



CenturyLink™

Correctional Communications Services

State of Nebraska

Department of Correctional Services
Request for Proposal 5289 Z1
Inmate Calling System
Due Date: June 21, 2016

Submitted By:
CenturyLink
600 New Century Pkwy
New Century, KS 66031

Contact:
Phil Burks
National Account Executive
Voice 913.353.7431 | Wireless 913.908.5099
Phillip.R.Burks@CenturyLink.com

Proposal 1 - Primary



CenturyLinkTM



June 17, 2016

Mr. Robert Thompson & Ms. Nancy Storant
State Purchasing Bureau
1526 K Street, Suite 130
Lincoln, NE 68508

On behalf of the CenturyLink account team, we welcome the opportunity to respond to the Nebraska Department of Correctional Services Solicitation Number RFP 5289 Z1 for Inmate Calling Services.

CenturyLink is confident that our proposal meets all requirements, and we strongly feel that we offer the best solution to meet the needs of the Nebraska Department of Correctional Services (NDCS), now and into the future. Our Senior Account Manager, Phil Burks (913.353.7431), will be your primary contact for any questions on our proposal that you may have.

CenturyLink has over 25 years of Inmate and Public Coin Telephone Services implementation and support experience. Further, we believe our financial resources, customer service, technical expertise, in-depth operational experience, and qualified personnel are unmatched in the industry. CenturyLink provides inmate calling services for approximately 310,000 inmates nationwide, including multiple counties and nine state departments of corrections.

Our response to the RFP will highlight our experience and will demonstrate that we are uniquely qualified to provide the best solution for NDCS. CenturyLink has exhibited a thorough understanding of your needs and proposes a solution that, combined with our highly experienced resources, will provide you with the most advanced technological solution available, one that will enhance the experience of staff, inmates, and friends and family.

CenturyLink has a consistent and documented history of meeting and exceeding every contractual requirement; time after time we have proven our flexibility by implementing new services beyond the scope of the original proposal and subsequent contract. We encourage the NDCS to call any of our current or previous accounts to verify this, and we strongly urge that you compare our references to those from the other bidders.



At CenturyLink, we believe that a product is only as good as the people standing behind it. Our fully staffed support center is always on call, and our entire staff is dedicated to providing the best customer support in our industry.

Sincerely,

A handwritten signature in blue ink, appearing to read "Paul Cooper".

Paul Cooper
Vice President and General Manager
CenturyLink Public Communications
Office: 913.353.7388
Fax: 720.264.8121
Email: paul.n.cooper@centurylink.com

Executive Summary



CENTURYLINK SUMMARY

- **25+ years experience** in inmate telephone systems with 9 implemented state DOC contracts
- **Fastest growing inmate communications provider since 2013** (measured by inmates), now serving 310,000 inmates nationwide
- **Access to dozens of Nebraska-based technical personnel** through parent company CenturyLink, Inc.
- Part of the 3rd largest local telecommunications company in the U.S., with 40,000 employees and **unmatched financial strength**
- The only facilities-based telecom in inmate communications, with **unique access to carrier databases and cost-effective network capacity**
- Only publicly held, currently **Sarbanes-Oxley compliant** company in inmate communications
- **Full suite of inmate communications, kiosk, and security services**

CenturyLink is pleased to submit a fully compliant proposal to Nebraska Department of Correctional Services Solicitation Number RFP 5289Z1 for Inmate Calling Services.

As you will see throughout our technical response, CenturyLink is a leader in inmate communications technology and has extensive experience serving state Departments of Correction. We confidently state that by partnering with us, NDCS will receive the most state-of-the-art inmate communications system, increasing safety for the public, staff, and inmates while further serving its constituents with lower end-user rates and improved customer service.

CenturyLink Public Communications, Inc. ("CenturyLink") has been providing best-in-class services to correctional facilities for over 25 years, connecting inmates with their families while providing the highest level of security to correctional staff and the public. During this time, CenturyLink has a demonstrated track record of exceptional service to correctional facilities nationwide.

As part of a network and managed service provider, CenturyLink is also uniquely positioned in the Corrections Industry. While recent trends in the industry include growth in video visitation solutions, delivering content to tablets, and other bandwidth intensive products, these types of solutions will quickly bring any network problems to the attention of a facility.

CenturyLink understands these network demands and has the assets and expertise to engineer network solutions that alleviate service issues for our customers.

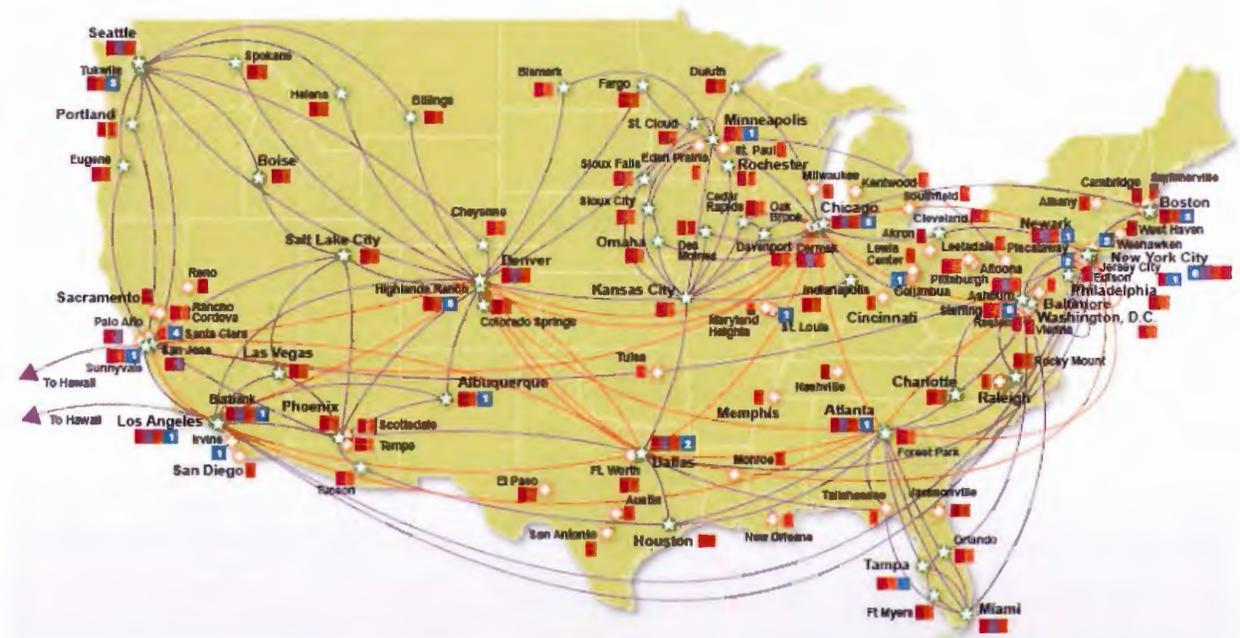
Executive Summary

In recent years, we have continued to emphasize a couple of key differentiators that are the pillars of our success. First, we embrace a partner model where CenturyLink has the flexibility and integration experience to bring customized, best in class, technology solutions to the facilities we serve.

Second, in an industry where the word “service” often times has a hollow meaning, CenturyLink prides itself on service that truly differentiates us from our competition in our approach to how we meet the needs of facilities as well as inmates, friends & families. This dedication to service has benefited us well as CenturyLink is now the fastest growing company in the inmate calling system and services industry when measured on additional inmates served. Within the last two years, we have successfully installed the Enforcer four new State DOC contracts including Utah, Arizona, Idaho and West Virginia.

While we take pride in this growth story, the retention of our existing customers is a better testament to the CenturyLink approach, service model, and the customer centric product development of the Enforcer platform. CenturyLink has only lost one customer from the proposed Enforcer inmate phone system solution – a small county facility - since our first installation with this technology nearly ten years ago. This is a story we take great pride in and appreciate the customer loyalty over the last decade.

CenturyLink Technology Assets & Capabilities

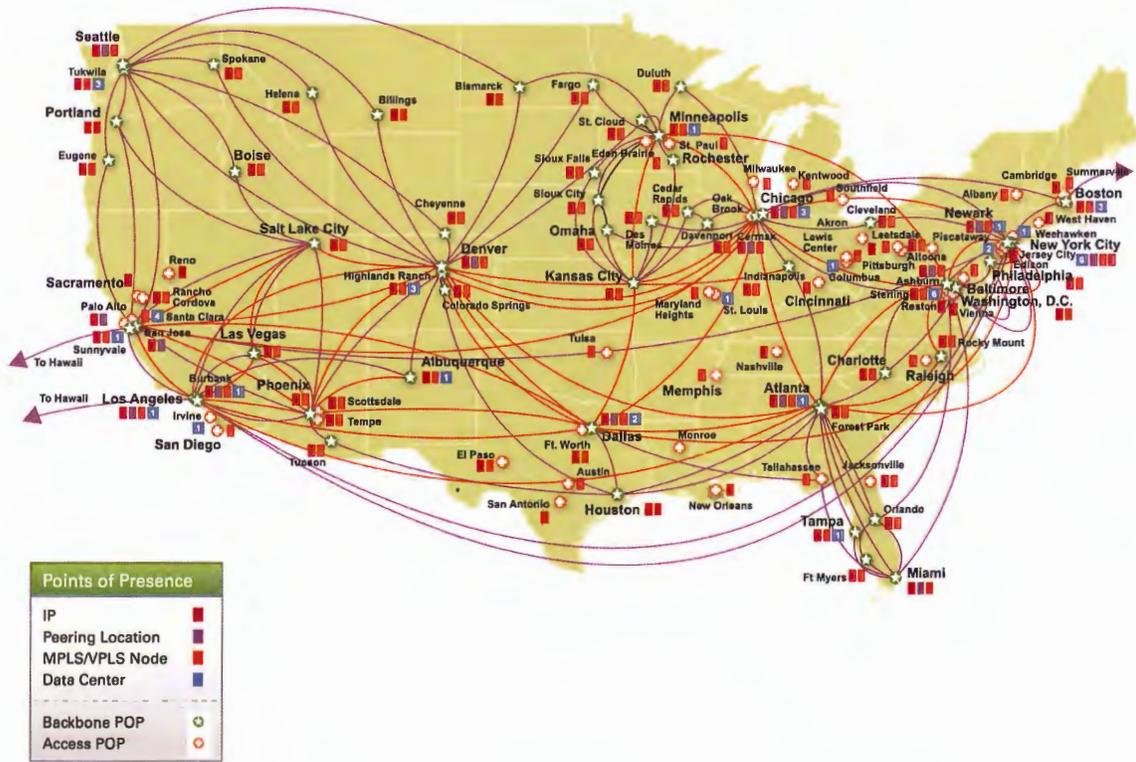


Executive Summary

Inmate communications involve managed IT services requiring a broad range of technical, financial, and service capabilities, and no company is positioned as well as CenturyLink to successfully integrate the Enforcer phone system platform with any other systems now or in the future.

The capabilities of CenturyLink Public Communications, Inc. coupled with the extensive corporate resources of parent company, CenturyLink, Inc., allow us to provide end-to-end technology solutions that others in the industry simply can't duplicate. As a leading network and IT provider some of the capabilities and resources that set us apart are:

- ✓ Nationwide 250,000 mile fiber optic network
- ✓ 56 class 3 and 4 data centers
- ✓ One of two commercial service providers authorized by Department of Homeland Security to provide Enhanced Cybersecurity Services
- ✓ Cloud and collocation services
- ✓ Full portfolio of managed services including voice, data, hosting, and security
- ✓ Big data and advanced analytics solutions



Executive Summary

CenturyLink Presence in Nebraska

CenturyLink has an extensive customer base across Nebraska and has motivation to perform at a high level, exceed the department's expectations, and continue to build on our reputation with the State. Highlights of our unique position and approach to our customers relative to our competition are as follows:

- ✓ Provider of voice, internet, & video services for nearly 200,000 residential and business customers
- ✓ Network investment in excess of \$1.65 billion within the State
- ✓ An employee base in Nebraska of approximately 1,000 associates with approximately \$55 million in annual payroll

With this extensive customer base and corporate investment made within the state of Nebraska it is easy to see how CenturyLink has more at stake than any other inmate phone system provider. CenturyLink is excited to expand our current business with the State and continue to demonstrate our corporate values of service, integrity, and ethics to NDCS.

The Inmate Phone System Solution & Technology

The proposed Enforcer centralized platform is a state of the art system that is browser based with anytime/anywhere access, has an intuitive user interface, and boasts an extensive list of product features that are fully integrated into the platform.

This emphasis on integration is critical, and the Enforcer system has a broad feature set fully integrated in the platform to ensure usability for NDCS users today AND the ability to add additional functionality as future needs arise.

Investigative tools such as link analysis, keyword search, voice biometrics, and our enhanced call player are all inherent in the platform and are not separate "modules" cobbled together from third party acquisitions, nor do they require installation of software supplements.



Executive Summary

We are confident that NDCS will find the Enforcer system solution to meet and/or exceed all the requirements in this RFP. In addition, CenturyLink has extensive technology partners to bring additional services to NDCS that were not specifically requested in this RFP.

CenturyLink Solution At A Glance

System Features	
<ul style="list-style-type: none"> ✓ Multi-layer redundancy *Industry Leading* ✓ Browser-based Easy to Use Interface ✓ Online Reporting Capabilities ✓ Remote Access 	<ul style="list-style-type: none"> ✓ Integrated TDD *Industry Leading* ✓ Centralized Call Processing ✓ Lifetime Online Storage of CDRs ✓ Extensive Call Controls
Service Features	
<ul style="list-style-type: none"> ✓ Lifetime Repair & Warranty ✓ Inmate & Called Party Training ✓ Free Software Upgrades 	<ul style="list-style-type: none"> ✓ 24 x 7 x 365 Technical Service ✓ Ongoing Staff Training ✓ Inmate & Called Party Instruction
Calling Services	
<ul style="list-style-type: none"> ✓ Collect, Prepaid Collect & Debit Calling Programs *Industry Leading* ✓ Custom Call Prompts & Voice Overlays ✓ Automated PIN/PAN and other OMS data interfaces 	<ul style="list-style-type: none"> ✓ Self-Learning PAN Capability ✓ Multiple Language Prompts – additional languages at no cost ✓ Inbound inmate voice messaging
Facility Operational Tools	
<ul style="list-style-type: none"> ✓ “The Communicator” Voice-Verified inmate communications portal, including staff-to- inmate messaging and appointment scheduling *Industry Leading* ✓ Emergency auto-dial service to family members ✓ Integration with other NDCS systems, <i>always</i> at no cost 	<ul style="list-style-type: none"> ✓ Voice-Verified Information Line, including account balance and other confidential information *Industry Leading* ✓ “The Attendant” Interactive Voice Response system for automated responses to family inquiries ✓ Phone-based commissary ordering

Executive Summary

Fraud Controls	
<ul style="list-style-type: none"> ✓ Three-Way Detection *Industry Leading* ✓ Call Forward Detection *Industry Leading* ✓ Hook Switch & Secondary Dial Tone Prevention ✓ Custom Call Restrictions number blocking 	<ul style="list-style-type: none"> ✓ Inmate-to-Inmate Communications ✓ Incoming Call Block ✓ Real-Time Call Validation ✓ Extra Dialed Digit Prevention ✓ Global and inmate-specific custom call restrictions number blocking ✓ Chain Dialing Prevention
Investigative Tools	
<ul style="list-style-type: none"> ✓ Unlimited Reverse Directory with Satellite *Industry Leading* 	<ul style="list-style-type: none"> ✓ Voice Biometrics (Pre-call validation included in offer) *Industry Leading*
Investigative Tools	
<ul style="list-style-type: none"> ✓ Unlimited Reverse Directory with Satellite Mapping *Industry Leading* ✓ 4-channel Audio Separation – Critical for Voice Biometrics & Word Search *Industry Leading* ✓ Unlimited Billing Name and Address Lookup ✓ Frequently Called Number Reports ✓ 100% Monitoring & Recording of Non-Confidential Calls ✓ Data Mining & Link Analysis to Investigators 	<ul style="list-style-type: none"> ✓ Voice Biometrics (Pre-call validation included in offer) *Industry Leading* ✓ Funding Alerts *Industry Leading* ✓ Crime Tip & PREA Lines ✓ Access to CenturyLink Carrier ✓ Database information ✓ Call Alerts ✓ Barge In Capability & Call Forwarding

Executive Summary

Value Added Services*

- | | |
|---|--------------------------------------|
| ✓ Phone-Based Commissary Ordering | ✓ Word Detective (Keyword Search) |
| ✓ Inmate Medical Scheduling | ✓ Contraband Cellular Solutions |
| ✓ Edovo Education & Entertainment Tablets | ✓ Inmate-to-Inmate Call Detection |
| ✓ Location Data Services (LocAid) | ✓ CRIMES Data Mining & Investigation |
| ✓ Continuous Voice Biometrics | |

****Broad Offering of Value Added Services
Above and Beyond Basic Inmate Calling Services****

Consistent Commitment to Service

Service to NDCS

Our service plan for NDCS is multi-faceted. By taking excellent care of offenders/clients and their family members, complaints and overall frustration with the Enforcer system is minimized.

And by meeting our commitments and maintaining flexibility throughout the contract, NDCS can be assured that their cost of administering the contract will be absolutely minimized:

- ✓ Dedicated Service Team: Although we are a part of a large national corporation, our Correctional Markets Division is a standalone entity focused on managing complex inmate telephone system installations. Bottom line: NDCS can be assured of focused, quality attention and service.
- ✓ "Enterprise-grade" system, with no lost call records or voice recordings. Since the CenturyLink Team cut over its first Enforcer system we have processed over 100 million call detail records (CDRs) and audio recordings. Not a single CDR or audio recording has been lost. No other provider's ITS can match the redundancy, fault-tolerance, and overall performance of our system.
- ✓ Consistent history of meeting or exceeding commitments. Time after time, CenturyLink has proven its flexibility in implementing new services beyond the scope of the original RFP proposal process or contract.

***"We at the Department of Corrections
have been pleased with every aspect
of their service."***

Robert Brantley – Alabama DOC
Asst. Accounting Director &
ITS Contract Administrator

Executive Summary

Service to Inmates

Service to inmates requires high system availability and prompt responses to inquiries and complaints, but it also means transforming the Enforcer system from just a one-way calling system to a true administrative tool for NDCS:

- ✓ System availability. Inmate's perceptions of the Enforcer system begin with exceptional system availability. With our redundant architecture, no other provider can deliver the system availability that we can.
- ✓ Timely response to inmate complaints. Unhappy inmates mean unhappy staff.
- ✓ Inmate Training. Transition planning also includes inmate training as well as day room posters.
- ✓ Ability to implement commissary ordering by phone and other automated functions.

Service to Family Members

Poor service to family members is a major problem in our industry and the reason is simple: cost. Live agents are expensive to staff and train, and most providers purposely make it difficult to reach one. The CenturyLink Team's approach is different;

- ✓ U.S.-based representatives who answer the phone. Please call all vendors' customer service lines and compare:

Our call center can be reached at (888) 506-8407. Our average hold times are consistently under 90 seconds – less than 10 seconds during peak weekday times during which we are more heavily staffed.

- ✓ Real-time routing to customer service. When an inmate calls a number, if the called party does not have an account with us (for example, a first call to a cell phone) or has depleted the funds in their account, they are *immediately* routed to our call center and presented with options to complete the call.
- ✓ Audits and accountability. As a division of a Sarbanes-Oxley compliant company, CenturyLink completes monthly audits to verify call rating and billing accuracy.

Executive Summary

The CenturyLink Difference

We recognize that many of the vendor responses and proposed solutions will appear very similar. And as most any Inmate Telephone System users know, despite all the salesmanship, claims of exclusive patents, and focus on features, over 97% of all functions are the same. Call restrictions, link analysis, reporting, even voice biometrics, cell phone detection, and location services and features any top-tier provider, including CenturyLink, can provide. But the Differences show up “around the edges” when real money has to be spent in order to provide a total package:

- ✓ Features developed from the ground up directly within the system; no separate “modules” cobbled together from acquisitions
- ✓ 4-channel audio separation – critical for word search and voice biometrics
- ✓ Network capacity, scalability, and redundancy
- ✓ Consumer service model – industry leader by far and critical for regulatory compliance
- ✓ Proven willingness to work with any 3rd party vendor
- ✓ Carrier database access (to aid in investigation)
- ✓ Dedicated and proven service, support and account management to support NDCS

In closing, the corrections industry continues to be a very important focus in our business and we are excited about the opportunity to work with NDCS. We also understand that some items that are vital to our success, such as, **ethics and service** are difficult to score during an evaluation. With that said, we urge NDCS to call any of our accounts to learn more about our service model and our commitment to our customers.



CenturyLinkTM

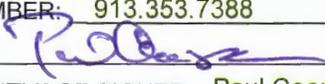
BIDDER MUST COMPLETE THE FOLLOWING

By signing this Request for Proposal for Contractual Services form, the bidder guarantees compliance with the provisions stated in this Request for Proposal, agrees to the terms and conditions unless otherwise agreed to (see Section III) and certifies that bidder maintains a drug free work place environment.

Per Nebraska's Transparency in Government Procurement Act, Neb. Rev Stat § 73-603 DAS is required to collect statistical information regarding the number of contracts awarded to Nebraska Contractors. This information is for statistical purposes only and will not be considered for contract award purposes.

_____ **NEBRASKA CONTRACTOR AFFIDAVIT:** Bidder hereby attests that bidder is a Nebraska Contractor. "Nebraska Contractor" shall mean any bidder who has maintained a bona fide place of business and at least one employee within this state for at least the six (6) months immediately preceding the posting date of this RFP.

_____ **I hereby certify that I am a Resident disabled veteran or business located in a designated enterprise zone** in accordance with Neb. Rev. Stat. § 73-107 and wish to have preference, if applicable, considered in the award of this contract.

FIRM: CenturyLink Public Communications, Inc.
COMPLETE ADDRESS: 600 New Century Pkwy, New Century, KS 66031
TELEPHONE NUMBER: 913.353.7388 FAX NUMBER: 720.264.8121
SIGNATURE:  DATE: 6/17/2016
TYPED NAME & TITLE OF SIGNER: Paul Cooper – Vice President and General Manager

Form A
Bidder Contact Sheet
Request for Proposal Number 5289Z1

Form A should be completed and submitted with each response to this Request for Proposal. This is intended to provide the State with information on the bidder's name and address, and the specific person(s) who are responsible for preparation of the bidder's response.

Preparation of Response Contact Information	
Bidder Name:	CenturyLink Public Communications, Inc. (CenturyLink)
Bidder Address:	600 New Century Pkwy New Century, KS 66031
Contact Person & Title:	Jeff Sargent - Technical / Proposal Writer
E-mail Address:	jeffrey.d.sargent@centurylink.com
Telephone Number (Office):	913-353-07427
Telephone Number (Cellular):	913-593-4203
Fax Number:	913-791-7371

Each bidder shall also designate a specific contact person who will be responsible for responding to the State if any clarifications of the bidder's response should become necessary. This will also be the person who the State contacts to set up a presentation/demonstration, if required.

Communication with the State Contact Information	
Bidder Name:	CenturyLink Public Communications, Inc. (CenturyLink)
Bidder Address:	600 New Century Pkwy New Century, KS 66031
Contact Person & Title:	Phil Burks - Senior Account Executive
E-mail Address:	phillip.r.burks@centurylink.com
Telephone Number (Office):	913-353-7431
Telephone Number (Cellular):	913-908-5099
Fax Number:	913-791-7371

III. TERMS AND CONDITIONS

By signing the "Request for Proposal for Contractual Services" form, the bidder guarantees compliance with the provisions stated in this Request for Proposal, agrees to the Terms and Conditions unless otherwise agreed to, and certifies bidder maintains a drug free work place environment.

Bidders are expected to closely read the Terms and Conditions and provide a binding signature of intent to comply with the Terms and Conditions; provided, however, a bidder may indicate any exceptions to the Terms and Conditions by (1) clearly identifying the term or condition by subsection, and (2) including an explanation for the bidder's inability to comply with such term or condition which includes a statement recommending terms and conditions the bidder would find acceptable. Rejection in whole or in part of the Terms and Conditions may be cause for rejection of a bidder's proposal. **Bidders must include completed Section III with their proposal response.**

The State of Nebraska is soliciting bids in response to the RFP. The State of Nebraska will not consider proposals that propose the substitution of the bidder's contract, agreements, or terms for those of the State of Nebraska's. Any License, Service Agreement, Customer Agreement, User Agreement, Bidder Terms and Conditions, Document, or Clause purported or offered to be included as a part of this RFP must be submitted as individual clauses, as either a counter-offer or additional language, and each clause must be acknowledged and accepted in writing by the State. If the Bidder's clause is later found to be in conflict with the RFP or resulting contract the Bidder's clause shall be subordinate to the RFP or resulting contract.

A. GENERAL

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
TE			

The contract resulting from this Request for Proposal shall incorporate the following documents:

1. Amendment to Contract Award with the most recent dated amendment having the highest priority;
2. Contract Award and any attached Addenda;
3. The Request for Proposal form and the Contractor's Proposal, signed in ink
4. Amendments to RFP and any Questions and Answers; and
5. The original RFP document and any Addenda.

These documents constitute the entirety of the contract.

Unless otherwise specifically stated in a contract amendment, in case of any conflict between the incorporated documents, the documents shall govern in the following order of preference with number one (1) receiving preference over all other documents and with each lower numbered document having preference over any higher numbered document: 1) Amendment to Contract Award with the most recent dated amendment having the highest priority, 2) Contract Award and any attached Addenda, 3) the signed Request for Proposal form and the Contractor's Proposal, 4) Amendments to RFP and any Questions and Answers, 5) the original RFP document and any Addenda.

Any ambiguity in any provision of this contract which shall be discovered after its execution shall be resolved in accordance with the rules of contract interpretation as established in the State of Nebraska.

Once proposals are opened they become the property of the State of Nebraska and will not be returned.

B. AWARD

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

All purchases, leases, or contracts which are based on competitive proposals will be awarded according to the provisions in the Request for Proposal. The State reserves the right to reject any or all proposals, in whole or in part, or to award to multiple bidders in whole or in part, and at its discretion, may withdraw or amend the Request for Proposal at any time. The State reserves the right to waive any deviations or errors that are not material, do not invalidate the legitimacy of the proposal, and do not improve the bidder's competitive position. All awards will be made in a manner deemed in the best interest of the State. The Request for Proposal does not commit the State to award a contract. If, in the opinion of the State, revisions or amendments will require substantive changes in proposals, the due date may be extended.

By submitting a proposal in response to this Request for Proposal, the bidder grants to the State the right to contact or arrange a visit in person with any or all of the bidder's clients.

Once intent to award decision has been determined, it will be posted to the Internet at:
<http://das.nebraska.gov/materiel/purchasing.html>

Grievance and protest procedure is available on the Internet at:
http://das.nebraska.gov/materiel/purchase_bureau/docs/vendors/protest/ProtestGrievanceProcedureForVendors.pdf

Any protests must be filed by a vendor within ten (10) business days after the intent to award decision is posted to the Internet.

C. COMPLIANCE WITH CIVIL RIGHTS LAWS AND EQUAL OPPORTUNITY EMPLOYMENT / NONDISCRIMINATION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The Contractor shall comply with all applicable local, state, and federal statutes and regulations regarding civil rights laws and equal opportunity employment. The Nebraska Fair Employment Practice Act prohibits Contractors of the State of Nebraska, and their Subcontractors, from discriminating against any employee or applicant for employment, with respect to hire, tenure, terms, conditions, compensation, or privileges of employment because of race, color, religion, sex, disability, marital status, or national origin (Neb. Rev. Stat. §§ 48-1101 to 48-1125). The Contractor guarantees compliance with the Nebraska Fair Employment Practice Act, and breach of this provision shall be regarded as a material breach of contract. The Contractor shall insert a similar provision in all Subcontracts for services to be covered by any contract resulting from this Request for Proposal.

D. PERMITS, REGULATIONS, LAWS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The Contractor shall procure and pay for all permits, licenses, and approvals necessary for the execution of the contract. The Contractor shall comply with all applicable local, state, and federal laws, ordinances, rules, orders, and regulations.

E. OWNERSHIP OF INFORMATION AND DATA

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The State of Nebraska shall have the unlimited right to publish, duplicate, use, and disclose all information and data developed or derived by the Contractor pursuant to this contract.

The Contractor must guarantee that it has the full legal right to the materials, supplies, equipment, and other rights or titles (e.g. rights to licenses transfer or assign deliverables) necessary to execute this contract. The contract price shall, without exception, include compensation for all royalties and costs arising from patents, trademarks, and copyrights that are in any way involved in the contract. It shall be the responsibility of the Contractor to pay for all royalties and costs, and the State must be held harmless from any such claims.

F. INSURANCE REQUIREMENTS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The Contractor shall not commence work under this contract until all the insurance required hereunder has been obtained and such insurance has been approved by the State. The Contractor shall maintain all required insurance for the life of this contract and shall ensure that the State Purchasing Bureau has the most current certificate of insurance throughout the life of this contract. If Contractor will be utilizing any Subcontractors, the Contractor is responsible for obtaining the certificate(s) of insurance required herein under from any and all Subcontractor(s). The Contractor is also responsible for ensuring Subcontractor(s) maintain the insurance required until completion of the contract requirements. The Contractor shall not allow any Subcontractor to commence work on any Subcontract until all similar insurance required of the Subcontractor has been obtained and approved by the Contractor. Approval of the insurance by the State shall not limit, relieve, or decrease the liability of the Contractor hereunder.

If by the terms of any insurance a mandatory deductible is required, or if the Contractor elects to increase the mandatory deductible amount, the Contractor shall be responsible for payment of the amount of the deductible in the event of a paid claim.

Insurance coverages shall function independent of all other clauses in the contract, and in no instance shall the limits of recovery from the insurance be reduced below the limits required by this section.

1. WORKERS' COMPENSATION INSURANCE

The Contractor shall take out and maintain during the life of this contract the statutory Workers' Compensation and Employer's Liability Insurance for all of the contractors' employees to be engaged in

work on the project under this contract and, in case any such work is sublet, the Contractor shall require the Subcontractor similarly to provide Worker's Compensation and Employer's Liability Insurance for all of the Subcontractor's employees to be engaged in such work. This policy shall be written to meet the statutory requirements for the state in which the work is to be performed, including Occupational Disease. This policy shall include a waiver of subrogation in favor of the State. The amounts of such insurance shall not be less than the limits stated hereinafter.

2. COMMERCIAL GENERAL LIABILITY INSURANCE AND COMMERCIAL AUTOMOBILE LIABILITY INSURANCE

The Contractor shall take out and maintain during the life of this contract such Commercial General Liability Insurance and Commercial Automobile Liability Insurance as shall protect Contractor and any Subcontractor performing work covered by this contract from claims for damages for bodily injury, including death, as well as from claims for property damage, which may arise from operations under this contract, whether such operation be by the Contractor or by any Subcontractor or by anyone directly or indirectly employed by either of them, and the amounts of such insurance shall not be less than limits stated hereinafter.

The Commercial General Liability Insurance shall be written on an occurrence basis, and provide Premises/Operations, Products/Completed Operations, Independent Contractors, Personal Injury, and Contractual Liability coverage. The policy shall include the State, and others as required by the contract documents, as Additional Insured(s). This policy shall be primary, and any insurance or self-insurance carried by the State shall be considered excess and non-contributory. The Commercial Automobile Liability Insurance shall be written to cover all Owned, Non-owned, and Hired vehicles.

3. INSURANCE COVERAGE AMOUNTS REQUIRED

COMMERCIAL GENERAL LIABILITY	
General Aggregate	\$2,000,000
Products/Completed Operations Aggregate	\$2,000,000
Personal/Advertising Injury	\$1,000,000 per occurrence
Bodily Injury/Property Damage	\$1,000,000 per occurrence
Fire Damage	\$50,000 any one fire
Medical Payments	\$10,000 any one person
Damage to Rented Premises	\$300,000 each occurrence
Contractual	Included
XCU Liability (Explosion, Collapse, and Underground Damage)	Included
Independent Contractors	Included
Abuse & Molestation	Included
WORKER'S COMPENSATION	
Employers Liability Limits	\$500K/\$500K/\$500K
Statutory Limits- All States	Statutory - State of Nebraska
USL&H Endorsement	Statutory
Voluntary Compensation	Statutory
COMMERCIAL AUTOMOBILE LIABILITY	
Bodily Injury/Property Damage	\$1,000,000 combined single limit
Include All Owned, Hired & Non-Owned Automobile liability	Included
UMBRELLA/EXCESS LIABILITY	
Over Primary Insurance	\$5,000,000
COMMERCIAL CRIME	
Crime/Employee Dishonesty Including 3 rd Party Fidelity	\$1,000,000
SUBROGATION WAIVER	
"Workers' Compensation policy shall include a waiver of subrogation in favor of the State of Nebraska."	
LIABILITY WAIVER	
"Commercial General Liability & Commercial Automobile Liability policies shall be primary and any insurance or self-insurance carried by the State shall be considered excess and non-contributory."	

4. EVIDENCE OF COVERAGE

The Contractor should furnish the State, with their proposal response, a certificate of insurance coverage complying with the above requirements to the attention of the Buyer at 402-471-2089 (fax)

Administrative Services
 State Purchasing Bureau
 1526 K Street, Suite 130
 Lincoln, NE 68508

These certificates or the cover sheet shall reference the RFP number, and the certificates shall include the name of the company, policy numbers, effective dates, dates of expiration, and amounts and types of coverage afforded. If the State is damaged by the failure of the Contractor to maintain such insurance, then the Contractor shall be responsible for all reasonable costs properly attributable thereto.

Notice of cancellation of any required insurance policy must be submitted to Administrative Services State Purchasing Bureau when issued and a new coverage binder shall be submitted immediately to ensure no break in coverage.

G. COOPERATION WITH OTHER CONTRACTORS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The State may already have in place or choose to award supplemental contracts for work related to this Request for Proposal, or any portion thereof.

1. The State reserves the right to award the contract jointly between two or more potential Contractors, if such an arrangement is in the best interest of the State.
2. The Contractor shall agree to cooperate with such other Contractors, and shall not commit or permit any act which may interfere with the performance of work by any other Contractor.

H. INDEPENDENT CONTRACTOR

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

It is agreed that nothing contained herein is intended or should be construed in any manner as creating or establishing the relationship of partners between the parties hereto. The Contractor represents that it has, or will secure at its own expense, all personnel required to perform the services under the contract. The Contractor's employees and other persons engaged in work or services required by the contractor under the contract shall have no contractual relationship with the State; they shall not be considered employees of the State.

All claims on behalf of any person arising out of employment or alleged employment (including without limit claims of discrimination against the Contractor, its officers, or its agents) shall in no way be the responsibility of the State. The Contractor will hold the State harmless from any and all such claims. Such personnel or other persons shall not require nor be entitled to any compensation, rights, or benefits from the State including without limit, tenure rights, medical and hospital care, sick and vacation leave, severance pay, or retirement benefits.

I. CONTRACTOR RESPONSIBILITY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The Contractor is solely responsible for fulfilling the contract, with responsibility for all services offered and products to be delivered as stated in the Request for Proposal, the Contractor's proposal, and the resulting contract. The Contractor shall be the sole point of contact regarding all contractual matters.

If the Contractor intends to utilize any Subcontractor's services, the Subcontractor's level of effort, tasks, and time allocation must be clearly defined in the Contractor's proposal. The Contractor shall agree that it will not utilize any Subcontractors not specifically included in its proposal in the performance of the contract without the prior written authorization of the State. Following execution of the contract, the Contractor shall proceed diligently with all services and shall perform such services with qualified personnel in accordance with the contract.

J. CONTRACTOR PERSONNEL

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The Contractor warrants that all persons assigned to the project shall be employees of the Contractor or specified Subcontractors, and shall be fully qualified to perform the work required herein. Personnel employed by the Contractor to fulfill the terms of the contract shall remain under the sole direction and control of the Contractor. The Contractor shall include a similar provision in any contract with any Subcontractor selected to perform work on the project.

Contractor shall make his/her employees aware of Neb. Rev. Stat. 28-322.01 that states it shall be a Felony for individuals working for or under contract to the Department of Correctional Services to engage in sexual contact or relations with an inmate or parolee within the State correctional system, and that no inmate nor parolee is legally capable of giving consent to any such relationship.

Contractor's personnel shall be subject to departmental security checks prior to their arrival on site, and will carry proper identification with them at all time while on facility grounds.

Contractor shall inform his/her personnel of the Nebraska Department of Correctional Services Tobacco Policy, which states that tobacco and tobacco-related products are contraband and must not be carried into any NDCS-owned or controlled property. Such products must remain in Contractor's locked vehicle while on NDCS-owned or controlled property.

Personnel commitments made in the Contractor's proposal shall not be changed without the prior written approval of the State. Replacement of key personnel, if approved by the State, shall be with personnel of equal or greater ability and qualifications.

The State reserves the right to require the Contractor to reassign or remove from the project any Contractor or Subcontractor employee.

In respect to its employees, the Contractor agrees to be responsible for the following:

1. any and all employment taxes and/or other payroll withholding;
2. any and all vehicles used by the Contractor's employees, including all insurance required by state law;
3. damages incurred by Contractor's employees within the scope of their duties under the contract;
4. maintaining workers' compensation and health insurance and submitting any reports on such insurance to the extent required by governing State law; and

5. determining the hours to be worked and the duties to be performed by the Contractor's employees.

K. CONTRACT CONFLICTS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

Contractor shall insure that contracts or agreements with sub-contractors and agents, and the performance of services in relation to this contract by sub-contractors and agents, does not conflict with this contract.

L. STATE OF NEBRASKA PERSONNEL RECRUITMENT PROHIBITION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The Contractor shall not, at any time, recruit or employ any State employee or agent who has worked on the Request for Proposal or project, or who had any influence on decisions affecting the Request for Proposal or project.

M. CONFLICT OF INTEREST

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

By submitting a proposal, bidder certifies that there does not now exist any relationship between the bidder and any person or entity which is or gives the appearance of a conflict of interest related to this Request for Proposal or project.

The bidder certifies that it shall not take any action or acquire any interest, either directly or indirectly, which will conflict in any manner or degree with the performance of its services hereunder or which creates an actual or appearance of conflict of interest.

The bidder certifies that it will not employ any individual known by bidder to have a conflict of interest.

N. PROPOSAL PREPARATION COSTS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The State shall not incur any liability for any costs incurred by bidders in replying to this Request for Proposal, in the demonstrations and/or oral presentations, or in any other activity related to bidding on this Request for Proposal.

O. ERRORS AND OMISSIONS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The bidder shall not take advantage of any errors and/or omissions in this Request for Proposal or resulting contract. The bidder must promptly notify the State of any errors and/or omissions that are discovered.

P. BEGINNING OF WORK

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The bidder shall not commence any billable work until a valid contract has been fully executed by the State and the successful Contractor. The Contractor will be notified in writing when work may begin.

Q. ASSIGNMENT BY THE STATE

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The State shall have the right to assign or transfer the contract or any of its interests herein to any agency, board, commission, or political subdivision of the State of Nebraska. There shall be no charge to the State for any assignment hereunder.

R. ASSIGNMENT BY THE CONTRACTOR

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The Contractor may not assign, voluntarily or involuntarily, the contract or any of its rights or obligations hereunder (including without limitation rights and duties of performance) to any third party, without the prior written consent of the State, which will not be unreasonably withheld.

S. DEVIATIONS FROM THE REQUEST FOR PROPOSAL

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The requirements contained in the Request for Proposal become a part of the terms and conditions of the contract resulting from this Request for Proposal. Any deviations from the Request for Proposal must be clearly defined by the bidder in its proposal and, if accepted by the State, will become part of the contract. Any specifically defined deviations must not be in conflict with the basic nature of the Request for Proposal, mandatory requirements, or applicable state or federal laws or statutes. "Deviation", for the purposes of this RFP, means any proposed changes or alterations to either the contractual language or deliverables within the scope of this RFP. The State discourages deviations and reserves the right to reject proposed deviations.

T. GOVERNING LAW

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The contract shall be governed in all respects by the laws and statutes of the State of Nebraska. Any legal proceedings against the State of Nebraska regarding this Request for Proposal or any resultant contract shall be brought in the State of Nebraska administrative or judicial forums as defined by State law. The Contractor must be in compliance with all Nebraska statutory and regulatory law.

U. ATTORNEY'S FEES

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

In the event of any litigation, appeal, or other legal action to enforce any provision of the contract, the Contractor agrees to pay all expenses of such action, as permitted by law, including attorney's fees and costs, if the State is the prevailing party.

V. ADVERTISING

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The Contractor agrees not to refer to the contract award in advertising in such a manner as to state or imply that the company or its services are endorsed or preferred by the State. News releases pertaining to the project shall not be issued without prior written approval from the State.

W. STATE PROPERTY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
RC			

The Contractor shall be responsible for the proper care and custody of any State-owned property which is furnished for the Contractor's use during the performance of the contract. The Contractor shall reimburse the State for any loss or damage of such property; normal wear and tear is expected.

X. SITE RULES AND REGULATIONS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The Contractor shall use its best efforts to ensure that its employees, agents, and Subcontractors comply with site rules and regulations while on State premises. If the Contractor must perform on-site work outside of the daily operational hours set forth by the State, it must make arrangements with the State to ensure access to the facility and the equipment has been arranged. No additional payment will be made by the State on the basis of lack of access, unless the State fails to provide access as agreed to between the State and the Contractor.

Y. NOTIFICATION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

During the bid process, all communication between the State and a bidder shall be between the bidder's representative clearly noted in its proposal and the buyer noted in Section II.A. Procuring Office and Contact Person, of this RFP. After the award of the contract, all notices under the contract shall be deemed duly given upon delivery to the staff designated as the point of contact for this Request for Proposal, in person, or upon delivery by U.S. Mail, facsimile, or e-mail. Each bidder should provide in its proposal the name, title, and complete address of its designee to receive notices.

1. Except as otherwise expressly specified herein, all notices, requests, or other communications shall be in writing and shall be deemed to have been given if delivered personally or mailed, by U.S. Mail, postage prepaid, return receipt requested, to the parties at their respective addresses set forth above, or at such other addresses as may be specified in writing by either of the parties. All notices, requests, or communications shall be deemed effective upon personal delivery or three (3) calendar days following deposit in the mail.
2. Whenever the Contractor encounters any difficulty which is delaying or threatens to delay its timely performance under the contract, the Contractor shall immediately give notice thereof in writing to the State reciting all relevant information with respect thereto. Such notice shall not in any way constitute a basis for an extension of the delivery schedule or be construed as a waiver by the State of any of its rights or remedies to which it is entitled by law or equity or pursuant to the provisions of the contract. Failure to give such notice, however, may be grounds for denial of any request for an extension of the delivery schedule because of such delay.

Either party may change its address for notification purposes by giving notice of the change, and setting forth the new address and an effective date.

For the duration of the contract, all communication between Contractor and the State regarding the contract shall take place between the Contractor and individuals specified by the State in writing. Communication about the contract between Contractor and individuals not designated as points of contact by the State is strictly forbidden.

Z. EARLY TERMINATION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The contract may be terminated as follows:

1. The State and the Contractor, by mutual written agreement, may terminate the contract at any time.
2. The State, in its sole discretion, may terminate the contract for any reason upon thirty (30) calendar day's written notice to the Contractor. Such termination shall not relieve the Contractor of warranty or other service obligations incurred under the terms of the contract. In the event of termination the Contractor shall be entitled to payment, determined on a pro rata basis, for products or services satisfactorily performed or provided.
3. The State may terminate the contract immediately for the following reasons:
 - a. if directed to do so by statute;
 - b. Contractor has made an assignment for the benefit of creditors, has admitted in writing its inability to pay debts as they mature, or has ceased operating in the normal course of business;
 - c. a trustee or receiver of the Contractor or of any substantial part of the Contractor's assets has been appointed by a court;
 - d. fraud, misappropriation, embezzlement, malfeasance, misfeasance, or illegal conduct pertaining to performance under the contract by its Contractor, its employees, officers, directors, or shareholders;
 - e. an involuntary proceeding has been commenced by any party against the Contractor under any one of the chapters of Title 11 of the United States Code and (i) the proceeding has been pending for at least sixty (60) calendar days; or (ii) the Contractor has consented, either expressly or by operation of law, to the entry of an order for relief; or (iii) the Contractor has been decreed or adjudged a debtor;
 - f. a voluntary petition has been filed by the Contractor under any of the chapters of Title 11 of the United States Code;
 - g. Contractor intentionally discloses confidential information;
 - h. Contractor has or announces it will discontinue support of the deliverable;
 - i. second or subsequent documented "vendor performance report" form deemed acceptable by the State Purchasing Bureau; or
 - j. Contractor engaged in collusion or actions which could have provided Contractor an unfair advantage in obtaining this contract.

AA. FUNDING OUT CLAUSE OR LOSS OF APPROPRIATIONS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The State may terminate the contract, in whole or in part, in the event funding is no longer available. The State's obligation to pay amounts due for fiscal years following the current fiscal year is contingent upon legislative appropriation of funds for the contract. Should said funds not be appropriated, the State may terminate the contract.

with respect to those payments for the fiscal years for which such funds are not appropriated. The State will give the Contractor written notice thirty (30) calendar days prior to the effective date of any termination, and advise the Contractor of the location (address and room number) of any related equipment. All obligations of the State to make payments after the termination date will cease and all interest of the State in any related equipment will terminate. The Contractor shall be entitled to receive just and equitable compensation for any authorized work which has been satisfactorily completed as of the termination date. In no event shall the Contractor be paid for a loss of anticipated profit.

BB. BREACH BY CONTRACTOR

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The State may terminate the contract, in whole or in part, if the Contractor fails to perform its obligations under the contract in a timely and proper manner. The State may, by providing a written notice of default to the Contractor, allow the Contractor to cure a failure or breach of contract within a period of thirty (30) calendar days (or longer at State's discretion considering the gravity and nature of the default). Said notice shall be delivered by Certified Mail, Return Receipt Requested, or in person with proof of delivery. Allowing the Contractor time to cure a failure or breach of contract does not waive the State's right to immediately terminate the contract for the same or different contract breach which may occur at a different time. In case of default of the Contractor, the State may contract the service from other sources and hold the Contractor responsible for any excess cost occasioned thereby.

CC. ASSURANCES BEFORE BREACH

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
E			

If any document or deliverable required pursuant to the contract does not fulfill the requirements of the Request for Proposal/resulting contract, upon written notice from the State, the Contractor shall deliver assurances in the form of additional Contractor resources at no additional cost to the project in order to complete the deliverable, and to ensure that other project schedules will not be adversely affected.

DD. ADMINISTRATION – CONTRACT TERMINATION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

1. Contractor must provide confirmation that upon contract termination all deliverables prepared in accordance with this agreement shall become the property of the State of Nebraska; subject to the ownership provision (section E) contained herein, and is provided to the State of Nebraska at no additional cost to the State.
2. Contractor must provide confirmation that in the event of contract termination, all records that are the property of the State will be returned to the State within thirty (30) calendar days. Notwithstanding the above, Contractor may retain one copy of any information as required to comply with applicable work product documentation standards or as are automatically retained in the course of Contractor's routine back up procedures.

EE. PENALTY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
RC			

In the event that the Contractor fails to perform any substantial obligation under the contract, the State may withhold all monies due and payable to the Contractor, without penalty, until such failure is cured or otherwise adjudicated. Failure to meet the dates for the deliverables as agreed upon by the parties may result in an assessment of penalty due the State of \$500.00 per day for outages of phones in one Housing Unit (HU) for six (6) or more hours, and \$1,000.00 per day for outage of phones in two (2) HUs at one (1) institution for six (6) or more hours, and/or \$5,000.00 per day for outage of an institution for six (6) or more hours per day, until the deliverables are approved. Contractor will be notified in writing when penalty will commence.

FF. PERFORMANCE BOND

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
RC			

The Contractor will be required to supply a cashier's check or a bond executed by a corporation authorized to contract surety in the State of Nebraska, payable to the State of Nebraska, which shall be valid for the life of the contract to include any renewal and/or extension periods. The amount of the cashier's check or bond must be \$500,000.00. The check or bond will guarantee that the Contractor will faithfully perform all requirements, terms and conditions of the contract. If the Contractor chooses to provide a cashier's check, the check must show an expiration date on the check. Cashier's checks will only be allowed for contracts for three (3) years or less, including all renewal options. Failure to comply shall be grounds for forfeiture of the check or bond as liquidated damages. Amount of forfeiture will be determined by the agency based on loss to the State. The bond or cashier's check will be returned when the service has been satisfactorily completed as solely determined by the State, after termination or expiration of the contract.

GG. FORCE MAJEURE

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
RC			

Neither party shall be liable for any costs or damages resulting from its inability to perform any of its obligations under the contract due to a natural disaster, or other similar event outside the control and not the fault of the affected party ("Force Majeure Event"). A Force Majeure Event shall not constitute a breach of the contract. The party so affected shall immediately give notice to the other party of the Force Majeure Event. The State may grant relief from performance of the contract if the Contractor is prevented from performance by a Force Majeure Event. The burden of proof for the need for such relief shall rest upon the Contractor. To obtain release based on a Force Majeure Event, the Contractor shall file a written request for such relief with the State Purchasing Bureau. Labor disputes with the impacted party's own employees will not be considered a Force Majeure Event and will not suspend performance requirements under the contract.

HH. PROHIBITION AGAINST ADVANCE PAYMENT

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
RL			

Payments shall not be made until contractual deliverable(s) are received and accepted by the State.

II. PAYMENT

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
RL			

State will render payment to Contractor when the terms and conditions of the contract and specifications have been satisfactorily completed on the part of the Contractor as solely determined by the State. Payment will be made by the responsible agency in compliance with the State of Nebraska Prompt Payment Act (See Neb. Rev. Stat. §§ 81-2401 through 81-2408). The State may require the Contractor to accept payment by electronic means such as ACH deposit. In no event shall the State be responsible or liable to pay for any services provided by the Contractor prior to the Effective Date, and the Contractor hereby waives any claim or cause of action for any such services.

JJ. INVOICES

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
RL			

Invoices for payments must be submitted by the Contractor to the agency requesting the services with sufficient detail to support payment. The terms and conditions included in the Contractor's invoice shall be deemed to be solely for the convenience of the parties. No terms or conditions of any such invoice shall be binding upon the State, and no action by the State, including without limitation the payment of any such invoice in whole or in part, shall be construed as binding or estopping the State with respect to any such term or condition, unless the invoice term or condition has been previously agreed to by the State as an amendment to the contract.

Invoices: NE Department of Correctional Services

Accounts Payable
P.O. Box 94661
Lincoln, NE 68509-4661
Or Via e-mail to: DCS.AccountsPayable@nebraska.gov
Accounts Payable Contact (402) 479-5715

KK. RIGHT TO AUDIT

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

Contractor shall establish and maintain a reasonable accounting system that enables the State to readily audit contract. The State and its authorized representatives shall have the right to audit, to examine, and to make copies of or extracts from all financial and related records (in whatever form they may be kept, whether written, electronic, or other) relating to or pertaining to this contract kept by or under the control of the Contractor, including, but not limited to those kept by the Contractor, its employees, agents, assigns, successors, and Subcontractors. Such records shall include, but not be limited to, accounting records, written policies and procedures; all paid vouchers including those for out-of-pocket expenses; other reimbursement supported by invoices; ledgers; cancelled checks; deposit slips; bank statements; journals; original estimates; estimating work sheets; contract amendments and change order files; back charge logs and supporting documentation; insurance documents; payroll documents; timesheets; memoranda; and correspondence.

Contractor shall, at all times during the term of this contract and for a period of five (5) years after the completion of this contract, maintain such records, together with such supporting or underlying documents and materials. The Contractor shall at any time requested by the State, whether during or after completion of this contract and at Contractor's own expense make such records available for inspection and audit (including copies and extracts of records as required) by the State. Such records shall be made available to the State during normal business hours at the Contractor's office or place of business. In the event that no such location is available, then the financial records, together with the supporting or underlying documents and records, shall be made available for audit at a time and location that is convenient for the State. Contractor shall ensure the State has these rights with Contractor's assigns, successors, and Subcontractors, and the obligations of these rights shall be explicitly included in any subcontracts or agreements formed between the Contractor and any Subcontractors to the extent that those Subcontracts or agreements relate to fulfillment of the Contractor's obligations to the State.

Costs of any audits conducted under the authority of this right to audit and not addressed elsewhere will be borne by the State unless certain exemption criteria are met. If the audit identifies overpricing or overcharges (of any nature) by the Contractor to the State in excess of one-half of one percent (.5%) of the total contract billings, the Contractor shall reimburse the State for the total costs of the audit. If the audit discovers substantive findings related to fraud, misrepresentation, or non-performance, the Contractor shall reimburse the State for total costs of audit. Any adjustments and/or payments that must be made as a result of any such audit or inspection of the Contractor's invoices and/or records shall be made within a reasonable amount of time (not to exceed 90 days) from presentation of the State's findings to Contractor.

LL. INSPECTION AND APPROVAL

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

Final inspection and approval of all work required under the contract shall be performed by the designated State officials. The State and/or its authorized representatives shall have the right to enter any premises where the Contractor or Subcontractor duties under the contract are being performed, and to inspect, monitor or otherwise evaluate the work being performed. All inspections and evaluations shall be at reasonable times and in a manner that will not unreasonably delay work.

MM. CHANGES IN SCOPE/CHANGE ORDERS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The State may, upon the written agreement of Contractor, make changes to the contract within the general scope of the RFP. The State may, at any time work is in progress, by written agreement, make alterations in the terms of work as shown in the specifications, require the Contractor to make corrections, decrease the quantity of work, or make such other changes as the State may find necessary or desirable. The Contractor shall not claim forfeiture of contract by reasons of such changes by the State. Changes in work and the amount of compensation to be paid to the Contractor shall be determined in accordance with applicable unit prices if any, or a pro-rated value.

Corrections of any deliverable, service or performance of work required pursuant to the contract shall not be deemed a modification. Changes or additions to the contract beyond the scope of the RFP are not permitted.

NN. SEVERABILITY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

If any term or condition of the contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and conditions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the contract did not contain the particular provision held to be invalid.

OO. CONFIDENTIALITY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

All materials and information provided by the State or acquired by the Contractor on behalf of the State shall be regarded as confidential information. All materials and information provided by the State or acquired by the Contractor on behalf of the State shall be handled in accordance with federal and state law, and ethical standards. The Contractor must ensure the confidentiality of such materials or information. Should said confidentiality be breached by a Contractor; Contractor shall notify the State immediately of said breach and take immediate corrective action.

It is incumbent upon the Contractor to inform its officers and employees of the penalties for improper disclosure imposed by the Privacy Act of 1974, 5 U.S.C. 552a. Specifically, 5 U.S.C. 552a (i)(1), which is made applicable to Contractors by 5 U.S.C. 552a (m)(1), provides that any officer or employee of a Contractor, who by virtue of his/her employment or official position has possession of or access to agency records which contain individually identifiable information, the disclosure of which is prohibited by the Privacy Act or regulations established thereunder, and who knowing that disclosure of the specific material is prohibited, willfully discloses the material in any manner to any person or agency not entitled to receive it, shall be guilty of a misdemeanor and fined not more than \$5,000.

PP. PROPRIETARY INFORMATION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

Data contained in the proposal and all documentation provided therein, become the property of the State of Nebraska and the data becomes public information upon opening the proposal. If the bidder wishes to have any information withheld from the public, such information must fall within the definition of proprietary information contained within Nebraska's public record statutes. **All proprietary information the bidder wishes the State to withhold must be submitted in a sealed package, which is separate from the remainder of the proposal, and provide supporting documents showing why such documents should be marked proprietary.** The separate package must be clearly marked PROPRIETARY on the outside of the package. **Bidders may not mark their entire Request for Proposal as proprietary.** Bidder's cost proposals may not be marked as proprietary information. Failure of the bidder to follow the instructions for submitting proprietary and copyrighted information may result in the information being viewed by other bidders and the public. Proprietary information is defined as trade secrets, academic and scientific research work which is in progress and unpublished, and other information which if released would give advantage to business competitors and serve no public purpose (see Neb. Rev. Stat. § 84-712.05(3)). In accordance with Attorney General Opinions 92068 and 97033, bidders submitting information as proprietary may be required to prove specific, named competitor(s) who would be advantaged by release of the information and the specific advantage the competitor(s) would receive. Although every effort will be made to withhold information that is properly submitted as proprietary and meets the State's definition of proprietary information, the State is under no obligation to maintain the confidentiality of proprietary information and accepts no liability for the release of such information.

QQ. CERTIFICATION OF INDEPENDENT PRICE DETERMINATION/COLLUSIVE BIDDING

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

By submission of this proposal, the bidder certifies that it is the party making the foregoing proposal and that the proposal is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the proposal is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham proposal, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham proposal, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the proposal price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the proposal price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the proposal are true; and further that the bidder has not, directly or indirectly, submitted the proposal price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, proposal depository, or to any member or agent thereof to effectuate a collusive or sham proposal.

RR. STATEMENT OF NON-COLLUSION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The proposal shall be arrived at by the bidder independently and be submitted without collusion with, and without any direct or indirect agreement, understanding or planned common course of action with, any person; firm; corporation; bidder; Contractor of materials, supplies, equipment or services described in this RFP. Bidder shall not collude with, or attempt to collude with, any state officials, employees or agents; or evaluators or any person involved in this RFP. The bidder shall not take any action in the restraint of free competition or designed to limit independent bidding or to create an unfair advantage.

Should it be determined that collusion occurred, the State reserves the right to reject a bid or terminate the contract and impose further administrative sanctions.

SS. PRICES

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

All prices, costs, and terms and conditions outlined in the proposal shall remain fixed and valid commencing on the opening date of the proposal until an award is made or the Request for Proposal is cancelled.

Prices offered herein will remain firm from the date of the award for five (5) years. Prices may be subject to change after the initial five (5) year period. All regulatory fees must be included in the rates, as no add on taxes or fees (except called out on the cost sheet) will be accepted. All taxes and fees must be included in the per minute rate. Such changes shall be based on industry changes as evidenced by revised printed price lists, verifiable documented cost increases or notices. A request for price increase shall be provided in writing, to The Nebraska State Purchasing Bureau at least thirty (30) days prior to any price increase of the contract. No price increases are to be billed to NDCS without prior written approval by the State Purchasing Bureau and the NDCS Purchasing Division. State Purchasing Bureau reserves the right to accept or reject any price increase request. In the event new prices are not acceptable, the contract may be cancelled. Approved price increases shall become part of the new contract as an amendment and will be recognized as firm contract pricing. Revised pricing will carry over to any subsequent renewals or revisions unless specifically revised and agreed upon by both parties.

The State will be given full proportionate benefit of any price decrease during the term of the contract. Contractor represents and warrants that all prices for services, now or subsequently specified, are as low as and no higher than prices which the Contractor has charged or intends to charge customers other than the State for the same or similar products and services of the same or equivalent quantity and quality for delivery or performance during the same periods of time. If, during the term of the contract, the Contractor shall reduce any and/or all prices charged to any customers other than the State for the same or similar products or services specified herein, the Contractor shall make an equal or equivalent reduction in corresponding prices for said specified products or services.

Contractor also represents and warrants that all prices set forth in the contract and all prices in addition, which the Contractor may charge under the terms of the contract, do not and will not violate any existing federal, state, or municipal law or regulations concerning price discrimination and/or price fixing. Contractor agrees to hold the State harmless from any such violation. Prices quoted shall not be subject to increase throughout the contract period unless specifically allowed by these specifications.

TT. BEST AND FINAL OFFER

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
RC			

The State will compile the final scores for all parts of each proposal. The award may be granted to the highest scoring responsive and responsible bidder. Alternatively, the highest scoring bidder or bidders may be requested to submit best and final offers. If best and final offers are requested by the State and submitted by the bidder, they will be evaluated (using the stated criteria), scored, and ranked by the Evaluation Committee. The award will then be granted to the highest scoring bidder. However, a bidder should provide its best offer in its original proposal. Bidders should not expect that the State will request a best and final offer.

UU. ETHICS IN PUBLIC CONTRACTING

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
RC			

No bidder shall pay or offer to pay, either directly or indirectly, any fee, commission compensation, gift, gratuity, or anything of value to any State officer, legislator, employee or evaluator based on the understanding that the receiving person's vote, actions, or judgment will be influenced thereby. No bidder shall give any item of value to any employee of the State Purchasing Bureau or any evaluator.

Bidders shall be prohibited from utilizing the services of lobbyists, attorneys, political activists, or consultants to secure the contract. It is the intent of this provision to assure that the prohibition of state contact during the procurement process is not subverted through the use of lobbyists, attorneys, political activists, or consultants. It is the intent of the State that the process of evaluation of proposals and award of the contract be completed without external influence. It is not the intent of this section to prohibit bidders from seeking professional advice, for example consulting legal counsel, regarding terms and conditions of this Request for Proposal or the format or content of their proposal.

If the bidder is found to be in non-compliance with this section of the Request for Proposal, they may forfeit the contract if awarded to them or be disqualified from the selection process.

VV. INDEMNIFICATION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
RC			

1. GENERAL

The Contractor agrees to defend, indemnify, hold, and save harmless the State and its employees, volunteers, agents, and its elected and appointed officials ("the indemnified parties") from and against any and all claims, liens, demands, damages, liability, actions, causes of action, losses, judgments, costs, and expenses of every nature, including investigation costs and expenses, settlement costs, and attorney fees and expenses ("the claims"), sustained or asserted against the State, arising out of, resulting from, or attributable to the willful misconduct, negligence, error, or omission of the Contractor, its employees, Subcontractors, consultants, representatives, and agents, except to the extent such Contractor liability is attenuated by any action of the State which directly and proximately contributed to the claims.

2. INTELLECTUAL PROPERTY

The Contractor agrees it will, at its sole cost and expense, defend, indemnify, and hold harmless the indemnified parties from and against any and all claims, to the extent such claims arise out of, result from, or are attributable to, the actual or alleged infringement or misappropriation of any patent, copyright, trade secret, trademark, or confidential information of any third party by the Contractor or its employees, Subcontractors, consultants, representatives, and agents; provided, however, the State gives the Contractor prompt notice in writing of the claim. The Contractor may not settle any infringement claim that will affect the State's use of the Licensed Software without the State's prior written consent, which consent may be withheld for any reason.

If a judgment or settlement is obtained or reasonably anticipated against the State's use of any intellectual property for which the Contractor has indemnified the State, the Contractor shall, at the Contractor's sole cost and expense, promptly modify the item or items which were determined to be infringing, acquire a license or licenses on the State's behalf to provide the necessary rights to the State to eliminate the infringement, or provide the State with a non-infringing substitute that provides the State the same functionality. At the State's election, the actual or anticipated judgment may be treated as a breach of warranty by the Contractor, and the State may receive the remedies provided under this RFP.

3. PERSONNEL

The Contractor shall, at its expense, indemnify and hold harmless the indemnified parties from and against any claim with respect to withholding taxes, worker's compensation, employee benefits, or any other claim, demand, liability, damage, or loss of any nature relating to any of the personnel provided by the Contractor.

4. SELF-INSURANCE

The State of Nebraska is self-insured for any loss and purchases excess insurance coverage pursuant to Neb. Rev. Stat. § 81-8,239.01 (Reissue 2008). If there is a presumed loss under the provisions of this agreement, Contractor may file a claim with the Office of Risk Management pursuant to Neb. Rev. Stat. §§ 81-8,829 – 81-8,306 for review by the State Claims Board. The State retains all rights and immunities under the State Miscellaneous (Section 81-8,294), Tort (Section 81-8,209), and Contract Claim Acts (Section 81-8,302), as outlined in Neb. Rev. Stat. § 81-8,209 *et seq.* and under any other provisions of law and accepts liability under this agreement to the extent provided by law.

5. ALL REMEDIES AT LAW

Nothing in this agreement shall be construed as an indemnification by one party of the other for liabilities of a party or third parties for property loss or damage or death or personal injury arising out of and during the performance of this lease. Any liabilities or claims for property loss or damages or for death or personal injury by a party or its agents, employees, contractors or assigns or by third persons, arising out of and during the performance of this lease shall be determined according to applicable law.

WW. NEBRASKA TECHNOLOGY ACCESS STANDARDS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
RC			

Contractor shall review the Nebraska Technology Access Standards, found at <http://nitc.nebraska.gov/standards/2-201.html> and ensure that products and/or services provided under the contract are in compliance or will comply with the applicable standards to the greatest degree possible. In the event such standards change during the Contractor's performance, the State may create an amendment to the contract to request the contract comply with the changed standard at a cost mutually acceptable to the parties.

XX. ANTITRUST

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The Contractor hereby assigns to the State any and all claims for overcharges as to goods and/or services provided in connection with this contract resulting from antitrust violations which arise under antitrust laws of the United States and the antitrust laws of the State.

YY. DISASTER RECOVERY/BACK UP PLAN

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The Contractor shall have a disaster recovery and back-up plan, of which a copy should be provided to the State, which includes, but is not limited to equipment, personnel, facilities, and transportation, in order to continue services as specified under the specifications in the contract in the event of a disaster.

ZZ. TIME IS OF THE ESSENCE

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

Time is of the essence in this contract. The acceptance of late performance with or without objection or reservation by the State shall not waive any rights of the State nor constitute a waiver of the requirement of timely performance of any obligations on the part of the Contractor remaining to be performed.

AAA. RECYCLING

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

Preference will be given to items which are manufactured or produced from recycled material or which can be readily reused or recycled after their normal use as per Neb. Rev. Stat. § 81-15,159.

BBB. DRUG POLICY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

Contractor certifies it maintains a drug free work place environment to ensure worker safety and workplace integrity. Contractor agrees to provide a copy of its drug free workplace policy at any time upon request by the State.

CCC. EMPLOYEE WORK ELIGIBILITY STATUS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The Contractor is required and hereby agrees to use a federal immigration verification system to determine the work eligibility status of employees physically performing services within the State of Nebraska. A federal immigration verification system means the electronic verification of the work authorization program authorized by the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, 8 U.S.C. 1324a, known as the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of an employee.

If the Contractor is an individual or sole proprietorship, the following applies:

1. The Contractor must complete the United States Citizenship Attestation Form, available on the Department of Administrative Services website at <http://das.nebraska.gov/materiel/purchasing.html>

The completed United States Attestation Form should be submitted with the Request for Proposal response.
2. If the Contractor indicates on such attestation form that he or she is a qualified alien, the Contractor agrees to provide the US Citizenship and Immigration Services documentation required to verify the Contractor's lawful presence in the United States using the Systematic Alien Verification for Entitlements (SAVE) Program.
3. The Contractor understands and agrees that lawful presence in the United States is required and the Contractor may be disqualified or the contract terminated if such lawful presence cannot be verified as required by Neb. Rev. Stat. § 4-108.

DDD. CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND INELIGIBILITY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The Contractor, by signature to this RFP, certifies that the Contractor is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any federal department or agency from participating in transactions (debarred). The Contractor also agrees to include the above requirements in any and all Subcontracts into which it enters. The Contractor shall immediately notify the Department if, during the term of this contract, Contractor becomes debarred. The Department may immediately terminate this contract by providing Contractor written notice if Contractor becomes debarred during the term of this contract.

Contractor, by signature to this RFP, certifies that Contractor has not had a contract with the State of Nebraska terminated early by the State of Nebraska. If Contractor has had a contract terminated early by the State of Nebraska, Contractor must provide the contract number, along with an explanation of why the contract was terminated early. Prior early termination may be cause for rejecting the proposal.

EEE. POLITICAL SUB-DIVISIONS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

The Contractor may extend the contract to political sub-divisions conditioned upon the honoring of the prices charged to the State. Terms and conditions of the Contract must be met by political sub-divisions. Under no circumstances shall the State be contractually obligated or liable for any purchases by political sub-divisions or other public entities not authorized by Neb. Rev. Stat. § 81-145, listed as "all officers of the state, departments, bureaus, boards, commissions, councils, and institutions receiving legislative appropriations." A listing of Nebraska political subdivisions may be found at the website of the Nebraska Auditor of Public Accounts.

FFF. OFFICE OF PUBLIC COUNSEL

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

If it provides, under the terms of this contract and on behalf of the State of Nebraska, health and human services to individuals; service delivery; service coordination; or case management, Contractor shall submit to the jurisdiction of the Office of Public Counsel, pursuant to Neb. Rev. Stat. §§ 81-8,240 et seq. This section shall survive the termination of this contract and shall not apply if Contractor is a long-term care facility subject to the Long-Term Care Ombudsman Act, Neb. Rev. Stat. §§ 81-2237 et seq.

GGG. LONG-TERM CARE OMBUDSMAN

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
PC			

If it is a long-term care facility subject to the Long-Term Care Ombudsman Act, Neb. Rev. Stat. §§ 81-2237 et seq., Contractor shall comply with the Act. This section shall survive the termination of this contract.

**ADDENDUM ONE
REVISED EVALUATION CRITERIA**

Date: April 12, 2016
To: All Bidders
From: Robert Thompson/Nancy Storant, Buyers
AS Materiel State Purchasing Bureau
RE: Addendum for Request for Proposal 5289Z1
to be opened June 1, 2016 at 2:00 p.m. Central

The Evaluation Criteria has been revised and posted to the website.

This addendum will become part of the proposal and should be acknowledged with the Request for Proposal

Pete Ricketts, Governor

ADDENDUM TWO

Date: April 25, 2016
To: All Bidders
From: Robert Thompson/Nancy Storant, Buyers
AS Materiel State Purchasing Bureau
RE: Addendum for Request for Proposal 5289Z1
to be opened June 1, 2016 at 2:00 p.m. Central

Revised Schedule of Events

A. SCHEDULE OF EVENTS

The State expects to adhere to the tentative procurement schedule shown below. It should be noted, however, that some dates are approximate and subject to change.

	ACTIVITY	DATE/TIME
4.	State responds to written first round questions through Request for Proposal "Addendum" and/or "Amendment" to be posted to the Internet at: http://das.nebraska.gov/materiel/purchasing.html	April 25, 2016 April 26, 2016

	ACTIVITY	DATE/TIME
5.	<p>Mandatory Pre-Proposal Conference and Site Visits Day One (1) Starting Location, followed by additional stops:</p> <p style="padding-left: 40px;">NDCS Correctional Services/Admin 801 W. Prospector Pl., #1 Lincoln NE 68522</p> <p style="padding-left: 40px;">NDCS Community Corrections Center/Lincoln 2720 West Van Dorn Lincoln NE 68522</p> <p style="padding-left: 40px;">NDCS Lincoln Correctional Center 3216 West Van Dorn Lincoln NE 68522</p> <p style="padding-left: 40px;">NDCS Diagnostic and Evaluation Center 3220 West Van Dorn Lincoln NE 68522</p> <p style="padding-left: 40px;">NDCS Nebraska State Penitentiary 4201 S. 14th Street Lincoln NE 68502</p> <p><i>* Registration Advisement: Bids will only be accepted from those Companies/Firms which properly register their attendance at this meeting by completing all of the required information on the State Registration Sheet.</i></p>	<p>May 2, 2016</p> <p>Meet at: 801 W. Prospect #1 at 9:30 AM Central Time</p>
6.	<p>Mandatory Pre-Proposal Conference and Site Visits Day Two (2) Starting Location, followed by additional stops:</p> <p style="padding-left: 40px;">NDCS Correctional Center for Women 1107 Recharge Rd York NE 68457</p> <p style="padding-left: 40px;">NE-DHHS-Youth Rehab and Treatment 855 North 1st Street Geneva NE 68361</p> <p><i>* Registration Advisement: Bids will only be accepted from those Companies/Firms which properly register their attendance at these meetings by completing all of the required information on the State Registration Sheet.</i></p>	<p>May 3, 2016</p> <p>Meet at: 1107 Recharge Rd at 9:30 AM Central Time</p>

	ACTIVITY	DATE/TIME
7.	<p>Mandatory Pre-Proposal Conference and Site Visits Day Three (3) Starting Location, followed by additional stops:</p> <p style="text-align: center;">NE-DHHS-Youth Rehab and Treatment 2802 30th Avenue Kearney NE 68845</p> <p style="text-align: center;">NDCS Work Ethic Camp 2309 North Highway 83 McCook NE 69001</p> <p><i>* Registration Advisement: Bids will only be accepted from those Companies/Firms which properly register their attendance at these meetings by completing all of the required information on the State Registration Sheet.</i></p>	<p style="text-align: center;">May 4, 2016</p> <p style="text-align: center;">Meet at: 2802 30th Avenue at 9:30 AM Central Time</p>
8.	<p>Mandatory Pre-Proposal Conference and Site Visits Day Four (4) Starting Location, followed by additional stops:</p> <p style="text-align: center;">NDCS Tecumseh State Correctional 2725 North Highway 50 Tecumseh NE 68450</p> <p style="text-align: center;">NDCS Correctional Youth Facility 2610 North 20th Street East Omaha NE 68110</p> <p style="text-align: center;">NDCS Omaha Correctional Center 2323 Avenue J Omaha NE 68110</p> <p style="text-align: center;">NDCS Community Corrections Center 2320 Avenue J Omaha NE 68110</p> <p><i>* Registration Advisement: Bids will only be accepted from those Companies/Firms which properly register their attendance at these meetings by completing all of the required information on the State Registration Sheet.</i></p>	<p style="text-align: center;">May 5, 2016</p> <p style="text-align: center;">Meet at: 2725 North Hwy 50 at 9:30 AM Central Time</p>
9.	<p>Last day to submit written (second round) questions after Pre-Proposal Conference</p>	<p style="text-align: center;">May 8, 2016</p>
10.	<p>State responds to written (second round) questions through Request for Proposal "Addendum" and/or "Amendment" to be posted to the Internet at: http://das.nebraska.gov/materiel/purchasing.html</p>	<p style="text-align: center;">May 16, 2016</p>

	ACTIVITY	DATE/TIME
11.	Proposal opening Location: State Purchasing Bureau 1526 K Street, Suite 130 Lincoln, NE 68508	June 1, 2016 2:00 PM Central Time
12.	Review for conformance of mandatory requirements	June 1, 2016
13.	Evaluation period	June 3, 2016 through June 10, 2016
14.	“Oral Interviews/Presentations and/or Demonstrations” (if required)	To Be Determined
15.	Post “Letter of Intent to Contract” to Internet at: http://das.nebraska.gov/materiel/purchasing.html	June 20, 2016
16.	Contract finalization period	June 20, 2016 through July 11, 2016
17.	Contract award	July 18, 2016
18.	Contractor start date	September 26, 2016

This addendum will become part of the proposal and should be acknowledged with the Request for Proposal

Pete Ricketts, Governor

ADDENDUM THREE QUESTIONS and ANSWERS

Date: April 26, 2016
 To: All Bidders
 From: Robert Thompson/Nancy Storant, Buyers
 AS Materiel, State Purchasing Bureau
 RE: Addendum for Request for Proposal Number 5289Z1
 to be opened June 1, 2016 at 2:00 p.m. Central Time

Questions and Answers

Following are the questions submitted and answers provided for the above mentioned Request for Proposal. The questions and answers are to be considered as part of the Request for Proposal. It is the Bidder's responsibility to check the State Purchasing Bureau website for all addenda or amendments.

<u>Question Number</u>	<u>RFP Section Reference</u>	<u>RFP Page Number</u>	<u>Question</u>	<u>State Response</u>
1.			Whether companies from Outside USA can apply for this? (like, from India or Canada)	Yes, companies from outside the USA may submit a proposal.
2.			Whether we need to come over there for meetings?	The proposal and contract execution require a physical presence.
3.			Can we perform the tasks (related to RFP) outside USA ? (like, from India or Canada)	No, contract execution requires a physical presence.
4.			Can we submit the proposals via email?	No, per the Request for Proposal for Contractual Services Form, item 1. "Sealed proposals must be received in State Purchasing Bureau by the date and time of proposal opening per the schedule of events. No late proposals will be accepted. No electronic, e-mail, fax, voice, or telephone proposals will

				be accepted.”
5.			Why was the previous Inmate Calling Services RFP (#5094 Z1) from August 2015 cancelled?	All bids were rejected in order for the State to revise the RFP and re-release.
6.			Who is the current provider for the Inmate Calling Services?	Public Communications Services, Inc.
7.			What is the current commission rate for the state on the Inmate Calling Services?	Zero. NDCS does not receive any commissions.
8.			Who provides the Inmate Commissary Services?	This is an internal system developed within the State of Nebraska.
9.			Having attended (at considerable time and expense) the last 4 day mandatory site visit in August 2015 for the previous, but internally rejected RFP process, is it still mandatory they we again visit the same sites to participate in this current RFP process? We would greatly appreciate any consideration for an "exemption" for those who previous invested in this aspect of the prior release of the Nebraska DOC RFP for inmate phones.	<p>Per Section II. F. PRE-PROPOSAL CONFERENCE AND SITE VISITS & Form B Important Notice:</p> <p>“Attendance at the pre-proposal conference and all site visits is mandatory in order to submit a proposal (bidders who attended the site visits in response to 5094Z1 are not required to attend the site visits for 5289Z1 – but must still attend the pre-proposal conference on Day 1, per the schedule of events .”</p> <p>All bidders must attend the mandatory pre-proposal conference on Day 1. The following vendors are excused from attending all site visits.</p> <p>CenturyLink GTL Legacy Inmate Comm. Securus Technologies Telmate X Direct</p> <p>All other bidders must attend the mandatory pre-proposal conference and all of the site visits conducted all four days, per the schedule of events.</p>
10.	III. Terms And Conditions FF. Performance Bond	Page 21	Please confirm if the Performance Bond is to be submitted with the RFP response.	The Performance Bond is NOT to be submitted with the RFP response. The bond is only required of the bidder who is in receipt of an intent to award and would be required prior to contract execution.

11.			Please provide your current ADP.	5225 as of 4/22/2016; does not include inmates NDCS houses in county jails.
12.			In the Q&A for the previous ITS RFP, you stated you had no ICE detainees. Is this still the case?	Yes.
13.			You provided call information for a 12-month period with the previous ITS RFP (Revised Attachment One, showing call data from 2014 and facility populations as of June 30, 2015). Could you please provide updated information?	Please refer to Attachment One, as posted.
14.			What educational programs do you currently have in place?	Core educational programs are High School and Adult Education classes and English as a Second Language (ESL).
15.	Request for Proposal for Contractual Service Form	i	"Cost proposals will not be considered propriety." We assume the last word of this statement is meant to be "proprietary." Please confirm or advise if this is not the case.	<p>Correct, "proprietary" is the correct term.</p> <p>The RFP is hereby amended to remove in its entirety, the second paragraph under IMPORTANT NOTICE on the REQUEST FOR PROPOSAL FOR CONTRACTUAL SERVICES FORM, with the following:</p> <p>In addition, all responses to Requests for Proposals will be posted to the Department of Administrative Services public website. The public posting will include figures, illustrations, photographs, charts, or other supplementary material. Proprietary information identified and marked according to state law is exempt from posting. To exempt proprietary information you must submit a written showing that the release of the information would give an advantage to named business competitor(s) and show that the named business competitor(s) will gain a demonstrated advantage by disclosure of information. The mere assertion that information is proprietary is not sufficient. (Attorney General Opinion No.</p>

				92068, April 27, 1992) The agency will then determine if the interests served by nondisclosure outweigh any public purpose served by disclosure. Cost proposals will not be considered proprietary.
16..	Request for Proposal for Contractual Service Form	i	"Failure to agree to the reservation and waiver of protection will result in the response to the RFP being non-conforming and rejected." Where in our response would you prefer we agree to this provision?	Signing the REQUEST FOR PROPOSAL FOR CONTRACTUAL SERVICES FORM, is the bidders acceptance.
17.	III.EEE	31	"The Contractor may extend the contract to political subdivisions conditioned upon the honoring of the prices charged to the State": Q: What other governmental entities are currently participating with the State in the procurement of an Inmate Telephone System as a Political Subdivision?	None. The condition is optional on behalf of the contractor.
18.	Revised Evaluation Criteria	p. 1 of Revised Criteria	We understand that traditional collect is a preferred but not required billing option. As the state is likely aware, collect is more expensive to provide than prepaid or debit. In addition, the Evaluation Criteria provide minutes for Pre-Pay Calling to be used in the evaluation but not collect. Q#1: Will collect rates be evaluated/scored?	No. Please refer to the Evaluation Criteria, as posted.
19.			Q#2: Because collect is more expensive to provide, may vendors propose a slightly higher rate for collect? If so, how will those rates be evaluated?	Bidder is to determine the cost proposed. Please see response to question 18.
20.	IV. A. Project Overview	32	RFP states "Optional products must be clearly identified... and provide the optional cost separately from the bid cost per minute." Also, "If bidding	Correct. If a bidder wishes to propose an alternant solution that would be evaluated and scored, a complete separate RFP response would

			<p>an alternant proposal, bidder must complete a separate RFP response including all mandatory requirements..."</p> <p>We read this as saying that if a respondent wished to propose the "base" telephone system as required <i>and</i> propose optional products that might impact the costs to end-users, that it should submit one proposal with optional products clearly identified and priced. I.e. a separate proposal would be necessary only if the respondent were proposing an alternative to the baseline functionality requested in the RFP.</p> <p>Q: Would the State confirm our understanding?</p>	<p>need to be submitted and would need to meet all of the mandatory requirements.</p> <p>However, bidders may also provide pricing for optional products or services that the State may procure from the awarded contractor that are not included in the technical proposal or built into the required Debit Calling and Pre-Pay cost per minute portion of the Cost Sheet.</p> <p>A Revised Attachment Two Cost Sheet has been posted with space provided to include optional products or services.</p>
21.	IV. D.2 Rates	34	<p>Provision states "All call connect/surcharge fees will be identified by type of call". However the most recent FCC Order in WC Docket 12-375 prohibits per-call connect fees.</p> <p>Q: For maximum clarity will the State remove this sentence from IV.D.2?</p>	<p>The RFP is hereby amended to remove Section IV. D. 2., in its entirety and is replaced with the following:</p> <p>2. Rates Per minute charges must be flat rate twenty-four (24) hours a day, seven (7) days a week. Rates must remain firm for the first five (5) years of the contract. Prices may be subject to change after the initial five (5) year period. All government-mandated fees and taxes must be included in the rates, as no add-ons will be accepted. Such changes shall be based on industry changes as evidenced by revised printed price lists, verifiable documented cost increases or notices. A request for price increase shall be provided in writing, to The Nebraska State Purchasing Bureau at least thirty (30) days prior to any price increase of the contract. No price increases are to be billed to NDCS without prior written approval by the State Purchasing Bureau and the NDCS Purchasing Division. State Purchasing Bureau reserves the</p>

				<p>right to accept or reject any price increase request. In the event new prices are not acceptable, the contract may be cancelled. Approved price increases shall become part of the new contract as an amendment and will be recognized as firm contract pricing. Revised pricing will carry over to any subsequent renewals or revisions unless specifically revised and agreed upon by both parties. Bidders must provide their proposed rates for all categories listed on the cost proposal sheet.</p> <p>Failure to provide rates as outlined may be grounds for rejection of proposal.</p> <p>Any and all charges billable to the inmates and their families must be detailed in the Bidder's cost proposal. Contractor may not assess any</p>
22.	IV. D.2 Rates & Revised Evaluation Criteria	p. 34 in RFP & p.1 in Revised Evaluation Criteria	<p>We read IV.D.2 and the Evaluation Criteria to say that different rates may be charged by call category (local vs. intraLATA, etc.), and that intraLATA will receive approximately 70% of the weighting in calculating the lowest cost submitted.</p> <p>Q#1: Will the State confirm our interpretation?</p>	<p>Bidder's prices will be multiplied by the quantity given (in the table at the bottom of the Evaluation Criteria) for each call type, and added together. This total sum will be calculated using the formula provided with the Evaluation Criteria to arrive at the cost points for each bidder.</p>
23.			<p>Q#2: Will the State provide a breakdown of actual calls and minutes for the past 12 months by local, intraLATA, interLATA, interstate, and international? This breakdown would also help vendors calculate the mix of jurisdictions and tax rates that must be bundled into the offered call rates.</p>	<p>Please refer to Attachment One, as posted.</p>
24,	IV.D.2 Rates	34	<p>Provision states that "All regulatory fees must be included in the rates, as no add-ons will be accepted." We read this as saying that all regulatory fees (e.g. FCC-mandated USF and other</p>	<p>Please see response to question 21.</p>

			<p>taxes (e.g. sales tax) of any type must be bundled into the proposed rates. Although unlikely, it is possible that some respondents may view regulatory fees as separate from taxes.</p> <p>Q: Would the State consider revising the requirement to state "All government-mandated fees and taxes must be included in the rates, as no add-ons will be accepted."?</p>	
25.	IV.D.6 Prepay by Inmate Families & Revised Evaluation Criteria	p 35 in RFP & p 1 in Revised Evaluation Criteria	<p>Provision states that account setup fees will be identified in the proposal. Account setup fees are not among the permitted fees in the most recent FCC Order, and would therefore not be permitted to be charged.</p> <p>Q: Would the State modify the RFP and Evaluation Criteria to disallow account setup fees?</p>	This question will be addressed at the preproposal conference and responded to in the second round of Questions and Answers.
26.	IV.D.6 Prepay by Inmate Families & Revised Evaluation Criteria	p 35 in RFP & p 1 in Revised Evaluation Criteria	<p>Provision states that (1) all monies paid to the contractor by inmate families will be credited to the families account and (2) contractors are allowed to charge a fee to cover the cost of accepting credit card payments from families with the fee not to exceed 5%. In addition the Revised Evaluation Criteria list only Account Setup Fees as fees to be proposed and evaluated.</p> <p>Some providers direct families away from setting up accounts (which take time to process) and toward "single pay" programs such as text payment to a cell phone or automated payment by phone (trade names e.g. text collect, PayNow). These require use of automated payment systems and avoid the cost of setting up an account, as well as forcing families to pay a transaction fee every time they</p>	This question will be addressed at the preproposal conference and responded to in the second round of Questions and Answers.

			<p>receive a call.</p> <p>Q#1: For these reasons will the State explicitly disallow these single pay programs?.</p>	
27.			<p>Q#2: If a respondent proposed a transaction fee to families lower than 5%, would it receive additional points in the evaluation?</p>	<p>This question will be addressed at the preproposal conference and responded to in the second round of Questions and Answers.</p>
28.			<p>Q#3: If it would receive more points in the evaluation, would the State modify the Evaluation Criteria to include account transaction fees? At the State's current usage we would expect approximately 550 transactions per month. If single pay methods were allowed, the number of transaction fee events would be several times this amount</p>	<p>This question will be addressed at the preproposal conference and responded to in the second round of Questions and Answers.</p>
29.	IV.D.6 Prepay by Inmate Families & Revised Evaluation Criteria	p 35 in RFP & p 1 in Revised Evaluation Criteria	<p>Q #1: Will third-party cash vendors such as Western Union be allowed for family members who are "unbanked"?</p>	<p>Contractor determines if they will accept third-party cash vendors such as Western Union for payment.</p>
30.			<p>Q #2: If so, will the State require vendors to disclose these fees and certify that the fees do not include any markup from the third party, including but not limited to 'direct' markup, revenue sharing of any sort between the provider and the third party, volume rebates, etc.?</p>	<p>If contractor does allow, contractor must not charge any additional fees and or mark up.</p>
31.	IV.E.6	38	<p>Bidder must identify their capability to allow the facility to terminate the cell signal when signal is within a specified distance from the facility. We assume this means that the system must terminate an inmate call to a called party</p>	<p>This question will be addressed at the preproposal conference and responded to in the second round of Questions and Answers.</p>

			<p>cell phone outside the facility, if that called party cell phone is within a specified distance from the facility; terminating the called party's actual cell signal would violate federal regulation.</p> <p>Q: Would the State confirm our interpretation of the requirement?</p>	
32.			<p>I would like to clarify whether [REDACTED] will need to attend the Pre-Proposal Conference and Site Visit on May 2-5 since we attended the last one that was held back on August 25, 2015.</p>	<p>Please see response to question number 9.</p>

This addendum will become part of the proposal and should be acknowledged with the Request for Proposal.

ADDENDUM FOUR

Date: May 10, 2016

To: All Bidders

From: Robert Thompson/Nancy Storant, Buyers
AS Materiel State Purchasing Bureau

RE: Addendum for Request for Proposal 5289Z1
to be opened June 1, 2016 at 2:00 p.m. Central

Revised Schedule of Events

A. SCHEDULE OF EVENTS

The State expects to adhere to the tentative procurement schedule shown below. It should be noted, however, that some dates are approximate and subject to change.

	ACTIVITY	DATE/TIME
9.	Last day to submit written (second round) questions after Pre-Proposal Conference	May 8, 2016 May 11, 2016
10.	State responds to written (second round) questions through Request for Proposal "Addendum" and/or "Amendment" to be posted to the Internet at: http://das.nebraska.gov/materiel/purchasing.html	May 16, 2016 May 18, 2016
11.	Proposal opening Location: State Purchasing Bureau 1526 K Street, Suite 130 Lincoln, NE 68508	June 1, 2016 2:00 PM Central Time
12.	Review for conformance of mandatory requirements	June 1, 2016
13.	Evaluation period	June 3, 2016 through June 10, 2016
14.	"Oral Interviews/Presentations and/or Demonstrations" (if required)	To Be Determined
15.	Post "Letter of Intent to Contract" to Internet at: http://das.nebraska.gov/materiel/purchasing.html	June 20, 2016

ACTIVITY		DATE/TIME
16.	Contract finalization period	June 20, 2016 through July 11, 2016
17.	Contract award	July 18, 2016
18.	Contractor start date	September 26, 2016

This addendum will become part of the proposal and should be acknowledged with the Request for Proposal

ADDENDUM FIVE

Date: May 18, 2016
 To: All Bidders
 From: Robert Thompson/Nancy Storant, Buyers
 AS Materiel State Purchasing Bureau
 RE: Addendum for Request for Proposal 5289Z1
 to be opened June 1, 2016 at 2:00 p.m. Central

Revised Schedule of Events

A. SCHEDULE OF EVENTS

The State expects to adhere to the tentative procurement schedule shown below. It should be noted, however, that some dates are approximate and subject to change.

	ACTIVITY	DATE/TIME
9.	State responds to written (second round) questions through Request for Proposal "Addendum" and/or "Amendment" to be posted to the Internet at: http://das.nebraska.gov/materiel/purchasing.html	May 16, 2016 May 18, 2016 May 19, 2016
10.	Proposal opening Location: State Purchasing Bureau 1526 K Street, Suite 130 Lincoln, NE 68508	June 1, 2016 2:00 PM Central Time
11.	Review for conformance of mandatory requirements	June 1, 2016
12.	Evaluation period	June 3, 2016 through June 10, 2016
13.	"Oral Interviews/Presentations and/or Demonstrations" (if required)	To Be Determined
14.	Post "Letter of Intent to Contract" to Internet at: http://das.nebraska.gov/materiel/purchasing.html	June 20, 2016
15.	Contract finalization period	June 20, 2016 through July 11, 2016

	ACTIVITY	DATE/TIME
16.	Contract award	July 18, 2016
17.	Contractor start date	September 26, 2016

This addendum will become part of the proposal and should be acknowledged with the Request for Proposal

**ADDENDUM SIX
REVISED SCHEDULE OF EVENTS**

Date: May 20, 2016

To: All Bidders

From: Robert Thompson/Nancy Storant, Buyers
AS Materiel State Purchasing Bureau

RE: Addendum for Request for Proposal 5289Z1
to be opened June 1, 2016 To Be Determined at 2:00 p.m. Central

Revised Schedule of Events

A. SCHEDULE OF EVENTS

The State expects to adhere to the tentative procurement schedule shown below. It should be noted, however, that some dates are approximate and subject to change.

	ACTIVITY	DATE/TIME
9.	State responds to written (second round) questions through Request for Proposal "Addendum" and/or "Amendment" to be posted to the Internet at: http://das.nebraska.gov/materiel/purchasing.html	May 16, 2016 May 18, 2016 May 19, 2016 To Be Determined
10.	Proposal opening Location: State Purchasing Bureau 1526 K Street, Suite 130 Lincoln, NE 68508	June 1, 2016 To Be Determined 2:00 PM Central Time
11.	Review for conformance of mandatory requirements	June 1, 2016 To Be Determined

ACTIVITY		DATE/TIME
12.	Evaluation period	June 3, 2016 To Be Determined through June 10, 2016 To Be Determined
13.	“Oral Interviews/Presentations and/or Demonstrations” (if required)	To Be Determined
14.	Post “Letter of Intent to Contract” to Internet at: http://das.nebraska.gov/materiel/purchasing.html	June 20, 2016 To Be Determined
15.	Contract finalization period	June 20, 2016 To Be Determined Through July 11, 2016 To Be Determined
16.	Contract award	July 18, 2016 To Be Determined
17.	Contractor start date	September 26, 2016

This addendum will become part of the proposal and should be acknowledged with the Request for Proposal

**ADDENDUM SEVEN
REVISED SCHEDULE OF EVENTS**

Date: June 2, 2016
 To: All Bidders
 From: Robert Thompson/Nancy Storant, Buyers
 AS Materiel State Purchasing Bureau
 RE: Addendum for Request for Proposal 5289Z1
 to be opened ~~June 1, 2016~~ To Be Determined June 14, 2016 at 2:00 p.m.
 Central

Revised Schedule of Events

A. SCHEDULE OF EVENTS

The State expects to adhere to the tentative procurement schedule shown below. It should be noted, however, that some dates are approximate and subject to change.

	ACTIVITY	DATE/TIME
9.	State responds to written (second round) questions through Request for Proposal "Addendum" and/or "Amendment" to be posted to the Internet at: http://das.nebraska.gov/materiel/purchasing.html	May 16, 2016 May 18, 2016 May 19, 2016 To Be Determined June 2, 2016
10.	Proposal opening Location: State Purchasing Bureau 1526 K Street, Suite 130 Lincoln, NE 68508	June 1, 2016 To Be Determined June 14, 2016 2:00 PM Central Time

ACTIVITY		DATE/TIME
11.	Review for conformance of mandatory requirements	June 1, 2016 To Be Determined June 14, 2016
12.	Evaluation period	June 3, 2016 To Be Determined June 15, 2016 through June 10, 2016 To Be Determined June 22, 2016
13.	“Oral Interviews/Presentations and/or Demonstrations” (if required)	To Be Determined
14.	Post “Letter of Intent to Contract” to Internet at: http://das.nebraska.gov/materiel/purchasing.html	June 20, 2016 To Be Determined July 6, 2016
15.	Contract finalization period	June 20, 2016 To Be Determined July 6, 2016 Through July 11, 2016 To Be Determined July 20, 2016
16.	Contract award	July 18, 2016 To Be Determined July 27, 2016
17.	Contractor start date	September 26, 2016

This addendum will become part of the proposal and should be acknowledged with the Request for Proposal

Pete Ricketts, Governor

**ADDENDUM EIGHT
QUESTIONS and ANSWERS**

Date: June 2, 2016

To: All Bidders

From: Robert Thompson/Nancy Storant, Buyers
AS Materiel, State Purchasing Bureau

RE: Addendum for Request for Proposal Number 5289Z1
to be opened ~~June 1, 2016~~ June 14, 2016 at 2:00 p.m. Central Time

Questions and Answers

Following are the questions submitted and answers provided for the above mentioned Request for Proposal. The questions and answers are to be considered as part of the Request for Proposal. It is the Bidder's responsibility to check the State Purchasing Bureau website for all addenda or amendments.

<u>Question Number</u>	<u>RFP Section Reference</u>	<u>RFP Page Number</u>	<u>Question</u>	<u>State Response</u>
1.	IV. Project Description and Scope of Work A. Project Overview, 4 th paragraph	Page 32	Please provide clarification on this sentence, "If bidding an alternant proposal, the bidder must provide a complete separate RFP response including all mandatory	

			<p>requirements (section II.N.).”</p> <p>What is the States definition for an Alternate Proposal?</p> <p>Is an Alternate Proposal required if an optional service is provided/proposed separately along with a separately bid cost per minute in the original bid response?</p>	<p>An alternate proposal would be the submission of a second cost sheet proposing an alternate solution. The alternate solution would need to be detailed in the bidder’s Technical Approach. The alternate proposal would be subject to evaluation and Per Section IV.A. Project Overview, would need to be submitted as a complete separate RFP response including all mandatory requirements (section II. N.)</p> <p>No. A bidder may propose optional services in the optional services table on the revised cost sheet (posted along with this 2nd round of Q&A on the State Purchasing Bureau website). Optional services are not to be included in the bidder’s technical approach, as optional services will not be evaluated, and must be detailed on the cost sheet, and priced per minute.</p>
2.	<p>Addendum 3</p> <p>IV. Project Description and Scope of Work</p> <p>D. Business Requirements, 2. Rates</p>	Page 34	<p>Per Addendum 3, #21, the State removed Section IV. D. 2 in its entirety and provided a replacement. The very last sentence is incomplete in this revision.</p> <p>“Contractor may not assess any....”</p> <p>Will the State please provide the complete sentence to this revision?</p>	<p>The following is the response for Addendum 3, question #21 in its entirety.</p> <p>2. Rates</p> <p>Per minute charges must be flat rate twenty-four (24) hours a day, seven (7) days a week.</p> <p>Rates must remain firm for the first five (5) years of the contract. Prices may be subject to change after the initial five (5) year period. All government-mandated fees and taxes must be included in the rates, as no add-ons will be accepted. Such changes shall be based on industry changes as evidenced by revised printed price lists, verifiable documented cost increases or notices. A request for price increase shall be provided in writing, to The Nebraska State Purchasing Bureau at least thirty (30) days prior to any price increase of the contract. No price increases are to be billed to NDCS without prior written approval by the State Purchasing Bureau and the NDCS Purchasing Division. State Purchasing Bureau reserves the right to accept or reject any price increase request. In</p>

				<p>the event new prices are not acceptable, the contract may be cancelled. Approved price increases shall become part of the new contract as an amendment and will be recognized as firm contract pricing. Revised pricing will carry over to any subsequent renewals or revisions unless specifically revised and agreed upon by both parties. Bidders must provide their proposed rates for all categories listed on the cost proposal sheet.</p> <p>Failure to provide rates as outlined may be grounds for rejection of proposal.</p> <p>Any and all charges billable to the inmates and their families must be detailed in the Bidder's cost proposal. Contractor may not assess any charges to any party in connection with this service that are not outlined in their proposal response.</p> <p>NOTE: Section IV.D.2. has been further amended in response to question #12 below.</p>
3.			<p>Please provide clarification on differences and mandates for submitting multiple cost proposals and optional cost products and services and the metrics for both.</p>	<p>Please see response to Question #1.</p>
4.			<p>On Addendum #3 Questions and Answers, I have a point of clarification. On pages 4 and 5 in response to question # 20, the last statement in your answer (page 5) refers to "A Revised Attachment Two Cost Sheet, with space to include optional products or services". I cannot locate this document.</p> <p>Can you confirm that it has been issued and if so, where I might locate and download the document?</p>	<p>Revised Attachment Two was not posted as some of the possible revisions were dependent on responses to the questions from Round 1 that were deferred until Round 2. The Revised Attachment Two is now posted and available on the State Purchasing Bureau website.</p>

5.			<p>In the last RFP (5094Z1 Addendum 7 dated Oct. 26, 2015) the State indicated the desire to add 63 outdoor phones: "The Nebraska Department of Correctional Services is adding additional phones for outdoor use. These phones must be able to withstand harsh weather and treatment by an inmate population".</p> <p>Q: Are these phones included in the phone count provided in Attachment One of RFP 5289Z1? If not, is it still the State's desire to add these phones?</p>	<p>The outdoor phone count is a separate count from Attachment One.</p> <p>Yes, it is still the desire of the State to add these phones. Table below provides approximate phone count for outdoor use phones.</p> <p>The Nebraska Department of Correctional Services is adding additional phones for outdoor use. These phones must be able to withstand harsh weather and treatment by an inmate population. Additional outdoor phones by facility are noted as follows:</p> <table border="1"> <thead> <tr> <th>Facility</th> <th>General Population</th> <th></th> <th>Facility</th> <th>Restrictive Housing**</th> </tr> <tr> <td></td> <td>Quantity of Phones</td> <td></td> <td></td> <td>Quantity of Phones</td> </tr> </thead> <tbody> <tr> <td>LCC</td> <td>4</td> <td></td> <td>LCC</td> <td>8</td> </tr> <tr> <td>NCCW</td> <td>4</td> <td></td> <td>NCCW</td> <td>3</td> </tr> <tr> <td>NSP</td> <td>8</td> <td></td> <td>NSP</td> <td>8</td> </tr> <tr> <td>OCC</td> <td>4</td> <td></td> <td>OCC</td> <td>2</td> </tr> <tr> <td>TSCI</td> <td>4</td> <td></td> <td>TSCI</td> <td>16</td> </tr> <tr> <td>WEC</td> <td>2</td> <td></td> <td>WEC</td> <td>0</td> </tr> </tbody> </table> <p>** NOTE: Restrictive Housing Phones must be a</p>	Facility	General Population		Facility	Restrictive Housing**		Quantity of Phones			Quantity of Phones	LCC	4		LCC	8	NCCW	4		NCCW	3	NSP	8		NSP	8	OCC	4		OCC	2	TSCI	4		TSCI	16	WEC	2		WEC	0
Facility	General Population		Facility	Restrictive Housing**																																								
	Quantity of Phones			Quantity of Phones																																								
LCC	4		LCC	8																																								
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WEC	2		WEC	0																																								

				<p>highly rugged/durable phone that can withstand harsh treatment by the inmate population.</p> <p>Awarded contractor will work with NDCS to establish location and implement these outdoor phones.</p>
6.		n/a	<p>What is the importance to NDCS with regard to security and data protection?</p> <p>We respectfully request that the RFP be amended to require all submitting vendors to supply any and all security breaches that they, and/or any of their partners, their subsidiaries, or parent companies have had within the past five (5) years— as well as nature of the breach.</p> <p>We also respectfully request that this information be included in the evaluation of the Corporate Overview.</p>	<p>The State does not understand the reference to “security and data protection”. Contractor is responsible to perform the contract in compliance with the RFP. Section III.DDD CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND INELIGIBILITY and Section II.O. Reference checks address pass performance.</p> <p>No amendment will be added to require all submitting vendors to supply the information requested.</p> <p>This will not be included in the evaluation of the Corporate Overview.</p>
7.	<p>Glossary of Terms:</p> <p>Vendor: An individual or entity lawfully conducting business in the State of Nebraska, or licensed to do so, who seeks to provide goods or services under the terms of a written solicitation.</p>	Page ix	<p>What is the importance to NDCS of having a partner who is fully licensed?</p> <p>We also respectfully request the RFP be amended to require vendors to disclose if, in the past 18 months, they have been fined by any state for not having a Money Transmitter</p>	<p>Bidders must comply with the requirements of the State of Nebraska Department of Banking and Finance. Link provided. http://www.ndbf.ne.gov/soc/index.shtml</p> <p>Contractor is responsible to perform the contract in compliance with the RFP. Section III.DDD.CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND INELIGIBILITY and Section II.O.</p>

			<p>license.</p> <p>Lastly, we respectfully request that this information be included in the evaluation of the Corporate Overview.</p>	<p>Reference checks address passed performance. No amendment will be added to require all submitting vendors.</p> <p>This will not be included in the evaluation of the Corporate Overview.</p>
8.	<p>II. G. ORAL INTERVIEWS/PRESENTATIONS AND/OR DEMONSTRATIONS</p> <p>The Evaluation Committee(s) may conclude after the completion of the Technical and Cost Proposal evaluation that oral interviews/presentations and/or demonstrations are required in order to determine the successful bidder. All bidders may not have an opportunity to interview/present and/or give demonstrations; the State reserves the right to select only the top scoring bidders to present/give oral interviews in its sole discretion. The scores</p>	Page 5	<p>What is the importance to NDCS with regard to evidence of competence and full capabilities disclosure for any and all claims made in the vendor's RFP response?</p> <p>We respectfully request that NDCS require that all vendors must be able to demonstrate, on demand and before selection, any and/or every capability claimed in their proposal.</p> <p>We also respectfully request that this information be included in the evaluation of the Technical Approach.</p>	<p>Contractor is responsible to perform the contract in compliance with the RFP.</p> <p>Oral interviews per the referenced section are at the State's option.</p> <p>This will not be included in the evaluation of the Technical Approach.</p>

<p>from the oral interviews/ presentations and/or demonstrations will be added to the scores from the Technical and Cost Proposals. The presentation process will allow the bidders to demonstrate their proposal offering, explaining and/or clarifying any unusual or significant elements related to their proposals.</p> <p>Bidders' key personnel may be requested to participate in a structured interview to determine their understanding of the requirements of this proposal, their authority and reporting relationships within their firm, and their management style and philosophy. Bidders shall not be allowed to alter or amend their proposals. Only representatives of the State and the presenting bidders will be permitted to attend the oral interviews/ presentations and/or demonstrations.</p>			
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<p>Once the oral interviews/ presentations and/or demonstrations have been completed the State reserves the right to make a contract award without any further discussion with the bidders regarding the proposals received.</p> <p>Detailed notes of oral interviews/ presentations and/or demonstrations may be recorded and supplemental information (such as briefing charts, et cetera) may be accepted; however, such supplemental information shall not be considered an amendment to a bidders' proposal. Additional written information gathered in this manner shall not constitute replacement of proposal contents. Any cost incidental to the oral interviews/ presentations and/or demonstrations shall be borne entirely by the bidder and will not</p>			
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	be compensated by the State.			
9.	Section E. "Technical Requirements" #12 & Attachment One	Page 40 and Attachment One	<p>Section E, #12 on Page 40 of the RFP and Attachment One dictate the quantity of phones required per facility.</p> <p>Are any additional phones or equipment required beyond what is detailed in this section and Attachment One?</p>	<p>Section IV.A. Project Overview (fifth paragraph) During the term of the contract circumstances beyond the control of the state may result in increases or decreases in revenue, as well as increase or decreases in required equipment and/or services. Such circumstances include, but are not limited to, increase/decrease in inmate population, in number of telephones and/or in number of correctional facilities. The committee representing the OCIO and the NDCS maintains sole authority to increase or decrease the quantity of facilities, inmate telephones, equipment and service, at the Contractors expense. The contractor may also be required to provide outdoor telephone services, as the need arises.</p> <p>Also please see response to question #5.</p>
10.			<p>Are any housing units in the current facilities unoccupied? If so, how many phones are in each of those unoccupied locations?</p>	<p>NDCS has no empty housing units.</p> <p>YRTC-Geneva: Two buildings with two phones in each building.</p> <p>YRTC-Kearney: One building with two phones however this building will reopen within the next six month.</p>
11	Attachment One	Attachment One	<p>Attachment One provides call volume through December 2015.</p> <p>Will the State please provide call volume through the end of March 2016?</p>	<p>Please see Attachment 1a. posted to the State Purchasing website. http://das.nebraska.gov/materiel/purchasing/5289/5289.html</p>
12.	Business Requirements, IV-D-2 All regulatory fees must be included in the rates, as no add ons will be accepted.	34	<p>Does the facility understand that its proposed requirement to bundle all taxes and regulatory surcharges for interstate and intrastate ICS calls may run afoul of state and federal requirements because it imposes a per minute of use recovery mechanism for</p>	<p>Applicable taxes and regulatory fees, per FCC rules, shall be passed through by the provider to the consumer directly with no markup.</p> <p>The RFP is hereby amended as follows;</p> <p>Section IV.D.2. Rates, is hereby removed in its entirety and replaced with the following:</p>

			<p>amounts to be paid that are not usage sensitive?</p>	<p>2. Rates</p> <p>Per minute charges must be flat rate twenty-four (24) hours a day, seven (7) days a week.</p> <p>Rates must remain firm for the first five (5) years of the contract. Prices may be subject to change after the initial five (5) year period. Such changes shall be based on industry changes as evidenced by revised printed price lists, verifiable documented cost increases or notices. A request for price increase shall be provided in writing, to The Nebraska State Purchasing Bureau at least thirty (30) days prior to any price increase of the contract. No price increases are to be billed to NDCS without prior written approval by the State Purchasing Bureau and the NDCS Purchasing Division. State Purchasing Bureau reserves the right to accept or reject any price increase request. In the event new prices are not acceptable, the contract may be cancelled. Approved price increases shall become part of the new contract as an amendment and will be recognized as firm contract pricing. Revised pricing will carry over to any subsequent renewals or revisions unless specifically revised and agreed upon by both parties. Bidders must provide their proposed rates for all categories listed on the cost proposal sheet.</p> <p>Failure to provide rates as outlined may be grounds for rejection of proposal.</p> <p>Any and all charges billable to the inmates and their families must be detailed in the Bidder's cost proposal. Contractor may not assess any charges to any party in connection with this service that are not outlined in their proposal response.</p> <p>Section III.SS. Second paragraph, is hereby removed in its entirety and replaced with the following:</p> <p style="text-align: center;">Prices offered herein will remain firm from the date of the award for five (5) years. Prices</p>
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				<p>may be subject to change after the initial five (5) year period. Such changes shall be based on industry changes as evidenced by revised printed price lists, verifiable documented cost increases or notices. A request for price increase shall be provided in writing, to The Nebraska State Purchasing Bureau at least thirty (30) days prior to any price increase of the contract. No price increases are to be billed to NDCS without prior written approval by the State Purchasing Bureau and the NDCS Purchasing Division. State Purchasing Bureau reserves the right to accept or reject any price increase request. In the event new prices are not acceptable, the contract may be cancelled. Approved price increases shall become part of the new contract as an amendment and will be recognized as firm contract pricing. Revised pricing will carry over to any subsequent renewals or revisions unless specifically revised and agreed upon by both parties.</p>
13.	Cost Sheet	n/a	If a vendor offers optional products without listing the cost of those optional products, is that grounds for disqualification?	The proposal would not be disqualified, as optional products are not evaluated. However, optional products/services proposed without pricing would not ever be able to be awarded and utilized by the state without a fixed cost being provided with the proposal submission.
14.	General Question regarding pre-bid meeting.		At the recently concluded pre-bid meeting, it was mentioned that there would be a new pricing sheet released that would allow for bidders to	<p>Yes, Please see response to question #4</p> <p>Bidder should not modify the cost sheet.</p>

			submit pricing for optional services. Does the State still plan to revise the pricing sheet or should the bidders include optional services pricing in the current pricing sheet by modifying it?	
The following were submitted for the first round of questions, however, the responses were delayed until after the Preproposal Conference.				
25.	IV.D.6 Prepay by Inmate Families & Revised Evaluation Criteria	p 35 in RFP & p 1 in Revised Evaluation Criteria	Provision states that account setup fees will be identified in the proposal. Account setup fees are not among the permitted fees in the most recent FCC Order, and would therefore not be permitted to be charged. Q: Would the State modify the RFP and Evaluation Criteria to disallow account setup fees?	The requirement will remain as written in the RFP.

26.	IV.D.6 Prepay by Inmate Families & Revised Evaluation Criteria	p 35 in RFP & p 1 in Revised Evaluation Criteria	<p>Provision states that (1) all monies paid to the contractor by inmate families will be credited to the families account and (2) contractors are allowed to charge a fee to cover the cost of accepting credit card payments from families with the fee not to exceed 5%. In addition the Revised Evaluation Criteria list only Account Setup Fees as fees to be proposed and evaluated.</p> <p>Some providers direct families away from setting up accounts (which take time to process) and toward "single pay" programs such as text payment to a cell phone or automated payment by phone (trade names e.g. text collect, PayNow). These require use of automated payment systems and avoid the cost of setting up an account, as well as forcing families to pay a transaction fee every time they receive a call.</p> <p>Q#1: For these reasons will the State explicitly disallow these single pay programs?.</p>	No. Bidders may accept/propose whatever form(s) of payment they choose, provided they comply with the requirements of the RFP. An awarded contractor cannot charge any fees that are not allowed by the RFP. The 5% reference in the question is specifically for acceptance of credit card payments and will not apply to any other form of payment.
27.			Q#2: If a respondent proposed a transaction fee to families lower than 5%, would it receive additional points in the evaluation?	No.

28.			<p>Q#3: If it would receive more points in the evaluation, would the State modify the Evaluation Criteria to include account transaction fees? At the State's current usage we would expect approximately 550 transactions per month. If single pay methods were allowed, the number of transaction fee events would be several times this amount</p>	<p>Not applicable, please see response to question # 27.</p>
31.	IV.E.6	38	<p>Bidder must identify their capability to allow the facility to terminate the cell signal when signal is within a specified distance from the facility. We assume this means that the system must terminate an inmate call to a called party cell phone outside the facility, if that called party cell phone is within a specified distance from the facility; terminating the called party's actual cell signal would violate federal regulation.</p> <p>Q: Would the State confirm our interpretation of the requirement?</p>	<p>The RFP is hereby amended as follows: Section IV.6., eighth paragraph is removed in its entirety and replaced with the following.</p> <p>Bidder must identify any capability or technology they have that might identify calls to cellular phones and their proximity to the correctional facility when calls are in progress.</p>

This addendum will become part of the proposal and should be acknowledged with the Request for Proposal.

Pete Ricketts, Governor

**ADDENDUM NINE
QUESTIONS and ANSWERS CLARIFICATION
&
REVISED SCHEDULE of EVENTS**

Date: June 10, 2016

To: All Bidders

From: Robert Thompson/Nancy Storant, Buyers
AS Materiel, State Purchasing Bureau

RE: Addendum for Request for Proposal 5289Z1
to be opened ~~June 1, 2016 To Be Determined June 14, 2016~~ **June 17, 2016** at
2:00 p.m. Central

Questions and Answers Clarification

The following is a request for Q&A clarification. Responses provided are to be considered as part of the Request for Proposal. It is the Bidder's responsibility to check the State Purchasing Bureau website for all addenda or amendments.

<u>Question Number</u>	<u>RFP Section Reference</u>	<u>RFP Page Number</u>	<u>Question</u>	<u>State Response</u>
1.	Rules regarding pricing requirements: - IV. Project Overview A, paragraph 4 - Addendum 3 Q&A #20 - Addendum 8 Q&A #13 Clarifications regarding technical	RFP p. 32 RFP p. 38	Our questions are from our reading (perhaps incorrect) that any additional service must be priced as an "add on" to phone service rates – at the same time pricing for optional services would not be evaluated. Would the State clarify two scenarios? A. A bidder wanted to offer a value-added service that is normally charged separately from a phone call (e.g., the ability for a family member to communicate	

Materiel Division • Bo Botelho, Materiel Administrator

	<p>requirements:</p> <ul style="list-style-type: none"> - IV.E.6 - Addendum #8 Q&A #31 		<p>using an alternate communication method not covered by FCC regulation, at \$x per communication). In this case a per-minute add-on to inmate telephone rates would not be appropriate.</p> <p><i>Q: How would the State prefer pricing for these kinds of services to be presented?</i></p> <p>B. We read the answer to Addendum #8 Q&A #31 to say that the ability to provide this cell phone control service would be evaluated. However, that service may not be implemented, meaning that any additional cost for the service should not be included in the base offer.</p> <p>As a separate issue there are many different “flavors/tiers” of this service – i.e. the service is the same or similar but the scope of deployment would drive different costs. This is true of certain other services in the technical requirements as well.</p> <p>In this case, it is appropriate to price the service as an add-on to telephone rates. However, a bidder could describe a gold-plated service to receive a favorable technical score, but include additional costs for those services under Optional Services that would not be evaluated.</p> <p><i>Q1: If the State has asked bidders to describe their <u>ability</u> to provide a particular feature, how should pricing be presented – for example would it add an evaluated/scored section to the pricing template for the</i></p>	<p>Bidder may write-in an alternate unit of measure. Attachment Two SECOND REVISION has also been posted to the RFP web page to accommodate.</p> <p>Costs associated with the requirements of the RFP must be included in the cost per minute for the Debit Calling and Pre-Pay portion of the cost sheet.</p> <p>In the example above (B.</p>
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			<p><i>bidder to state a separate add-on to inmate telephone rates for that feature?</i></p> <p><i>Q2: If there are different flavors or tiers of a particular feature, how should pricing be presented – for example would the State allow bidders to price them in this same scored section as long as they are clearly described?</i></p>	<p>Addendum #8 Q&A #31) The requirement was amended from requiring a functionality, to describing if a functionality is available. Due to this change, this specific item if available should be priced in the Optional section of the cost sheet if the bidder requires an additional fee for the functionality.</p> <p>No. The solution as described in the bidder's technical approach would have to be provided at the cost per minute for Debit Calling and Pre-Pay bid on the cost sheet.</p> <p>Bidders may submit alternate proposals for "different flavors or tiers" as wholly separate RFP submissions to be evaluated independently. The different flavor or tier would be described in the technical approach, and the associated cost per minute provided on a separate cost sheet provided with the alternate proposal submission. In this scenario the bidder's technical score may improve to offset potential lower cost score if the flavor or tier came with a higher cost.</p> <p>Or,</p> <p>Bidders may provide the optional pricing for different flavors or tiers in the optional section of the cost sheet. The description of such would be included only on the cost sheet and must not be included in the technical as the optional items are not scored. These items would only be available to the agency from the awarded contractor and would be awarded or utilized solely at the agency's discretion.</p> <p>Please also see Addendum Eight, question #1, and RFP Section IV.A. Project Overview.</p>
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Revised Schedule of Events

A. SCHEDULE OF EVENTS

The State expects to adhere to the tentative procurement schedule shown below. It should be noted, however, that some dates are approximate and subject to change.

	ACTIVITY	DATE/TIME
10.	Proposal opening Location: State Purchasing Bureau 1526 K Street, Suite 130 Lincoln, NE 68508	June 1, 2016 To Be Determined June 14, 2016 June 17, 2016 2:00 PM Central Time
11.	Review for conformance of mandatory requirements	June 1, 2016 To Be Determined June 14, 2016 June 17, 2016
12.	Evaluation period	June 3, 2016 To Be Determined June 15, 2016 June 20, 2016 through June 10, 2016 To Be Determined June 22, 2016 June 27, 2016
13.	"Oral Interviews/Presentations and/or Demonstrations" (if required)	To Be Determined
14.	Post "Letter of Intent to Contract" to Internet at: http://das.nebraska.gov/materiel/purchasing.html	June 20, 2016 To Be Determined July 6, 2016 July 11, 2016

	ACTIVITY	DATE/TIME
15.	Contract finalization period	June 20, 2016 To Be Determined July 6, 2016 July 11, 2016 Through July 11, 2016 To Be Determined July 20, 2016 July 22, 2016
16.	Contract award	July 18, 2016 To Be Determined July 27, 2016 July 29, 2016
17.	Contractor start date	September 26, 2016

This addendum will become part of the proposal and should be acknowledged with the Request for Proposal

ADDENDUM TEN

REVISED SCHEDULE of EVENTS

Date: June 14, 2016

To: All Bidders

From: Robert Thompson/Nancy Storant, Buyers
AS Materiel, State Purchasing Bureau

RE: Addendum for Request for Proposal 5289Z1
to be opened ~~June 1, 2016 To Be Determined June 14, 2016 June 17, 2016~~ **June 21, 2016** at 2:00 p.m. Central

Revised Schedule of Events

A. SCHEDULE OF EVENTS

The State expects to adhere to the tentative procurement schedule shown below. It should be noted, however, that some dates are approximate and subject to change.

	ACTIVITY	DATE/TIME
10.	Proposal opening Location: State Purchasing Bureau 1526 K Street, Suite 130 Lincoln, NE 68508	June 1, 2016 To Be Determined June 14, 2016 June 17, 2016 June 21, 2016 2:00 PM Central Time
11.	Review for conformance of mandatory requirements	June 1, 2016 To Be Determined June 14, 2016 June 17, 2016 June 21, 2016

	ACTIVITY	DATE/TIME
12.	Evaluation period	<p>June 3, 2016 To Be Determined June 15, 2016 June 20, 2016 June 24, 2016 through June 10, 2016 To Be Determined June 22, 2016 June 27, 2016 July 1, 2016</p>
13.	"Oral Interviews/Presentations and/or Demonstrations" (if required)	To Be Determined
14.	Post "Letter of Intent to Contract" to Internet at: http://das.nebraska.gov/materiel/purchasing.html	<p>June 20, 2016 To Be Determined July 6, 2016 July 11, 2016 July 15, 2016</p>
15.	Contract finalization period	<p>June 20, 2016 To Be Determined July 6, 2016 July 11, 2016 July 15, 2016 Through July 11, 2016 To Be Determined July 20, 2016 July 22, 2016 July 26, 2016</p>
16.	Contract award	<p>July 18, 2016 To Be Determined July 27, 2016 July 29, 2016 August 2, 2016</p>
17.	Contractor start date	September 26, 2016

This addendum will become part of the proposal and should be acknowledged with the Request for Proposal



CenturyLinkTM

Corporate Overview

CORPORATE OVERVIEW

The Corporate Overview section of the Technical Proposal must consist of the following subdivisions:

a. **BIDDER IDENTIFICATION AND INFORMATION**

The bidder must provide the full company or corporate name, address of the company's headquarters, entity organization (corporation, partnership, proprietorship), state in which the bidder is incorporated or otherwise organized to do business, year in which the bidder first organized to do business and whether the name and form of organization has changed since first organized.

 CenturyLink Response: Read, understood, and will comply.

CenturyLink Public Communications, Inc. ("CenturyLink") is a corporation and a subsidiary of CenturyLink, Inc. CenturyLink Public Communications, Inc. ("CPCI") was incorporated in Florida on March 21, 1994 under the name Sprint Payphone Services, Inc. It has operated under the same corporate form since that time.

Since 1994, the corporation has operated under the name Embarq Payphone Services, Inc. (following Embarq Corp.'s spin-off from Sprint Nextel in 2006), and was changed in November 2013 to CenturyLink Public Communications, Inc. (following Embarq Corp.'s merger with CenturyTel, Inc. to form CenturyLink, Inc. and CenturyLink, Inc.'s subsequent acquisition of Qwest Corp.).

These were name changes only and did not involve re-organization or change of any sort to our legal form. In addition, no contracts were impacted beyond basic administrative actions to change the legal name on relevant contract forms.

CenturyLink Public Communications, Inc.'s corporate headquarters are 100 CenturyLink Dr., Monroe, LA 71203 and our main office operational headquarters are located at 600 New Century Pkwy, New Century, KS 66031.

b. **FINANCIAL STATEMENTS**

The bidder must provide financial statements applicable to the firm. If publicly held, the bidder must provide a copy of the corporation's most recent audited financial reports and statements, and the name, address, and telephone number of the fiscally responsible representative of the bidder's financial or banking organization.

 CenturyLink Response: Read, understood, and will comply.

Corporate Overview

CPCI will rely upon the financial backing of parent company CenturyLink, Inc., to ensure that it has the financial wherewithal to provide the services described in this response. CenturyLink, Inc. is the third largest telecommunications company in the United States and is recognized as a leader in the industry. In 2014, CenturyLink, Inc. generated operating cash flow, excluding special items, of \$7.1 billion. The financial capacity of the CenturyLink companies will ensure that CPCI possesses sufficient financial resources (including cash, liquidity and capital resources) to provide the services sought in this solicitation.

The financial capabilities of CenturyLink are demonstrated in CenturyLink, Inc.'s most recent audited financial reports and statements provided under Attachment 1 – 10-K Annual Report. Financial reports are also available at <http://ir.centurylink.com/docs.aspx?iid=4057179>.

The name, address, and telephone number of the fiscally responsible representative of the bidder's financial or banking organization is:

Name: Stewart Ewing, Executive Vice President & Chief Financial Officer

Address: 100 CenturyLink Dr., Monroe, LA 71203

Telephone Number: 318.388.9512

If the bidder is not a publicly held corporation, either the reports and statements required of a publicly held corporation, or a description of the organization, including size, longevity, client base, areas of specialization and expertise, and any other pertinent information, must be submitted in such a manner that proposal evaluators may reasonably formulate a determination about the stability and financial strength of the organization. Additionally, a non-publicly held firm must provide a banking reference.

 CenturyLink Response: Read and understood.

Not applicable to CenturyLink.

The bidder must disclose any and all judgments, pending or expected litigation, or other real or potential financial reversals, which might materially affect the viability or stability of the organization, or state that no such condition is known to exist.

 CenturyLink Response: Read, understood, and will comply.

To the best of our knowledge there are no judgments, pending or expected litigation, or other real or potential financial reversals, which might materially affect the viability or stability of our organization and our ability to meet all contractual requirements.

Corporate Overview

The State may elect to use a third-party to conduct credit checks as part of the corporate overview evaluation.

 CenturyLink Response: Read, understood, and will comply.

c. CHANGE OF OWNERSHIP

If any change in ownership or control of the company is anticipated during the twelve (12) months following the proposal due date, the bidder must describe the circumstances of such change and indicate when the change will likely occur. Any change of ownership to an awarded vendor(s) will require notification to the State.

 CenturyLink Response: Read, understood and will comply.

We do not anticipate any change of ownership or control of our company, including parent CenturyLink, Inc. during the twelve (12) months following the proposal due date.

d. OFFICE LOCATION

The bidder's office location responsible for performance pursuant to an award of a contract with the State of Nebraska must be identified.

 CenturyLink Response: Read and understood.

CenturyLink Public Communications, Inc.'s corporate headquarters are 100 CenturyLink Dr., Monroe, LA 71203 and our main office operational headquarters are located at 600 New Century Pkwy, New Century, KS 66031.

e. RELATIONSHIPS WITH THE STATE

The bidder shall describe any dealings with the State over the previous two (2) years. If the organization, its predecessor, or any party named in the bidder's proposal response has contracted with the State, the bidder shall identify the contract number(s) and/or any other information available to identify such contract(s). If no such contracts exist, so declare.

 CenturyLink Response: Read and understood.

Corporate Overview

CenturyLink, Inc. affiliates have contracts with the State of Nebraska for data and phone services. The data is mostly Metro Ethernet, but also some MPLS and Internet. The phone services are mostly all Centrex lines. The Data Contract # is 594957 and the Phone Contract # is 512248. In addition to these two contracts directly with the State of Nebraska, CenturyLink, Inc. through its affiliates has extensive operations within the State. Statistics as of 12/31/15:

- 1000 employees
- annual payroll of \$55,140,000
- 193,000 access lines
- \$1,642,024,000 network investment



f. BIDDER'S EMPLOYEE RELATIONS TO STATE

If any party named in the bidder's proposal response is or was an employee of the State within the past two (2) months, identify the individual(s) by name, State agency with whom employed, job title or position held with the State, and separation date. If no such relationship exists or has existed, so declare.

If any employee of any agency of the State of Nebraska is employed by the bidder or is a Sub-Contractor to the bidder, as of the due date for proposal submission, identify all such persons by name, position held with the bidder, and position held with the State (including job title and agency). Describe the responsibilities of such persons within the proposing organization. If, after review of this information by the State, it is determined that a conflict of interest exists or may exist, the bidder may be disqualified from further consideration in this proposal. If no such relationship exists, so declare.

Corporate Overview

 CenturyLink Response: Read and understood.

CenturyLink declares that no such relationship exists.

g. CONTRACT PERFORMANCE

If the bidder or any proposed Sub-Contractor has had a contract terminated for default during the past five (5) years, all such instances must be described as required below. Termination for default is defined as a notice to stop performance delivery due to the bidder's non-performance or poor performance, and the issue was either not litigated due to inaction on the part of the bidder or litigated and such litigation determined the bidder to be in default.

It is mandatory that the bidder submit full details of all termination for default experienced during the past five (5) years, including the other party's name, address, and telephone number. The response to this section must present the bidder's position on the matter. The State will evaluate the facts and will score the bidder's proposal accordingly. If no such termination for default has been experienced by the bidder in the past five (5) years, so declare.

If at any time during the past five (5) years, the bidder has had a contract terminated for convenience, non-performance, non-allocation of funds, or any other reason, describe fully all circumstances surrounding such termination, including the name and address of the other contracting party.

 CenturyLink Response: Read and understood.

CenturyLink declares that we, in addition to any proposed sub-contractor, have not had any contracts terminated for default during the past five (5) years.

h. SUMMARY OF BIDDER'S CORPORATE EXPERIENCE

The bidder shall provide a summary matrix listing the bidder's previous projects similar to this Request for Proposal in size, scope, and complexity. The State will use no more than three (3) narrative project descriptions submitted by the bidder during its evaluation of the proposal.

Corporate Overview

 CenturyLink Response: Read and understood.

CenturyLink is the **Prime Contractor** for ALL project descriptions provided at the end of this section.

The bidder must address the following:

- i. Provide narrative descriptions to highlight the similarities between the bidder's experience and this Request for Proposal. These descriptions must include:
 - a) The time period of the project;
 - b) The scheduled and actual completion dates;
 - c) The Contractor's responsibilities;
 - d) For reference purposes, a customer name (including the name of a contact person, a current telephone number, a facsimile number, and e-mail address); and
 - e) Each project description shall identify whether the work was performed as the prime Contractor or as a Sub-Contractor. If a bidder performed as the prime Contractor, the description must provide the originally scheduled completion date and budget, as well as the actual (or currently planned) completion date and actual (or currently planned) budget.

 CenturyLink Response: Read and understood.

CenturyLink is the **Prime Contractor** for ALL project descriptions provided at the end of this section.

- ii. Contractor and Sub-Contractor(s) experience must be listed separately. Narrative descriptions submitted for Sub-Contractors must be specifically identified as Sub-Contractor projects.

 CenturyLink Response: Read and understood.

CenturyLink is the **Prime Contractor** for ALL project descriptions provided at the end of this section.

- iii. If the work was performed as a Sub-Contractor, the narrative description shall identify the same information as requested for the Contractors above. In addition, Sub-Contractors shall identify what share of contract costs, project responsibilities, and time period were performed as a Sub-Contractor.

Corporate Overview

☀ CenturyLink Response: Read and understood.

CenturyLink is the **Prime Contractor for nine (9) state DOCs** (Department of Corrections). We understand that the State will use no more than three (3) narrative project descriptions for evaluation purposes and have therefore chosen three DOCs for which we have provided service for more than 2 years.



Customer	Alabama Department of Corrections	
Account size	30 facilities; 1,121 phones; 25,000 inmates	
Summary of Services	OMS interface, first-time installation of self-learning PANs, CTL attorney audits, fraud and velocity controls, prepaid collect and inmate debit, location-based calling restrictions, customized debit calling interface, video visitation at three facilities	

Corporate Overview

a) Time period of the project	June 2012 (contract signed) to present	
b) Scheduled and actual completion dates	Installation was completed in September 2012 on schedule	
c) Contractor's responsibilities	<p>The project goal was to complete the installation on schedule and within specifications. During implementation, our team uncovered widespread wiring issues; however, the project goals were achieved and the installation was completed on-time.</p> <p>CenturyLink worked closely with the incumbent inmate phone system vendor to ensure a seamless transition of service from the existing calling platform to the Enforcer system with no loss of service, and all existing customer data (PIN numbers, PIN/PAN lists, globally blocked numbers, privileged (do not record) numbers, etc.) successfully transferred.</p> <p>Noteworthy aspects of the implementation project were:</p> <ul style="list-style-type: none"> • Interface with the Alabama DOC Offender Management System • First-time implementation of automated Personal Allowed Number (PAN) management • Pilot implementation of remote video visitation • Development of a debit calling interface with the Alabama DOC trust account system 	
d) Reference contact	<p>Robert M Brantley Assistant Accounting Director 331 S. Ripley St. P.O. Box 301501 Montgomery, AL 36130-1501 Phone: 334.353.5561 Email: robert.brantley@ doc.alabama.gov</p>	
e) Contractor type	<p>Prime Contractor. Originally scheduled completion date was met. ADOC is a no-cost contract and as such no budget was associated with the project; the contract generates approximately \$6 million in gross revenue annually.</p>	

Corporate Overview

Customer	Kansas Department of Corrections	
Account size	13 facilities; 967 phones; 9,500 inmates	
Summary of Services	OMS interface, interface with JPay kiosk system for inmate debit purchase, interface with Union Supply for commissary ordering by phone (in-process), prepaid collect	
a) Time period of the project	November 2007 (contract signed) to present	
b) Scheduled and actual completion dates	Installation completed December 2007 on schedule; the legacy premise-based Enforcer system was transitioned to the new centralized Enforcer system in August 2013	
c) Contractor's responsibilities	<p><u>Kansas is one of three inmate telephone service contracts retained by CenturyLink under new long-term contracts within the past 3 years.</u></p> <p>After the initial contract and renewal options expired, the contract went out to bid in 2012 and a new contract was awarded to CenturyLink and signed in January 2013 for an additional three years with two one year renewal options.</p> <p>CenturyLink worked closely with the incumbent inmate phone system vendor on the initial installation in 2007 to ensure a seamless transition of service to the Enforcer system with no loss of service, and all existing customer data (PIN numbers, PIN/PAN lists, globally blocked numbers, privileged (do not record) numbers, etc.) successfully transferred, including a compressed installation schedule and "buyout" of the prior vendor ahead of the Christmas holiday.</p> <p>Noteworthy aspects of the implementation project were:</p> <ul style="list-style-type: none"> • Interface with the State of Kansas Offender Management System. • Interface with the State of Kansas Commissary System • Automated debit calling • Interface with JPay for kiosk features 	
d) Reference contact	Chris Walker Communications Supervisor Lansing Correctional	

Corporate Overview

	<p>Facility (formerly Kansas State Penitentiary) 301 E Kansas St. Lansing, KS 66043 Phone: 913.727.3235 Email: chris.walker@doc.ks.gov</p>	
e) Contractor type	<p>Prime Contractor. Originally scheduled completion date was met. KDOC is a no-cost contract with no associated budget; for reference the contract generates approximately \$5 million in gross revenue annually.</p>	

Customer	Nevada Department of Corrections	
Account size	18 facilities; 678 phones; 12,700 inmates	
Summary of Services	OMS interface, prepaid collect, inmate debit, continuous voice biometrics, cell phone detection equipment trial, automated inmate information services, detailed location-based calling restrictions by housing units, inmate voicemail, "message of the day" through the Enforcer system	
a) Time period of the project	February 2008 to present	
b) Scheduled and actual completion dates	Completed in April 2008 on schedule; the legacy Enforcer system was transitioned to the new centralized Enforcer in August 2014	
c) Contractor's responsibilities	<p><u>Nevada is one of three inmate telephone service contracts retained by CenturyLink under new long-term contracts within the past 3 years.</u></p> <p>The project goal was to complete the installation on schedule and within specifications. Even though there were challenges with the installation (as with any large project), all goals were completed on time and within specifications.</p> <p>CenturyLink worked closely with the incumbent inmate phone system vendor to ensure a seamless transition of service to the Enforcer system with no loss of service, and all existing customer data (PIN numbers, PIN/PAN lists, globally blocked numbers, privileged (do not record) numbers, etc.) successfully transferred.</p> <p>Noteworthy aspects of the implementation project were:</p>	

Corporate Overview

	<ul style="list-style-type: none"> • Interface with the State of Nevada Offender Management System. • Interface with the State of Nevada Inmate Banking System Commissary • Automated PIN and Debit calling • Initially implemented Pre-call Voice Biometrics • Implemented Continuous Voice Biometrics (Investigator Pro) mid-contract • Network bandwidth swap mid-contract • Inmate automated information services – trust-account verification implemented through the Enforcer system mid-contract • Inbound friends & family voicemail for inmates mid-contract • Informational messaging system implemented mid-contract 	
d) Reference contact	<p>Dawn Rosenberg Chief of Purchasing and Contract Management 5500 Snyder Ave, Bldg. 17 P.O. Box 7101 Carson City, NV 89701 Phone: 775.887.3219 Email: drosenberg@doc.nv.gov</p>	
e) Contractor type	<p>Prime Contractor. Originally scheduled completion date was met. NDOC is a no-cost contract with no associated budget; for reference the contract generates approximately \$6 million in gross revenue annually.</p>	

i. SUMMARY OF BIDDER'S PROPOSED PERSONNEL/MANAGEMENT APPROACH

The bidder must present a detailed description of its proposed approach to the management of the project.

The bidder must identify the specific professionals who will work on the State's project if their company is awarded the contract resulting from this Request for Proposal. The names and titles of the team proposed for assignment to the State project shall be identified in full, with a description of the team leadership, interface and support functions, and reporting relationships. The primary work assigned to each person should also be identified.

Corporate Overview

The bidder shall provide resumes for all personnel proposed by the bidder to work on the project. The State will consider the resumes as a key indicator of the bidder's understanding of the skill mixes required to carry out the requirements of the Request for Proposal in addition to assessing the experience of specific individuals.

Resumes must not be longer than three (3) pages. Resumes shall include, at a minimum, academic background and degrees, professional certifications, understanding of the process, and at least three (3) references (name, address, and telephone number) who can attest to the competence and skill level of the individual. Any changes in proposed personnel shall only be implemented after written approval from the State.

 CenturyLink Response: Read and understood.

Provided below is the service organization CenturyLink will have in place to meet the requirements of the contract. Our service organization begins with the customer, who is provided with a Program Manager, Brenda McKinley, focused on customer satisfaction and contract compliance.

Mrs. McKinley is a 38-year veteran of the telecommunications industry, including the last 15 years where she has had direct experience with Public Communications with increasing levels of responsibility managing national and strategic accounts. Mrs. McKinley's most recent responsibilities include program account management for West Virginia Department of Corrections, where she is accountable for:

- Developing and maintaining the customer relationship
- Service issues (trouble ticket escalation and resolution)
- Service requests (phone installations and relocations, software updates, training and other special requests)
- Technician and on-site service desk representative supervision
- Equipment and parts inventory and supplies
- Performance monitoring (service, system, financial, on-site equipment, etc.)

In addition, CenturyLink will provide an experienced and skilled Senior Account Manager, Phil Burks, an experienced and skilled Implementation Manager, Shelia Rafferty and an experienced and skilled Training Manager, Kristie Dean. Over the last 12 months, Mrs. Rafferty and Mrs. Dean were the implementation and training project leads for Idaho DOC, Utah DOC, West Virginia DOC and Arizona DOC.

Resumes for Mrs. McKinley, Mr. Burks, Mrs. Rafferty, and Mrs. Dean are provided in the last section of this document under the heading Key Contract Personnel – Resumes.

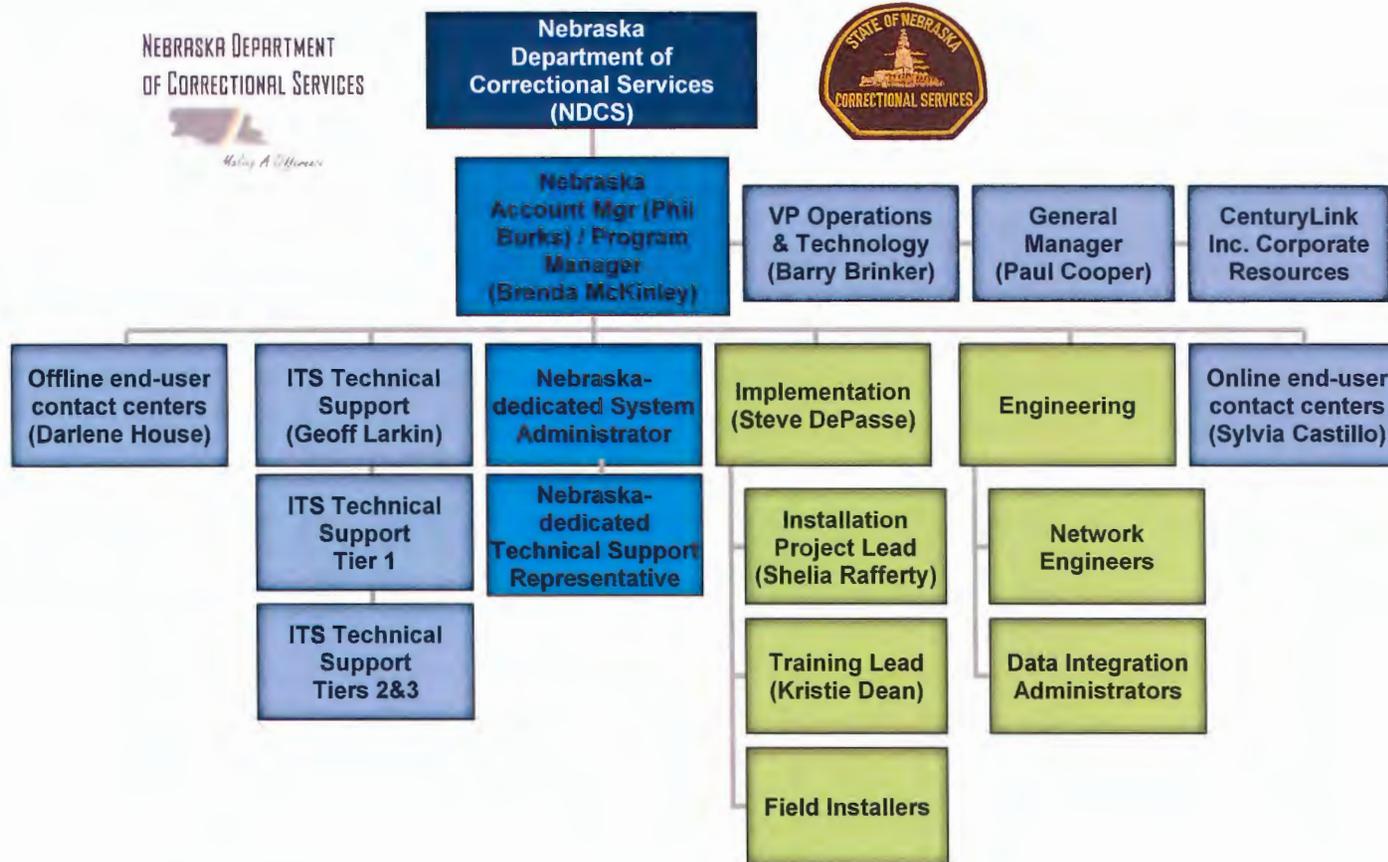
Corporate Overview

Mrs. McKinley will oversee a staff of two (2): One (1) Nebraska-based on-site System Administrator and one (1) Nebraska-based Technical Support Representative. These positions are shaded in blue in the organization chart on the following two pages.

In addition to service personnel focused serving all of CenturyLink's other DOC contracts, Mrs. McKinley will have access to all of the corporate resources of CenturyLink, Inc. – network, data center infrastructure, skilled higher-level technical personnel (e.g. outside plant technicians, fiber splicers), as well as the financial resources of an \$18 billion company. Put together, no other provider can come close to providing NDCS with the service resources that CenturyLink can.

Corporate Overview

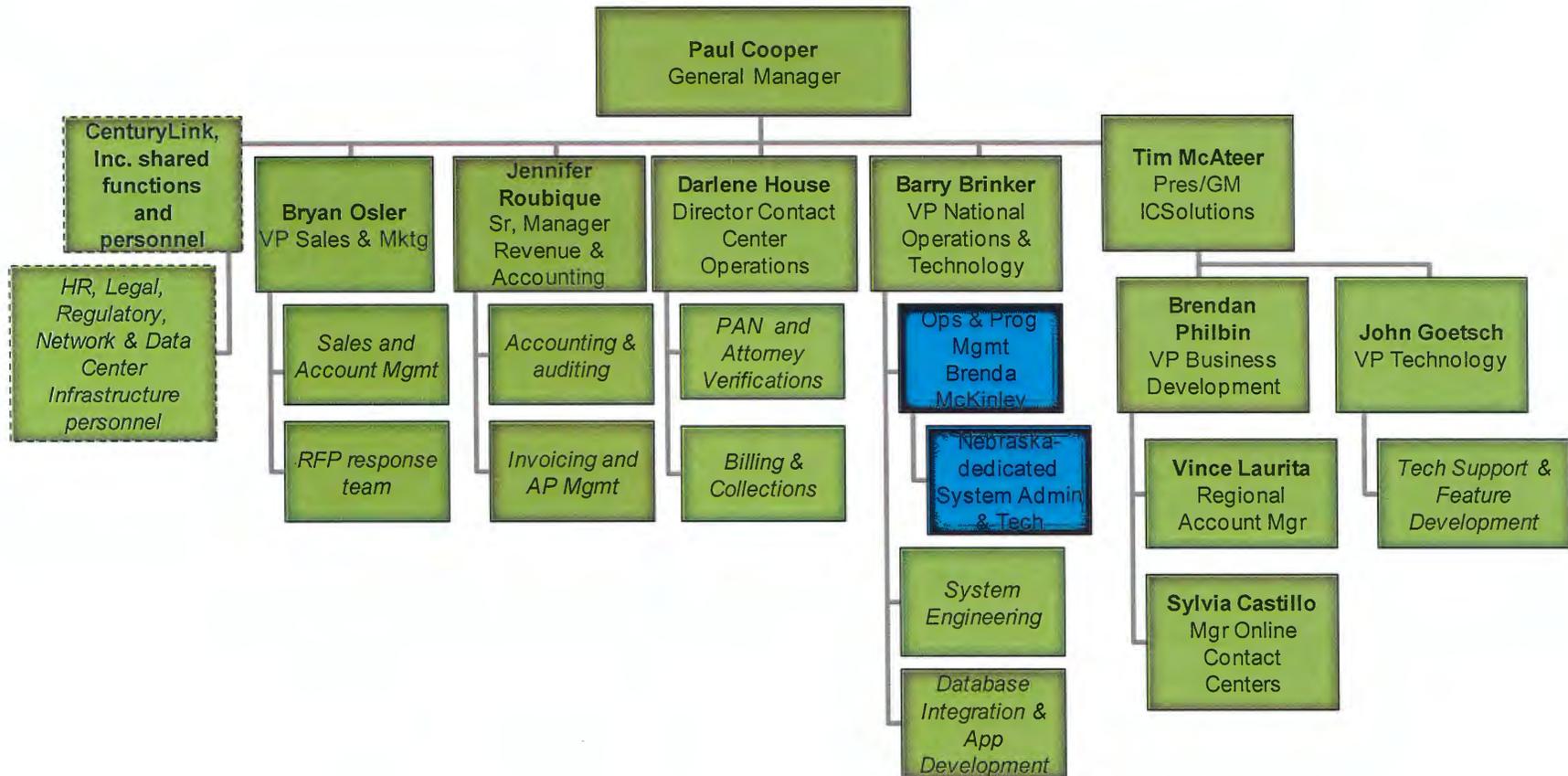
Organization of Key Service Personnel for Nebraska Department of Correctional Services



Corporate Overview

CenturyLink's Service Delivery Team provides overall management oversight to all of CenturyLink's DOC contracts, including but not limited to contract compliance, service metrics, security feature development, data integrations, network operations, and all other aspects of turnkey correctional communications services:

Management and Service Delivery Team



Corporate Overview

Key Contract Personnel - Resumes

CenturyLink's service to NDCS/YRTC begins with the following key contract personnel:

- Account Manager, Phillip Burks
- Program Manager, Brenda McKinley
- Implementation Manager, Shelia Rafferty
- Training Manager, Kristie Dean

Mr. Burks, Mrs. McKinley, Mrs. Rafferty, and Ms. Dean are supported by the personnel shown in the organizational charts above. Resumes of key contract personnel are detailed below:

PHILLIP BURKS

Senior Account Manager

600 New Century Pkwy, New Century, KS 66031

Office: (913) 345-7565

Phillip.R.Burks@CenturyLink.com

PROFESSIONAL QUALIFICATIONS/EXPERIENCE:

- 26 years experience in Telecommunications with CenturyLink, Embarq, Sprint, and United Telephone Company – within both local and long distance arenas
- 34 years experience in Sales
- 9 years experience in the Inmate Markets

CURRENT RESPONSIBILITIES:

- Account Management and Sales responsibilities in selected CenturyLink accounts

PRIMARY FUNCTION FOR NEBRASKA DEPARTMENT OF CORRECTIONAL SERVICES:

- Ongoing Account Management & Contract Compliance

EDUCATION / TRAINING:

- Bachelor of Science, Kent State University

REFERENCES:

Idaho DOC

Julie McKay

Grants/Contract Officer

Phone: 208.658.2176

jmckay@idoc.idaho.gov

1299 N. Orchard, Suite 110

Boise, ID 83706

West Virginia DOC

Paul Simmons

Assistant Commissioner

Phone: 304.221.2213

paul.e.simmons@wv.gov

901 8th St

Moundsville, WV 26041

Kansas DOC

Chris Walker

Communications Supervisor

Phone: 913.727.3235

chris.walker@doc.ks.gov

301 E Kansas St.

Lansing, KS 66043

Corporate Overview

BRENDA MCKINLEY

Program Manager – NDCS/YRTC
665 Lexington Ave, Mansfield OH 44907
419-755-8473 Office
Brenda.M.McKinley@CenturyLink.com

PROFESSIONAL QUALIFICATIONS/EXPERIENCE:

- 39 Years experience in Telecommunications
- 16 Years experience in Public Communication Services
- Experienced Program and Project Manager

CURRENT RESPONSIBILITIES:

- Corrections program account management for West Virginia DOC (ADP approximately 6,000) and Baton Rouge Parish Jail (ADP approximately 1,700)
- Management of Public Communications portfolio of communications products with strong emphasis on national and strategic accounts.
- Developing and maintaining the customer relationship
- Service issues (trouble ticket escalation and resolution)
- Service requests (phone installations and relocations, software updates, training and other special requests)
- Technician and on-site service desk representative supervision
- Equipment and parts inventory and supplies
- Performance monitoring (service, system, financial, on-site equipment, etc.)

EDUCATION / TRAINING:

- Project Management Training, Baldwin-Wallace
- Manufacturer trained on the Enforcer system
- Ongoing CenturyLink training in customer service, technology and management

REFERENCES:

West Virginia DOC
Paul Simmons
Assistant Commissioner
Phone: 304.221.2213
paul.e.simmons@wv.gov
901 8th St
Moundsville, WV 26041

East Baton Rouge Parish Prison
Dennis Grimes
Warden
Phone: 225-358-4003
dgrimes@ebrso.org
2867 Brig. Gen. Isaac Smith Ave.
Scotlandville, LA 70807

East Baton Rouge Parish Prison
Major Robert Clement
Assistant Warden
Phone: 225-358-4003
rclement@ebrso.org
2867 Brig. Gen. Isaac Smith Ave.
Scotlandville, LA 70807

Corporate Overview

SHELIA RAFFERTY

Implementation Project Manager

600 New Century Pkwy, New Century, KS 66031

(913) 345-4956 Office

Shelia.Rafferty@CenturyLink.com

PROFESSIONAL QUALIFICATIONS/EXPERIENCE:

- 41 Years experience in Telecommunications – Network, Engineering, Forecasting, and Payphones and Corrections Market
- 16 Years experience Corrections Market - Project Implementation of Inmate Call Control Systems
- Successfully managed the installation and conversion of inmate systems, phones, enclosures, pedestals, etc. - nine (9) State accounts and eleven (12) County Jails
- Participated in and provided detailed information for 250+ site surveys
- Business Service Representative taking incoming customer orders and service order entry
- Product Analyst – Inmate Commissioning, Billing, Traffic, Bad Debt, System Reports, etc
- Team Leader
- Special Project Teams
- Process Development
- Developed Billing Training Manual
- Facilitator
- Trainer
- Program Manager Jackson County Jail and Ft Worth County Jail

2015 IMPLEMENTATIONS

- Utah DOC – 283 phones and 4,794 ADP – 2 Facilities
- Salt Lake County Jail – 240 phones and 923 ADP – 2 Facilities
- West Virginia – 480 Phones and 6,000 ADP – 15 Facilities
 - o Charleston Facilities – Installed prior to cutting over Enforcer system due to customer moved to new building and incumbent would not move the system
- Arizona – 1823 Phones and 48,600 ADP – 20 Facilities
 - o Required Instruction Card with Numbers by Unit
 - o Special Voice Enrollment Phones with locks
 - o All 1823 phones and systems were installed and cutover in 30 days
- McDowell County WV – 41 phones – 430 ADP – 2 Facilities

CURRENT RESPONSIBILITIES:

- Attend site surveys and obtain detailed information for implementation planning
- Facilitator for Inmate Project Conference Calls and Track and assign tasks

Corporate Overview

- Develop installation schedules with input from state personnel, facilities personnel, Local Exchange Carrier (LEC) personnel, suppliers, and technicians.
- Develop Hardware and Labor Budgets
- Order equipment and services: phones, enclosures, Kiosk, network circuits, routers, Internet access devices, circuit protection, call control recording and monitoring equipment, etc.
- Supervise and assist in the installation of phones, enclosures, and systems ensuring work is completed with as little interruption and inconvenience as possible
- Ensure high-quality installation is completed on time and within budget
- Troubleshoot and escalate unforeseen issues
- Ensure facility personal are appropriately trained
- Voice Recognition and Voice Verification Enrollment
- Manage installation of Value Added Products
- Provide written technical implementation plans, Gantt Charts, High Level Implementation Charts for State and County Corrections Markets RFP responses
- Order, schedule and turn up circuits
- Identify phone ports and enter port and phone location detail into the Inmate System
- Facilitate and distribute inmate calling material via brochures, instruction cards, website, etc.

PRIMARY FUNCTION FOR NDCS:

- Implementation Manager

EDUCATION / TRAINING:

- Masters Certificate in Project Management from George Washington University
- Enforcer Administration Certification
- Enforcer Installation, Support and Maintenance Certification
- Enforcer Train the Trainer
- Company training in customer service, technology and management
- PREA Certification
- Cell Phone Detection

REFERENCES:

West Virginia DOC
Paul Simmons
Assistant Commissioner
Phone: 304.221.2213
paul.e.simmons@wv.gov
901 8th St
Moundsville, WV 26041

Arizona DOC
Gary Lippert
Telecom Support Manager
Phone: 602-364-3017
glippert@azcorrections.gov
1645 W. Jefferson
Phoenix, AZ 85007

Utah DOC Gunnison
Joel White
Captain
Phone: 435-528-6405
wjoelwhite@utah.gov
255 E. 300 North
Gunnison, UT 84634

Corporate Overview

KRISTIE DEAN

Network Installation Manager and Trainer
555 Lake Border Drive, Apopka, FL 32703
(407) 889-6882 Office
Kristine.Dean@CenturyLink.com

PROFESSIONAL QUALIFICATIONS/EXPERIENCE:

- 15 Years experience in Telecommunications
- 8 Years experience in Inmate/Corrections Market
- Network Engineering responsibility for dial tone, PRI, T1, DSL and all circuitry needed for installation
- Facilitate and coordinate the training of staff on the new Enforcer System platform
- Voice Biometrics implementation

CURRENT RESPONSIBILITIES:

- Subject matter expert: submit pricing and costs for network expenses
- Assist with implementation and cut over projects for newly installed Inmate Telephone Systems by processing the orders for network services
- National Lead Trainer

PRIMARY FUNCTION FOR NEBRASKA DEPARTMENT OF CORRECTIONAL SERVICES:

- Network installation coordination
- Lead Trainer

EDUCATION / TRAINING:

- Enforcer Administration Certification
- Enforcer Installation, Support and Maintenance Certification
- Company training in customer service, technology and management

REFERENCES:

Alabama DOC
Robert M Brantley
Assistant Accounting Director
Phone: 334.353.5561
robert.brantley@doc.alabama.gov
331 S. Ripley St.
Montgomery, AL 36130-1501

Arizona DOC
Gary Lippert
Telecom Support Manager
Phone: 602-364-3017
glippert@azcorrections.gov
1645 W. Jefferson
Phoenix, AZ 85007

West Virginia DOC
Paul Simmons
Assistant Commissioner
Phone: 304.221.2213
paul.e.simmons@wv.gov
901 8th St
Moundsville, WV 26041

Corporate Overview

ADDITIONAL KEY PERSONNEL:

PAUL COOPER

General Manager

600 New Century Pkwy, New Century, KS 66031

(913) 353 7388 Office

Paul.N.Cooper@CenturyLink.com

PROFESSIONAL QUALIFICATIONS/EXPERIENCE:

- 15 Years experience in Telecommunications
- 8 Years experience leading CenturyLink's Inmate Communications business
- Variety of functional expertise including finance, program management, network design and technical sales and support

CURRENT RESPONSIBILITIES:

- Lead 150+-member team responsible for sales, service, and operations for CenturyLink's state and county inmate telecommunications market, in addition to managing public pay phones throughout the U.S.

PRIMARY FUNCTION FOR NEBRASKA DEPARTMENT OF CORRECTIONAL SERVICES

- Overall contract administration
- Contract Approval
- Escalation Point

EDUCATION / TRAINING:

- Bachelor of Arts in Political Science and Economics
- Masters of Business Administration in Marketing and Finance
- Masters of Arts in Economics

BARRY BRINKER

Director - Operations

1944 Jamison Drive SE, Salem, OR 97306

(503) 990-6466 Office

Barry.E.Brinker@CenturyLink.com

PROFESSIONAL QUALIFICATIONS/EXPERIENCE:

- 19 Years experience in Telecommunications providing leadership, vision and direction for technology based corporations across North America. Managing all aspects of Operations and Customer Service - Implementation, Account Management, Field

Corporate Overview

Operations, Engineering, Network Planning, Project Management, Procurement and Technical Support

- 7 Years experience in Inmate Call Control Systems Management

CURRENT RESPONSIBILITIES:

- Overall management of CenturyLink's Operations team with the following responsibilities:
 - Management of the following teams:
 - Program Managers
 - Call Center - Help Desk
 - Field Service Technicians
 - Technical Support Technicians
 - Customer Service and Billing
 - Contract negotiation and compliance with both customers and subcontractors
 - Vendor Management
 - Implementation of all products agreed to during contract negotiations
 - SLA reporting and overall contract compliance

PRIMARY FUNCTION FOR NEBRASKA DEPARTMENT OF CORRECTIONAL SERVICES:

- System operations management and field operations
- Escalation Point

EDUCATION / TRAINING:

- Bachelor of Science in Information Technology
- Extensive training on project management, implementation techniques, contract negotiation, customer service, managing vendor relationships and network design (SONET, LAN/WAN, DWDM)

BRYAN OSLER

Vice President of Sales & Marketing
600 New Century Pkwy, New Century, KS 66031
(913) 353-7423 Office
Bryan.ROsler@CenturyLink.com

PROFESSIONAL QUALIFICATIONS/EXPERIENCE:

- 11 Years experience in Telecommunications with CenturyLink
- 4 Years experience in CenturyLink's Inmate Communications business
- Variety of functional expertise including finance, strategy, project management, and sales

Corporate Overview

CURRENT RESPONSIBILITIES:

- Lead team responsible for sales and marketing for CenturyLink's state and county inmate telecommunications market.

PRIMARY FUNCTION FOR NEBRASKA DOC

- Overall contract administration
- Contract Approval
- Escalation Point

EDUCATION / TRAINING:

- Bachelor of Science in Business Marketing
- Masters of Business Administration

TAMMIE SAUCEDO

Program Manager

6700 Via Austi Parkway, Las Vegas, NV 89119

(702)244-8384 Office

Tammie.J.Saucedo@CenturyLink.com

PROFESSIONAL QUALIFICATIONS/EXPERIENCE:

- 33 Years experience in Telecommunications
- 8 Years experience in Inmate Call Control Systems
- Several years experience successfully processing and analyzing inmate call detail usage and commissions for a total of approximately 150 state prison facilities for 6 state department of corrections as well as 29 county facilities

CURRENT RESPONSIBILITIES:

- Responsible for analyzing and auditing inmate call detail records, processing inmate facility commissions, maximizing revenue and increasing commissions by reducing bad debt and implementing debit calling where applicable.
- Developed and implemented commissioning of prisons system (COPS) to ensure accuracy of monthly commission reporting
- Provide primary customer contact and business office support
- Acting inmate and payphone liaison for all regulatory requirements or filings

PRIMARY FUNCTION FOR NEBRASKA DEPARTMENT OF CORRECTIONAL SERVICES:

- Commissions
- Monthly Rate Audits Debit management

Corporate Overview

EDUCATION / TRAINING:

- Enforcer Administration Certification
- Enforcer Installation, Support and Maintenance Certification
- Company training in customer service, technology and management

JOHN GOETSCH

Vice President – Technology, Inmate Calling Solutions, LLC (ICSolutions)

2200 Danbury Street, San Antonio, TX 78217

(210) 581-8105 Office

Jgoetsch@lcsolutions.com

PROFESSIONAL QUALIFICATIONS/EXPERIENCE:

- 13 years experience in Telecommunications
- 10 years experience in Correctional Markets, including 6 years with Value-Added Communications (now part of Global Tel*Link)

CURRENT RESPONSIBILITIES:

- Overall design and development of products and applications for correctional markets industry
- Oversee day-to-day IT operations
- Direct assembly of product hardware
- Technical oversight of product deployments in the field

EDUCATION/TRAINING:

- Rhodes University, South Africa (with honors)

Corporate Overview

j. SUB-CONTRACTORS

If the bidder intends to Sub-Contract any part of its performance hereunder, the bidder must provide:

- i. name, address, and telephone number of the Sub-Contractor(s);
- ii. specific tasks for each Sub-Contractor(s);
- iii. percentage of performance hours intended for each Sub-Contract; and
- iv. total percentage of Sub-Contractor(s) performance hours.

CenturyLink Response: Read and understood.

CenturyLink will sub-contract with its technology partner Inmate Calling Solutions, LLC ("ICSolutions") for certain components of the NDCS solution. ICSolutions is our exclusive partner on all new opportunities, and the only sub-contractor CenturyLink would intend to use for NDCS.

Inmate Calling Solutions, LLC
Tim McAteer, President
2200 Danbury Street
San Antonio, TX 78217
210.572.9570

ICSolutions will provide development and technical support for the Enforcer call platform software and hardware, in addition to technical support for NDCS users and billing support for prepaid consumers. All other components included but not limited to network, data center infrastructure, account management, field support, accounting/auditing, contract compliance, and overall account management will be performed by CenturyLink.

In total and as calculated by total labor hours, sub-contractor ICSolutions will perform components totaling 11.2% of the total contract. A detailed reconciliation of contract components is provided below. Because ICSolutions is our sole sub-contractor, this is the total percentage of performance hours to be performed by sub-contractors.

Corporate Overview

% of Hours By Component Provider						
			Total Labor Hours			
#	Category Of Task	Task (Implementation Hours Are One Time, Operations Hours Are Monthly)	CTL Labor (Hours)	CTL Labor (%)	ICS Labor (Hours)	ICS Labor (%)
1	Implementation	Project Management	120	0.4%	20	0.6%
2	Implementation	Site Surveys	40	0.1%	0	0.0%
3	Implementation	Equipment Ordering	10	0.0%	10	0.3%
4	Implementation	Phone Installation	80	0.3%	0	0.0%
5	Implementation	Site Preparation	10	0.0%	0	0.0%
6	Implementation	Platform Installation	80	0.3%	20	0.6%
7	Implementation	Platform Cutover	40	0.1%	20	0.6%
8	Implementation	Customer Training	40	0.1%	20	0.6%
9	Operation	Program Management	4,800	18.0%	0	0.0%
10	Operation	Network Management	2,400	9.0%	0	0.0%
11	Operation	Phone Repair	13,200	49.4%	0	0.0%
12	Operation	Platform Maintenance	1,800	6.7%	300	9.0%
13	Operation	Platform Repair	1,200	4.5%	900	27.0%
14	Operation	HelpDesk	0	0.0%	900	27.0%
15	Operation	Collect Call Management	600	2.2%	0	0.0%
16	Operation	Prepaid Call Management	600	2.2%	600	18.0%
17	Operation	Debit Call Management	600	2.2%	300	9.0%
18	Operation	Commissioning	600	2.2%	0	0.0%
19	Operation	Ongoing Training	480	1.8%	240	7.2%
20		Totals	26,700	100.0%	3,330	100.0%
21		Grand Totals	27,558	88.8%	3,474	11.2%
					31,032	100.0%



CenturyLinkTM

Technical Approach

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I. UNDERSTANDING OF THE PROJECT REQUIREMENTS

The bidder should provide the following information in response to this Request for Proposal.

A. PROJECT OVERVIEW

The State of Nebraska is seeking qualified bidders to submit proposals to furnish, install, and maintain an Inmate Calling System for use in all present and future correctional facilities. The intent of this RFP is to award a single statewide contract that will enable inmates at all State Correctional facilities and youth at the Department of Health and Human Services (DHHS) rehabilitation and treatment centers to make collect, debit, and pre-paid calls from State facilities. The State will require inmate access to local, Intrastate, Interstate and International calling. The State has special security requirements and has a prime objective of controlling inmate telephone usage and limiting the use of the telephone system for fraudulent activity.

 CenturyLink Response: Read, agreed and will comply.

CenturyLink is proposing the Enforcer Inmate Calling System ("Enforcer") for the Nebraska Department of Correctional Services (NDCS) and Youth Rehabilitation and Treatment Center (YRTC). The centralized Enforcer comes with an array of standard features that promote security and efficiency at our client's facilities. In addition, the Enforcer system software, developed by ICSolutions in partnership with CenturyLink, is deployed in-state in Scotts Bluff and Lancaster counties and neighboring Department of Corrections in Iowa, Kansas, and Wyoming – providing a unique opportunity for cross-agency cooperation without the need for additional training. Nationwide, the Enforcer system is deployed in a total of 10 DOCs in addition to numerous county jails.

The Enforcer is operated through a browser-based GUI (Graphical User Interface). Anyone with a login and password provided by an authorized system administrator can securely access the system from any computer with Internet access and a modern browser as if they were opening a website. The Enforcer's web interface is intuitive, easy to use and functions like any other website.

The Enforcer system has been developed with the help of correctional industry professionals as well as experienced leaders in the telecommunications field. CenturyLink's detailed response to technical requirements is provided throughout our response to the Project Description and Scope of Work.

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A few examples of the Enforcer system's capabilities are:

- ✓ **Industry-leading fraud controls:** Like all major providers, CenturyLink offers "base" fraud control features like hook switch, secondary dialing, and chain dialing prevention, in addition to customizable blocked number tables and alerts. Where we differ, however, is in the areas of 3-way and remote call forwarding detection. With the advent of cell phone call merging, SIP technology, and new call forwarding/call conferencing technologies, **3-way and call forwarding detection** is far more difficult than only 2-3 years ago. To combat this issue, only CenturyLink provides a multi-pronged approach including traditional methods, voice biometric detection, network inspection/querying, and others.
- ✓ **Unique 4-channel audio isolation technology,** isolating the offenders' audio stream from the called party as well as announcements heard by both parties; a critical feature to enable quality voice biometrics and keyword analysis.
- ✓ **Customizable call controls by facility, called number, or inmate.** Developed in partnership with Arizona and Utah DOCs, who required strict but variable calling privilege rules by inmate disciplinary and custody status, the Enforcer allows NDCS' personnel the option of varying call restrictions using any number of criteria.
- ✓ **24/7/365 Technical and Customer Service** availability with a live, U.S.-based technician or customer service representative
- ✓ **Unlimited Reverse Lookup.** Through our unique access to carrier databases and Prepaid Collect account management process, CenturyLink provides unlimited access to *verified* Billing Name and Address (BNA) information at no cost to NDCS.
- ✓ **Data mining.** Link analysis and call pattern analysis are part of our base offering, not a separate "module" not integrated with the inmate telephone system.
- ✓ **Remote Access.** Ability to access the system without dedicated work stations; all inmate investigation, monitoring, and administrative functions can be accessed from any computer with Internet access, and without requiring VPN access.
- ✓ **Live monitoring** via workstation, telephone, or cellular phone
- ✓ **Call Management Tools.** Easy-to-use tools for saving, copying, or emailing recordings, reports and call detail records

Technical Approach

- ✓ **Third-party integration.** CenturyLink has a proven ability to work with third-party providers to enable commissary ordering by phone, sick call/appointment setting by phone, secure trust account balance inquiries by phone, PIN integration, debit sales, investigative data sharing, and other functionality.
- ✓ **PREA and other reporting tools** to help ensure ongoing compliance
- ✓ **TDD/TTY secure monitoring directly on the system,** not an outboard translation program, in addition to a complete ADA compliance program
- ✓ **Cell phone interdiction technology expertise.** – The only provider team to have installed Managed Access, Passive Service Denial, and Portable Detection solutions



What Makes Us Different

As the State knows Inmate Calling Systems are a complex IT service spanning network engineering, system integration, field operations, and called party customer care. It is difficult to fully judge a provider's capabilities – and the true total cost of ownership to you and your citizens – from just their carefully constructed RFP responses.

❖ CENTURYLINK DIFFERENTIATORS ❖

While 97%+ of all Inmate Calling System features are the same, the remaining 3% can make a big difference.

CenturyLink's focus on state DOCs and position as a nationwide network provider has real benefits to NDCS.

Technical Approach

Most Inmate Calling System “super-users” also know that, despite all the salesmanship, claims of exclusive patents, and focus on features, over 97% of all functions are the same. Call restrictions, link analysis, reporting, even voice biometrics, cell phone detection, and location services are fundamentals any top-tier provider, including CenturyLink, can provide. Differences show up “around the edges” when real money has to be spent in order to provide a total package:

- **Benefits of a carrier.** Network and infrastructure are two of the most expensive components of the Enforcer Inmate Calling System. As part of a nationwide network and data center infrastructure provider, CenturyLink’s capabilities as a Tier 1 network and data center provider, including the ability to “over-provision” our systems, has several major advantages:
 - Unique access to carrier databases and relationships for investigators
 - Regulatory expertise and credibility
 - Always-available calling and access to investigative data
 - Network-intensive value-added services such as video relay, video visitation, and automated information services.

- **Customized approach & proven ability to integrate with other vendors.** CenturyLink is targeted in its approach, focusing on state DOCs and county jails only in select areas. The result is that our service personnel are not distracted by hundreds of other accounts and their different needs. This, coupled with the Enforcer system’s open architecture, allows us to meet your changing needs throughout the contract.
 - Custom feature delivery in weeks, not months or years
 - Data interfaces to any system for one-stop management: Security Threat Group, VINE, PIN, debit/commissary, etc.
 - Data interfaces written to you and your vendors’ specs, not ours, and at no cost

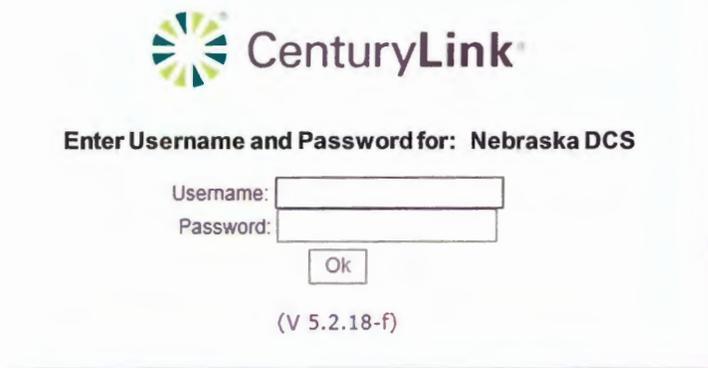
- **Accountability is the driver.** As a publicly traded and regulated nationwide telecommunications carrier, we recognize and accept the scrutiny put on us. Lost recordings, hidden fees, poor service, re-negotiation after-the-fact – we won’t accept those business practices even if it hurts our profit margins. And ALL of our customers will back that up.

Technical Approach

The system at each Nebraska Department of Correctional Services (NDCS) and Youth Rehabilitation and Treatment Center (YRTC) facility must allow for investigative personnel located either at the facility or central administration to remotely access each of the systems via a secure, password protected method. Specified NDCS/YRTC personnel must have the ability to change, modify, or view any privileges or restrictions pertaining to inmates at their facility.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer provides flexible and convenient remote access for investigators *without requiring the use of a VPN or other separate software*. The Enforcer's web interface is intuitive, easy to use and functions like any other website. Personnel with a valid login and password provided by authorized administrators can securely access the Enforcer system from any computer with Internet access and a modern browser as if they were opening a website.



 CenturyLink®

Enter Username and Password for: Nebraska DCS

Username:

Password:

(V 5.2.18-f)

Example Login Screen

Multiple investigators can access the system remotely at the same time without impacting on-going system operations or performance.

While connected, authorized users may monitor live conversations, play back call recordings, search system data, and generate reports as if they were onsite. In addition to providing remote accessibility for your staff, this feature can also facilitate cooperative investigations with external law enforcement agencies.

Technical Approach

Each username is linked to a customized set of privileges (class of service) established by administrators when they granted that user access. These privileges range from being able to create or modify inmate data to being able to display reports, playback recordings, etc. A standard set (or several sets) of privileges can be created for booking officers, investigators and administrators prior to installation to speed up enrollment of all NDCS; nevertheless, NDCS staff with "Administrator" access will always be able to alter or revise the privileges allowed to any user, can revoke access, or can require a user to select a new password at any time through the easy-to-use browser-based GUI (Graphical User Interface).

The system features shall include, but are not limited to: central and remote site network administration, centralized web based database where access will be limited by facility, automated operator, call branding, call blocking, three-way call detect, call forwarding detect, answering supervision, call duration limits and other inmate/youth calling restrictions, call monitoring and recording, hot number tracking and system reporting. The contractor shall install and operate prison inmate/youth telephones and all related equipment including wiring for the inmate/youth telephones, installation, and any related hardware and software/firmware specifically identified in this RFP without cost to the State.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer system is a full featured, technologically advanced inmate calling system that provides all of the required items mentioned above and will be responded to individually in response to specific requirements within the remainder of the Technical Approach response.

CenturyLink agrees to install and operate prison inmate/youth telephones and all related equipment including wiring for the inmate/youth telephones, installation, and any related hardware and software/firmware specifically identified in this RFP without cost to the State.

The bidder may include any other information that is believed to be relevant to this procurement but not specifically asked for in this RFP. Bidder may explain in detail any innovation, alternatives or more cost effective approaches available in any area of this RFP. Contractor may provide optional or alternant products or services available to the State. Optional products must be clearly identified as optional and provide the optional cost separately from the bid cost per minute. If bidding an alternant proposal, the bidder must provide a complete separate RFP response including all mandatory requirements (section II. N.)

 CenturyLink Response: Read, agreed and will comply.

Technical Approach

CenturyLink is more than just an inmate telephone service provider. As part of the only facilities-based network provider in inmate communications with access to, by far, the widest network of personnel and financial assets in this industry, we have access to a unique set of value-added services that provide unique ways for inmates to securely communicate with family and for the State to cut costs.

Probably most important, CenturyLink recognizes that needs don't just arise when the contract expires and goes out to RFP – needs constantly change and NDCS needs a vendor willing and able to identify and solve issues on an ongoing basis. The main way we do this is regular account reviews with NDCS staff, either on a quarterly or bi-annual basis according to your preferences. At those meetings, we review service, what is working or not, new technologies being released in inmate communications, cell phone detection, or other investigative areas, PREA, FCC regulation, and others. Face-to-face meetings make these reviews efficient and effective, and with operational headquarters in nearby Kansas City travel would never be an issue.

“Partnership” is a word often misused in this industry, but something we honestly try to provide to all of our customers. Below are a few examples of how we have worked with our state DOC customers above and beyond the basics of our written contracts



Alabama DOC

Repair of widespread prior cable issues
Voluntary holiday rate promotions



Arizona DOC

Custom website development
Significantly expedited implementation



Idaho DOC

Two voluntary rate reductions
Mid-contract Video Relay installation



West Virginia DOC

One-week install of new facility refused by
prior provider



Wisconsin DOC

No-cost on-site personnel
Long-term legacy recording access



Kansas DOC

Early buyout of prior provider
No-cost commissary ordering by phone



Utah DOC

Custom privilege level development
& number verification



Texas DCJ

Highly customized verification system
Managed Access installation



Nevada DOC

Automated inmate info services
Cell phone detection equipment loan

Technical Approach

COST IMPACTING OPTIONAL MISCELLANEOUS PRODUCTS OR SERVICES, DESCRIPTION

CenturyLink has a number of available optional miscellaneous products or services that are available to our customers and will improve staff efficiency, streamline investigations, and simplify inmate communications and operations, and increase connections between inmates and their friends/family. We look forward to discussing these options with NDCS. Pricing information is provided under the Cost Proposal tab on the Cost Sheet within the Miscellaneous Products or Services, Description table.

A summary table is provided below with detailed descriptions following.

Feature Name:	Feature and Benefits:
Inmate Voicemail (more detailed description following chart)	<ul style="list-style-type: none">• Increased communication with family through an inbound voicemail from family and friends to inmates while maintaining security controls. Also, an additional revenue source.
Edovo Tablets – Jail Education Solutions (more detailed description following chart)	<ul style="list-style-type: none">• Incentive Based Learning Platform• Over 10,000 hours of content (education and entertainment)• Pursue a GED or college credit
Argus CRIMES and ECHO Investigative Tools including PREAPRO Module (more detailed description following chart)	<ul style="list-style-type: none">• Extensive data mining• Assists in the discovery, identification, and analysis of investigative leads• Advanced Voice Biometric Platform<ul style="list-style-type: none">○ Auto enroll inmates○ Match voices across channels○ Identify civilians○ Group calls by common voice of civilian, voice categorization• PREA compliance software with extensive searching and reporting

Technical Approach

❖ Inmate Voicemail

The Enforcer offers an easy-to-use voicemail option for friends & family to leave messages for inmates. The length of the voicemail is configurable and typically set at 30 – 60 seconds. This is a useful feature for family members to leave a best time for the inmate to call, or to communicate news such as a death in the family without the need to contact staff.

Inmate voicemail also maintains security requirements. In order to send a voicemail, the friend/family member must have an established pre-paid collect account, which is associated with a phone number. All pre-paid collect accounts, regardless of funding method, include verified billing name and address information. In addition, the Enforcer is able to check the phone number on the pre-paid collect account with the inmate's PAN table to ensure no unauthorized contacts are made through the voicemail system.

❖ Edovo Tablets – Jail Education Solutions

CenturyLink will provide secure, ruggedized seven inch connected tablets and an accompanying secure network for the purpose of rehabilitation, inmate management, and decreased recidivism. In partnership with Jail Education Solutions and its' Edovo educational platform, these secure tablets offer an end-to-end solution with not only a full education suite, but the ability to integrate with inmate phones and other vendor's services - email, entertainment, commissary, grievances, etc.

Operating in facilities like Philadelphia, Chicago, Alabama and California, Edovo safely offers the most full-featured and flexible platform in corrections that allows inmates free daily access to rehabilitative services in their common areas and day rooms, and will allow NDCS to track the progress of inmates and see significant gains to inmate behavior. Edovo tablets are designed specifically for corrections, and as such, have intense levels of security required.

With thousands of hours of material covering not only everything from literacy to college course work, Edovo also has a full library, GED courses, vocational training, cognitive behavioral therapy, and more. Edovo also recognizes an important place for incentives in its uniquely designed learning management system.

Users earn points for doing self-improvement content that can then unlock entertainment content as a reward. This not only motivates fringe learners and retains engagement, but it also provides social cover in an environment where learning is not always viewed favorably.

Technical Approach

While Edovo creates and includes the broadest range of content in corrections, it also allows facilities to upload their own content - PREA, existing training, or the inmate handbook - to decrease cost and track engagement. Investment in inmate education leads to reduced recidivism, but programming in correction is limited in scope by budget, space, and movement. Edovo overcomes these challenges.



Edovo Inmate Tablet

Edovo transforms the environment of a correction facility. Rather than aimlessly watching television, inmates quietly focus on exploring a topic of interest at their own pace, all while earning rewards for their work. Operationally, when tablets are unlocked and checked out from charge carts in the morning, inmates traditionally engage for hours each day in near silence until tablets are returned to secure charge carts and locked up for the night. Feedback from both inmates and correctional officers has been overwhelmingly positive. Tablets with accessible self-improvement are changing the dynamic of facilities across the country.

❖ **Argus CRIMES and ECHO Investigative Tools including PEAPRO Module**

CenturyLink partners with Argus Corrections Solutions to offer its CRIMES™ and Echo™ investigative tools, the most advanced and tailor-made solutions for Corrections available today. Unlike other solutions which feature technology aggregated from outside Corrections, CRIMES and Echo were designed from the ground up, in collaboration with DOC staff and investigators, to exceed the requirements of the most demanding clients while delivering a true corrections Investigative package. CRIMES is the only case management software used by every division within the DOC with the potential to have fully integrated Voice Biometrics.

Most case management solutions offer basic tracking of cases. CRIMES is the only tool to offer a true comprehensive Case Management Solution (CMS). CRIMES Includes:

- **Event Management:** Create an unlimited number of events. The user is only presented with the fields and controls relevant to the type of event he/she is creating ensuring maximum accuracy and efficiency.

Technical Approach

- **Subject Management:** Place subjects in three distinct categories: People, Staff, or Organizations. Link Victims/Perpetrators to organizations or other people all through the click of a mouse.
- **Evidence Management:** Add pictures, video, documents and other electronic files to the event as well as to the subjects or events.
- **Comprehensive Reporting:** Powerful, customizable, and scalable reporting engine that includes predefined and self service ad hoc reporting. Report authors can create highly formatted reports that provide agency personnel with a clear vision of incidents, events and subjects, both inside and outside the facility walls along with a journal of actions conducted by users as they interact with CRIMES.
- **PREAPRO™ Module:** Designed from the ground up to exceed the requirements of the DOJ's PREA Reporting requirements, this module allows users to create, track, manage, and report on all PREA activities within the prison. Additionally, users can generate and submit their PREA Form in the approved DOJ format all with the click of a button.
- **Unmatched Security Restrictions:** Control the purging of events. Limit access to information through comprehensive and unmatched administrative privileges.
- **Most Advanced Fully Integrated Voice Biometric Platform:** Echo is the most advanced platform available for corrections today. Users of Echo can:
 - *Auto-Enroll Inmates:* Eliminate laborious and costly enrollment processes by utilizing Echo's unmatched ability to create biometric voice prints without human intervention
 - *Match Voices Across Channels:* Echo is the only platform allowing investigators to search for voices across media, from telephone to video visitation, voicemails, cell phone calls or extractions and more.
 - *Identify Civilians:* Echo can create prints for civilians of interest and identify them in future calls
 - *Group Calls by Common Voice of Civilian, Voice Categorization:* Echo can search for a voice of a target civilian and group resulting calls by voices found in the recordings using its proprietary Voice Categorization (VoxCat™) technology. This provides investigators not just how many voices are using a particular telephone number, but how many telephone numbers a particular speaker is using.
 - *Identify Inmate to Ex-Inmate Communication:* Echo is the only platform that can identify released inmates, talking to current inmates.

Technical Approach

CRIMES™ (Case Reporting, Intelligence Management and Evidence System) offers the first and only solution in corrections designed by investigators for investigators to manage their cases and evidence. The CRIMES software allows investigators to quickly and efficiently handle their work load, investigate and the close cases, following the operating procedure for corrections.

CRIMES is also the first and only solution to bring together all of the divisions within the Department. Users of CRIMES include: the Office of the Inspector General Investigation Unit, Human Resources, PREA Administrators, Legal, Division of Adult Institutions, and Probation and Parole all with their respective modules/categories sharing and using the same data. From the Request for and Investigation to the prosecution of a case, CRIMES provides users the tools and resources to maximize their resources in conducting investigations. The sharing of information across divisions cuts down previous barriers to communication and ensures the department is working at its maximum potential.

Reporting

CRIMES provides the most robust reporting capabilities through its unique and novel approach to reporting. Features found in CRIMES include:

- Built in Drill Down Reporting™ with the ability to create virtually unlimited ad hoc reports.
- Unmatched Visual Linking of Subjects through its unique integration with Cases and People of Interest.
- True Data Mining and Big Data Tools; utilizing Argus's intelligence engine.

The Drill Down Reporting found in CRIMES is unlike any other reporting interface. It allows investigators to quickly see the information at whatever level they want by interacting with the corresponding chart. This allows investigators to quickly go from facility level information down to housing unit or even the cell level information in seconds.

The advanced reporting module provides agencies with the ability to meet users' reporting demands with the absolute minimal application of IT resources. Even the most non-technical user can build and modify reports without having to export data to external applications.

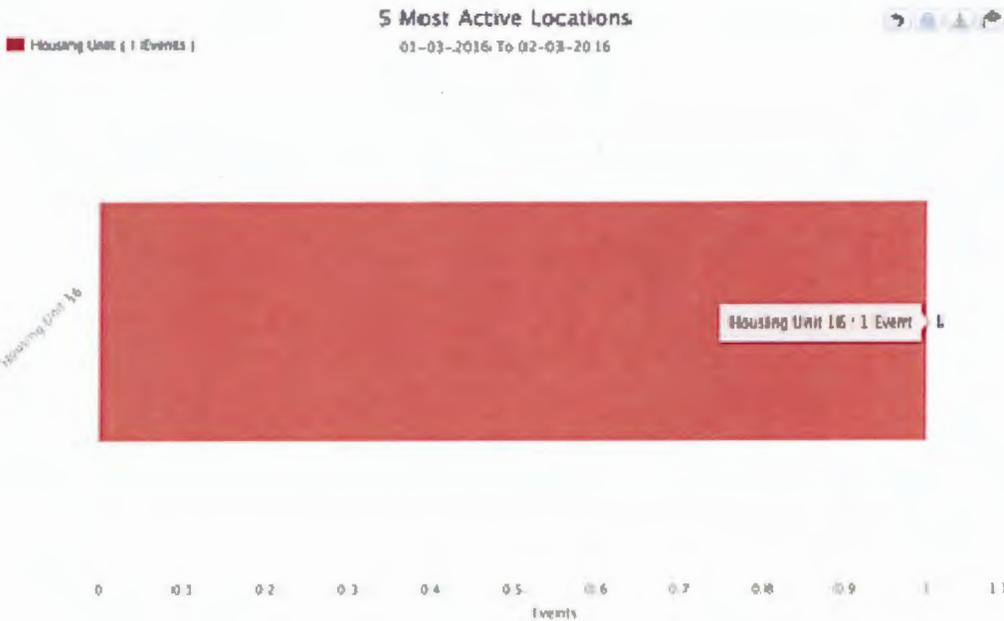
Users can generate grid and chart based reports from consolidated data in multiple formats to create a holistic view of activity across the agency, and drill down into the most detailed of data stored within CRIMES.

Technical Approach

Rich design tools enable users to create the precise report layouts they need. The chart type, date range, report title and subtitle are all easily controlled by the user, as are the data sets displayed on the X and Y axis of a chart and the columns and headers contained within a grid based report.

Reporting > Events > Most Active Locations

Grid Graph



Reports > Events > 5 Most Active Locations

Grid Graph

5 Most Active Locations

Facility	Building	Housing Unit	Wing	Room	Event ID	Requested Date	Creator
ERDCC	Building 16	Housing Unit 16	B Wing	Unknown	CM22	01/28/2016	Hayd

Items per page: 50

Drill Down Reporting™: from facility/department level to cell level in seconds.

Technical Approach

Visual Linking of Subjects and Data Mining Engine

Now agency staff can identify and even predict criminal or otherwise illicit activities and the entities involved with such activities. Through CRIMES, investigators can keep inmates, agency staff and the general public safer; identify and disrupt criminal, gang, and other prohibited activities, and close investigations faster.

CRIMES provides users with the ability to integrate data from multiple sources and multiple incidents and discover patterns related to the structure, organization, operation and information flow in organized and other criminal networks.

CRIMES employs sophisticated techniques to mine large volumes of data to discover and reveal useful knowledge about incidents, subjects and the structure of the relationships they have with each other in a network. The end result is a powerful application that assists agency personnel in the discovery, identification and analysis of investigative leads.

Don't Just Search, PREDICT. CRIMES tried and true Algorithms provides investigators leads and relationships not found through normal techniques. They are updated dynamically, ensuring the latest and most relevant data is always provided.

Algorithms are applied to automatically process data and categorize data subsets into three primary groups:

1. Spatio-temporal (physical location of activity and time of occurrences)
2. Event specifications (including the characteristics of an event and offenders' behavior patterns)
3. Offender profiles: (e.g., to gender specifications (age, gender, race, etc)

Different events or subjects of interest require analyzing different types of variable. **Through the application of this artificial intelligence against consolidated, organized data, agency personnel are able to discover hidden relationships among data.** Such relationships can identify criminal or other characteristics, and often form a network of subjects, organized to conduct illicit activity.

Through the visual linking of events, incidents and subjects, CRIMES provides users with a systematic, intelligent approach for criminal investigation. Users have the ability to visually analyze networks to determine members, the relationships they have with other members, and the role members play within the network.

After automatically analyzing data, CRIMES visually presents relationships between incidents, events and subjects using analytical, charting and mapping tools. These tools assist the user in the recognition of patterns related to criminal and/or other illicit activity.

Technical Approach

CRIMES displays associations between subjects. Subjects are presented as nodes and their associations and interactions by links. For many agencies, the task of extracting the associations of subjects of interest is still conducted manually, and is a painstaking, labor intensive process that requires a great deal of time to complete. CRIMES reveals these relationships automatically and instantly.

As organized networks (criminal and otherwise) are dynamic and subject to change over time, CRIMES automatically analyzes new data and includes new subjects, incidents and events and the relationships between the them in the link analysis graphical displays.

CRIMES utilizes an embedded algorithm to adjust the positions of the nodes dynamically to ensure that the display presents the most relevant content without becoming cluttered. Further, users can control the view by dragging the nodes of the network for easier viewing and interpretation. Icons are used to display the content of the chart and the user has the ability to filter and select the entities to be included (for example gang members) in the chart.

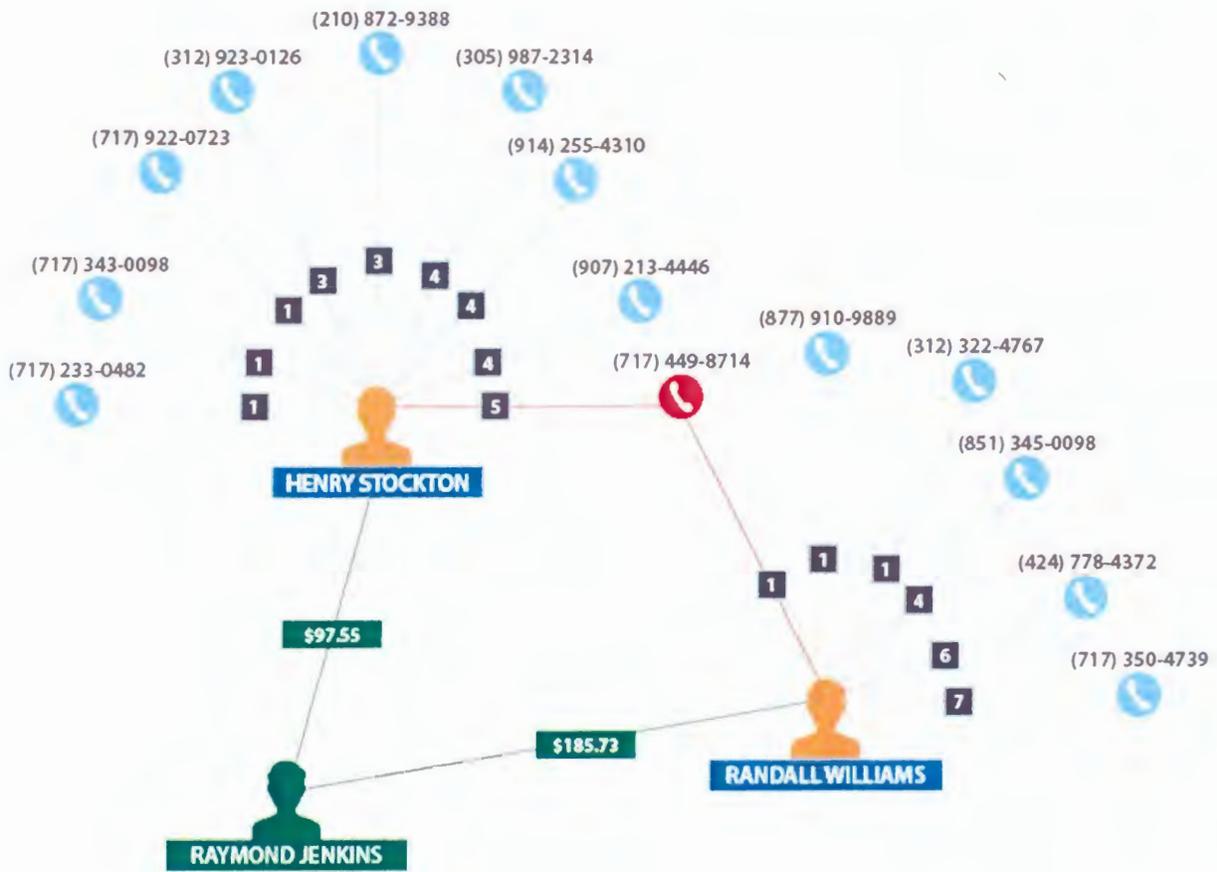
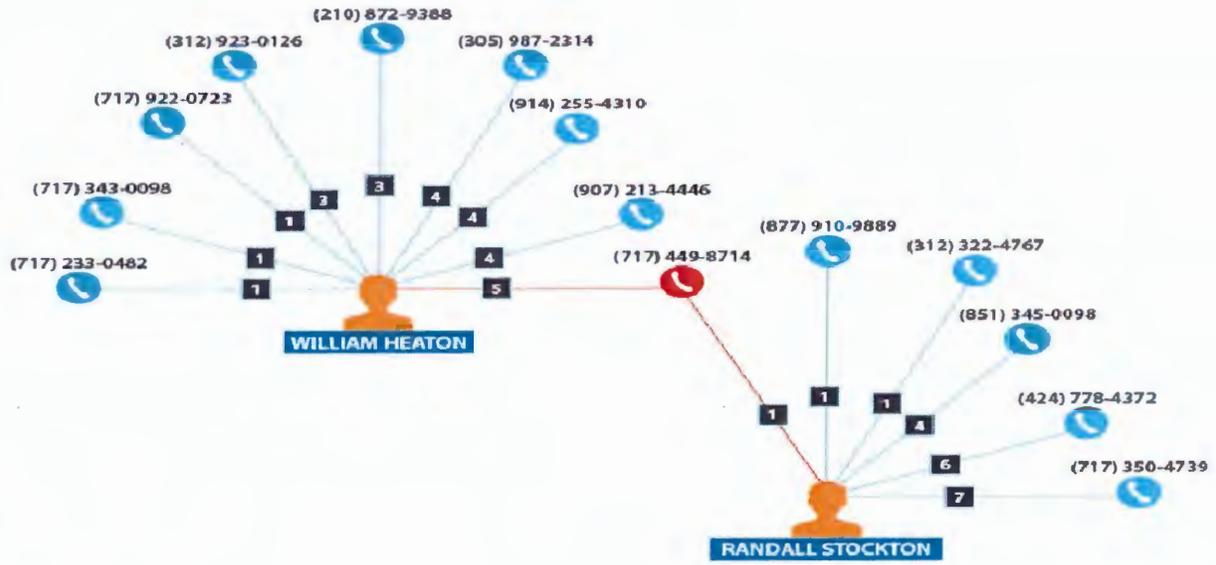
Social Network Analysis (SNA) techniques are used to discover patterns of interaction between subjects within the network. The application of SNA can reveal:

1. The general structure of the network
2. Subgroups that exist within the network
3. The interaction between the subgroups
4. Potential roles (central or peripheral) each subject plays within the network.

Cluster analysis techniques are utilized to detect groupings of interactions between subjects that would otherwise be hidden in the raw data.

SNA methods can address some of the traditional challenges of data processing by indicating structural holes, that is, areas of missing or incomplete data within the network. Once identified, staff members can attempt to collect, add and refine data within the system, improving the overall efficiency and effectiveness of CRIMES.

Technical Approach



Technical Approach

ECHO

Today's biometric systems are limited by their onerous inscription requirements, dependency on the source of the recordings and inflexible applications. Argus is proud to deliver the most advanced biometric identification system available worldwide that exceeds the needs of today's most discerning agencies.

Argus' Echo™ system is unmatched by any existing biometric provider in the marketplace today.

- **System is independent of Language, Channel, or Text:** This means the Biometric Voice Print can be recorded or extracted from any source and used to match in any other channel (see Case Study 1). Additionally, regardless of what language the Voice Print is created in it can be matched in any language the inmate speaks, regardless of what he says
- Echo provides for **continuous voice identification**, providing the investigators not only verification of whom is speaking but also the identity of the inmates
- Echo is the only solution that **DOES NOT require a lengthy enrollment process**. Prints are automatically created and continuously improved delivering the highest accuracy possible.
- Echo is able to create voice prints on request. This is a powerful tool to have when a suspect is not an inmate and is using many different phone numbers. Once the print is created, the voice can be searched through historical calls so investigators can listen to and extract potential intelligence.
- Echo is not only able to identify PIN sharing but also the identity of the PIN accomplice allowing investigators to focus their investigative efforts.
- Queries can be run on the database by voice, identifying all the calls in which a targeted inmate may have spoken on. Much more than this, a **voice of a targeted NON-INMATE can also be run against the database** given investigators unparalleled intelligence gathering tools.
- In the event that Echo cannot positively identify the identity of an impostor, the system will still notify that the speaker was not the owner of the PIN.
- **VoxCat™** allows investigators to quickly and seamlessly process large groups of calls and aggregate them by common voice, even when the target is a non-inmate. This feature is used to identify the same voice across multiple telephone numbers and aids in voice search through large volumes of call records.

Technical Approach

BENEFITS	OTHERS	ARGUS ECHO
Language, Channel, Text Independent	NO	YES
Identifies the voices of all inmates on the call	YES	YES
Requires Lengthy Enrollment Process	YES	NO
Create Biometric Voice Prints on Request	NO	YES
Continuous Speaker Identification	YES	YES
Able to Identify BOTH Sides of the Call	NO	YES
Report Inmate to Inmate Communication when Inmate is NOT in Prison	NO	YES
Biometric Voice Prints Continuously Improve Ensuring The Highest Accuracy	NO	YES
Can Create a Voice Print for a Non-Inmate High Interest Individual	NO	YES
Voice Categorization to Ensure Voice Print is of Target Individual	NO	YES
Voice Categorization to Identify Same Voice Across different BTNs	NO	YES

Technical Approach

BENEFITS	OTHERS	ARGUS ECHO
Able to process BOTH MONO and STEREO Recordings	NO	YES
Award winning Anti-Spoofing Technology	NO	YES

ECHO Exclusive Features:

Echo was designed and developed from the ground up by investigators for investigators providing tools and processes that no other biometric processing system can match.

- Automatic Print Enrollment:** Echo requires NO human intervention or assistance from Agency staff in the creation of its Biometric Voice Print (BVPs). The system uses proprietary processes to create BVPs from recordings, a process aided by Echo's unique VoxCat capabilities. ECHO's voice prints can also be set to continuously improve, ensuring that the BVP is of the highest quality at all times.
- Create Voice Prints on Request:** Investigators can also request the creation of BVPs for subjects under investigation.

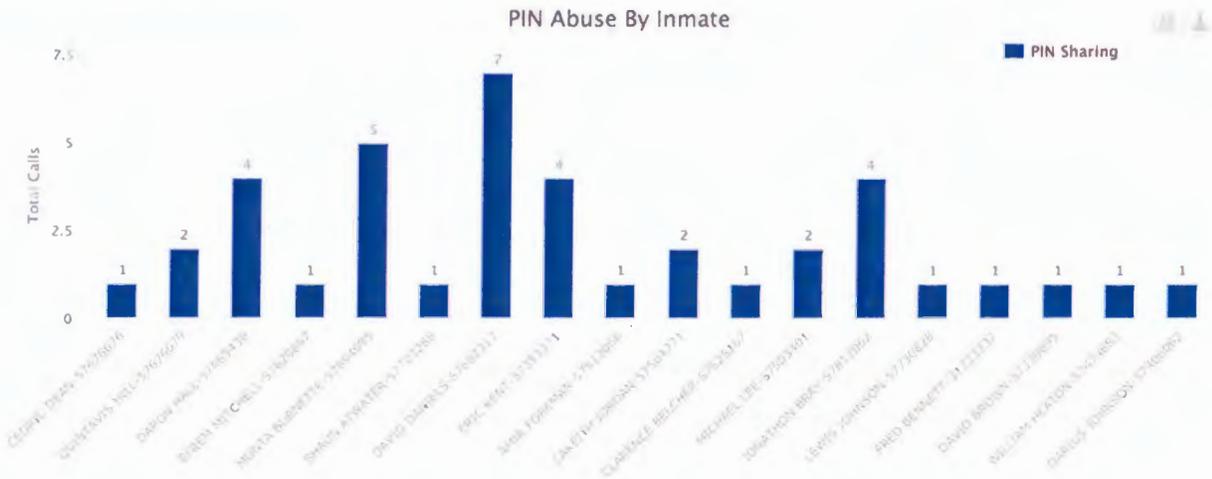


Technical Approach

- **Independent of Channel, Text, and Language:** Echo is the only biometric voice system that can identify an individual regardless of the channel he or she is using (phone vs. video, vs. recordings), regardless of what the speaker is saying, and regardless of in what language he or she is saying it in. The BVP will work across all these various instances.
- **Built in Custom Player:** Echo's player is web based and does not require any additional software to run. It was designed specifically for investigators with the ability to:
 - Isolate tracks (combined, inmate, and civilian)
 - Make notes in each track
 - Speed up track play
 - Show Whisper™: Ability to highlight sections of the recording where the voice dropped below a certain percentage. Likely revealing an attempt to pass illicit information in hush tones.
 - Remove Silence: Ability to remove silence (dead space, no speaker talking) of a call for speedier playback.
- **Drill Down Reporting™:** Echo's charts allow the investigator to quickly find the information they are looking by "Drilling Down" on each category to the level of interest. Charts provided include, but are not limited to, the following information:
 - Events of interest: PIN sharing and multi-speaker inmate calls
 - PIN abuse by inmate
 - Results system wide (or specific to a facility or other physical location)
 - Ability to schedule reports to be delivered at a specified time frame

Technical Approach

Reports > PIN Abuse by Inmate



- **Identification of Inmate to Ex-Inmate Communication using Voice:** Another unique feature is the capability to look for inmate to ex-inmate communication using voice. Since Echo can analyze and identify the speaker(s) on the called party side, it is able to identify when an ex-inmate is speaking with someone on the inside the facility. This call type is likely to contain actionable intelligence or be of interest for investigators to listen to.
- **WorkFlow Management:** Echo allows investigators to quickly and efficiently handle large volumes of calls of interest by assigning the workload to their team using built in criteria. The purpose of the workflow management module is to enable an authorized user (Admin or otherwise) to schedule the distribution of Echo results (events) to first level investigators to investigate the call recording for actionable intelligence. Such authorized user(s) will have the ability to configure the system to automatically distribute call events across multiple groups and/or users. Additionally, it is possible for the authorized user to override the default schedule, once established, to redistribute workload based on resource availability and client requests to focus investigative efforts on one facility or housing unit, or other criteria.

Technical Approach

Workflow > Schedule

Task

Location: PIN Sharing: Inmate to Inmate:
By PIN Number: By Inmate Voice: By Civilian Voice:

Destination Number: Hotlist: Inmate: David Brown
Inmate: Darius Johnson

ID	Task Name	Creation Date	Group	User
1	testing	06/01/2015		Andy Horton
2	Inmate	05/26/2015		Andy Horton
3	#Test	05/26/2015		Robert Sterling

- **VoxCat™**: Echo's proprietary Voice Categorization technology is a technological breakthrough for Voice Biometric Applications. VoxCat groups calls by common voice without the need to create Voice Prints. This process also guarantees extremely high confidence scores since it utilizes an everything against everything match, a process only used by Echo and VoxCat.

VoxCat can be utilized in ECHO in two ways:

1. *BVP Creation*: VoxCat refines the automatic BVP process in Echo by automatically selecting calls from within a pre-existing group of calls and selecting the absolute best candidates for print creation based on the similarity of voice characteristics. The resulting BVP is of the highest quality possible, while eliminating potential imposters from appearing in the BVP.
2. *Linking Civilians by Voice*: The breakthrough capability is of particular importance on the called party side of the call. Traditionally, biometric systems have ignored this valuable source of information due to technological challenges, and an inability to biometrically link called parties. VoxCat allows investigators to link civilians by voice, to quickly find civilians that are using multiple telephone numbers as well as to see how many civilians are using a single telephone number. The resulting information is displayed graphically to facilitate the investigation. This revolutionary feature is found only in Echo.

Technical Approach

The term of any contract awarded as a result of a proposal shall be five (5) years with the option to renew for three (3) additional one (1) year periods as mutually agreed upon by all parties. During the term of the contract circumstances beyond the control of the state may result in increases or decreases in revenue, as well as increase or decreases in required equipment and/or services. Such circumstances include, but are not limited to, increase/decrease in inmate population, in number of telephones and/or in number of correctional facilities. The committee representing the OCIO and the NDCS maintains sole authority to increase or decrease the quantity of facilities, inmate telephones, equipment and service, at the Contractors expense. The contractor may also be required to provide outdoor telephone services, as the need arises.

 CenturyLink Response: Read, agreed and will comply.

Bidder must indicate their understanding and willingness to comply with the requirements of this RFP. In any case where the Bidder does not take written exception to a requirement it will be understood that the Bidder shall comply fully. In cases where the Bidder cannot comply with a requirement, the Bidder must state so immediately following the requirement in their proposal.

 CenturyLink Response: Read, agreed and will comply.

CenturyLink understands and is willing to comply with ALL of the requirements of this RFP.

B. PROJECT ENVIRONMENT

The Nebraska Inmate Calling System presently consists of twelve (12) facilities located throughout the State. Below is a list of facilities and locations. Attachment I shows each facility and their minutes used in 2014.

<u>LOCATION/SITE ID</u>	<u>ADDRESS</u>
Nebraska State Penitentiary Site ID 1145 (NSP)	4201 South 14th Street Lincoln, Nebraska
Lincoln Correctional Center Site ID 1142 (LCC)	3216 West Van Dorn Lincoln, Nebraska
Diagnostic and Evaluation Center	3220 West Van Dorn Lincoln, Nebraska

Technical Approach

Site ID 1140 (D&E)	
Community Correctional Center Lincoln Site ID 1137 (CCCL)	2720 West Van Dorn Lincoln, Nebraska
Omaha Correctional Center Site ID 1146 (OCC)	2323 Avenue "J" Omaha, Nebraska
Youth Rehab and Treatment Center Site ID 1150 (YRTC-G)	855 North 1 st Street Geneva, Nebraska
Youth Rehab and Treatment Center Site ID 1152 (YRTC-K)	2802 30 th Avenue Kearney, Nebraska
Community Correction Center Omaha Site ID 1148 (CCCO)	2320 Avenue "J" Omaha, Nebraska
NE Correctional Center for Women Site ID 1143 (NCCW)	1107 Recharge Road York, Nebraska
Work Ethic Camp Site ID 1149 (WEC)	2309 North Highway 83 McCook, Nebraska
Nebraska Correctional Youth Facility Site ID 1144 (NCYF)	2610 North 20 th Street East Omaha, Nebraska
Tecumseh State Correctional Institution Site ID 2975 (TSCI)	2725 North Highway 50 Tecumseh, Nebraska
Correctional Services/Admin Site Id 1157 (CO)	801 W. Prospector Pl., #1 Lincoln, Nebraska
Correctional Services/Admin 2 Site ID 7917	801 W. Prospector Pl., #1 Lincoln, Nebraska

Technical Approach

 CenturyLink Response: Read, agreed and will comply.

C. PROJECT REQUIREMENTS

Contractor must provide, install, and maintain at their expense all equipment, servers, workstations, telephones, telephone lines, cabling, recording equipment, and any other incidentals necessary to provide inmate calling services as proposed. The State of Nebraska will not be responsible for any costs associated with the implementation or ongoing maintenance of this service. Although some cabling may be available for contractor use, it will be the contractor's responsibility to maintain all cable associated with their system.

 CenturyLink Response: Read, agreed and will comply.

CenturyLink will provide, install, and maintain at our expense all equipment, servers, workstations, telephones, telephone lines, cabling, recording equipment, and any other incidentals necessary to provide inmate calling services as proposed.

Contractor will be required to provide at least one (1) full time (40 hours per week) system administrator and one (1) full time (40 hours per week) technical support staff. Additional staff may be required by the contractor to fulfill the contractor's responsibilities. This administrator and technical support staff must be trained and equipped to perform all functions related to the day to day operation and maintenance of the inmate calling systems including, but not limited to: State personnel training, line testing, equipment testing, telephone replacement, telephone repair, database information collection, data input, report generation, recording system operation, and miscellaneous maintenance. These individuals will be employed by the contractor with a full time commitment to work on the State of Nebraska account only. System administrator and technical support staff will be provided workspace at the NDCS central administrators office located in Lincoln, NE and will be expected to work from that space. A relief staff will be provided in the event that the primary individual is absent.

 CenturyLink Response: Read, agreed and will comply.

A total of one (1) full time System Administrator and one (1) full time Technician (Technical Support Staff) will be hired to fulfill CenturyLink's responsibilities. CenturyLink is willing to hire the existing System Administrator and Technical Support staff to minimize the impact to NDCS/YRTC.

Technical Approach

In addition to the resources listed above, CenturyLink has access to 19 additional existing telecommunications operations technicians throughout the state of Nebraska that can be used as backups to dedicated NDCS/YRTC resources.

Also, a Program Manager and Account Manager will be assigned to this account to supervise the one (1) full time dedicated System Administrator and one (1) full time dedicated Technician (Technical Support Staff), as well as performing offsite customer service and monitoring contract compliance.

NDCS shall retain final authority on all telephone/system placement and count. At any time the State may require the addition or removal of individual telephones, or complete systems, as the needs of the State dictate.

 CenturyLink Response: Read, agreed and will comply.

Contractor must be able to provide and install complete systems for State facilities that may open or allow for future expansion within ninety (90) days from written notification.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer has unlimited expansion capabilities and will be able to accommodate any new construction or future growth of NDCS, at no cost to the State and within ninety (90) days from written notification. The Enforcer already serves state systems ranging from just over 2,000 to well over 40,000 inmates. CenturyLink can add storage and phones and other expansion needs at any time without affecting the operations of the existing system. For further details about our approach please reference our response to 3.d – Detailed project work plan and 3.e – Deliverables and due dates located at the end of our Technical Approach response.

All system equipment and software will remain the property and responsibility of the contractor. All digital call recordings and call detail records will become the property of the NDCS. For a period of one (1) year following the end of the contract, the vendor will make available in a searchable and playable format.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer system offers fully integrated digital recording capability. CenturyLink will securely store all call data and recordings in fully redundant, geographically separate data centers to protect the State from any potential data loss.

Technical Approach

Call data and recordings will be available online throughout the contract period and for a period of at least one (1) year following the end of the contract, and CenturyLink will make available in a searchable and playable format.

Without question, the NDCS retains the right to suspend inmate calling indefinitely for security purposes. This suspension may occur at any level to include Statewide. Inmate calling will only be suspended when absolutely necessary, and will be restored as soon as possible.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer is configured to support cut-off of the inmate phone system system-wide, or by individual phone or housing unit configurations in the event of a lockdown or other incident that requires emergency shutdown of the inmate telephone system.

A single station, multiple stations or individual calls may be quickly switched on/off through the workstation Call Status display. Using the "Phone Disable" function of the Enforcer, staff can easily and rapidly shut down a single phone, a single POD, or an entire facility.

After selecting "Phone Disable" on the drop-down menu, a second "Phone Disable Menu" will be displayed. It is important to note that all administrative changes made in the system occur instantaneously and in real time, so the time required for this action depends only upon the speed of the operator.

Emergency/Temporary Phone Disable.

Select one or more sites, one or more station groups, or one or more stations and then click an action button to do that action to those stations. It is okay to select from multiple columns. Hold down Ctrl key and click on items to un-select. Ctrl key also can be used to select multiple items. (Red indicates stations that are inactive.)

Disable	Enable	Cutoff and Disable			
			Choose Sites:	Choose Station Groups:	Choose Stations:
			Carlin Conservation Camp (CCC), NV	1	10A - 1
			Casa Grande Transitional Center (CGTC), NV	10	10A - 2
			Ely Conservation Camp (ECC), NV	11	10A - 3
			Ely State Prison (ESP), NV	12	10A - 4
			Florence McClure Womens Correctional (FMWCC), NV	13	10B - 1
			High Desert State Prison (HDSP), NV	1A-BTM	10B - 2
			Humboldt Conservation Camp (HCC), NV	2	10B - 3
			Jean Conservation Camp (JCC), NV	3	10B - 4
			Lovelock Correctional Center (LCC), NV	4	10C - 1
			Nevada State Prison (NSP), NV	5	10C - 2
			Northern Nevada Correctional Center (NNCC), NV	6	10C - 3
			Northern Nevada Restitution Center (NNRC), NV	7	10C - 4
			Pioche Conservation Camp (PCC), NV	8	10D - 1
			Silver Springs Conservation Camp (SSCC), NV	9	10D - 2
			Southern Desert Correctional Center (SDCC), NV	CCC A	10D - 3
			Southern Nevada Correctional Center (SNCC), NV	CCC B	10D - 4
			Stewart Conservation Camp (SCC), NV	CCC C	10E - 1
			Three Lakes Valley Conservation Camp (TLVCC), NV	CGTC Trunks	10E - 2

Phone Disable Menu

Technical Approach

Phone Disable Menu

On the Phone Disable Menu, select the individual phone, a group of phones, or the site you wish to disconnect. Then select one of the three buttons at the top of the menu to perform the following function:

- ✓ Disable – Allows in-progress calls to complete. No new calls will be allowed from the selected phone(s)
- ✓ Enable – Allows calls to be made from the selected phones
- ✓ Cutoff and Disable – Immediately cuts off all calls in progress and disables the selected phone(s).

Mechanical cut-off switches can also be used as an alternative to phone shut down vs. using the system workstation. These manual overrides quickly turn the telephones on/off on demand at a “hardware level” without requiring action by the Enforcer software. The illustration below is an example of our typical cut-off switch, manufactured by Telcom Marketing Group (Kill Switch Box model KS-6100).

The KS-6100 Kill Switch Box is designed to provide manual telephone cut-off capability where it is needed. The Kill Switch Box features standard 25 pair Amphenol type connectors for incoming wiring from the system or punch down block, and for outgoing wiring to the telephones. Easy to install and connect. Velcro cable retainers are provided to prevent accidental cable disconnection. On/Off marking indicators are provided to assure proper switch position for the function you choose.

TMG, Inc.

KS-6100-12 Kill Switch Box

Body: High Security, 14 Gauge Steel

Size: 9 3/4”L x 7”D x 3”H

Paint: Scratch Resistant Black Powder Coat

Weight: 5 lbs. Each

Mounting: Rubber Feet for Desk Top use or Holes for Wall Mounting

Wiring: Standard 25 pair wire, 24 gauge

Connection: Male Amphenol Connector with Velcro cable retainer



Applications

- Maximum Security Prisons
- Segregation Housing Units

Technical Approach

- Holding Cells
- Prison Hospitals
- Any place a temporary phone may be required

The KS-6100 will accommodate any standard Inmate Telephone, coin telephones as well as other types of telephones.

Also available with 6 Switch and 24 Switch

KS-6100-6-0 6 Switch Box with 0 Amphenol connectors **Size:** 5"L x 7 1/2"D x 3"H

KS-6100-6-1 6 Switch Box with 1 Amphenol connector

KS-6100-24-1 24 Switch Box with 1 Amphenol connector

The Contractor will be solely responsible for the ordering of, payment for, maintenance of, and troubleshooting on all local or interexchange telephone company lines or services necessary to provide inmate calling service. The contractor will be responsible for all telephone company coordination necessary to install, operate, and maintain their service. The contractor will be solely responsible for the integration and compatibility of the service with any and all circuits and facilities as may be provided by the local telephone company and/or carriers. The contractor will pay all invoices from any provider of ancillary or supporting service that is associated with the provision of those services in a timely manner.

 CenturyLink Response: Read, agreed and will comply.

As part of a nationwide Tier 1 network and data center infrastructure provider, CenturyLink has extensive know-how in the payment, ordering, provisioning, maintenance and troubleshooting on all local and interexchange telephone company lines or services necessary to provide inmate calling service.



Perhaps more important, CenturyLink's network ownership gives it a unique cost advantage over other proposers. The two largest components of any provider's cost are billing/end-user service and network – CenturyLink, Inc.'s network presence and capacity within Nebraska gives us a unique advantage in providing the bandwidth necessary to meet NDCS' current needs, in addition to new technology needs into the future.

Technical Approach

The contractor will not be authorized to obligate State funds.

 CenturyLink Response: Read, agreed and will comply.

The NDCS or the OCIO will give all orders for installation, removal, or modification in writing. The contractor will not install, modify, remove, or make any changes to service without written approval.

 CenturyLink Response: Read, agreed and will comply.

D. BUSINESS REQUIREMENTS

1. Commissions

To keep inmate calling rates as low as possible, The State of Nebraska will not accept a commission from the Inmate Calling Services.

 CenturyLink Response: Read, agreed and will comply.

2. Rates

(Addendum 8 Q&A Response # 23: Section IV.D.2. Rates, is hereby removed in its entirety and replaced with the following):

Per minute charges must be flat rate twenty-four (24) hours a day, seven (7) days a week.

 CenturyLink Response: Read, agreed and will comply.

Rates must remain firm for the first five (5) years of the contract. Prices may be subject to change after the initial five (5) year period. Such changes shall be based on industry changes as evidenced by revised printed price lists, verifiable documented cost increases or notices. A request for price increase shall be provided in writing, to The Nebraska State Purchasing Bureau at least thirty (30) days prior to any price increase of the contract. No price increases are to be billed to NDCS without prior written approval by the State Purchasing Bureau and the NDCS Purchasing Division. State Purchasing Bureau reserves the right to accept or reject any price increase request. In the event new prices are not acceptable, the contract may be cancelled. Approved price increases shall become part of the new contract as an amendment and will be recognized as firm contract pricing. Revised pricing will carry over to any subsequent renewals

Technical Approach

or revisions unless specifically revised and agreed upon by both parties. Bidders must provide their proposed rates for all categories listed on the cost proposal sheet.

 CenturyLink Response: Read, agreed and will comply.

Failure to provide rates as outlined may be grounds for rejection of proposal. Any and all charges billable to the inmates and their families must be detailed in the Bidder's cost proposal. Contractor may not assess any charges to any party in connection with this service that are not outlined in their proposal response.

 CenturyLink Response: Read, agreed and will comply.

Further details are provided under the Cost Proposal tab.

Rates must remain firm for the first five (5) years of the contract. Prices may be subject to change after the initial five (5) year period. All regulatory fees must be included in the rates, as no add-ons will be accepted. Such changes shall be based on industry changes as evidenced by revised printed price lists, verifiable documented cost increases or notices. A request for price increase shall be provided in writing, to The Nebraska State Purchasing Bureau at least thirty (30) days prior to any price increase of the contract. No price increases are to be billed to NDCS without prior written approval by the State Purchasing Bureau and the NDCS Purchasing Division. State Purchasing Bureau reserves the right to accept or reject any price increase request. In the event new prices are not acceptable, the contract may be cancelled. Approved price increases shall become part of the new contract as an amendment and will be recognized as firm contract pricing. Revised pricing will carry over to any subsequent renewals or revisions unless specifically revised and agreed upon by both parties. Bidders must provide their proposed rates for all categories listed on the cost proposal sheet.

 CenturyLink Response: Read, agreed and will comply.

CenturyLink's offered prices are provided under the Cost Proposal tab.

Failure to provide rates as outlined may be grounds for rejection of proposal.

 CenturyLink Response: Read, agreed and will comply.

Technical Approach

Further details are provided under the Cost Proposal tab.

Any and all charges billable to the inmates and their families must be detailed in the Bidder's cost proposal. Contractor may not assess any charges to any party in connection with this service that are not outlined in their proposal response.

 CenturyLink Response: Read, agreed and will comply.

Further details are provided under the Cost Proposal tab.

3. Collect Billing

The Bidder must provide a list of Local Exchange Carriers (LEC), and Competitive Local Exchange Carriers (CLEC) names and Operating Company numbers for every LEC and CLEC at which the Bidder has an established collect billing arrangement. Collect calls to parties whose local telephone service is provided by a LEC or CLEC appearing on this list must not be blocked for any reason except in the event that the LEC or CLEC itself has placed a collect call restriction on that telephone line, or the line has been ported from a billable LEC to a CLEC. If collect calls are blocked due to LEC or CLEC restriction, the nature of this restriction must be presented to the NDCS/OCIO within twenty-four (24) hours of request.

 CenturyLink Response: Read, agreed and will comply.

Please reference Attachment 2 – Collect Billing List. While we have provided the required documentation, CenturyLink will not be offering traditional collect calling as it was noted as “optional”.

The Bidder must detail how called parties are billed when they have either “collect calling blocks”, or a line serviced by a LEC which the contractor does not have a direct collect billing agreement. If called party is required to contact the contractor in order to establish an account, provide the toll free number that is available for this purpose. This number must be answered within six (6) minutes.

 CenturyLink Response: Read, agreed and will comply.

Technical Approach

CenturyLink provides prepaid calling with a best-in-class process to direct otherwise collect-unbillable called parties to prepaid. Our solution identifies unbillable parties and transfers them – automatically as the call is being made – **to a live representative. There is no need to separately contact us to set up an account.**

During account setup, all end-users are verified and presented with billing options in real-time. This is especially important given the growing number of cell phone and IP-based phone users, whose carriers do not offer collect calling options to Inmate Calling Service providers – typically 97%+ of called parties are not billable using traditional collect.



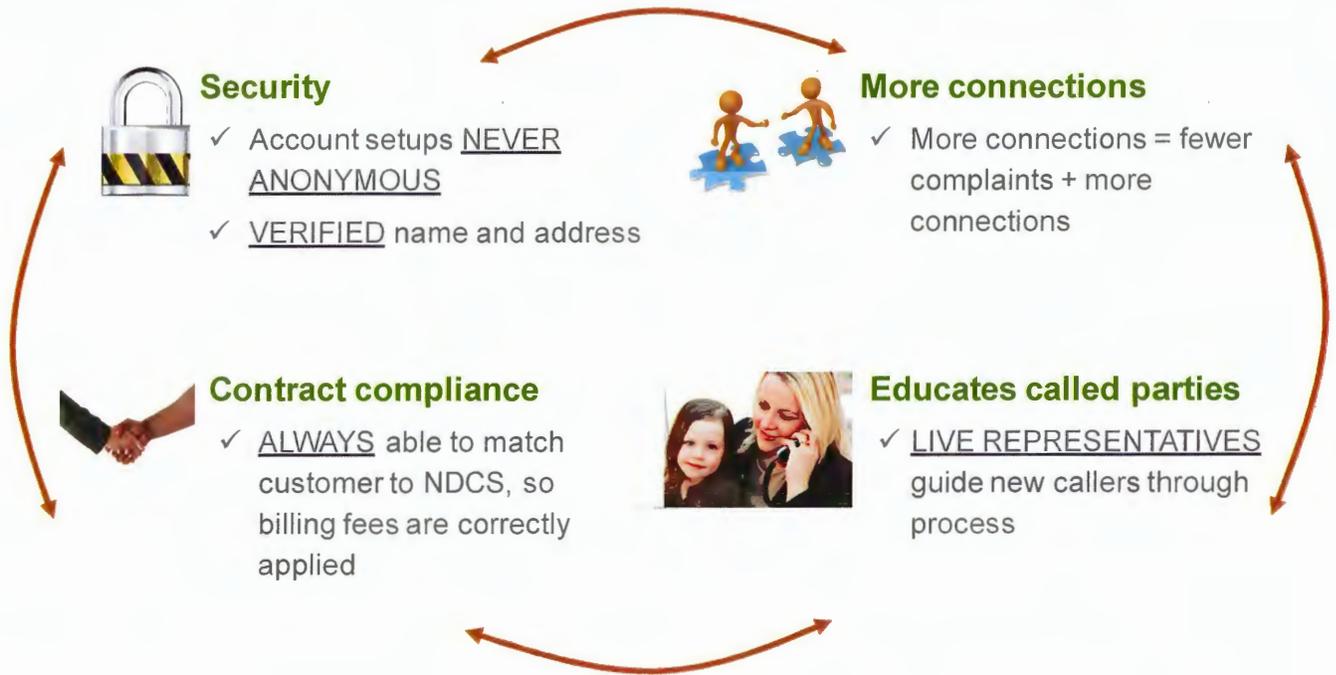
Prepaid Collect Calling

The CenturyLink advantages are **real-time access AND verified called party information**. When a call is placed to a number that would be blocked for billing reasons, the called party is provided with the option for **immediate access to our live Customer Care call center** to establish billing arrangements. Typically, an account is established in 15 minutes, and inmate calling access is immediately allowed.

Only CenturyLink's prepaid program includes **proactive outreach and account set-up efforts and live Customer Care call center professionals**. This support enables CenturyLink to create more accounts and complete more inmate calls than any other prepaid calling program.

Technical Approach

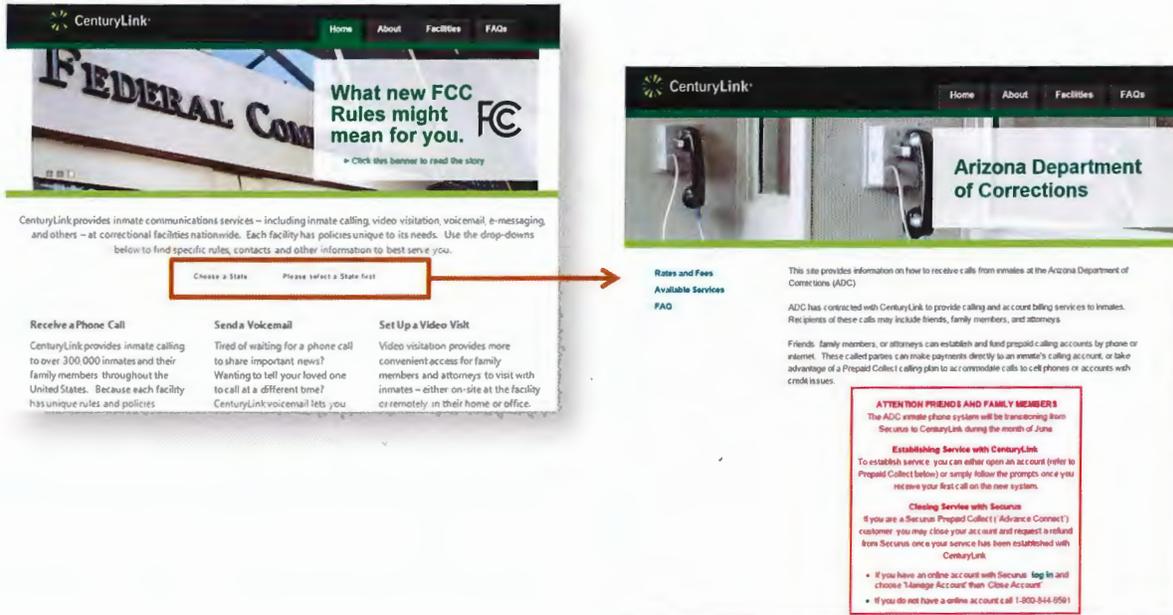
An additional advantage is that first-time called parties are forwarded directly from the NDCS system, enabling back office systems to identify the phone number as being associated with NDCS. This allows back office systems to provide NDCS-specific information to representatives, and apply NDCS-specific fees and policies. This last point is particularly important since providers' "default" fees are usually much higher than allowed by the State.



Finally, CenturyLink commits to creating a NDCS-specific webpage available from www.centurylinkcorrections.com, including rules, rates, instructions for setting up accounts and obtaining refunds, and other FAQs to link from NDCS's homepage.

This unique CenturyLink offering provides NDCS constituents with rules regarding inmate communications, rates, customer service policies, and a host of FAQs customized to NDCS.

Technical Approach



Setup and Fund Prepaid Accounts Online

CenturyLink will provide a secure website to quickly and easily create, manage, and add funds to their prepaid accounts online. Our Point-of-Sale Prepaid Collect (PSPC™) calling option allows friends and family members of inmates to prepay for calls to a particular phone number. PSPC™ provides customers that may not be able to accept traditional collect calls, such as cell phone users, with a way to stay in touch with their incarcerated loved one.

The image shows three screenshots of the CenturyLink website interface. The first screenshot is the "Sign In (Existing Users)" form, which includes input fields for "Phone Number", "First and Last Names", and "Pin Number", and a "Submit" button. The second screenshot is the "Create Account (New Users)" form, which includes input fields for "Phone Number" and "First and Last Names", and a "Submit" button. The third screenshot is the "Support" section, which includes links for "Contact Us", "FAQ", and "Purchase Payment Options", and a photo of a smiling woman wearing a headset.

Technical Approach

We strive to make our calling and funding options as easy to use and convenient as possible. Credit and Debit Card payments can be made 24/7/365 and will be posted in real time using our Toll Free Customer Service Line or our **user-friendly Website**. Customers can log in to our secure website at any time to add funds to their prepaid collect account, check their balance information, and view their prepaid account information, such as billing and payment information

Customers can log in to their prepaid collect account or create a new prepaid account at our billing partner ICSolutions' website. <https://icsonline.icsolutions.com/icsonline/Welcome.aspx> where they are prompted to enter their called-to number and their PIN number. The PIN number is required for FCC Customer Proprietary Network Information compliance. Once logged in, users can easily make payments *and* view their entire payment history, as seen below:

Payment History						
Account Options	Payment History	Products	Make Payment	Log Out		
Billing Number:	(408) 362-4040					
Name:	TEST ICSOLUTIONS					
Display Options:	Only Payments For This Account					
<i>Click on payment to see details</i>						
Payment ID Date Agent ID	Inmate ID Product Agency	Payment Venue Payment Method Reference Number	Amount Fee Tax	Payment Total	Status†	User Account
01710578 03/10/2010 02:07PM ICSOLUTIONS	N/A Prepaid Collect Pasco County Sheriff	Online Consumer Credit/Debit Card 1066145945	50.00 .00 7.22	57.22	Approved	00682808
†Approved	Payment was recieved and is waiting for transmission to Agency.					
Pending	Payment was accepted. Waiting for payment to be made and transmitted to IC Solutions.					
Transmitted	Payment has been transmitted to Agency.					
Posted	Payment has been posted to the Inmate account by Agency.					
Auto Posted	Payment was sent to a facility that does not acknowledge posting					
Adjusted	Payment did not match requested total amount. New payment was created.					
Exception	Discrepancy between Transmitted and Posted data.					
Refund Requested	Refund for payment is pending.					
Refunded	Payment has been refunded.					
Marked as Posted	Payment was manually posted by Agency/ICS.					

Payment History online

Customer Service Assistance

Live customer service is available 24 hours a days, 365 days a year. Through our toll-free call center, customers will be connected to our knowledgeable customer service representatives who can help with billing questions, account setup, account status, payments, and more. Service is available in both English and Spanish.

Consumers calling the Customer Care center are provided simple instructions for “pressing off” to a live representative without being stuck in automated phone tree. Once entered into the representative queue, hold times consistently average 90 seconds or less. We urge NDCS to call 888-506-8407 to see the difference vs. other providers.

Technical Approach

If direct billing accounts must be established for called parties who cannot be billed directly from the local carrier, contractor may not ask called parties for any type of pre-payment or deposit at the time of account establishment. Calling from the inmate to these called party numbers must be available within twenty-four (24) hours of account establishment.

 CenturyLink Response: Read, agreed and will comply.

CenturyLink does not require direct billing accounts for call called parties who cannot be billed directly from the local carrier. For high-volume users such as attorneys' offices that prefer direct billing to Prepaid Collect, no pre-payment or deposit is required and calling is available immediately upon account establishment.

Due dates on all invoices must be no sooner than fifteen (15) days from invoice mailing. Contractor may not block calling to a direct billed number unless the account is thirty (30) days past due. Contractor may require a refundable deposit not to exceed \$75.00 to restore calling for any account that has not been paid within thirty (30) days of bill due date.

 CenturyLink Response: Read, agreed and will comply.

Contractor will be required to certify to the State of Nebraska in writing, on a yearly basis that they have completed a self-audit of rates, and that called parties have been billed in accordance with the contract award rates. Contractor will be required to provide an electronic copy of ALL collect call detail files that are sent to local exchange carriers or third party billing companies to the State on at least a quarterly basis. This file must contain originating facility, called to number, date, time, and charge for each call detail record billed. Contractor will be required to provide a refund within sixty (60) days of request for any calls that are either billed in error, billed incorrectly, or do not appear on the monthly call detail file sent to the State. Rates may be audited periodically by the NDCS to ensure accuracy. Call detail records will be periodically checked against call records on the system itself. Call detail records must match system records. If discrepancies become excessive, the State may hire an independent party to perform complete monthly audits of call records until discrepancies are taken care of at the contractor's expense.

 CenturyLink Response: Read, agreed and will comply.

Technical Approach

CenturyLink will exceed this requirement. As part of a Sarbanes-Oxley compliant company, CenturyLink conducts monthly rate audits on every call detail record to ensure accurate billing. The integrity of this process relies critically on the Enforcer ITS' Call Rating Engine. Because the ITS rates calls directly on the calling platform and retains them in an unalterable state – opposed to use of an “outboard” billing system as most other providers do – this provides a truly independent reconciliation of the number of CDRs over a given time period in addition to the amount billed to each end user.

Every month, every type of inmate phone call (local, intraLATA, interLATA, interstate, and international) involving every type of payment method (collect, debit, and prepaid) completed by an NDCS inmate will be audited to ensure the correct rates were applied. This check is done as part of the monthly reporting process.

Any variance will be identified and subjected to a root cause analysis to prevent it from happening again, and the recommended corrective action will be documented and presented to the State.

To our knowledge no other ITS provider conducts audits close to this frequency or degree of thoroughness. In addition to the monthly system-wide audit, CenturyLink commits to providing electronic copies of all collect call detail files sent to LECs on at least a quarterly basis, and to provide immediate refunds to any parties discovered to have been billed in error.

4. Debit Recharge

Dollar values to inmate accounts will be sold directly to inmates by facility staff. The State of Nebraska will compile a daily file on all sales and provide to the contractor (to be mutually agreed upon). Contractor must add dollar values to inmate accounts within eight (8) hours of receipt. The Contractor must explain their procedure for accounting of inmate debit balances. Contractor will bill according to the files received during a calendar month.

 CenturyLink Response: Read, agreed and will comply.

Technical Approach

Debit files are stored directly on the Enforcer system, rather than an external debit accounting system. This ensures accountability and integrity of the debit balance and accounting data. The reporting on account credits funding and usage are available straight from the Enforcer. Site admin or authorized personnel are able to easily and efficiently respond to inquiries.

Data integrations are provided for the State of Nebraska and other third party systems (e.g. Offender/Inmate Management System, Trust System, Commissary System, etc.).

All integrations are written to State of Nebraska-defined specifications, not vice versa, and are available at installation and throughout the contract (as systems change or additional integrations are requested) at no cost to the State or inmates/family members.

The Enforcer system comes standard with many useful reports, including the Debit Balance Report. The Debit Balance Report shows the balance in the debit account for each inmate who has set up a debit account to pay for phone calls.

For each account, the report lists the site name, inmate ID, inmate name, account number, call number, inmate status (active/inactive), and account balance. The report can be requested by site, inmate status, and balance amount (negative, positive, non-zero). Also, the report can be sorted by inmate ID, inmate name, or site.

In addition to the Debit Balance Report, these other standard Enforcer reports are useful for accounting and reconciling inmate debit balances.

Debit Statement	Shows all transactions for debit card and PIN-based debit including a beginning and ending balance, cost and duration of calls, and deposits made to an inmate's account.
Debit Activity	Shows all deposits, transactions, refunds, and closing balance for all debit accounts for inmates
Debit Transaction	Provides a reconciliation record for all debit transactions for an Inmate ID for a user-specified date range

Technical Approach

Inmate ID: 1625 Find/New Last Name: Find Only search active inmates

Inmate ID: 1625 Name: JASON LEE BEATY

Create New Restricted Debit Acct

Billing ID: 3389725

Adjust Funds

Debit account restricted to: Unrestricted Balance: \$0.90

Amount: 0.00 Type: CallCenterDebit Credit

Description: Adjust Funds

Transactions for the last 30 days

Accounts Tab - Inmate Debit Account Management

5. Debit Billing

The NDCS will not allow for plastic pre-paid calling cards and requires that all pre-paid time purchased by inmates at all facilities be added to their accounts in the time specified in Section III.D.4 Debit Recharge. Contractor shall invoice the NDCS on a monthly basis for the combined dollar values added to inmate accounts during the previous calendar month, less refunds made to released inmates. Billings should be sent in one of the following methods:

NDCS Accounts Payable
P. O. Box 94661
Lincoln, Nebraska 68509

Or via email to: DCS.AccountsPayable@nebraska.gov

The State of Nebraska's Chief Information Security Officer has established a mandatory requirement that all file transmissions to and from the State of Nebraska be secured at both sides of the file transmission. Some of the suggested file transmission protocols to resolve this requirement are as follows:

Technical Approach

- a. Connect Direct software
- b. SFTP server with public key authentication

The State will provide the contractor with a monthly file listing inmate released during the previous month. This file will be provided to the Contractor by the 5th of each month. Each inmate release file will include inmate name, inmate number, and release date. The contractor will be required to return that file by the 10th day of the same month and add the amount of funds remaining on each inmate's debit account so that refunds can be made to the inmate by the State . The total amount of refunds will be deducted from that month's payment to the contractor.

 CenturyLink Response: Read, agreed and will comply.

CenturyLink manages similar processes with many of our facilities. Our preferred method is SFTP server with public key authentication ((b) above) but we are able to support almost any method, including Connect Direct.

In addition, timelines for data sharing and invoicing are consistent with current processes we have in place with other customers.

6. Prepay by Inmate Families

Contractors may require inmate families to Pre-pay for services if those families do not meet the Contractor's creditworthiness requirements for collect calling. When Pre-pay is required, the Contractor must be able to accept payment from inmate families using credit cards, debit cards, personal checks, and money orders. All monies paid to the vendor by inmate families will be credited to the families account and decremented at a rate equal to those in the bidder's cost proposal. Inmate family pre-pay accounts are considered "Debit" accounts and will be subject to the Debit calling rate. Contractors may charge a fee to cover the cost of accepting credit card payments from inmate families however, that fee may not exceed 5% of the total transaction. The contractor may not charge any additional processing fees when inmate families pay using methods other than credit/debit cards except for insufficient check fees. Bidders must outline their entire policy for Pre-pay in their bid proposal. Any setup fees will be identified within the proposal. All individuals utilizing a prepaid account will have name, address, and phone number in a searchable/exportable database that is accessible to the NDCS. Contractor must provide details pertaining to the verification process that are completed to set up an account.

Technical Approach

 CenturyLink Response: Read, agreed and will comply.

Prepaid services are available within 15 minutes of purchase and the payment methods we accept are:

- Visa/MasterCard logo'd credit and debit cards
- (If allowed by NDCS) Western Union at a low negotiated rate of \$5.50 per transaction; this is a WU-only fee with no add-ons by CenturyLink
- Certified checks
- Money Orders

CenturyLink provides prepaid calling with a best-in-class process to direct otherwise collect-unbillable called parties to prepaid. Our solution identifies unbillable parties and transfers them – automatically as the call is being made – to **a live representative. There is no need to separately contact us to set up an account.**

During account setup, all end-users are verified and presented with billing options in real-time. This is especially important given the growing number of cell phone and IP-based phone users, whose carriers do not offer collect calling options to Inmate Calling Service providers – typically 97%+ of called parties are not billable using traditional collect.

Technical Approach



Prepaid Collect Calling

The CenturyLink advantages are **real-time access AND verified called party information**. When a call is placed to a number that would be blocked for billing reasons, the called party is provided with the option for **immediate access to our live Customer Care call center** to establish billing arrangements. Typically, an account is established in 15 minutes, and inmate calling access is immediately allowed.



Only CenturyLink's Prepaid program includes **proactive outreach and account set-up** efforts and **live Customer Care call center professionals**. This support enables CenturyLink to create more accounts and complete more inmate calls than any other prepaid calling program.

An additional advantage is that first-time called parties are forwarded directly from the NDCS system, enabling back office systems to identify the phone number as being associated with NDCS. This allows back office systems to provide NDCS-specific information to representatives, and apply NDCS-specific fees and policies. This last point is particularly important since providers' "default" fees are usually much higher than allowed by the State.

Technical Approach



Finally, CenturyLink commits to creating a NDCS-specific webpage including rules, rates, instructions for setting up accounts and obtaining refunds, and other FAQs to link from NDCS's homepage.

Verification Process for Called Parties

A critical feature of our Prepaid Collect account process is that it is "closed loop" – no account can be set up anonymously, even those funded through Western Union. During the account setup process, end-user's billing name and address (BNA) is taken and verified against credit/debit card information through a full AVS data dip. For Western Union customers, BNA is taken during account setup and, by contract, verified by the Western Union agent at point of sale.

While this process costs us more to provide, it ensures NDCS investigators have access to verified BNA for all account holders. This verified BNA is a standard feature and made available to authorized personnel by simply clicking on the telephone number anywhere within the Enforcer or performing any of the variety of analyses below, and does not require a subpoena or court order to obtain.



Technical Approach

Setup and Fund Prepaid Accounts Online

A secure website is provided to quickly and easily create, manage, and add funds to prepaid accounts online. With our partner ICSolutions, Point-of-Sale Prepaid Collect (PSPC™) allows friends and family members of inmates to prepay for calls to a particular phone number. PSPC™ provides customers that may not be able to accept traditional collect calls, such as cell phone users, with a way to stay in touch with their incarcerated loved one.

The screenshot displays three distinct user interface panels. The first panel, titled 'Sign In (Existing Users)', contains input fields for 'Phone Number', 'First and Last Names', and 'Pin Number', along with a 'Submit' button. The second panel, titled 'Create Account (New Users)', contains input fields for 'Phone Number' and 'First and Last Names', along with a 'Submit' button. The third panel, titled 'Support', features a background image of a smiling woman wearing a headset and lists links for 'Contact Us', 'FAQ', 'Purchase Payment Options', and '3 Ways to Purchase Prepaid Phone Services'.

We strive to make our calling and funding options as easy to use and convenient as possible. Credit and Debit Card payments can be made 24/7/365 and will be posted in real time using our Toll Free Customer Service Line or **user-friendly Website**.

Customers can log in to our secure website at any time to add funds to their prepaid collect account, check their balance information, and view their prepaid account information, such as billing and payment information

Customers can log in to their prepaid collect account or create a new prepaid account at our billing partner ICSolutions' website, where they are prompted to enter their called-to number and their PIN number. The PIN number is required for FCC Customer Proprietary Network Information compliance. Once logged in, users can easily make payments *and* view their entire payment history, as seen below:

Technical Approach

Payment History					
Account Options	Payment History	Products	Make Payment	Log Out	
Billing Number:	(408) 362-4040				
Name:	TEST ICSOLUTIONS				
Display Options:	Only Payments For This Account				
<i>Click on payment to see details</i>					
Payment ID Date Agent ID	Inmate ID Product Agency	Payment Venue Payment Method Reference Number	Amount Fee Tax	Payment Total	Status† User Account
01710578 03/10/2010 02:07PM ICSOLUTIONS	N/A Prepaid Collect Pasco County Sheriff	Online Consumer Credit/Debit Card 1066145945	50.00 .00 7.22	57.22	Approved 00682808
†Approved	Payment was received and is waiting for transmission to Agency.				
Pending	Payment was accepted. Waiting for payment to be made and transmitted to IC Solutions.				
Transmitted	Payment has been transmitted to Agency.				
Posted	Payment has been posted to the Inmate account by Agency.				
Auto Posted	Payment was sent to a facility that does not acknowledge posting				
Adjusted	Payment did not match requested total amount. New payment was created.				
Exception	Discrepancy between Transmitted and Posted data.				
Refund Requested	Refund for payment is pending.				
Refunded	Payment has been refunded.				
Marked as Posted	Payment was manually posted by Agency/ICS.				

Payment History online

Customer Service Assistance

Live customer service is available 24 hours a days, 365 days a year. Through our toll-free call center, customers will be connected to our knowledgeable customer service representatives who can help with billing questions, account setup, account status, payments, and more.

Our customer service representatives can offer multi-lingual assistance, including both English and Spanish. We invite the NDCS to contact us anytime at the number or website below to compare CenturyLink's service to our competitors.

- Toll-free at (888-506-8407) 24 Hours a Day
- User-Friendly Web Site www.icsolutions.com



Called-party & community support at 888-506-8407 or online at www.icsolutions.com

Blocking and unblocking

Regardless of the billing method chosen (traditional collect or prepaid collect), CenturyLink does not "block" calls without a customer being given an opportunity to be brought to "current" status.

Technical Approach

If a LEC/CLEC-billed call comes back to us as unpaid, we place a “soft block” on the line, so that next time the person receives an inmate call, the family member is routed into our call center to pay their bill, be brought to current status, and offered Prepaid Collect to avoid recurrence.

Once the customer is brought into current status, calling will be restored within four (4) hours.

The bottom line is that with the Enforcer call routing engine, no customer is ever “hard blocked” – that is, blocked without being given the opportunity to bring their account to clear status to continue receiving calls.

Another billing rule to note is that if the inmate is paying using their debit account and the called party’s account is still in bad payment status, CenturyLink will allow that call to go through. This is because the party in non-payment status is the family member, not the inmate paying for the call.

Refund policies

Refunds for prepaid phone account balances are straightforward. To have their account closed and a refund issued for any unused balance, a customer simply calls our toll-free customer service hotline at any time. If the original payment was made by credit or debit card, the refund is processed while the consumer is on the phone with the call center agent. If the original payment was not on a card (e.g. cashier’s check) the refund is processed within 5-7 business days and sent out by regular mail. Consumers are NOT required to fill out and mail paper refund forms, then wait weeks to receive their refund... assuming the request was not lost.

Funding Alerts

The Enforcer system allows investigators to set alerts on inmates of interest and/or telephone numbers of interest. When a Debit or Prepaid account is funded that is associated with an inmate or telephone number of interest, the designated investigators are immediately alerted via email.



Email alerts contain information such as Inmate ID and Name (for a Debit account), names and addresses of account holder and account funder (for a Prepaid account), funding amount, and funding source (credit card, Western Union, cashier’s check, or money order). If a credit card was used, the alert will also report the first and last four digits of the credit card number.

Once prepaid accounts are established, the Enforcer offers many options for investigating prepaid account holder information, including:

- Reporting – create custom queries based on prepaid account user information

Technical Approach

- Call Analysis – view, analyze and run reports on the calls made between inmates and called parties
- Data Detective – view and analyze the links between inmates and called parties
- Reverse Lookup - instantly access the called party's address

E. TECHNICAL REQUIREMENTS

1. General Calling Requirements

The points below provide a high-level look at the Enforcer system processes that take place for an inmate call.

On the Inmate Side:

- Validate the inmate making the call (through PIN number and optional voice validation described below)
- Enable the inmate to specify a call type
- Validate that funds are available to pay for the call type (for Debit calls)
- Inform the inmate of the current account balance
- Validate whether the inmate is allowed to call the number based on inmate-specific restrictions
- Validate whether the inmate is allowed to call the number based on a facility-wide block that may be placed on the number
- Inform inmate of the time limit for the call (if applicable)
- If the call attempt fails, inform the inmate (through the appropriate notification message) why the call could not be completed
- Play a "one minute remaining" message on call duration (Debit calls)

On the Called Party Side:

- Announce the name of the inmate and location of the facility
- Allow called party to optionally check their account balance (Prepaid Collect calls only)
- Allow called party to accept or reject a call
- Allow called party to set a future block status on calls (block inmate only, or block all calls from correctional facility)
- Play a "one minute remaining" message on call duration (Debit or Debit Card calls)

The bullet points below summarize several conditions that can cause an inmate call to fail the validation process.

Technical Approach

On the Inmate Side

- ✓ Inmate enters incorrect PIN (personal identification number)
- ✓ Inmate fails voice recognition
- ✓ Inmate is blocked from calling number by an *inmate-specific* block on the number
- ✓ Inmate is blocked from calling number by a global block on the number (*no* inmates at the facility can call it)
- ✓ Inmate does not have sufficient funds to pay for the call type

On the Called Party Side

- ✓ Inmate attempts a collect call to a number that cannot receive a standard collect call for any reason
- ✓ Inmate attempts a collect call to a number which has a Collect account set up, but a pre-defined monthly monetary threshold for the account has been exceeded
- ✓ Inmate attempts a collect call to a number which has a Prepaid Collect account, but the current account balance is insufficient

Nebraska inmates are allowed fifteen (15) cumulative minutes per day to place calls. The Contractor's system must be able to accumulate all daily call totals for each inmate and suspend calling once the cumulative fifteen (15) minute time limit has been reached. This includes any calls that may be in progress. Systems which are not able to limit calling for each inmate to fifteen (15) minutes per day will be rejected. It is preferred that the cumulative call limit be adjustable per phone number.

☀ CenturyLink Response: Read, agreed and will comply.

The Enforcer system is fully configurable to meet any rules defined by NDCS, including but not limited to enforcing daily call limits as described. Call limits can also be varied by inmate PIN (e.g. inmates with different disciplinary status) or phone number – CenturyLink already has multi-dimensional calling limits in place at Arizona and Utah DOCs, and these features can be easily modified for NDCS.

Technical Approach

It is preferred that inmates be able to place calls using a two (2) step verification process. The inmate's identification number must be used to identify each inmate account on the Contractor's system. Vendor must identify the various methods available for secure calling practices.

☀ CenturyLink Response: Read, agreed and will comply.

CenturyLink offers NDCS a two (2) step verification process with the first step in verification being an inmate entering a valid PIN. The second step is a voice biometric verification. Voice biometric verification matches a pre-recorded voice print from the inmate that can be compared to the inmate's voice when they make a phone call; if the print and the actual voice do not match, the call is not allowed to be placed. A more detailed description of the pre-call voice verification feature is provided below.

❖ CRITICAL FEATURE ❖

Various providers implement voice biometric identification features that use different technology.

The Verifier uses true biometric identification to match the inmate's voice to his/her PIN. This is far more accurate and less prone to failure than certain other technologies, such as phrase identification.

The VerifierSM

At no cost to NDCS, CenturyLink will install The Verifier, the Enforcer's inmate voice verification module. The Verifier matches an inmate's ID/PIN and "voice print" created during the intake process with his/her voice when initiating a phone call. **The Verifier is currently installed in multiple DOC and county facilities today.**

The Verifier requires each inmate to speak a phrase prior to placing a call to an outside party. In order for the inmate to place the call, the inmate's spoken voice must match a "model" of a voice print stored in the Enforcer.

The Verifier also provides an upgrade path to continuous voice biometric analysis. Enhancements in 2016 will include identification and alerting of an imposter in real-time as the call is occurring, along with further enhancements to provide the actual identity of the imposter. This real-time detection and notification is unique vs. other biometrics packages that provide analysis after the call is completed.

Enrollment with the Verifier

The Verifier can be set up for either Manual Enrollment or **Auto Enrollment** of each inmate voice. With Manual Enrollment, the inmate must complete an initial *enrollment* process in order to store his/her voice model in the Enforcer system prior to placing any calls. Pre-recorded prompts guide the inmate through this enrollment process.

Technical Approach

With Auto Enrollment, the Enforcer samples previously recorded inmate calls to build the voice model for each inmate. **Auto Enrollment saves facilities the step of having the entire inmate population enroll their voices manually upon deployment of The Verifier.**

The Verifier offers the ability to report on:

- **Enrollment Status** – provides a listing of the Enrollment Status of all inmates by facility. The report displays the Facility, Inmate ID, Inmate Name, Location, number of times enrollment passed, overall pass rate, number of times enrollment failed, last call placed, enrollment date, and the enrollment status (enrolled, not enrolled, or enrollment is disabled). The report can be run for one or all facilities and filtered according to Enrollment Status.
- **Verification Activity** – provides a listing of the Verification Activity for call attempts and completions. Every call detail record includes a completion code that indicates whether a voiceprint has passed or failed. The report displays Call Start, Inmate ID, Inmate Last Name, Dialed Number, and completion code. The report can be run for one or all facilities according to a specified date range.

Verifier Enrollment Status

Date: Mon Jun 08th, 2015 01:34pm Choose Site:

Choose Enroll Filter:

Choose Enroll Sort:

Enter any parameters and click RUN

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Verifier Enrollment Status
 Facility: County Sheriff's Office
 Enroll Filter = Not Enrolled - Exclude Disabled/Deny; Enroll Sort = Location

Facility	Inmate ID	Name	Location	Overall	Recent	Pass	Reject	Last Call	Last Enroll	Mode	Status	Last Result
	659	WARD,	DORM 2			0	0	2015-04-23	Never	Enabled	Not Enrolled	
	33	REED,	DORM 2			0	0	2015-03-29	Never	Enabled	Not Enrolled	
	660	JOHNS,	DORM 2			0	0	2015-03-30	Never	Enabled	Not Enrolled	
	662	SIRLS,	DORM 2			0	0	2015-03-04	Never	Enabled	Not Enrolled	
	319	WILLI,	DORM 2			0	0	2015-03-24	Never	Enabled	Not Enrolled	M
	410	SANTL,	DORM 2			0	0	Never	Never	Enabled	Not Enrolled	
	518	PARKS,	DORM 2			0	0	2015-03-29	Never	Enabled	Not Enrolled	
	480	TUTT,	DORM 2			0	0	2015-04-06	Never	Enabled	Not Enrolled	
	30	EDDIN,	DORM 2			0	0	2015-03-20	Never	Enabled	Not Enrolled	

Verifier Enrollment Status Screens – Filter by Non-Enrolled Inmates Example

Technical Approach

Verifier Enrollment Status

Date: Mon Jun 08th, 2015 01:36pm Choose Site: All

Choose Enroll Filter: Not Enrolled - Exclude Disabled/Deny

Choose Enroll Sort: Location

Enter any parameters and click RUN.

Summary of The Verifier voice biometric system:

- ✓ Provides option for self-learning, avoiding operational disruptions from enrolling the existing inmate population
- ✓ Provides detailed reporting capabilities on pass/fail rates, enrollment status, and other monitoring metrics. As an integrated feature within the Enforcer, call detail records are automatically updated with Verifier events for investigative review.
- ✓ Directly integrated into the Enforcer system, without the need to install or navigate to a separate "module"

The Enforcer monitors all calls and prohibits inmate fraud at every step of the call process. The Enforcer provides an exhaustive list of features that detect and prevent fraudulent, illicit or unauthorized activity.

- ✓ **PINs:** Each time an inmate places a call, they are first required to enter their assigned PIN. By associating a PIN number with every call, the system provides investigators and security personnel with the ability to identify specific inmates when setting alerts, monitoring calls, retrieving call recordings, searching call detail records, generating reports, etc.
- ✓ **Custom Call Restrictions:** Inmate calling can easily be limited to specific times of the day and set lengths of time. During installation, the system is programmed to block calls to live operators, toll-free lines, long-distance carriers, judges and correctional facility staff, etc. While these call restrictions are set facility-wide, additional call restrictions can be set for individual inmates.

Technical Approach

- ✓ **Random Voice Overlays:** The Enforcer system can play randomly interjected voice prompts as requested. These voice prompts can be custom recorded as requested by the facility, or a standard voice prompt such as this may be used: "This call is from a correctional facility, and is subject to monitoring and recording." Voice overlays limit indicate where the call originated. Any inappropriate calls can be easily reported to facility personnel.
- ✓ **Real-Time Call Validation:** CenturyLink's call validation incorporates real-time validation responses from Local Exchange Carriers, compliance with carriers who do not permit collect calls, and managerial restrictions such as blocked-number lists. Call validation counteracts fraud by correctly identifying the location of called numbers to prevent the use of prepaid cell phones or pay phones to commit fraudulent activities. By validating numbers, we have the most up-to-date information about a BTN.
- ✓ **Continuous System Monitoring:** As an additional fraud prevention tool, CenturyLink proactively monitors system data by looking for fluctuations in call traffic and failed attempts that could indicate fraud.
- ✓ **No Incoming Calls:** All inmate calls are processed by this centralized system and terminated over outbound-dial only trunks. Additionally, the on-premise IP Gateways that provide talk battery to the inmate telephones are incapable of processing an inbound call, and, as such, CenturyLink can warrant that no inmate telephone shall be capable of receiving an incoming call.
- ✓ **No Chain Dialing or Hook-switch Flashing:** Inmates are not permitted to obtain secondary dial tone or to "chain dial" at any time. Any attempts to manipulate the inmate phone or hook-switch in order to bypass system controls will result in immediate call disconnection, forcing the inmate to begin a new call with all call controls in full effect.
- ✓ **No Three-Way Calls:** The Enforcer automatically detects attempts by destination parties to connect, or forward, calls to a third party. These detection features have highly configurable parameters for changing the sensitivity to accommodate the requirements of each installation. When a three-way call attempt is detected, the system can either
 - flag the call for investigation;
 - flag the call for investigation, and play a warning message to the inmate and called party; or
 - flag the call for investigation, play a notification to the inmate and called party, and terminate the call.

Technical Approach

The Enforcer monitors each call connection for any inmate attempts to bypass the system controls. If an inmate presses keys on the keypad following call connection, the system detects this activity and terminates the call. Any call terminated for this reason is marked accordingly in the call detail record.

The system proposed must be capable of giving inmates the option of completing calls either on a debit account or prepaid account. It is preferred that a collect call option also be available.

 CenturyLink Response: Read, agreed and will comply.

CenturyLink offers inmates more way to complete calls by supporting traditional collect and easy to use Prepaid calling options. We provide calling options for all domestic locations and international calling to virtually any country. Our Prepaid programs allow payment alternatives, call expense budgeting, and calling options for numbers that may not accept traditional collect calls, such as cell phones. More information about these calling options is provided below:

Called Party Prepaid – Also referred to by us as **Point of Sale Prepaid Collect (PSPCSM)**

Prepay customers set up a Prepaid account, which allows them to deposit money to fund future **calls to their telephone number only**. Deposits can be made via the phone or web using a credit or debit card, through Western Union, or by mailing in a check or money order.

CenturyLink's Called Party Prepaid Program targets those customers whose calls are blocked due to carrier billing limitations. As with collect, the called party pays for these calls. Coupled with a short complementary call, PSPC allows short-term inmates to make calls immediately to facilitate their release and provides a communications avenue to friends and families of long-term inmates. **PSPC results in higher revenues and fewer complaints** by allowing calls to telephone numbers that are most likely blocked by your current vendor.

The CenturyLink advantage is **real-time access**. When a call is placed to a number that would be blocked for billing reasons, the called party is provided with the option for **immediate access to our live Customer Care call center** to establish billing arrangements. Typically, an account is established in 15 minutes, and inmate calling access is immediately allowed.

Only CenturyLink's Prepaid program includes **proactive outreach and account set-up efforts and live Customer Care call center professionals**. This support enables CenturyLink to create more accounts and complete more inmate calls than any other prepaid calling program. Finally, CenturyLink commits to creating a NDCS-specific webpage including rules, rates, instructions for setting up accounts and obtaining refunds, and other FAQs to link from NDCS' homepage.

Technical Approach

Integrated Cardless Debit

Integrated Cardless Debit is a fully integrated debit platform that allows inmates to place calls using the funds established and maintained in their individual PIN-based accounts. To enable this calling option, NDCS will interface with NDCS' inmate/records management system or commissary software package to share information between systems and automate the process.

More Calling Options = More Completed Calls

CenturyLink will offer NDCS' inmates more ways to stay in touch with their friends and family during their incarceration. With our easy-to-use prepaid calling options, we anticipate a significant increase in inmate calling, which translates directly into more connected calls.

Our Prepaid Collect and Inmate Debit services provide more ways to pay for inmate calling, simplified account management, and connectivity to more kinds of telephones – such as cell phones, business lines and VoIP phones – that cannot be reached with traditional inmate calling. This has become exceptionally important over the last ten years as more and more Americans rely solely on cell phones that do not allow traditional collect calls.

Provide toll free services that allow inmates to access services that NDCS is obligated and/or elects to provide. Presently NDCS has identified two different services that are currently utilized.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer system can be configured to support as many toll free services needed, such as tip-lines, voice message lines, etc. as each NDCS facility requests. These toll-free numbers can be set up as a direct dial or speed dial access, be recorded/not recorded, require/not require positive acceptance, require/not require use of a valid PIN, and various other designations. Rich reporting capabilities are also available for calls to these numbers.

The contractor must be able to identify inmate legal calls, which will not be recorded.

 CenturyLink Response: Read, agreed and will comply.

Technical Approach

CenturyLink already performs attorney validation for Wisconsin, Texas, and Nevada DOCs, and performs quarterly audits of attorney numbers to ensure the list is up-to-date, and not being used by inmates to make non-recorded calls to parties who should be subject to recording.

Step 1: Import from prior system

Through an existing transition services agreement with NDCS' current provider, CenturyLink will receive and preload the Enforcer system with a file of attorney numbers that have been pre-configured for "non-record" status. Calls made to these numbers will not be recorded.

Step 2: Ongoing attorney verification

When an inmate submits a number request form indicating that a number is that of his attorney, CenturyLink will verify that the number listed is in fact an attorney or legal counsel and subsequently protect calls placed to that number.



Our suggested "best practice" method of attorney registration and verification was developed in partnership with Nevada DOC. At NDOC, inmates request the registration of their attorney's phone number directly on the Enforcer system:

- The inmate identifies an attorney by whom they want to be represented.
- The inmate makes a call through the Enforcer system, and then selects option 5 ("register your attorney number") from the Call Main menu.
- By following the prompts, the inmate provides the phone number of an attorney. This action places the phone number on a pending Attorney Registration list.
- An authorized user can then click on the Attorney Registration quick link under the Global Numbers tab to locate the number, add notes during the evaluation process, and either approve or reject the inmate's request.

All calls must be branded in the following manner: "You have a collect call from (inmate first and last name) at (correctional facility name) in (city) Nebraska. Contractor must provide branding process for accepting, rejecting or blocking a call.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer will be programmed with NDCS' requested call greeting branding to be played to the called party upon answer. Additional configuration parameters can be chosen to give the called party the following options:

Technical Approach

- To accept this call, dial '5'
- To refuse this call, hang up now
- For a rate quote on this call, dial '2'
- To block this call and all future calls from this facility, press '9'"

If a call is not completed for any reason, the inmate is informed of the status by an explanatory announcement. Examples include:

Facility Block	"The number you have dialed is blocked and cannot be called from this facility"
Telco Block	"The number you have dialed is blocked by the telephone service provider"
No Answer	"Your party is not answering. Please try your call again later."
Busy Signal	"That line is currently busy. Please try your call again later."
Invalid Telephone Number	"A dialing error has occurred. Please check your number and try again."
Refused Call	"Your party has refused this call."
Refused & Blocked	"Your party has refused this call and blocked their number from future calls."

Call greeting branding and other call prompts may be customized to NDCS' specific requirements.

The Contractor's system must be able to record inmate telephone calls, and recordings must be easily accessible to NDCS/DHHS designated State personnel.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer system offers fully integrated digital recording capability. **Call recordings are digitally stored on redundant storage arrays and will be available to NDCS/DHHS for immediate access (online, not archived) throughout the contract.** We also offer to provide a leave-behind storage array to store your call data offline indefinitely after contract termination or provide continued online access for a mutually agreed upon timeframe.

Technical Approach

Simple and immediate access to recordings

The Enforcer enables immediate, online retrieval of any recording at any time with no change of storage media, and utilizes a fault tolerant call storage server, built-in arrays of mirrored hard disks for redundant long-term recording storage.

This eliminates the hassles of loading and unloading tapes or optical disks, because all recordings are stored online for the full contract term. Storing your call recordings – as well as the call data – online for the life of the contract ensures that you will always have quick access to all of your call recordings and data.

Most important, storage arrays have built-in software and hardware redundancy within each data center AND are geographically redundant across multiple data centers. The same is true for call control functionality – so, for example, as a result a catastrophic event at one site, CenturyLink would still be able to provide both access to calling data and inmate calling function.

From any Call Detail Report, authorized facility users may quickly and easily export or download call recordings and call data in standard file formats with virtually no loss in quality. Selected calls may be quickly and easily exported to media in **CSV, PDF, and Excel file formats**. Call recordings may be exported to **MP3, WAV, or Speex formats**. CDRs and call recordings can be emailed, saved to CD, USB, etc. Emailed call recordings are forwarded as an email attachment, and the file size for a compressed 15-minute recording is approximately 2 MB.

All recordings are date and time stamped to ensure admissibility in court. The copying/burning process is built into the Enforcer. No external application / software are required.

Writing selected recordings to a CD-R/W device is as simple as clicking the Write CD button. The system requests a blank CD, and writes the recording(s) to the media in standard audio file format or MP3 format for playback on any standard CD player. Exported recordings are encoded with a date and time stamp.

From any Call Detail Report, selected calls may be quickly and easily exported or downloaded in MP3 or other audio formats. Users may save call detail and recordings locally so that the call data can be emailed, as well.

❖ CRITICAL FEATURES – RECORDING ACCESS AND RETRIEVAL ❖

CenturyLink provides attached storage media with online access to all recordings for the life of the contract. While this costs us slightly more to provide, it pays major dividends with respect to retrieval and management of recordings. We respectfully request the opportunity for an in-person demonstration to show the difference our architecture makes for investigative personnel.

Technical Approach

The Firecracker application within the Enforcer optimizes the process of burning and saving call recordings. Personnel have the option to download files in either the default speex (.spx) or mp3 format, move the recordings to different discs and perform multiple burns. After you have performed a call detail query, you can save call recordings locally or burn call recordings to a CD or DVD by clicking the Burn/Save button.

The screenshot shows the Firecracker application interface. At the top, there are search filters for Inmate, CSN, Start Date/Time, Last Name, Called Number, and End Date/Time. A 'Burn/Save' button is highlighted with a red box. Below the filters is a table of call records with columns: Select, Off Hook Time, can, Inmate ID, Lastname, Phone number, Call Type, Tariff Type, Cost, and End Type. Two records are visible: one for CARETT and one for MUELSKE.

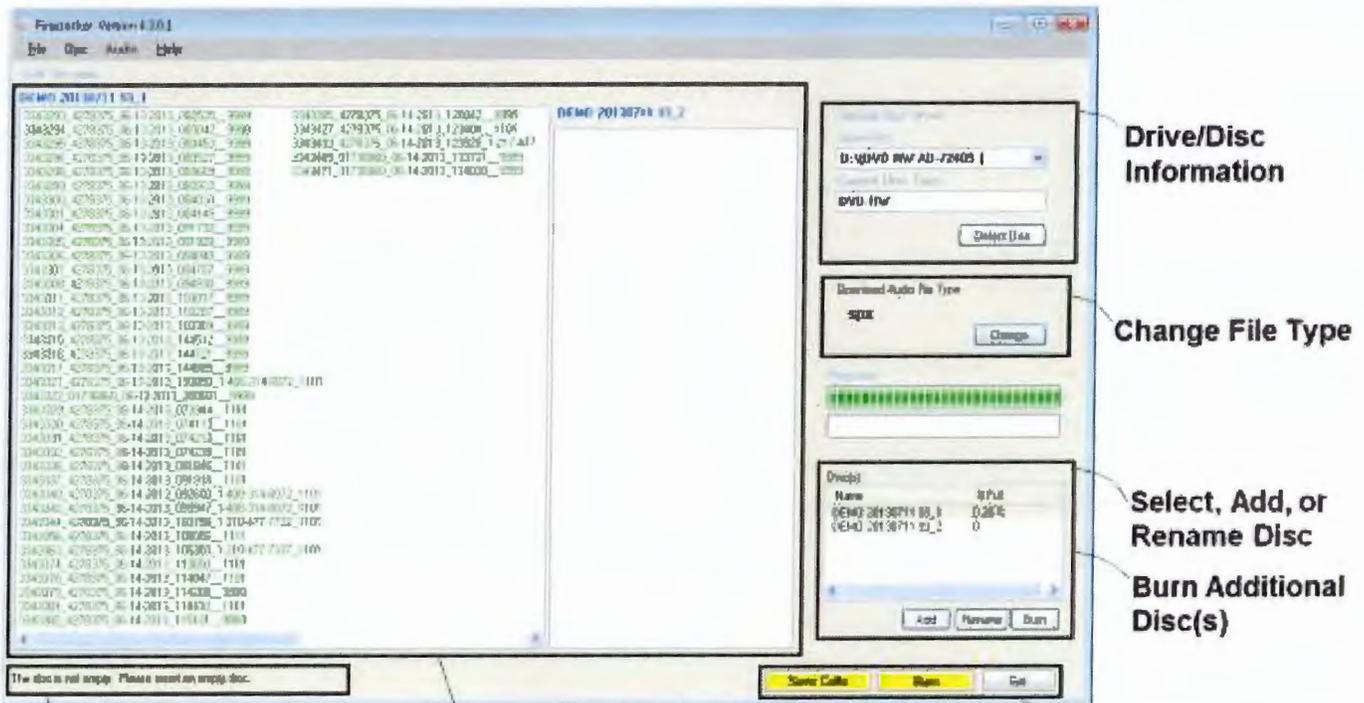
Select	Off Hook Time	can	Inmate ID	Lastname	Phone number	Call Type	Tariff Type	Cost	End Type
<input type="checkbox"/>	04/02/2014 15:26:48	0055002	9903078903	CARETT	1-681-467-1014	Debit	Local	\$0.00	Hangup
<input type="checkbox"/>	04/02/2014 15:27:01	0055002	1300190293	MUELSKE	1-431-461-7565	Admin Zero Bal	Local	\$0.00	Preanswer Hangup

Select Call Records to Export

Once selected, the Enforcer opens the Firecracker application window. From the application window, personnel have the option to:

- Burn recordings to CDs or DVDs, which provide much larger storage capacity
- Download files in either mp3 or speex (.spx) format, and then move selected files to different discs to perform multiple burns
- Receive notification of any download errors, and then retry the files with errors
- Save mp3 or speex files to your local computer

Technical Approach



User Notification Messages

Downloaded Files

- Monitor File Download Progress
- Move/Copy Files to Multiple Discs
- Retry or Skip Failed Downloads

Select Action

To burn to multiple discs, the user first selects all the recordings they wish to download. Once the first disc is full, the system automatically prompts the user to load another disc. There is no need to put recordings in a separate folder, as Firecracker automatically detects when the disc is full and completes the burn process before prompting for another disc.

CenturyLink provides by far the highest call quality in the industry due to our experience integrating with voice biometrics applications. CenturyLink has always used less compression and more advanced Codecs for digital voice transmission than any other vendor. Voice traffic including inmate calls and audio streaming to investigators will be prioritized on the network.

CenturyLink's process that has been implemented to confirm authenticity mandates that the MD5 checksum created by the AU comp program be recorded in a secure location. At the time of the authenticity test, the "expert" can use the MD5 Sum program on the recording and compare the resulting checksum to the checksum retrieved from the secure location. If the checksum comparisons are equal, this will confirm that the recording has not been tampered and is therefore authentic.

Technical Approach

2. Account/PIN Administration Requirements

When inmate accounts are established, inmates will provide a list of up to thirty (30) telephone numbers. These numbers must be programmed into an inmate "allowed call list". Inmates will only be permitted to dial numbers that appear on their "allowed call list". Contractor may provide alternative options for establishing phone lists.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer's PAN module is fully flexible to meet NDCS' requirements in a number of different ways – including bulk import, auto-enrollment, movement across facilities, maintenance of move/add/change history, configurable numbers PANs, and updating rules (quarterly, monthly, etc.). In addition, the Enforcer can manage "anti-PANs" – blocked numbers individual to a particular inmate (e.g. victims) but that do not count against his maximum PAN allowance.

❖ SIGNIFICANT EXPERIENCE WITH SELF-LEARNING PANs ❖

CenturyLink has already implemented self-learning PANs in multiple DOCs, in addition to performing attorney verifications and audits – offloading cumbersome administrative tasks from staff.

The Enforcer system at NDCS would be set up to automatically allow up to thirty (30) PANs per inmate; the system can also be easily set up to override this requirement by location (e.g. not requiring PANs at a lower-custody facility, if desired) or even inmate PIN. Our site administrator would manage inmate accounts and allowed lists as required by NDCS security staff.

In order to minimize the time required to enter an allowed list for each inmate, the system provides a useful "self-learning" feature. Upon assignment of a PIN, the inmate is given a defined time period (usually 24 hours) to enter an allowed call list by dialing the numbers on any inmate telephone. This timeframe can be modified according to NDCS requirements.

It is not necessary to complete a call to the number to add it to the list. Once the learning period is over, any changes to the list must be made manually. Self-Learning can also be limited to a specified phone or phones in order to provide a greater level of control over the phone number entry process.

CenturyLink is fully capable of processing inmate PAN forms electronically, eliminating paper processes at the NDCS' Facilities. The Enforcer is able to be used as a data input device for most any purpose, including entry of PANs and attorney numbers to reduce paper and provide more thorough audit trails. CenturyLink already successfully performs electronically automated PAN entry and attorney entry/verification at the Nevada Department of Corrections.

Technical Approach

The Enforcer system may be configured to require a list of Personal Allowed Numbers (PANs). This is a list of defined telephone numbers that each inmate is permitted to call. Each time the NDCS activates the PAN feature for an inmate, you can select a maximum number of PANs to allow on an inmate's list. If you leave the field blank the default value is 20, but there is no practical limit to the number of PANs that may be assigned.

To be added to the PAN list, a call to the telephone number must be accepted by the call recipient. Once the PAN list is full, any changes to the list must be made manually. Self-Learning can also be limited to a specified phone or phones in order to provide a greater level of control over the phone number entry process. Additionally, a PAN list can be used as an inmate-specific override to a phone number that has been blocked globally (i.e., for all other inmates). PAN lists can be created in one of three ways:

- 1) By letting an inmate call whoever they want to call.** This occurs only if the Inmate PAN feature has been set up in self-learning mode by the facility administrator. Based on a predefined maximum number of phone numbers, each call completed by an inmate automatically adds the called party number to the Inmate PAN List. As long as the inmate is set up to pay for each call using a debit payment or is calling a number that can accept collect or prepaid collect calls, the inmate can call the called party number without restriction. By default, the inmate is able to add 20 numbers to a PAN list; however, the number of numbers can be set to any value on a per-inmate level.
- 2) CenturyLink staff,** who accesses the PAN List under the Inmate Profile to add approved numbers (or to block a specific number.) This method requires a higher administrative workload to manually build and add numbers to the inmate PAN lists. However, some facilities require administrative approval of all called party numbers before they are added to an inmate PAN list.
- 3) By employing the Inmate PAN Registration feature,** which can be used by an inmate to request the registration (and addition) of a called party number to their PAN list. The inmate makes this request by placing a call to the Enforcer system and following a series of prompts to enter the desired number on the phone keypad. Next, an authorized user at the correctional facility reviews a "request list" (shown below), and then either approves or rejects each called party number that is requested by an inmate for addition to their PAN list. Staff can search for all "Pending" PAN approvals and individually approve or reject the entry, as shown below:

Technical Approach

Phone	Requested	Status	Updated	Note	Inmate	Resolution
1-212-555-9876	03/13/2012	Pending Approval	03/20/2012	Show Add	M11698 DARLA HARKER	Approve Reject
1-217-273-8170	03/20/2012	Pending Approval	03/20/2012	Add	B28169 HANNAH BOOKER	Approve Reject
1-217-273-8170	03/20/2012	Pending Approval	03/20/2012	Add	R16203 DARRON WILLIAMS	Approve Reject
1-217-299-4151	03/20/2012	Pending Approval	03/20/2012	Add	B54764 EARNEST PAUL	Approve Reject

PAN Approval Request Screen

An inmate's PAN list can be accessed by clicking on the "PANs" quick link at the bottom of the Inmate Profile Screen.

As shown below, the system user can then view the existing PANs for a number, add or delete PANs, block or unblock a number, and view an inmate's calling history for PAN numbers.

Personal Allowed/Blocked Numbers (PANs)

Pan Num	Phone Number	Speed Dial	Name	Relationship	Description	Allow	Call Type	Date Updated	Updated By	In Use	Detail
1	1-312-301-9014		GATORS, DEBRA	FRIEND	CHICAGO, IL	Allow	All	04/20/2010 13:53:37	enf	1	Details
2	1-440-787-0357		SMITH, TYRONE	BROTHER		Allow	All	04/20/2010 13:53:37	enf	1	Details
3	1-773-261-1704		SMITH, OC	UNCLE	CHICAGO, IL	Allow	All	04/20/2010 13:53:37	enf	1	Details
4	1-773-265-1315		HALL, TIMIKO	WIFE		Allow	All	04/20/2010 13:53:37	enf	1	Details
5	1-773-276-5025		HARMON, LANNETTE	SPOUSE	CHICAGO, IL	Allow	All	04/20/2010 13:53:37	enf	3	Details

PANs (Personal Allowed/Blocked Numbers)
Inmate ID: B70414 GREGORY SMITH

(3 digit speed dials must start with a '1' for PANs)

PAN Num	Phone Number	Speed Dial	Name	Relationship	Description	Block	In use	Call Type	Date Updated	Updated By	Detail (+) Delete (-)
1	1-312-301-9014		GATORS, DEBRA	FRIEND	CHICAGO, IL	<input type="checkbox"/>	1	All	04/20/2010	enf	+ -
2	1-440-787-0357		SMITH, TYRONE	BROTHER		<input type="checkbox"/>	1	All	04/20/2010	enf	+ -
3	1-773-261-1704		SMITH, OC	UNCLE	CHICAGO, IL	<input checked="" type="checkbox"/>	1	All	04/20/2010	enf	+ -
4	1-773-265-1315		HALL, TIMIKO	WIFE		<input type="checkbox"/>	1	All	04/20/2010	enf	+ -
5	1-773-276-5025		HARMON, LANNETTE	SPOUSE	CHICAGO, IL	<input type="checkbox"/>	3	All	04/20/2010	enf	+ -

PAN History
Inmate ID: B70414 GREGORY SMITH

phone	date altered	user	action	Speed Dial	Name	Relationship	Description	Allow
1-312-301-9014	03/31/2010 05:58:20	enf	UPDATE		GATORS, DEBRA	FRIEND	738 87TH CHICAGO, IL	Allow
1-773-265-1315	03/31/2010 05:58:20	enf	UPDATE		HALL, TIMIKO	WIFE		Allow
1-773-418-6298	05/18/2008 00:00:00	enf	INSERT		STUCKEY, ANGEL	COUSIN	CHICAGO, IL	Allow
1-773-426-6443	05/18/2008 00:00:00	enf	INSERT		STONE, BENJAMIN	FRIEND	CHICAGO, IL	Allow
1-312-301-9014	05/18/2008 00:00:00	enf	INSERT		GATORS, DEBRA	FRIEND	CHICAGO, IL	Allow

PAN Screens

Technical Approach

In addition, the Enforcer offers several tools to query and report PAN information. These include:

- Display all PAN records for an inmate account.
- Display all Inmate ID's having access to a specific PAN.
- Display all free or no-charge PAN records
- Display all PAN records having administration blocks
- Display all PAN records having telephone company blocks
- Print reports for the above queries

The Contractor will have the capability of identifying social and legal calls.

☀ CenturyLink Response: Read, agreed and will comply.

CenturyLink already performs attorney validation for Wisconsin, Texas, and Nevada DOCs, and performs quarterly audits of attorney numbers to ensure the list is up-to-date, and not being used by inmates to make non-recorded calls to parties who should be subject to recording.

Setting up Attorney or Other Privileged Numbers

Technical Approach

Step 1: Import from prior system

Through an existing transition services agreement with NDCS' current provider, CenturyLink will receive and preload the Enforcer system with a file of attorney numbers that have been pre-configured for "non-record" status. Calls made to these numbers will not be recorded.

Step 2: Ongoing attorney verification

When an inmate submits a number request form indicating that a number is that of his attorney, CenturyLink will verify that the number listed is in fact an attorney or legal counsel and subsequently protect calls placed to that number.

Our suggested "best practice" method of attorney registration and verification was developed in partnership with Nevada DOC. At NDOC, inmates request the registration of their attorney's phone number directly on the Enforcer system:

- The inmate identifies an attorney by whom they want to be represented.
- The inmate makes a call through the Enforcer system, and then selects option 5 ("register your attorney number") from the Call Main menu.
- By following the prompts, the inmate provides the phone number of an attorney. This action places the phone number on a pending Attorney Registration list.
- An authorized user can then click on the Attorney Registration quick link under the Global Numbers tab to locate the number, add notes during the evaluation process, and either approve or reject the inmate's request.

The contractor provided system administrator or technical support staff will be responsible for creating and maintaining inmate calling accounts. All accounts must be created within twenty-four (24) hours of receipt. The Contractor will utilize NDCS provided registration forms. Contractor may provide alternative options for phone number registry.

 CenturyLink Response: Read, agreed and will comply.

CenturyLink will provide administrative staff that will create and maintain inmate calling accounts. All accounts will be created within twenty-four (24) hours of receipt using NDCS provided registration forms or other allowed methods as described in the previous response above.

Technical Approach

The bidder will describe their process for the prerecorded announcement of the inmate's committed name or legal name change (first and last name) when creating account. System must not allow inmate to record his/her own name at any time. Both parties must be electronically blocked from hearing or communicating with the other party until the call is accepted. Inmate's voice will not be used during any announcement. Electronic security measures must prevent an inmate from interfering with or altering an announcement.

 CenturyLink Response: Read, agreed and will comply.

To meet this requirement CenturyLink is able to set up the name recording as an automated process, utilizing the same text-to-speech engine that the Enforcer's Communicator module uses to convert written text into speech for playback over the phone system. A synthesized voice would "read" the inmate name exactly as it is entered in the system.

While this process could save time during intake, it also has a higher potential for mispronunciations, since the Enforcer cannot take into account variations in the way some names can be pronounced. Using a human process, the Officer or Site Admin can confirm correct pronunciation at the time of recording.

The process ensures that the inmate's voice is never heard before a call is accepted. The called party will hear the inmate's name as recorded by a facility Officer or Site Admin, or a synthesized voice. The name recording will be stored within the Enforcer and used for all phone calls made using that ID/PIN combination. This measure prevents inmates from "passing messages," while still providing the called party with the inmate's name during the call greeting.

Whenever an inmate places a call to a called party, the inmate is muted to prevent communication with the called party until the call is connected. The Enforcer places the inmate on hold once the called party answers, preventing the inmate from hearing the called party or being heard by the called party until acceptance is confirmed. Both the inmate and called party are notified upon acceptance of the call that the call may be recorded and monitored for security purposes. If the call is accepted by the called party, the inmate hears an automated prompt similar to: "Thank you for using CenturyLink. This call may be monitored or recorded. You may begin speaking now."

The inmate never has control of, or access to, the name recording, as it is stored internally on the Enforcer system. Only authorized facility administrators may access the recording, giving them the ability to re-record the name if necessary – such as in the case of a legal name change or in response to reports that the original recording was inaudible.

Technical Approach

Staff members at each NDCS/YRTC facility must be trained to create and maintain inmate accounts in the event that system administrator or technical support staff is not available. Method of training should include user manual, instructor presentation, or PowerPoint presentation.

☀ CenturyLink Response: Read, agreed and will comply.

CenturyLink's training goal during implementation and ongoing is to familiarize NDCS/YRTC personnel with daily system functions, blocks, reports, and investigative tools as well as emergency system shut down of the Enforcer system.

Training can be conducted onsite or via webinar and will include user manual and instructor presentation and live demonstration of the system features and functions.

As part of our standard training, day-to-day system administration is covered and includes instruction on creating new inmate accounts and other typical functions:

- Logging In
- User Access Control Settings
- Call Process Flow
- Call Record Search
- Blocked Number Administration
- Inmate Editor Function
- **Create a new account**
- ANI Advanced Privileges and Controls
- Entering PANs
- Alerts on Inmate Accounts
- Disable Account
- Search for Inmate Account
- Print Account Information
- Debit Account Administration
- Interface functionality (if applicable)

More details regarding our Training Plan is provided in our response to 3d – Work Plan and 3e – Deliverables and Due Dates at the end of this Technical Approach document.

Technical Approach

3. Collect Calling Requirements

The system must function as follows:

- a. Inmate goes off-hook, and is prompted to complete verification process. Preferably a two-step process.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer system includes a two (2) step verification process for pre-call validation. Pre-call validation matches a pre-recorded voice print from the inmate that can be compared to the inmate's voice when they make a phone call; if the print and the actual voice do not match, the call is not allowed to be placed. This feature is very useful in reducing attempted PIN theft among inmates. A more detailed description is provided below.

The VerifierSM

At no cost to NDCS, CenturyLink will install The Verifier, the Enforcer's inmate voice verification module. The Verifier matches an inmate's ID/PIN and "voice print" created during the intake process with his/her voice when initiating a phone call. **The Verifier is currently installed in multiple DOC and county facilities today.**

The Verifier requires each inmate to speak a phrase prior to placing a call to an outside party. In order for the inmate to place the call, the inmate's spoken voice must match a "model" of a voice print stored in the Enforcer.

The Verifier also provides an upgrade path to continuous voice biometric analysis. Enhancements in 2016 will include identification and alerting of an imposter in real-time as the call is occurring, along with further enhancements to provide the actual identity of the imposter. This real-time detection and notification is unique vs. other biometrics packages that provide analysis after the call is completed.

Enrollment with the Verifier

The Verifier can be set up for either Manual Enrollment or **Auto Enrollment** of each inmate voice. With Manual Enrollment, the inmate must complete an initial *enrollment* process in order to store his/her voice model in the Enforcer system prior to placing any calls. Pre-recorded prompts guide the inmate through this enrollment process.

❖ CRITICAL FEATURE ❖

Various providers implement voice biometric identification features that use different technology.

The Verifier uses true biometric identification to match the inmate's voice to his/her PIN. This is far more accurate and less prone to failure than certain other technologies, such as phrase identification.

Technical Approach

With Auto Enrollment, the Enforcer samples previously recorded inmate calls to build the voice model for each inmate. **Auto Enrollment saves facilities the step of having the entire inmate population enroll their voices manually upon deployment of The Verifier.**

The Verifier offers the ability to report on:

- **Enrollment Status** – provides a listing of the Enrollment Status of all inmates by facility. The report displays the Facility, Inmate ID, Inmate Name, Location, number of times enrollment passed, overall pass rate, number of times enrollment failed, last call placed, enrollment date, and the enrollment status (enrolled, not enrolled, or enrollment is disabled). The report can be run for one or all facilities and filtered according to Enrollment Status.
- **Verification Activity** – provides a listing of the Verification Activity for call attempts and completions. Every call detail record includes a completion code that indicates whether a voiceprint has passed or failed. The report displays Call Start, Inmate ID, Inmate Last Name, Dialed Number, and completion code. The report can be run for one or all facilities according to a specified date range.

Verifier Enrollment Status

Date: Mon Jun 08th, 2015 01:34pm Choose Site:

Choose Enroll Filter:

 Choose Enroll Sort:

Enter any parameters and click RUN

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Verifier Enrollment Status
Facility: County Sheriff's Office
Enroll Filter = Not Enrolled - Exclude Disabled/Deny; Enroll Sort = Location

Facility	Inmate ID	Name	Location	Overall	Recent	Pass	Reject	Last Call	Last Enroll	Mode	Status	Last Result
	659	WARD,	DORM 2	0	0			2015-04-23	Never	Enabled	Not Enrolled	
	33	REED,	DORM 2	0	0			2015-03-29	Never	Enabled	Not Enrolled	
	660	JOHNS,	DORM 2	0	0			2015-03-30	Never	Enabled	Not Enrolled	
	662	SIRLS,	DORM 2	0	0			2015-05-04	Never	Enabled	Not Enrolled	
	319	WILLI,	DORM 2	0	0			2015-05-24	Never	Enabled	Not Enrolled	M
	410	SANTL,	DORM 2	0	0			Never	Never	Enabled	Not Enrolled	
	519	PARKS,	DORM 2	0	0			2015-03-29	Never	Enabled	Not Enrolled	
	480	TUTT,	DORM 2	0	0			2015-04-06	Never	Enabled	Not Enrolled	
	30	EDDIN,	DORM 2	0	0			2015-05-20	Never	Enabled	Not Enrolled	

Verifier Enrollment Status Screens – Filter by Non-Enrolled Inmates Example

Technical Approach

Verifier Enrollment Status

Date: Mon Jun 08th, 2015 01:36pm Choose Site:

Choose Enroll Filter:

 Choose Enroll Sort:

Enter any parameters and click RUN.

Summary of The Verifier voice biometric system:

- ✓ Provides option for self-learning, avoiding operational disruptions from enrolling the existing inmate population
- ✓ Provides detailed reporting capabilities on pass/fail rates, enrollment status, and other monitoring metrics. As an integrated feature within the Enforcer, call detail records are automatically updated with Verifier events for investigative review.
- ✓ Directly integrated into the Enforcer system, without the need to install or navigate to a separate "module"

b. Inmate is then given an automated option to place a collect call or a debit call.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer system provides fully automated collect, prepaid collect and debit calling. The Enforcer system provides fully automated (mechanized/electronic) calling, using an automated operator resident within the system. Access to live operators is neither required nor permitted at any time.

c. Inmate selects option to place collect call.

 CenturyLink Response: Read, agreed and will comply.

d. Inmate dials number.

 CenturyLink Response: Read, agreed and will comply.

Technical Approach

- e. System validates dialed number against the inmates individual "allowed number list" or proposed system by vendor, and then places inmate on hold.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer can be configured to require Personal Allowed Numbers (PAN) lists (approved allowed numbers assigned and restricted by PIN). The Enforcer system will be configured to place the inmate on hold once the called party answers the automated operator, preventing the inmate from hearing the called party or being heard by the called party until active called party acceptance is confirmed. In other words, the inmate cannot hear or communicate with the called party until the call has been positively accepted.

- f. System places call.

 CenturyLink Response: Read, agreed and will comply.

- g. When called party answers, system prompts called party to either accept or reject the call. The inmate and called party will not be able to hear one another until call is accepted.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer system will be configured to place the inmate on hold once the called party answers the automated operator, preventing the inmate from hearing the called party or being heard by the called party until active called party acceptance is confirmed.

- h. Either a call path is established, or inmate is notified that call was not completed, and the reason for unsuccessful completion.

 CenturyLink Response: Read, agreed and will comply.

Technical Approach

If a call is not completed for any reason, the inmate is informed of the status by an explanatory announcement. Examples include:

Facility Block	"The number you have dialed is blocked and cannot be called from this facility"
Telco Block	"The number you have dialed is blocked by the telephone service provider"
No Answer	"Your party is not answering. Please try your call again later."
Busy Signal	"That line is currently busy. Please try your call again later."
Invalid Telephone Number	"A dialing error has occurred. Please check your number and try again."
Refused Call	"Your party has refused this call."
Refused & Blocked	"Your party has refused this call and blocked their number from future calls."

Call greeting branding and other call prompts such as above may be customized to NDCS' specific requirements.

4. Debit Calling Requirements

The system must function as follows:

- a. Inmate goes off-hook, and is prompted to complete verification process. Preferably a two-step process.

☀ CenturyLink Response: Read, agreed and will comply.

CenturyLink's verification process includes a two-step process. Please reference Collect Calling Requirements 3.a above.

- b. Inmate is then given an automated option to place a collect call or a debit call.

☀ CenturyLink Response: Read, agreed and will comply.

Please reference Collect Calling Requirements 3.b above.

Technical Approach

- c. Inmate selects option to place a debit call.

 CenturyLink Response: Read, agreed and will comply.

- d. System plays the remaining dollar amount on card.

 CenturyLink Response: Read, agreed and will comply.

- e. Inmate dials number.

 CenturyLink Response: Read, agreed and will comply.

- f. System validates dialed number against the inmates individual "allowed number list" or proposed system by contractor, and then places inmate on hold.

 CenturyLink Response: Read, agreed and will comply.

Please reference Collect Calling Requirements 3.e above for further details.

- g. System places call.

 CenturyLink Response: Read, agreed and will comply.

- h. When called party answers, system prompts called party to either accept or reject the call. The inmate and called party will not be able to hear one another until call is accepted.

 CenturyLink Response: Read, agreed and will comply.

Please reference Collect Calling Requirements 3.g above for further details regarding call flow.

- i. Either a call path is established, or inmate is notified that call was not completed, and the reason for unsuccessful completion.

 CenturyLink Response: Read, agreed and will comply.

Technical Approach

Please reference Collect Calling Requirements 3.h above for further details regarding call flow. For completeness, an overview of debit administration options is also provided below.

Debit Overview

The purchase of inmate pre-paid calling time (often called "debit") can be achieved in any number of ways. CenturyLink is eager to accommodate NDCS' system needs for inmate debit purchases and we provide several different options to accomplish it.

We will make debit as simple as possible for both NDCS and its inmates. All potential processes include a no-cost interface to NDCS' accounting/commissary system, as well as refunds of unused funds (as applicable) without requiring a physical calling card.

Traditional Commissary Debit Purchase

This traditional method allows inmates to purchase blocks of credit to be used for phone calls from commissary. Debit time is simply added to the commissary menu, and purchase records are sent to the Enforcer on an agreed-upon time schedule.

These purchase records can be as simple as a text file with inmate number and purchased amount. With this information, CenturyLink would immediately load the balance onto the inmate's debit account for use. In addition, **no physical cards are necessary** – the inmate simply inputs his/her PIN into the phone system and chooses the debit calling option from the prompts.

With our integration expertise, we are certain that we can create the required integrations to provide this seamless calling service. In just the last 2 years we have written SOAP, FTP and SFTP, XML, CSV, 2XML, Incremental, Sync, Webservices and other types of software interfaces with inmate commissary, banking / trust account systems, JMS/OMS and/or VINE systems.

These integrations allow us to eliminate paperwork, increase calling and commission revenues, and improve service for our client facilities. We guarantee our ability to create customized interfaces with NDCS's systems to support our full range of premium integrated services.

CenturyLink has several standardized reports that display debit account activity. Additional reports can also be generated at no cost to NDCS.

Technical Approach

Debit Balance	Shows the balance in the debit account for each inmate who has set up a debit account to pay for phone calls. For each account, the report lists the site name, inmate ID, inmate name, account number, call number, inmate status (active/inactive), and account balance. The report can be requested by site, inmate status, and balance amount (negative, positive, non-zero). Also, the report can be sorted by inmate ID, inmate name, or site.
Debit Statement	Shows all transactions for debit card and PIN-based debit including a beginning and ending balance, cost and duration of calls, and deposits made to an inmate's account.
Debit Activity	Shows all deposits, transactions, refunds, and closing balance for all debit accounts for inmates.
Debit Transaction	Provides a reconciliation record for all debit transactions for an Inmate ID for a user-specified date range.

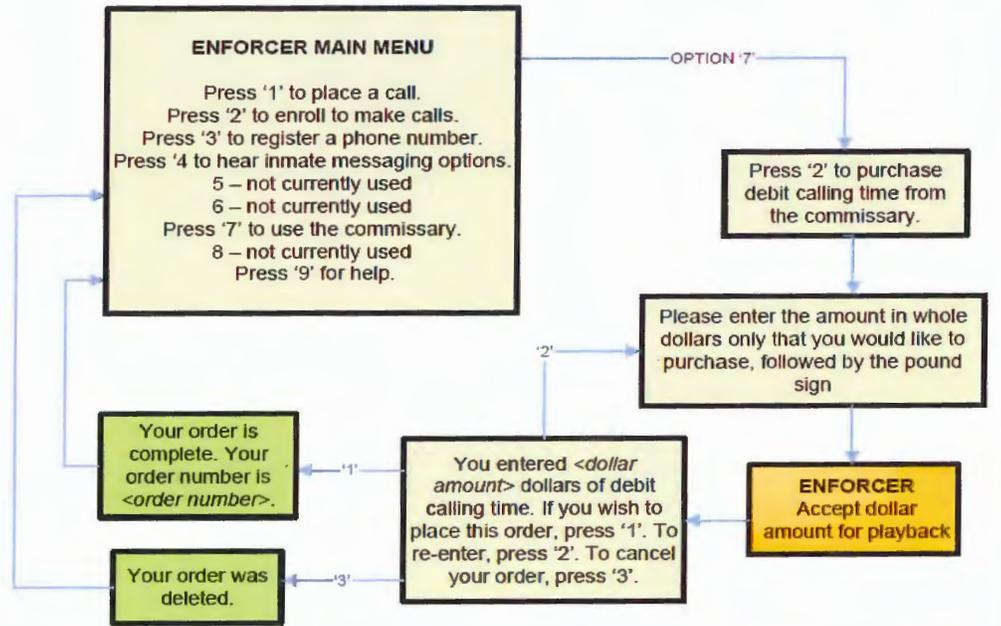
Additional Alternative: Debit / Commissary Transfers

While this process is more manual, it provides an additional option for facilities to enable debit calling. With this option, inmates may place an internal phone call to request that funds available in their commissary account be transferred (applied) to their inmate debit calling account in the Enforcer.

Call Flow

The diagram below shows the prompts that are heard by the inmate when the inmate places a request to purchase debit calling time through your site's commissary system. From the Enforcer Main Menu, the inmate begins the process by selecting Option '7' to access the site's commissary system. The diagram shows all possible prompts that an inmate may hear during the process of requesting the purchase.

Technical Approach



Inmate Commissary to Debit Call Flow

Approving or Rejecting Funds Transfer Requests

The Debit / Commissary Transfers screen is shown below. From one location, this screen enables an authorized user to view, annotate, and either approve or reject each inmate funds transfer request. This sample shows requests from a single sites across a multiple-site system.

Inmate	Global Numbers	Accounts	Monitor Phones	Call Info	Reports	Site Admin	ICS Admin	Tools	Logout
		Debit Acct							
Choose site: Bibb Correctional		Debit / Commissary Transfers	Save Changes	Cancel Changes					
		Prepaid Collect							
Site	Date	Order number	Inmate Id	Name	Requested	Accepted	Accept	Reject	Note
Bibb Correctional Facility, AL	2014-08-08 10:15	186095	22	J	3.00	3.00	<input type="checkbox"/>	<input type="checkbox"/>	
Bibb Correctional Facility, AL	2014-08-08 10:09	186091	25	J	5.00	5.00	<input type="checkbox"/>	<input type="checkbox"/>	
Bibb Correctional Facility, AL	2014-08-08 10:21	186098	2E	N	5.00	5.00	<input type="checkbox"/>	<input type="checkbox"/>	
Bibb Correctional Facility, AL	2014-08-08 13:44	186169	26	A	30.00	30.00	<input type="checkbox"/>	<input type="checkbox"/>	

Account Tab – Debit/Commissary Transfers

Technical Approach

5. Recording Requirements

Inmate calls must be recorded, and easily accessible to authorized NDCS/YRTC State personnel. It is the responsibility of the vendor to maintain call recordings on a redundant system to be accessible 24 hours a day to authorized NDCS/YRTC State personnel.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer offers fully integrated digital recording capability. **Call recordings are digitally stored on redundant storage arrays and will be available to NDCS/YRTC for immediate access (online, not archived) throughout the contract.** We also offer to provide a leave-behind storage array to store your call data offline indefinitely after contract termination or provide continued online access for a mutually agreed upon timeframe.



The Enforcer enables immediate, online retrieval of any recording at any time with no change of storage media, and utilizes a fault tolerant call storage server, built-in arrays of mirrored hard disks for redundant long-term recording storage.

This eliminates the hassles of loading and unloading tapes or optical disks, because all recordings are stored online for the full contract term. Storing your call recordings – as well as the call data – online for the life of the contract ensures that you will always have quick access to all of your call recordings and data.

Most important, storage arrays have built-in software and hardware redundancy within each data center AND are geographically redundant across multiple data centers. The same is true for call control functionality – as a result a catastrophic event at one site CenturyLink would still be able to provide both access to calling data and inmate calling function.

The Contractor's system must be capable of locating call recordings by inmate name, inmate PIN, date, originating number, or called to number, name and/or address.

 CenturyLink Response: Read, agreed and will comply.

For convenience and to verify compliance to this important capability, the following description regarding locating (querying) call detail records and associated recordings is provided both here and also within the response to Section 13 – System Requirements.

Technical Approach

The Enforcer system stores **all call detail records and recordings online for the life of the contract**. Data are never archived on separate storage media; this ensures all reporting and search features are available for immediate use at any time.

The Enforcer's full featured reporting capabilities allow facility users to generate reports immediately and in real time. The Enforcer's browser-based application allows searching and reporting of all inmate calls to any authorized user through a simple, point-and-click GUI (Graphical User Interface). Each call attempt results in the creation of a call detail record. The record includes extensive information about the call that can be queried, including, but not limited to, the following:

- Date of call
- Start Time of Call
- End Time of Call
- Call Duration
- Called Number (ANI)
- Station & Trunk ID
- PIN
- Disposition of Call (accepted, denied, incomplete etc.)
- Call Termination Reason
- Call Charges (if accepted)
- Recording indicator
- Three-way call detect indicator

Extensive call detail reports are available to meet the requirements stated. The following screen details the customization options available for call detail reports.

The screenshot displays the CenturyLink Inmate Phone System interface. At the top left is the CenturyLink logo. The main header reads "INMATE PHONE SYSTEM" with "Powered by THE ENFORCER" below it. On the top right, it says "ICS Inmate Demo", "User: jsargent (v 3895-f)", and "Copyright 2005-2016". A navigation bar contains buttons for "Inmate", "Global Numbers", "Accounts", "Monitor", "Call Info", "Reports", "Site Admin", "Tools", and "Logout". The "Reports" button is highlighted. Below this is a "Call Details" section with a search input field labeled "Inmate ID, Last Name, CSN or Phone Number" and a "+" icon. To the right of the input are "Search" and "Clear" buttons. Below the input are two date pickers: "05/04/2016" and "05/11/2016", followed by a "More Search Criteria" button. Below these are "Quick Searches" (a dropdown menu), "Load", "Save", "Delete", and "Show All" (with a checkbox). At the bottom of the interface are buttons for "Burn", "Save", "Email Call Recordings", "Share CDR", "Change Columns", "Reset columns", "Export CDR to File", and "Print".

Call Detail Records – Select criteria for custom query

Technical Approach

Numerous additional fields are stored within each call record and can be used to further customize reports and recording searches. After you click More Search Criteria, a dialog box displays that lets you specify several additional search parameters related to the origin from which the calls were made, as well as specific information about the calls. These parameters are grouped into categories as shown in the dialog box below.

The screenshot shows a dialog box titled "More Search Criteria" with a close button (X) in the top right corner. The dialog is organized into several sections, each with a sub-header and a table of search criteria:

- General**

Completions	CSN Range	DNR
Duration	End Type	Privileged
Show Alerts only	Show DTMF only	
- Call Origin**

Site	Station Group	Station ID
Station Name	Trunk ID	
- Validation**

Imposter	Validation	
----------	------------	--
- Billing**

Billing ID	Call Type	Card Number
Cost Range	LIDB Code	Tariff Band
- Called Party**

Location	Response Digits	Show 3-Way only
State	Supervision Type	

Search Criteria Categories

The Search Categories have additional search criteria parameters that can be selected. In the example below, the search categories selected from above are:

- Completions
- End Type
- Call Type
- Privileged

Within those main-level search categories you have more detailed selection options as shown in the print screen below showing the check off selection boxes for End Type and Call Type. This is just one example of the numerous real-time custom calling report options available from the Call Detail screen using the More Search Criteria function.

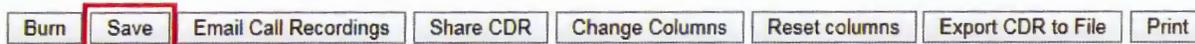
Technical Approach

The screenshot displays the 'Call Details' interface. At the top, there is a search bar with the text 'Inmate ID, Last Name, CSN or Phone Number' and buttons for 'Search' and 'Clear'. Below this are date range selectors for '05/04/2016' and '05/11/2016', along with a 'More Search Criteria' button. A row of buttons includes 'Quick Searches', 'Load', 'Save', 'Delete', and 'Show All'. Below these are two dropdown menus: 'Completions: All' and 'End Type:'. Another row contains 'Call Type:' and 'Privileged: All'. A row of action buttons includes 'Burn', 'Save', 'Email Call Recordings', 'Share CDR', 'Change Columns', 'Reset columns', 'Export CDR to File', and 'Print'. Two dialog boxes are open: 'End Type' and 'Call Type'. The 'End Type' dialog has a search field and a list of checkboxes for various call termination reasons, such as 'Unknown', 'Initial', 'Max ring time', 'Time limit', 'Incoming call', 'No message', 'Called party reject', 'Extra digits', 'User Command', 'Illegal digit', 'Normal', 'Lost server', 'Refused', 'Loop-current drop', 'Abandoned', 'Attempted self accept', 'Excessive rotary pulses', 'Loop-current idle', 'Forced', 'Threeway event detected', 'All Trunks Busy', 'No Trunks Available', 'Monitor Kill', 'Blocked', 'No Call', 'CP to Cust Service', 'Refused PP admin', 'Digit Timeout', 'Shutoff w/ warning', 'Voice ID failure', 'Max Accept Time', 'Admin Drop', 'Station Hangup', 'Long #', 'Trunk Failed', 'Manual cutoff', 'Preanswer Hangup', 'Call Abandoned', 'Call Overrun', 'Inmate Block', 'Telco Error', 'Call Disconnected', 'VoicePrint Error', 'No Trunk Configuration', 'Internal Error', 'Dangling', 'Inmate Hangup', 'Called Party Hangup', 'T1 Error Inbound', and 'T1 Error Outbound'. The 'Call Type' dialog has a search field and a list of checkboxes for various call types, such as 'Not Set', 'Debit', 'Debit card', 'Collect', 'Prepaid collect', 'Free', 'Admin Setup', 'Officer', 'Incoming', 'Admin Zero Bal', 'Admin Low Bal', 'Exceeds Credit Limit', 'Special Free', 'Enrollment', 'Commissary', 'Visitation', 'Info Request Msg', 'Balance Check', 'TDD Operator', 'Phone Number Registration', 'Complaint', 'Informant', 'Collect Calls are Blocked', 'Incoming Message', 'Voice Message', 'Text Message', 'Medical Menu', 'Bypass call', 'Phone Debit Purchase', 'Free voicemail', 'The Informer calls', 'Listener', and 'PREA'. Both dialog boxes have a 'Done' button at the bottom right.

Call Detail Records – Select More Search Criteria Example

Saving Search Criteria for a Future Search

After you have set up a specific set of search criteria for searching CDRs, you can save the criteria for a future search by clicking the **Save** button.



You can then select the same search criteria for a future call search without having to re- enter a date range *or* any other parameters.

After you click **Save**, the ENFORCER displays a dialog box where you can name the search, indicate whether you want other users to be able to use it, and save the search.

Technical Approach

Save this search

Name: Ray Smith - June 2014 x

Details:

Search: seq:1583360

start_date: 06/01/2014

end_date: 09/03/2015

end_type: Called party reject
Normal
Refused

call_type: Debit
Prepaid

Make this search public

Save
Cancel

After you click **Save**, the Enforcer adds the saved search to the pull-down list of saved searches. The search name is preceded by the Enforcer user ID of the person who created it.

Select All Displayed CDRs

Add Call Note		View Call Notes		Play Call Recording		View Inmate Profile		Sort Column								
Play	Notes	Inmate ID	Last Name	Phone Number	Call Type	Tariff Band	Station	Tariff	Billed Time	Final Cost	Validation	End Type	Alert	DIM	Ln#	Start Time
<input type="checkbox"/>	<input type="checkbox"/>	1583360	MURBERT	1-888-337-9311	Prepaid	Local	K-2	0	0:00	\$0.00	OK call allowed	Max ring time	0	0	1583360	06/23/2014 09:28:16
<input type="checkbox"/>	<input type="checkbox"/>	1583360	DIARRA JET	1-888-337-9311	Prepaid	Inmate	K-4	0	0:00	\$0.00	OK call allowed	Station message	0	0	1583360	06/23/2014 09:28:43
<input type="checkbox"/>	<input type="checkbox"/>	1583360	FARMER	1-888-337-9311	Prepaid	Local	K-1	0	0:00	\$0.00	OK call allowed	Max ring time	0	0	1583360	06/23/2014 09:27:24
<input type="checkbox"/>	<input type="checkbox"/>	1583360	PERRAULT	1-888-337-9311	Prepaid	Inmate	K-4	0	0:00	\$0.00	OK call allowed	Max accept time	0	0	1583360	06/23/2014 09:27:11
<input type="checkbox"/>	<input type="checkbox"/>	1583360	PERRAULT	1-888-337-9311	Prepaid	Inmate	K-4	0	0:00	\$0.00	OK call allowed	Refused	0	0	1583360	06/23/2014 09:25:27
<input type="checkbox"/>	<input type="checkbox"/>	1583360	PERRAULT	1-888-337-9311	Prepaid	Inmate	K-4	0	0:00	\$0.00	OK call allowed	Max ring time	0	0	1583360	06/23/2014 09:23:43
<input type="checkbox"/>	<input type="checkbox"/>	1583360	FUKERSON	1-888-337-9311	Prepaid	Inmate	K-4	888	12:00	\$2.76	OK call allowed	Normal	0	0	1583360	06/23/2014 09:23:35
<input type="checkbox"/>	<input type="checkbox"/>	1583360	HANFC	1-888-337-9311	Prepaid	Inmate	K-1	491	0:00	\$0.00	OK call allowed	Normal	0	0	1583360	06/23/2014 09:21:46
<input type="checkbox"/>	<input type="checkbox"/>	1583360	FARMER	1-888-337-9311	Prepaid	Local	K-1	0	0:00	\$0.00	OK call allowed	Max ring time	0	0	1583360	06/23/2014 09:19:46
<input type="checkbox"/>	<input type="checkbox"/>	1583360	FUKERSON	1-888-337-9311	Prepaid	Inmate	K-4	0	0:00	\$0.00	OK call allowed	Max ring time	0	0	1583360	06/23/2014 09:18:41
<input type="checkbox"/>	<input type="checkbox"/>	1583360	PASSLER	1-888-337-9311	Prepaid	Local	K-1	0	0:00	\$0.00	OK call allowed	Max ring time	0	0	1583360	06/23/2014 00:06:18
<input type="checkbox"/>	<input type="checkbox"/>	1583360	PASSLER	1-888-337-9311	Prepaid	Local	K-1	0	0:00	\$0.00	OK call allowed	Max ring time	0	0	1583360	06/23/2014 09:01:17

Call Info - Search Calls - Standard Results screen

Technical Approach

The Enforcer system keeps a full data dictionary on each call attempt. If the standard Call Record screen doesn't show the particular information you're looking for you can simply click on the "Change Columns" button to pick the data types you would like to see on all your Call Search results in the future:

Call Details

11/26/2014 12/02/2014 More Search Criteria

Quick Searches Load Save Delete Show All

Print Save Email Call Recordings Share CDR **Change Columns**

Showing 1 to 300 of 2,512 entries		Change Columns		Alert			
Play	Notes	Start Time	CSN	Inmate ID	Last	Alert Type	Alert
<input type="checkbox"/>		11/26/2014 08:22:12	52580848	34937	MCML	Normal	0
<input type="checkbox"/>		11/26/2014 08:33:57	52580871	31027	ROCH HUER	Normal	0
<input type="checkbox"/>		11/26/2014 08:35:54	52580876	34265	MANE	Normal	0
<input type="checkbox"/>		11/26/2014 08:47:06	52580823	13655	LUNT	Normal	0
<input type="checkbox"/>		11/26/2014 08:47:29	52580822	5888	KIRKI	Normal	0
<input type="checkbox"/>		11/26/2014 08:54:13	52580852	34627	MCKE	Time limit	0
<input type="checkbox"/>		11/26/2014 08:57:44	52580868	5459	FRED	Time limit	0
<input type="checkbox"/>		11/26/2014 09:01:14	52580828	-11	ROBE	Normal	0
<input type="checkbox"/>		11/26/2014 09:14:46	52581053	3146	MOR	Debit	204
<input type="checkbox"/>		11/26/2014 09:16:19	52581058	34927	MCF	Debit	211
<input type="checkbox"/>		11/26/2014 09:18:45	52581072	3146	MOR	Debit	265
<input type="checkbox"/>		11/26/2014 09:22:13	52581085	32281	LJU	Debit	722
<input type="checkbox"/>		11/26/2014 09:28:23	52581116	12734	BRC	Prepaid	512
<input type="checkbox"/>		11/26/2014 09:29:14	52581125	34933	MCF	Debit	302

Call Search - Customize Search Results

Selected calls may be quickly and easily exported to CDR media in either MP3 or audio format and emailed, saved to CD, USB, etc. Emailed call recordings are forwarded as an email attachment, and the file size for a compressed 15-minute recording is approximately 2 MB.

Authorized users can log in to the Enforcer to email a call recording directly from the Call Detail results screen. After performing a call detail query, the user simply selects the recordings they wish to email and clicks the **Email call recordings** button to attach the recording(s) to an email message.

Technical Approach

Play	Notes	Start Time *	CSN	Inmate ID	Last Name	Phone Number	Call Type	Tariff Band	Station	Talk Secs
<input checked="" type="checkbox"/>		01/01/2015 04:30:07	52751113	39547	PIPER	1-2 152	Collect	IntraLata Intrastate	INTAKE 1 R	210
<input checked="" type="checkbox"/>		01/01/2015 08:10:24	52751190	9574	LEFEVRE	1-2 128	Debit	Local	C LL	903
<input checked="" type="checkbox"/>		01/01/2015 08:31:21	52751217	9576	LEFEVRE	1-2 111	Debit	IntraLata Intrastate	C LL	323
<input checked="" type="checkbox"/>		01/01/2015 08:37:56	52751222	9574	LEFEVRE	1-2 128	Debit	Local	C LL	903
<input type="checkbox"/>		01/01/2015 08:46:00	52751230	39746	BALDRIDGE	1-5 36	Prepaid	InterLata IntraState	E LL	889

Call Detail Results - Email Call Recordings

A pop-up window appears to enter the email address, subject, and body text of the email message:

Email Recordings

Email selected records:
52751222,52751217,52751190,52751113

To:

Subject:

Message Body:

Max Size (MB):

Send Close

Email Recordings Pop-Up Window

A maximum size can be set in the Max Size field. The file size for a compressed 15-minute recording is approximately 2 MB. Once the user clicks Send, each call recording will be attached to the email message as a separate mp3.

Technical Approach

The Contractor will provide a system that allows NDCS staff to download to a variety of storage methods, to include CDs, DVDs, hard-drive, or email.

 CenturyLink Response: Read, agreed and will comply.

Each site must be capable of storing twelve (12) months of call recordings on the system hard drive for immediate access. Once call recordings become twelve (12) months old, the system must automatically download them to a permanent storage media maintained by vendor, and be available to NDCS within 72 hours upon written request. Recordings are the property of the State of Nebraska.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer system stores **all call detail records and recordings online for the life of the contract**. Data are never archived on separate storage media; this ensures all reporting and search features are available for immediate use at any time.

The contractor provided system administrator needs the ability to monitor inmate calls for troubleshooting purposes.

 CenturyLink Response: Read, agreed and will comply.

The Observer live monitoring application is described later in our response to Section 14 – Live Monitoring.

6. System Security Requirements

Call forwarding and 3-way calls are a concern for NDCS/YRTC. Explain in detail your systems solution for detecting and eliminating these types of calls.

 CenturyLink Response: Read, agreed and will comply.

Technical Approach

Given the different protocols used by different communications technologies, CenturyLink employs a multi-pronged approach to detecting both 3-way calls (calls forwarded to / conferenced with a third party number after call setup) and remote call forwarded calls (calls forwarded to/conference with a third party number prior to call setup). These various technologies, which are described in more detail below, are industry leading and deployed for use with both landline and cellular telephone services.



CenturyLink®

Industry-Leading Features

Fraud Detection Summary

Three-Way Call Detection	CenturyLink	Others
Traditional 3-way ("Call Sensing")	✓	✓ / ✓
Voice Biometric Inmate-to-Inmate Sensing ("ICER")	✓	✓ / ✗
Simultaneous Call Detection	✓	✗ / ✓

Remote Call Forwarding Detection	CenturyLink	Others
Real-Time Network Query	✓	✗ / ✓
Operating Carrier Query (subject to NDCS direction and FCC approval)	✓	✓ / ✗
"ICER"	✓	✓ / ✗

Technical Approach

Three-Way Call Detection

Approach 1: Call Sensing

Call Sensing is the traditional method of 3-way call detection. Like other systems, the Enforcer automatically detects attempts by destination parties to connect, or forward, calls to a third party. These detection features have highly configurable parameters for changing the sensitivity to accommodate the requirements of each installation.

Call sensing uses a combination of 3 factors: sensing of call progress, DTMF tones from either party on the call, and extended silence periods during the call. The success of this DTMF or extended silence, detection is very reliable. However, it does not always indicate call-forwarding or three-way call set up.

Many correctional facilities with full-channel recording have found that a Three-Way Call Deterrent Policy – at least for those calls flagged through Call Sensing – is much more effective. With such a policy, the deterrent to making three-way calls is the inability for inmates to make future calls.

Unlike the old methodology, which only blocked or cut off the called party, the inmate was still able to call back to the called party and try numerous ways to exploit the system until they succeeded.

The sensitivity of detection settings is also configurable so that parameters can be set to optimize performance.

When a three-way call attempt is detected, the system can:

- Flag the call for investigation
- Flag the call for investigation, and play a warning message to the inmate and called party
- Flag the call for investigation, play a notification to the inmate and called party, and terminate the call

The Enforcer will be programmed to take whichever action NDCS prefers from the list above. This action is also configurable by called number, for example, not taking action on attorney calls (which may be transferred from a receptionist).

Technical Approach

CenturyLink highly recommends allowing the call to proceed, because valuable investigative data can be found by reviewing calls that were flagged as three-way attempts. When the system is configured to terminate a call upon detection of fraudulent use, such as three-way call attempts, a voice prompt is played to both parties on the call upon "sensing" a usage violation.

This voice prompt typically informs the parties that fraudulent use has been detected and disconnects the call. The resulting call record is then flagged with this detection and termination for future query and reporting purposes, as shown on the following screen:

The screenshot displays the 'INMATE PHONE SYSTEM' interface, powered by THE ENFORCER. The top navigation bar includes links for Inmate, Global Numbers, Accounts, Monitor, Call Info, Reports, Site Admin, Tools, and Logout. The user is identified as 'ICS Inmate Demo' with the username 'jsargent (V 3695-0)' and a copyright notice for 2005-2016.

The 'Call Details' section features a search bar for 'Inmate ID, Last Name, CSN or Phone Number' and a date range from 07/01/2015 to 05/11/2016. Below the search bar are buttons for 'Quick Searches', 'Load', 'Save', 'Delete', and 'Show All'. A checkbox for 'Show 3-Way only' is checked. Additional buttons include 'Burn', 'Save', 'Email Call Recordings', 'Share CDR', 'Change Columns', 'Reset columns', 'Export CDR to File', and 'Print'.

The main data table shows two entries:

	Play	Notes	Start Time	CSN #	Inmate ID	Last Name	Phone Number	Call Type	Tariff Band	Station	Talk Secs	Billed Time	Final Cost	Validation	End Type	Alert
<input type="checkbox"/>			04/04/2016 14:01:50	60003747	6239	Test	1-800-627-3529	TDD Operator	Wats	STATION_9999	266	3:00	\$0.00	OK: call allowed	Call Overrun	0
<input type="checkbox"/>			08/27/2015 09:37:20	59993669	4278278	TEST	1-408-314-3072	Prepaid	InterLata InterState	STATION_9999	123	1:00	\$0.19	OK: call allowed	Telco Error	3

Call Detail Screen – Result on Suspected 3-Way Calls

Standard three-way activity reports from the Enforcer system can facilitate investigations into suspected three-way call attempts. The Three-Way Attempts Report lists all three-way call attempts detected, along with all associated call detail information. The Top 25 three-Way Destination Numbers shows the top 25 called numbers that triggered three-way call detection.

Approaches 2 and 3 address the specific issue of inmates using the telephone system for inmate-to-inmate 3-way communication – an obvious and major security issue.

Approach 2: Inmate Inter-Communications Evaluation & Reporting (ICER)

CenturyLink is pleased to offer NDCS the ICER™ - Inmate Inter-Communication Evaluation and Reporting system. We are partnering with JLG Technologies, a leading voice biometric analysis technology company. After developing its Investigator Pro voice identification and crime

Technical Approach

investigation system now in place in 176 correctional facilities throughout the country, JLG furthered its research as a result of requests from corrections investigators to develop an automated way of identifying inmates who are illegally communicating with other inmates using the inmate telephone system. The result of this research and development effort is ICER.

The Threat

Inmates have been, and continue to communicate with each other over the telephone systems that have been provided for their controlled contact with the outside world.

Until now, ITIC (short for Inmate-to-inmate phone communications) has essentially gone undetected because there was neither practical technology nor uniform networking capability to identify such communications. Following are highlights of the ITIC threat:

- Through a variety of methods, inmates are circumventing the inmate phone system at a particular facility to communicate with another inmate whether the other inmate is in a neighboring POD or in a facility in a different state and using a different inmate phone system.

Inmates exploit conference bridges, services such as Skype, Google Voice and other kinds of modern telecommunications technology. In addition, they rely on called parties to bridge the calls, place three-way calls, or even put two speaker-phones in proximity to one another, so that inmates can talk to other inmates

- Until recently, ITIC incidents were only found when accidentally stumbled upon by correctional staff and incidents are now known to occur with much wider frequency than previously known. ICER has already identified more than 1,000 of these events.
- These ITIC communications have involved criminal activities including coordinating gang-related murders, drug trafficking, racketeering, as well as inmate disturbances at multiple correctional facilities around the country.

Technology, Cooperation Between Inmate Telephone System providers, and Participating Nation-Wide Corrections Administrations are Joining to Reduce the Threat

Every day we learn from the news about instances of major crimes being solved because of the increasingly cooperative efforts of state and federal agencies that are now beginning to share case-critical data around the US and the world.

In the world of inmate phone calls, we are offering a new technology based on voice biometric analytics and a dedicated cooperative network provided through a consortium of inmate telephone system providers* and JLG Technologies.

Technical Approach

This combined effort will enable all participating corrections administrations throughout the country to receive specific and detailed information on a call-by-call basis when their inmates are using their phone systems to talk to each other – whether the calls are connected between different inmate telephone systems, between PODs in the same facility, or between inmates in facilities from Florida to California.

The more agencies that take part in the ICER network and share ICER data, the more ITIC calls that will get caught in the net and be reported.

How ICER Works

ICER uses advanced voice analysis technology to generate a “call signature” — a representation of the call that does not involve any of the original audio — for each completed inmate telephone call.

Call signatures are then automatically encrypted and transmitted to the central data center at JLG Technologies headquarters in Framingham, Massachusetts for analysis. Because none of the original audio is used in a call signature, the ICER system is in full compliance with state laws regarding the transmission of call recordings.

Under normal operations, call signatures are created, transmitted, and received at the data center within seconds of each completed call. Upon arrival, the call signature is immediately analyzed and checked against other call signatures.

If an ITIC event is detected, it is logged in the ICER system database and investigators from the participating corrections administration are automatically alerted via email to log into the ICER system for the detailed report.



ICER Event Report

Event Identified On: Mar 11, 2014
10:14 pm (EDT)

An Inmate Inter-Communications Event has been detected involving an inmate at your facility. The details of which follows below.

Inmate	WILLIAMS, LAURIE	SMITH, DAVID
Agency	Russ County Detention Center	Russ County Detention Center
Site	45678	24781
Inmate ID	0041996789	0042797568
Called Number	17024463043	17022141399
Station Name	OPEN AREA MALE - 25	OPEN AREA MALE - 27
Call ID	4631867072	4318321735
Call Start Time	Mar 11, 2014 10:12 pm (EDT)	Mar 11, 2014 10:13 pm (EDT)
Time into Recording (H:M:S)	04m:21s (261 sec)	03m:30s (210 sec)
Duration of Event (H:M:S)	01m:22s (82 sec)	01m:22s (82 sec)

Technical Approach

To protect certain elements of inmate data from being displayed to participating agencies, on-line consent by both parties must be gained before details of the full report are made available. The ICER system doesn't require correctional facilities to transmit audio files and each agency is always in complete control of the level of sensitivity of any data transferred.

The above is a sample report showing data which investigators in two participating agencies will see once mutual viewing acceptance is granted.

Until mutual viewing acceptance is granted, investigators will only be able to see inmate call data for their own facility (either the right or left sides of the report) plus limited data on the inmate from the other facility.

Where inmates are calling each other within their own facility (not shown), all data for both inmates will be displayed automatically.

While we view ICER as a significant contribution to detecting inmate inter-facility communication, participation of your administration and facility is voluntary and will be provided at no cost to your facility. The cost of this technology is born by the consortium of inmate telephone providers and JLG Technologies. We would be pleased to discuss ICER further with NDCS during contract discussions.

❖ CRITICAL FEATURES ❖

Because most inmate-to-inmate communications are not bridged through calls made to the same number, **ICER and Simultaneous Call Detection must be deployed in parallel** to effectively combat this issue.

We have included a copy of the user's license that would grant permission to NDCS to participate in the nationwide ICER operations at the end of this Item response. The only prerequisite is completion of the JLG Technologies standard license form contained herein.

Please see the ICER End User License Agreement at the end of this section.

Approach #3: Simultaneous Call Detection

This final approach is a newer feature that relies solely on network data for 3-way call detection. Simultaneous call detection addresses the increasing issue of call merging, which is not detectable with traditional 3-way detection methods (there is no silence, line energy, or DTMF tone to detect). An example of this is the "merge call" feature on iPhones.

To combat this problem, the Enforcer checks for a current active connection to the same number during call setup. All numbers in the Global Numbers tables (e.g. attorneys) are exempt from this feature by default, although it can be configured if desired.

Technical Approach

It is critical to note that although this feature is not subject to false positives or negatives like voice biometric-driven “ICER”, that it alone is insufficient to effectively combat inmate-to-inmate communications – the two must be implemented in parallel.

Remote Call Forwarding (RCF) Detection

Approach #1: Call Validation

A first line of defense for RCF Detection can occur at call validation – this is the typical approach we understand is taken by providers who provide call forwarding detection.¹ CenturyLink has identified specific operating carriers (that we identify by their Operating Company Numbers “OCNs”) known to primarily provide, or are primarily used by call forwarding services such as Vumber, Google Voice, Conscallhome, etc.

Combined with our knowledge of these services’ updating rules for the Line Information Database (LIDB) unique billing name and address verification (BNA) process for prepaid collect customers, this information provides rules-based methods for blocking call forwarding services.

Critical Note: blocking of any telephone numbers must occur in partnership with the Agency as law enforcement; although we believe some providers do block without explicit consent of / direction from law enforcement this policy risks adverse action by the Federal Communications Commission.

Approach #2: ICER

In addition to 3-way calls that are forward post-setup, ICER is also able to detect inmate-to-inmate calls that are connected through remote call forwarding methods. ICER is explained in detail earlier in the response to this Section.

Approach #3: Network querying

Our final RCF method is network querying. The Enforcer employs state-of-the-art Session Initiated Protocol (SIP) for network signaling and control. During call setup and disconnection, messages are passed across the SIP network – one such message is Message 181 which indicates whether a call is being forwarded. By completing network signaling integrations with transport carriers, we are able to receive this message and flag it in call records for follow-up, or disconnect the call as it occurs.

¹ Some providers also check billing address against the called party number at the time a prepaid collect account is established (all call forwarding services require use of prepaid collect billing). CenturyLink does not take this approach due to the risk of human error and potential need to refund accounts, in addition to the poor customer experience caused by the lengthy verification process during account setup.

Technical Approach

Please note that transport carriers rely critically on terminating carriers to pass SIP messages back to them, and that messages such as 181 are not supported by all terminating carriers. However, as SIP is more widely deployed it will become more common. Regardless, if an event is detected the Enforcer is able to take action as mandated by NDCS:

- Allow the call to continue and make a notation on the call record
- Allow the call to continue, make a notation on the call record and send an alert to a designated Agency staff member
- Notify the inmate and disconnect the call, making a notation on the call record
- Disconnect the call and make a notation on the call record

Additional Information

JLG END USER ICER SOFTWARE LICENSE AGREEMENT

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This End-User License Agreement ("Agreement") is the sole and exclusive agreement between you (herein after "You" or "Your") and JLG ICER Technologies, LLC, its suppliers, and licensors (collectively referred to as "Licensor"). You agree and covenant to the following terms and conditions:

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Technical Approach

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Technical Approach

- 4. Terms Governed by Contract with Supplier:** You agree and acknowledge that additional terms and conditions including, but not limited to, support, service, fees, and payment terms may be governed by one or more separate agreements between You and the supplier of the ICER Software, other software, computer system, and/or computer network. You further agree and acknowledge Licensor is not a party to any other such agreement. In the event of a dispute between You and any such supplier, You agree to look solely to the supplier for relief. In no event shall Licensor be responsible for or incur any liability for any claim, dispute or lawsuit related to or resulting from any agreement or contract between You and any supplier or other third party.
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Technical Approach

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Technical Approach

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YOU ACKNOWLEDGE THAT YOU HAVE READ THIS AGREEMENT, UNDERSTAND IT, AND AGREE TO BE BOUND BY ITS TERMS AND CONDITIONS.

<i>Accept</i>		<i>Do not accept</i>
---------------	--	----------------------

The State reserves the right to shut down inmate telephones and/or limit inmate access to telephone calls in any or all areas of a particular facility as needed. Explain how this function can be managed with your system.

 CenturyLink Response: Read, agreed and will comply.

There are several different ways the operation of inmate telephones can be controlled – both scheduled/programmed (e.g. limitation on hours of operation, limitation of calls on a per-inmate basis) and “on command” as needs change. In addition, during installation, the system is programmed to block calls to live operators, toll-free lines, long-distance carriers, judges and correctional facility staff, etc. While these call restrictions are set facility-wide, additional call restrictions can be set for individual inmates or groups of inmates.

The Enforcer is configured to support cut-off of the inmate phone system by individual phone or housing unit configurations in the event of a riot or lockdown, or any other incident that requires emergency shutdown of the inmate telephone system.

Technical Approach

Phone Disable Menu

A single station, multiple stations or individual calls may be quickly switched on/off through the workstation Call Status display. Using the "Phone Disable" function of the System, staff can easily and rapidly shut down a single phone, a single POD, or an entire facility.

After selecting "Phone Disable" on the drop-down menu, a second "Phone Disable Menu" will be displayed. It is important to note that all administrative changes made in the System occur instantaneously and in real time, so the time required for this action depends only upon the speed of the operator.

Emergency/Temporary Phone Disable.

Select one or more sites, one or more station groups, or one or more stations and then click an action button to do that action to those stations. It is okay to select from multiple columns. Hold down Ctrl key and click on items to un-select. Ctrl key also can be used to select multiple items. (Red indicates stations that are inactive.)

Choose Sites:	Choose Station Groups:	Choose Stations:
Carlin Conservation Camp (CCC), NV	1	10A - 1
Casa Grande Transitional Center (CGTC), NV	10	10A - 2
Ely Conservation Camp (ECC), NV	11	10A - 3
Ely State Prison (ESP), NV	12	10A - 4
Florence McClure Womens Correctional (FMWCC), NV	13	10B - 1
High Desert State Prison (HDSP), NV	1A-BTM	10B - 2
Humboldt Conservation Camp (HCC), NV	2	10B - 3
Jean Conservation Camp (JCC), NV	3	10B - 4
Lovelock Correctional Center (LCC), NV	4	10C - 1
Nevada State Prison (NSP), NV	5	10C - 2
Northern Nevada Correctional Center (NNCC), NV	6	10C - 3
Northern Nevada Restitution Center (NNRC), NV	7	10C - 4
Pioche Conservation Camp (PCC), NV	8	10D - 1
Silver Springs Conservation Camp (SSCC), NV	9	10D - 2
Southern Desert Correctional Center (SDCC), NV	CCC A	10D - 3
Southern Nevada Correctional Center (SNCC), NV	CCC B	10D - 4
Stewart Conservation Camp (SCC), NV	CCC C	10E - 1
Three Lakes Valley Conservation Camp (TLVCC), NV	CGTC Trunks	10E - 2

Phone Disable Menu

On the Phone Disable Menu, select the individual phone, a group of phones, or the site you wish to disconnect. Then select one of the three buttons at the top of the menu to perform the following function:

- ✓ Disable – Allows in-progress calls to complete. No new calls will be allowed from the selected phone(s)
- ✓ Enable – Allows calls to be made from the selected phones
- ✓ Cutoff and Disable – Immediately cuts off all calls in progress and disables the selected phone(s).

Technical Approach

Mechanical cut-off switches can also be used as an alternative to phone shut down vs. using the system workstation. These manual overrides quickly turn the telephones on/off on demand at a "hardware level" without requiring action by the Enforcer software. The illustration to the right is an example of our typical cut-off switch, manufactured by Telcom Marketing Group (Kill Switch Box model KS-6100).

The KS-6100 Kill Switch Box is designed to provide Manual telephone cut-off capability where it is needed. The Kill Switch Box features standard 25 pair Amphenol type connectors for incoming wiring from the system or punch down block, and for outgoing wiring to the telephones. Easy to install and connect. Velcro cable retainers are provided to prevent accidental cable disconnection. On/Off marking indicators are provided to assure proper switch position for the function you choose.

TMG, Inc.

KS-6100-12 Kill Switch Box

Body: High Security, 14 Gauge Steel

Size: 9 3/4"L x 7"D x 3"H

Paint: Scratch Resistant Black Powder Coat

Weight: 5 lbs. Each

Mounting: Rubber Feet for Desk Top use or Holes for Wall Mounting

Wiring: Standard 25 pair wire, 24 gauge

Connection: Male Amphenol Connector with Velcro cable retainer



Applications

- Maximum Security Prisons
- Segregation Housing Units
- Holding Cells
- Prison Hospitals
- Any place a temporary phone may be required

The KS-6100 will accommodate any standard Inmate Telephone, coin telephones as well as other types of telephones.

Also available with 6 Switch and 24 Switch

KS-6100-6-0 6 Switch Box with 0 Amphenol connectors **Size:** 5"L x 7 1/2"D x 3"H

KS-6100-6-1 6 Switch Box with 1 Amphenol connector

KS-6100-24-1 24 Switch Box with 1 Amphenol connector

Technical Approach

Inmate telephones must be restricted from out-pulsing any dual-tone multi frequency (DTMF) digits once the call has been connected.

☀ CenturyLink Response: Read, agreed and will comply.

The Enforcer only allows outgoing, station-to-station collect calling unless specially configured by authorized personnel. In this typical deployment all other call types are disabled and therefore, the inmate is prohibited from choosing other calling methods or out-pulsing/dialing extra digits. The Enforcer monitors each call connection for any inmate attempts to bypass the system controls. If an inmate presses keys on the keypad following call connection, the system detects this activity, and terminates the call. Any call terminated for this reason is marked accordingly in the call detail record.

Inmates are not permitted to obtain secondary dial tone or to “chain dial” at any time. Any attempts to manipulate the inmate phone or hookswitch in order to bypass system controls will result in immediate call disconnection, forcing the inmate to begin a new call with all call controls in full effect.

Contractor must provide the proposed system with audit software that keeps track of access to system, i.e. time and date of all network logins, time spent logged in, changes made while logged in, calls monitored by user, etc. This access information will only be available to the NDCS Intel Coordinator or others as approved by the NDCS Intel Coordinator. Explain how your system accomplishes this.

☀ CenturyLink Response: Read, agreed and will comply.

Activity Monitoring

The Enforcer system logs all users and user actions with the date, time, user ID, IP address and action performed. These records are maintained online throughout the life of the contract, allowing instant access to this historical data. The Administrator can run reports to view user activity, including a “playback” history of every user that has listened to a recorded call, PIN changes, additions, etc.

The User Report is another way that NDCS can track, and monitor what its users do. The User Update Reports display each and every username that made changes on the left, exhibits when they last logged-in, shows which ‘table’ they accessed last, what phone or inmate information was altered, the name of the inmate, and the inmate number (if applicable).

Technical Approach

At right is an example of the Users showing the username, user level and the last login date. Additional details by user may be reported by clicking on the user name. Additional reporting options are available upon request and will be customized to meet the Department's needs.

Click on a row to select a user

Sort by Name

Username	Administrator	Last Login
leat1	Admin	2008/02/04 12:04
stally		2008/02/03 11:59
cwilliams	Admin	2008/02/03 11:37
cp	Admin	2008/02/03 10:01
jgurati	Admin	2008/02/03 05:39
rr	Admin	2008/02/03 05:03

A sample of the User Status Report is provided below that shows the username, first and last name, organization, last login and status.

Username	Last Name	First Name	Organization	Last Login	Status
jswyers	Swyers	Joann		2007-08-16 11:15	Disabled
jtapia	Tapia	Jennifer	ICSolutions	2013-04-30 15:14	Active
jturner	Turner	Jackie	ICSolutions	2010-06-28 15:25	Disabled
jvega	Vega	Jose	ICSolutions	2012-01-13 14:02	Active
kcole	Cole	Kelly	ICSolutions	2010-06-24 13:39	Disabled
kcrafts	Crafts	Kimberly	ICSolutions	2013-04-26 14:48	Active
kdawson	Dawson	Ken	ICSolutions	2012-02-29 12:56	Active
kday	Day	Kevin		2013-05-02 09:48	Active
kday	unknown	unknown		2007-06-15 08:10	Active
kloss	unknown	unknown		2008-04-22 11:24	Disabled
khughes	Hughes	Ken	ICSolutions	2012-10-22 13:56	Active
khunter	Hunter	Kellie	ICSolutions	2010-01-27 10:41	Disabled

User Status Screen

User Access Reporting

Below is a sample taken from a user log (User Update Report). For each username in the system, the login date/time is logged, and a record is displayed of the database table(s) each user accessed (for example, call recording, inmate lookup, etc.). The report also displays related information, such as inmate name, phone, and inmate number.

Administrators can use the User Update Report to see what actions were taken by each user at what time/date. The report below shows that the user "jkline" logged in at 1:38 p.m. on April 17 and listened to the recording of a call placed by inmate Rodney Lehman.

Technical Approach

username	last login	table	Phone or Inmate	Name	Inmate or Number
animchan	2012-04-17 16:08	Recording	13302899184	TORREY SWAIN	0000099483
Subtotal	Number of Items 1				
jkline	2012-04-17 13:38	Recording	13303096667	RODNEY LEHMAN	0000078734
Subtotal	Number of Items 1				
jnorman	2012-04-17 13:33	Inmate	0000000848	CHESTER CALLEBS	
		Inmate	0000000990	ERIC HOWELL	
		Inmate	0000002565	GARY NORMAN	
		Inmate	0000074798	Michael Brown	
		Inmate	0000090117	EDMAURICE IVORY	
		Inmate	0000099510	MICHAEL HIGGINS	

User Access Report Screen

In the example shown below, the individual has been given access to East Hutchinson, Hutchinson, and Larned. Note the "All Sites" check box at the top of the "Sites" list to allow access to all sites with one entry.

User Role Assignment Screen

Technical Approach

The Contractor's system must have a real time "Call Alert" feature. This feature will alert staff that a designated inmate is making a call, or that an inmate is placing a call to a designated telephone number. Explain methods for real time notification, NDCS prefers email alerts, or phone call alerts.

☀ CenturyLink Response: Read, agreed and will comply.

The Enforcer provides an Alert feature to aid investigators in up-to-the-minute inmate telephone activity. The Enforcer alerts can be placed on specific Inmate PINs or specific destination numbers to indicate that the inmate or number is currently involved in a conversation or to indicate that a Prepaid or Debit account has been funded.

Setting alerts by called number

From the Global Number Edit screen, alerts can be set for any called party number. As shown below, alerts can be sent by email or phone. Payment alerts can also be triggered when a prepaid account is funded.

The screenshot displays the 'Global Number Edit' interface. At the top, there is a search bar for 'Dialed Phone Number' with the value '12105818100' and a 'Find/New' button. Below this are search filters for 'Name or Comment Search' and 'Speed Dial Number Search'. A row of buttons allows users to 'Show All Numbers', 'Show All Blocked Numbers', 'Show All Speed Dial Numbers', and 'Show All Wildcard Numbers'. The main form area is titled 'Global Number Edit' and contains several sections: 'Number' (1-210-581-8100), 'Speed Dial', 'Name' (Test), and 'Description'. A 'Call Type' dropdown is set to 'All'. The 'Block' section is set to 'Not Blocked'. Under 'Alerts', several options are checked: 'Email Alert(s)' (with 'investigator@doc.gov' as the recipient), 'Monitor Alert(s)' (with '605-858-7457, 605-890-3871' as the numbers), and 'General Alert'. There is also an 'Attach' checkbox. Other options like 'Page Alert(s)', 'Payment Alert(s)', 'Ignore DTMF', and 'Ignore Silence' are unchecked. At the bottom, there are 'Delete', 'Cancel Changes', and 'Save Changes' buttons. Two callout boxes provide additional information: one states 'Payment Alerts are triggered when a watch number receives funds for prepaid calling' pointing to the 'Payment Alert(s)' checkbox, and another states 'Alerts can be sent by email - to multiple email boxes if desired - with the option to automatically attach the call recording.' and 'Alerts by phone have a "find me follow me" function that outdials to monitor alert numbers until answered' pointing to the 'Email Alert(s)' and 'Monitor Alert(s)' fields.

Alert Settings on a Specific Phone Number

Technical Approach

Setting alerts by Inmate PIN

Like alerts by number, authorized personnel can set email and phone alerts within the Inmate Management tab

Accepted:	15
Retry Request:	0
Rejected:	0

Alerts can be sent to any investigator cell phone, land line, email, and/or pager. This alert will be triggered when an alerted number is dialed/connected from any inmate phone regardless of which inmate dialed the number. The alerts available with the Enforcer are described in detail below.

Monitoring Alerts

The Enforcer can call an investigator on his or her telephone (or cell phone), and once provided with an approved pass code, can immediately patch the investigator into an Enforcer monitoring session for almost instantaneous access to inmate activity. This capability is silent and undetectable by the inmate and the called party.

Technical Approach

Investigators can set the Enforcer to automatically transfer calls to them for monitoring wherever they may be by using CenturyLink unique "Find Me, Follow Me" service. "Find Me, Follow Me" – allows call alerts to phone multiple investigator telephone numbers (such as an office number, cell number, and home number), trying each number in succession until the investigator answers and enters the correct access code; this feature dramatically increases the probability that an investigator will be located and can monitor a call of interest while it is still in progress.

Email/SMS Alerts

The Enforcer can send email or SMS messages to an administrative workstation or any public email address when an alert is triggered. The email alert will contain the called phone number, the inmate name and ID, the start date and time, a link to the call record, and the call recording.



Information Contained in an Email Alert

Pager Alerts

The Enforcer can issue numeric messages to paging services to alert an investigator that a call is in progress.

Funding Alerts

The Enforcer allows investigators to set alerts on inmates of interest and/or telephone numbers of interest. When a Debit or Prepaid account is funded that is associated with an inmate or telephone number of interest, the designated investigators are immediately alerted via email.

Email alerts contain information such as Inmate ID and Name (for a Debit account), names and addresses of account holder and account funder (for a Prepaid account), funding amount, and funding source (credit card, Western Union, cashier's check, or money order). If a credit card was used, the alert will also report the first and last four digits of the credit card number.

Technical Approach

System security should be available at varied levels of system access. Explain how your system restricts access to particular features or programs based on NDCS/YRTC user login. Contractor should identify various inmate data sets which may be restricted by user level.

 CenturyLink Response: Read, agreed and will comply.

Security clearance to gain access to call record data, call recordings, call monitoring and reporting is managed through a series of usernames, passwords, and account privileges in the Enforcer system. The system controls access to all system features by requiring a unique username and log-in password to initiate a session. When the Enforcer system is launched, the user must log in (see following example) to the system with a valid username and password.



 **CenturyLink**

Enter Username and Password for: Nebraska DCS

Username:

Password:

(V 5.2.18-f)

User Login Screen

Password Standards

Passwords can use almost any guidelines required by NDCS. Our standard password is eight characters; this can be set to any required length, and can use special characters if desired. The passwords can be set to expire at certain timeframes, with passwords not allowed to be reused for several resets. Unsuccessful password attempts can be forced to require a reset password, if desired.

Roles

Each username is linked to a customized set of privileges (a role) which define the access that a user can have; these privileges range from read-only access to certain data, the ability to generate specific reports, modify data, monitor live conversations, play back recordings, etc.

Technical Approach

Standard sets of roles can be created for booking officers, investigators and administrators and other staff classifications to simplify the assignment of roles to users. NDCS staff with "administrator" authority will always be able to alter or revise these roles, revoke access, or require a user to select a new password at any time.

The following screen depicts the User Role Assignment screen that the site administrator would use to assign an individual to one or more roles. In this case, the user is assigned System Admin, Booking, and CDR Limited roles.

CenturyLink **INMATE PHONE SYSTEM** Powered By THE ENFORCER® **Demo**
User: mhaynes | v 4.1.1-6 | Copyright 2005-2014

Inmate | Global Numbers | Accounts | Monitor Phones | Call Info | Reports | The Investigator | Site Admin | ICS Admin | Tools | Logout

Username: (type * for wildcard)
mhaynes

Active accounts only

Username: Email:
First Name: Phone:
Last Name: Organization:
Password: Confirm:

Account Disabled

Roles: Sys Admin
 Site Admin
 Site User
 Invest
 Booking
 Monitor
 Comm
 PPC
 DISABLED
 Comm Admin
 Acct
 Rec Admin
 Class
 Embargo Agent
 Phone Admin
 CDR Limited
 Cust Serv
 HPI Inmate Share
 Court Officer

Sites: All Sites
 McHenry County Correctional Facility, IL

User Role Assignment Screen

Technical Approach

The privileges assigned to each role are added, deleted, or modified using the Roles/Access Definitions screen:

Role / Access Definitions

	Site Admin	Site Admin	Site User	Invest.	Booking	Monitor	Comm.	PPC	Comm Admin	Acct	Rao Admin	Class.	Embarg Agent	Phone Admin	CDR Limited	Cust Serv	HPInmate Share	Court Officer
accounting reports vis	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
accounts visible	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
accounts write susadm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
acct visible	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
alerts visible	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
attreg edit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
attreg visible	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
audit menu visible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
ballbond roundrobin view	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
block collect	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
block prepaid	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
call records hide cdr	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
call records visible	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
call type bypass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
call type commissary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
call type complaint	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
call type medical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
call type monitor alert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
call type smtch	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
odr burn	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
odr limited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
odr listen	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
odr share	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Roles/Access Definitions Screen

Cellular and IP telephones present a security concern and need to be identified. The bidder must state in their RFP response, how their system will identify calls placed to cellular and IP phones, flag all call detail and recordings on said phones, and have the capability of real time notification including the method of notification.

 CenturyLink Response: Read, agreed and will comply.

This is achieved through a standard LIDB validation, which provides a wireless cellular (Y/N) indicator in addition to the Operating Carrier Number (OCN). LIDB provides verification of LEC/CLEC (Local Exchange Carrier, Competitive LEC, VoIP Provider) ownership and type of telephone number (Plain Old Telephone Service, Cell Phone, etc.).

Technical Approach

This information will be inserted into each call detail record (CDR). In addition, CenturyLink has identified specific operating carriers (that we identify by their Operating Company Numbers "OCNs") known to primarily provide, or are primarily used by call forwarding services such as Vumber, Google Voice, Conscallhome, etc.

In conjunction with writing the LIDB validation information to the database, the live monitoring application (The ObserverSM) can be expanded to include a column for Phone Service Type (Land Line, Cellular etc.) This Phone Service Type will be displayed in real time as each call connects and security risk calls could be displayed in a different color for the monitoring staff. Additionally, if desired, the monitoring application could be configured to trigger a call out alert (i.e. live monitor) when a call is connected to a security risk telephone.

Critical Note: if any services are to be blocked, this must occur at the explicit direction of NDCS; although we believe some providers do block without explicit consent of / direction from law enforcement this policy risks adverse action by the Federal Communications Commission.

~~Bidder must identify their capability to provide technology allowing the facility to terminate the cell signal when signal is within a specified distance from the facility, and alert NDCS/YRTC staff.~~

(Addendum 8 Q&A Response # 31: The RFP is hereby amended as follows: Section IV.6., eighth paragraph is removed in its entirety and replaced with the following.)

Bidder must identify any capability or technology they have that might identify calls to cellular phones and their proximity to the correctional facility when calls are in progress.

 CenturyLink Response: Read, agreed and will comply.

CenturyLink offers "Location Data" services powered by LocAid, which captures and reports the physical location of a cellphone. Once the physical location of cellphone is captured, the technology provides real-time alerting to designated staff, with the option to listen in on the call in progress. For all call locations captured, the GPS location coordinates are written to the Enforcer system database at the time of call acceptance. Available reporting in the Enforcer system includes but is not limited to the:

- Date and time of the call or call attempt
- Location coordinates of the cellphone
- Specific inmate that completed the call

Technical Approach

- Recording of the completed calls
- Cellphone number called
- Identity of the account holder if there is a prepaid calling account for that specific cellphone number
- Identity of the account holder if the facility uses PAN lists for debit calling

Once a call is made from the Enforcer system to a cellphone, the called party must accept that the call is coming from the inmate at the correctional facility and in accepting the call, the called party is authorizing the location of their cellphone to be captured and reported. With appropriate warrant documentation, the authorization requirement can be disabled allowing the cellphone location to be captured and reported without authorization from the called party. The facility has several options in determining specifically which cellphones to track the location of, including the following:

- Universal option to capture and report the location of all calls made to cellphones
- Option to capture and report the location of calls made to a specific cellphone number
- Option to capture and report the location of calls made by a specific inmate

Since the technology cost structure is on a per call basis, the different options above allow tremendous flexibility to the State to find the correct balance in desired technology utilization vs. end-user rates. This is illustrated in the cost proposal with multiple pricing options available.

A key feature of this technology is that it can support a non-call based location query, whereby the location capture request is launched from an authorized workstation, and the cell phone user responds with an opt-in confirmation. As this service is opt-in based, it does not require a warrant. This same application can also be configured – with carrier approval and appropriate warrant documentation – to retrieve location data without the user opting-in. Due to the tremendous benefit this can provide in aiding investigations, all warrant driven location requests are processed regardless of pricing option selected.

In addition, the “GEO Sensing” feature allows the facility to preset location perimeters, and leveraging the opt-in confirmation, will track and report any calls made to a cellphone in that perimeter. As an additional option, the Enforcer system can prohibit any calls made to cellphones in the pre-set location perimeter. This allows the facility to designate a preset perimeter around the facility with the option of allowing and reporting calls made to cellphones in that perimeter or prohibiting them altogether while still reporting the attempt to the facility.

Technical Approach

System must have the capability to provide detailed reports as defined by the NDCS/YRTC, to include but not be limited to:

- a. Number of calls completed by institution
- b. Number of calls to a specific number
- c. Number of calls by a specific inmate
- d. Number of terminated calls, including detailed reasons
- e. Number of calls per gallery
- f. Number of calls monitored by NDCS staff and institution, etc.

 CenturyLink Response: Read, agreed and will comply.

Authorized users can create the reports required above by selecting the appropriate parameters on the Call Detail screen. Alternately, CenturyLink can create a standard report for any of the reports outlined below that users may access automatically in the **Reports** tab.

- Number of calls completed by institution – User would enter a specified date range and select Site to display calls completed by institution. A Station Activity report is also available through the **Reports** tab that provides a summary of all calls made for a user-specified date range that can generated by site or station group.
- Number of calls to a specific number - User would enter a specified date range and enter the called number to display calls completed to that phone number. A Frequently Called Numbers report is also available through the **Reports** tab that displays the total number of calls and total minutes of talk time to a specific called phone number.
- Number of calls by a specific inmate – User would enter a specified date range and the inmate’s ID to display calls completed by a specific inmate. A Volume Users report is also available through the **Reports** tab that displays a summary of high telephone volume usage by specific inmates.
- Number of terminated calls, including detailed reasons - User would enter a specified date range and completions or end type parameters to display the termination reasons of calls. A Call Record Statistics report is also available through the **Reports** tab that provides a summary of calls by call type, completion code, and call count.
- Number of calls per gallery – User would enter a specified date range and select Station Group to display calls made within a particular group of phones. A Station Activity report is also available through the **Reports** tab that provides a summary of all calls made for a user-specified date range that can generated by site or station group.

Technical Approach

- Number of calls monitored by NDCS staff and institution, etc. – Users can view this information in the Recording Access report, which is a standard report available. This report provides a listing of all call records that have been listened to during a user-specified date range. The report lists the user ID of the person who listened to the call, the CSN, inmate ID and name of the inmate who made the call, called number, and date the user listened to the call record.

The Enforcer system provides centralized reporting capabilities, allowing facility users to generate reports immediately and in real time. The system comes preconfigured with an extensive list of standard reports. Users may access these reports on-demand or schedule the reports to be automatically generated on a pre-defined schedule.

Additionally, a facility user can generate real-time “ad hoc” reports by defining his/her own query based on data of interest – allowing instant access to any report you could ever need. Call detail records are stored on the system hard disks for the entire contract duration to provide the facility with immediate access to historical call information throughout the contract term.

The following screen details the customization options available for call detail reports.

The Enforcer system stores **all call detail records and recordings online for the life of the contract**. Data are never archived on separate storage media; this ensures all reporting and search features are available for immediate use at any time.

The Enforcer’s full featured reporting capabilities allow facility users to generate reports immediately and in real time. The Enforcer’s browser-based application allows searching and reporting of all inmate calls to any authorized user through a simple, point-and-click GUI (Graphical User Interface).

Each call attempt results in the creation of a call detail record. The record includes extensive information about the call that can be queried, including, but not limited to, the following:

- Date of call
- Start Time of Call
- End Time of Call
- Call Duration
- Called Number (ANI)
- Station & Trunk ID
- PIN

Technical Approach

- Disposition of Call (accepted, denied, incomplete etc.)
- Call Termination Reason
- Call Charges (if accepted)
- Recording indicator
- Three-way call detect indicator

Extensive call detail reports are available to meet the requirements stated. The following screen details the customization options available for call detail reports.

The screenshot displays the 'INMATE PHONE SYSTEM' interface, powered by THE ENFORCER. The interface includes a navigation menu with options: Inmate, Global Numbers, Accounts, Monitor, Call Info, Reports, Site Admin, Tools, and Logout. The main content area is titled 'Call Details' and features a search bar for 'Inmate ID, Last Name, CSN or Phone Number' with a '+' icon, 'Search', and 'Clear' buttons. Below the search bar are two date pickers set to '05/04/2016' and '05/11/2016', and a 'More Search Criteria' button. A 'Quick Searches' dropdown menu is followed by 'Load', 'Save', 'Delete', and 'Show All' (with an unchecked checkbox). At the bottom, there is a row of buttons: 'Burn', 'Save', 'Email Call Recordings', 'Share CDR', 'Change Columns', 'Reset columns', 'Export CDR to File', and 'Print'. In the top right corner, it says 'ICS Inmate Demo User: jsargent (V 3895-f) Copyright 2005-2016'.

Call Detail Records – Select criteria for custom query

Numerous additional fields are stored within each call record and can be used to further customize reports and recording searches. After you click More Search Criteria, a dialog box displays that lets you specify several additional search parameters related to the origin from which the calls were made, as well as specific information about the calls.

Technical Approach

These parameters are grouped into categories as shown in the dialog box below.

The screenshot shows a dialog box titled "More Search Criteria" with a close button (X) in the top right corner. The dialog is organized into several sections, each with a sub-header and a table of search criteria parameters.

General		
Completions	CSN Range	DNR
Duration	End Type	Privileged
Show Alerts only	Show DTMF only	

Call Origin		
Site	Station Group	Station ID
Station Name	Trunk ID	

Validation	
Imposter	Validation

Billing		
Billing ID	Call Type	Card Number
Cost Range	LIDB Code	Tariff Band

Called Party		
Location	Response Digits	Show 3-Way only
State	Supervision Type	

Search Criteria Categories

The Search Categories have additional search criteria parameters that can be selected. In the example below, the search categories selected from above are:

- Completions
- End Type
- Call Type
- Privileged

Within those main-level search categories you have more detailed selection options as shown in the print screen below showing the check off selection boxes for End Type and Call Type. This is just one example of the numerous real-time custom calling report options available from the Call Detail screen using the More Search Criteria function.

Technical Approach

Call Details

Inmate ID, Last Name, CSN or Phone Number

05/04/2016 05/11/2016

Quick Searches

Completions: All End Type:

Call Type: Privileged: All

End Type

Type to filter...

<input type="checkbox"/> Unknown	<input type="checkbox"/> Excessive rotary pulses	<input type="checkbox"/> Long #
<input type="checkbox"/> Initial	<input type="checkbox"/> Loop-current idle	<input type="checkbox"/> Trunk Failed
<input type="checkbox"/> Max ring time	<input type="checkbox"/> Forced	<input type="checkbox"/> Manual cutoff
<input type="checkbox"/> Time limit	<input type="checkbox"/> Threeway event detected	<input type="checkbox"/> Preanswer Hangup
<input type="checkbox"/> Incoming call	<input type="checkbox"/> All Trunks Busy	<input type="checkbox"/> Call Abandoned
<input type="checkbox"/> No message	<input type="checkbox"/> No Trunks Available	<input type="checkbox"/> Call Overrun
<input type="checkbox"/> Called party reject	<input type="checkbox"/> Monitor Kill	<input type="checkbox"/> Inmate Block
<input type="checkbox"/> Extra digits	<input type="checkbox"/> Blocked	<input type="checkbox"/> Telco Error
<input type="checkbox"/> User Command	<input type="checkbox"/> No Call	<input type="checkbox"/> Call Disconnected
<input type="checkbox"/> Illegal digit	<input type="checkbox"/> CP to Cust Service	<input type="checkbox"/> VoicePrint Error
<input type="checkbox"/> Normal	<input type="checkbox"/> Refused PP admin	<input type="checkbox"/> No Trunk Configuration
<input type="checkbox"/> Lost server	<input type="checkbox"/> Digit Timeout	<input type="checkbox"/> Internal Error
<input type="checkbox"/> Refused	<input type="checkbox"/> Shutoff w/ warning	<input type="checkbox"/> Dangling
<input type="checkbox"/> Loop-current drop	<input type="checkbox"/> Voice ID failure	<input type="checkbox"/> Inmate Hangup
<input type="checkbox"/> Abandoned	<input type="checkbox"/> Max Accept Time	<input type="checkbox"/> Called Party Hangup
<input type="checkbox"/> Attempted self accept	<input type="checkbox"/> Admin Drop	<input type="checkbox"/> T1 Error Inbound
	<input type="checkbox"/> Station Hangup	<input type="checkbox"/> T1 Error Outbound

Done

Call Type

Type to filter...

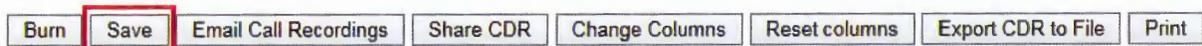
- Not Set
- Debit
- Debit card
- Collect
- Prepaid collect
- Free
- Admin Setup
- Officer
- Incoming
- Admin Zero Bal
- Admin Low Bal
- Exceeds Credit Limit
- Special Free
- Enrollment
- Commissary
- Visitation
- Info Request Msg
- Balance Check
- TDD Operator
- Phone Number Registration
- Complaint
- Informant
- Collect Calls are Blocked
- Incoming Message
- Voice Message
- Text Message
- Medical Menu
- Bypass call
- Phone Debit Purchase
- Free voicemail
- The Informer calls
- Listener
- PREA

Done

Call Detail Records – Select More Search Criteria Example

Saving Search Criteria for a Future Search

After you have set up a specific set of search criteria for searching CDRs, you can save the criteria for a future search by clicking the **Save** button.



You can then select the same search criteria for a future call search without having to re- enter a date range or any other parameters.

After you click **Save**, the ENFORCER displays a dialog box where you can name the search, indicate whether you want other users to be able to use it, and save the search.

Technical Approach



After you click **Save**, the Enforcer adds the saved search to the pull-down list of saved searches. The search name is preceded by the Enforcer user ID of the person who created it.

Select All Displayed CDRs

[Add Call Note](#) [View Call Notes](#) [Play Call Recording](#) [View Inmate Profile](#) [Sort Column](#)

Play	Notes	Inmate ID	Last Name	Phone Number	Call Type	Tariff Band	Station	Talk Units	Billed Time	Total Cost	Validation	End Type	Alert	DIMP	CSM	Start Time
<input type="checkbox"/>		10000	MINERS	304-233-1000	Prepaid	Local	A-0	0	0:00	\$0.00	OK call allowed	Max ring time	0	0	0	06/23/2014 09:20:10
<input type="checkbox"/>		10000	MIRALIT	304-233-1000	Prepaid	T-Dialup Inmate	A-0	1	0:00	\$0.00	OK call allowed	Station Holdup	0	0	0	06/23/2014 09:20:03
<input type="checkbox"/>		10000	TARTER	304-233-1000	Prepaid	Local	A-1	0	0:00	\$0.00	OK call allowed	Max ring time	0	0	0	06/23/2014 09:22:24
<input type="checkbox"/>		10000	MIRAJUL	304-233-1000	Prepaid	Intracell Inmate	A-4	0	0:00	\$0.00	OK call allowed	Max Answer Time	0	0	0	06/23/2014 09:21:11
<input type="checkbox"/>		10000	MIRAJUL	304-233-1000	Prepaid	Intracell Inmate	A-4	0	0:00	\$0.00	OK call allowed	Refused	0	0	0	06/23/2014 09:25:27
<input type="checkbox"/>		10000	MIRAJUL	304-233-1000	Prepaid	Intracell Inmate	A-4	0	0:00	\$0.00	OK call allowed	Max ring time	0	0	0	06/23/2014 09:22:40
<input type="checkbox"/>		10000	FILKERSON	304-233-1000	Prepaid	Intracell	F-4	888	12:00	\$2.76	OK call allowed	Normal	0	0	0	06/23/2014 09:22:55
<input type="checkbox"/>		10000	HAYES	304-233-1000	Prepaid	Intracell Inmate	A-1	401	9:00	\$2.17	OK call allowed	Normal	0	0	0	06/23/2014 09:41:40
<input type="checkbox"/>		10000	FARMER	304-233-1000	Prepaid	Local	A-1	0	0:00	\$0.00	OK call allowed	Max ring time	0	0	0	06/23/2014 09:19:48
<input type="checkbox"/>		10000	FURBERSON	304-233-1000	Prepaid	Intracell	F-4	0	0:00	\$0.00	OK call allowed	Max ring time	0	0	0	06/23/2014 09:18:41
<input type="checkbox"/>		10000	PASLAR	304-233-1000	Prepaid	Local	A-1	0	0:00	\$0.00	OK call allowed	Max ring time	0	0	0	06/23/2014 09:06:18
<input type="checkbox"/>		10000	FASSLER	304-233-1000	Prepaid	Local	A-1	0	0:00	\$0.00	OK call allowed	Max ring time	0	0	0	06/23/2014 09:08:12

[Select Calls for Save, Copy, or Share](#) [View List of Users Who Have Listened to Call](#) [Look Up Called Party Name/Address](#) [View Call Log](#)

Call Info - Search Calls - Standard Results screen

The Enforcer system keeps a full data dictionary on each call attempt. If the standard Call Record screen doesn't show the particular information you're looking for you can simply click on

Technical Approach

Play	Notes	Start Time	CSN	Inmate ID	Last Name	Phone Number	Call Type	Tariff Band	Station	Talk Secs
<input checked="" type="checkbox"/>		01/01/2015 04:30:07	52751113	35547	PIPER	1-2 152	Collect	IntraLata IntraState	INTAKE 1 R	210
<input checked="" type="checkbox"/>		01/01/2015 08:10:24	52751122	2572	LEFEVRE	1-2 122	Debit	Local	C LL	903
<input checked="" type="checkbox"/>		01/01/2015 08:31:21	52751217	2572	LEFEVRE	1-2 111	Debit	IntraLata IntraState	C LL	323
<input checked="" type="checkbox"/>		01/01/2015 08:37:56	52751222	2572	LEFEVRE	1-2 122	Debit	Local	C LL	903
<input type="checkbox"/>		01/01/2015 08:46:00	52751232	3372	BALDRIDGE	1-5 35	Prepaid	InterLata IntraState	E LL	889

Call Detail Results - Email Call Recordings

A pop-up window appears to enter the email address, subject, and body text of the email message:

Email Recordings

Email selected records:
52751222,52751217,52751190,52751113

To:

Subject:

Message Body:

Max Size (MB):

Send Close

Email Recordings Pop-Up Window

A maximum size can be set in the Max Size field. The file size for a compressed 15-minute recording is approximately 2 MB. Once the user clicks Send, each call recording will be attached to the email message as a separate mp3.

Standard Reports

The following is a list of the standard reports available in the Enforcer. All reports can be generated online for quick review or exported to PDF or CSV format for further review and data filtering.

Technical Approach

Report Name	Description
Admin Setup Only	<ul style="list-style-type: none"> • Listing by inmate name of all “admin setup only” (60-second free) calls made during a user-specified date range. Provides inmate name, ID, number, start time, etc. • <i>Benefit: Tracking fraud attempts and free call “churning”</i>
Attorney Registration Status	<ul style="list-style-type: none"> • Counts for attorney phone numbers in Global Number list. • Provides quantity, percent of total, and total quantity of attorney phone numbers in the Enforcer by status (approved, rejected, pending) • <i>Benefit: Quick response to attorney requests + tracking attorney registration process</i>
Attorney Registration Rejects	<ul style="list-style-type: none"> • List of all inmates for which a requested attorney has been denied. • <i>Benefit: Tracking inmates attempting to fraudulently set up non-recorded calls.</i>
Call Detail	<ul style="list-style-type: none"> • Completely configurable database search engine (by payment method, minimum length of call, site location, time period, call termination type, etc.) Provides detailed call information (billed start time, dialed number, site called from, recording status, call cost, detected 3-way attempt, alerted calls, etc.) • Individual user queries can be saved for future use. • <i>Benefit: Configurable search capability for site operations, investigative, fiscal, or any other NDCS personnel.</i>
Call Record Statistics	<ul style="list-style-type: none"> • Summary of calls by call type, completion code, and call count. The report can be requested by site name or for all sites for a user-specified date range. • <i>Benefit: Provides summary of calling trends by site</i>
Frequently Used PANs Summary	<ul style="list-style-type: none"> • Lists all allowed numbers by user-specified number of inmates using number. Lists called number, called party, number of instances (calls), and the number of sites. • <i>Benefit: Provides quick report of potential suspicious numbers used, for example, for coordinating gang activity.</i>
Frequently Used PANs Detail	<ul style="list-style-type: none"> • Provides additional detail regarding inmate names and PINs using number. • <i>Benefit: Additional detail for investigations</i>
Global Number	<ul style="list-style-type: none"> • Detailed report for all parameters that are found in the Global Number Table, e.g. all blocked numbers, all free numbers, all do not record (attorney) numbers, all notes, random note text searches, and alerts. • <i>Benefit: Summary reports for special number administration – attorneys, Informant Lines, PREA Hotline, Tip Lines, etc.</i>

Technical Approach

Report Name	Description
Global Number History	<ul style="list-style-type: none"> Historical records of all changes made to ANI phone number to include an audit trail for users who made the changes <i>Benefit: Summary audit records for NDCS operations management</i>
Inmate Alerts	<ul style="list-style-type: none"> Lists all alerts that have been activated for each inmate. The report lists site name, inmate ID, inmate name, phone number, name associated with the called number, and phone number/email address for each alert type that has been set up. <i>Benefit: Summary audit records for NDCS investigations management</i>
Inmate PANs	<ul style="list-style-type: none"> PAN (personal allowed number) list for the inmate. The report also includes any restrictions associated with a PAN (blocks, free call, do not record, passive mode). <i>Benefit: Summary record for number administrators and NDCS site staff responding to inmate inquiries</i>
Inmate Status	<ul style="list-style-type: none"> Listing of inmate IDs, passcodes, inmate account status (active/inactive), site and location, the current number of PANs being used and allowed, and any associated notes. Can be generated for a specific inmate or all inmates, and can be sorted by inmate active/inactive status. <i>Benefit: Assists site operations personnel in inmate management and inquiries</i>
Number Alerts	<ul style="list-style-type: none"> Lists all alerts that have been activated for a called phone number: site name, phone number, name associated with the called number, and phone number/email address for each alert type that has been set up. <i>Benefit: Coordination between investigations staff</i>
PIN Fraud	<ul style="list-style-type: none"> Listing of each call on which an inmate attempted to use an incorrect PIN. For each call, the report lists the site, CSN, station ID, station name, inmate name, inmate ID, passcode, the PIN number attempted in the CDR, the actual PIN, and extra digits. <i>Benefit: Summary information for investigations and site operations staff</i>
Prepaid Balance Summary	<ul style="list-style-type: none"> Provides account (phone numbers) for all called numbers that have an established prepaid Account. The report includes the project number, billing ID, account/phone number, balance, and current status of active/non-active. <i>Benefit: Summary information for responding to friends and family inquiries, if necessary</i>

Technical Approach

Report Name	Description
Recording Access	<ul style="list-style-type: none"> • Listing of all call records that have been listened to during a user-specified date range. The report lists the user ID of the person who listened to the call, the CSN, inmate ID and name of the inmate who made the call, called number, and date the user listened to the call record. • <i>Benefit: Important audit tool for NDCS system administration</i>
Revenue	<ul style="list-style-type: none"> • Call counts, durations, billed minutes, revenue and revenue percentage for each call type, grouped by account (payment) type. • Can be requested by specific site or for all sites for any previous calendar month either in PDF, Excel, or CSV format • User-defined date ranges. • Reports can be generated by facility, including number of call attempts vs. completions, total minutes, and revenue breakout. • <i>Benefit: "At your fingertips" summary tool for fiscal staff</i>
Station Activity	<ul style="list-style-type: none"> • Summary of all calls, by site and by station, made for a user-specified date range. Includes site name, station (phone) port, station (phone) name, attempted calls, accepted calls, etc. • <i>Benefit: Site operations - Quick identification of phones out of service. Investigations – identifying phones being dominated by an inmate or group of inmates for some reason.</i>
Station Group Privileges	<ul style="list-style-type: none"> • Listing of station groups (phones) that are assigned to specific inmates (i.e., phones from which inmates are allowed to make calls), if used by NDCS. • <i>Benefit: Summary report for site operations personnel</i>
Inmate Suspensions	<ul style="list-style-type: none"> • Listing of all inmate suspensions. Lists site name, inmate ID, inmate name (first, middle, last), whether the suspension is full or partial, start/end date/time, and user notes (usually a description of the reason for suspension). • <i>Benefit: Summary report for disciplinary</i>
Trunk Usage	<ul style="list-style-type: none"> • Summary of all calls that have been dialed and connected to the network by trunk. The summary is defined by site name, trunk, out-dialed Calls, accepted calls, and the percentage of accepted calls. • <i>Benefit: Primarily used by CenturyLink, and sometimes site, network personnel</i>

Technical Approach

Report Name	Description
Volume Users	<ul style="list-style-type: none">• Summary of high telephone volume usage by inmates. Can be generated by site or threshold type (quantity of calls or total minutes). Results are listed by site name, inmate ID, inmate name (last, first, middle), number of calls, and minutes count (total minutes).• <i>Benefit: Filters suspicious calling activity</i>

The option for the NDCS/YRTC to utilize voice to text translation and voice recognition with specific word or phrase search capabilities.

 CenturyLink Response: Read, agreed and will comply.

Voice-To-Text Technology

CenturyLink proposes a voice-to-text solution that is designed for use in correctional facilities and leverages the Nuance Dragon NaturallySpeaking runtime engine (DSS). This technology is configured for back-end transcription tasks and operates in a server environment. DSS is specially designed for integration into solutions that require speech recognition to run in the background without any interactive dictation or self-editing by users.

The DSS engine has enhanced acoustic models that provide a statistical representation of the sound patterns that make up individuals words. These enhanced acoustic models incorporate sounds of words, phonetic properties of the language, speaker's voice, audio channel and acoustic environment to select the word that sound most similar to the spoken utterance. The DSS engine supports different accents and hosts a collection of base acoustic models that have been trained on a vast amount of relevant speech recordings.

At the conclusion of each call, the Enforcer system will deliver the call recording in raw audio format to the DSS engine for modeling and transcription. The raw call recording contains 4 distinct audio channels isolating the various voices and system prompts (inmate, called party, prompts, overlays) thereby eliminating the complexity of multiple unique voices, which may have different accents and vocabularies and, worse, are very likely to interrupt or talk over one another, as is normal in casual conversations. This multi-channel voice recording coupled with enhanced acoustic models greatly improves the accuracy of the transcribed conversation.

Technical Approach

Word Detective Keyword Search

With our Word Detective keyword search tool, powered by Nexidia, investigators can quickly scan thousands of call recordings to locate words or phrases of interest. Word Detective searches for the sounds that make up words, and therefore it is highly accurate, even in a conversation with simultaneous speakers, dialects, and background noise – all typical conditions in a corrections environment.

Keyword Search – Expanded Capabilities

Word Detective can search recorded conversations not for specific words, but also for “associated words,” i.e., synonyms, related terms, and related slang. To enable this functionality, we are building a generic “Association Table” that contains common search terms and their associated words or phrases. We are using information – including slang terms known to be used in correctional facilities – that is readily available in the public domain to build this database table.

The indexing engine that powers Word Detective, Nexidia, has always had the ability to use an Association Table; we have recently designed and are expanding the Word Detective user interface in order to offer this feature through the Enforcer’s GUI.

The screenshot displays the Enforcer GUI with the Word Detective search tool. The top navigation bar includes: Inmate, Global Numbers, Accounts, Monitor Phones, Call Info, Reports, Site Admin, Tools, and Logout. The search results table shows 14 results, with the following data:

Score	Inmate ID	Inmate	Notes	Call Number	Call Time	Offset	Duration	Occur.	Notes	Play
97	44221	SOKOL	Data Detective	1.724.8917	04/09/2014 20:14	3:10	16:18	2	+ [P]	[C]
97	89642	VELAM	Word Detective	2.631.4215	04/10/2014 08:27	5:45	12:08	1	+ [P]	[C]
97	29771	BYRSKI, DEBRA	Word Detective Thesaurus	1.773.398.3982	04/09/2014 14:52	9:11	20:50	1	+ [P]	[C]
97	192309	POPWICK, ASHLEY		1.630.397.9338	04/09/2014 18:59	5:38	6:51	1	+ [P]	[C]
97	117443	STRAZA, FRED		1.224.558.9587	04/05/2014 20:07	5:56	17:50	2	+ [P]	[C]
96	119216	MORRIS, ADAM		1.815.385.7243	04/09/2014 13:15	17:05	20:08	1	+ [P]	[C]

The detailed view for call 1-210-433-6142 shows the following information:

- Receiver:** DEBRA TERI, 130 SWEET AVE, SAN ANTONIO, TX 78228
- CSN:** 56498905
- Station ID:** 17117
- Station Name:** 6A-3 (ANNEX)
- Score:** 96
- Phrase:** lawyer
- Offset:** 11:38

A map shows the location of 130 Sweet Ave in San Antonio, TX.

Word Detective in the Enforcer GUI

Technical Approach

With this feature in place, investigators can run a search for a specific word, and Word Detective will return results that contain that word *or any associated terms*. For example, a search for the word "attorney" would find conversations that contain the word "attorney" *or* the word "lawyer."

Investigators can customize and expand upon the generic Association Table by adding new slang and terms that are specific to your geographic region. Custom terms can be entered into a database table – via the simple Enforcer Word Detective interface – that is available facility-wide; or, each user can create their own custom tables containing a personal list of word associations.

In addition to the functionality above, Word Detective users will also be able to run advanced searches for more than one specific word using "and / or" statements. For example, an authorized user could search for "drugs and sell," and Word Detective would return results in which both words appear in the same sentence.

7. NITC (Nebraska Information Technology Commission) Requirements

All equipment used must comply with Nebraska Information Technology Commission (NITC) and Nebraska Office of the Chief Information Officer Standards and Guidelines. The Standards and Guidelines are available at <http://www.nitc.ne.gov/standards/>. Specific standards include:

- a. 8-101 – Information Security Standard
- b. 8-102 – Data Security Standard
- c. 8-301 – Password Standard
- d. 8-303 – Remote Access Standard
- e. 8-304 – Remote Administration of Internal Devices Standard

All NDCS Computing resources must comply with AR 104.06 – Computer and Telephone Equipment Usage.

 CenturyLink Response: Read, agreed and will comply.

8. Network and Cabling Requirements

- a. WAN/Internet Service - DCS/OCIO will provide a basic VPN connection for remote system maintenance (see Remote Access section below). If the project requires a connection to the Internet beyond the remote support VPN, the contractor will need to establish their own contract with an Internet Service Provider (ISP) for service while following NDCS/OCIO guidelines for circuit equipment location. The contractor must provide their own Uninterrupted Power Supply (UPS) power for such equipment. There are physical limitations to installing new service at some facilities

Technical Approach

so the project manager will need to coordinate with the NDCS Engineering Department if construction is required. The Engineering Department will review property ownership and liability issues and must review the contract made between the contractor and their ISP who will provide service on NDCS property.

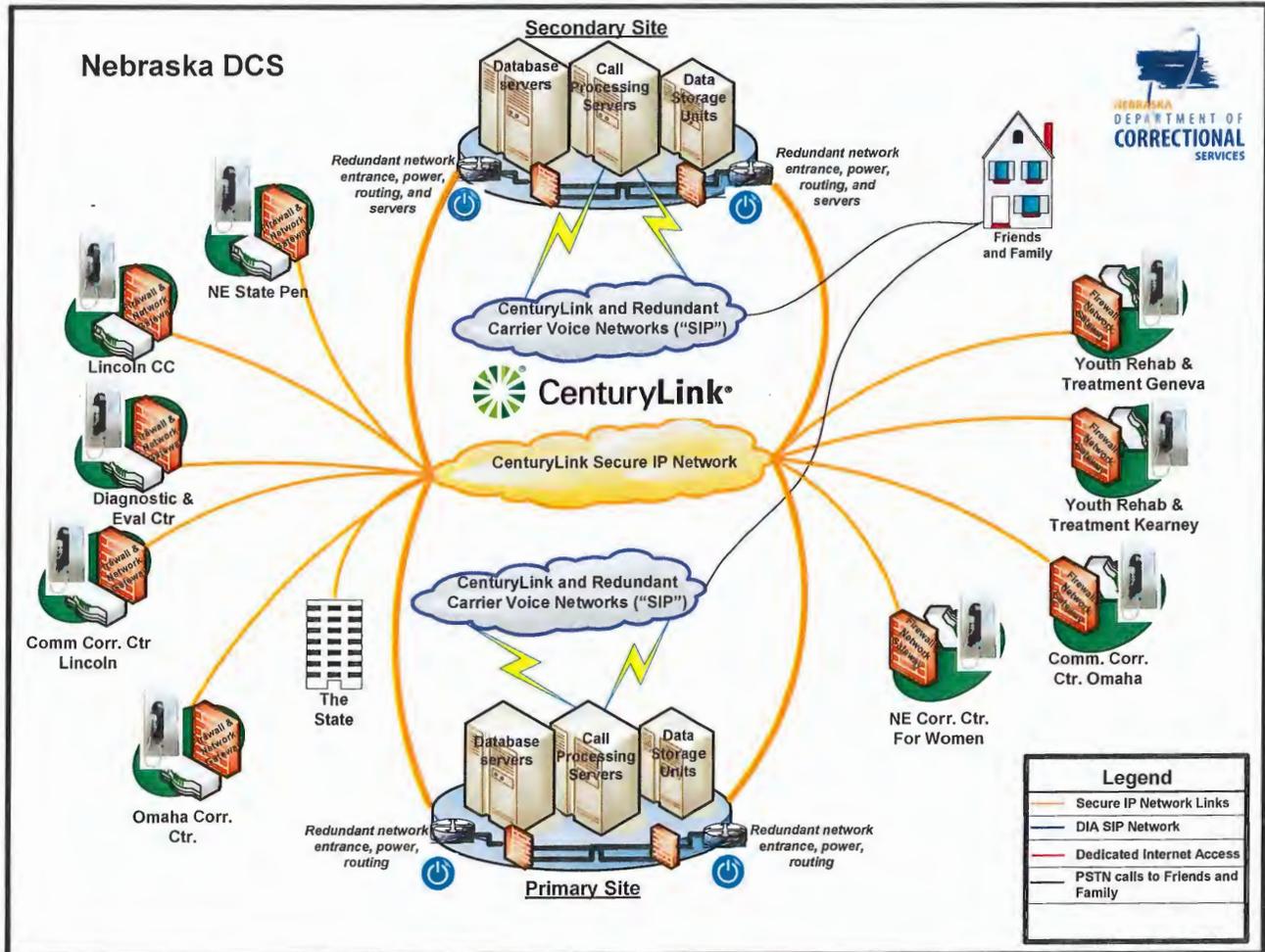
☀ CenturyLink Response: Read, agreed and will comply.

CenturyLink does not currently foresee a need for basic VPN access. If additional remote access is required, CenturyLink will establish our own ISP service, working within DCS/OCIO guidelines and working with the NDCS Engineering Department, as required.

CenturyLink's proposed **Centralized Network Solution** provides the following significant benefits:

- ✓ **Network Owned and Operated by CenturyLink**
 - Quick problem resolution
 - No finger-pointing
- ✓ **Full redundancy at two separate sites**
 - Data and recordings backed up immediately
 - Call processing redundancy
- ✓ **'Over-provisioned' network**
 - 100% off-hook capacity
 - Enables kiosks and other services
- ✓ **Separate Network**
 - No use of State of Nebraska DCS/OCIO bandwidth
- ✓ **Minimal Equipment Room Space Requirements**
 - Only on-site network equipment required are small "pizza box" size Adtran IP Gateways and standard Uninterrupted Power Supply (UPS) power backup

Technical Approach



System Architecture Design

- b. Cabling. The contractor will provide at a minimum:
 - i. Network horizontal cabling from contractor's equipment to NDCS network. The current standard for NDCS is blue Category 6 cable and plenum cable where necessary to meet fire and safety codes. Rack mounted patch panels are generally preferred over wall mount blocks.

 CenturyLink Response: Read, agreed and will comply.

- ii. The NDCS IT Manager must approve all network cabling design prior to installation to ensure industry and facility standards and codes are followed. After the contract is awarded the contractor will perform a site survey to determine where all new equipment

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will be installed and how to route cabling to the nearest existing telecommunications room. The contractor will communicate with facility maintenance departments for installation of all conduit for all cabling.

 CenturyLink Response: Read, agreed and will comply.

Conducting site surveys during the pre-installation phase of the implementation is standard operating procedure. One of the key steps in our implementation plan is to conduct site surveys at every facility prior to installation. This familiarizes our team with each facility and the layout of the existing inmate telephone system while also allowing us to solicit input from our site contacts to ensure we complete the install with as little impact as possible to normal facility operations.

Once CenturyLink has received a letter of intent from NDCS, a meeting will be held between CenturyLink and appropriate NDCS staff. This initial meeting will identify all key stakeholders, their responsibilities, and document information necessary to schedule detailed site inspections at each NDCS facility:

CenturyLink will review the data gathered in the initial implementation meeting and the site surveys to ensure that all customer requirements are met. Any new or outstanding issues will be resolved with the designated customer representative before orders are placed for system and networking equipment and services. More details about our implementation methodology, including our pre-installation site survey procedure is provided in Section IV. Detailed Project Work Plan and V. Deliverables and Due Dates.

- iii. Wireless connectivity (such as 802.11) should be avoided if practical in these correctional services environments. Physical hard-wired cabling should be used instead to limit introduction of new security and operational problems in correctional services environments. If wireless is necessary and agreed upon by DCS, the installation methods and equipment must be approved by the NE OCIO.

 CenturyLink Response: Read, agreed and will comply.

After completing the site surveys, CenturyLink has no intention to use wireless connectivity for inmate telephones.

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- c. Contractor will provide the following information before installation begins:
 - i. Network diagrams or schematics that show logical or physical connectivity of system to include network infrastructure and server placement.

 CenturyLink Response: Read, agreed and will comply.

- ii. Switch port requirements – speed and duplex

 CenturyLink Response: Read, agreed and will comply.

- iii. Firewall rule sets and other special network requirements

 CenturyLink Response: Read, agreed and will comply.

- iv. Other LAN and WAN requirements – bandwidth or protocols

 CenturyLink Response: Read, agreed and will comply.

9. Client-Server Requirements

- a. The contractor must identify if software will be installed on existing State workstations or if the contractor will be supplying new workstations. The contractor will need to identify if their application is web-based or a separate Windows-based application.

 CenturyLink Response: Read, agreed and will comply.

Standard user operations require no additional software to be loaded on user workstations or PC's. Some advanced users – specifically those and only those who wish to control key components and operations within the system – require the installation of a small proprietary supplemental software package. With that said, even these advanced users can easily utilize the system without the need to download additional software.

The only function requiring installation of the supplement is burning/downloading calls. This is a custom Windows application which optimizes the downloading process and facilitates the burning of recordings to CD or DVD. This *is also unavoidable for any provider or operating system*; as an alternative, calls can be easily downloaded to a local hard drive and burned using the utility already installed on that computer.

Technical Approach

Currently, a custom call player providing talk path isolation, speed up/speed down, skip pauses, etc. also requires a software supplement - this is a custom Java application which requires a recent version of Java to be installed. However, the Enforcer will be updated to no longer need Java for the enhanced player, and will instead be enabled using standard features in an internet browser.

We have continuously worked to reduce the 'footprint' of this supplement, which is available for direct installation as well as an offline installation to allow IT organizations to include the package in standard centralized update mechanisms.

Any onsite or remote PC that meets the following minimum specifications may securely access the Enforcer platform:

Operating System: Any Windows 7 or newer OS (32 and 64 bit)

CPU: 2 GHz minimum, 3GHz+ recommended

RAM: 1GB minimum, 2GB+ recommended

Browser: Any modern browser including Internet Explorer, Firefox, and Chrome

Again, the Enforcer system does not require dedicated workstations to use the system because any onsite or remote PC that is internet-enabled and meets the above minimum specifications may securely access the Enforcer platform; however, for your convenience, CenturyLink is willing to negotiate any needed workstations into a final package for the initial implementation.

- b. As of this time, any new software installed on State workstations will need to be compatible with Windows 7 64 bit and Internet Explorer 10. If special client configurations or plugins are required, the contractor must specify.

 CenturyLink Response: Read, agreed and will comply.

- c. If new servers are required for the project, the physical location for those servers must be identified. If a server is serving multiple sites, it is recommended to place a Virtual Server(s) at the State of Nebraska Data Center for Enterprise Services. If a server is placed at each site, it will need to be a 19" rack mount server (as opposed to a desktop computer or tower) and it will need a proper housing such as a rack in a communications room that has proper environmental controls, power, and cooling. The contractor must ask the questions during the site surveys about if they can put their servers in existing racks or if they need to provide new racks or cabinets.

Technical Approach

 CenturyLink Response: Read, agreed and will comply.

The Enforcer system is fully hosted centralized calling platform, with critical system components (including servers) located offsite in redundant, geographically separate data centers. The primary data center is in Atlanta and the secondary data center is in San Antonio. Onsite equipment is limited to just the phone instruments themselves, UPS backup power, and Integrated Access Devices (IADs) that connect the phones to the network for connectivity with the offsite call processors.

- d. Servers outside State Network/DMZ. If the application software is accessible outside the State network (from home for example), the contractor will need to demonstrate how their application meets encryption and security standards such as SSL, TLS, or VPN requirements. The accessibility should be negotiated closely with DCS to prevent unauthorized access to data. All web browser data should be passed through protocols using HTTPS instead of plain text HTTP.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer system can be accessed from any Internet-enabled computer. Since one system will handle every NDCS facility, there will not be a need to sign in to different systems to access data. Access is simple; if an individual has access to the Internet, they can use their office sign-on and password from any state office building, NDCS headquarters, residence, hotel room, etc. Nothing else is required.

Security is through Hypertext Transfer Protocol Secure (HTTPS) which is a communications protocol for secure communication over a computer network, with especially wide deployment on the Internet. It is the result of simply layering the Hypertext Transfer Protocol (HTTP) on top of the SSL/TLS (Secure Sockets Layer/Transport Layer Security) protocol, thus adding the security capabilities of SSL/TLS to standard HTTP communications. The security of HTTPS is that of the underlying TLS, which uses long term public and secret keys to exchange a short term session key to encrypt the data flow between client and server.

- e. If servers will not be on State premises the contractor must demonstrate methods for data security, backups, and disaster recovery planning to meet DCS operational standards.

 CenturyLink Response: Read, agreed and will comply.

Technical Approach

Disaster Recovery Summary

CenturyLink's management team recognizes the importance of maintaining an effective Disaster Recovery Plan to help ensure the continuity of critical business processes and minimize disruption in the event of material disruption. Our internal planning covers:

1. Disruption or disaster at a client facility
2. Disruption or failure of a managed WAN or third-party network service (i.e., LIDB validation)
3. Disruption or disaster at a CenturyLink data center
4. Loss of key personnel

Each separate plan identifies a primary and back-up Incident Commander (IC).

Type 1 – Onsite Equipment Disruption

Please note that the calling system is fully centralized, with most critical system components located offsite in redundant, geographically separate data centers. Onsite equipment is limited to just the phone instruments themselves, UPS backup power, and Integrated Access Devices (IADs) that connect the phones to the offsite call processors.

CenturyLink typically installs multiple IADs at each facility, with additional spares for both IADs and phone instruments maintained in-state. In the event that one of our IADs fails, the inmate phones will be automatically routed to the next available IAD, without any interruption to inmate calling. While extremely remote, in the event of a catastrophic failure of all IADs, all of our field service technicians maintain spare components and gateways and will be immediately dispatched to the facility to replace the defective IADs. In the event of an onsite disaster that damages most or all of the onsite equipment, the following procedure will be initiated.

For a Type 1 disaster the primary IC will be Brenda McKinley (NDCS Program Manager), with Barry Brinker (Director of Service Operations) as the back-up. Each will be closely acquainted with NDCS staff and procedures. They will be alerted by our 24/7/365 Technical Services Center and will:

1. Immediately coordinate a visit from themselves or our local technician to assess the damage and put the Technical Support Team on notice.
2. They will then determine the extent of the damage and the need for replacement parts, as well as the availability of space, and if needed, a network access point for communication services, and present a plan to the facility to restore all services.
3. Technical Support team will ship the new system components

Technical Approach

4. Ms. McKinley or Mr. Brinker will join a member of the Engineering team and our local technicians for onsite equipment installation, including new wiring as necessary.

Type 2 – Network Connectivity Disruption

Please note that CenturyLink obtains network service from two different network carriers from our central data centers (each network is sized to carry the full network load), so that if one carrier experiences an outage, service will instantly fail over to the second carrier.

While the following plan will be initiated anytime a network service outage is detected, phone system access will continue to operate normally except in the highly unlikely event that a disaster should impede service of both network carriers simultaneously.

For a Type 2 disaster the primary IC is Steve Depasse (Engineering/Network Manager) and the back-up is Shawn Kulik (Network Supervisor). Type 2 incidents may also require a full Crisis Response Team (CRT) drawn from the technical staff of our Network Operations (NetOps), Operations, Installation, Engineering and Management teams.

The IC will be notified by our network monitoring applications or a ticket opened online by facility staff or a call into our 24/7/365 Technical Services Center, or by one of our network or database providers and their monitoring staff. The IC will:

1. Immediately notify the network provider and our Network Specialists and Engineering team leaders, who will begin diagnostics and re-route traffic
2. Determine based on the severity of the incident whether or not to form a full Crisis Response Team including CenturyLink Management (if so, Steve Depasse (Engineering/Network Manager) and Shawn Kulik (Network Supervisor) will take charge
3. Notify NDCS
4. Determine whether to involve CenturyLink Management
5. Present a plan to re-route all traffic and/or restore normal service
6. Make our Network carriers aware of SLAs and escalate as entitled under our service contracts
7. Coordinate operational response from our carriers and NetOps and Engineering teams to re-route traffic, restore normal service
8. Share progress and resolution with NDCS

Technical Approach

In addition, third-party validation sources as well as network common carriers have built-in redundancy with database replication and failover mechanisms in place. This redundancy is on top of the redundancy and failover capabilities employed in CenturyLink's architecture – network and third-party services are distributed among multiple vendors.

Any network outage should be diagnosed from our primary data center and Network Operations Center (NOC) in San Antonio. In the event of a third-party utility outage such as a cut power line, Mr. Depasse, Mr. Kulik, or the most available backup IC would coordinate directly with local utility.

Type 3 – Data Center Disruption

CenturyLink currently maintains two data centers. Our primary call processing data center is located in a secure CenturyLink datacenter in Atlanta, Georgia. Our secondary call processing data center is located 900 miles away in San Antonio, Texas.

Each office serves as a back-up site for the other. Source code for all applications supported from a location is spooled weekly to a server at the other location. Call data is transmitted instantly to both data centers, ensuring backup copies of all investigative data are always available. NDCS facilities would experience a disruption to these services only in the very unlikely event that disasters should impact both data centers. Regardless, Type 3 incidents will be initiated as outlined below, anytime a service disruption is detected at either data center.

For a Type 3 incident Barry Brinker (Director of Service Operations) will be the primary IC, with Steve Depasse (Engineering/Network Manager) as the secondary IC, if Mr. Brinker is not immediately available. A Type 3 incident will be detected immediately by CenturyLink's staff and system monitoring applications. For any Type 3 incident, a Crisis Response Team will be formed with Mr. Brinker or Mr. Depasse coordinating Engineering and Operations teams at the remaining data center.

- Core Technology: CenturyLink maintains nightly off-site backups of all source code and compiler tools to enable recreation of the support environment virtually anywhere within a few hours.
- All other systems such as reporting, accounting, etc. are backed up nightly and could be restored quickly onto "off-the-shelf" hardware. Our staff can build a new server stack from readily available hardware and install it at an unaffected co-location to restore redundancy in short order.

Technical Approach

In the event that a temporary replacement system must be set up at another data center (such as if a data center were completely destroyed in a natural disaster), CenturyLink has a nationwide procurement and inventory management system that can be used to quickly procure replacement equipment. An Engineering team can be mobilized to assemble, load, and test a server stack and related systems for installation in a near-by commercial facility, if a prolonged downtime at one of our data centers is expected.

CenturyLink's Engineering team is prepared and able to configure, ship, and replace any damaged or failed system within 12 to 24 hours from on-hand materials, depending on the number of facilities affected. The CenturyLink Team has installed over 200 centralized calling platforms, so our ability to do so reliably and under deadline is tested and validated regularly in the course of normal operations.

Type 4 – Loss of Key Personnel

Any company is vulnerable to the loss of key personnel, and CenturyLink's management is diligent in cross-training and knowledge transfer among our departments in order to minimize the disruption caused by the loss of a key individual. Specific personnel backup designations have been established to assist in contingency planning. Each key staff member has a backup.

All of CenturyLink's disaster response and business continuity plans are subject to an annual internal review by our Executive Management team, which has more than 60 years of experience managing the reliable provision of services to correctional agencies nationwide. Dry runs testing the ability of IC and secondary staff to identify and evaluate disruptions are held at least annually.

Summary: Redundancy and Security	
Onsite Equipment	<ul style="list-style-type: none"> • Ample ratio of spares for phone instruments, roll carts, and network devices ("IADs") maintained in-state • Multiple Uninterrupted Power Supply ("UPS") to on-site equipment for transition to backup on-site power • Should on-site backup power fail, the UPS is secondary backup and can carry the data center load for roughly 2 hours
Network Connectivity	<ul style="list-style-type: none"> • Redundant carriers & third-party validation contracts, both implemented at each data center • Diverse network entrance facilities at each data center • Continuous network monitoring with established failover plan
Central Data Center	<p><u>Call Processing</u></p> <ul style="list-style-type: none"> • Primary call processor housed in a CenturyLink, Inc. class 4 data center in Atlanta • Fully functional, always-on backup processor located in a

Technical Approach

	<p>redundant class 4 data center in San Antonio</p> <ul style="list-style-type: none"> • If disaster were to disrupt call processing in Atlanta, service would instantly and automatically fail over to the secondary processor in San Antonio • Atlanta and San Antonio data centers both supported by multiple active power and cooling supplies • Redundant fault tolerant enterprise grade components • Minimum of two diverse paths for power and network into each data center <p><u>Data</u></p> <ul style="list-style-type: none"> • Call data and recordings are stored at each of the two data centers • Databases constantly synchronized in real-time • Call recording storage systems continuously synced in near real-time • Each data center supports various RAID (internally redundant) storage configurations to provide for additional storage redundancy. • All data and recordings are maintained in both data centers for the entire contract term, plus all renewal periods
Personnel	<ul style="list-style-type: none"> • Internal certification of trained and named backup personnel – all positions • Documented succession plan for all key positions

10. Remote Access (VPN) for System Support and Maintenance

- a. NDCS will provide the contractor with a maximum of three individual VPN accounts upon request. The VPN system for the State of Nebraska is provided by the Nebraska OCIO.

 CenturyLink Response: Read, agreed and will comply.

CenturyLink does not currently foresee a need for basic VPN access. If additional remote access is required, CenturyLink will establish our own ISP service, working within DCS/OCIO guidelines and working with the NDCS Engineering Department, as required.

- b. The contractor notifies the NDCS project manager about the need for remote access. NDCS will give the OCIO VPN form to the contractor and they will return one form for each person who needs access. The form will be signed by the NDCS project manager for authorization, and then the form will be given to NDCS IT to review network policies. IT will submit the request to OCIO and when the account is ready, IT will send connection instructions to the contractor directly.

Technical Approach

 CenturyLink Response: Read, agreed and will comply.

The ITS platform is engineered with maximum redundancy to ensure peak performance and minimize troubles. Further, the Network Operations Center proactively identifies potential problems by real-time central monitoring of hardware, software, and system performance.

11. Network Requirements

The type of data network used will be the responsibility of the contractor, however all site information to include recording and monitoring must be made available to the central administration workstations on a "real time" basis.

 CenturyLink Response: Read, agreed and will comply.

This is an area of particular strength for CenturyLink. As part of a Tier 1 network provider, CenturyLink "over-provisions" bandwidth to ensure the highest grade of service standards – P.05 GOS at a minimum. Local administrators will examine traffic and call termination reports to ensure the highest rates of call completion.



The Enforcer system is also built with multiple points of redundancy to continue to operate in the event a connection fails. For example, if the validation database server connection is disabled for any reason, the system can continue to complete debit, collect and prepaid collect calls using the on-board database cache until the connection is restored.

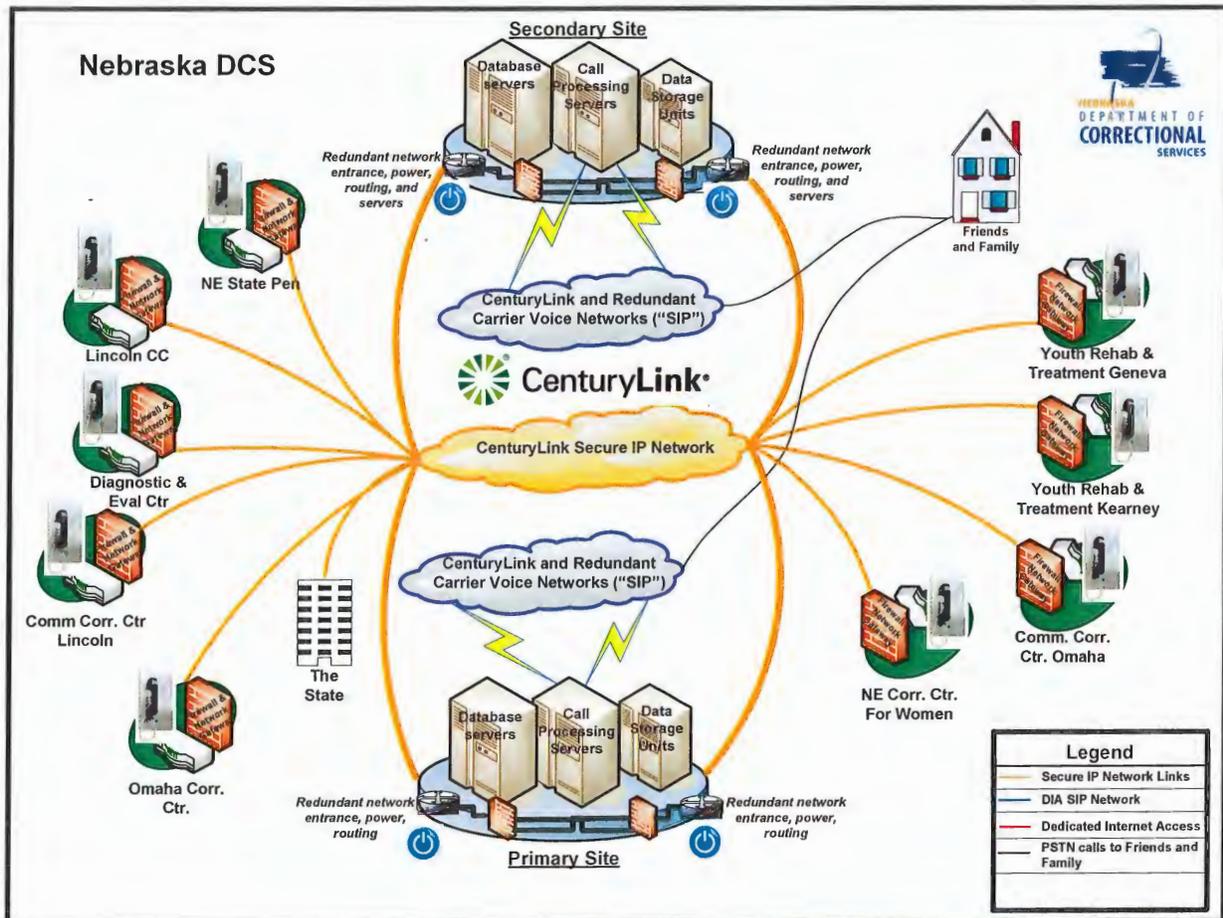
All site information and data, including recording and monitoring, are made available to central administration workstations as well as remote user workstations on a real time basis.

The type of voice network used will be the responsibility of the contractor. A Voice over Internet Protocol (VoIP) solution will be permitted, however the contractor must provide some type of redundancy so that facilities are never isolated from electronic monitoring from the Central administration site.

 CenturyLink Response: Read, agreed and will comply.

Our proposed architecture includes redundant locations for call processors, databases, and data storage units, in addition to redundant network connectivity into each individual site. As a result NDCS facilities will never be isolated from electronic monitoring.

Technical Approach



All data and telephone network used by the contractor provided system must be installed, maintained, and paid for by the contractor. At no time will the contractor be permitted to use State resources.

 CenturyLink Response: Read, agreed and will comply.

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All inmate telephones must be capable of functioning simultaneously. This will require a 1:1 ratio of telephones to outside lines.

 CenturyLink Response: Read, agreed and will comply.

CenturyLink's standard operating procedure is to provision the hardware and network to allow all inmate phones to be in operation at the same time. As the only facilities-based network provider in this industry, CenturyLink does not use any form of line concentration to reduce costs.



12. Telephone Equipment Requirements

All inmate telephones will be provided by contractors and must be heavy-duty wall mount phones to include:

- a. Hearing aid compatibility
- b. DTMF signaling
- c. Fully FCC and U.L. approved
- d. ADA compliant and compatible with TDD devices
- e. Armored cords
- f. Volume control

 CenturyLink Response: Read, agreed and will comply.

Specifications and illustrations of our proposed inmate telephone are provided at the end of this section.

Telephone types and counts for each facility can be found in Attachment I.

 CenturyLink Response: Read, agreed and will comply.

Contractor must provide a portable telephone at each facility for use in segregation units and skilled nursing facility as indicated in Attachment 1.

 CenturyLink Response: Read, agreed and will comply.

Technical Approach

Roll Carts

CenturyLink proposes the Wintel 4-Wheel Phone Cart. Features and specifications are listed below:

- Powder Coated Black Paint
- 14-Gauge Steel Construction
- 4-4" Lockable Wheels
- Dimensions •
 - Base: 24" X 24"
 - Floor to Top: 51"
 - Base to Top: 44"
- Telephone Keypad Center Height: •High: 40" from Floor
 - Low: 30" from Floor
 - Variation depending on phone type
- Weight: 95 pounds (w/o shipping material)
- Various Heavy Duty Cord options available



Contractor will also provide cordless capability where identified.

☀ CenturyLink Response: Read, agreed and will comply.

Contractor must provide one (1) TDD unit at each facility location as indicated in Attachment 1. Additional TDD units shall be provided as requested by NDCS. Digital monitoring capabilities must be available for TDD units.

☀ CenturyLink Response: Read, agreed and will comply.

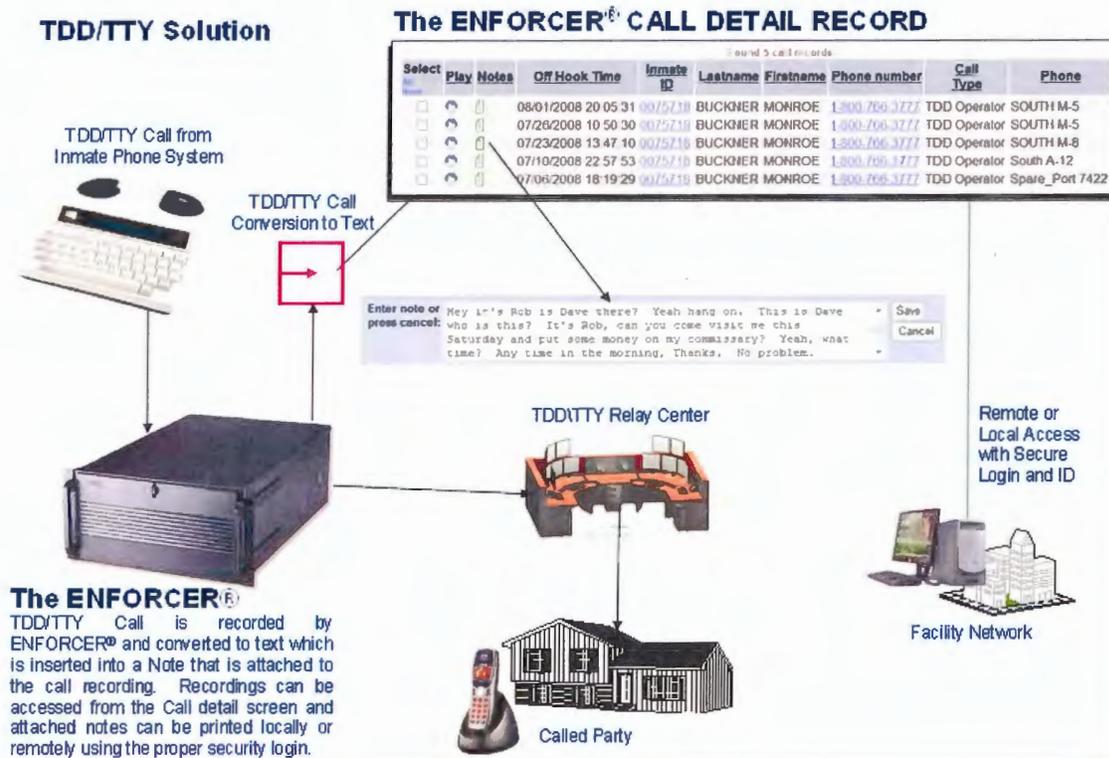
TDD Call Recordings

As a feature built especially for Kansas DOC, each TDD/TTY call is recorded by the Enforcer and converted to text, which is inserted into a Note and attached to the call recording.

In this way all security features can be maintained through the system.

Technical Approach

Recordings can be accessed from the Call Detail Screen, and attached Notes can be printed locally or remotely by users with appropriate security credentials.



Call Restrictions

The Enforcer can be configured to require the inmate to enter their Inmate ID\PIN and the destination number using the TDD device keyboard, prior to establishing the data connection to the Relay Center. The Enforcer will capture the entered information and will validate this information against the inmate's call restrictions (including PANs, blocked number lists, time of day restrictions, etc.) before establishing the connection to the Relay Center.

CenturyLink registers the caller ID of each facility with the appropriate Relay Center with instructions to restrict communications to the specific dialed number that is delivered as part of the set-up connection.

As such, CenturyLink can ensure that all call restrictions applicable to that inmate or called number are preserved and enforced for inmates using the deaf relay service, just as they would apply to inmates placing standard voice calls.

Technical Approach

Billing

TDD calls are typically connected as a toll-free call to the state-contracted Relay Center and as such are connected by CenturyLink at no cost to the inmate or the called party. Based on individual state policy, the state-contracted Relay Center may assess a charge to the called party. CenturyLink is also able to bill these calls using NDCS-mandated rates to these Relay Center Numbers. TDD to TDD calls do not involve third parties and are billed like any standard inmate telephone call.

Minicom IV

This basic TTY is easy to use. It has an easy-touch keyboard with a bright, tilted 20-character display for hours of comfortable use. Minicom IV includes a printer port to connect an external printer. Turbo Code lets you enjoy "real-time" conversations with other Turbo Code TTYs. Auto ID lets everyone you call know you are using a TTY. Please note the following specifications:



Physical Dimensions

- Size—10" x 9.5" x 3"
- Weight—3.75 lbs with batteries

Power

- AC adapter—9VDC, 650 mA (barrel is positive)
- AC adapter is UL/CSA listed
- The six AA NiCad rechargeable batteries are user replaceable. They power the unit for 45 to 60 minutes of normal use.

Keyboard

- 50 ergonomic keys in 5 rows
- Control key plus 4 function keys
- Sticky Keys for single-handed typists
- Character set: A-Z, 0-9, Backspace,
- Return/LF, Space, +=-\$'()/:;?.,*# GA, SK.

Display

- Blue/green vacuum-fluorescent
- 20 characters
- 0.25" (6mm) character height

Acoustic Coupler

- Accepts both circular and square telephone handsets

Communication Codes

- Automatic code detection on incoming and outgoing calls (Turbo Code or Baudot)

Baudot Code:

- 45.5 and 50 baud
- Sensitivity = -45 dbm, 67 dBSPL (min)
- Output = -10 dbm

Turbo Code:

- Enhanced communication protocol with interrupt capability.
- 100 baud (average)
- 7 data bits

Approvals

- FCC approved. FCC Registration No. (Part 68): D8KUSA-18408-DT-N

Technical Approach

Video Relay Services

Although our TDD/TTY solution is industry-leading, we are also in the process of developing recorded Video Relay Services (VRS). This eventual VRS solution includes recording both audio and video from these calls as well as the ability to playback and review all calls. CenturyLink would deal directly with each VRS vendor and be the single point of contact for all inmate phone and VRS communications issues.

Currently we are working with Purple Communications along with third party recording partner Televideo Networks at the Idaho Department of Corrections for the implementation of a recorded VRS solution. These are the only partners for which we have a current solution in development.

Our development plan also includes access to the database for searching and paying back VRS recordings from the Purple/Televideo system directly from the Enforcer Inmate Phone System GUI. Because the Enforcer uses an open architecture, we are able to link to a trusted third party site specific to a particular agency – for example we do this today at Kansas DOC for investigating money transfer data.

Of course, CenturyLink recognizes the importance of this emerging technical need and intend to extend our work to other VRS vendors. The primary issue is that in order to qualify for funding, VRS providers are strictly prohibited from recording audio and video; as a result they must work with a third party, in addition to inmate communications providers like CenturyLink, to provide the recording capability.

With the exception of cordless handsets, inmate telephones must be line powered.

 CenturyLink Response: Read, agreed and will comply.

Telephones placed in State facilities must utilize sturdy, high security construction, and have armored handset cords. Contractor shall provide spare telephone sets onsite at each location as indicated in Attachment 1. Contractor should provide as an attachment a photo and specifications of the telephone sets proposed.

 CenturyLink Response: Read, agreed and will comply.

Technical Approach

CenturyLink proposes the Cord Out-the-Top ITC7090SE Stainless Steel with Keypad manufactured by Wintel. Features and specifications are listed below:

- Built-in user controlled volume “LOUD” button for ADA mandated volume control (must be user-controlled volume amplification AND volume must be reset to normal with on-hook to meet ADA requirements).
- 180 Degree rotating swivel elbow with at least 1,000# pull strength.
- Allows for handsets with extremely short cords to be hung from either end.
- Heavy duty 14 gauge brushed stainless steel provides rugged vandal resistant telephone housing designed for inmate use.
- Confidencer technology, built into every dial, filters out background noise at the user’s location, allowing better sound to the called party.
- All-in-one electronic dial features modular incoming line and handset connections for quick maintenance. Carbon (HS) and DuraClear (DURA) Handsets have separate 4-pin connections.
- Heavy chrome metal keypad bezel, buttons, and hook-switch lever withstand abuse and vandalism.
- Armored handset cord is equipped with a steel lanyard (1000# pull strength) and secured with a 14 gauge retainer bracket for maximum vandal resistance.
- Handset has sealed transmitter and receiver caps, suitable for heavy use and abuse locations.
- Pin-in-head security screws minimizing tampering.
- Hearing aid compatible and FCC registered
- US: 1DATE05BTC-254, IC: 3267A-ITC254



If NDCS prefers a different color, size, design, etc., other models are available. Wintel is by far the most deployed inmate telephone in CenturyLink’s network due to their combination of quality and durability.

Technical Approach

This means fewer out of service conditions and less disruption to NDCS operations due to technician repairs. The installation of WinTel inmate telephones also has the added benefit of spare parts inventory throughout our national operations.

13. System Requirements

The Bidder's system must allow for programming of time frames when calls may or may not be placed. These calling windows must be programmable on a site-by-site basis.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer's Phone Scheduler feature lets you pre-set any on/off times for the phones that you choose. The Enforcer can accommodate different schedules for days of the week, dates of the month and year, etc. Hours can be set as follows:

- By phone or group of phones (booking area, living units, infirmary, recreation, etc. may each have unique operating hours)
- For all phones in the facility
- Unique hours for defined holidays
- Unique hours by day of week
- Unique hours for specified called numbers

The Phone Schedule option under Site Administration on the Enforcer's control bar (top of diagram below) allows authorized users to set Schedules for individual phones or groups of phones.

Technical Approach

Weekly Phone Schedule

Groupname	Day	Schedule	Edit		
Default	Mon	7:00-21:45	on all day	off all day	
Default	Tue	0:00-21:45	on all day	off all day	
Default	Wed	7:00-21:45	on all day	off all day	
Default	Thu	7:00-21:45	on all day	off all day	
Default	Fri	7:00-21:45	on all day	off all day	
Default	Sat	7:00-21:45	on all day	off all day	
Default	Sun	7:00-21:45	on all day	off all day	
Default	Hol	7:00-21:45	on all day	off all day	regular service

Phone Schedule- program service times for phones or groups

The Bidder's system must have the ability to block telephone numbers on a global basis. The NDCS maintains a list of telephone numbers that must be blocked from access by the entire system.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer enables authorized users to immediately enter blocked numbers into the system using the user-friendly Administrator interface. Blocks may be added for a specific telephone number or group of numbers. Important Block Features:

- Block groups of numbers such as: 800, 888, 866, 911, 1411, 555-1212, 1010XXX, etc.
- Block individual numbers – **unlimited quantity**
- Blocks from your existing system will be imported during installation process
- Soft Block resulting from multiple refused calls
- REAL-TIME block activation
- Simple workstation block entry
- Blocked number report

Blocks can be added using the Global Number Edit screen shown below:

Technical Approach

Global Number Edit

Number: Speed Dial: Name:

Description:

Call Type: All
Category: undefined
Block: Facility

Passive Acceptance
 Greeting Off
 PAN Override
 Do Not Record
 Privileged
 Free Video
 Free Voicemail
 Block Voicemail

Email Alert(s): Attach
 Page Alert(s):
 Monitor Alert(s):
 Payment Alert(s):
 General Alert:

Dial pattern: Rate File:

Hide Recording Hide CDRs

Max Duration (minutes): Ignore DTMF Digits: 0 Time frame (secs): 0
Default is 15 Ignore Silence Seconds: 0

Notes:

Last Updated: 2014-12-19 13:27 By: hqdata

Global Number Edit- Blocked Number

Standard blocks are established for each system at the time of installation. These include directory assistance, 911, emergency, pay-per-call services, 1010XXX access codes, toll free numbers, and live operators.

In addition, CenturyLink's project team will work with NDCS to populate the blocked number table with facility personnel telephone numbers, and will work with the outgoing vendor to incorporate any telephone numbers which were blocked due to complaints of harassment.

The Enforcer can also block calls from a specific inmate to a particular phone number. To do this, simply add the number to that inmate's PAN (Personal Allowed Number List) and check in the "Block" column as shown below.

Technical Approach

Inmate ID: 5447 TAUREAN DWAYNE FLOWERS
[Save Changes](#) [Back to Inmate Editor](#) [PAN History](#)

(3 digit speed dials must start with a '1' for PANS)

Active Non-Blocked PANS: 0 Active Blocked PANS: 4 Total Active PANS: 4 Total Inactive PANS: 0

PAN Num	Active	Phone Number	Speed Dial	First Name	Last Name	Relationship	Description	Block	In Use	Call Type	Approved
		Address 1		Address 2	City	State	Zip		Alt Phone		
1	<input checked="" type="checkbox"/>	1-269-425-6771	dd	stacey	barker	protected		Facility	1		01/11/2015
											jworden
2	<input checked="" type="checkbox"/>	1-269-589-2252	dd	stacey	barker	protected		Facility	2		01/23/2015
											jworden
3	<input checked="" type="checkbox"/>	1-269-753-8371	dd	dontey	west	protected		Facility	1		01/23/2015
											jworden
4	<input checked="" type="checkbox"/>	1-269-993-2743	dd					Facility	2		02/22/2015
											cp

Edit PAN- Add Inmate-Specific Call Block

For the purpose of billing, and decrementing the inmate account, call timers may not begin until the inmate has an actual talk path established with the called party, and must end when one or both of the parties goes back on-hook.

 CenturyLink Response: Read, agreed and will comply.

Upon detecting answer, the system will only acknowledge positive acceptance by the called party, and ensure that billing does not occur until after this positive acceptance. If a call is not completed due to a 'non-conforming' event, the Enforcer informs the inmate as to the reason for call termination.

In addition, the Enforcer's 4-channel audio isolation technology ensures that when either the called party or inmate is hearing announcements in their respective audio streams that the call timer is turned off. This ensures end-users are not charged for listening to system announcements.

The Bidder's system must be capable of storing all call detail records. System must be capable of producing real-time custom calling reports for investigative or auditing purposes. The following data elements must be available to query; PIN, called number, date, originating telephone set, time, originating number, terminating number, name and address, call duration, and call types. NDCS/YRTC prefers these data elements come from pre-paid calling, debit calling, and collect calling.

Technical Approach

 CenturyLink Response: Read, agreed and will comply.

The Enforcer system stores **all call detail records and recordings online for the life of the contract**. Data are never archived on separate storage media; this ensures all reporting and search features are available for immediate use at any time.

The Enforcer's full featured reporting capabilities allow facility users to generate reports immediately and in real time. The Enforcer's browser-based application allows searching and reporting of all inmate calls to any authorized user through a simple, point-and-click GUI (Graphical User Interface).



Each call attempt results in the creation of a call detail record. The record includes extensive information about the call that can be queried, including, but not limited to, the following:

- Date of call
- Start Time of Call
- End Time of Call
- Call Duration
- Called Number (ANI)
- Station & Trunk ID
- PIN
- Disposition of Call (accepted, denied, incomplete etc.)
- Call Termination Reason
- Call Charges (if accepted)
- Recording indicator
- Three-way call detect indicator

Extensive call detail reports are available to meet the requirements stated. The following screen details the customization options available for call detail reports.

Technical Approach



CenturyLink®

INMATE PHONE SYSTEM

Powered by THE ENFORCER®

ICS Inmate Demo
User: jsargent (V 3895-f)
Copyright 2005-2016

Inmate	Global Numbers	Accounts	Monitor	Call Info	Reports	Site Admin	Tools	Logout
--------	----------------	----------	---------	-----------	---------	------------	-------	--------

Call Details

Inmate ID, Last Name, CSN or Phone Number

05/04/2016 05/11/2016

Quick Searches Show All

Call Detail Records – Select criteria for custom query

Numerous additional fields are stored within each call record and can be used to further customize reports and recording searches. After you click More Search Criteria, a dialog box displays that lets you specify several additional search parameters related to the origin from which the calls were made, as well as specific information about the calls. These parameters are grouped into categories as shown in the dialog box below.

More Search Criteria ✕

General

Completions	CSN Range	DNR
Duration	End Type	Privileged
Show Alerts only	Show DTMF only	

Call Origin

Site	Station Group	Station ID
Station Name	Trunk ID	

Validation

Imposter	Validation
----------	------------

Billing

Billing ID	Call Type	Card Number
Cost Range	LIDB Code	Tariff Band

Called Party

Location	Response Digits	Show 3-Way only
State	Supervision Type	

Search Criteria Categories

Technical Approach

The Search Categories have additional search criteria parameters that can be selected. In the example below, the search categories selected from above are:

- Completions
- End Type
- Call Type
- Privileged

Within those main-level search categories you have more detailed selection options as shown in the print screen below showing the check off selection boxes for End Type and Call Type. This is just one example of the numerous real-time custom calling report options available from the Call Detail screen using the More Search Criteria function.

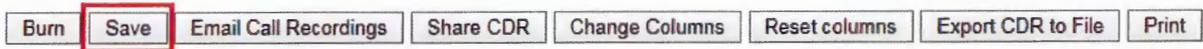
The screenshot displays the 'Call Details' application interface. At the top, there is a search bar with the placeholder text 'Inmate ID, Last Name, CSN or Phone Number' and buttons for 'Search' and 'Clear'. Below the search bar are date filters for '05/04/2016' and '05/11/2016', along with a 'More Search Criteria' button. A 'Quick Searches' dropdown menu is also present, with buttons for 'Load', 'Save', 'Delete', and 'Show All'. The main search area contains four filter categories: 'Completions' (set to 'All'), 'End Type', 'Call Type', and 'Privileged' (set to 'All'). Below these filters is a row of action buttons: 'Burn', 'Save', 'Email Call Recordings', 'Share CDR', 'Change Columns', 'Reset columns', 'Export CDR to File', and 'Print'. Two windows are open for selection: 'End Type' and 'Call Type'. The 'End Type' window lists 30 criteria with checkboxes, including 'Unknown', 'Initial', 'Max ring time', 'Time limit', 'Incoming call', 'No message', 'Called party reject', 'Extra digits', 'User Command', 'Illegal digit', 'Normal', 'Lost server', 'Refused', 'Loop-current drop', 'Abandoned', 'Attempted self accept', 'Excessive rotary pulses', 'Loop-current idle', 'Forced', 'Threeway event detected', 'All Trunks Busy', 'No Trunks Available', 'Monitor Kill', 'Blocked', 'No Call', 'CP to Cust Service', 'Refused PP admin', 'Digit Timeout', 'Shutoff w/ warning', 'Voice ID failure', 'Max Accept Time', 'Admin Drop', 'Station Hangup', 'Long #', 'Trunk Failed', 'Manual cutoff', 'Preanswer Hangup', 'Call Abandoned', 'Call Overrun', 'Inmate Block', 'Telco Error', 'Call Disconnected', 'VoicePrint Error', 'No Trunk Configuration', 'Internal Error', 'Dangling', 'Inmate Hangup', 'Called Party Hangup', 'T1 Error Inbound', and 'T1 Error Outbound'. The 'Call Type' window lists 30 criteria with checkboxes, including 'Not Set', 'Debit', 'Debit card', 'Collect', 'Prepaid collect', 'Free', 'Admin Setup', 'Officer', 'Incoming', 'Admin Zero Bal', 'Admin Low Bal', 'Exceeds Credit Limit', 'Special Free', 'Enrollment', 'Commissary', 'Visitation', 'Info Request Msg', 'Balance Check', 'TDD Operator', 'Phone Number Registration', 'Complaint', 'Informant', 'Collect Calls are Blocked', 'Incoming Message', 'Voice Message', 'Text Message', 'Medical Menu', 'Bypass call', 'Phone Debit Purchase', 'Free voicemail', 'The Informer calls', 'Listener', and 'PREA'. Both windows have a 'Done' button at the bottom.

Call Detail Records – Select More Search Criteria Example

Technical Approach

Saving Search Criteria for a Future Search

After you have set up a specific set of search criteria for searching CDRs, you can save the criteria for a future search by clicking the **Save** button.



You can then select the same search criteria for a future call search without having to re- enter a date range *or* any other parameters.

After you click **Save**, the ENFORCER displays a dialog box where you can name the search, indicate whether you want other users to be able to use it, and save the search.



After you click **Save**, the Enforcer adds the saved search to the pull-down list of saved searches. The search name is preceded by the Enforcer user ID of the person who created it.

Technical Approach

Select All Displayed CDRs

[Add Call Note](#) [View Call Notes](#) [Play Call Recording](#) [View Inmate Profile](#) [Sort Column](#)

Showing 1 to 100 of 7,369 entries

| <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> |
| <input type="checkbox"/> |
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| <input type="checkbox"/> |
| <input type="checkbox"/> |
| <input type="checkbox"/> |

[Select Calls for Save, Copy, or Share](#) [View List of Users Who Have Listened to Call](#) [Look Up Called Party Name/Address](#) [View Call Log](#)

Call Info - Search Calls - Standard Results screen

The Enforcer system keeps a full data dictionary on each call attempt. If the standard Call Record screen doesn't show the particular information you're looking for you can simply click on the "Change Columns" button to pick the data types you would like to see on all your Call Search results in the future:

Technical Approach

Call Details

11/26/2014 12/02/2014 More Search Criteria

Quick Searches Load Save Delete Show All

Buttons: **Change Columns** (highlighted), Email Call Recordings, Share CDR

Play	Notes	Start Time	CSN	Inmate ID	Last	Alert	Card #	Inmate Seq	Phone Number	Sup Type
<input type="checkbox"/>		11/26/2014 08:22:12	52512250	2-237	MCML	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>		11/26/2014 08:33:57	52512271	21227	ROCH HUER	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>		11/26/2014 08:35:54	52512276	2-245	MAN5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>		11/26/2014 08:47:06	52512222	12445	LUNT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>		11/26/2014 08:47:29	52512222	5222	KIRKI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>		11/26/2014 08:54:13	52512251	2-242	MCKE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>		11/26/2014 08:57:44	52512242	5-52	FRED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>		11/26/2014 09:01:14	52512231	-11	ROBE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>		11/26/2014 09:14:46	52512252	21-2	MOR	1-26	264	Debit	IntraCell	ADSEG LL 161 3:00 \$2.93 OK: call allowed Normal 0
<input type="checkbox"/>		11/26/2014 09:16:19	52512251	2-242	MCH	1-31	211	Debit	InterLata IntraState	G LL 903 15:00 \$6.13 OK: call allowed Time limit 0
<input type="checkbox"/>		11/26/2014 09:18:45	52512272	21-2	MOR	1-21	245	Debit	InterLata IntraState	ADSEG LL 903 15:00 \$3.89 OK: call allowed Time limit 0
<input type="checkbox"/>		11/26/2014 09:22:13	52512255	12221	LJU	1-51	722	Debit	IntraLata IntraState	B LL 633 11:00 \$5.06 OK: call allowed Normal 0
<input type="checkbox"/>		11/26/2014 09:28:23	52512212	1272-	BRC	1-26	212	Prepaid	IntraLata IntraState	G MAX 190 4:00 \$3.00 OK: call allowed Normal 0
<input type="checkbox"/>		11/26/2014 09:29:14	52512230	2-232	MCH	1-31	252	Debit	InterLata IntraState	A LL 324 6:00 \$3.73 OK: call allowed Normal 0

Call Search - Customize Search Results

Selected calls may be quickly and easily exported to CDR media in either MP3 or audio format and emailed, saved to CD, USB, etc. Emailed call recordings are forwarded as an email attachment, and the file size for a compressed 15-minute recording is approximately 2 MB.

Authorized users can log in to the Enforcer to email a call recording directly from the Call Detail results screen. After performing a call detail query, the user simply selects the recordings they wish to email and clicks the **Email call recordings** button to attach the recording(s) to an email message.

12/31/2014 01/01/2015 More Search Criteria

Quick Searches Load Save Delete Show All

Buttons: **Email Call Recordings** (highlighted), Share CDR, Change Columns, Reset columns, Export CDR to File, Print

Showing 1 to 132 of 132 entries

Play	Notes	Start Time	CSN	Inmate ID	Last Name	Phone Number	Call Type	Tariff Band	Station	Talk Secs
<input checked="" type="checkbox"/>		01/01/2015 04:30:07	52751112	325-7	PIPER	1-2 162	Collect	IntraLata IntraState	INTAKE 1 R	210
<input checked="" type="checkbox"/>		01/01/2015 08:10:24	52751122	257-2	LEFEVRE	1-2 123	Debit	Local	C LL	903
<input checked="" type="checkbox"/>		01/01/2015 08:31:21	52751217	257-6	LEFEVRE	1-2 111	Debit	IntraLata IntraState	C LL	323
<input checked="" type="checkbox"/>		01/01/2015 08:37:56	52751222	257-2	LEFEVRE	1-2 123	Debit	Local	C LL	903
<input type="checkbox"/>		01/01/2015 08:46:00	52751230	337-6	BALDRIDGE	1-5 36	Prepaid	InterLata IntraState	E LL	889

Technical Approach

Call Detail Results - Email Call Recordings

A pop-up window appears to enter the email address, subject, and body text of the email message:



Email Recordings Pop-Up Window

A maximum size can be set in the Max Size field. The file size for a compressed 15-minute recording is approximately 2 MB. Once the user clicks Send, each call recording will be attached to the email message as a separate mp3.

Standard Reports

The following is a list of the standard reports available in the Enforcer. All reports can be generated online for quick review or exported to PDF or CSV format for further review and data filtering.

Report Name	Description
Admin Setup Only	<ul style="list-style-type: none">• Listing by inmate name of all "admin setup only" (60-second free) calls made during a user-specified date range. Provides inmate name, ID, number, start time, etc.• <i>Benefit: Tracking fraud attempts and free call "churning"</i>
Attorney Registration Status	<ul style="list-style-type: none">• Counts for attorney phone numbers in Global Number list.• Provides quantity, percent of total, and total quantity of attorney phone numbers in the Enforcer by status (approved, rejected, pending)• <i>Benefit: Quick response to attorney requests + tracking attorney registration process</i>

Technical Approach

Report Name	Description
Attorney Registration Rejects	<ul style="list-style-type: none"> List of all inmates for which a requested attorney has been denied. <i>Benefit: Tracking inmates attempting to fraudulently set up non-recorded calls.</i>
Call Detail	<ul style="list-style-type: none"> Completely configurable database search engine (by payment method, minimum length of call, site location, time period, call termination type, etc.) Provides detailed call information (billed start time, dialed number, site called from, recording status, call cost, detected 3-way attempt, alerted calls, etc.) Individual user queries can be saved for future use. <i>Benefit: Configurable search capability for site operations, investigative, fiscal, or any other NDCS personnel.</i>
Call Record Statistics	<ul style="list-style-type: none"> Summary of calls by call type, completion code, and call count. The report can be requested by site name or for all sites for a user-specified date range. <i>Benefit: Provides summary of calling trends by site</i>
Frequently Used PANs Summary	<ul style="list-style-type: none"> Lists all allowed numbers by user-specified number of inmates using number. Lists called number, called party, number of instances (calls), and the number of sites. <i>Benefit: Provides quick report of potential suspicious numbers used, for example, for coordinating gang activity.</i>
Frequently Used PANs Detail	<ul style="list-style-type: none"> Provides additional detail regarding inmate names and PINs using number. <i>Benefit: Additional detail for investigations</i>
Global Number	<ul style="list-style-type: none"> Detailed report for all parameters that are found in the Global Number Table, e.g. all blocked numbers, all free numbers, all do not record (attorney) numbers, all notes, random note text searches, and alerts. <i>Benefit: Summary reports for special number administration – attorneys, Informant Lines, PREA Hotline, Tip Lines, etc.</i>
Global Number History	<ul style="list-style-type: none"> Historical records of all changes made to ANI phone number to include an audit trail for users who made the changes <i>Benefit: Summary audit records for NDCS operations management</i>
Inmate Alerts	<ul style="list-style-type: none"> Lists all alerts that have been activated for each inmate. The report lists site name, inmate ID, inmate name, phone number, name associated with the called number, and phone number/email address for each alert type that has been set up. <i>Benefit: Summary audit records for NDCS investigations management</i>

Technical Approach

Report Name	Description
Inmate PANs	<ul style="list-style-type: none"> • PAN (personal allowed number) list for the inmate. The report also includes any restrictions associated with a PAN (blocks, free call, do not record, passive mode). • <i>Benefit: Summary record for number administrators and NDCS site staff responding to inmate inquiries</i>
Inmate Status	<ul style="list-style-type: none"> • Listing of inmate IDs, passcodes, inmate account status (active/inactive), site and location, the current number of PANs being used and allowed, and any associated notes. Can be generated for a specific inmate or all inmates, and can be sorted by inmate active/inactive status. • <i>Benefit: Assists site operations personnel in inmate management and inquiries</i>
Number Alerts	<ul style="list-style-type: none"> • Lists all alerts that have been activated for a called phone number: site name, phone number, name associated with the called number, and phone number/email address for each alert type that has been set up. • <i>Benefit: Coordination between investigations staff</i>
PIN Fraud	<ul style="list-style-type: none"> • Listing of each call on which an inmate attempted to use an incorrect PIN. For each call, the report lists the site, CSN, station ID, station name, inmate name, inmate ID, passcode, the PIN number attempted in the CDR, the actual PIN, and extra digits. • <i>Benefit: Summary information for investigations and site operations staff</i>
Prepaid Balance Summary	<ul style="list-style-type: none"> • Provides account (phone numbers) for all called numbers that have an established prepaid Account. The report includes the project number, billing ID, account/phone number, balance, and current status of active/non-active. • <i>Benefit: Summary information for responding to friends and family inquiries, if necessary</i>
Recording Access	<ul style="list-style-type: none"> • Listing of all call records that have been listened to during a user-specified date range. The report lists the user ID of the person who listened to the call, the CSN, inmate ID and name of the inmate who made the call, called number, and date the user listened to the call record. • <i>Benefit: Important audit tool for NDCS system administration</i>

Technical Approach

Report Name	Description
Revenue	<ul style="list-style-type: none"> • Call counts, durations, billed minutes, revenue and revenue percentage for each call type, grouped by account (payment) type. • Can be requested by specific site or for all sites for any previous calendar month either in PDF, Excel, or CSV format • User-defined date ranges. • Reports can be generated by facility, including number of call attempts vs. completions, total minutes, and revenue breakout. • <i>Benefit: "At your fingertips" summary tool for fiscal staff</i>
Station Activity	<ul style="list-style-type: none"> • Summary of all calls, by site and by station, made for a user-specified date range. Includes site name, station (phone) port, station (phone) name, attempted calls, accepted calls, etc. • <i>Benefit: Site operations - Quick identification of phones out of service. Investigations – identifying phones being dominated by an inmate or group of inmates for some reason.</i>
Station Group Privileges	<ul style="list-style-type: none"> • Listing of station groups (phones) that are assigned to specific inmates (i.e., phones from which inmates are allowed to make calls), if used by NDCS. • <i>Benefit: Summary report for site operations personnel</i>
Inmate Suspensions	<ul style="list-style-type: none"> • Listing of all inmate suspensions. Lists site name, inmate ID, inmate name (first, middle, last), whether the suspension is full or partial, start/end date/time, and user notes (usually a description of the reason for suspension). • <i>Benefit: Summary report for disciplinary</i>
Trunk Usage	<ul style="list-style-type: none"> • Summary of all calls that have been dialed and connected to the network by trunk. The summary is defined by site name, trunk, out-dialed Calls, accepted calls, and the percentage of accepted calls. • <i>Benefit: Primarily used by CenturyLink, and sometimes site, network personnel</i>
Volume Users	<ul style="list-style-type: none"> • Summary of high telephone volume usage by inmates. Can be generated by site or threshold type (quantity of calls or total minutes). Results are listed by site name, inmate ID, inmate name (last, first, middle), number of calls, and minutes count (total minutes). • <i>Benefit: Filters suspicious calling activity</i>

Technical Approach

Data Detective Visual Link Analysis & Call Pattern Analysis

Visual Link Analysis

Data Detective Link Analysis provides powerful data mining tools for investigators. Using Link Analysis, NDCS staff will be able to search varying degrees of separation in order to establish links from inmate to inmate or end user to end user. Links are established when an end user (outside the facility) interacts with one or more inmates through the Enforcer system, or when multiple end users interact with the same inmate(s). These linked "interactions" can include:

- Inmate phone calls
- Deposit services
- E-messaging services

Key features of Link Analysis include:

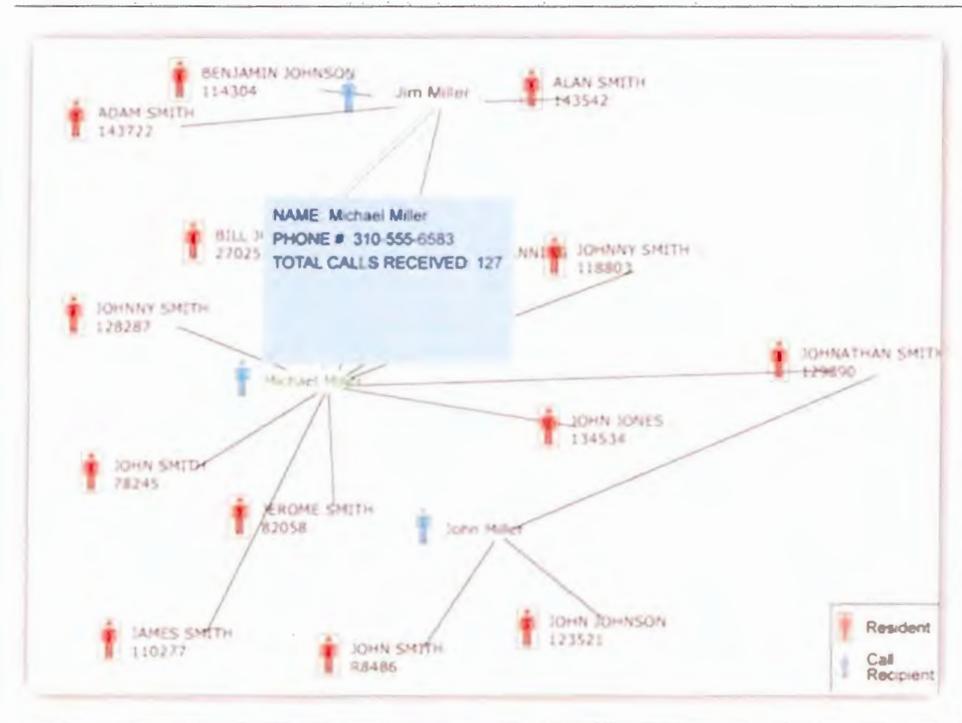
- Facility staff can explore important data using a dynamic visual map.
- The unique design of the visual map allows investigators to quickly find connections and patterns.
- Link Analysis is a web-based program. Authorized facility staff can use it from their own desktop or laptop computer, in addition to using onsite workstations.

This tool will automatically be applied to all calling and payment information. The NDCS will have access to Link Analysis reports in real time 24 hours a day, 7 days a week. These reports can be searched by date range and include all calling and transaction information, including the called party (or depositor's) address.

Below is a sample Link Analysis visual map. In this sample, an end user "Michael Miller" has received phone calls from multiple inmates. The visual map displays Michael Miller's name, phone number, and total number of calls received, as well as all the inmates who called him.

The visual map also shows other call recipients who interacted with one or more of the same inmates as Michael Miller. Again, all reports are available 24/7, and reports can also be exported to Excel or downloaded as a PDF.

Technical Approach



Link Analysis Screen

Call Pattern Analysis

The Enforcer system will also be equipped with a robust analytical system that enables correctional staff to quickly and easily identify calls of interest that are most likely to provide actionable intelligence among the thousands of inmate conversations recorded each month. Call Pattern Analysis works by analyzing the associations between inmates, called parties, and even other inmates and – most importantly – by identifying changes in these associations or calling patterns that could indicate illicit activity.

Calling patterns are naturally established as the result of inmate and called party schedules and preferences. For instance, an inmate is usually familiar with each called party's work schedule and will avoid calling during certain times (such as weekdays, for example) when that person is usually at work. To increase the likelihood of having their call answered, the inmate will naturally make a habit of calling in the evening or over the weekend. While legitimate changes in pattern do sometimes occur – such as when a change is made in the called party's work schedule – disruptions to normal patterns can also be an indicator that illicit activity is occurring.

Technical Approach

For example, if a pattern of regular communication exists between a particular inmate and a called party, and then communication suddenly ceases altogether, the absence of calling could indicate that the inmate has obtained the use of an illegal cell phone, on which he or she is making these phone calls.

If calling to this telephone number suddenly resumes on the regular schedule, but it is a different inmate who is placing the calls, this could indicate that the called party is merely facilitating communications to the outside world and possibly assisting in the completion of illegal communications.

Call Pattern Analysis identifies relationships and calling patterns among inmates, called parties, and even other inmates. Call Pattern Analysis then detects subtle and dramatic changes in these relationships and calling patterns to identify calls, inmates, and called numbers as suspicious.

Call Pattern Analysis will increase the productivity and efficiency of your investigative staff by automatically identifying calls of interest that are most likely to provide actionable intelligence.

Detailed queries can be structured – based upon timeframe, called number and/or inmate PIN – to help investigators pinpoint calls of interest, such as:

- Phone numbers called by multiple inmates
- Phone numbers that appear on multiple inmates' PAN lists
- Phone numbers that appear on an inmate's PAN list but are never called
- Frequently called numbers
- Sudden absence of an inmate's regular calling
- Sudden absence of calling to a particular number
- Changes in regular calling times/days
- Increase in inmate calling over a finite period
- Decrease in inmate calling over a finite period
- Increase in calling to a particular BTN over a finite period
- Decrease in calling to a particular BTN over a finite period
- Transfer of communication patterns from one inmate PIN to another inmate PIN

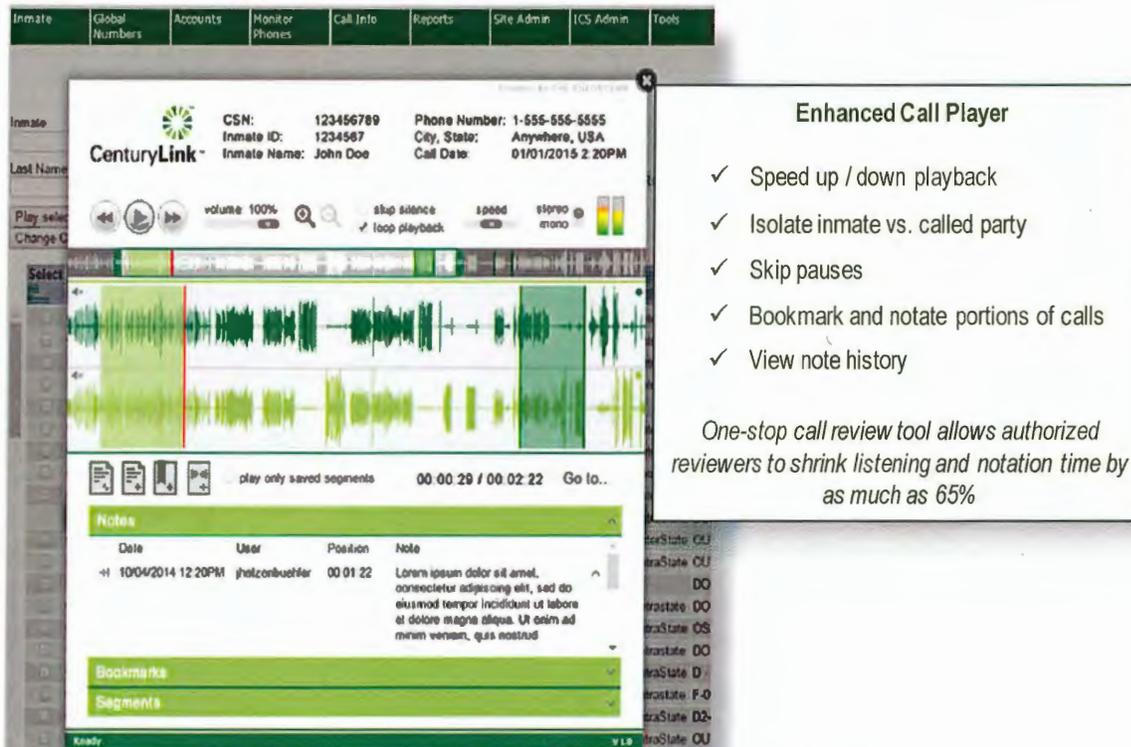
Technical Approach

Investigators can use this information to isolate call recordings of interest. Or, they can use the Enforcer's custom reporting tools to create detailed reports containing particular data of interest, for example:

- A list of all numbers called by more than one inmate within a specified timeframe;
- A list of all calls attempted by a particular inmate during a designated timeframe
- A list of all telephone stations used to dial a particular telephone number.

The system's flexible reporting application allows investigators to create custom queries based upon any combination of the data that is collected for each and every phone call, and to save these custom queries locally or globally in order to quickly run the reports again over future timeframes.

Listening productivity is also enhanced by the Enforcer's Enhanced Call Player, which allows users to isolate portions of the call, skip, or speed up playback (note human speech can be sped up approximately 130% without loss of understanding). In this way a 15 minute phone call can be reviewed and notated in as little as 3 or 4 minutes.



The screenshot displays the 'Enhanced Call Player' interface. At the top, there is a navigation menu with options: Inmate, Global Numbers, Accounts, Monitor Phones, Call Info, Reports, Site Admin, ICS Admin, and Tools. The main content area shows call details for a CenturyLink call. The details include: CSN: 123456789, Inmate ID: 1234567, Inmate Name: John Doe, Phone Number: 1-555-555-5555, City, State: Anywhere, USA, and Call Date: 01/01/2015 2:20PM. Below the details are playback controls: volume (100%), skip silence, loop playback, speed, and stereo/mono. A waveform visualization of the call is shown below the controls. At the bottom, there is a 'Notes' section with a table of notes, a 'Bookmarks' section, and a 'Segments' section. A call duration indicator shows '00:00:29 / 00:02:22'. A text box on the right side of the screenshot lists the features of the Enhanced Call Player.

Date	User	Position	Note
10/04/2014 12:20PM	phzcnbuettler	00 01 22	Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud

Enhanced Call Player

- ✓ Speed up / down playback
- ✓ Isolate inmate vs. called party
- ✓ Skip pauses
- ✓ Bookmark and notate portions of calls
- ✓ View note history

One-stop call review tool allows authorized reviewers to shrink listening and notation time by as much as 65%

Enhanced Call Player

Technical Approach

The Bidder's system must restrict incoming calls, with the exception of emergency situation(s) as defined by NDCS. This feature must be available on all inmate telephone sets.

 CenturyLink Response: Read, agreed and will comply.

All inmate calls are processed by the Enforcer centralized system and terminated over outbound-dial only trunks. Additionally, the on-premise Adtran IP Gateways that provide talk battery to the inmate telephones are incapable of processing an inbound call – as a result no inmate telephone is capable of receiving an incoming call.

The Bidder's system must be capable of processing calls and making announcements in both English and Spanish. The ability to add additional languages must be available. System announcement capabilities must be programmable, and the NDCS will approve all automated language prior to being put into production.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer system is delivered with pre-recorded instructional voice prompts in both English and Spanish. Language is selected by the inmate as part of the call setup process. *“For English, press or say 1; for Spanish, press or say 2.”*

Additional languages can be added at the facility's request at no charge. Languages currently deployed at some of our client facilities include English, Spanish, French, Russian, and Hmong. The called party can choose to assign a specific language when they set up a prepaid account.

The Bidder's system must be capable of playing periodic voice overlays announcing that the current call is being placed from the (name, city, and state of the corrections facility). These announcements must be played at random intervals, no more than twice per fifteen (15) min call, and must be audible to the called party. Inmate voice must be muted during the playing of these announcements.

 CenturyLink Response: Read, agreed and will comply.

Technical Approach

The Enforcer system can play randomly interjected voice overlays as requested. These voice prompts can be customized to meet this requirement. The inmate voice will be muted during playing of voice overlay announcements. In addition, the call timer is turned off whenever a voice prompt is played to ensure proper billing to end-users.

The Bidder system must allow for calling restrictions or suspensions at the individual account level. Individual inmate accounts must reside in the database for each facility Statewide. This will permit an inmate to be transferred from one facility to another without the need for establishing a new account.

 CenturyLink Response: Read, agreed and will comply.

The centralized system ensures that any suspensions or other restrictions placed at an inmate/PIN level follow that inmate no matter the facility in which s/he is housed.

Inmate-Specific Restrictions

Inmates can be given customized calling privileges and restrictions according to a variety of criteria based on their inmate PIN and will reside in the centralized Enforcer system database. Inmates calling privileges can be customized in the following ways:

- Restricting calling from individual phones or groups of phones
- Restricting the number of calls an inmate can place in a specific timeframe (days, weeks, months)
- Restricting calling to a specific set of phone numbers (i.e., PAN lists)
- Restricting the number of free calls an inmate can make
- And more!

As shown in the screen below, more specific restrictions can be set from the Inmate Account Profile. Once the Status of the inmate account is changed to "Restricted" in the Inmate Account Profile, authorized users may customize calling restrictions; note the "Restrict___ Calls Every___ (Day/Week/Month)," and "Free Calls Allowed" fields below.

Technical Approach

Inmate Account Profile

To block calls only from a specific inmate to a particular number add the number to that inmate's PAN (Personal Allowed Number List) and select the check box in the "Block" column as shown below.

PANs (Personal Allowed/Blocked Numbers)

Inmate ID: 870414 GREGORY SMITH

Save Changes

PAN History

(3 digit speed dial must start with a '1' for PANs)

PAN Num	Phone Number	Speed Dial	Name	Relationship	Description	Block	In use	Call Type	Date Updated	Updated By	Detail (+) / Delete (-)
1	1-312-301-9014		GATORS DEBRA	FRIEND	CHICAGO IL	<input type="checkbox"/>	1	AI	04/20/2010	enf	+ -
2	1-440-787-0357		SMITH TYRONE	BROTHER		<input type="checkbox"/>	1	AI	04/20/2010	enf	+ -
3	1-773-261-1704		SMITH OC	UNCLE	CHICAGO IL	<input checked="" type="checkbox"/>	1	AI	04/20/2010	enf	+ -
4	1-773-265-1315		HALL TIMKO	WIFE		<input type="checkbox"/>	1	AI	04/20/2010	enf	+ -
5	1-773-276-5025		HARMON LANNETTE	SPOUSE	CHICAGO IL	<input type="checkbox"/>	3	AI	04/20/2010	enf	+ -

Edit PAN - Add Inmate-Specific Call Block

Suspend Call Privileges

The Enforcer supports the suspension of inmate calling privileges by PIN. Authorized personnel may enter a timeframe (i.e. 24 hours) or a specific date/time when the suspension is to end. At that point, the suspended inmate may only call legal counsel until the suspension period ends. When the suspension is over, calling privileges are automatically restored by the system at the time designated by the authorized user. Inmate suspensions are defined in the Inmate Profile screen. At the bottom of this screen is the **Inmate Suspension** section highlighted by a red box, as shown in the following screen:

Technical Approach

Inmate ID:

Status: Location:

Last Name: First Name: Middle Name:

ALERTS

Email Address(es):

Pager Number(s):

Monitor Number(s):

Payment Email(s):

General CVV Failures Only

Max PANs Allowed: Default: 20 PANs enabled

Free Calls: Allowed Remaining: Disabled Last Reset:

Voice Id: Status: Enrolled

Last Calls: Attempt:11/26/2012 17:29:16 Success:11/26/2012 17:29:16 Reject:11/17/2012 15:50:49 Fail:11/26/2012 11:46:49

Click here to skip down to: [Notes](#) [Suspensions](#) [Station Groups](#) [PANs](#)
Other helpful links: (no cards) [Show Debit Acct](#) [Show Call Records](#) [Show](#)

Inmate Notes

Inmate Suspension

No current suspension. Previous suspensions: 0

Inmate Profile – Inmate Suspension

By selecting the **Suspensions** button, users will be brought to the following screen which will enable them to complete suspending call privileges.

Suspensions
Inmate ID: 3278378 ICS TEST

Start **End or Duration**

Date: End:

Duration:

Full (no calls)

Standard (Allow calls to Global Numbers with 'privileged' checked)

Note/comment:

(current and future suspensions are red, historical suspensions are white)

user	date created	start date/time	end date/time	duration	type	Disabled	notes
theam	04/27/2010 17:26	04/28/2010 17:24	04/29/2010 12:00	18 hours 35 minutes	Standard	<input type="button" value="Disable"/>	test

Suspension of Calling Privileges

Technical Approach

There are two categories of Suspensions:

- **'Full'** means the inmate will not be allowed to place any calls, including calls to attorneys or free numbers.
- **'Standard'** is the default setting and allows the inmate to place calls only to attorneys or numbers that are identified as privileged numbers. Once the desired type of suspension has been selected, users must define the length of time that this suspension should take effect.

Select the appropriate **Start Date** for the suspension (either immediately, or in the future), and then select either the **End Date** or the **Duration** (in hours, days, weeks, or months). Lastly, click the Notes/Comments tab to add any further required information. Once all of this has been completed, select the **Create** button. This will automatically make the suspension active. Authorized personnel may disable a suspension manually at any time.

Calling and time restrictions must be established at the facility level, and will vary from facility to facility depending on needs. The contractor must provide a system that allows designating inmates to place calls to a specified number and duration, above and beyond the standard duration of time.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer is configured with a master call duration setting, which can be programmed with each facility's maximum duration time. In addition, the system rate files include call duration override settings for situations that require duration changes for local calls or specific destination numbers.

Technical Approach

Number: Speed Dial: Name:
Description:
Call Type: All
Category: undefined
Block:
 Passive Acceptance
 Greeting Off
 PAN Override
 Do Not Record
 Privileged
 Free Video
 Free Voicemail
 Block Voicemail
Max Duration (minutes): Default is 15
 Email Alert(s): Attach
 Page Alert(s):
 Monitor Alert(s):
 Payment Alert(s):
 General Alert:
Dial pattern: Rate File:
 Ignore DTMF Digits: Time frame (secs):
 Ignore Silence Seconds:
Notes:
Delete Cancel Changes Save Changes
Last Updated: 2014-12-19 13:27 By: hqdata

Global Number Edit- Override Global Duration Limit for Specific Number

The proposed system including monitoring and recording equipment must be expandable with software upgrades as they become available and are approved by the State. These upgrades must be performed at no cost to the State, at a mutually agreeable timeframe.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer has unlimited expansion capabilities and will be able to accommodate any new construction or future growth of your facilities, at no cost the NDCS. CenturyLink can add storage and phones at any time without affecting the operations of the existing system.

Free, regular software updates are provided at no cost throughout the life of the contract. Whenever an upgrade and/or enhancements to the Enforcer system finishes testing and is ready for wide release, NDCS will be notified of the new release updates and provided documentation of the features and functions of the new software.

Technical Approach

New software releases and enhancements are distributed through an IP connection, with no need for any onsite disruption. Enhancements and upgrades to the Enforcer are predominantly driven by market demand and specific client requests. Typically, large upgrades are released quarterly.

Information regarding our Software Development Methodology is provided later in this document in response to Section 3.b Proposed Development Approach.

The Bidder system must allow the person accepting a collect call to inquire about the charge for a call prior to accepting it. Explain how the bidder's proposed system meets this requirement.

 CenturyLink Response: Read, agreed and will comply.

On every call, the Enforcer announces the funding mode of the call to the call recipient. For example, for a collect call, the automated operator prompt will say "Hello, you have a collect call from (inmate's name), an inmate at (facility name)." For a Debit call (paid for by the inmate), the automated prompt will say, "Hello, you have a call at no expense to you from (inmate's name), an inmate at (facility name)."

If the call is a collect or prepaid collect call (paid for by the call recipient), the automated prompt offers the call recipient the opportunity to hear the call rate on every call: **"To hear the charges for this call, press 2."**

The script that the called party hears is:

- "Hello. You have a (type of call) from (inmate's name), an inmate at (facility name)"
- "Your account balance is (dollars and cents of the account balance)." (prepaid call only)
- "To hear the charges for this call, press 2" (prepaid and collect only)
- "To accept this call press 5"
- "To refuse this call hang up now"
- "To block this call and all future calls from this facility, press 9"
- "This call will be recorded and is subject to monitoring at any time."

If the prepaid account balance is insufficient to pay for the first minute of the call, the call recipient will hear the following message:

Technical Approach

"Your account balance is (dollars and cents remaining in their prepaid collect account). This balance is not enough to allow this call to be completed .Please contact Inmate Calling Solutions at 888-506-8407. Please press 0 to be transferred to Inmate Calling Solutions at 888-506-8407."

All data for each NDCS facility to include call detail records, call recordings, and platform operating system must be backed up daily. Backups whether on tape or hard drive media must be maintained in such a manner that they can be used to restore 100% operation to a site regardless of outage cause within 24 hours. Outages that are a result of corrupt or missing data must not last more than 24 hours. Processes for system backup, redundancy, and recovery must be outlined in the bidder's response.

 CenturyLink Response: Read, agreed and will comply.

The Enforcer system offers fully integrated digital recording capability. **Call recordings are digitally stored on redundant storage arrays and will be available to NDCS for immediate access (online, not archived) throughout the contract.** We also offer to provide a leave-behind storage array to store your call data offline indefinitely after contract termination or provide continued online access for a mutually agreed upon timeframe.

Most important, storage arrays have built-in software and hardware redundancy within each data center AND are geographically redundant across multiple data centers. The same is true for call control functionality – so, for example, as a result a catastrophic event at one site, CenturyLink would still be able to provide both access to calling data and inmate calling function.

The Enforcer enables immediate, online retrieval of any recording at any time with no change of storage media, and utilizes a fault tolerant call storage server, built-in arrays of mirrored hard disks for redundant long-term recording storage.

This eliminates the hassles of loading and unloading tapes or optical disks, because all recordings are stored online for the full contract term. Storing your call recordings – as well as the call data – online for the life of the contract ensures that you will always have quick access to all of your call recordings and data.

A description of our disaster recovery plans was provided earlier in this RFP response document and is repeated below for convenience

Technical Approach

Disaster Recovery Summary

CenturyLink's management team recognizes the importance of maintaining an effective Disaster Recovery Plan to help ensure the continuity of critical business processes and minimize disruption in the event of material disruption. Our internal planning covers:

1. Disruption or disaster at a client facility
2. Disruption or failure of a managed WAN or third-party network service (i.e., LIDB validation)
3. Disruption or disaster at a CenturyLink data center
4. Loss of key personnel

Each separate plan identifies a primary and back-up Incident Commander (IC).

Type 1 – Onsite Equipment Disruption

Please note that the calling system is fully centralized, with most critical system components located offsite in redundant, geographically separate data centers. Onsite equipment is limited to just the phone instruments themselves, UPS backup power, and Integrated Access Devices (IADs) that connect the phones to the offsite call processors.

CenturyLink typically installs multiple IADs at each facility, with additional spares for both IADs and phone instruments maintained in-state. In the event that one of our IADs fails, the inmate phones will be automatically routed to the next available IAD, without any interruption to inmate calling. While extremely remote, in the event of a catastrophic failure of all IADs, all of our field service technicians maintain spare components and gateways and will be immediately dispatched to the facility to replace the defective IADs. In the event of an onsite disaster that damages most or all of the onsite equipment, the following procedure will be initiated.

For a Type 1 disaster the primary IC will be Brenda McKinley (NDCS Program Manager), with Barry Brinker (Director of Service Operations) as the back-up. Each will be closely acquainted with NDCS staff and procedures. They will be alerted by our 24/7/365 Technical Services Center and will:

1. Immediately coordinate a visit from themselves or our local technician to assess the damage and put the Technical Support Team on notice.
2. They will then determine the extent of the damage and the need for replacement parts, as well as the availability of space, and if needed, a network access point for communication services, and present a plan to the facility to restore all services.
3. Technical Support team will ship the new system components

Technical Approach

4. Ms. McKinley or Mr. Brinker will join a member of the Engineering team and our local technicians for onsite equipment installation, including new wiring as necessary.

Type 2 – Network Connectivity Disruption

Please note that, for each supported facility, CenturyLink obtains network service from two different network carriers, (each network is sized to carry the full network load) so that if one carrier experiences an outage, service will instantly fail over to the second carrier.

While the following plan will be initiated anytime a network service outage is detected, phone system access will continue to operate normally except in the highly unlikely event that a disaster should impede service of both network carriers simultaneously.

For a Type 2 disaster the primary IC is Steve Depasse (Engineering/Network Manager) and the back-up is Shawn Kulik (Network Supervisor). Type 2 incidents may also require a full Crisis Response Team (CRT) drawn from the technical staff of our Network Operations (NetOps), Operations, Installation, Engineering and Management teams.

The IC will be notified by our network monitoring applications or a ticket opened online by facility staff or a call into our 24/7/365 Technical Services Center, or by one of our network or database providers and their monitoring staff. The IC will:

1. Immediately notify the network provider and our Network Specialists and Engineering team leaders, who will begin diagnostics and re-route traffic
2. Determine based on the severity of the incident whether or not to form a full Crisis Response Team including CenturyLink' Management (if so, Steve Depasse (Engineering/Network Manager) and Shawn Kulik (Network Supervisor) will take charge
3. Notify NDCS
4. Determine whether to involve CenturyLink Management
5. Present a plan to re-route all traffic and/or restore normal service
6. Make our Network carriers aware of SLAs and escalate as entitled under our service contracts
7. Coordinate operational response from our carriers and NetOps and Engineering teams to re-route traffic, restore normal service
8. Share progress and resolution with NDCS

In addition, third-party validation sources as well as network common carriers have built-in redundancy with database replication and failover mechanisms in place. This redundancy is on top of the redundancy and failover capabilities employed in CenturyLink's architecture – network and third-party services are distributed among multiple vendors.

Technical Approach

Any network outage should be diagnosed from our primary data center and Network Operations Center (NOC) in San Antonio. In the event of a third-party utility outage such as a cut power line, Mr. Depasse, Mr. Kulik, or the most available backup IC would coordinate directly with local utility.

Type 3 – Data Center Disruption

CenturyLink currently maintains two data centers. Our primary call processing data center is located in a secure CenturyLink datacenter in Atlanta, Georgia. Our secondary call processing data center is located 900 miles away in San Antonio, Texas.

Each office serves as a back-up site for the other. Source code for all applications supported from a location is spooled weekly to a server at the other location. Call data is transmitted instantly to both data centers, ensuring backup copies of all investigative data are always available. NDCS facilities would experience a disruption to these services only in the very unlikely event that disasters should impact both data centers. Regardless, Type 3 incidents will be initiated as outlined below, anytime a service disruption is detected at either data center.

For a Type 3 incident Barry Brinker (Director of Service Operations) will be the primary IC, with Steve Depasse (Engineering/Network Manager) as the secondary IC, if Mr. Brinker is not immediately available. A Type 3 incident will be detected immediately by CenturyLink's staff and system monitoring applications. For any Type 3 incident, a Crisis Response Team will be formed with Mr. Brinker or Mr. Depasse coordinating Engineering and Operations teams at the remaining data center.

- Core Technology: CenturyLink maintains nightly off-site backups of all source code and compiler tools to enable recreation of the support environment virtually anywhere within a few hours.
- All other systems such as reporting, accounting, etc. are backed up nightly and could be restored quickly onto "off-the-shelf" hardware. Our staff can build a new server stack from readily available hardware and install it at an unaffected co-location to restore redundancy in short order.

In the event that a temporary replacement system must be set up at another data center (such as if a data center were completely destroyed in a natural disaster), CenturyLink has a nationwide procurement and inventory management system that can be used to quickly procure replacement equipment. An Engineering team can be mobilized to assemble, load, and test a server stack and related systems for installation in a near-by commercial facility, if a prolonged downtime at one of our data centers is expected.

Technical Approach

CenturyLink's Engineering team is prepared and able to configure, ship, and replace any damaged or failed system within 12 to 24 hours from on-hand materials, depending on the number of facilities affected. The CenturyLink Team has installed over 200 centralized calling platforms, so our ability to do so reliably and under deadline is tested and validated regularly in the course of normal operations.

Type 4 – Loss of Key Personnel

Any company is vulnerable to the loss of key personnel, and CenturyLink's management is diligent in cross-training and knowledge transfer among our departments in order to minimize the disruption caused by the loss of a key individual. Specific personnel backup designations have been established to assist in contingency planning. Each key staff member has a backup.

All of CenturyLink's disaster response and business continuity plans are subject to an annual internal review by our Executive Management team, which has more than 60 years of experience managing the reliable provision of services to correctional agencies nationwide. Dry runs testing the ability of IC and secondary staff to identify and evaluate disruptions are held at least annually.

Summary: Redundancy and Security	
Onsite Equipment	<ul style="list-style-type: none"> • Ample ratio of spares for phone instruments, roll carts, and network devices ("IADs") maintained in-state • Multiple Uninterrupted Power Supply ("UPS") to on-site equipment for transition to backup on-site power • Should on-site backup power fail, the UPS is secondary backup and can carry the data center load for roughly 2 hours
Network Connectivity	<ul style="list-style-type: none"> • Redundant carriers & third-party validation contracts, both implemented at each data center • Diverse network entrance facilities at each data center • Continuous network monitoring with established failover plan
Central Data Center	<p><u>Call Processing</u></p> <ul style="list-style-type: none"> • Primary call processor housed in a CenturyLink, Inc. class 4 data center in Atlanta • Fully functional, always-on backup processor located in a redundant class 4 data center in San Antonio • If disaster were to disrupt call processing in Atlanta, service would instantly and automatically fail over to the secondary processor in San Antonio • Atlanta and San Antonio data centers both supported by multiple active power and cooling supplies • Redundant fault tolerant enterprise grade components • Minimum of two diverse paths for power and network into each data

Technical Approach

	center
	<u>Data</u> <ul style="list-style-type: none">• Call data and recordings are stored at each of the two data centers• Databases constantly synchronized in real-time• Call recording storage systems continuously synced in near real-time• Each data center supports various RAID (internally redundant) storage configurations to provide for additional storage redundancy.• All data and recordings are maintained in both data centers for the entire contract term, plus all renewal periods
Personnel	<ul style="list-style-type: none">• Internal certification of trained and named backup personnel – all positions• Documented succession plan for all key positions

14. Live Monitoring Requirements

The Contractor's system must allow for live monitoring of calls in progress from individual workstations. Staff must be able to monitor multiple calls simultaneously. The Contractor's system must be able to show all active calls on a single screen, and staff must be able to move from one call to another quickly. Moving from one call to another must take no more than five (5) seconds. Live monitoring calls shall have the capability to be forwarded to designated NDCS/YRTC phone numbers.

 CenturyLink Response: Read, agreed and will comply.

The Observer live monitoring application

The Enforcer system offers real-time, live call monitoring of calls in progress. Call monitoring with The Observer is accessed through the **Monitor Phones** tab of the Enforcer's GUI (graphical User Interface). The authorized user selects a station or trunk to monitor with a click of the mouse, and then clicks the **Listen** button.

This function is **silent and undetectable by either the inmate or called party**. Multiple monitoring sessions can occur at the same time **without any impact to ongoing call processing or recording**.

Authorized personnel can monitor live calls in progress with a high level of audio quality **from any location, whether remote or on-site**. The Enforcer is operated through an easy-to-use browser-based GUI.

Technical Approach

Anyone with a password and log-in ID granted by authorized administrators can access the system from any computer with an internet connection as if they were opening a website.

Once the operator has gained access to this display with the proper password and privileges, the monitoring operation can be activated. The operator simply clicks on a call in progress, or telephone station port, and the system begins streaming the audio to the workstation and plays through the workstation speakers or attached headset.



The Observer

Onhook: 34 Talking: 41 Alert: 0 DWR: 3

Action	Status	Station	Number	Min	Cost	Inmate	Name	Host	Alert
	Dialing	STATION 7107	1-208-	0:00	\$4.20	80360	LAYTON	ctlat003	none
	Talking	REC ROOM PH B	1-417-	4:47	\$0.84	85511	LYLE	ctlat001	none
	Talking	LAUNDRY PH 1	1-208-	13:32	\$1.96	105720	MICHAEL	ctlat006	none
	Talking	J BLOCK TIER 2 CORDLESS PHONE 2	1-208-	4:33	\$0.70	72862	JESUS	ctlat004	none
	Talking	J BLOCK TIER 2 CORDLESS PHONE 3	1-208-	18:51	\$0.00	76321	AZAD	ctlat002	none
	Talking	A TIER 3 CORDLESS PHONE 2	1-208-	4:44	\$0.84	29268	CASEY	ctlat001	none
	Talking	A TIER 2 CORDLESS PHONE 1	1-385-	17:24	\$2.52	81525	OROZ	ctlat006	none
	Talking	E BLOCK TIER 2 PHONE 2	1-208-	28:23	\$4.06	107564	PATRICK	ctlat002	none
	Talking	G BLOCK DAYROOM CORDLESS PHONE 1	1-208-	20:41	\$3.08	103803	O, JOHN	ctlat002	none
	Talking	STATION 13101	1-208-	21:30	\$3.22	78515	DUSTIN	ctlat001	none
	Talking	KITCHEN - PH 3	1-208-	7:20	\$1.26	53693	IRGIL	ctlat002	none
	Greeting	UNIT 1 - PH B	1-208-	0:00	\$2.66	78058	WER, LINDA	ctlat005	none
	Dialing	CLASS ROOM A - PH 1	1-208-	0:00	\$4.20	90217	NICKI	ctlat006	none

Monitoring Live Calls - Calls in Progress screen

Critical Call Monitoring Functions include:

- Silent, undetectable monitoring
- Allows multiple simultaneous monitoring sessions
- Search function to isolate calls of interest
- Monitoring has no impact to recording function

Technical Approach

- Ability to monitor from a remote workstation or PC via LAN, WAN or Internet
- Protection of privileged calls from monitoring
- Ability to disconnect call in progress while monitoring
- Ability to “barge in” to calls in progress and speak to both parties

The Observer

Action Buttons

Customization

Offhook:54 Talking:41 Alert:0 DNR:3

Action	Status	Station	Number	Min	Cost	Inmate	Name	Host	Alert
	Dialing	STATION 7107	1-208-3				H, CLAYTON	ctlati05	none
	Talking	REC ROOM PH 8	1-417-5				VIN, LYLE	ctlati01	none
	Talking	LAUNDRY PH 1	1-208-3				EN, MICHAEL	ctlati06	none
	Talking	J BLOCK TIER 2 CORDLESS PHONE 2	1-208-3				ON, JESUS	ctlati04	none
	Talking	J BLOCK TIER 2 CORDLESS PHONE 3	1-208-3				LLAH, AZAD	ctlati02	none
	Talking	A TIER 3 CORDLESS PHONE 2	1-208-7				ER, CASEY	ctlati01	none
	Talking	A TIER 2 CORDLESS PHONE 1	1-385-628-8306	1:24	\$2.32		OMOZICO CORNEJO, RICARDO	ctlati06	none
	Talking	E BLOCK TIER 2 PHONE 2	1-208-785-5781	28:23	\$4.06	10756-3	RODRIGUEZ, PATRICK	ctlati02	none
	Talking	G BLOCK DAYROOM CORDLESS PHONE 1	1-208-571-8275	20:41	\$3.08	102803	TORSTENBO, JOHN	ctlati02	none
	Talking	STATION 13101	1-208-899-6846	21:30	\$3.22	78515	TRINKAUS, DUSTIN	ctlati01	none

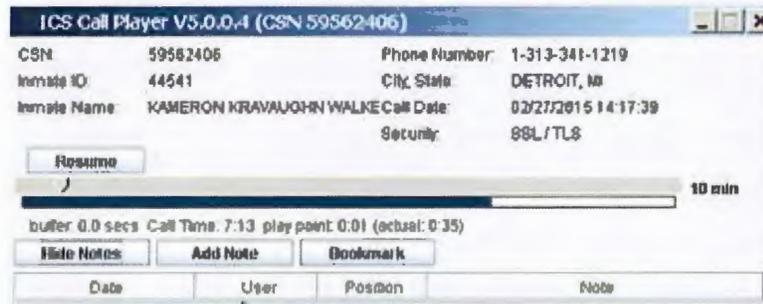
Call Station List

A call in progress may be disconnected by authorized personnel by clicking the *Cutoff* button.

Display of Calls in Progress

Monitoring sessions occur in true real time with no delay in transmission of the audio, using standard live audio streaming techniques. When a user selects a call in progress to begin monitoring, the audio is streamed to that user live and in real-time. All audio is buffered so even if a call is five minutes in when a user begins monitoring the call, the user may scroll back to any point in the call and listen to the audio.

Technical Approach



Standard Call Player

The Monitor Phones function lets you perform several actions on live (in-progress) calls, recent calls, and the phone stations from which the calls are made.

These include:

- Customizing or limiting the calls/stations you are viewing
- Monitoring a call in progress
- Performing security-related tasks, such as cutting off a call in progress or disabling a phone station
- Taking a “snapshot” of the displayed information
- Accessing more detailed information about a selected call

When you click the Monitor Phones tab from the Enforcer main menu, the system opens The Observer call monitoring module. While you have this module open, the displayed information continues to change dynamically based on inmate calling activity.

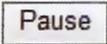
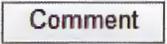
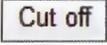
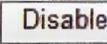
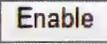
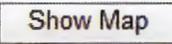
Several pull-down lists are displayed in the View Customization Options pane at the top of the Monitor Phones screen The Observer call monitoring module window. These lists let you limit or customize the information that is displayed in the Call/Station List pane and the Call Details pane.

Performing Actions on Displayed Calls/Stations

You can perform several actions on a call or station by clicking one or more of the Call Action buttons. Most of these actions require that you first select a call/station from the Call/Station List by clicking on the line with your mouse pointer.

Technical Approach

Call/Station Action Button Descriptions

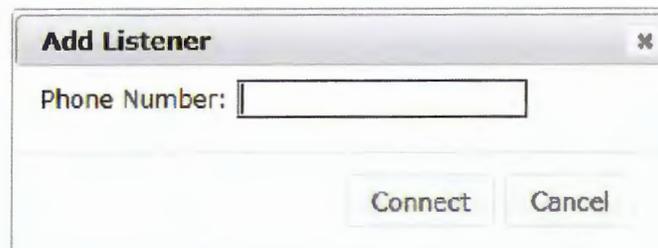
Button	Function
	Click this button to pause the list of displayed calls (displays point-in-time list and “freezes” the dynamic display of call activity).
	Click this button to add a comment (note) to the Call Detail Record for the call.
	If fraudulent activity or threatening behavior is detected on the call, click this button to cut off (disconnect) the call. When you click Cut off , you are <i>also</i> temporarily disabling the phone station. .
	Click this button to temporarily disable the phone station. If a call is currently in progress when you click Disable , the inmate will be allowed to complete the call before the station is disabled. If you want to cut off the call <i>before</i> disabling the station, click Cut off <i>before</i> you click Disable . After you click Disable , the station will remain in a ‘disabled’ state until you select the station, and then click Enable .
	This button displays only for a selected call that you have disabled (by clicking the Disable button). Click this button to re-enable the phone station.
	Click this button to connect yourself or another user directly to the call as a third-party.
	Click this button to display a map of the locations of the site/facility as well as all called party numbers displayed in the Call/Station List.

* Using these buttons requires that you *first* select a call/station from the Call/Station List.

Forwarding a suspicious call in progress to an Investigator

As a newly added feature to the Observer live monitoring application, listeners can forward in-progress calls they find suspicious to an investigator or other authorized person.

By clicking on the desired phone station in the Observer, users can click on “Add Listener” and enter the phone number to forward the call to.



Technical Approach

The inmate and called party *are not* notified and *are not* aware that you are monitoring the call. Once the investigator has received the call for monitoring, he or she also has options to dial designated digits in order to barge in or disconnect the call.

Other Alerts

The Enforcer provides an Alert feature to aid investigators in up-to-the-minute inmate telephone activity. The Enforcer alerts can be placed on specific Inmate PINs or specific destination numbers to indicate that the inmate or number is currently involved in a conversation or to indicate that a Prepaid or Debit account has been funded.

The screenshot shows the 'Global Number Edit' interface. At the top, there is a search bar for 'Dialed Phone Number' with the value '12105818100' and a 'Find/New' button. Below this are search bars for 'Name or Comment Search' and 'Speed Dial Number Search'. Filter buttons include 'Show All Numbers', 'Show All Blocked Numbers', 'Show All Speed Dial Numbers', and 'Show All Wildcard Numbers'. The main configuration area is titled 'Global Number Edit' and includes fields for 'Number' (1-210-581-8100), 'Speed Dial', and 'Name' (Test). There are also fields for 'Description' and 'Notes'. A list of alert types is shown with checkboxes: 'Email Alert(s)', 'Page Alert(s)', 'Monitor Alert(s)', 'Payment Alert(s)', and 'General Alert'. The 'Email Alert(s)' field is populated with 'investigator@doc.gov'. The 'Monitor Alert(s)' field is populated with '605-858-7457, 605-890-3871'. Other options include 'Passive Acceptance', 'Greeting Off', 'PAN Override', 'Do Not Record', 'Privileged', 'Free Video', 'Ignore DTMF', and 'Ignore Silence'. There are also fields for 'Dial pattern', 'Rate File', 'Digits', and 'Time frame (secs)'. At the bottom, there are buttons for 'Delete', 'Cancel Changes', and 'Save Changes'. Two callout boxes provide additional information: one states 'Payment Alerts are triggered when a watch number receives funds for prepaid calling' and the other states 'Alerts can be sent by email - to multiple email boxes if desired - with the option to automatically attach the call recording. Alerts by phone have a "find me follow me" function that outdials to monitor alert numbers until answered'.

Alert Settings on a Specific Phone Number

Alerts can be sent to any investigator cell phone, land line, email, and/or pager. This alert will be triggered when an alerted number is dialed\connected from any inmate phone regardless of which inmate dialed the number. The alerts available with the Enforcer are described in detail below.

Technical Approach

Monitoring Alerts

The Enforcer can call an investigator on his or her telephone (or cell phone), and once provided with an approved pass code, can immediately patch the investigator into an Enforcer monitoring session for almost instantaneous access to inmate activity. This capability is silent and undetectable by the inmate and the called party.

Investigators can set the Enforcer to automatically transfer calls to them for monitoring wherever they may be by using CenturyLink unique "Find Me, Follow Me" service. "Find Me, Follow Me" – allows call alerts to phone multiple investigator telephone numbers (such as an office number, cell number, and home number), trying each number in succession until the investigator answers and enters the correct access code; this feature dramatically increases the probability that an investigator will be located and can monitor a call of interest while it is still in progress.

Email/SMS Alerts

The Enforcer can send email or SMS messages to an administrative workstation or any public email address when an alert is triggered. The email alert will contain the called phone number, the inmate name and ID, the start date and time, a link to the call record, and the call recording.



Information Contained in an Email Alert

Pager Alerts

The Enforcer can issue numeric messages to paging services to alert an investigator that a call is in progress.

Technical Approach

Funding Alerts

The Enforcer allows investigators to set alerts on inmates of interest and/or telephone numbers of interest. When a Debit or Prepaid account is funded that is associated with an inmate or telephone number of interest, the designated investigators are immediately alerted via email.

Email alerts contain information such as Inmate ID and Name (for a Debit account), names and addresses of account holder and account funder (for a Prepaid account), funding amount, and funding source (credit card, Western Union, cashier's check, or money order). If a credit card was used, the alert will also report the first and last four digits of the credit card number.

Monitoring Alerted Calls

Once an investigator is patched into an Enforcer monitoring session from an alert, the investigator can monitor, "barge in," or terminate a call between an inmate and a called party by pressing the appropriate digit on the keypad.

15. Service Level Requirements

The following service levels will be met by the Contractor. The Contractor will not substitute or deviate from these service levels.

- a. **CRITICAL:** Any outage where more than 30% of the assigned system extensions OR 30% of the assigned extensions to any particular building OR 30% of the system trunks are not operational for any reason. Vendor must respond to critical service level issues within one (1) hour. This may include remote dial in, or dispatch. Vendor must make every possible attempt to restore service within four (4) hours. With the exception of LEC service issues, critical service level outages must be resolved, or alternative means of communications established within eight (8) hours. Vendor must provide a detailed report to the NDCS Intel Coordinator within 48 hours of any critical outage. This report must outline the following:
 - i. Time, date, and cause of outage
 - ii. Time and date of first vendor response
 - iii. Chronological list of actions taken to restore service
 - iv. Name and contact number of person reporting outage

 CenturyLink Response: Read, agreed and will comply.

Technical Approach

- b. **MAJOR:** Any outage where more than 10% of the assigned system extensions OR 10% of the assigned extensions to any particular building OR 10% of the system trunks are not operational for any reason. Any instance where 10% or more of telephone calls are dropped or have static. Vendor must respond to major service level issues within three (3) hours. This may include remote dial in, or dispatch. Vendor must make every possible attempt to restore service within ten (10) hours. With the exception of LEC service issues, major service level outages must be resolved, or alternative means of communications established within 16 hours. If a major outage is reported after business hours, it will be the vendor's responsibility to inform the caller that a charge may be incurred, and to offer the option to have the outage responded to on the next business day. If the caller chooses to wait until the next business day, the "clock" for response and resolution times will begin at 8:00 AM on that day. If the caller still requests after hours dispatch, the vendor may proceed with written authorization from the caller. An e-mail from a State Government e-mail address will be acceptable. All State e-mail addresses end with (Nebraska.gov) Vendor must provide a detailed report to the NDCS Intel Coordinator within seven (7) days of any major outage. This report must outline the following:
- i. Time, date, and cause of outage
 - ii. Time and date of first vendor response
 - iii. Chronological list of actions taken to restore service
 - iv. The name and contact number of person reporting trouble

 CenturyLink Response: Read, agreed and will comply.

- c. **MINOR:** A case where any assigned extensions, trunks, or system features are not operational, or are not functioning properly for any reason. Any instance where telephone calls are either dropped or have static. Incidents where features or functions of the telephone sets are not operating properly. Vendor must respond to minor service level issues within ten (10) hours. This may include remote dial in, or dispatch. Vendor must make every possible attempt to restore service within 24 hours. With the exception of LEC service issues, minor service level outages must be resolved, or alternative means of communications established within 36 hours.

Technical Approach

If a minor outage is reported after business hours it must not be handled by the vendor until the next business day. The "clock" for response and resolution times will begin at 8:00 AM on that day. Vendor must provide a detailed report to the NDCS Intel Coordinator within 30 days of any minor outage. This report must outline the following:

- i. Time, date, and cause of outage
- ii. Time and date of first vendor response
- iii. List of actions taken to restore service
- iv. The name and contact number of the person reporting trouble

 CenturyLink Response: Read, agreed and will comply.

F. PERFORM IMPLEMENTATION

1. Initial System Implementation and Installation

Contractor will be responsible for the creation of all existing accounts. Inmate account information can be provided to the contractor in an electronic format.

 CenturyLink Response: Read, agreed and will comply.

The contractor must designate a limited number of personnel, including the site administrator to participate in the system installation at State facilities. Contractors must pass a standard NDCS background check. They will also be prohibited from forming personal relationships of any kind with inmates, their friends, or their families.

 CenturyLink Response: Read, agreed and will comply.

The Bidder must provide a detailed plan for installation, test, and turn-up to the State. Cut-over of any individual facility shall not occur without prior approval of NDCS. Any changes in schedule must be approved by the State. Digital circuit and/or telephone line information must also be provided to include circuit ID numbers along with due dates.

 CenturyLink Response: Read, agreed and will comply.

Technical Approach

Please reference the last two sections of our Technical Approach response: Section IV – Detailed Work Plan and Section V – Deliverables and Due Dates.

G. PROVIDE POST IMPLEMENTATION SUPPORT

1. Customer Service Requirements

Contractor must provide 24 X 7 customer service, including holidays, to the State of Nebraska for the purpose of resolving problems with system hardware, software, calling functionality, recording functionality, and monitoring functionality.

 CenturyLink Response: Read, agreed and will comply.

Contractor must provide a dedicated contact to resolve all issues surrounding "Debit" transactions and accounting. The contractor must provide a trouble ticket system where each debit transaction issue is documented. The contractor must acknowledge receipt of each trouble ticket and respond to the State in writing on each resolution. All trouble ticket information and trending will be made available to the State upon request.

 CenturyLink Response: Read, agreed and will comply.

For applicable details, please reference our response below to Section 3 – Trouble Reporting.

Contractor must assign a dedicated account representative other than the system administrator to the State of Nebraska account.

 CenturyLink Response: Read, agreed and will comply.

For applicable details, please reference our response below to Section 3 – Trouble Reporting.

Contractor must be willing to replace, either, the system administrator, support technician, or account representative at the State's request. The State will only make this request if attempts at corrective action have not resulted in the State's satisfaction.

 CenturyLink Response: Read, agreed and will comply.

Technical Approach

As a condition of employment, all CenturyLink system administrators and support technicians acknowledge that the unique correctional environment in which we operate, and that their continued service is contingent on the continued approval of the customers they service.

CenturyLink agrees to replace any personnel at the State's request.

2. System Alarm Monitoring and Reporting

It is expected that the contractor monitor all equipment including LEC access lines on a continuous 24 X 7 basis including holidays. Any problems that effect system functionality in any way must be reported to the State immediately. A contact list will be given upon contract award.

Contractor must provide a toll free number that will be answered by a live person. This number must be staffed 24 X 7 including holidays.

 CenturyLink Response: Read, agreed and will comply.

The CenturyLink operations team will respond promptly to all inmate telephone service calls, friends and family issues, billing inquiries and any other issues relating to the inmate phone system on a 24/7/365 basis. This will be accomplished through the centralized Customer Service Center via a toll free customer service line (888-922-2934).

When calling our toll free number for technical assistance, you will be connected with a live, U.S.-based Level 1 TSC technician within 20 seconds. Our technical support team proactively monitors performance of the Enforcer system and reports issues as they are discovered.

3. Trouble Reporting

Contractor must provide a detailed description of their escalation procedures. Upon award Contractor must provide a service escalation list to include names, office, cellular, and pager numbers.

Contractor must provide an automated trouble reporting system. Contractor must provide a 24-hour toll free number for reporting troubles.

 CenturyLink Response: Read, agreed and will comply.

CenturyLink has assembled a seasoned team of account management, technical support and repair personnel to support all of your facility's ongoing service needs.

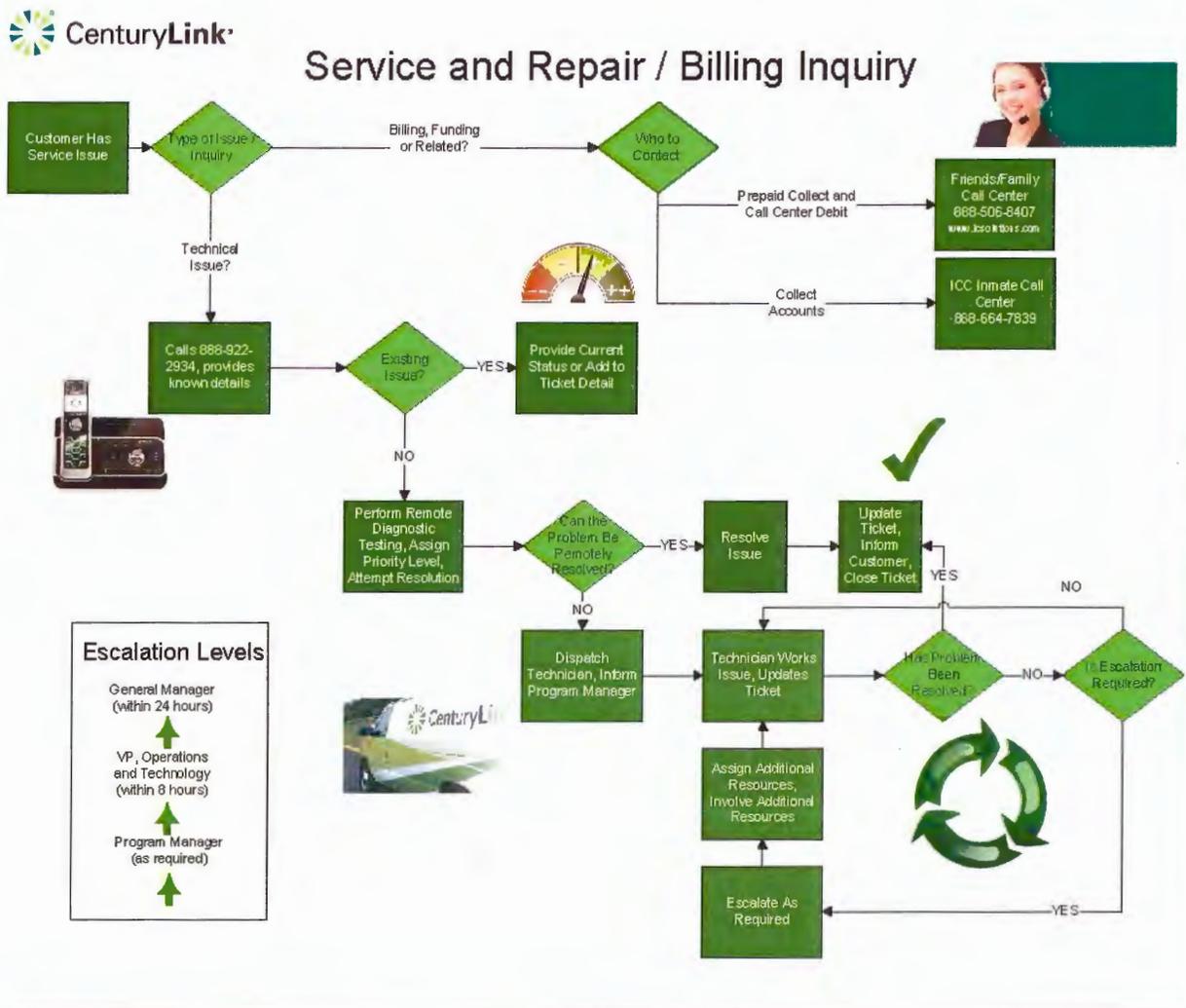
In keeping with our mission, the support team is dedicated to customer satisfaction and our primary goal is to provide continuous, reliable system performance throughout the contract term.

Technical Approach

CenturyLink's proposal includes full support, repair, maintenance, and component replacement as necessary to maintain continuous operation of the Enforcer system. Our commitment extends to all systems, telephones, software, and peripheral hardware.

This level of support is part of our turn-key proposal to each customer. As such, there will be no cost whatsoever to the State for this service.

A graphical flow chart of our trouble reporting process is provided below, followed by an escalation list with description of roles and responsibilities.



Technical Approach

The CenturyLink operations team will respond promptly to all inmate telephone service calls, friends and family issues, billing inquiries and any other issues relating to the inmate phone system on a 24/7/365 basis. This will be accomplished through our centralized Customer Service Center via a toll free customer service line (888-922-2934).

While our technical support team will work diligently to resolve issues in accordance with the Service Level Agreement requirements in Section E.15, we offer the following escalation points of contact as well as their responsibilities and suggested timelines to resolve issues before moving on to the next level.

Level	Escalation Point	Escalation Responsibilities
1	Program Manager (Brenda McKinley) Phone: (419) 755-8473 Brenda.M.Mckinley@centuryLink.com	<ul style="list-style-type: none"> • Notifies personnel and supervisors of strategy for problem resolution. • Keeps the State and management involved in progress of problem resolution. Escalates as necessary. • Responsible for seeing problem through to resolution. • Contacts Manager –Operations within required timeframe of missed performance standard.
2	Vice President – Operations and Technology (Barry Brinker) Phone: 503.990.6466 Barry.E.Brinker@centuryLink.com	<ul style="list-style-type: none"> • Operations VP resolves trouble/issue or escalates further if necessary. • Contacts additional resources (CenturyLink, Vendors, LECs, IXCs, etc.) as necessary. • Keeps the State informed of ongoing activities involving problem resolution. • Contacts General Manager within 8 hours if issue is not resolved.
3	General Manager – CenturyLink Public Communications (Paul Cooper) Phone: 913.353.7388 Paul.N.Cooper@centurylink.com	<ul style="list-style-type: none"> • Escalates further if necessary.
4	President – Wholesale Markets Division (Bill Cheek) Phone: 318.388.9582 Bill.Cheek@centurylink.com	<ul style="list-style-type: none"> • Final escalation point

Technical Approach

In addition to these formal escalation guidelines, NDCS management is able to bypass formal procedures and call Mr. Cooper – CenturyLink’s General Manager – for any situation that it deems necessary.

H. DELIVERABLES

1. Installation Period

Installation at each facility must be completed and all Inmate calling service available no later than 8:00 AM Central Standard Time on September 26, 2016.

It will be the contractor's responsibility to keep the State informed of all timelines and work progress.

 CenturyLink Response: Read, agreed and will comply.

Please reference the last two sections of our Technical Approach response: Section IV. Detailed Work Plan and V. Deliverables and Due Dates.

II. PROPOSED DEVELOPMENT APPROACH

CenturyLink's service and customer development approach is described throughout the prior section. In the interest of brevity, we use this section to detail our methodology and approach for improving existing and developing new features for the inmate communications solutions we provide to our customers.

Feature Development Methodology

Many features that are currently available on the Enforcer system are the result of specific suggestions and requests from our clients. Regardless of which client requests the new feature, the functionality is automatically made available to all clients at no cost.

CenturyLink follows an efficient, flexible and adaptive software development methodology to ensure that the Enforcer is always functioning optimally and offers the most cutting-edge features in the market today.

Our development process is a cooperative effort between CenturyLink and our technology partner ICSolutions that has been designed to balance speed-to-implement with analysis and testing rigor. NDCS will be notified at least 14 days prior to any upgrade and be provided with documentation on the new features and functionality of the new software.

Notification/documentation takes several forms:

- Email/phone notification from the CenturyLink Program Manager to personnel designated by NDCS as contract managers and System Administrators ("Super Users"). If upgrades require user training, the Program Manager will work with NDCS designees to schedule the training.
- Release Notes, which are included in notification emails and directly within the Enforcer User Interface screen under "Tools".
- An updated User Reference Guide, which is always available from the user screen under "Tools".

Software Development Process

When releasing new features, updates, and bug fixes, the CenturyLink Team follows the Agile software development process, which allows for expediency and flexibility in development.

Technical Approach

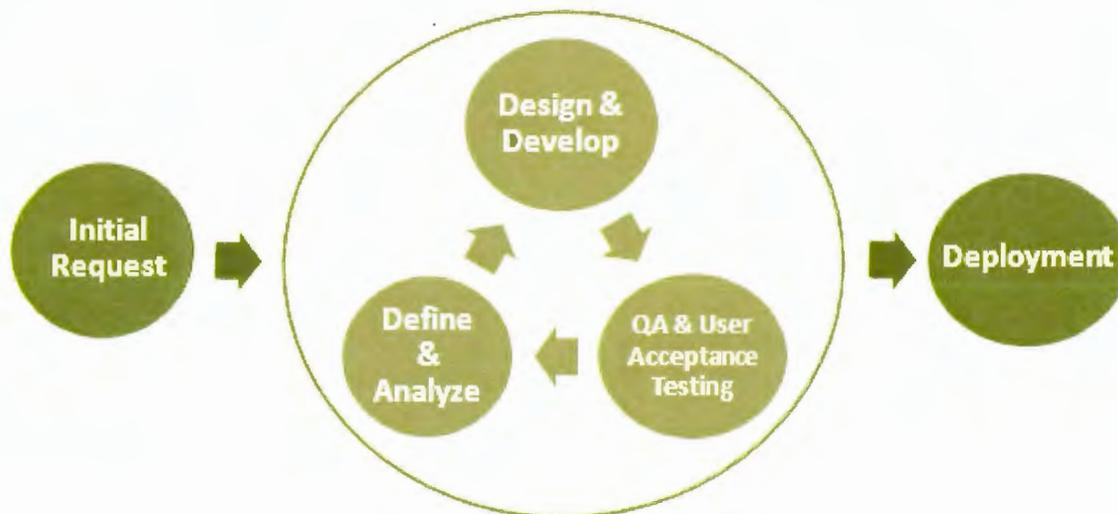
While many companies go through a long process of analysis and documentation for business justification, we are driven by the needs and desires of the customers to get to the end result quickly and efficiently. Business justification is left to a very few cases where the requested feature will only benefit a single customer.

Benefits of Agile Software Development

The Agile Software Development process is unique in that the development methods are based on **iterative** and **incremental** development, rather than focusing on one long-term project from beginning to end. Instead, Agile breaks the development cycle into small pieces that allows for short-term planning that can be completed more quickly and fluidly.

This incremental development allows developers to create solutions that evolve through collaboration with multiple cross-functional teams and in many cases, directly with the client, throughout the development process. Benefits of this type of flexibility include:

- Quick turn-around, with the ability to develop and deliver working software within days or weeks
- High level of customer input in every phase, allowing for adaptive change throughout the development process
- Collaborative effort that evolves with internal and external feedback



Agile Software Development Cycle

Technical Approach

CenturyLink's Software Development Cycle consists of five phases after the Initial Request is placed:

- Phase 1: Define & Analyze
- Phase 2: Design & Develop
- Phase 3: Quality Assurance & User Acceptance Testing
- Phase 4: Deployment
- Phase 5: Post-Deployment

These phases are described in detail on the following pages.

Phase 1: Define & Analyze

Enhancements and upgrades to the Enforcer are predominantly driven by **emerging technology and technological ideas**, market demand and specific client requests. Enhancements, upgrades, or client requests are entered into our ticketing system, which are prioritized and tracked through each phase of development. Feature requests may be submitted by internal CenturyLink employees, as well as external clients.

All feature requests are reviewed at the executive level by the Vice President of Technology, the Vice President of Business Development and other general management to determine the order of priority for each enhancement.

- *Preliminary Product Requirements.* Business owners present features/functionality desired, including considerations of basic versus advanced functionality.
- *Analysis of Business Need.* Business owners additionally present data regarding the individual customer and/or broader market need for their idea.
- *Go/No-Go Decision.* A go/no-go decision is made based on preliminary business analysis. If "go," the project proceeds to formal evaluation.

Enhancements that are approved for development are ported into a Project List to outline the priority and order in which the enhancement will be completed.

Technical Approach

The Project List includes:

- Detailed list of feature(s) required, listed in order of priority
- For each feature required, requirements for each solution component are listed: application design and development, database design and storage requirements, as well as ongoing maintenance/monitoring and customer care (staff as well as consumers).

A Project Plan is then created to track progress and capture the overall essence of the project flow. Functional owners detail tasks and timelines needed to fully deploy the project; the project is then placed in the development queue.

The number of system updates required for a particular enhancement is dependent upon the scope of the project.

Phase 2: Design & Develop

During the Development phase, the Engineering Manager oversees the development of functional requirements through to the QA Testing phase. To ensure that development is on track, Engineering Scrums are run three times per week. Using Scrum methodologies in Agile, projects are broken down into smaller, more manageable pieces, known as "sprints," that can be completed within two to three days. At the end of each sprint, the Development Team meets to assess the project's progress and plan the next steps.

Due to the collaborative nature of the Agile process, CenturyLink's Developers work closely with customers throughout the development phase to define and fulfill a requirement request in the most efficient and accurate way. The focus is on getting the feature developed that is most beneficial and useful to the customer, not on extraneous process and documentation.

For specific customer requests, periodic work-in-progress demonstrations of the new feature may be performed for customers where appropriate.

Phase 3: Quality Assurance & User Acceptance Testing

CenturyLink conducts thorough Quality Assurance testing, and in cases of specific customer request, User Acceptance testing. Once the Development phase of each iteration is complete, the Quality Assurance Team will define test parameters for the system, which is reviewed with the entire Development Team. This Test Parameters and Requirements document will be used to generate a QA matrix. Testing is performed in a QA Test environment to verify functionality of new enhancements, bug fixes, and software patches.

Technical Approach

Due to the incremental nature of Agile, testing often occurs concurrently with development so that each iteration of a feature is tested as it is developed. Testing in this manner lessens the risk of a compressed test period that often occurs in traditional Software Development Cycles as a result of running out of time on the development timeline.

For enhancements resulting from specific customer requests, our Engineers will work closely with the customer to conduct User Acceptance Testing in a controlled test environment to ensure that all requirements of the requested enhancement are met. Customers will review their enhancement for the appropriate functionality and usability and report any issues or requested changes back to the Testing Engineer.

While Engineers are completing QA Testing, CenturyLink's Technical Writer begins creating documentation of the new features that will go into the User Reference Guide and Release Notes, which are released to NDCS before deployment.

Phase 4: Deployment

After the Testing Phase is complete, the feature/module is moved from the development branch into the software trunk. The software is then forwarded to the System Architect for incorporation into the appropriate software release. New software releases and enhancements are distributed through an IP connection, with no need for any onsite disruption. Due to this centralized system update, downtime is minimal. CenturyLink's Program Manager will work with NDCS to arrange a mutually agreeable maintenance schedule at the most convenient time to ensure as little disruption to site operations as possible. CenturyLink can accommodate any time of day or night for release, whether during business hours or after hours.

Whenever an upgrade and/or enhancement to The Enforcer finishes testing and is ready for wide release, NDCS will be notified of the new release updates (typically within two weeks of the release) and provided documentation of the features and functions of the new software. A white paper "Feature Flyer" will be distributed to NDCS, which describes the new system feature and its functionality. At this point, the newly updated User Reference Guide and Release notes are uploaded online for NDCS users to access through the Enforcer GUI.

CenturyLink schedules two major and two minor releases per year on a quarterly basis to ensure the system is always state-of-the-art. In addition, specific customer requests can be completed on-demand and pushed to NDCS as a patch. These requests will then be rolled out to all clients in the next quarterly release. Any bug fixes and critical patches will be completed and applied immediately, as well.

Technical Approach

Phase 5: Post-Deployment

In the Post-Deployment phase, our Technical Services Center is notified of all system changes in the release so that they are aware of and prepared for any potential issues that may occur. All software is built to report non-standard behavior through our central monitoring system, Enforcer Real Time Status (ERTS).

System monitoring is part of the fundamental design of all components of the Enforcer system. All key applications send heartbeat messages to CenturyLink's central monitoring system, ERTS. These heartbeats are recorded in a status database and displayed on a browser screen. ERTS monitors all heartbeats and raises events, should a heartbeat become overdue based on configuration to ensure that no missing heartbeats are ignored.

Any condition which is deemed "not normal" can cause an event to trigger. All programs generate detailed log files both for troubleshooting and monitoring, with logs being scraped at least twice per hour for anomalous activity, which is sent to ERTS for processing.

ERTS has various options for event handling including, but not limited to, email, SMS, and user interface alerts. Our Technical Support and system monitoring teams are responsible for responding to and performing Level 1 support on issues, and escalating both technically and administratively, as appropriately.

Should an event occur as a result of a recent release, our Technical Services Center will work with the Engineering department to troubleshoot the issue so that Engineering can begin development of a bug fix or software patch where appropriate.

Technical Approach

III. TECHNICAL CONSIDERATIONS

MOST ADVANCED INMATE COMMUNICATIONS AND FORENSICS TECHNOLOGY

To be frank, 97-98% of all inmate telephone system features are the same. Despite claims of industry-leading security features, patent portfolios, and other unique capabilities, any credible offeror's system validates call attempts, manages call lists, has multiple billing options, and can search records using almost infinite different search criteria. Even for newer investigative tools like visual link analysis and call pattern analysis, as well as keyword search and voice biometric technology, most everyone has equivalent tools. CenturyLink is no different.

In addition, our team is continually developing new features – both small improvements in addition to major new releases – by listening to our customers. In total, our customers house over 310,000 inmates nationwide.

When it comes to true differences among providers in the area of technology, they are usually more subtle, and can be seen in system and service qualities that are more costly to provide.

1. Telco-grade system engineering

As part of the only company in inmate telecommunications who owns and manages its own network and data centers, CenturyLink is in a unique position. Our system is engineered for maximum redundancy and resiliency, and provides end-to-end network management that no other provider can match, from network design, installation, diagnostic, and break-fix capabilities.

CenturyLink's access to carrier databases, along with senior executive relationships with other carrier, enable us to assist our DOC customers in investigations beyond the inmate telephone system.

Key benefits from CenturyLink's network capabilities:

- ✓ *Maximum redundancy and resiliency.* Other providers' centralized systems use shared infrastructure with limited failover capacity. Although it is more expensive to deploy, our system is sized for full failover capacity – network, distribution, and hardware:
 - Redundant storage of call records and recordings, with network sized to handle additional transactions such as inmate inquiries by phone (commissary ordering, account balance inquiries, etc.)

Technical Approach

- Redundant call processing capacity networked for real-time failover
- CenturyLink has processed hundreds of millions of call detail records (CDRs) and recordings on the proposed Enforcer platform, and has not lost a single CDR or recording on this platform.
- ✓ *End-to-end control.* CenturyLink is the only company owning the entire solution – from the servers controlling the calls to the fiber transporting them.
 - Ability to expedite provisioning if necessary
 - Faster resolution of issues if they occur

2. Unique 4-channel talk path isolation

To our knowledge, only the Enforcer ITS processes and records calls using 4-channel talk path isolation. This means that the audio stream is split into four distinct channels: (1) what the inmate says; (2) what the inmate hears from system prompts; (3) what the called party says; (4) what the called party hears from system prompts.

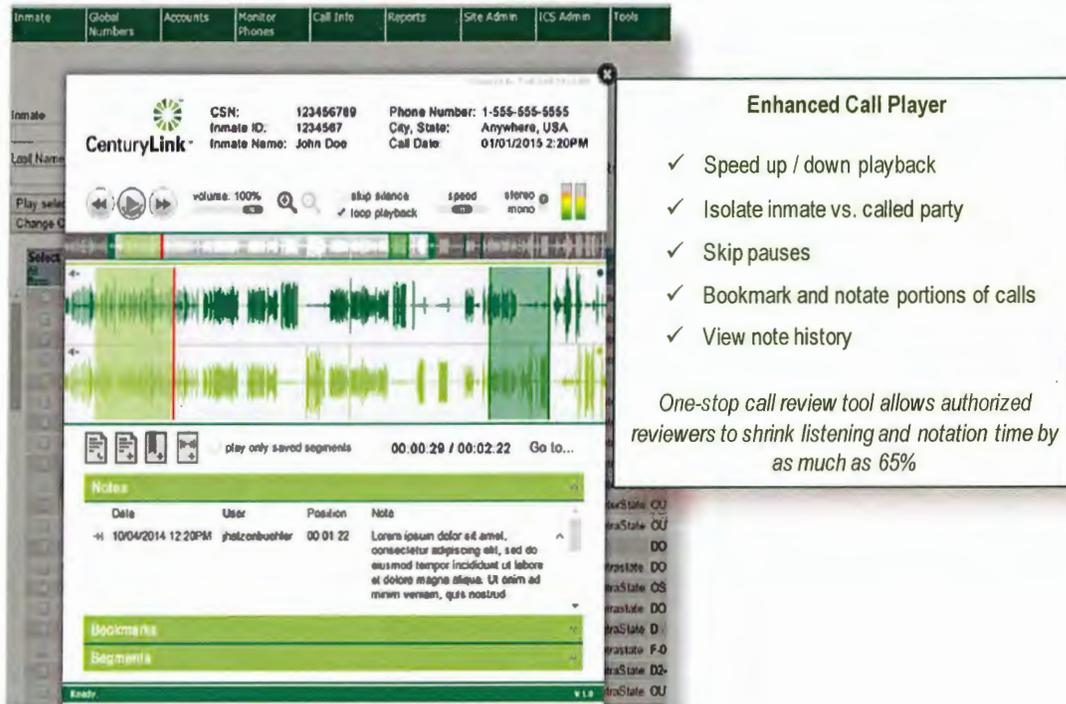
This additional software development may not seem that important, but it is critically important for investigators:

- ✓ *Better keyword search.* Because each talk path is isolated, our keyword search software is able to determine words spoken by each individual, instead of being “confused” by situations where both parties speak at the same time.
- ✓ *Better voice biometric identification.* Similar to keyword search, voice biometric software is able to isolate each speaker and determine if that specific speaker has changed throughout the course of a call.
- ✓ *Better listening productivity.* Using the Enforcer’s Enhanced Call Player, investigators can isolate specific sides of a conversation to reduce the time needed to listen to a phone call. The Player also enables investigators to speed up or slow down one or both sides of a conversation as well as highlight portions of a conversation and make notes for follow-up.

❖ UNIQUE CAPABILITY ❖

4-channel talk path isolation does not necessarily enable any specific feature. However, it makes many critical security features work better.

Technical Approach



Enhanced Call Player

- ✓ Speed up / down playback
- ✓ Isolate inmate vs. called party
- ✓ Skip pauses
- ✓ Bookmark and notate portions of calls
- ✓ View note history

One-stop call review tool allows authorized reviewers to shrink listening and notation time by as much as 65%

Enhanced Call Player

An added benefit of 4-channel isolation is that when either announcement channel is active, the call timer is turned off. This ensures that the inmate or called party are not charged for listening to announcements.

3. Most advanced fraud detection features

Given the different protocols used by different communications technologies, CenturyLink employs a multi-pronged approach to detecting both 3-way calls (calls forwarded to/conferenced with a third party number after call setup) and remote call forwarded calls (calls forwarded to/conference with a third party number prior to call setup).

These various technologies, which are the result of numerous hours of requirements documentation and development, are described in more detail in our response to section IV.E.6, is industry leading and deployed for use with both landline and cellular telephone services.



Technical Approach

Fraud Detection Summary

Three-Way Call Detection	CenturyLink	Others
Traditional 3-way ("Call Sensing")	✓	✓ / ✓
Voice Biometric Inmate-to-Inmate Sensing ("ICER")	✓	✓ / ✗
Simultaneous Call Detection	✓	✗ / ✓

Remote Call Forwarding Detection	CenturyLink	Others
Real-Time Network Query	✓	✗ / ✓
Operating Carrier Query (subject to NDCS direction and FCC approval)	✓	✓ / ✗
"ICER"	✓	✓ / ✗

4. Internally developed features, not separate "modules"

A final key component of the Enforcer system is that its features are internally developed, not separate "modules" cobbled together from various acquisitions. The benefit is that all Enforcer features are completely integrated – allowing ease of use as users are not required to toggle between different systems, and maintaining security protocols by passing metadata between the "engines" underlying each feature.

This point is best made during a live demonstration, and we respectfully request the opportunity to demonstrate the Enforcer and its capabilities to the State prior to final decision.

Technical Approach

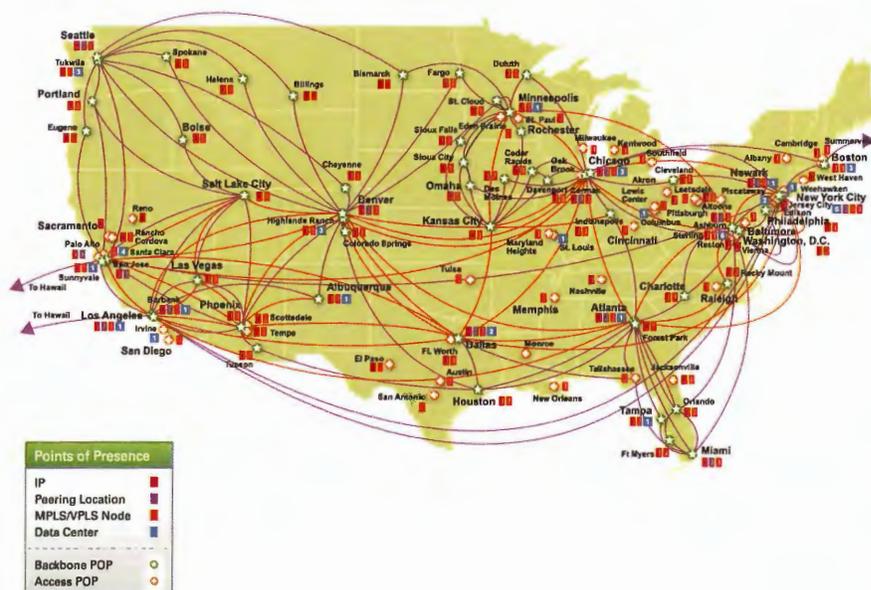
CORPORATE RESOURCES & CAPABILITIES

Inmate communications involve managed IT services requiring a broad range of technical, financial, and service capabilities, and no company is positioned as well as CenturyLink to successfully integrate the ITS with any other systems specified by NDCS now or in the future.

The capabilities of CenturyLink Public Communications coupled with the extensive corporate resources of parent company, CenturyLink, Inc., allow us to provide end-to-end technology solutions that others in the industry simply can't duplicate. As a leading network and IT provider some of the capabilities and resources that set us apart are:

With over \$1.6 billion in invested Nebraska network infrastructure and several NDCS facilities in CenturyLink, Inc. franchise territory, we have a unique advantage in terms of cost and ability to scale network capacity to meet current and future needs. No other provider even comes close.

- ✓ Nationwide 250,000 mile fiber optic network
- ✓ 56 class 3 and 4 data centers
- ✓ One of two commercial service providers authorized by Department of Homeland Security to provide Enhanced Cybersecurity Services
- ✓ Cloud and collocation services
- ✓ Full portfolio of managed services including voice, data, hosting, and security
- ✓ Big data and advanced analytics solutions



Technical Approach

Enterprise-Grade Network, Engineering & Service

- As a nationwide provider of network and data center infrastructure, AND the local provider of network access to several of NDCS facilities, we can afford to be Enterprise-grade. This ensures the NDCS has more than enough bandwidth for operations and, most important, system backups at the facility, hardware, power, and network levels, to make sure data are always available and never lost. All data are stored at multiple geographically diverse, highly secure and highly available data centers.
- Redundant facilities we own and control, resulting in maximum availability for both inmate calling and investigations.
- All call detail records and call recordings are stored on-line; they are never archived. This information will be available immediately; there will be no delay waiting for archived data to be restored. **We have processed millions of call records and recordings on our proposed Enforcer, and not a single record or recording has been lost.**
 - ✓ Through our long-term strategic partnership with Keefe Group, the Enforcer has dozens of existing commissary and trust interfaces that have been translated for interfaces with other vendors.
 - ✓ Proven ability to work with other vendors at no cost to them or the state – a prime example being commissary ordering by phone with Union Supply at Kansas Department of Corrections.

Technical Approach

NO COST VALUE-ADDED TECHNOLOGICAL ENHANCEMENTS AND SERVICE OPTIONS

CenturyLink has a number of available value-added technological enhancements and service options that are available at no cost to our customers and will improve staff efficiency, streamline investigations, and simplify inmate communications and operations, and increase connections between inmates and their friends/family. We look forward to discussing these value-added enhancements / options with NDCS.

A summary table is provided below with detailed descriptions following.

Feature Name:	Feature and Benefits:
"The Communicator" Paperless Inmate Communications (more detailed description following chart)	<ul style="list-style-type: none">• Reduced staff time• Eliminate paper and form usage• Audit trail• Staff can respond using text to speech technology, if desired• Schedule medical appointments• File Grievances• Submit PREA or crime tip reports• File inmate telephone complaints
"The Attendant" Inmate Information Line and "Message of the Day" (more detailed description following chart)	<ul style="list-style-type: none">• Reduced staff time• Enhanced inmate and F&F welfare• Better staff to inmate communications• With JMS/OMS integration, inmates and F&F can track appointment, parole court, and release dates, perform bond inquiries, inmate look-up information
Integration with Other Systems (more detailed description following chart)	<ul style="list-style-type: none">• "One stop" application for investigators• Provide direct links from the Enforcer to other vendor portals (OMS, e-messaging and deposit service providers)• Combine data into more integrated application(s)
Phone-Based Commissary Ordering (more detailed description following chart)	<ul style="list-style-type: none">• Reduced staff time by inmates transferring funds from their commissary account with staff involvement• Commissary items can be ordered and prepackaged for pickup or delivery

Technical Approach

<p>Inmate Medical Scheduling</p> <p>(more detailed description following chart)</p>	<ul style="list-style-type: none"> • Reduced staff time because inmates can schedule appointments over the phone using automated prompts and receive messages back confirming appointment time
<p>Additional Investigative Assistance (Includes Access to Additional Reverse Lookup Databases and Carrier Information)</p> <p>(more detailed description following chart)</p>	<ul style="list-style-type: none"> • Increased staff efficiency • Potential reduction of criminal activity
<p>Data Detective Visual Link Analysis & Call Pattern Analysis</p> <p>(more detailed description following chart)</p>	<ul style="list-style-type: none"> • Increased investigative capabilities
<p>Backup Technical Assistance</p>	<ul style="list-style-type: none"> • CenturyLink can call on multi-disciplinary employees for difficult or unusual situations for better service. There are 215 CenturyLink, Inc. technicians available in Nebraska for backup technical assistance.

❖ The Communicator – Paperless Inmate Communications

Through standard IVR data entry and response technology, the Enforcer can be used to automate most any transaction that is occurring by paper forms today.

- ✓ Commissary ordering by phone
- ✓ Grievance filing
- ✓ Appointments
- ✓ PREA Reporting
- ✓ Staff to inmate communications
- ✓ Automated inquiries

100% Paperless Reporting

With our paperless telephone process, inmates can file grievances, make PREA or crime tip reports, or even file complaints about the Inmate Telephone System – all using secure voice mailboxes on any standard inmate telephone.

Technical Approach

Depending upon the type of inmate report, the appropriate facility staff will be automatically notified when an inmate files a new grievance. Using text-to-speech technology or traditional voice messaging, staff can respond to inmate reports via the Enforcer system, and the response will be delivered to a secure voice mailbox for inmate retrieval. This improves the efficiency by reducing labor costs as information passing move away from traditional paper ordering as staff spends less time collecting and processing medical forms. Implementation would be a collaborative effort and customized to meet your requirements.



The screenshot displays a web-based interface for managing inmate communications. On the left, there are several filter options: 'Inmate ID' (input field), 'Category' (dropdown menu set to 'All'), 'Filter by Status' (checkboxes for Submitted, Reviewed, Responded, Listened), 'Submitted Between' (date range from 06/06/2013 to 06/13/2013), and 'Active Inmates Only' (checkbox). At the bottom left are 'CLEAR' and 'SEARCH' buttons. The main area is a table with the following columns: CSN, Category, Inmate ID, Inmate Name, Submitted, Reviewed, Responded, Elapsed, Listened, and Play. The table contains six rows of data, each with a 'Play' button and a 'Reply' button.

CSN	Category	Inmate ID	Inmate Name	Submitted	Reviewed	Responded	Elapsed	Listened	Play
3343316	Doctor request	4278375	TEST ICS	06/13/2013 14:47:53					Reply
3343312	Grievance	4278375	TEST ICS	06/13/2013 10:32:53	06/13/2013 14:58:48				Reply
3343311	Doctor request	4278375	TEST ICS	06/13/2013 10:31:07					Reply
3343307	Informabon Request	4278375	TEST ICS	06/13/2013 09:47:47	06/13/2013 09:47:11	06/13/2013 09:49:30	0:01		View
3343300	Grievance	4278375	TEST ICS	06/13/2013 08:40:55					Reply
3343299	Doctor request	4278375	TEST ICS	06/13/2013 08:40:10		06/13/2013 08:41:45	0:01	06/13/2013 09:19:47	View

Communicator Management Screen

System Capacity Management

This additional load on the telephone system is easily accommodated by CenturyLink's system "over-provisioning". As part of a Tier 1 network provider, we are able to cost-effectively architect the system to handle multiple times more call volume than simple inmate-to-family calling.

Operational Efficiencies

Put together, NDCS can enjoy significant improvement over existing processes.

Technical Approach



❖ “The Attendant” – Inmate Information Line and “Message of the Day”

Complementary with the Communicator module, inmate information takes two forms.

First, the Inmate Information Line allows inmates to check information such as release dates, account balances, and other simple information through straightforward prompts within the Enforcer. Velocity restrictions can also be placed so that inmates are able to call into the IVR no more than once or twice a day – this was an important learning during a similar installation at South Carolina DOC several years ago.

Second, using a voice messaging system, facility staff can create a “Message of the Day” that is delivered to inmates via inmate phone during a specified time period. Facility staff can type the message into the Enforcer system, and the message is translated to a voice recording using text-to-speech technology; or staff can use traditional voice recording to record their message.

They then enter the time window (start/stop dates and times) during which the message will be played to inmates. Any time an inmate picks up any inmate phone during the designated timeframe, they will hear the Message of the Day before call connection. When the message expires, it is no longer played to inmates, with no further action necessary from Facility staff.

Technical Approach

The facility can use the Message of the Day feature to share information with inmates facility-wide. Additionally, with the facility's permission, CenturyLink can create messages to inform inmates of new product rollouts, facility-approved rate modifications, or other changes to inmate calling services.

Please note: CenturyLink is able to provide these additional services over the Enforcer due to its position as a network provider, which in turn allows us to "over-provision" the extra bandwidth needed to handle these types of transactions.

❖ Integration with Other Systems

We recognize that investigative data can come from several sources – the Offender Management System, or other communications systems such as e-messaging, commissary, or trust fund deposits.

Because the Enforcer is a standalone IT architecture, we are able to link to NDCS-specific systems without the worry many other systems have with data security and "firewalling" from other accounts. In addition, the Enforcer is able to accept data and write interfaces to other system's specifications rather than forcing them to meet ours. Links to other systems would primarily be shown in the inmate information menu.

With our integration expertise, we are able to implement integrations to provide seamless calling services. For example, in just the last 2 years we have written SOAP, FTP and SFTP, XML, CSV, 2XML, Incremental, Sync, Webservices and other types of software interfaces with inmate commissary, banking / trust account systems, JMS/OMS and/or VINE systems for more than 20 clients.

A core capability of CenturyLink is as a managed IT systems integrator. As a result, we have a proven track record of integrating with a number of other best-in-class vendors to provide a seamless experience for our clients.

- *Custom features typically delivered in weeks, not months or years.*
- *We write to you and your vendors' specs, not the other way around. While our standard language is XML, the Enforcer's open source platform allows our in-house database administrators to "normalize" our data exchanges to fit other vendors' (or the NDCS' internal systems') specs. This means fast and simple data exchanges, without the need for NDCS staff to arbitrate disagreements between vendors.*

Technical Approach

- *Existing partnerships & proven ability to work with other vendors.* CenturyLink already has proven our ability to integrate with multiple internally-developed and commercially provided software systems. For example:
 - ✓ Multiple internally-developed Offender Management Systems
 - ✓ At Idaho Department of Corrections, CenturyLink worked with VRS provider Purple Communications with the objective of providing secure, recorded video relay services.

❖ Phone-Based Commissary Ordering

Please note: As part of a top-tier network provider, CenturyLink would be able to accommodate the additional load on the phone system for commissary ordering at no cost to NDCS. And as a subsidiary of the nation's largest commissary software and supply company, CenturyLink's technology partner ICSolutions has developed the most robust commissary ordering and processing by phone module available today.

The module offers complete flexibility to NDCS to use the phone system in the way it most sees fit:

- As a complete commissary management tool, including warehousing, purchase restrictions on a global (no one can purchase more than x items) or individual (diabetic, indigent) basis, inventory management, picking slips, and P&L reporting.
- As an "Electronic Bubble Sheet / Shopping Cart Manager", where inmates enter and delete items on the phone to be presented to NDCS order fulfillment and inventory systems.
- As a simple free "Speed dial" into a NDCS-managed automated system for order entry and control or combinations, such as an Electronic Bubble Sheet that enforces restrictions prior to order entry. The Enforcer system has existing customers using the commissary module in all three ways.

Products are given a 4-digit code within the system, thereby allowing 9,999 unique products to be sold. Laminated product sheets would be installed by CenturyLink for inmates' reference.

Once entering the commissary ordering module, simple prompts would be provided to allow inmates to enter product codes and quantities, as well as the opportunity to review and modify an order before submitting.

Technical Approach

Inventory

The Enforcer includes inventory management so that NDCS personnel can check order history and stocking levels.

Red indicates items that are below re-order level

Item Code	Description	Max per Sale	Class	Category	Sale Price	Last Cost	Available	Reserved For Inmates	Expected Stock	Re-order Level	Qty Due Soon (on order)	Edit/View
1000	DISP RAZOR	1	Reg Trustee	Misc	\$0.35	\$0.25	2529	0	2529	0	0	Edit...
1001	Gatorade (orange flavor)	5	Reg Trustee	Misc	\$1.00	\$0.65	6	0	6	0	0	Edit...
1002	Gatorade (arctic blue)	6	Reg Trustee	Misc	\$1.00	\$0.65	20	0	20	10	0	Edit...
1003	Gatorade (red punch flavored)	5	Reg Trustee	Misc	\$1.00	\$0.65	2	0	2	0	0	Edit...
1004	Gatorade (Lemon-Lime flavored)	5	Reg Trustee	Misc	\$1.00	\$0.65	54	0	54	10	0	Edit...
1005	ROLAIDS	5	Disc Reg Med Trustee	Misc	\$0.75	\$0.51	89	0	89	10	0	Edit...
1006	GUMMY FRUIT SNACKS	5	Reg Trustee	Misc	\$0.25	\$0.14	24	0	24	10	0	Edit...
1007	instant COFFEE	0	Reg Trustee	Misc	\$1.75	\$1.60	88	0	88	10	0	Edit...
1008	BR-SAVERS MINTS	5	Reg Trustee	Misc	\$0.75	\$0.47	12	0	12	10	0	Edit...
1009	BUTTERFINGER	5	Reg Trustee	Misc	\$0.80	\$0.60	52	0	52	10	0	Edit...
1010	PAYDAY	5	Not For Sale	Misc	\$0.80	\$0.56	0	0	0	10	0	Edit...
1011	Payday (KING SIZE)	5	Reg Trustee	Misc	\$1.25	\$1.00	21	0	21	10	0	Edit...
1012	SNICKERS	5	Reg Trustee	Misc	\$0.80	\$0.56	68	0	68	10	0	Edit...
1013	MILKY WAY king size	5	Reg Trustee	Misc	\$1.25	\$1.00	17	0	17	10	0	Edit...
1014	Whatchamacallit Candy Bar	5	Reg Trustee	Candy	\$0.80	\$0.55	50	0	50	10	0	Edit...
1015	3 MUSKETEERS	5	Reg Trustee	Misc	\$0.80	\$0.56	5	0	5	10	0	Edit...
1016	Snickers Peanut Butter	6	Reg Trustee	Misc	\$0.85	\$0.56	22	0	22	10	0	Edit...
1017	REESES PEANUT BUTTER CUP king size	5	Reg Trustee	Misc	\$1.25	\$1.00	34	0	34	10	0	Edit...
1018	Reese's mini cups (king size)	5	Reg Trustee	Candy	\$1.25	\$1.00	37	0	37	10	0	Edit...
1019	Jack Link's JERKY CHEW	4	Reg Trustee	Misc	\$1.25	\$1.00	53	0	53	10	0	Edit...
1020	100 Grand candy bar	5	Reg Trustee	Misc	\$0.80	\$0.65	55	0	55	10	0	Edit...
1021	Mint SNUFF pouches	1	Reg Trustee	Misc	\$2.75	\$2.00	62	0	62	10	0	Edit...
1022	Baby Ruth	5	Reg Trustee	Misc	\$0.80	\$0.65	32	0	32	10	0	Edit...
1023	SPAM (individual serving)	5	Reg Trustee	Misc	\$1.50	\$1.16	21	0	21	10	0	Edit...
1024	Starburst fruit chews	10	Reg Trustee	Misc	\$0.80	\$0.60	25	0	25	10	0	Edit...
1025	Cheese squeezer - Hot Pepper	10	Reg Trustee	Misc	\$0.70	\$0.50	59	0	59	10	0	Edit...
1026	OATMEAL CREAM PIE	5	Not For Sale	Misc	\$0.80	\$0.30	0	0	0	10	0	Edit...
1027	M&M PLAIN	5	Reg Trustee	Misc	\$0.80	\$0.55	45	0	45	5	0	Edit...
1028	MEAT & CHEESE sticks	0	Reg Trustee	Misc	\$0.85	\$0.60	137	0	137	10	0	Edit...
1029	HUGE RICE KRISPIE TREATS	5	Not For Sale	Misc	\$1.25	\$0.50	11	0	11	10	0	Edit...
1030	tube of toothpaste	2	Disc Reg Med Trustee	Misc	\$1.75	\$1.00	21	0	21	5	0	Edit...

Purchase history

Full inmate purchase history is easily accessible for authorized commissary personnel, along with the opportunity to review and approve purchases:

Technical Approach

Item Code:

Item Code: Description: [Inventory](#)

Category:

Sale Price: Total In Stock: Re-order level: Max qty per inmate sale: (0 means unlimited)

Indigent Discipline Regular Medical Trustee Not for sale

(for missing or found items)

Purchase History

Date	Transaction Type	Qty	Cost	Qty Ordered	Qty Received
07/02/2012	Found	1	\$0.00	0	0
06/29/2012	Found	1	\$0.00	0	0
05/30/2012	Found	1	\$0.00	0	0
03/22/2012	Purchase	2526	\$0.25	3000	3000
08/12/2010	Purchase	0	\$0.22	4000	4000
02/09/2010	Purchase	0	\$0.22	2000	2000
09/21/2009	Purchase	0	\$0.22	2000	2000
08/27/2009	Purchase	0	\$0.22	500	500
04/23/2009	Purchase	0	\$0.22	1000	1000
03/04/2009	Purchase	0	\$0.26	800	800
03/02/2009	Purchase	0	\$0.26	200	200
12/01/2008	Purchase	0	\$0.25	200	200
10/20/2008	Found	0	\$0.00	0	0
07/30/2008	Purchase	0	\$0.37	40	40
07/02/2008	Purchase	0	\$0.37	20	20
02/27/2008	Purchase	0	\$0.37	40	40
01/09/2008	Purchase	0	\$0.37	40	40
11/28/2007	Purchase	0	\$0.37	40	40
10/24/2007	Purchase	0	\$0.37	40	40
06/06/2007	Purchase	0	\$0.37	20	20
05/31/2007	Adjust	0	\$0.37	102	102

Select Order Number	State	Date	Inmate ID	Name	Item Code	Qty	Description	Comment	Cost	Total Cost
61277	Delivered	undo 07/10/2012	20110419	LESTER E SMITH	1023	2	SPAM (individual serving)		\$3.00	\$3.00
61251	Delivered	undo 07/10/2012	20110419	LESTER E SMITH	2035	1	pencil cap eraser		\$0.10	\$6.70
					2074	2	BIG 24 oz. Pepsi		\$3.00	
					2084	3	Ramen - Chicken		\$1.80	
					2085	3	Ramen - Beef		\$1.80	
61246	Delivered	undo 07/10/2012	20110419	LESTER E SMITH	1007	1	instant COFFEE		\$1.75	\$7.85
					1040	1	big Box of snack crackers 12 oz.		\$2.25	
					1059	1	2 in 1 Shampoo & conditioner		\$1.75	
					1149	2	ENVELOPE WITH STAMP		\$1.10	
					2033	1	TradeWinds SWEET TEA		\$1.00	
60776	Delivered	undo 06/26/2012	20110419	LESTER E SMITH	1149	3	ENVELOPE WITH STAMP		\$1.65	\$1.65
60769	Delivered	undo 06/26/2012	20110419	LESTER E SMITH	1000	1	DISP. RAZOR		\$0.35	\$13.80
					1007	1	instant COFFEE		\$1.75	
					1056	1	BAR SOAP		\$1.75	
					1149	1	ENVELOPE WITH STAMP		\$0.55	
					2010	2	HUGE Soz Sausage - mild		\$3.50	
					2044	2	Mocha Cappachino		\$1.10	
					2074	2	BIG 24 oz. Pepsi		\$3.00	
					2084	3	Ramen - Chicken		\$1.80	
60687	Delivered	undo 06/19/2012	20110419	LESTER E SMITH	1174	1	INDIGENT PACKAGE (complete)		\$0.00	\$0.00
60470	Delivered	undo 06/12/2012	20110419	LESTER E SMITH	1000	1	DISP. RAZOR		\$0.35	\$0.35
60169	Delivered	undo 06/05/2012	20110419	LESTER E SMITH	1059	1	2 in 1 Shampoo & conditioner		\$1.75	\$2.30
					1149	1	ENVELOPE WITH STAMP		\$0.55	
59798	Delivered	undo 05/22/2012	20110419	LESTER E SMITH	1007	1	instani COFFEE		\$1.75	\$5.60
					1056	1	BAR SOAP		\$1.75	
					1149	2	ENVELOPE WITH STAMP		\$1.10	

Technical Approach

Order Entry Rules

Times allowed for order entry are configurable. This is particularly useful if NDCS manages inventory in an "Electronic Bubble Sheet" scenario - inventory amounts provided to the Enforcer system can therefore be "frozen" to avoid over-ordering. Alternatively, the Enforcer system could allow "over-ordering" and simply disclose to inmates that their orders are taken pending approval, with the final picking slip describing items fulfilled versus denied.

Day	Open time	Close time
Monday	0:00	0:00
Tuesday	15:00	23:00
Wednesday	0:00	0:00
Thursday	0:00	0:00
Friday	0:00	0:00
Saturday	0:00	0:00
Sunday	0:00	0:00

0:00 for start and 24:00 for stop means commissary is **on** all day.
 0:00 for start and stop means commissary is **off** all day.

Reporting

Numerous reporting capabilities (account balances, order history, etc) are native in the system. Only a select grouping of reports is shown for brevity.

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Commissary Item Price List

Code	Description	Price	Allow	Max		Code	Description	Price	Allow	Max
1000	DISP. RAZOR	0.35	RT	1		1109	SPORTSBRA 36	4.50	RMT	2
1001	Gatorade (orange flavor)	1.00	RT	5		1110	SPORTSBRA 38	4.50	RMT	2
1002	Gatorade (arctic blue)	1.00	RT	6		1111	SPORTSBRA 40	4.50	RMT	2
1003	Gatorade (red punch flavored)	1.00	RT	5		1112	SPORTSBRA 42	4.50	RMT	2
1004	Gatorade (Lemon-Lime flavored)	1.00	RT	5		1113	SPORTSBRA 44	4.50	RMT	2
1005	ROLAIDS	0.75	DRMT	5		1114	T-SHIRT LG	4.00	RT	2
1006	GUMMY FRUIT SNACKS	0.25	RT	5		1115	T-SHIRT NLG	4.00	RMT	2
1007	instant COFFEE	1.75	RT	0		1116	T-SHIRT 2X	4.50	RT	2
1008	BR-SAVERS MINTS	0.75	RT	5		1117	T-SHIRT 3X	4.50	RT	2
1009	BUTTERFINGER	0.80	RT	5		1118	small t-shirt	4.00	RMT	1
1011	Payday (KING SIZE)	1.25	RT	5		1119	T-SHIRT MEDIUM	4.00	DRMT	2
1012	SNICKERS	0.80	RT	5		1134	CHEESE COMBO	0.80	RT	5
1013	MILKY WAY long size	1.25	RT	5		1136	JALAPENO COMBO	0.80	RT	5
1014	Whatchamacallit Candy Bar	0.80	RT	5		1139	MENS CANVAS SHOE 6	5.00	RMT	1
1015	3 MUSKETEERS	0.80	RT	5		1140	MENS CANVAS SHOE 7	5.00	RMT	1
1016	Snickers Peanut Butter REESE'S PEANUT BUTTER CUP long size	0.85	RT	5		1141	MENS CANVAS SHOE 8	5.00	RMT	1
1017	Reese's mini cups (long size)	1.25	RT	5		1142	MENS CANVAS SHOE 9	5.00	RMT	1
1018	Jack Link's JERKY CHEW	1.25	RT	4		1143	MENS CANVAS SHOE 10	5.00	RMT	1
1019	100 Grand candy bar	0.80	RT	5		1144	MENS CANVAS SHOE 11	5.00	RMT	1
1020	Mini SNUFF pouches	2.75	RT	1		1145	MENS CANVAS SHOE 12	4.00	RMT	1
1021	Baby Ruth	0.80	RT	5		1146	MENS CANVAS SHOE 13	4.00	RMT	1
1022	SPAM (individual serving)	1.50	RT	5		1147	MENS CANVAS SHOE 14	4.00	RMT	1
1023	Starburst fruit chews	0.80	RT	10		1149	ENVELOPE WITH STAMP	0.55	DRMT	10
1025	Cheese squeezer - Hot Pepper	0.70	RT	10		1150	POSTAGE STAMP	0.45	DRT	6
1027	M&M PLAIN	0.80	RT	5		1152	writing paper	1.75	RT	2
1028	MEAT & CHEESE sticks	0.85	RT	5		1155	MANILA ENVELOPE	0.30	DRMT	5
1030	tube of toothpaste	1.75	DRMT	2		1156	FOLDER W/POCKETS	0.40	RMT	5
1031	Skittles	0.70	RT	5		1159	CROSSWORD PUZZLE BOOK	1.50	RT	2
1033	Big Mayonaisse squeezer	0.25	RT	4		1160	WORD SEARCH PUZZLE BOOK	1.50	RT	2
1034	Chili pouch (Western Style)	1.75	RT	6		1162	PLAYING CARDS	2.00	RMT	1
1035	Chili pouch (mild)	1.75	RT	6		1166	UNO CARDS	2.50	RT	1
						1170	DICTIONARY	1.00	RMT	1

Technical Approach

Commissary Category Report

Start_Time = 07/06/2012 00:00:00 End_Time = 07/13/2012 23:59 Choose_Category = All

Category	Order	Inmate ID	Item	Description	Notes	Qty	Price	Cost
Candy	61137	20060231	1018	Reese's mini cups (king size)		1	1.25	1.25
	61139	0004	2037	cherry/cheese bear claw danish		2	0.00	0.00
	61140	20100320	2028	Iced Honey Bun		4	0.85	3.40
	61141	20020356	2050	Reese's Fast Break candy bar KING SIZE		2	1.25	2.50
	61142	20000074	2021	salted peanuts		1	0.75	0.75
	61143	20020828	2050	Reese's Fast Break candy bar KING SIZE		3	1.25	3.75
	61144	20120208	2002	Reese's Pieces		2	0.80	1.60
	61147	20110403	2002	Reese's Pieces		3	0.80	2.40
	61147	20110403	2001	Hershey w/Almonds		2	0.80	1.60
	61147	20110403	2000	Big Peanut Butter Cookie		2	0.80	1.60
	61148	20120244	2028	Iced Honey Bun		2	0.85	1.70
	61148	20120244	2012	Chocolate sandwich cookies		2	0.75	1.50
	61148	20120244	2011	Peanut Butter Sandwich cookies		2	0.75	1.50
	61149	20060027	2046	Bun candy bar (maple)		3	0.80	2.40
	61149	20060027	2012	Chocolate sandwich cookies		1	0.75	0.75
	61149	20060027	1018	Reese's mini cups (king size)		1	1.25	1.25
	61149	20060027	2018	Deluxe mixed nuts		2	1.50	3.00
	61149	20060027	2016	sweet and salty nut mix		1	0.99	0.99
	61149	20060027	2038	diet Pepsi 16.9 oz		2	1.10	2.20
	61151	20120142	2033	TradeWinds SWEET TEA		1	1.00	1.00
	61151	20120142	2037	cherry/cheese bear claw danish		2	0.85	1.70
	61152	20020356	2050	Reese's Fast Break candy bar KING SIZE		2	1.25	2.50
	61152	20020356	2011	Peanut Butter Sandwich cookies		1	0.75	0.75
	61152	20020356	2012	Chocolate sandwich cookies		1	0.75	0.75
	61152	20020356	2014	Twix Peanut Butter		2	0.80	1.60
	61153	20110146	2033	TradeWinds SWEET TEA		5	1.00	5.00
	61153	20110146	2032	KING SIZE Peanut M&M's		2	1.25	2.50
	61153	20110146	2011	Peanut Butter Sandwich cookies		2	0.75	1.50
	61153	20110146	2012	Chocolate sandwich cookies		1	0.75	0.75
	61154	20040182	2055	Peanut Butter squeezer	Ord: 61154, User sancintye set order as Return: qty was 2 (07/11/2012 07:26).	0	0.50	0.00

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Special Acct Summary

Special Acct	Credit	Debit	Balance
Commissary Sales	-493,429.22	493,429.22	0.00
Debit Calling	0.00	0.00	0.00
Restitution	0.00	0.00	0.00
Hygiene	-1,685.99	1,711.99	26.00
Property Damage	-277.32	287.62	10.30
Medical Co-pay	-15,074.83	15,374.83	300.00
Copy Fees	-0.60	0.60	0.00
Inmate Trust Account	-48.20	1,213.11	1,164.91
Total	-510516.16	512017.37	1501.21

Technical Approach

❖ Inmate Medical Scheduling

Through standard IVR data entry and response technology, the Enforcer can be used to deliver medical information to and from inmates. This provides an automated means for inmates to request appointments and receive responses, all in a single, trackable system. The Enforcer system's voice messaging module can also be used, for example, for inmates to describe symptoms to medical staff.

This improves the efficiency by reducing labor costs as information passing move away from traditional paper ordering as staff spends less time collecting and processing medical forms. Implementation would be a collaborative effort and customized to meet requirements.

❖ Emergency Auto-Dialer

CenturyLink offers the capability, on short notice to generate a calling campaign to provide general information to friends and family. For example, if a disaster at a facility (fire, flood) that causes the Enforcer system to no longer function, an automated calling campaign could provide a status to all numbers dialed by inmates within a certain timeframe.

- ✓ Piece of mind for friends and family
- ✓ Reduces inquiries to central office

❖ Additional Investigative Assistance

As a division of a Local Exchange Carrier (LEC), CenturyLink has unique access to carriers and reverse lookup databases, and continues to offer assistance whenever needed to NDCS investigative staff. These unique relationships are augmented by our "closed loop" prepaid account setup process, which verifies Billing Name and Address information for all called parties upon account setup, and makes this information available to authorized users anywhere in the Enforcer.

Any investigator knows that even the most sophisticated investigative tools can be rendered useless if they cannot track the phone on the other end of the conversation. Although it costs more to administer, our unique prepaid account setup process ensures that account is set up anonymously – even those set up through Western Union. As a result, investigators receive verified billing name and address information for use in investigations.



Technical Approach

Finally, even if a number outside the Inmate Telephone System becomes part of an investigation, CenturyLink's corporate law enforcement department and unique carrier relationships are available to our customers.

This was put to the test in a murder cold case at one of our County correctional customers – detectives there were unable to contact the right people to get a SIM card unlocked. Through CenturyLink's LERG database and executive-level contacts at the carrier, we were able to contact the right people and get the SIM card unlocked in less than one week.

The LERG database provides carrier information, as well as alternate contact information for subpoena requests, for numbers that may not be entered into the Enforcer system but may materialize in the course of an investigation.

Enhanced carrier database (LIDB)

Phone Number: 2528000000 * Format: NPANXXXXXX
 Select BNA Provider: Compiled Data Source

Phone Number	2528000000
BNA Host Provider	Compiled Data Source (33)
Reply Code	800 - (Verify) Listing found and information can be found in the addenda of the response
Name	MANXXXXXXXX
Address	4014 WHITEHORN
Service Start Date	11-15-2011
Company Type	C
OCN	0470
OCN Name	CENTURYLINK
Wireless Indicator	N
Ported Indicator	N
LIDB ID	UT
Timestamp	Thu Apr 12 14:59:23 EDT 201

Local Carrier Routing Guide (LERG)

Network Services - Client Systems - MOA - LERG

LERG Switch Information Lookup

Local Exchange Routing Guide Switch Information
 Enter any one of the following criteria to search for LERG info:

CLLI code: Use UPPER CASE. Enter partial CLLI for wildcard search. Enter N to find all entries with N anywhere in the CLLI.
 NPA / NXX: Enter 3 digit NPA and either 3 digit or partial NXX for wildcard search. Examples: entering 800+200 and nxx+40 will return 200.240, 200.241, 200+01, 200+03, etc.
 LATA code: Enter LATA for a list of all associated CLLI's.
 OCN: Enter the Operating Company Number for detailed OCN information.
 Local Routing Number: Enter LRN (or first few digits) to get associated CLLI's.
 LATA: OCN: Enter LATA to find all NPAs/NXX's for a LATA. (Entering an OCN will narrow the search).
 OCN Category: Select a category for a list of OCN's.
 Actual Switch CLLI: Enter acs_sw_31_60 for a list of all associated CLLI's.
 Call Agent Code: Enter a call agent code for a list of associated CLLI's.

Operating Company Information

Click here for a [Printer Friendly](#) version of the page.

OCN: 9533
 Name: SOUTHWESTERN BELL
 Alt. Name: SOUTHWESTERN BELL
 Category: RBOC State: TX ever_all_ocn: 9533

Contact Information:
 Name: AD Phone: 927
 Title:
 Company: SOUTHWESTERN BELL
 Address: 26
 SA:
 Mailstop info: 159005

Through Enhanced LIDB and CenturyLink's exclusive access to LERG, additional Billing Name and Address information – in addition to carrier contact information for records requests – are available to authorized investigative personnel

Technical Approach

Through our Program Manager, CenturyLink offers additional assistance to NDCS investigators. This assistance includes:

- ✓ Running standard reports to identify suspicious activity over the Enforcer system.
- ✓ Regular refresher training for investigators

❖ Data Detective Visual Link Analysis & Call Pattern Analysis

Visual Link Analysis

Data Detective Link Analysis provides powerful data mining tools for investigators. Using Link Analysis, NDCS staff will be able to search varying degrees of separation in order to establish links from inmate to inmate or end user to end user. Links are established when an end user (outside the facility) interacts with one or more inmates through the Enforcer system, or when multiple end users interact with the same inmate(s). These linked "interactions" can include:

- Inmate phone calls
- Access Corrections / Keefe Deposit services
- E-messaging services

Key features of Link Analysis include:

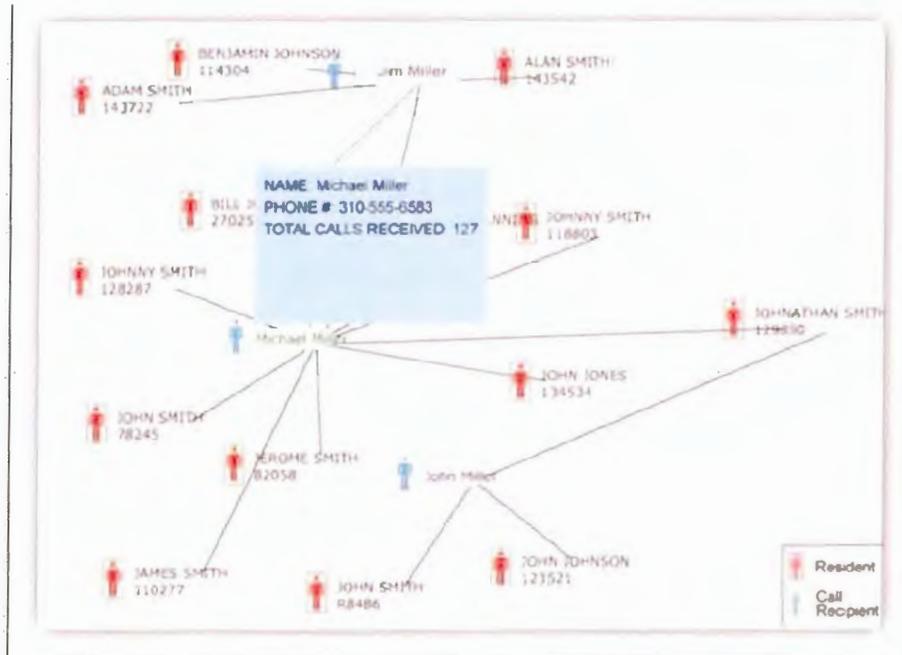
- Facility staff can explore important data using a dynamic visual map.
- The unique design of the visual map allows investigators to quickly find connections and patterns.
- Link Analysis is a web-based program. Authorized facility staff can use it from their own desktop or laptop computer, in addition to using onsite workstations.

This tool will automatically be applied to all calling and payment information. The NDCS will have access to Link Analysis reports in real time 24 hours a day, 7 days a week. These reports can be searched by date range and include all calling and transaction information, including the called party (or depositor's) address.

Below is a sample Link Analysis visual map. In this sample, an end user "Michael Miller" has received phone calls from multiple inmates. The visual map displays Michael Miller's name, phone number, and total number of calls received, as well as all the inmates who called him.

The visual map also shows other call recipients who interacted with one or more of the same inmates as Michael Miller. Again, all reports are available 24/7, and reports can also be exported to Excel or downloaded as a PDF.

Technical Approach



Link Analysis Screen

Call Pattern Analysis

The Enforcer system will also be equipped with a robust analytical system that enables correctional staff to quickly and easily identify calls of interest that are most likely to provide actionable intelligence among the thousands of inmate conversations recorded each month. Call Pattern Analysis works by analyzing the associations between inmates, called parties, and even other inmates and – most importantly – by identifying changes in these associations or calling patterns that could indicate illicit activity.

Calling patterns are naturally established as the result of inmate and called party schedules and preferences. For instance, an inmate is usually familiar with each called party's work schedule and will avoid calling during certain times (such as weekdays, for example) when that person is usually at work. To increase the likelihood of having their call answered, the inmate will naturally make a habit of calling in the evening or over the weekend. While legitimate changes in pattern do sometimes occur – such as when a change is made in the called party's work schedule – disruptions to normal patterns can also be an indicator that illicit activity is occurring.

Technical Approach

For example, if a pattern of regular communication exists between a particular inmate and a called party, and then communication suddenly ceases altogether, the absence of calling could indicate that the inmate has obtained the use of an illegal cell phone, on which he or she is making these phone calls. If calling to this telephone number suddenly resumes on the regular schedule, but it is a different inmate who is placing the calls, this could indicate that the called party is merely facilitating communications to the outside world and possibly assisting in the completion of illegal communications.

Call Pattern Analysis identifies relationships and calling patterns among inmates, called parties, and even other inmates. Call Pattern Analysis then detects subtle and dramatic changes in these relationships and calling patterns to identify calls, inmates, and called numbers as suspicious. Call Pattern Analysis will increase the productivity and efficiency of your investigative staff by automatically identifying calls of interest that are most likely to provide actionable intelligence.

Detailed queries can be structured – based upon timeframe, called number and/or inmate PIN – to help investigators pinpoint calls of interest, such as:

- Phone numbers called by multiple inmates
- Phone numbers that appear on multiple inmates' PAN lists
- Phone numbers that appear on an inmate's PAN list but are never called
- Frequently called numbers
- Sudden absence of an inmate's regular calling
- Sudden absence of calling to a particular number
- Changes in regular calling times/days
- Increase in inmate calling over a finite period
- Decrease in inmate calling over a finite period
- Increase in calling to a particular BTN over a finite period
- Decrease in calling to a particular BTN over a finite period
- Transfer of communication patterns from one inmate PIN to another inmate PIN

Investigators can use this information to isolate call recordings of interest. Or, they can use the Enforcer's custom reporting tools to create detailed reports containing particular data of interest – for example:

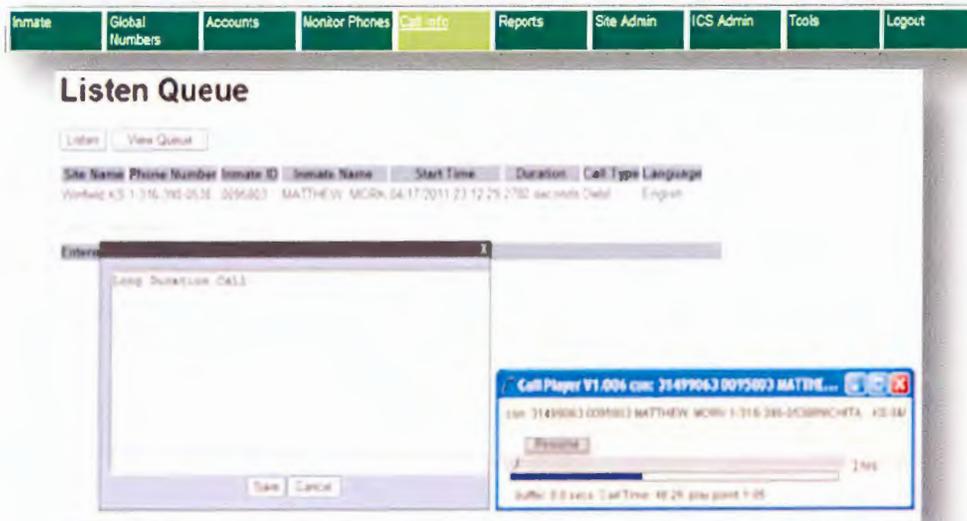
- A list of all numbers called by more than one inmate within a specified timeframe;
- A list of all calls attempted by a particular inmate during a designated timeframe
- A list of all telephone stations used to dial a particular telephone number.

Technical Approach

The system's flexible reporting application allows investigators to create custom queries based upon any combination of the data that is collected for each and every phone call, and to save these custom queries locally or globally in order to quickly run the reports again over future timeframes.

Listen Queue

Once calls are identified as suspicious and needing further review, the Enforcer's Listen Queue tool helps Investigations manage case activities. Depending on the NDCS's rules, authorized listeners can choose calls randomly or be 'forced' to listen to identified calls in order, and then include notes and follow-up. All functions are tracked for management review.



Listen Queue Screen

Listening productivity is also enhanced by the Enforcer's Enhanced Call Player, which allows users to isolate portions of the call, skip, or speed up playback (note human speech can be sped up approximately 130% without loss of understanding). In this way a 15 minute phone call can be reviewed and notated in as little as 3 or 4 minutes.

Technical Approach

The screenshot displays the CenturyLink Enhanced Call Player interface. At the top, there is a navigation menu with options: Inmate, Global Numbers, Accounts, Monitor Phones, Call Info, Reports, Site Admin, ICS Admin, and Tools. The main content area shows call details for a CenturyLink call with CSN 123456789, Inmate ID 1234567, Inmate Name John Doe, Phone Number 1-555-555-5555, City/State Anywhere, USA, and Call Date 01/01/2015 2:20PM. Below this are playback controls including volume (100%), skip silence, loop playback, speed, stereo, and mono. A large audio waveform is displayed in the center. At the bottom, there are sections for Notes, Bookmarks, and Segments. A table of notes is visible, with one entry dated 10/04/2014 at 12:20PM by user jhatconbuettler, containing placeholder text.

Enhanced Call Player

- ✓ Speed up / down playback
- ✓ Isolate inmate vs. called party
- ✓ Skip pauses
- ✓ Bookmark and notate portions of calls
- ✓ View note history

One-stop call review tool allows authorized reviewers to shrink listening and notation time by as much as 65%

Enhanced Call Player Display

Technical Approach

IV. DETAILED PROJECT WORK PLAN

In the past 4 years, no other inmate communications provider has installed more new systems at DOCs, covering more inmates, than CenturyLink. Our installation team, managed out of Denver and with primary on-site installation staff in our nearby Kansas City headquarters, is highly experienced and ready to meet or exceed NDCS' expectations. In addition, they have a proven ability to operate under tight timelines and be flexible to deal with any of our customers' operational challenges as they arise.



Alabama DOC

New contract – installed 4Q2012
Repair of widespread prior cable issues



Arizona DOC

New contract – installed 2Q2015
Expedited 30-day implementation following legal challenge from outgoing vendor



Idaho DOC

New contract – installed 3Q2014
Voluntary calling rate reduction



West Virginia DOC

New contract – installed 2Q2015
One-week install of new facility refused by prior provider



Utah DOC

New contract – installed 1Q2015
Custom privilege level development



Kansas DOC

Long-term renewal of existing contract – 1Q2013
Installation of centralized platform; transition from legacy Enforcer premise system



Nevada DOC

Long-term renewal of existing contract – 3Q2014
Installation of centralized platform; transition from legacy Enforcer premise system

Implementation Plan: Approach and Methodology

CenturyLink will work with the incumbent ITS vendor to ensure a seamless transition of service. The transfer of service from the existing calling platform to the CenturyLink ITS will result in no loss of service, and all existing relevant customer data (PIN numbers, PIN/PAN lists, globally blocked numbers, privileged (do not record) numbers, etc.) will be successfully transferred to the new system.

Technical Approach

1) Methodology Overview

Gantt charts allow for critical path analysis and are the preferred method of operation used by CenturyLink for all project management efforts. The use of Microsoft Project allows the team to clearly identify, document, track and account for all tasks that must be accomplished as part of the project, including all prep work, day of transition activities, post-cutover, acceptance testing and quality assurance testing. By doing so, we can easily monitor a project's progress and provide real time updates to all stakeholders.

Quality assurance measures are an integral part of our project planning and these steps are integrated throughout all phases of the project; not just at the completion of the transition. Our objective is to spend additional time in the planning phase of a project to identify any potential problems up front and proactively take steps to prevent them. This practice allows for all stakeholders to have not only a voice but also a sense of ownership when the final implementation plan is created. It also promotes communication throughout all phases of the implementation.

2) Implementation Meeting

Once CenturyLink has received a letter of intent from Nebraska Department of Correctional Services (NDCS), a meeting will be held between CenturyLink and appropriate NDCS staff. This initial meeting will identify all key stakeholders, their responsibilities, and document information necessary to schedule detailed site inspections at each NDCS facility:

- Introductions, responsibilities and contact information of all key stakeholders
- Name and physical address of each site that requires inmate telephone service
- Name and physical address of sites that will require access for CenturyLink personnel during the contract
- Number of inmate phones at each site (standard, ADA, TDD) and associated hardware (backboards, pedestals, enclosures, flush mount brackets, etc)
- Verify number of new required workstations at each site (investigative or administrative) and number of existing workstations and laptops at each site that will require access to the new ITS
- Breakdown of traffic at each site (percentage of traffic that is local and percentage of traffic that is long distance [intraLATA, interLATA, and interstate])
- Discuss site access requirements
- Discuss site survey and voice biometric enrollment process
- Local contacts at each site (name, title, and telephone number)

Technical Approach

- Central contact for existing database information (blocking, PIN/PAN lists, free call lists, privileged call lists, call duration settings, 3-way detect/disconnect settings, on/off times, etc.)
- Scheduling information (beginning and end dates, site priorities and constraints)
- Miscellaneous information (identification of unique technical, regulatory, or administrative issues)

3) Site Surveys

One of the key steps in our implementation plan is to conduct site surveys at every facility prior to installation. This familiarizes our team with the facility and the layout of the existing ITS while also allowing us to solicit input from our site contacts to ensure we complete the install with as little impact as possible to normal facility operations.

The inspection team (CenturyLink Project/Program Manager, ITS Specialist and technicians) will perform the following tasks:

- Locate, identify, and document the following by building, floor, room, rack, vendor and type (and document via e-mail):
 - Existing inmate telephone system (ITS)
 - Existing ITS workstations
 - Existing inmate phones (type, backboard, and enclosure)
 - Existing toggle switches
 - Existing conduits and risers
 - Existing lightning protection
 - Existing AC outlets
- Identify and document environmentally controlled space for the planned equipment:
 - Floor space for the CenturyLink ITS
 - Wall or floor space for any new phones requested by on-site personnel
 - Desk space for any workstations planned for the site or requested by on-site personnel
- Identify and document other requirements:
 - Electrical power requirements (for ITS equipment and during installation)
 - Air conditioning requirements for the ITS equipment
 - Parking requirements during installation

Technical Approach

- Secured storage area requirements for equipment arriving before installation team
- Staging requirements during installation
- Physical addresses of NDCS sites for shipping (street address, city, state, zip)
- Contact name(s) and telephone number(s) for future coordination

The following information, if provided by the customer during inspection, will also be formally documented:

- PIN/PAN requirements
- Desired call limit (calls/day)
- Desired calling duration limit (minutes)
- Daily time period (lunch, night, etc.) during which the system should be shut down, if any
- Desired Inmate access to call progression and what level of detail (called party response, tones, silence, etc.)
- Desired 3-Way call action and type (detect, alarm, disconnect, etc.)
- Desired location of the ITS equipment (building, floor, room, location in room, etc.)
- Desired quantity and location of workstations
- Desired location of supporting network hardware
- Desired quantity and location of new cutoff switches
- Desired quantity and location of new inmate phones
- Desired quantity and location of new telephone devices for the deaf (TDDs)
- Desired quantity and location of portable telephones
- Desired quantity and location of wireless telephones

Any information obtained in the site surveys that was not in the RFP or that enhances/contradicts information provided in the RFP will be added to the project plan documentation to ensure the project satisfies the customer's needs.

Most importantly, any requests for net new inmate phones or workstations will be documented for further discussion with NDCS project stakeholders.

Technical Approach

4) System Requirements Review

CenturyLink will review the data gathered in the initial implementation meeting and the site surveys to ensure that all customer requirements are met. Any new or outstanding issues will be resolved with the designated customer representative before orders are placed for system equipment.

5) Order Equipment and Services

CenturyLink maintains relationships with a wide range of top suppliers in the corrections industry and has selected those that best fit the specific needs of NDCS. CenturyLink's long-standing relationship with its chosen subcontractors provides for a seamless operation that will be transparent to NDCS.

CenturyLink remains the single point of contact regarding performance, products, and services. Based upon the information provided in the RFP and further details provided by customer representatives in meetings and site inspections, CenturyLink will place orders to furnish all labor, supervision, equipment, materials, and supplies as detailed in the table below.

Any information provided in the order process that was not in the RFP or that enhances/contradicts information provided in the RFP will be added to the project plan documentation to ensure the project satisfies the customer's needs.

Most importantly, the delivery dates provided upon placement of the orders with the various vendors will be checked against the project schedule to ensure the critical path is not impacted.

6) Delivery of Equipment and Services

CenturyLink is sensitive to the particular concerns associated with the daily operation of prisons and jails. The unexpected arrival of equipment or personnel can be very disruptive to the ongoing operations of corrections/detention facilities.

Therefore, the delivery of any equipment or service in advance of the installation team's arrival (such as network services or system equipment) will be coordinated in advance. CenturyLink has dedicated personnel to manage the ongoing coordination of deliveries with sites to minimize disruption.

7) Telephone Instrument Installation

CenturyLink will have multiple teams removing and replacing phones and supporting equipment. Telephone lines will be installed and terminated and the system will be installed. This will be coordinated to ensure minimum interruption of telephone service.

Technical Approach

CenturyLink will coordinate with the incumbent ITS provider to remove phones and may request to purchase backboard, pedestal or enclosures, in place, if found to be in good condition and with NDCS approval.

Any information obtained during the telephone installation that was not in the RFP or enhances/contradicts information provided in the RFP will be added to the project plan documentation to ensure the project satisfies the customer's needs. Most importantly, any new cabling or equipment issues identified during the telephone installation will be included in the implementation plan.

8) Install and Test New Inmate Telephone System (Back-End Components)

We recommend pre-wiring laterally, to the existing platform, so that the supporting systems can run concurrently during installation. Running concurrent platforms benefits a flawless cutover as it provides a contingency plan if a problem does arise.

The CenturyLink team will prepare the telephone room by:

- Extending circuits from demarc to the room where the telephone equipment will be installed
- Providing clean and identified cable pairs for each circuit
- Marking blocks 1-24 and identify each pair and what telephone it serves
- Leaving a copy of all notes and identification information on site
- Testing all phones, jacks and toggle switches
- Identifying all phones by cable pair
- Leaving information about how extensions will be done when circuits can't be extended before the cutover
- Running one CAT6 cable, per workstation, from the call control system room to the room(s) where the new workstation(s) will be installed, where applicable

All back-end inmate telephone equipment and workstations can be installed adjacent to the existing equipment without impacting its services. Installation is a matter of unpacking the equipment, placement in a rack or desired telephone room area, punching down telephone cables and out-going lines and initiating system power.

The system is then tested to ensure proper software configuration. This will include the upload validation of any databases currently used by the facility within the inmate call processors.

Technical Approach

These databases include but are not limited to:

- Blocked Number Call Lists
- Inmate PINs and PANs
- Alert Features
- Reports
- Free and/or Attorney Number Lists

The project manager will then check all items in the approval process to ensure that all equipment, circuits, and trunks to be cutover meet the specifications of the RFP.

Note: All equipment will be tested and certified as fully operational prior to cutover to ensure that all individual requirements for each site are in full compliance with facility regulations. At this point, the system is turned over to the TSC (Technical Service Center) for 24/7 monitoring.

9) Cutover Process

1. CenturyLink personnel will work with the site and/or NDCS to schedule the transfer of the telephone lines during a period that inmates have no or limited access to the phones (e.g. lunch or dinner times). Once a timeframe has been confirmed with the facility and/or NDCS, CenturyLink will begin to cut the station lines from the existing system and re-install them on the CenturyLink Enforcer system.
2. CenturyLink will begin by disconnecting incoming station lines between the Main Distribution Frame (MDF) and the existing platform, 24 lines (one block) at a time.
3. After the first block has been cut, each pair will then be punched down on the block connecting the MDF to the new ITS.
4. If the cable between the MDF and the existing system is too short to be connected to the new system then a new cable will be installed to connect the MDF to the new ITS.
5. This process will continue until all lines are transferred.
6. The phones will only be interrupted 24 at a time and it should not take more than 15 minutes per block of 24 to transfer service.

In the unlikely event that a site experiences ITS issue during cutover, CenturyLink will be able to transfer service back to the incumbent's system until the problem is resolved. CenturyLink understands the high volume of phone usage on the weekends and as a result, usually only performs cutovers Monday through Thursday.

Technical Approach

10) Test Calls

CenturyLink will also ensure that the new Enforcer system is properly programmed by placing test calls at each facility:

Calling Information	Function Verified by Test Call
Test Numbers	Accepted calls are completed, and denied calls are not completed
Local Calling Area	Local calls are not billed as long distance
Script Parameters	Inmates and called parties received proper instruction
Phone Signage	Instructions on telephone reflect operation/ configuration of system
Globally Allowed Numbers	Calls to allowed numbers are completed
Globally Denied Numbers	Calls to prohibited numbers are not completed
Personal Identification Numbers (PINs)	Calls without PINs, or invalid PINs, are not completed. Calls with valid PINs are completed.
Personal Allowed Numbers (PANs)	Accepted calls will be completed, but only with the proper PIN
Privileged Numbers	Calls are not monitored and recorded
Free Numbers	Calls are not billed to called parties

After cutover, CenturyLink personnel will go to each phone and record location and serving port identification number. This information will then be entered into the Enforcer system to aid in NDCS investigative activities.

11) Training

Our goal is to familiarize NDCS personnel with daily system functions, blocks, reports, and investigative tools as well as emergency system shut down of the Inmate Telephone System. We understand that different user groups will sometimes have different training needs. As such, classes will be customized to fit the participants and their NDCS assigned user roles. The user-friendly nature of the Enforcer system makes it easy to understand and minimizes staff training time.

NDCS Staff training would be a three-phase process as outlined below:

Phase 1 – Pre Cutover Training

Each identified user will receive a printable copy of The Enforcer User Guide via email in PDF format.

Technical Approach

Online training ("Webinar") will be provided in several sessions to all participants beginning one month prior to the cutover of NDCS. There is no maximum number of attendees for Webinar training and CenturyLink will schedule as many sessions as needed based on the role of the user.

Each participant must have access to a personal computer, workstation, or laptop with access to the Internet. The online class ("Webinar") will serve as a presentation of the Enforcer system and preparation for the cutover process. The goal of Phase 1 Training is an introduction and high level overview of the Enforcer; these sessions typically last 30-45 minutes. Participants will be able to ask questions during the training session.

Phase 2 – Formal Training After System Cutover

Formal training will be provided immediately after cutover to address in detail managing inmates, global numbers, monitoring, and the retrieval of call recordings. These training sessions can be conducted onsite or via the web. Scheduled sessions will be based on the number of users and the needs of the NDCS staff. The goal of Phase 2 training is to fully prepare NDCS personnel to operate the Enforcer system. These sessions will typically last one hour depending on the user level.

Phase 3 – Post Cutover Follow-Up Training

Follow up training will be provided no more than 30 days after all platform cutovers have been completed and users have had a chance to start using the Enforcer. This training can be conducted onsite or via webinar.

The training method and the locations will be scheduled by NDCS. The goal of Phase 3 Training is to answer any new questions the users may have after working in the system. Phase 3 sessions will typically last one hour depending on the needs of the users and the questions they may have.

The standard training curriculum is detailed below. This is a typical training agenda which can be customized for NDCS:

Day-to-Day System Administration

- ✓ Logging In
- ✓ User Access Control Settings
- ✓ Call Process Flow
- ✓ Call Record Search
- ✓ Blocked Number Administration

Technical Approach

- ✓ Inmate Editor Function
- ✓ Create a new account
- ✓ ANI Advanced Privileges and Controls
- ✓ Entering PANs
- ✓ Alerts on Inmate Accounts
 - Disable Account
 - Search for Inmate Account
 - Print Account Information
- ✓ Debit Account Administration
- ✓ Interface functionality (if applicable)

Investigative Functions

- ✓ Monitoring
- ✓ Call Disrupt Function
- ✓ Recording
- ✓ Recording Exempt Numbers
- ✓ Setting Alerts (email, pager and phone)
- ✓ Recording Search, Retrieval & Reporting
- ✓ Recording Export to CD
- ✓ Report Generation

Automated Calling Process

- ✓ Initiating a Call
- ✓ Collect Call Process
- ✓ Debit Call Process
- ✓ PrePaid Collect

Service & Maintenance

- ✓ Receiving Trouble Reports
- ✓ Information Gathering & Preliminary Trouble-shooting

Technical Approach

- ✓ Trouble Reporting Instructions
- ✓ Email updates on trouble tickets

Reference Tools

- ✓ Quick Reference Guide
- ✓ User Guide
- ✓ Report Synopsis
- ✓ Inmate Information Pamphlet in English & Spanish
- ✓ Support Center
- ✓ Contact Information

CenturyLink will provide a customized training curriculum for NDCS. Training classes will be scheduled to fit NDCS's preferences and the schedules of the personnel involved in the training.

Our systems have evolved with the input and recommendations by corrections industry experts, investigators, security personnel and officers, who use the systems on a daily basis and provide the best feedback and concepts for further improvements to the system.

Upon the release of upgrades and/or enhancements to the Enforcer system, NDCS will be notified and provided documentation of the features and functionalities contained in that release, and if NDCS deems that refresher training is needed, that training will be provided.

Inmate Population Training

Inmate training is a simple but critical component of implementation. The CenturyLink Team's inmate training checklist includes the following:

- ✓ Placement of posters in day rooms and common areas
- ✓ New calling procedures
- ✓ Account information for family members (need to close out previous accounts)
- ✓ Debit funding processes (no change)
- ✓ Placement of leaflets at visitation
- ✓ Production of pamphlet for intake packet (if desired)

Technical Approach

Family & Friends Training

Training for family and friends is equally as important. This is one area where the CenturyLink Team's customer service program is most valuable. Upon an inmate's first call to a number following cutover, prepaid account holders are *automatically* routed to a live representative to initiate an account – not left to call us separately on their own.

Moreover, representatives are specially scripted to explain policies during account setup, including providing information on how to close out accounts and receive refunds from the previous provider. Of course, website updates, leaflets at visitation, and other communications further educate family members.

Technical Approach

V. DELIVERABLES AND DUE DATES

CenturyLink's proposed implementation and installation deliverables and due dates is provided beginning after this page in a Microsoft Project Gantt Chart format.

In the past 4 years, no other inmate communications provider has installed more new systems at DOCs, covering more inmates, than CenturyLink. Our installation team, managed out of Denver and with primary on-site installation staff in our nearby Kansas City headquarters, is highly experienced and ready to meet or exceed NDCS' expectations. In addition, they have a proven ability to operate under tight timelines and be flexible to deal with any of our customers' operational challenges as they arise.



Alabama DOC

Repair of widespread prior cable issues
Voluntary holiday rate promotions



Arizona DOC

Custom website development
Significantly expedited implementation



Idaho DOC

Two voluntary rate reductions
Mid-contract Video Relay installation



West Virginia DOC

One-week install of new facility refused by
prior provider



Wisconsin DOC

No-cost on-site personnel
Long-term legacy recording access



Kansas DOC

Early buyout of prior provider
No-cost commissary ordering by phone



Utah DOC

Custom privilege level development
& number verification



Texas DCJ

Highly customized verification system
Managed Access installation



Nevada DOC

Automated inmate info services
Cell phone detection equipment loan

We invite NDCS to contact any of our customers for a better understanding of our capabilities and consistent commitment to customer service.

Nebraska Department of Correctional Services /CenturyLink Implementation Plan

ID	Task Name	Duration	Start	Finish	Predecessors	Jul '16							Aug '16							Sep '16							Oct '16						
						26	3	10	17	24	31	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	4	11	18	25	2
1	Letter of Intent/Contract Awarded	50 days	Fri 7/15/16	Thu 9/22/16																													
2	NDCS Letter of Intent	1 day	Fri 7/15/16	Fri 7/15/16																													
3	Conference Call between CTL personnel and DOC personnel to Verify Critical RFP Data	0.25 days	Thu 7/21/16	Thu 7/21/16																													
4	NDCS Contact Names, Titles, and Phone Numbers	5 mins	Thu 7/21/16	Thu 7/21/16	2FS+3 days																												
5	Verify Physical Addresses of All Facilities and Shipping/Delivery Policies	5 mins	Thu 7/21/16	Thu 7/21/16	4																												
6	Number of indoor and outdoor phones and types of enclosures (wall mount, pedestal, etc.)	10 mins	Thu 7/21/16	Thu 7/21/16	5																												
7	Breakdown of traffic at each site (local versus LD, collect versus debit versus prepaid)	10 mins	Thu 7/21/16	Thu 7/21/16	6																												
8	Verify rate information.	10 mins	Thu 7/21/16	Thu 7/21/16	7																												
9	Scheduling Constraints (beginning and end dates, site priorities and constraints)	10 mins	Thu 7/21/16	Thu 7/21/16	8																												
10	PIN/PAN usage and format	5 mins	Thu 7/21/16	Thu 7/21/16	9																												
11	Allowed calling duration	5 mins	Thu 7/21/16	Thu 7/21/16	10																												
12	System On and Off Times	5 mins	Thu 7/21/16	Thu 7/21/16	11																												
13	Desired Quantity and Location of new Phones	10 mins	Thu 7/21/16	Thu 7/21/16	12																												
14	Workstations (quantity and location)	10 mins	Thu 7/21/16	Thu 7/21/16	13																												
15	Schedule site survey	5 mins	Thu 7/21/16	Thu 7/21/16	14																												
16	Coordinate Site Access	5 mins	Thu 7/21/16	Thu 7/21/16	15																												
17	Scheduled work hours and discuss dates not allowed in facilities	5 mins	Thu 7/21/16	Thu 7/21/16	16																												
18	Accounting/Banking	15 mins	Thu 7/21/16	Thu 7/21/16	17																												
19	Identify specific site names to be announced during call	5 mins	Thu 7/21/16	Thu 7/21/16	18																												
20	Follow Up Site Survey. Confirm location of demarcs, condition of cabling & cutoff switches, floor space and power availability for platform and network CPE). Location of New Phones.	4 days	Mon 7/25/16	Fri 7/29/16																													
21	Omaha Correctional Center - 2323 Avenue J - Omaha - 34 phones	2 hrs	Mon 7/25/16	Mon 7/25/16	15FS+2 days																												
22	Less than 1 mile	5 mins	Mon 7/25/16	Mon 7/25/16	21																												
23	Community Correctional Center - 2320 Avenue J - Omaha - 15 phones	1.5 hrs	Mon 7/25/16	Mon 7/25/16	22																												
24	Less than 3 miles about 6 minutes	10 mins	Mon 7/25/16	Mon 7/25/16	23																												
25	Correctional Youth Facility - 2610 North 20th Street - East Omaha - 14 phones	1.5 hrs	Mon 7/25/16	Mon 7/25/16	24																												
26	approx 70 miles - 55 minutes	1 hr	Mon 7/25/16	Mon 7/25/16	25																												
27	Tecumseh State Correctional - 2725 North Hwy 50 - Tecumseh - 107 phones	4 hrs	Tue 7/26/16	Tue 7/26/16	26																												
28	approx 49 miles - 55 minutes	1 hr	Tue 7/26/16	Tue 7/26/16	27																												
29	Nebraska State Penitentiary - 4201 S 14th Street - Lincoln - 77 phones	2 hrs	Tue 7/26/16	Tue 7/26/16	28																												
30	approx 6 miles - 8 minutes	10 mins	Tue 7/26/16	Tue 7/26/16	29																												
31	Community Corrections Center - 2720 West Van Dorn - Lincoln - 21 phones	1.5 hrs	Wed 7/27/16	Wed 7/27/16	30																												
32	less than 1 mile	5 mins	Wed 7/27/16	Wed 7/27/16	31																												
33	Diagnostic and Evaluation Center - 3220 West Van Dorn Street - Lincoln - 30 phones	1.5 hrs	Wed 7/27/16	Wed 7/27/16	32																												
34	less than 1 mile	10 mins	Wed 7/27/16	Wed 7/27/16	33																												
35	Lincoln Correction Center - 3216 West Van Dorn Street - Lincoln - 19 phones	1.5 hrs	Wed 7/27/16	Wed 7/27/16	34																												

Project: Nebraska Gantt Chart
Date: Fri 6/17/16

Task		Summary		Rolled Up Progress		External MileTask	
Critical Task		Rolled Up Task		Split		Critical Task	
Progress		Rolled Up Critical Task		External Tasks		Progress	
Milestone		Rolled Up Milestone		Project Summary			

Nebraska Department of Correctional Services /CenturyLink Implementation Plan

ID	Task Name	Duration	Start	Finish	Predecessors	Jul '16				Aug '16				Sep '16				Oct '16			
						26	3	10	17	24	31	7	14	21	28	4	11	18	25	2	9
36	approx 71 miles - 1 hr 10 minutes	1.25 hrs	Wed 7/27/16	Wed 7/27/16	35					7/27	7/27										
37	Youth Rehab and Treatment - 855 North 1st Street - Geneva - 11 phones	1.5 hrs	Wed 7/27/16	Wed 7/27/16	36					7/27	7/27										
38	approx 26 miles - 30 minutes	0.5 hrs	Wed 7/27/16	Wed 7/27/16	37					7/27	7/27										
39	Correctional Center for Women - 1107 Recharge Road - York - 19 phones	1.5 hrs	Thu 7/28/16	Thu 7/28/16	38					7/28	7/28										
40	89 miles - 1 hr 27 minutes	1.5 hrs	Thu 7/28/16	Thu 7/28/16	39					7/28	7/28										
41	Youth Rehab and Treatment - 2802 30th Avenue - Kearney - 12 phones	1.5 hrs	Thu 7/28/16	Thu 7/28/16	40					7/28	7/28										
42	approx 108 miles - 1 hr 53 minutes	2 hrs	Thu 7/28/16	Thu 7/28/16	41					7/28	7/28										
43	Work Ethic Camp - 2309 North Highway 83 - McCook - 10 phones	1.5 hrs	Fri 7/29/16	Fri 7/29/16	42					7/29	7/29										
44	System Requirements Review and Finalize System Design	1 day	Tue 8/2/16	Wed 8/3/16																	
45	Review site survey with NDCS and resolve any outstanding issues	1 day	Tue 8/2/16	Wed 8/3/16	43FS+2 days					8/2	8/3										
46	Design ITS Platform (# of phone ports, trunks, workstations, storage capacity, features, etc.)	1 day	Tue 8/2/16	Wed 8/3/16	43FS+2 days					8/2	8/3										
47	Define number of IP addresses needed	1 day	Tue 8/2/16	Wed 8/3/16	43FS+2 days					8/2	8/3										
48	Finalize Implementation Plan with NDCS	1 day	Wed 8/3/16	Thu 8/4/16																	
49	Obtain approval of installation of equipment and cutover schedule	1 day	Wed 8/3/16	Thu 8/4/16	45					8/3	8/4										
50	Implementation Plan Approved by NDCS	1 day	Wed 8/3/16	Thu 8/4/16	45					8/3	8/4										
51	- Staffing	25 days	Thu 8/4/16	Thu 9/8/16																	
52	Interview and Hire Full time system administrator	25 days	Thu 8/4/16	Thu 9/8/16	50					8/4	9/8										
53	Assign Technical Support Staff	1 day	Thu 8/4/16	Fri 8/5/16	49					8/4	8/5										
54	Assign Account Representative	1 day	Thu 8/4/16	Fri 8/5/16	49					8/4	8/5										
55	24X7 Call Center Setup	1 day	Thu 8/4/16	Fri 8/5/16	49					8/4	8/5										
56	Order Equipment and Services	1 day	Thu 8/4/16	Fri 8/5/16																	
57	Order System Equipment (get delivery date)	1 day	Thu 8/4/16	Fri 8/5/16	49					8/4	8/5										
58	Order Inmate Phone Equipment and misc material	1 day	Thu 8/4/16	Fri 8/5/16	49					8/4	8/5										
59	Order Network	1 day	Thu 8/4/16	Fri 8/5/16	49					8/4	8/5										
60	Finalize Implementation Schedule Based Upon Provided Delivery Dates	1 day	Thu 8/4/16	Fri 8/5/16	49					8/4	8/5										
61	Request/Process Critical Information	0.25 days	Mon 8/8/16	Mon 8/8/16																	
62	Request That System Data Be Provided By The Incumbent (PINs, PANs, blocked numbers, attorney numbers, free numbers, etc.)	2 hrs	Mon 8/8/16	Mon 8/8/16	49FS+2 days					8/8	8/8										
63	Identify local calling areas for billing purposes	2 hrs	Mon 8/8/16	Mon 8/8/16	49FS+2 days					8/8	8/8										
64	Identify dialing rules (local versus intraLATA versus interLATA versus interState).	2 hrs	Mon 8/8/16	Mon 8/8/16	49FS+2 days					8/8	8/8										
65	Obtain ILD Sub-CIC for LEC processing	2 hrs	Mon 8/8/16	Mon 8/8/16	49FS+2 days					8/8	8/8										
66	Training	11 days	Thu 8/4/16	Fri 8/19/16																	
67	NDCS provides a list of Staff that needs training	10 days	Thu 8/4/16	Thu 8/18/16	50					8/4	8/18										
68	Provide instructions and sign on for initial on-line webinar training for Nebraska NDCS Staff	1 day	Thu 8/4/16	Fri 8/5/16	50					8/4	8/5										
69	Schedule webinar classes	1 day	Thu 8/18/16	Fri 8/19/16	67					8/18	8/19										
70	Delivery of Equipment To Sites	25 days	Fri 8/5/16	Fri 9/9/16																	

Project: Nebraska Gantt Chart
Date: Fri 6/17/16

Task		Summary		Rolled Up Progress		External MileTask	
Critical Task		Rolled Up Task		Split		Critical Task	
Progress		Rolled Up Critical Task		External Tasks		Progress	
Milestone		Rolled Up Milestone		Project Summary			



CenturyLinkTM

CTL 10-K 12/31/2015

Section 1: 10-K (10-K)

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2015
or

[] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to
Commission File No. 001-7784



CENTURYLINK, INC.
(Exact name of registrant as specified in its charter)

Louisiana
(State or other jurisdiction of
incorporation or organization)
100 CenturyLink Drive, Monroe, Louisiana
(Address of principal executive offices)

72-0651161
(I.R.S. Employer
Identification No.)
71203
(Zip Code)

(318) 388-9000
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Table with 2 columns: Title of Each Class, Name of Each Exchange on Which Registered. Row 1: Common Stock, par value \$1.00; New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: Stock Options

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes [X] No []

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes [] No [X]

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes [X] No []

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes [X] No []

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions

of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

On February 17, 2016, 543,852,862 shares of common stock were outstanding. The aggregate market value of the voting stock held by non-affiliates as of June 30, 2016 was \$16.4 billion.

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of the Registrant's Proxy Statement to be furnished in connection with the 2016 annual meeting of shareholders are incorporated by reference in Part III of this Annual Report.

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Unless the context requires otherwise, references in this Annual Report to "CenturyLink," "we," "us" and "our" refer to CenturyLink, Inc. and its consolidated subsidiaries.

PART I

ITEM 1. BUSINESS

Overview

We are an integrated communications company engaged primarily in providing an array of communications services to our residential and business customers. Our communications services include local and long-distance voice, high-speed Internet, Multi-Protocol Label Switching ("MPLS"), private line (including special access), data integration, Ethernet, colocation, managed hosting (including cloud hosting), network, public access, video, wireless and other ancillary services. We strive to maintain our customer relationships by, among other things, bundling our service offerings to provide our customers with a complete offering of integrated communications services.

Based on our approximately 11.7 million total access lines at December 31, 2015, we believe we are the third largest wireline telecommunications company in the United States. We operate 74% of our total access lines in portions of Colorado, Arizona, Washington, Minnesota, Florida, North Carolina, Oregon, Iowa, Utah, New Mexico, Missouri, and Nevada. We also provide local service in portions of Idaho, Ohio, Wisconsin, Virginia, Texas, Nebraska, Pennsylvania, Montana, Alabama, Indiana, Arkansas, Wyoming, Tennessee, New Jersey, South Dakota, North Dakota, Kansas, Louisiana, South Carolina, Michigan, Illinois, Georgia, Mississippi, Oklahoma, and California. In the portion of these 37 states where we have access lines, which we refer to as our local service area, we are the incumbent local telephone company.

At December 31, 2015, we served approximately 6.0 million high-speed Internet subscribers and 285 thousand Prism TV subscribers. We also operate 59 data centers throughout North America, Europe and Asia.

We were incorporated under the laws of the State of Louisiana in 1968. Our principal executive offices are located at 100 CenturyLink Drive, Monroe, Louisiana 71203 and our telephone number is (318) 388-9000.

For a discussion of certain risks applicable to our business, see "Risk Factors" in Item 1A of Part I of this Annual Report. The summary financial information in this section should be read in conjunction with, and is qualified by reference to, our consolidated financial statements and notes thereto in Item 8 and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7 of Part II of this Annual Report.

Financial and Operational Highlights

The following table summarizes the results of our consolidated operations:

	Years Ended December 31,		
	2015 ⁽¹⁾	2014 ⁽²⁾	2013 ⁽³⁾
	(Dollars in millions)		
Consolidated statements of operations summary results:			
Operating revenues	\$ 17,900	18,031	18,095
Operating expenses	15,295	15,621	16,642
Operating income	\$ 2,605	2,410	1,453
Net income (loss)	\$ 878	772	(239)

⁽¹⁾ During 2015, we recognized an incremental \$215 million of revenue associated with the Federal Communications Commission ("FCC") Connect America Fund Phase 2 support program. For additional information, see Note 1—Basis of Presentation and Summary of Significant Accounting Policies to our consolidated financial statements in Item 8 of Part II of this Annual Report.

⁽²⁾ During 2014, we recognized a \$60 million tax benefit associated with a deduction for the tax basis for worthless stock in a wholly-owned foreign subsidiary and a \$63 million pension settlement charge. For additional information, see Note 13—Quarterly Financial Data (Unaudited) to our consolidated financial statements included in Item 8 of Part II of this Annual Report.

⁽³⁾ During 2013, we recorded a non-cash, non-tax-deductible goodwill impairment charge of \$1.092 billion for goodwill attributed to one of our previous operating segments and a litigation settlement charge of \$235 million.

The following table summarizes certain selected financial information from our consolidated balance sheets:

	As of December 31,	
	2015	2014
(Dollars in millions)		
Consolidated balance sheets summary information:		
Total assets ⁽¹⁾	\$ 47,604	49,103
Total long-term debt ⁽¹⁾⁽²⁾	20,225	20,503
Total stockholders' equity	14,060	15,023

- (1) We adopted both ASU 2015-03 "Simplifying the Presentation of Debt Issuance Costs" and ASU 2015-17 "Balance Sheet Classification of Deferred Taxes" by retrospectively applying the requirements of the ASUs to our previously issued consolidated financial statements. See further discussion in Note 1—Basis of Presentation and Summary of Significant Accounting Policies to our consolidated financial statements in Item 8 of Part II of this Annual Report.
- (2) Total long-term debt is the sum of current maturities of long-term debt and long-term debt on our consolidated balance sheets. For additional information on our total long-term debt, see Note 3—Long-Term Debt and Credit Facilities to our consolidated financial statements in Item 8 of Part II of this Annual Report. For information on our total obligations, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Future Contractual Obligations" in Item 7 of Part II of this Annual Report.

The following table summarizes certain of our operational metrics:

	As of December 31,		
	2015	2014	2013
(in thousands except for data centers, which are actuals)			
Operational metrics:			
Total access lines ⁽¹⁾	11,748	12,394	13,002
Total high-speed Internet subscribers ⁽¹⁾	6,048	6,082	5,991
Total Prism TV subscribers	285	242	175
Total data centers ⁽²⁾	59	58	55

- (1) Access lines are lines reaching from the customers' premises to a connection with the public network and high-speed Internet subscribers are customers that purchase high-speed Internet connection service through their existing telephone lines, stand-alone telephone lines, or fiber-optic cables. Our methodology for counting our access lines and high-speed Internet subscribers includes only those lines that we use to provide services to external customers and excludes lines used solely by us and our affiliates. It also excludes unbundled loops and includes stand-alone high-speed Internet subscribers. We count lines when we install the service.
- (2) We define a data center as any facility where we market, sell and deliver either colocation services, multi-tenant managed services, or both. Our data centers are located in North America, Europe and Asia.

Our methodology for counting access lines, high-speed Internet subscribers, Prism TV subscribers and data centers may not be comparable to those of other companies.

Substantially all of our long-lived assets are located in the United States and substantially all of our total consolidated operating revenues are from customers located in the United States. We estimate that approximately 2% of our consolidated revenues is derived from providing telecommunications, colocation and hosting services outside the United States.

Operations

Segments

We are organized into operating segments based on customer type, business and consumer. These operating segments are our two reportable segments in our consolidated financial statements:

- Business Segment.** Consists generally of providing strategic, legacy and data integration products and services to small, medium and enterprise business, wholesale and governmental customers, including other communication providers. Our strategic products and services offered to these customers include our MPLS, private line (including special access), Ethernet, high-speed Internet, colocation, managed hosting, cloud hosting and other ancillary services. Our legacy services offered to these customers primarily include switched access, local and long-distance voice services, including the sale of unbundled network elements ("UNEs") which allow our wholesale customers to use all or part of our network to provide voice and data services to their customers. Our data integration offerings include the sale of telecommunications equipment located on customers' premises and related professional services. These services include network management, installation and maintenance of data equipment and the building of proprietary fiber-optic broadband networks; and
- Consumer Segment.** Consists generally of providing strategic and legacy products and services to residential customers. Our strategic products and services offered to these customers include our high-speed Internet, video (including our Prism TV services) and wireless services. Our legacy services offered to these customers include local and long-distance voice service.

The following table shows the composition of our revenues by segment under our current segment categorization for the years ended December 31, 2015, 2014 and 2013:

	Years Ended December 31,			Percent Change	
	2015	2014	2013	2015 vs 2014	2014 vs 2013
Percentage of revenues:					
Business segment	59%	61%	61%	(2)%	—%
Consumer segment	34%	33%	33%	1 %	—%
Other operating revenues	7%	6%	6%	1 %	—%
Total operating revenues	100%	100%	100%		

For additional information on our segment data, including information on certain centrally-managed assets and expenses not reflected in our segment results, see Note 12—Segment Information to our consolidated financial statements in Item 8 of Part II of this Annual Report and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7 of Part II of this Annual Report.

Products and Services

Our products and services include local and long-distance voice, high-speed Internet, MPLS, private line (including special access), data integration, Ethernet, colocation, managed hosting (including cloud hosting), network, public access, video, wireless and other ancillary services.

We offer our customers the ability to bundle together several products and services. For example, we offer integrated and unlimited local and long-distance voice services. Our customers can also bundle two or more services such as high-speed Internet, video (including DIRECTV through our strategic partnership), voice and Verizon Wireless (through our strategic partnership) services. We believe our customers value the convenience and price discounts associated with receiving multiple services through a single company.

Most of our products and services are provided using our telecommunications network, which consists of voice and data switches, copper cables, fiber-optic cables and other equipment. Our network serves approximately 11.7 million access lines and forms a portion of the public switched telephone network, or PSTN. For more information on our network, see "Business—Network Architecture" below.

Described in greater detail below are our key products and services.

Strategic Services

We primarily focus our marketing and sales efforts on our "strategic" services, which are those services for which demand generally remains strong and that we believe are most important to our future performance. Generally speaking, our strategic services enable our customers to access the Internet, connect to private networks and transmit data, and enhance the security, reliability and efficiency of our customers' communications. Our strategic services are comprised of the following:

- *High-speed Internet.* Our high-speed Internet services allow customers to connect to the Internet through their existing telephone lines or fiber-optic cables at high speeds. Substantially all of our high-speed Internet subscribers are located within the local service area of our wireline telephone operations;
- *MPLS.* Multi-Protocol Label Switching is standards-approved data networking technology that we provide to support real-time voice and video. This technology allows network operators flexibility to divert and route traffic around link failures, congestion and bottlenecks;
- *Private Line.* A private line (including special access) is a direct circuit or channel specifically dedicated for the purpose of directly connecting two or more sites. Private line service offers a high-speed, secure solution for frequent transmission of large amounts of data between sites, including wireless backhaul transmissions;
- *Ethernet.* Ethernet services include point-to-point and multi-point equipment configurations that facilitate data transmissions across metropolitan areas and wide area networks. Ethernet services are also used to provide transmission services to wireless service providers that use our fiber-optic cables connected to their towers;
- *Colocation.* Colocation services enable our customers to install their own information technology ("IT") equipment in our data centers;
- *Managed Hosting.* Managed hosting includes provision of centralized IT infrastructure and a variety of managed services including cloud and traditional computing, application management, back-up, storage, and other advanced services including planning, design, implementation and support services;
- *Video.* Our video services include our facilities-based video, marketed as CenturyLink Prism TV, which is a premium entertainment service that allows our customers to watch hundreds of television or cable channels and record up to four shows on one home digital video recorder. We also offer satellite digital television under an arrangement with DIRECTV that allows us to market, sell and bill for its services under its brand name;
- *VoIP.* Voice over Internet Protocol, or VoIP, is a real-time, two-way voice communication service (similar to our traditional voice services) that originates over a broadband connection and often terminates on the PSTN; and
- *Managed Services.* Managed services represents a blend of network, hosting, cloud, and IT services that typically require ongoing support from our staff. These services frequently involve equipment or networks owned, acquired or controlled by the customer and often include consulting or software development.

Legacy Services

Our "legacy" services represent our traditional voice, data and network services, which include the following:

- *Local Voice Services.* We offer local calling services for our residential and business customers within the local service area of our wireline markets, generally for a fixed monthly charge. These services include a number of enhanced calling features and other services, such as call forwarding, caller identification, conference calling, voice mail, selective call ringing and call waiting, for which we generally charge an additional monthly fee. We also generate revenues from non-recurring services, such as inside wire installation, maintenance services, service activation and reactivation. For our wholesale customers, our local calling service offerings include primarily the resale of our voice services and the sale of UNEs, which allow our wholesale customers to use all or part of our network to provide voice and data services to their customers. Local calling services provided to our wholesale customers allow other telecommunications companies the ability to originate or terminate telecommunications services on our network;
- *Long-distance Voice Services.* We offer our residential and business customers domestic and international long-distance services and toll-free services. Our international long-distance services include voice calls that either terminate or originate with our customers in the United States;

- *Switched Access Services.* As part of our wholesale services, we provide various forms of switched access services to wireline and wireless service providers for the use of our facilities to originate and terminate their interstate and intrastate voice transmissions;
- *ISDN.* We offer integrated services digital network ("ISDN") services, which use regular telephone lines to support voice, video and data applications; and
- *WAN.* We offer wide area network ("WAN") services, which allow a local communications network to link to networks in remote locations.

Data Integration

Data integration includes the sale of telecommunications equipment located on customers' premises and related professional services. These services include network management, installation and maintenance of data equipment and the building of proprietary fiber-optic broadband networks for our business customers.

Other Operating Revenues

Other operating revenues consist primarily of Connect America Fund ("CAF") support payments, Universal Service Fund ("USF") support payments and USF surcharges. We receive federal support payments from both CAF Phase 1 and CAF Phase 2 programs, and support payments from both federal and state USF programs. These support payments are government subsidies designed to reimburse us for various costs related to certain telecommunications services, including the costs of deploying, maintaining and operating voice and high-speed Internet infrastructure in high-cost rural areas where we are not able to recover our costs from our customers. USF surcharges are the amounts we collect based on specific items we list on our customers' invoices to fund the Federal Communications Commission's ("FCC") universal service programs. We also generate other operating revenues from leasing and subleasing of space in our office buildings, warehouses and other properties. Because we centrally manage the activities that generate these other operating revenues, these revenues are not included in our segment revenues.

Additional Information

From time to time, we also make investments in other communications or technology companies.

For further information on regulatory, technological and competitive changes that could impact our revenues, see "Regulation" and "Competition" under this Item 1 below and "Risk Factors" under Item 1A below. For more information on the financial contributions of our various services, see "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7 of Part II of this Annual Report.

Patents, Trade Names, Trademarks and Copyrights

Either directly or through our subsidiaries, we have rights in various patents, trade names, trademarks, copyrights and other intellectual property necessary to conduct our business, such as our CenturyLink® and Prism® brand names. Our services often use the intellectual property of others, including licensed software. We also occasionally license our intellectual property to others as we deem appropriate.

We periodically receive offers from third parties to purchase or obtain licenses for patents and other intellectual property rights in exchange for royalties or other payments. We also periodically receive notices, or are named in lawsuits, alleging that our products or services infringe on patents or other intellectual property rights of third parties. In certain instances, these matters can potentially adversely impact our operations, operating results or financial position. For additional information, see "Risk Factors—Risks Impacting Our Business" in Item 1A of Part I of this Annual Report, and Note 14—Commitments and Contingencies to our consolidated financial statements in Item 8 of Part II of this Annual Report.

Sales and Marketing

We maintain local offices in most of the larger population centers within our local service area. These offices provide sales and customer support services in the community. We also rely on our call center personnel and a variety of channel partners to promote sales of services that meet the needs of our customers. Our sales and marketing strategy is to enhance our sales by offering solutions tailored to the needs of our various customers and promoting our brands. Our offerings include both stand-alone services and bundled services designed to meet the needs of different customer segments.

We conduct most of our operations under the brand name "CenturyLink." Our satellite television service is offered on a co-branded basis under the "DIRECTV" name. Our switched digital television service offering is branded under the name "Prism TV." The wireless service that we offer under our agency agreement with Verizon Wireless is marketed under the "Verizon Wireless" brand name.

Our sales and marketing approach to our residential customers emphasizes customer-oriented sales, marketing and service with a local presence. Our marketing plans include marketing our products and services primarily through direct sales representatives, inbound call centers, local retail stores, telemarketing and third parties, including retailers, satellite television providers, door to door sales agents and digital marketing firms. We support our distribution with digital marketing, direct mail, bill inserts, newspaper and television advertising, website promotions, public relations activities and sponsorship of community events and sports venues.

Similarly, our sales and marketing approach to our business customers includes a commitment to provide comprehensive communications and IT solutions for business, wholesale and governmental customers of all sizes, ranging from small offices to select enterprise customers. Our marketing plans include marketing our products and services primarily through digital advertising, direct sales representatives, inbound call centers, telemarketing and third parties, including telecommunications agents, system integrators, value-added resellers and other telecommunications firms. We support our distribution through digital advertising, events, television advertising, website promotions and public relations.

Network Architecture

Most of our products and services are provided using our telecommunications network, which consists of voice switches, data switches and routers, high-speed transport equipment, fiber-optic and copper cables and other equipment. Our local exchange carrier networks also include central offices and remote site assets. A substantial portion of our equipment operates with licensed software. As of December 31, 2015, we maintained approximately 1.0 million miles of copper plant and approximately 259 thousand miles of domestic fiber-optic plant.

We continue to enhance and expand our network by deploying broadband-enabled technologies to provide additional capacity to our customers. Rapid and significant changes in technology are expected to continue in the telecommunications industry. Our future success will depend, in part, on our ability to anticipate and adapt to changes in customer demands and technology. In particular, we anticipate that continued increases in broadband usage by our customers will require us to make significant capital expenditures to increase network capacity or to implement network management practices to alleviate network capacity shortages. The Federal Communications Commission has defined "broadband service" as Internet access service with a minimum transmission speed of 25 megabits per second, which could create additional requirements for higher capital spending to address marketing and competitive issues. Any such additional expenditures could adversely impact our results of operations and financial condition.

Similarly, we continue to take steps to simplify and modernize our network. To attain our objectives, we plan to continue to undertake several complex projects that we expect will be costly and take several years to complete. The costs of these projects could increase materially if we conclude that we need to replace any or all of our legacy systems.

Like other large telecommunications companies, we are a constant target of cyber-attacks of varying degrees, which has caused us to spend increasingly more time and money to deal with increasingly sophisticated attacks. Although none of our resulting security breaches to date have materially adversely affected our business, results of operations or financial condition, we periodically notify our customers, our employees or the public of select breaches.

We rely on several other communications companies to provide our offerings. We lease a significant portion of our core fiber network from our competitors and other third parties. Many of these leases will lapse in future years. All of our satellite television and wireless voice services are provided by other carriers under agency agreements, and some of our other services are reliant upon reselling arrangements with other carriers. Our future ability to provide services on the terms of our current offerings will depend in part upon our ability to renew or replace these leases, agreements and arrangements on terms substantially similar to those currently in effect.

For additional information regarding our systems, network, cyber risks, capital expenditure requirements and reliance upon third parties, see "Risk Factors", generally, in Item 1A of Part I of this Annual Report, and, in particular, "Risk Factors—Risks Affecting Our Business" and "Risk Factors—Risks Affecting Our Liquidity and Capital Resources." For more information on our properties, see Item 2 of Part I of this Annual Report.

Regulation

Overview

As discussed further below, our operations are subject to significant local, state, federal and foreign laws and regulations.

We are subject to significant regulation by the Federal Communications Commission ("FCC"), which regulates interstate communications, and state utility commissions, which regulate intrastate communications. These agencies (i) issue rules to protect consumers and promote competition, (ii) set the rates that telecommunication companies charge each other for exchanging traffic, and (iii) have traditionally developed and administered support programs designed to subsidize the provision of services to high-cost rural areas. In most states, local voice service, switched and special access services and interconnection services are subject to price regulation, although the extent of regulation varies by type of service and geographic region. In addition, we are required to maintain licenses with the FCC and with state utility commissions. Laws and regulations in many states restrict the manner in which a licensed entity can interact with affiliates, transfer assets, issue debt and engage in other business activities. Many acquisitions and divestitures require approval by the FCC and some state commissions. These agencies typically have the authority to withhold their approval, or to request or impose substantial conditions upon the transacting parties in connection with granting their approvals.

Our telephone operating companies are considered incumbent local exchange carriers ("ILECs"). Historically, ILECs operated as regulated monopolies having the exclusive right and responsibility to provide local telephone services in their franchised service territories. As we discuss in greater detail below, passage of the Telecommunications Act of 1996, coupled with state legislative and regulatory initiatives and technological change, fundamentally altered the telephone industry by generally reducing the regulation of ILECs and creating a substantial increase in the number of competitors. The following description discusses some of the major industry regulations that affect our traditional telephone operations, but numerous other regulations not discussed below could also impact us. Some legislation and regulations are currently the subject of judicial, legislative and administrative proceedings which could substantially change the manner in which the telecommunications industry operates and the amount of revenues we receive for our services. Neither the outcome of these proceedings, nor their potential impact on us, can be predicted at this time. For additional information, see "Risk Factors" in Item 1A of Part I of this Annual Report.

The laws and regulations governing our affairs are quite complex and occasionally in conflict with each other. From time to time, we are fined for failing to meet applicable regulations or service requirements.

Federal Regulation

General

We are required to comply with the Communications Act of 1934. Among other things, this law requires our ILECs to offer various of our legacy services at just and reasonable rates and on non-discriminatory terms. The Telecommunications Act of 1996 materially amended the Communications Act of 1934, primarily to promote competition.

The FCC regulates interstate services we provide, including the special access charges we bill for wholesale network transmission and the interstate access charges that we bill to long-distance companies and other communications companies in connection with the origination and termination of interstate phone calls. Additionally, the FCC regulates a number of aspects of our business related to privacy, homeland security and network infrastructure, including our access to and use of local telephone numbers and our provision of emergency 911 services. The FCC has responsibility for maintaining and administering support programs designed to expand nationwide access to communications services (which are described further below), as well as other programs supporting service to low-income households, schools and libraries, and rural health care providers.

In recent years, our operations and those of other telecommunications carriers have been further impacted by legislation and regulation imposing additional obligations on us, particularly with regards to providing voice and high-speed Internet service, bolstering homeland security, increasing disaster recovery requirements, minimizing environmental impacts and enhancing privacy. These laws include the Communications Assistance for Law Enforcement Act, and laws governing local telephone number portability and customer proprietary network information requirements. In addition, the FCC has heightened its focus on 911 reliability. The FCC has imposed fines on us and other companies for 911 outages and has adopted new compliance requirements for 911 service. We are making investments to protect against future 911 outages as well as incurring compliance-related costs to meet the FCC's 911 reliability standards. All of these laws and regulations may cause us to incur additional costs and could impact our ability to compete effectively.

In 2012, the FCC initiated a special access proceeding and requested data, information and documents to allow it to conduct a comprehensive evaluation of competition in the special access market. In late 2015, the FCC initiated a special access tariff investigation in order to review specific terms and conditions related to long-term special access contracts and discount plans. As part of its evaluations, the FCC is reviewing special access rates, terms and conditions. The ultimate impact of these proceedings on us is currently unknown. However, if the FCC were to adopt significant changes in regulations affecting special access services, this could adversely impact our operations or financial results.

In 2015, the FCC issued an order regulating the manner in which ILECs can discontinue or reduce certain copper-based services. This order requires ILECs to provide prior notice to certain customers of their proposed change in services, and in certain cases to provide replacement offerings on reasonably comparable terms and conditions. We expect that this order will limit our flexibility to react to changing conditions in the communications industry.

Intercarrier Compensation and Universal Service

For decades, the FCC has regularly considered various intercarrier compensation reforms, generally with a goal to create a uniform mechanism to be used by the entire telecommunications industry for payments between carriers originating, terminating, or carrying telecommunications traffic. The FCC has also traditionally administered support programs designed to promote the deployment of voice and high-speed Internet services in high-cost rural areas of the country.

In October 2011, the FCC adopted the Connect America and Intercarrier Compensation Reform order ("the 2011 order"), intended to reform the existing regulatory regime to recognize ongoing shifts to new technologies, including VoIP, and to re-direct universal service funding to foster nationwide broadband coverage. The 2011 order provides for a multi-year transition as terminating intercarrier compensation charges are reduced, universal service funding is explicitly targeted to broadband deployment, and line charges paid by end user customers are increased. These changes have increased the pace of reductions in the amount of switched access revenues related to our wholesale services, while creating opportunities for increased federal USF support and retail revenue funding.

In late 2011, numerous parties filed a petition for reconsideration with the FCC seeking numerous revisions to the 2011 order. Future judicial challenges to the 2011 order are also possible, which could alter or delay the FCC's proposed changes. In addition, based on the outcome of the FCC proceedings, various state commissions may consider changes to their universal service funds or intrastate access rates. Rulemaking designed to implement the order is not complete, and several FCC proceedings relating to the 2011 order remain pending. For these and other reasons, we cannot predict the ultimate impact of these proceedings at this time.

As a result of the 2011 order, a new Universal Service program was created to deploy broadband to unserved and underserved rural areas utilizing the Connect America Fund or "CAF". The CAF substantially replaces interstate USF funding previously utilized to support voice service in high-cost rural markets. There are two phases to the CAF program, CAF Phase 1 is a one-time broadband grant program while CAF Phase 2 is a multi-year recurring subsidy program for more extensive broadband deployment in price-cap ILEC territories.

In August 2015, we agreed to accept from the FCC CAF Phase 2 funding of approximately \$500 million per year for six years to fund the deployment of voice and high-speed Internet infrastructure for approximately 1.2 million rural households and businesses in 33 states. The funding from the CAF Phase 2 support program is expected to substantially supplant the funding we previously received from the interstate USF program that we previously utilized to support voice services in high-cost rural markets in these 33 states. In September of 2015, we began receiving payments from the FCC under the new CAF Phase 2 support program, which included (i) monthly payments at a higher rate than under the interstate USF support and (ii) a substantial one-time cumulative catch-up payment designed to address program transitioning issues.

We declined annual funding of approximately \$10 million in four states, and we expect the funding from the CAF Phase 2 support program for these four states will be auctioned by the FCC, perhaps in the latter part of 2016. In these four states, the interstate USF support we have historically received is expected to continue until the CAF Phase 2 auctions are completed.

As a result of accepting CAF Phase 2 support payments for 33 states, we will be obligated to make substantial capital expenditures to build infrastructure by certain specified milestone deadlines. Future funding is contingent upon our compliance with these infrastructure buildout commitments and certain other service requirements, including certain minimum transmission speed requirements (broadband service with download speeds of 10 megabits per second and upload speeds of 1 megabit per second). In addition, if we are not in compliance with FCC measures at the end of the six-year CAF Phase 2 period, we will have 12 months to attain full compliance. If we are not in full compliance after the additional 12 months, we would incur a penalty equal to 1.89 times the average amount of support per location received in the state over the six-year term, plus a potential penalty of 10% of the total CAF Phase 2 support over the six-year term for the state. For information on the risks associated with participating in this program, see Item 1A of Part I in this Annual Report.

For additional information about the potential financial impact of the CAF Phase 2 program, see Item 7 of Part II of this Annual Report.

Broadband Regulation

In February 2015, the FCC adopted new regulations that regulate Internet services as a public utility under Title II of the Communications Act of 1934. We anticipate that these regulations and any related rules will be reviewed by both the courts and Congress. At this time, we cannot estimate the impact this may have on our business.

The FCC recently adopted a new broadband standard of 25 Mbps download speed and 3 Mbps of upload speed. At this time, we are not aware of any regulatory mandates requiring us to deploy this target speed. The new target is simply a benchmark by which the FCC will evaluate broadband deployment progress in the future. However, the FCC could attempt to utilize this broadband speed target in future regulatory proceedings.

State Regulation

In recent years, most states have reduced their regulation of ILECs. Nonetheless, state regulatory commissions generally continue to regulate local service rates, intrastate access charges, state universal service funds and in some cases service quality. We are generally regulated under various forms of alternative regulation that typically limit our ability to increase rates for stand-alone, basic local voice service, but relieve us from the requirement to meet certain earnings tests. In a number of states, we have gained pricing freedom for the majority of retail services other than stand-alone basic consumer voice service. In most of the states in which we operate, we have gained pricing flexibility for certain enhanced calling services, such as caller identification and for bundled services that also include local voice service.

Under state law, our telephone operating subsidiaries are typically governed by laws and regulations that (i) regulate the purchase and sale of ILECs, (ii) prescribe certain reporting requirements, (iii) require ILECs to provide service under publicly-filed tariffs setting forth the terms, conditions and prices of regulated services, (iv) limit ILECs' ability to borrow and pledge their assets, (v) regulate transactions between ILECs and their affiliates and (vi) impose various other service standards.

Unlike many of our competitors, as an ILEC we generally face "carrier of last resort" obligations which include an ongoing requirement to provide service to all prospective and current customers in our service area who request service and are willing to pay rates prescribed in our tariffs. In certain situations, this may constitute a competitive disadvantage to us if competitors can choose to focus on low-cost profitable customers and withhold service from high-cost unprofitable customers. In addition, strict adherence to carrier-of-last-resort requirements may force us to construct facilities with a low likelihood of attractive economic return.

We operate in states where traditional cost recovery mechanisms, including rate structures, are under evaluation or have been modified. As laws and regulations change, there can be no assurance that these mechanisms will continue to provide us with any cost recovery.

For several years, we have faced various carrier complaints, legislation or other investigations regarding our intrastate switched access rates in several of our states. The FCC's 2011 order preempted state regulatory commissions' jurisdiction over all terminating access charges, including intrastate access charges that have historically been subject to exclusive state jurisdiction. Excluding the rate implications contemplated on a prospective basis by this FCC order, we will continue to vigorously defend and seek to collect our intrastate switched access revenues subject to outstanding disputes. The outcomes of these disputes cannot be determined at this time. If we are required to reduce our intrastate switched access rates as a result of any of these disputes or state initiatives, we will seek to recover displaced switched access revenues from state universal service funds or other services. However, the amount of such recovery, particularly from residential customers, is not assured.

Other Regulations

We are subject to federal and state regulations of customer service standards related to Prism TV. The metrics that are followed are generally the federal rules, but local franchise authorities have the ability to adopt more stringent standards. The FCC has largely delegated its enforcement powers to the individual local franchise authorities. We are subject to penalties in many of our local franchise agreements if we miss customer service standards.

Certain of our telecommunications, colocation and hosting services conducted in foreign countries are or may become subject to various foreign laws. Some of the legal requirements governing our foreign operations are more restrictive than or conflict with those governing our domestic operations, which raises our compliance costs and regulatory risks.

Various foreign, federal and state laws govern our storage, maintenance and use of customer data, including a wide range of consumer protection, data protection, privacy, intellectual property and similar laws. The application, interpretation and enforcement of these laws are often uncertain, and may be interpreted and applied inconsistently from jurisdiction to jurisdiction. Various foreign, federal and state legislative or regulatory bodies have recently adopted increasingly restrictive laws or regulations governing the protection or retention of data, and others are contemplating similar actions.

For additional information about these matters, see “Risk Factors—Risks Affecting Our Business” and “Risk Factors—Risks Relating to Legal and Regulatory Matters.”

Competition

General

We compete in a rapidly evolving and highly competitive market and we expect intense competition to continue. In addition to competition from larger national telecommunications providers, we are facing increasing competition from several other sources, including cable and satellite companies, wireless providers, technology companies, cloud companies, broadband providers, device providers, resellers, sales agents and facilities-based providers using their own networks as well as those leasing parts of our network. Technological advances and regulatory and legislative changes have increased opportunities for a wide range of alternative communications service providers, which in turn have increased competitive pressures on our business. These alternate providers often face fewer regulations and have lower cost structures than we do. In addition, the communications industry has, in recent years, experienced substantial consolidation; and some of our competitors in one or more lines of our business are generally larger, have stronger brand names, have more financial and business resources and have broader service offerings than we currently do.

Wireless telephone services are a significant source of competition with our ILEC services. It is increasingly common for customers to completely forego use of traditional wireline phone service and instead rely solely on wireless service for voice services. We anticipate this trend will continue, particularly as our older customers are replaced over time with younger customers who are less accustomed to using traditional wireline voice services. Technological and regulatory developments in wireless services, Wi-Fi, and other wired and wireless technologies have contributed to the development of alternatives to traditional landline voice services. Moreover, the growing prevalence of electronic mail, text messaging, social networking and similar digital non-voice communications services continues to reduce the demand for traditional landline voice services. These factors have led to a long-term systemic decline in the number of our wireline voice service customers.

The Telecommunications Act of 1996, which obligates ILECs to permit competitors to interconnect their facilities to the ILEC's network and to take various other steps that are designed to promote competition, imposes several duties on an ILEC if it receives a specific request from another entity which seeks to connect with or provide services using the ILEC's network. In addition, each ILEC is obligated to (i) negotiate interconnection agreements in good faith, (ii) provide nondiscriminatory "unbundled" access to all aspects of the ILEC's network, (iii) offer resale of its telecommunications services at wholesale rates and (iv) permit competitors, on terms and conditions (including rates) that are just, reasonable and nondiscriminatory, to collocate their physical plant on the ILEC's property, or provide virtual collocation if physical collocation is not practicable. Current FCC rules require ILECs to lease a network element only in those situations where competing carriers genuinely would be impaired without access to such network elements, and where the unbundling would not interfere with the development of facilities-based competition.

As a result of these regulatory, consumer and technological developments, ILECs also face competition from competitive local exchange carriers, or CLECs, particularly in densely populated areas. CLECs provide competing services through reselling an ILEC's local services, through use of an ILEC's unbundled network elements or through their own facilities.

Technological developments have led to the development of new products and services that have reduced the demand for our traditional services, as noted above, or that compete with traditional ILEC services. Technological improvements have enabled cable television companies to provide traditional circuit-switched telephone service over their cable networks, and several national cable companies have aggressively marketed these services. Similarly, companies providing VoIP services provide voice communication services over the Internet which compete with our traditional telephone service and our own VoIP services. In addition, demand for our broadband services could be adversely affected by advanced wireless data transmission technologies being deployed by wireless providers and by certain technologies permitting cable companies and other competitors to deliver faster average broadband transmission speeds than ours.

Similar to us, many cable, technology or other communications companies that previously offered a limited range of services are now offering diversified bundles of services, either through their own networks, reselling arrangements or joint ventures. As such, a growing number of companies are competing to serve the communications needs of the same customer base. Such activities will continue to place downward pressure on the demand for and pricing of our services.

As both residential and business customers increasingly demand high-speed connections for entertainment, communications and productivity, we expect the demands on our network will continue to increase over the next several years. To succeed, we and other network-based providers must ensure that our networks can deliver competitive services that meet these increasing bandwidth and speed requirements. We plan to continue to invest in our network to be able to meet this future demand and to compete effectively. In addition, network reliability and security are increasingly important competitive factors in our business.

In addition to facing direct competition from those providers described above, ILECs increasingly face competition from alternate communication systems constructed by long distance carriers, large customers, municipalities or alternative access vendors. These systems are capable of originating or terminating calls without use of an ILEC's networks or switching services. Other potential sources of competition include non-carrier systems that are capable of bypassing ILECs' local networks, either partially or completely, through various means, including the provision of special access or independent switching services and the concentration of telecommunications traffic on a few of an ILEC's access lines. We anticipate that all these trends will continue and lead to decreased billable use of our networks.

Additional information about competitive pressures is located (i) under the heading "Risk Factors—Risks Affecting Our Business" in Item 1A of Part I of this Annual Report and (ii) in the discussion immediately below, which contains more specific information on how these trends in competition have impacted our segments.

Business Segment

Strategic Services

In connection with providing strategic services to our business customers, which includes our small, medium and enterprise business, wholesale and governmental customers, we compete against other telecommunication providers, as well as other regional and national carriers, other fiber providers, cable companies, CLECs and other enterprises, some of whom are substantially larger than us. Competition is based on price, bandwidth, quality and speed of service, promotions and bundled offerings. In providing broadband services, we compete primarily with cable companies, wireless providers, technology companies and other broadband service providers. Competition for private line services is based on price, network reach and reliability, service, promotions and bundled offerings. We face competition in Ethernet based services in the wholesale market from cable companies and fiber based CLEC providers.

Our competitors for providing integrated data, Internet, voice services and other IT services to our business customers range from mid-sized businesses to large enterprises. Due to the size and capacity of some of these companies, our competitors may be able to offer more inexpensive solutions to our customers. To compete, we focus on providing sophisticated, secure and performance-driven services to our business customers through our global infrastructure.

The number of companies providing business services has grown and increased competition for these services, particularly with respect to smaller business customers. Many of our competitors for strategic services are not subject to the same regulatory requirements as we are and therefore they are able to avoid significant regulatory costs and obligations.

Our competitors for cloud, hosting, colocation and other IT services include telecommunications companies, technology companies, cloud companies, colocation companies, hardware manufacturers and system integrators that support the in-house IT operations for a business or offer outsourcing solutions. Due to the size, capacity and strategically low pricing tactics of some of these companies, our competitors may be able to offer more inexpensive solutions to our customers. The increase in recent years in the number of companies providing these services has placed substantial downward pressure on pricing for a wide range of cloud, hosting, colocation and other IT services. We believe, however, that our hybrid IT services capabilities, which offer multiple products and services (including colocation, managed hosting, cloud and network services), could help differentiate our products and services from those offered by competitors with a narrower range of products and services. We have remained focused on expanding our hybrid cloud portfolio by adding differentiating features across the cloud spectrum, to include private and public services, and acquiring additional companies that we believe have strengthened our cloud products.

Legacy Services

We face intense competition with respect to our legacy services and continue to see customers migrating away from these services and into strategic services. In addition, our legacy services revenues have been, and we expect they will continue to be, adversely affected by product substitution, technological migration and price competition. For our wholesale customers, we will continue to be adversely affected by product substitution, technological migration, industry consolidation and mandated rate reductions. We face significant competition for access services from CLECs, cable companies, resellers and wireless service providers as well as some of our own wholesale markets customers, many of which are deploying their own networks to provide customers with local services. By doing so, these competitors reduce revenue producing traffic on our network.

Data Integration

In providing data integration to our business customers, we compete primarily with large integrators, equipment providers and national telecommunication providers. Competition is based on package offerings, and as such we focus on providing these customers individualized and customizable packages. Our strategy is to provide our data integration through packages that include other strategic and legacy services. As such, in providing data integration we often face many of the same competitive pressures as we face in providing strategic and legacy services, as discussed above.

We expect data integration revenues to continue to fluctuate from quarter to quarter as this offering tends to be more sensitive than others to changes in the economy and in spending trends of our governmental customers. We further expect the profit margins on our data integration offerings to continue to be lower than those of our strategic and legacy services.

Consumer Segment

Strategic Services

With respect to providing our strategic services to residential customers, competition is based on price, bandwidth, quality and speed of service, promotions and bundled offerings. Wireless carriers' fourth generation, or 4G, services are allowing them to more directly compete with our strategic services. The manner in which we compete for high-speed Internet customers in this segment is substantially similar to the manner in which we compete for business customers, as described in the above section. In reselling DIRECTV video services, we compete primarily with cable and other satellite companies as well as other sales agents and resellers. Our Prism TV residential video service faces substantial competition from a variety of competitors, including well-established cable companies, satellite companies and several national companies that deliver content over the Internet and on mobile devices. Many of our competitors for these strategic services are not subject to the same regulatory requirements as we are, and therefore are able to avoid significant regulatory costs and obligations.

Our strategy for maintaining and increasing our base of broadband customers is based on pricing, packaging of services and features, quality of service and meeting customer care needs. In order to remain competitive, we believe continually increasing connection speeds is important. As a result, we continue to invest in our network, which allows for the delivery of higher speed broadband services. We also continue to expand our marketing and product bundling efforts by offering a variety of bundled products and services with various pricing discounts, as we compete in a maturing market in which a significant portion of consumers already have broadband services. We offer these bundled products and services through various sales and marketing opportunities as further described above under the heading "Sales and Marketing."

Legacy Services

Although our status as an ILEC continues to provide us advantages in providing local services in our local service area, as noted above, we increasingly face significant competition as an increasing number of consumers are willing to substitute cable, wireless and electronic communications for traditional voice telecommunications services. This has led to an increase in the number and type of competitors within our industry, price compression and a decrease in our market share. As a result of this product substitution, we face greater competition in providing local and long-distance voice services from wireless providers, resellers and sales agents (including ourselves), social media hosts and broadband service providers, including cable companies. We also continue to compete with traditional telecommunications providers, such as national carriers, smaller regional providers, CLECs and independent telephone companies.

Our strategy to manage access line loss is based primarily on our pricing, packaging of services and features, quality of service and meeting customer care needs. While bundle price discounts have resulted in lower average revenues for our individual services, we believe service bundles continue to positively impact our customer retention.

Acquisitions

During the fourth quarter of 2014, we acquired all of the outstanding stock of two companies for total consideration of \$95 million, net of \$2 million acquired cash and including immaterial future cash payments. During the year ended December 31, 2013, we acquired all of the outstanding stock of two companies for total cash consideration of \$160 million. In each case, the acquisitions were designed to augment our hosting services or our emerging IT services.

We regularly evaluate the possibility of acquiring additional assets in exchange for cash, securities or other properties, and at any given time may be engaged in discussions or negotiations regarding additional acquisitions. We generally do not announce our acquisitions or dispositions until we have entered into a preliminary or definitive agreement.

Environmental Compliance

From time to time we may incur environmental compliance and remediation expenses, mainly resulting from owning or operating prior industrial sites or operating vehicle fleets or power supplies for our communications equipment. Although we cannot assess with certainty the impact of any future compliance and remediation obligations or provide you with any assurances regarding the ultimate impact thereof, we do not currently believe that future environmental compliance and remediation expenditures will have a material adverse effect on our financial condition or results of operations. For additional information, see Item 1A of Part II of this Annual Report and Note 14—Commitments and Contingencies included in Item 8 of Part II of this Annual Report.

Seasonality

Overall, our business is not materially impacted by seasonality. Our network-related operating expenses are, however, generally higher in the second and third quarters of the year. From time to time, weather related problems have resulted in increased costs to repair our network and respond to service calls in some of our markets. The amount and timing of these costs are subject to the weather patterns of any given year, but have generally been highest during the third quarter and have been related to damage from severe storms, including hurricanes, tropical storms and tornadoes in our markets along the Atlantic and Gulf of Mexico coastlines.

Employees

At December 31, 2015, we had approximately 43,000 employees, of which approximately 16,000 are members of either the Communications Workers of America ("CWA") or the International Brotherhood of Electrical Workers ("IBEW"). See the discussion of risks relating to our labor relations in "Risk Factors—Risks Affecting Our Business" in Item 1A of Part I of this Annual Report.

Over the last several years, we have reduced our workforce primarily due to (i) integration efforts from our acquisitions, (ii) increased competitive pressures, and (iii) the loss of access lines and related legacy revenues.

Website Access and Important Investor Information

Our website is www.centurylink.com. The information contained on, or that may be accessed through, our website is not part of this Annual Report. You may obtain free electronic copies of our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports in the "Investor Relations" section of our website (ir.centurylink.com) under the heading "SEC Filings." These reports are available on our website as soon as reasonably practicable after we electronically file them with the Securities and Exchange Commission ("SEC"). From time to time we also use our website to webcast our earnings calls and certain of our meetings with investors or other members of the investment community.

We have adopted a written code of conduct that serves as the code of ethics applicable to our directors, officers and employees, in accordance with applicable laws and rules promulgated by the SEC and the New York Stock Exchange. In the event that we make any changes (other than by a technical, administrative or non-substantive amendment) to, or provide any waivers from, the provisions of our code of conduct applicable to our directors or executive officers, we intend to disclose these events on our website or in a report on Form 8-K filed with the SEC. The code of conduct, as well as copies of our guidelines on significant governance issues and the charters of our audit committee, compensation committee, nominating and corporate governance committee and risk evaluation committee, are also available in the "Corporate Governance" section of our website at www.centurylink.com/Pages/AboutUs/Governance/ or in print to any shareholder who requests them by sending a written request to our Corporate Secretary at CenturyLink, Inc., 100 CenturyLink Drive, Monroe, Louisiana, 71203.

Investors may also read and copy any materials filed with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. For information on the operation of the Public Reference Room, you are encouraged to call the SEC at 1-800-SEC-0330. For all of our electronic filings, the SEC maintains a website at www.sec.gov that contains reports, proxy statements and other information regarding issuers that file electronically with the SEC.

In connection with filing this Annual Report, our chief executive officer and chief financial officer made the certifications regarding our financial disclosures required under the Sarbanes-Oxley Act of 2002, and its related regulations. In addition, during 2015, our chief executive officer certified to the New York Stock Exchange that he was unaware of any violations by us of the New York Stock Exchange's corporate governance listing standards.

We typically disclose material non-public information by disseminating press releases, making public filings with the SEC, or disclosing information during publicly accessible meetings or conference calls. Nonetheless, from time to time we have used, and intend to continue to use, our website and social media accounts to augment our disclosures.

Special Note Regarding Forward-Looking Statements and Related Matters

This Annual Report and other documents filed by us under the federal securities law include, and future oral or written statements or press releases by us and our management may include, forward-looking statements about our business, financial condition, operating results and prospects. These statements constitute "forward-looking" statements as defined by, and are subject to the "safe harbor" protections under, the federal securities laws. These statements include, among others:

- forecasts of our anticipated future results of operations or financial position;
- statements concerning the impact of our transactions, investments and other initiatives, including our participation in government programs;
- statements about our liquidity, tax position, tax rates, asset values, contingent liabilities, growth opportunities and growth rates, acquisition and divestiture opportunities, business prospects, regulatory and competitive outlook, investment and expenditure plans, business strategies, dividend and stock repurchase plans, capital allocation plans, financing alternatives and sources, and pricing plans; and
- other similar statements of our expectations, beliefs, future plans and strategies, anticipated developments and other matters that are not historical facts, many of which are highlighted by words such as "may," "would," "could," "should," "plan," "believes," "expects," "anticipates," "estimates," "projects," "intends," "likely," "seeks," "hopes," or variations or similar expressions.

These forward-looking statements are based upon our judgment and assumptions as of the date such statements are made concerning future developments and events, many of which are beyond our control. These forward-looking statements, and the assumptions upon which they are based, (i) are not guarantees of future results, (ii) are inherently speculative and (iii) are subject to a number of risks and uncertainties. Actual events and results may differ materially from those anticipated, estimated, projected or implied by us in those statements if one or more of these risks or uncertainties materialize, or if our underlying assumptions prove incorrect. Factors that could affect actual results include but are not limited to:

- the effects of competition from a wide variety of competitive providers, including lower demand for our legacy offerings;
- the effects of new, emerging or competing technologies, including those that could make our products less desirable or obsolete;
- the effects of ongoing changes in the regulation of the communications industry, including the outcome of regulatory or judicial proceedings relating to intercarrier compensation, interconnection obligations, access charges, universal service, broadband deployment, data protection and net neutrality;
- our ability to effectively adjust to changes in the communications industry, and changes in the composition of our markets and product mix;
- possible changes in the demand for, or pricing of, our products and services, including our ability to effectively respond to increased demand for high-speed broadband service;
- our ability to successfully maintain the quality and profitability of our existing product and service offerings and to introduce new offerings on a timely and cost-effective basis;
- the adverse impact on our business and network from possible equipment failures, service outages, security breaches or similar events impacting our network;
- our ability to generate cash flows sufficient to fund our financial commitments and objectives, including our capital expenditures, operating costs, share repurchases, dividends, pension contributions and debt payments;
- changes in our operating plans, corporate strategies, dividend payment plans or other capital allocation plans, whether based upon changes in our cash flows, cash requirements, financial performance, financial position, or otherwise;
- our ability to effectively retain and hire key personnel and to successfully negotiate collective bargaining agreements on reasonable terms without work stoppages;
- increases in the costs of our pension, health, post-employment or other benefits, including those caused by changes in markets, interest rates, mortality rates, demographics or regulations;

- adverse changes in our access to credit markets on favorable terms, whether caused by changes in our financial position, lower debt credit ratings, unstable markets or otherwise;

- our ability to maintain favorable relations with our key business partners, suppliers, vendors, landlords and financial institutions;
- our ability to effectively manage our network buildout project and other expansion opportunities;
- our ability to collect our receivables from financially troubled customers;
- any adverse developments in legal or regulatory proceedings involving us;
- changes in tax, communications, pension, healthcare or other laws or regulations, in governmental support programs, or in general government funding levels;
- the effects of changes in accounting policies or practices, including potential future impairment charges;
- the effects of adverse weather or other natural or man-made disasters;
- the effects of more general factors such as changes in interest rates, in operating costs, in general market, labor, economic or geo-political conditions, or in public policy; and
- other risks referenced in Item 1A or elsewhere in this Annual Report or other of our filings with the SEC.

Additional factors or risks that we currently deem immaterial, that are not presently known to us or that arise in the future could also cause our actual results to differ materially from our expected results. Given these uncertainties, investors are cautioned not to unduly rely upon our forward-looking statements. We undertake no obligation to publicly update or revise any forward-looking statements for any reason, whether as a result of new information, future events or developments, changed circumstances, or otherwise. Furthermore, any information about our intentions contained in any of our forward-looking statements reflects our intentions as of the date of such forward-looking statement, and is based upon, among other things, existing regulatory, technological, industry, competitive, economic and market conditions, and our assumptions as of such date. We may change our intentions, strategies or plans (including our dividend or stock repurchase plans) at any time and without notice, based upon any changes in such factors, in our assumptions or otherwise.

Investors should also be aware that while we do, at various times, communicate with securities analysts, it is against our policy to disclose to them selectively any material non-public information or other confidential information. Accordingly, investors should not assume that we agree with any statement or report issued by an analyst with respect to our past or projected performance. To the extent that reports issued by securities analysts contain any projections, forecasts or opinions, such reports are not our responsibility.

Unless otherwise indicated, information contained in this Annual Report and other documents filed by us under the federal securities laws concerning our views and expectations regarding the communications industry are based on estimates made by us using data from industry sources, and on assumptions made by us based on our management's knowledge and experience in the markets in which we operate and the communications industry generally. You should be aware that we have not independently verified data from industry or other third-party sources and cannot guarantee its accuracy or completeness.

ITEM 1A. RISK FACTORS

The following discussion of "risk factors" identifies the most significant risks or uncertainties that could (i) materially and adversely affect our business, financial condition, results of operations, liquidity or prospects or (ii) cause our actual results to differ materially from our anticipated results or other expectations. You should carefully consider these factors, in addition to the other information set forth in this Annual Report and our subsequent filings with the SEC, when evaluating our business and whether to purchase, sell or hold our securities. Please note that the following discussion is not intended to comprehensively list all risks or uncertainties faced by us. Our operations or actual results could also be similarly impacted by additional risks and uncertainties that are not currently known to us, that we currently deem to be immaterial, that arise in the future or that are not specific to us, such as general economic conditions.

Risks Affecting Our Business

We may not be able to compete successfully against current or future competitors.

Each of our offerings to our residential and business customers face increasingly intense competition from a variety of sources under evolving market conditions. We expect these trends will continue. In addition to competition from larger national telecommunications providers, we are facing increasing competition from several other sources, including cable and satellite companies, wireless providers, technology companies, broadband providers, device providers, resellers, sales agents and facilities-based providers using their own networks as well as those leasing parts of our network. In particular, (i) intense competition from wireless and other communications providers has led to a long-term systemic decline in the number of our customers for wireline voice services, (ii) strong competition from cable companies and others has limited the growth of our broadband operations and (iii) aggressive competition from a wide range of technology companies and other market entrants has limited the prospects for our cloud computing operations. For more detailed information, see "Competition" under Item 1 of this Annual Report.

Some of our current and potential competitors (i) offer products or services that are substitutes for our wireline voice services, including wireless voice and non-voice communication services, (ii) offer a more comprehensive range of communications products and services, (iii) offer products or services with features that we cannot readily match in some or all of our markets, including faster average broadband transmission speeds and greater content, (iv) have market presence, engineering and technical capabilities, and financial and other resources greater than ours, (v) have larger or more diverse networks with greater transmission capacity or more or larger data centers, (vi) conduct operations or raise capital at a lower cost than us, (vii) are subject to less regulation, which we believe enables such competitors to operate more flexibly than us with respect to certain offerings, (viii) offer services nationally or internationally to a larger geographic area or larger base of customers, (ix) have substantially stronger brand names, which may provide them with greater pricing power than ours, or (x) have larger operations than ours, which may enable them to offer higher compensation packages in connection with recruiting and retaining top technological, managerial and operational talent. Consequently, these competitors may be better equipped to provide more attractive offerings, to charge lower prices for their products and services, to develop and expand their communications and network infrastructure more quickly, to adapt more swiftly to new or emerging technologies and changes in customer requirements, to devote greater resources to the marketing and sale of their products and services, to provide more comprehensive customer service, to provide greater resources to research and development initiatives and to take advantage of acquisition or other opportunities more readily. In the past, several of our competitors and their operations have grown through acquisitions and aggressive product development. The continued growth of our competitors could further enhance their competitive positions.

Competition could adversely impact us in several ways, including (i) the loss of customers and market share, (ii) the possibility of customers reducing their usage of our services or shifting to less profitable services, (iii) reduced traffic on our networks, (iv) our need to expend substantial time or money on new capital improvement projects, (v) our need to lower prices or increase marketing expenses to remain competitive and (vi) our inability to diversify by successfully offering new products or services.

We are continually taking steps to respond to these competitive pressures, but these efforts may not be successful. Our operating results and financial condition would be adversely affected if these initiatives are unsuccessful or insufficient and if we otherwise are unable to sufficiently stem our continuing access line losses and our legacy revenue declines. If this occurred, our ability to pay our debt and other obligations and to re-invest in the business would also be adversely affected.

Rapid technological changes could significantly impact our competitive and financial position.

The communications industry has been and continues to be impacted by significant technological changes, which in general are enhancing non-voice communications and enabling a broader array of companies to offer services competitive with ours. Many of those technological changes are (i) displacing or reducing demand for our wireline voice services, (ii) enabling the development of competitive products or services, or (iii) enabling our current customers to reduce or bypass use of our networks. Rapid changes in technology are increasing the competitiveness of the cloud, hosting, colocation and other IT services industries. In addition, demand for our broadband services has been constrained by certain technologies permitting cable companies and other competitors to deliver faster average broadband transmission speeds than ours. Demand for our broadband services could be further reduced by advanced wireless data transmission technologies being deployed by wireless providers, including "long-term evolution" or "LTE" technologies, especially if these wireless providers continue to increase their broadband transmission speed and decrease their service rates. To enhance the competitiveness of our broadband services, we may be required to expend additional capital to augment the capabilities of our copper-based services or to install more fiber optic cable.

We may not be able to accurately predict or respond to changes in technology or industry standards, or to the introduction of newly-offered services. Any of these developments could make some or all of our offerings less desirable or even obsolete. These developments could also require us to (i) expend capital or other resources in excess of currently contemplated levels, (ii) forego the development or provision of products or services that others can provide more efficiently, or (iii) make other changes to our operating plans, corporate strategies or capital allocation plans, any of which could be contrary to the expectations of our security holders or could adversely impact our operations. If we are not able to develop new products and services to keep pace with technological advances, or if those products and services are not widely accepted by customers, our ability to compete could be adversely affected and our market share could decline. Any inability to effectively respond to technological changes could also adversely affect our operating results and financial condition, as well as our ability to service debt and fund other commitments or initiatives.

Even if we succeed in adapting to changes in technology or industry standards by developing new products or services, there is no assurance that the new products or services would have a positive impact on our profit margins or financial performance.

In addition to introducing new technologies and offerings, we may need, from time to time, to phase out outdated and unprofitable technologies and services. If we are unable to do so, on a cost-effective basis, we could experience reduced profits.

For additional information on the risks of increased expenditures, see “Risk Factors—Risks Affecting our Liquidity and Capital Resources—Our business requires us to incur substantial capital and operating expenses, which reduces our available free cash flow.”

Our legacy and private line services continue to experience declining revenues, and our efforts to offset these declines may not be successful.

Primarily as a result of the competitive and technological changes discussed above, we have experienced a prolonged systemic decline in our access lines, long-distance revenues and network access revenues, which continue to decrease revenues generated from our legacy services. We have also experienced a decline in our private line revenues due to our customers' optimization of their networks, industry consolidation, price compression and technological migration to higher-speed services. The loss of private line services has placed downward pressure on our strategic revenues.

We have taken a variety of steps to counter these declines, including:

- an increased focus on selling a broader range of higher-growth strategic services, which are described in detail elsewhere in this Annual Report;
- an increased focus on serving a broader range of business, governmental and wholesale customers;
- greater use of service bundles; and
- acquisitions to increase our scale and strengthen our product offerings, including new products and services.

However, for the reasons described elsewhere in this Annual Report, most of these strategic services generate lower profit margins than our legacy and private line services, and some can be expected to experience slowing growth as increasing numbers of our existing or potential customers subscribe to these newer products. Moreover, we cannot assure you that the revenues generated from our new offerings will offset revenue losses associated with our legacy and private line services. In addition, our reliance on third parties to provide certain of these strategic services could constrain our flexibility, as described further below.

Our ability to successfully introduce new product or service offerings on a timely and cost-effective basis could be constrained by a range of factors, including network limitations, limited capital, an inability to attract key personnel with the necessary skills, intellectual property constraints, testing delays, or an inability to act as quickly as smaller, more nimble start-up competitors. Similarly, our ability to grow through acquisitions could be limited by several factors, including our leverage and inability to identify attractively-priced target companies. For these reasons, we cannot assure you that our new product or service offerings will be as successful as anticipated, or that we will be able to continue to grow through acquisitions.

We may not be able to successfully adjust to changes in our industry, our markets and our product mix.

Ongoing changes in the communications industry have fundamentally changed consumers' communications expectations and requirements. In response to these changes, we have substantially altered our product and service offerings through acquisitions and internal product development. Many of these changes have placed a higher premium on sales, marketing and product development functions, and necessitated ongoing changes in our processes and operating protocols, as well as periodic reorganizations of our sales and leadership teams. In addition, we now offer a more complex range of products and services, operate larger and more complex networks and serve a much larger and more diverse set of customers. Consequently, we now face greater challenges in effectively managing and administering our operations and allocating capital and other resources to our various offerings. For all these reasons, we cannot assure you that our efforts to adjust to these changes will be timely or successful.

Our revenues and cash flows may not be adequate to fund all of our current objectives.

As noted in the risk factor disclosures appearing above and below, changes in competition, technology, regulation and demand for our legacy services continue to place downward pressure on our consolidated revenues and cash flows. During each of 2015, 2014 and 2013, we experienced declines in revenues and net cash provided by operating activities as compared to prior years. Our cash flows will be further reduced as a result of anticipated increases in our cash tax payments due to our depletion of substantially all of our net operating loss carryforwards.

We rely upon our consolidated revenues and cash flows to fund our commitments and business objectives, including without limitation, funding our capital expenditures, operating costs, share repurchases, dividends, pension funding payments and debt repayments. We cannot assure you that our future cash flows will be sufficient to fund all of our cash requirements in the manner currently contemplated. Our inability to fund certain of these payments could have an adverse impact on our business, operations or competitive position or on the value of our securities.

We could be harmed by security breaches, damages or other significant disruptions or failures of our networks, information technology infrastructure or related systems, or of those we operate for certain of our customers.

We are materially reliant upon our networks, information technology infrastructure (including data centers) and related technology systems (including our billing systems) to provide products and services to our customers and to manage our operations and affairs. We face the risk, as does any company, of a security breach or significant disruption of our information technology infrastructure and related systems. As a communications company that transmits large amounts of sensitive and proprietary information over communications networks, we face an added risk that a security breach or other significant disruption of our public networks or information technology infrastructure and related systems that we develop, install, operate and maintain for certain of our business customers (which includes our wholesale and governmental customers) could lead to material interruptions or curtailments of service. Moreover, in connection with processing and storing confidential customer data, we face a heightened risk that a security breach or disruption could result in unauthorized access to our customers' proprietary information on our public networks or internal systems or the systems that we operate and maintain for certain of our customers.

We make significant efforts to maintain the security and integrity of information and systems under our control, and maintain contingency plans in the event of security breaches or other system disruptions. Nonetheless, we cannot assure you that our security efforts and measures will prevent unauthorized access to our systems, loss or destruction of data (including confidential customer information), account takeovers, unavailability of service, computer viruses, malware, distributed denial-of-service attacks, or other forms of cyber-attacks or similar events. These threats may derive from human error, hardware or software vulnerabilities, fraud, malice or sabotage on the part of employees, third parties or other nations, or could result from aging equipment or other accidental technological failure. These threats may also arise from failure or breaches of systems owned, operated or controlled by other unaffiliated operators to the extent we rely on such other operations to deliver services to our customers.

Similar to other large telecommunications companies, we are a constant target of cyber-attacks of varying degrees. Although some of these attacks have resulted in security breaches, to date none of these breaches have resulted in a material adverse effect on our operating results or financial condition. You should be aware, however, that defenses against cyber-attacks currently available to U.S. companies are unlikely to prevent intrusions by a highly-determined, highly-sophisticated hacker. Consequently, you should assume that we will be unable to implement security barriers or other preventative measures that repel all future cyber-attacks. Any such future security breaches or disruptions could materially adversely affect our business, results of operations or financial condition, especially in light of the growing frequency, scope and well-documented sophistication of cyber-attacks and intrusions.

Although we maintain insurance coverage that may, subject to policy terms and conditions (including self-insured deductibles, coverage restrictions and monetary coverage caps), cover certain aspects of our cyber risks, such insurance coverage may be unavailable or insufficient to cover our losses.

Additional risks to our network, infrastructure and related systems include:

- power losses or physical damage, whether caused by fire, adverse weather conditions, terrorism, sabotage, vandalism or otherwise;
- capacity or system configuration limitations, including those resulting from changes in our customer's usage patterns, the introduction of new technologies or products, or incompatibilities between our newer and older systems;
- theft or failure of our equipment;
- software or hardware obsolescence, defects or malfunctions;
- deficiencies in our processes or controls;
- programming, processing and other human error; and
- service failures of our third-party vendors and other disruptions that are beyond our control.

Due to these factors, we experience from time to time in the ordinary course of our business short disruptions in our service, and could experience more significant disruptions in the future.

Disruptions, security breaches and other significant failures of the above-described networks and systems could:

- disrupt the proper functioning of these networks and systems, which could in turn disrupt (i) our operations or (ii) the operations of certain of our customers who rely upon us to provide services critical to their operations;
- require significant management attention or financial resources to remedy the damages that result or to change our systems, including expenses to repair systems, add new personnel or develop additional protective systems;
- result in the unauthorized access to, and destruction, loss, theft, misappropriation or release of proprietary, confidential, sensitive, classified or otherwise valuable information of ours, our customers or our customers' end users, including trade secrets, which others could use for competitive, disruptive, destructive or otherwise harmful purposes and outcomes;
- require us to notify customers, regulatory agencies or the public of data breaches;
- require us to provide credits for future service under certain service level commitments we have provided contractually to our customers or to offer expensive incentives to retain customers;
- subject us to claims for damages, fines, penalties, termination or other remedies under our customer contracts or service standards set by state regulatory commissions, which in certain cases could exceed our insurance coverage; or
- result in a loss of business, damage our reputation among our customers and the public generally, subject us to additional regulatory scrutiny or expose us to prolonged litigation.

We could experience difficulties in expanding and updating our technical infrastructure.

Our ability to expand and update our systems and information technology infrastructure in response to our growth and changing business needs is important to our ability to maintain and develop attractive product and service offerings. As discussed further under "Business—Network Architecture" in Item 1 of Part I of this Annual Report, we are currently undertaking several complex, costly and time-consuming projects to simplify and modernize our network, which combines our legacy network and the networks of companies we have acquired in the past. Unanticipated delays in the completion of these projects may lead to increased project costs or operational inefficiencies. In addition, there may be issues related to our expanded or updated infrastructure that are not identified by our testing processes, and which may only become evident after we have started to fully utilize the redesigned systems. Our failure to modernize and upgrade our technology infrastructure could have adverse consequences, including the delayed implementation of new service offerings, decreased competitiveness of existing service offerings, network instabilities, increased operating or acquisition integration costs, service or billing interruptions, and the diversion of development resources.

Any or all of the foregoing developments could have a negative impact on our business, results of operations, financial condition and cash flows.

Negative publicity may adversely impact us.

Outages or other service failures of networks operated by us or other operators could cause substantial adverse publicity affecting us specifically or our industry generally. In either case, media coverage and public statements that insinuate improper actions by us or other operators, regardless of their factual accuracy or truthfulness, may result in negative publicity, litigation, governmental investigations or additional regulations. Addressing negative publicity and any resulting litigation or investigations may distract management, increase costs and divert resources. Negative publicity may have an adverse impact on our reputation and the morale of our employees, which could adversely affect our business, results of operations, financial condition and cash flows.

If we fail to hire and retain qualified executives, managers and employees, our operating results could be harmed.

Our future success depends on our ability to identify, hire, train and retain executives, managers and employees with technological, engineering, product development, operational, provisioning, marketing, sales, administrative and managerial skills. There is a shortage of qualified personnel in several of these fields nationally and in our headquarters city of Monroe, Louisiana, in particular. We compete with several other companies for this limited pool of potential employees. As our industry increasingly becomes more competitive, it could become especially difficult to attract and retain top personnel with skills in high demand. In addition, subject to limited exceptions, none of our executives or domestic employees have long-term employment agreements. For all these reasons, there is no assurance that our efforts to recruit and retain qualified personnel will be successful.

Increases in broadband usage may cause network capacity limitations, resulting in service disruptions, reduced capacity or slower transmission speeds for our customers.

Video streaming services, gaming and peer-to-peer file sharing applications use significantly more bandwidth than other Internet activity such as web browsing and email. As use of these newer services continues to grow, our high-speed Internet customers will likely use much more bandwidth than in the past. If this occurs, we could be required to make significant capital expenditures to increase network capacity in order to avoid service disruptions, service degradation or slower transmission speeds for our customers. Alternatively, we could choose to implement network management practices to reduce the network capacity available to bandwidth-intensive activities during certain times in market areas experiencing congestion, which could negatively affect our ability to retain and attract customers in affected markets. While we believe demand for these services may drive high-speed Internet customers to pay for faster broadband speeds, competitive or regulatory constraints may preclude us from recovering the costs of the necessary network investments. This could result in an adverse impact to our operating margins, results of operations, financial condition and cash flows.

We have been accused of infringing the intellectual property rights of others and will likely face similar accusations in the future, which could subject us to costly and time-consuming litigation or require us to seek third-party licenses.

From time to time, we receive notices from third parties or are named in lawsuits filed by third parties claiming we have infringed or are infringing upon their intellectual property rights. We are currently responding to several of these notices and claims. Like other communications companies, we have received an increasing number of these notices and claims in the past several years, and expect this industry-wide trend will continue. Responding to these claims may require us to expend significant time and money defending our use of the applicable technology, and divert management's time and resources away from other business. In certain instances, we may be required to enter into licensing agreements requiring royalty payments or, in the case of litigation, to pay damages. If we are required to take one or more of these actions, our profit margins may decline. In addition, in responding to these claims, we may be required to stop selling or redesign one or more of our products or services, which could significantly and adversely affect our business, results of operations, financial condition and cash flows.

Similarly, from time to time, we may need to obtain the right to use certain patents or other intellectual property from third parties to be able to offer new products and services. If we cannot license or otherwise obtain rights to use any required technology from a third party on reasonable terms, our ability to offer new products and services may be prohibited, restricted, made more costly or delayed.

We may not be successful in protecting and enforcing our intellectual property rights.

We rely on various patents, copyright, trade names, trademark, service mark, trade secret and other similar laws, as well as confidentiality procedures and contractual restrictions, to establish and protect our proprietary rights. The steps we have taken, however, may not prevent unauthorized use or the reverse engineering of our technology. Others may independently develop technologies that are substantially equivalent, superior to, or otherwise competitive to the technologies we employ in our services or that infringe on our intellectual property. We may be unable to prevent competitors from acquiring proprietary rights that are similar to or infringe upon our proprietary rights, or to prevent our current or former employees from using or disclosing to others our proprietary information. Enforcement of our intellectual property rights may depend on initiating legal actions against parties who infringe or misappropriate our proprietary information, but these actions may not be successful, even when our rights have been infringed. If we are unsuccessful in protecting or enforcing our intellectual property rights, our business, competitive position, results of operations and financial condition could be adversely affected.

Our operations, financial performance and liquidity are materially reliant on various third parties.

Reliance on other communications providers. To offer voice or data services in certain of our markets, we must either lease network capacity from, or interconnect our network with the infrastructure of, other communications companies who typically compete against us in those markets. Our reliance on these lease or interconnection arrangements limits our control over the quality of our services and exposes us to the risk that our ability to market our services could be adversely impacted by changes in the plans or properties of the carriers upon which we are reliant. In addition, we are exposed to the risk that the other carriers may be unwilling to continue or renew these arrangements in the future on terms favorable to us, or at all. This risk is heightened when the other carrier is a competitor of ours and may benefit from terminating the agreement. If we lose these arrangements and cannot timely replace them, our ability to provide services to our customers and conduct our business could be materially adversely affected.

Conversely, certain of our operations carry a significant amount of voice or data traffic for other communications providers. Their reliance on our services exposes us to the risk that they may transfer all or a portion of this traffic from our network to networks built, owned or leased by them, thereby reducing our revenues. For additional information, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Business Trends” included in Item 7 of Part II of this Annual Report.

We also rely on reseller and sales agency arrangements with other communications companies to provide some of the services that we offer to our customers, including video services and wireless products and services. As a reseller or sales agent, we do not control the availability, retail price, design, function, quality, reliability, customer service or branding of these products and services, nor do we directly control all of the marketing and promotion of these products and services. Similar to the risks described above regarding our reliance upon other carriers, we could be adversely affected if these communication companies fail to maintain competitive products or services, or fail to continue to make them available to us on attractive terms, or at all.

Our operations and financial performance could be adversely affected if our relationships with any of these other communications companies are disrupted or terminated for any other reason, including if such other companies:

- become bankrupt or experience substantial financial difficulties;
- suffer work stoppages or other labor strife;
- challenge our right to receive payments or services under applicable regulations or the terms of our existing contract arrangements; or
- are otherwise unable or unwilling to make payments or provide services to us.

Reliance on other key suppliers and vendors. We depend on a limited number of suppliers and vendors for equipment and services relating to our network infrastructure. Our local exchange carrier networks consist of central office and remote sites, all with advanced digital switches. If any of these suppliers experience interruptions or other problems delivering or servicing these network components on a timely basis, our operations could suffer significantly. To the extent that proprietary technology of a supplier is an integral component of our network, we may have limited flexibility to purchase key network components from alternative suppliers and may be adversely affected if third parties assert patent infringement claims against our suppliers or us. We also rely on a limited number of (i) software vendors to support our business management systems, (ii) content suppliers to provide programming to our video operations, and (iii) contractors to assist us in connection with our network construction and maintenance activities. In the event it becomes necessary to seek alternative suppliers and vendors, we may be unable to obtain satisfactory replacement supplies, services, utilities or programming on economically attractive terms, on a timely basis, or at all, which could increase costs or cause disruptions in our services.

Reliance on utility providers and landlords. We operate a substantial number of data center facilities, which are susceptible to electrical power shortages or outages. Our energy costs can fluctuate significantly or increase for a variety of reasons, including changes in legislation and regulation. Several pending proposals designed to reduce greenhouse emissions could substantially increase our energy costs, which we may not be able to pass on to our customers. Due to the increasing sophistication of equipment and our products, our demand or our customers' demand for power may exceed the power capacity in older data centers, which may limit our ability to fully utilize these data centers.

We lease most of our data centers. Although the majority of these leases provide us with the opportunity to renew the lease, many of these renewal options provide that rent for the renewal period will be equal to the fair market rental rate at the time of renewal. If the fair market rental rates are significantly higher than our current rental rates, we may be unable to offset these costs by charging more for our services, which could have a negative impact on our financial results. We cannot assure you that our data centers in the future will have access to sufficient space or power on attractive terms or at all.

Reliance on governmental payments. We receive a material amount of revenue or government subsidies under various government programs, which are further described under the heading "Risk Factors—Risks Relating to Legal and Regulatory Matters." We also provide products or services to various federal, state and local agencies. Governmental agencies frequently reserve the right to terminate their contracts for convenience, or to suspend or debar companies from receiving future subsidies or contracts under certain circumstances. If our governmental contracts are terminated for any reason, or if we are suspended or debarred from governmental programs or contracts, our results of operations and financial condition could be materially adversely affected.

Reliance on financial institutions. We rely on a number of financial institutions to provide us with short-term liquidity under our credit facility. If one or more of these lenders default on their funding commitments, our access to revolving credit could be adversely affected.

Rising costs, changes in consumer behaviors and other industry changes may adversely impact our video business.

The costs of purchasing video programming have risen significantly in recent years and continue to rise. Moreover, an increasing number of consumers are receiving access to video content through video streaming or other services pursuant to new technologies for a nominal or no fee, which will likely reduce demand for more traditional video products, such as the satellite TV services that we resell and our Prism TV services.

New technologies are also affecting consumer behavior in ways that are changing how content is delivered and viewed. Increased access to various media through wireless devices has the potential to reduce the viewing of our content through traditional distribution outlets. These new technologies have increased the number of entertainment choices available to consumers and intensified the challenges posed by audience fragmentation. Some of these newer technologies also give consumers greater flexibility to watch programming on a time-delayed or on-demand basis. All of these changes, coupled with changing consumer preferences and other related developments, could reduce demand for our video products and services. Reduced demand for our video products and services could, in turn, reduce advertisers' willingness to purchase advertising time from us, which would further reduce the profitability of our video offerings.

If we fail to extend or renegotiate our collective bargaining agreements with our labor unions as they expire from time to time, or if our unionized employees were to engage in a strike or other work stoppage, our business and operating results could be materially harmed.

As of December 31, 2015, approximately 37% of our employees were members of various bargaining units represented by the Communications Workers of America or the International Brotherhood of Electrical Workers. From time to time, our labor agreements with unions expire. Although we typically are able to negotiate new bargaining agreements, we cannot predict the outcome of our future negotiations of these agreements. We may be unable to reach new agreements, and union employees may engage in strikes, work slowdowns or other labor actions, which could materially disrupt our ability to provide services and result in increased cost to us. In addition, new labor agreements may impose significant new costs on us, which could impair our financial condition or results of operations in the future. To the extent they contain benefit provisions, these agreements may also limit our flexibility to change benefits in response to industry or competitive changes. In particular, post-employment benefits provided under these agreements could cause us to incur costs not faced by many of our competitors, which could ultimately hinder our competitive position.

Portions of our property, plant and equipment are located on property owned by third parties.

Over the past few years, certain utilities, cooperatives and municipalities in certain of the states in which we operate have requested significant rate increases for attaching our plant to their facilities. To the extent that these entities are successful in increasing the amount we pay for these attachments, our future operating costs will increase.

In addition, we rely on rights-of-way, colocation agreements and other authorizations granted by governmental bodies and other third parties to locate our cable, conduit and other network equipment on or under their respective properties. Our operations could be adversely affected if any of these authorizations terminate or lapse, or if the landowner requests price increases.

Our business customers may seek to shift risk to us.

We furnish to and receive from our business customers indemnities relating to damages caused or sustained by us in connection with certain of our operations. Our customers' changing views on risk allocation could cause us to accept greater risk to win new business or could result in us losing business if we are not prepared to take such risks. To the extent that we accept such additional risk, and seek to insure against it, our insurance premiums could rise.

Our international operations expose us to various regulatory, currency, tax, legal and other risks.

Our international operations are subject to U.S. and other laws and regulations regarding operations in foreign jurisdictions in which we provide services. These numerous and sometimes conflicting laws and regulations include anti-corruption laws, anti-competition laws, trade restrictions, tax laws, immigration laws, privacy laws and accounting requirements. Many of these laws are complex and change frequently. Regulations that require the awarding of contracts to local contractors or the employment of local citizens may adversely affect our flexibility or competitiveness in these jurisdictions. Local laws and regulations, and their interpretation and enforcement, differ significantly among those jurisdictions. There is a risk that these laws or regulations may materially restrict our ability to deliver services in various foreign jurisdictions or could be breached through inadvertence or mistake, fraudulent or negligent behavior of our employees or agents, failure to comply with certain formal documentation or technical requirements, or otherwise. Violations of these laws and regulations could result in fines and penalties, criminal sanctions against us or our personnel, or prohibitions on the conduct of our business or our ability to operate in one or more countries, any of which could have a material adverse effect on our business, reputation, results of operations, financial condition or prospects.

Many foreign laws and regulations relating to communications services are more restrictive than U.S. laws and regulations, particularly those relating to privacy rights and data retention. For example, all 28 member states of the European Union have adopted new European data protection laws that we believe could impact our operations in Europe and could potentially expose us to an increased risk of litigation or significant regulatory fines. Moreover, national regulatory frameworks that are consistent with the policies and requirements of the World Trade Organization have only recently been, or are still being, enacted in many countries. Accordingly, many countries are still in the early stages of providing for and adapting to liberalized telecommunications market. As a result, in these markets we may encounter more protracted and difficult procedures to obtain licenses necessary to provide the full set of products we seek to offer.

In addition to these international regulatory risks, some of the other risks inherent in conducting business internationally include:

- tax, licensing, political or other business restrictions or requirements;
- uncertainty concerning import and export restrictions, including the risk of fines or penalties assessed for violations;
- longer payment cycles and problems collecting accounts receivable;
- domestic and foreign regulation of overseas operations, including regulation under the Foreign Corrupt Practices Act, or FCPA, as well as other anti-corruption laws;
- economic, social and political instability, with the attendant risks of terrorism, kidnapping, extortion, civic unrest and potential seizure or nationalization of assets;
- currency and repatriation restrictions and fluctuations in currency exchange rates;
- challenges in securing and maintaining the necessary physical and telecommunications infrastructure;
- the inability in certain jurisdictions to enforce contract rights either due to underdeveloped legal systems or government actions that result in a deprivation of contract rights;
- the inability in certain jurisdictions to adequately protect intellectual property rights;
- laws, policies or practices that restrict with whom we can contract or otherwise limit the scope of operations that can legally or practically be conducted within any particular country;
- potential submission of disputes to the jurisdiction of a foreign court or arbitration panel;

- reliance on third parties, including those with which we have limited experience;
- limitations in the availability, amount or terms of insurance coverage;
- the imposition of unanticipated or increased taxes, increased communications or privacy regulations or other forms of public or governmental regulation that increase our operating expenses; and
- challenges in staffing and managing foreign operations.

Many of these risks are beyond our control, and we cannot predict the nature or the likelihood of the occurrence or corresponding effect of any such events, each of which could have an adverse effect on our financial condition and results of operations.

We do business and may in the future do additional business in certain countries or regions in which corruption is a serious problem. Moreover, in order to effectively compete in certain foreign jurisdictions, it is frequently necessary or required to establish joint ventures, strategic alliances or marketing arrangements with local operators, partners or agents. In certain instances, these local operators, partners or agents may have interests that are not always aligned with ours. Reliance on local operators, partners or agents could expose us to the risk of being unable to control the scope or quality of our overseas services or products, or being held liable under the FCPA or other anti-corruption laws for actions taken by our strategic or local partners or agents even though these partners or agents may not themselves be subject to the FCPA or other applicable anti-corruption laws. Any determination that we have violated the FCPA or other anti-corruption laws could have a material adverse effect on our business, results of operations, reputation or prospects.

We may be unable to integrate successfully our acquired operations and realize the anticipated benefits of our recent acquisitions.

Historically, much of our growth has been attributable to acquisitions. Although we have completed most of the work to integrate the operations of the acquired companies into our operations, we will continue to devote significant management attention and resources to completing the integration of the business practices, systems and operations of CenturyLink and the acquired companies. You should be aware that our remaining efforts to integrate these companies and businesses could distract our management, disrupt our ongoing business or create inconsistencies in our products, services, standards, controls, procedures and policies, any of which could adversely affect our ability to maintain relationships with customers, vendors and employees or to achieve the anticipated benefits of our acquisitions, or could otherwise adversely affect our business and financial results.

Any additional future acquisitions by us would subject us to additional business, operating and financial risks, the impact of which cannot presently be evaluated, and could adversely impact our capital structure or financial position.

From time to time in the future we may pursue other acquisition or expansion opportunities in an effort to implement our business strategies. These transactions could involve acquisitions of entire businesses or investments in start-up or established companies, and could take several forms, including mergers, joint ventures, investments in new lines of business, or the purchase of equity interests or assets. These types of transactions may present significant risks and uncertainties, including distraction of management from current operations, insufficient revenue acquired to offset liabilities assumed, unexpected expenses, inadequate return of capital, regulatory or compliance issues, potential infringements, potential violations of covenants in our debt instruments and other unidentified issues not discovered in due diligence. To the extent we acquire a business that is financially unstable or is otherwise subject to a high level of risk, we may be affected by currently unascertainable risks of that business. Accordingly, there is no current basis for you to evaluate the possible merits or risks of the particular business or assets that we may acquire. Moreover, we cannot guarantee that any such transaction will ultimately result in the realization of the benefits of the transaction originally anticipated by us or that any such transaction will not have a material adverse impact on our financial condition or results of operations. In particular, we can provide no assurances that we will be able to successfully integrate the technology systems, billing systems, accounting processes, sales force, cost structure, product development and service delivery processes, strategies and culture of the acquired company with ours. In addition, the financing of any future acquisition completed by us could adversely impact our capital structure as any such financing would likely include the issuance of additional securities or the borrowing of additional funds. Except as required by law or applicable securities exchange listing standards, we do not expect to ask our shareholders to vote on any proposed acquisition. Moreover, we generally do not announce our acquisitions until we have entered into a preliminary or definitive agreement.

Unfavorable general economic conditions could negatively impact our operating results and financial condition.

Unfavorable general economic conditions, including unstable economic and credit markets, could negatively affect our business. Worldwide economic growth has been sluggish since 2008, and many experts believe that a confluence of global factors may result in a prolonged period of economic stagnation, slow growth or economic uncertainty. While it is difficult to predict the ultimate impact of these general economic conditions, they could adversely affect demand for some of our products and services and could cause customers to shift to lower priced products and services or to delay or forego purchases of our products and services. These conditions impact, in particular, our ability to sell discretionary products or services to business customers that are under pressure to reduce costs or to governmental customers that have suffered substantial budget cuts in recent years. Any one or more of these circumstances could continue to depress our revenues. Also, our customers may encounter financial hardships or may not be able to obtain adequate access to credit, which could negatively impact their ability to make timely payments to us. In addition, as discussed further below, unstable economic and credit markets may preclude us from refinancing maturing debt at terms that are as favorable as those from which we previously benefited, at terms that are acceptable to us, or at all. For these reasons, among others, if current economic conditions persist or decline, our operating results, financial condition, and liquidity could be adversely affected.

For additional information about our business and operations, see Item 1 of Part I of this Annual Report.

Risks Relating to Legal and Regulatory Matters

We operate in a highly regulated industry and are therefore exposed to restrictions on our operations and a variety of claims relating to such regulation.

General. We are subject to significant regulation by, among others, (i) the Federal Communications Commission (“FCC”), which regulates interstate communications, (ii) state utility commissions, which regulate intrastate communications, and (iii) various foreign governments and international bodies, which regulate our international operations. Generally, we must obtain and maintain certificates of authority or licenses from these bodies in most territories where we offer regulated services. We cannot assure you that we will be successful in obtaining or retaining all licenses necessary to carry out our business plan, and, even if we are, the prescribed service standards and conditions imposed on us in connection with obtaining or acquiring control of these licenses may impose on us substantial costs and limitations. We are also subject to numerous requirements and interpretations under various international, federal, state and local laws, rules and regulations, which are quite detailed and occasionally in conflict with each other. Accordingly, we cannot ensure that we are always considered to be in compliance with all these requirements at any single point in time. The agencies responsible for the enforcement of these laws, rules and regulations may initiate inquiries or actions based on customer complaints or on their own initiative. Even if we are ultimately found to have complied with applicable regulations, such actions or inquiries could create adverse publicity that negatively impacts our business.

Regulation of the telecommunications industry continues to change, and the regulatory environment varies substantially from jurisdiction to jurisdiction. A substantial portion of our local voice services revenue remains subject to FCC and state utility commission pricing regulation, which periodically exposes us to pricing or earnings disputes and could expose us to unanticipated price declines. Interexchange carriers have filed complaints in various forums requesting reductions in our access rates. In addition, several long distance providers are disputing or refusing to pay amounts owed to us for carrying Voice over Internet Protocol (“VoIP”) traffic, or traffic they claim to be VoIP traffic. Similarly, some carriers are refusing to pay access charges for certain calls between mobile and wireline devices routed through an interexchange carrier. There can be no assurance that future regulatory, judicial or legislative activities will not have a material adverse effect on our operations, or that regulators or third parties will not raise material issues with regard to our compliance or noncompliance with applicable regulations.

Risks associated with recent changes in regulation. Historically, our financial performance has been substantially impacted by various aspects of federal regulation, including our receipt in the past of significant universal service payments designed to promote rural telephony. In October 2011, the FCC adopted the Connect America and Intercarrier Compensation Reform order (“the 2011 order”) intended to comprehensively reform the existing regulatory regime to focus support on networks capable of providing new technologies, including VoIP and other high-speed Internet services, and re-direct federal universal service funding to foster nationwide voice and high-speed Internet infrastructure. This initial ruling provides for a multi-year transition as intercarrier compensation charges are reduced, federal universal service funding is explicitly targeted to broadband deployment, and subscriber line charges paid by end-user customers are gradually increased. These changes have, among other things, fundamentally altered the manner in which federal subsidies are calculated and disbursed to us (including terminating substantially all of the old universal service payments paid to us under predecessor support programs), and have substantially increased the pace of reductions in the amount of switched access revenues we receive from our wholesale customers. We expect our participation in the FCC's CAF Phase 2 support program will significantly impact our financial results and capital expenditures in the coming years. For more information, see "Regulation" in Item 1 of Part I and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7 of Part II of this Annual Report.

Several judicial challenges to the 2011 order are pending and additional future challenges are possible, any of which could alter or delay the FCC's proposed changes. In addition, based on the outcome of the FCC proceedings, various state commissions may consider changes to their rates and support programs. Moreover, FCC proceedings relating to implementation of the order remain pending. For these and other reasons, we cannot predict the ultimate impact of these proceedings at this time.

In addition, during the last few years Congress or the FCC has initiated various other changes, including various broadband and internet regulation initiatives including “network neutrality” regulations (as discussed further below) and actions that will restrict our ability to discontinue or reduce certain services, even if unprofitable. The FCC is also, among other things, investigating the special access tariffs of several carriers, including us, and considering changes in the regulation of special access services. Any of these recent or pending initiatives could adversely affect our operations or financial results. Moreover, many of the FCC's regulations adopted in recent years remain subject to judicial review and additional rulemakings, thus increasing the difficulty of determining the ultimate impact of these changes on us and our competitors.

Certain states have recently taken steps that could reduce the amount of their universal service support payments to incumbent local exchange companies. If these trends continue, we would suffer a reduction in our revenues from state support programs.

Risks of higher costs. Regulations continue to create significant operating and capital costs for us. Challenges to our tariffs by regulators or third parties or delays in obtaining certifications and regulatory approvals could cause us to incur substantial legal and administrative expenses, and, if successful, such challenges could adversely affect the rates that we are able to charge our customers.

Our business also may be impacted by legislation and regulation imposing new or greater obligations related to regulations or laws related to regulating broadband services, storing records, bolstering homeland security or cyber security, increasing disaster recovery requirements, minimizing environmental impacts, enhancing privacy, restricting data collection, protecting intellectual property rights of third parties, or addressing other issues that impact our business, including (i) the Communications Assistance for Law Enforcement Act, which requires communications carriers to ensure that their equipment, facilities, and services are able to facilitate authorized electronic surveillance, and (ii) the USA Freedom Act, which requires communication companies to store records of communications of their customers. We expect our compliance costs to increase if future laws or regulations continue to increase our obligations.

In addition, increased regulation of our suppliers could increase our costs. For instance, if enhanced regulation of greenhouse gas emissions increases our energy costs, the profitability of our hosting and other operations could be adversely affected.

Increased risks of fines. We have recently paid certain regulatory fines associated with network or service outages, particularly with respect to outages impacting the availability of emergency - 911 services. We believe that regulators are now pursuing higher fines than in the past for these types of incidents, and expect this trend to continue.

Risks of reduced flexibility. As a diversified full service incumbent local exchange carrier in most of our key markets, we have traditionally been subject to significant regulation that does not apply to many of our competitors. This regulation in many instances restricts our ability to change rates, to compete and to respond rapidly to changing industry conditions. As our business becomes increasingly competitive, regulatory disparities between us and our competitors could impede our ability to compete.

Risks posed by other regulations. All of our operations are also subject to a variety of environmental, safety, health and other governmental regulations. We monitor our compliance with federal, state and local regulations governing the management, discharge and disposal of hazardous and environmentally sensitive materials. Although we believe that we are in compliance with these regulations in all material respects, our management, discharge or disposal of hazardous and environmentally sensitive materials might expose us to claims or actions that could potentially have a material adverse effect on our business, financial condition and operating results. For a discussion of regulatory risks associated with our international operations, see "Risk Factors—Risks Affecting Our Business—Our international operations expose us to various regulatory, currency, tax, legal and other risks."

Our participation in the FCC's Connect America Fund ("CAF") Phase 2 support program poses certain risks.

Our participation in the CAF Phase 2 support programs subjects us to certain financial risks. If we fail to attain certain specified infrastructure buildout requirements, the FCC could withhold future CAF support payments until these shortcomings are rectified. In addition, if we are not in compliance with FCC measures at the end of the six-year CAF Phase 2 period, we will have 12 months to attain full compliance. If we are not in full compliance after the additional 12 months, we would incur a penalty equal to 1.89 times the average amount of support per location received in the state over the six-year term, plus a potential penalty of 10% of the total CAF Phase 2 support over the six-year term for the state. The amount of these penalties could be material. To comply with the FCC's buildout requirements, we believe we will need to dedicate a substantial portion of our future capital expenditure budget to the construction of new infrastructure. The CAF-related expenditures could reduce the amount of funds we are willing or able to allocate to other initiatives or projects.

"Open Internet" regulation could limit our ability to operate our high-speed data business profitably and to manage our broadband facilities efficiently.

In order to continue to provide quality high-speed data service at attractive prices, we believe we need the continued flexibility to respond to changing consumer demands, to manage bandwidth usage efficiently for the benefit of all customers and to invest in our networks. In February 2015, the FCC adopted new regulations that regulate Internet services as a public utility under Title II of the Communications Act. Several companies, including us, have initiated judicial actions challenging the new regulations, which remain pending. The ultimate impact of the new regulations will depend on several factors, including the results of pending litigation and the manner in which the new regulations are implemented and enforced. Although it is premature for us to determine the ultimate impact of the new regulations upon our operations, we currently anticipate that the proposed rules could hamper our ability to operate our data networks efficiently, restrict our ability to implement network management practices necessary to ensure quality service, increase the cost of network extensions and upgrades, and otherwise negatively impact our current operations. It is possible that Congress, the FCC or the courts could take further action in the future to modify regulations affecting the provision of broadband Internet services.

We may be liable for the material that content providers distribute over our network.

Although we believe our liability for third party information stored on or transmitted through our networks is limited, the liability of private network operators is impacted both by changing technology and evolving legal principles that remain unsettled in many jurisdictions. As a private network provider, we could be exposed to legal claims relating to third party content stored or transmitted on our networks. Such claims could involve, among others, allegations of defamation, invasion of privacy, copyright infringement, or aiding and abetting restricted activities such as online gambling or pornography. If we decide to implement additional measures to reduce our exposure to these risks, or if we are required to defend ourselves against these kinds of claims, our operations and financial results could be negatively affected.

Any adverse outcome in any of our pending key legal proceedings could have a material adverse impact on our financial condition and operating results, on the trading price of our securities and on our ability to access the capital markets.

There are several material proceedings pending against us, as described in Note 14—Commitments and Contingencies to our consolidated financial statements included in Item 8 of Part II of this Annual Report. Results of these legal proceedings cannot be predicted with certainty. Irrespective of its merits, litigation may be both lengthy and disruptive to our operations and could cause significant expenditure and diversion of management attention. Any of the proceedings described in Note 14, as well as current litigation not described therein or future litigation, could have a material adverse effect on our financial position or operating results. We can give you no assurances as to the impact of these matters on our operating results or financial condition.

We are subject to franchising requirements that could impede our expansion opportunities or result in potential fines or penalties.

We may be required to obtain from municipal authorities operating franchises to install or expand certain facilities related to our fiber transport operations, our competitive local exchange carrier operations, and our facilities-based video services. Some of these franchises may require us to pay franchise fees. Many of our franchise agreements have compliance obligations and failure to comply may result in fines or penalties. In some cases, certain franchise requirements could delay us in expanding our operations or increase the costs of providing these services.

We are exposed to risks arising out of recent legislation affecting U.S. public companies.

Changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act and the Dodd-Frank Wall Street Reform and Consumer Protection Act, and related regulations implemented thereunder, are increasing legal and financial compliance costs and making some activities more time consuming. Any failure to successfully or timely complete annual assessments of our internal controls required by Section 404 of the Sarbanes-Oxley Act could subject us to sanctions or investigation by regulatory authorities. Any such action could adversely affect our financial results or our reputation with investors, lenders or others.

Changes in any of the above-described laws or regulations may limit our ability to plan, and could subject us to further costs or constraints.

From time to time, the laws or regulations governing us or our customers, or the government's policy of enforcing those laws or regulations, have changed frequently and materially. The variability of these laws could hamper the ability of us and our customers to plan for the future or establish long-term strategies. Moreover, future changes in these laws or regulations could further increase our operating or compliance costs, or further restrict our operational flexibility, any of which could have a material adverse effect on our results of operations, competitive position, financial condition or prospects.

For a more thorough discussion of the regulatory issues that may affect our business, see "Regulation" in Item 1 of Part I of this Annual Report.

Risks Affecting Our Liquidity and Capital Resources

Our high debt levels expose us to a broad range of risks.

We continue to carry significant debt. As of December 31, 2015, our consolidated long-term debt was approximately \$20.225 billion. As of the date of this Annual Report, approximately \$3.085 billion aggregate principal amount of our consolidated debt securities, excluding capital lease and other obligations, is scheduled to mature prior to December 31, 2018. While we currently believe we will have the financial resources to meet or refinance our obligations when they come due, we cannot fully anticipate our future performance or financial condition, the future condition of the credit markets or the economy generally.

Our significant levels of debt can adversely affect us in several other respects, including:

- limiting our ability to obtain additional financing for working capital, capital expenditures, acquisitions, refinancings or other general corporate purposes, particularly if, as discussed further in the risk factor disclosure below, (i) the ratings assigned to our debt securities by nationally recognized credit rating organizations are revised downward or (ii) we seek capital during periods of turbulent or unsettled market conditions;
- requiring us to dedicate a substantial portion of our cash flow from operations to the payment of interest and principal on our debt, thereby reducing the funds available to us for other purposes, including acquisitions, capital expenditures, strategic initiatives, dividends, stock repurchases and marketing;
- hindering our ability to capitalize on business opportunities and to plan for or react to changing market, industry, competitive or economic conditions;
- increasing our future borrowing costs;
- increasing the risk that third parties will be unwilling or unable to engage in hedging or other financial or commercial arrangements with us;
- making us more vulnerable to economic or industry downturns, including interest rate increases;
- placing us at a competitive disadvantage compared to less leveraged competitors;

- increasing the risk that we will need to sell securities or assets, possibly on unfavorable terms, or take other unfavorable actions to meet payment obligations; or
- increasing the risk that we may not meet the financial covenants contained in our debt agreements or timely make all required debt payments.

The effects of each of these factors could be intensified if we increase our borrowings.

Any failure to make required debt payments could, among other things, adversely affect our ability to conduct operations or raise capital.

Our debt agreements and the debt agreements of our subsidiaries allow us to incur significantly more debt, which could exacerbate the other risks described in this Annual Report.

The terms of our debt instruments and the debt instruments of our subsidiaries permit us to incur additional indebtedness. Additional debt may be necessary for many reasons, including those discussed above. Incremental borrowings that impose additional financial risks could exacerbate the other risks described in this Annual Report.

We expect to periodically require financing, and we cannot assure you that we will be able to obtain such financing on terms that are acceptable to us, or at all.

We have a significant amount of indebtedness that we intend to refinance over the next several years, principally through the issuance of debt securities of CenturyLink, Inc., Qwest Corporation or both. Our ability to arrange additional financing will depend on, among other factors, our financial position, performance, and credit ratings, as well as prevailing market conditions and other factors beyond our control. Global financial markets continue to be volatile. Prevailing market conditions could be adversely affected by (i) general market conditions, such as disruptions in domestic or overseas sovereign or corporate debt markets, geo-political instabilities, contractions or limited growth in the economy or other similar adverse economic developments in the U.S. or abroad and (ii) specific conditions in the communications industry. Volatility in the global markets could limit our access to the credit markets, leading to higher borrowing costs or, in some cases, the inability to obtain financing on terms that are as favorable as those from which we previously benefited, on terms that are acceptable to us, or at all. Any such failure to obtain additional financing could jeopardize our ability to repay, refinance or reduce our debt obligations.

We may also need to obtain additional financing under a variety of other circumstances, including if:

- revenues and cash provided by operations decline;
- economic conditions weaken, competitive pressures increase or regulatory requirements change;
- we engage in any acquisitions or undertake substantial capital projects or other initiatives that increase our cash requirements;
- we are required to contribute a material amount of cash to our pension plans;
- we are required to begin to pay other post-retirement benefits earlier than anticipated;
- our payments of federal taxes increase faster or in greater amounts than currently anticipated; or
- we become subject to significant judgments or settlements, including in connection with one or more of the matters discussed in Note 14—Commitments and Contingencies to our consolidated financial statements included elsewhere in this Annual Report.

For all the reasons mentioned above, we can give no assurance that additional financing for any of these purposes will be available on terms that are acceptable to us, or at all.

In addition, our ability to borrow funds in the future will depend in part on the satisfaction of the covenants in our credit facilities and other debt instruments. If we are unable to satisfy the financial covenants contained in those instruments, or are unable to generate cash sufficient to make required debt payments, the parties to whom we are indebted could accelerate the maturity of some or all of our outstanding indebtedness. Certain of our debt instruments have cross-default or cross-acceleration provisions. When present, these provisions could have a wider impact on liquidity than might otherwise arise from a default or acceleration of a single debt instrument.

As noted above, if we are unable to make required debt payments or refinance our debt, we would likely have to consider other options, such as selling assets, issuing additional securities, reducing or terminating our dividend payments, cutting costs or otherwise reducing our cash requirements, or negotiating with our lenders to restructure our applicable debt. Our current and future debt instruments may restrict, or market or business conditions may limit, our ability to do some of these things on favorable terms or at all.

Any downgrade in the credit ratings of us or our affiliates could limit our ability to obtain future financing, increase our borrowing costs and adversely affect the market price of our existing debt securities or otherwise impair our business, financial condition and results of operations.

Nationally recognized credit rating organizations have issued credit ratings relating to CenturyLink, Inc.'s long-term debt and the long-term debt of several of its subsidiaries. Most of these ratings are below "investment grade", which results in higher borrowing costs than "investment grade" debt as well as reduced marketability of our debt securities. There can be no assurance that any rating assigned to any of these debt securities will remain in effect for any given period of time or that any such ratings will not be lowered, suspended or withdrawn entirely by a rating agency if, in that rating agency's judgment, circumstances so warrant.

A downgrade of any of these credit ratings could:

- adversely affect the market price of some or all of our outstanding debt or equity securities;
- limit our access to the capital markets or otherwise adversely affect the availability of other new financing on favorable terms, if at all;
- trigger the application of restrictive covenants in certain of our debt agreements or result in new or more restrictive covenants in agreements governing the terms of any future indebtedness that we may incur;
- increase our cost of borrowing; and
- impair our business, financial condition and results of operations.

Under certain circumstances upon a change of control, we will be obligated to offer to repurchase certain of our outstanding debt securities, which could have certain adverse ramifications.

If the credit ratings relating to certain of our long-term debt securities are downgraded in the manner specified thereunder in connection with "change of control" of CenturyLink, Inc, then we will be required to offer to repurchase such debt securities. If, due to lack of cash, legal or contractual impediments, or otherwise, we fail to offer to repurchase such debt securities, such failure could constitute an event of default under such debt securities, which could in turn constitute a default under other of our agreements relating to our indebtedness outstanding at that time. Moreover, the existence of these repurchase covenants may in certain circumstances render it more difficult or discourage a sale or takeover of us, or the removal of our incumbent directors.

Our business requires us to incur substantial capital and operating expenses, which reduce our available free cash flow.

Our business is capital intensive, and we anticipate that our capital requirements will continue to be significant in the coming years. As noted elsewhere in this Annual Report, we committed to spend substantial sums to construct infrastructure in connection with our participation in the FCC's CAF Phase 2 program. In addition, as discussed further under "Risk Factors—Risks Affecting Our Business—Increases in broadband usage may cause network capacity limitations, resulting in service disruptions, reduced capacity or slower transmission speeds for our customers," increased bandwidth consumption by consumers and businesses has placed increased demands on the transmission capacity of our networks. If we determine that our networks must be expanded to handle these increased demands or as needed to meet CAF Phase 2 infrastructure requirements, we may determine that substantial additional capital expenditures are required, even though there is no assurance that the return on our investment will be satisfactory. In addition, many of our growth and modernization initiatives are capital intensive and changes in technology could require further spending. In addition to investing in expanded networks, new products or new technologies, we must from time to time invest capital to (i) replace some of our aging equipment that supports many of our legacy services that are experiencing revenue declines or (ii) convert older systems to simplify and modernize our network. While we believe that our planned level of capital expenditures will meet both our maintenance and core growth requirements, this may not be the case if demands on our network continue to accelerate or other circumstances underlying our expectations change. Increased spending could, among other things, adversely affect our operating margins, cash flows, results of operations and financial position.

Similarly, we continue to anticipate incurring substantial operating expenses to support our incumbent services and growth initiatives. Although we have successfully reduced certain of our operating expenses over the past few years, we may be unable to further reduce these costs, even if revenues in some of our lines of business are decreasing. If so, our operating margins will be adversely impacted.

As a holding company, we rely on payments from our operating companies to meet our obligations.

As a holding company, substantially all of our income and operating cash flow is dependent upon the earnings of our subsidiaries and their distribution of those earnings to us in the form of dividends, loans or other payments. As a result, we rely upon our subsidiaries to generate the funds necessary to meet our obligations, including the payment of amounts owed under our long-term debt. Our subsidiaries are separate and distinct legal entities and have no obligation to pay any amounts owed by us or, subject to limited exceptions for tax-sharing or cash management purposes, to make any funds available to us to repay our obligations, whether by dividends, loans or other payments. State law applicable to each of our subsidiaries restricts the amount of dividends that they may pay. Restrictions that have been or may be imposed by state regulators (either in connection with obtaining necessary approvals for our acquisitions or in connection with our regulated operations), and restrictions imposed by credit instruments or other agreements applicable to certain of our subsidiaries may limit the amount of funds that our subsidiaries are permitted to transfer to us, including the amount of dividends that may be paid to us. Moreover, our rights to receive assets of any subsidiary upon its liquidation or reorganization will be effectively subordinated to the claims of creditors of that subsidiary, including trade creditors. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources” included elsewhere in this Annual Report for further discussion of these matters.

We cannot assure you that we will continue paying dividends at the current rates or at all.

For the reasons noted below, we cannot assure you that we will continue periodic dividends on our capital stock at the current rates or at all.

As noted in the immediately preceding risk factor, because we are a holding company with no material assets other than the stock of our subsidiaries, our ability to pay dividends will depend on the earnings and cash flow of our subsidiaries and their ability to furnish funds to us in the form of dividends, loans or other payments.

Any quarterly dividends on our common stock and our outstanding shares of preferred stock will be paid from funds legally available for such purpose when, as and if declared by our Board of Directors. Decisions on whether, when and in which amounts to continue making any future dividend distributions will remain at all times entirely at the discretion of our Board of Directors, which reserves the right to change or terminate our dividend practices at any time and for any reason without prior notice, including without limitation any of the following:

- our supply of cash or other liquid assets is anticipated to decrease due to our projected payment of higher cash taxes and might decrease further for any of the reasons or potential adverse events or developments described in this Annual Report, including (i) changes in competition, regulation, federal and state support, technology, taxes, capital markets, operating costs or litigation costs, or (ii) the impact of any liquidity shortfalls caused by the below-described restrictions on the ability of our subsidiaries to lawfully transfer cash to us;
- our cash requirements or plans might change for a wide variety of reasons, including changes in our capital allocation plans (including a desire to retain or accumulate cash), capital spending plans, stock purchase plans, acquisition strategies, strategic initiatives, debt payment plans (including a desire to maintain or improve credit ratings on our debt securities), pension funding payments, or financial position;
- our ability to service and refinance our current and future indebtedness and our ability to borrow or raise additional capital to satisfy our capital needs;
- the amount of dividends that we may distribute to our shareholders is subject to restrictions under Louisiana law and restrictions imposed by our existing or future credit facilities, debt securities, outstanding preferred stock securities, leases and other agreements, including restricted payment and leverage covenants; and
- the amount of cash that our subsidiaries may make available to us, whether by dividends, loans or other payments, may be subject to the legal, regulatory and contractual restrictions described in the immediately preceding risk factor.

Based on its evaluation of these and other relevant factors, our Board of Directors may, in its sole discretion, decide not to declare a dividend on our common stock or our outstanding shares of preferred stock for any period for any reason, regardless of whether we have funds legally available for such purposes. Holders of our equity securities should be aware that they have no contractual or other legal right to receive dividends.

Similarly, holders of our common stock should be aware that repurchases of our common stock under various repurchase plans are completely discretionary, and may be suspended or discontinued at any time for any reason regardless of our financial position.

Our current dividend practices could limit our ability to deploy cash for other beneficial purposes.

The current practice of our Board of Directors to pay common share dividends reflects a current intention to distribute to our shareholders a substantial portion of our cash flow. As a result, we may not retain a sufficient amount of cash to apply to other transactions that could be beneficial to our shareholders or debtholders, including stock buybacks, debt prepayments or capital expenditures that strengthen our business. In addition, our ability to pursue any material expansion of our business through acquisitions or increased capital spending may depend more than it otherwise would on our ability to obtain third party financing.

We cannot assure you whether, when or in what amounts we will be able to use our net operating losses, or when they will be depleted.

At December 31, 2015, we had approximately \$72 million of federal net operating losses, or NOLs, which relate primarily to pre-acquisition losses of Qwest Communications International Inc. ("Qwest"). Under certain circumstances, these NOLs can be used to offset our future federal taxable income. The acquisitions of Qwest, SAVVIS, Inc. ("Savvis") and other corporations caused "ownership changes" under federal tax laws relating to the post-acquisition use of NOLs and other federal tax attributes. As a result, these laws could limit our ability to use the federal NOLs and certain other federal tax attributes of each of those corporations. Further limitations could apply if we are deemed to undergo an ownership change in the future. Based on current laws and circumstances, we expect to use only a portion of the aforementioned federal NOLs from 2016 through 2032.

Additionally, at December 31, 2015, we had state NOLs of approximately \$13 billion. A significant portion of the state NOLs are generated in states where separate company income tax returns are filed and our subsidiaries that generated the losses may not have the ability to generate income in sufficient amounts to realize these losses. In addition, certain of these state NOLs will be limited by state laws related to ownership changes. As a result, we expect to utilize only a small portion of the state NOLs, and consequently have determined that as of December 31, 2015, these state NOLs had a net tax benefit (before valuation allowance) of approximately \$444 million.

Increases in costs for pension and healthcare benefits for our active and retired employees may reduce our profitability and increase our funding commitments.

With approximately 43,000 employees, approximately 68,000 pension retirees and approximately 14,000 former employees with vested benefits participating in our benefit plans as of December 31, 2015, the costs of pension and healthcare benefits for our active and retired employees have a significant impact on our profitability. Our costs of maintaining our pension and healthcare plans, and the future funding requirements for these plans, are affected by several factors, most of which are outside our control, including:

- decreases in investment returns on funds held by our pension and other benefit plan trusts;
- changes in prevailing interest rates and discount rates used to calculate the funding status of our pension and other post-retirement plans;
- increases in healthcare costs generally or claims submitted under our healthcare plans specifically;
- increasing longevity of our employees and retirees;
- the continuing implementation of the Patient Protection and Affordable Care Act, and the related reconciliation act and regulations promulgated thereunder;
- increases in the number of retirees who elect to receive lump sum benefit payments;
- increases in insurance premiums we are required to pay to the Pension Benefit Guaranty Corporation, an independent agency of the United States government that must cover its own underfunded status by collecting premiums from an ever shrinking population of pension plans that are qualified under the U.S. tax code;
- changes in plan benefits; and
- changes in funding laws or regulations.

Increased costs under these plans could reduce our profitability and increase our funding commitments to our pension plans. Any future material cash contributions could have a negative impact on our liquidity by reducing our cash flows.

As of December 31, 2015, our pension plans and our other post-retirement benefit plans were substantially underfunded from an accounting standpoint. See Note 7—Employee Benefits to our consolidated financial statements included in Item 8 of Part II of this Annual Report. For more information on our obligations under our defined benefit pension plans and other post-retirement benefit plans, please see “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Pension and Post-retirement Benefit Obligations” included in Item 7 of Part II of this Annual Report.

For additional information concerning our liquidity and capital resources, see Item 7 of Part II of this Annual Report. For a discussion of certain currency and liquidity risks associated with our international operations, see “Risk Factors—Risks Affecting Our Business—Our international operations expose us to various regulatory, currency, tax, legal and other risks.”

Other Risks

We face risks from natural disasters, which can disrupt our operations and cause us to incur substantial additional capital and operating costs.

A substantial number of our facilities are located in Florida, Alabama, Louisiana, Texas, North Carolina, South Carolina and other coastal states, which subjects them to the risks associated with severe tropical storms, hurricanes and tornadoes, including downed telephone lines, flooded facilities, power outages, fuel shortages, damaged or destroyed property and equipment, and work interruptions. Although we maintain property and casualty insurance on our property (excluding our above ground outside plant) and may, under certain circumstances, be able to seek recovery of some additional costs through increased rates, only a portion of our additional costs directly related to such natural disasters have historically been recoverable. We cannot predict whether we will continue to be able to obtain insurance for catastrophic hazard-related damages or, if obtainable and carried, whether this insurance will be adequate to cover our losses. In addition, we expect any insurance of this nature to be subject to substantial deductibles or retentions and the premiums to be based on our loss experience. Moreover, our insurance coverage is limited for certain specified types of exposure to losses. For all these reasons, any future hazard-related costs and work interruptions could adversely affect our operations and our financial condition.

If conditions or assumptions differ from the judgments, assumptions or estimates used in our critical accounting policies, our consolidated financial statements and related disclosures could be materially affected.

The preparation of financial statements and related disclosures in conformity with U.S. generally accepted accounting principles requires management to make judgments, assumptions and estimates that affect the amounts reported in our consolidated financial statements and accompanying notes. Our critical accounting policies, which are described in “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates” in Item 7 of Part II of this Annual Report, describe those significant accounting policies and methods used in the preparation of our consolidated financial statements that are considered “critical” because they require judgments, assumptions and estimates that materially impact our consolidated financial statements and related disclosures. As a result, if future events or assumptions differ significantly from the judgments, assumptions and estimates in our critical accounting policies, these events or assumptions could have a material impact on our consolidated financial statements and related disclosures.

Lapses in disclosure controls and procedures or internal control over financial reporting could materially and adversely affect our operations, profitability or reputation.

There can be no assurance that our disclosure controls and procedures will be effective in the future or that we will not experience a material weakness or significant deficiency in internal control over financial reporting. Any such lapses or deficiencies may materially and adversely affect our business, operating results or financial condition, restrict our ability to access the capital markets, require us to expend significant resources to correct the lapses or deficiencies, expose us to regulatory or legal proceedings, including litigation brought by private individuals, subject us to fines, penalties or judgments, harm our reputation, or otherwise cause a decline in investor confidence and our stock price.

If our goodwill or other intangible assets become impaired, we may be required to record a significant charge to earnings and reduce our stockholders' equity.

As of December 31, 2015, approximately 55% of our total consolidated assets reflected on the consolidated balance sheet included in this Annual Report consisted of goodwill, customer relationships and other intangible assets. Under U.S. generally accepted accounting principles, most of these intangible assets must be tested for impairment on an annual basis or more frequently whenever events or circumstances indicate that their carrying value may not be recoverable. From time to time (most recently for the third quarter of 2013), we have recorded large non-cash charges to earnings in connection with required reductions of the value of our intangible assets. If our intangible assets are determined to be impaired in the future, we may be required to record additional significant, non-cash charges to earnings during the period in which the impairment is determined to have occurred.

Tax audits or changes in tax laws could adversely affect us.

Like all large businesses, we are subject to frequent and regular audits by the Internal Revenue Service as well as state and local tax authorities. These audits could subject us to tax liabilities if adverse positions are taken by these tax authorities.

We believe that we have adequately provided for tax contingencies. However, our tax audits and examinations may result in tax liabilities that differ materially from those that we have recognized in our consolidated financial statements. Because the ultimate outcomes of all of these matters are uncertain, we can give no assurance as to whether an adverse result from one or more of them will have a material effect on our financial results.

Legislators and regulators at all levels of government may from time to time change existing tax laws or regulations or enact new laws or regulations that could negatively impact our operating results or financial condition.

Our agreements and organizational documents and applicable law could limit another party's ability to acquire us.

A number of provisions in our agreements and organizational documents and various provisions of applicable law may delay, defer or prevent a future takeover of CenturyLink unless the takeover is approved by our Board of Directors. For additional information, please see our Registration Statement on Form 8-A/A filed with the SEC on March 2, 2015. This could deprive our shareholders of any related takeover premium.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our property, plant and equipment consists principally of telephone lines, cable, central office equipment, land and buildings related to our operations. Our gross property, plant and equipment consisted of the following components:

	As of December 31,	
	2015	2014
Land	2%	2%
Fiber, conduit and other outside plant ⁽¹⁾	42%	41%
Central office and other network electronics ⁽²⁾	36%	36%
Support assets ⁽³⁾	18%	18%
Construction in progress ⁽⁴⁾	2%	3%
Gross property, plant and equipment	100%	100%

(1) Fiber, conduit and other outside plant consists of fiber and metallic cable, conduit, poles and other supporting structures.

(2) Central office and other network electronics consists of circuit and packet switches, routers, transmission electronics and electronics providing service to customers.

(3) Support assets consist of buildings, data centers, computers and other administrative and support equipment.

(4) Construction in progress includes inventory held for construction and property of the aforementioned categories that has not been placed in service as it is still under construction.

We own substantially all of our telecommunications equipment required for our business. However, we lease from third parties certain facilities, plant, equipment and software under various capital and operating lease arrangements when the leasing arrangements are more favorable to us than purchasing the assets. We also own and lease administrative offices in major metropolitan locations both in the United States and internationally. Substantially all of our network electronics equipment is located in buildings or on land that we own or lease within our local service area. Outside of our local service area, our assets are generally located on real property pursuant to an agreement with the property owner or another person with rights to the property. It is possible that we may lose our rights under one or more of these agreements, due to their termination or expiration or in connection with legal challenges to our rights under such agreements.

Our net property, plant and equipment was approximately \$18.1 billion and \$18.4 billion at December 31, 2015 and 2014, respectively. Some of our property, plant and equipment is pledged to secure the long-term debt of subsidiaries. For additional information, see Note 5—Property, Plant and Equipment to our consolidated financial statements in Item 8 of Part II of this Annual Report.

ITEM 3. LEGAL PROCEEDINGS

The information contained under the subheadings "Pending Matters" and "Other Proceedings and Disputes" in Note 14—Commitments and Contingencies to our consolidated financial statements included in Item 8 of Part II of this Annual Report is incorporated herein by reference.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock is listed on the New York Stock Exchange ("NYSE") and the Berlin Stock Exchange and is traded under the symbol CTL and CYT, respectively. The following table sets forth the high and low reported sales prices on the NYSE along with the quarterly dividends, for each of the quarters indicated.

	Sales Price		Cash Dividend per Common Share
	High	Low	
2015			
First quarter	\$ 40.59	34.04	0.540
Second quarter	37.00	29.28	0.540
Third quarter	31.13	24.29	0.540
Fourth quarter	29.37	24.11	0.540
2014			
First quarter	\$ 32.98	27.93	0.540
Second quarter	38.21	32.45	0.540
Third quarter	45.67	35.70	0.540
Fourth quarter	41.99	37.56	0.540

Dividends on common stock during 2015 and 2014 were paid each quarter. On February 23, 2016, our Board of Directors declared a common stock dividend of \$0.54 per share.

As described in greater detail in Item 1A of Part I of this Annual Report, the declaration and payment of dividends is at the discretion of our Board of Directors, and will depend upon our financial results, cash requirements, future prospects and other factors deemed relevant by our Board of Directors.

At February 17, 2016, there were approximately 135,000 stockholders of record, although there were significantly more beneficial holders of our common stock. At February 17, 2016, the closing stock price of our common stock was \$29.73.

Issuer Purchases of Equity Securities

In February 2014, our Board of Directors authorized a 24-month program to repurchase up to an aggregate of \$1 billion of our outstanding common stock. This 2014 stock repurchase program took effect on May 29, 2014, immediately upon the completion of our predecessor 2013 stock repurchase program. On December 7, 2015, we completed the 2014 stock repurchase program. During the three months ended December 31, 2015, we repurchased approximately 10.3 million shares of our outstanding common stock in the open market. These shares were repurchased for an aggregate market price of \$278 million or an average purchase price of \$27.07 per share. The common stock repurchased has been retired. For additional information, see Note 17—Repurchase of CenturyLink, Inc. Common Stock to our consolidated financial statements included in Item 8 of Part II of this Annual Report.

The following table contains information about shares of our previously-issued common stock that were repurchased under our 24-month 2014 stock repurchase program during the fourth quarter of 2015:

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs
October 2015	5,031,341	\$ 26.20	5,031,341	\$ 145,743,848
November 2015	4,211,762	28.15	4,211,762	27,178,346
December 2015	1,007,841	26.97	1,007,841	—
Total	10,250,944	27.07	10,250,944	

The following table contains information about shares of our previously-issued common stock that we withheld from employees upon vesting of their stock-based awards during the fourth quarter of 2015 to satisfy the related minimum tax withholding obligations:

Period	Total Number of Shares Withheld for Taxes	Average Price Paid Per Share
October 2015	2,940	\$ 25.93
November 2015	27,471	27.72
December 2015	3,884	27.00
Total	34,295	

ITEM 6. SELECTED FINANCIAL DATA

The following tables of selected consolidated financial data should be read in conjunction with, and are qualified by reference to, our consolidated financial statements and notes thereto in Item 8 of Part II and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7 of Part II of this Annual Report.

The tables of selected financial data shown below are derived from our audited consolidated financial statements. These historical results are not necessarily indicative of results that you can expect for any future period.

The results of operations include Savvis for periods after July 15, 2011 and Qwest for periods after April 1, 2011.

Selected financial information from our consolidated statements of operations is as follows:

	Years Ended December 31, ⁽¹⁾				
	2015 ⁽²⁾	2014 ⁽³⁾	2013 ⁽⁴⁾	2012	2011
	(Dollars in millions, except per share amounts and shares in thousands)				
Operating revenues	\$ 17,900	18,031	18,095	18,376	15,351
Operating expenses	15,295	15,621	16,642	15,663	13,326
Operating income	\$ 2,605	2,410	1,453	2,713	2,025
Income before income tax expense	1,316	1,110	224	1,250	948
Net income (loss)	878	772	(239)	777	573
Basic earnings (loss) per common share	1.58	1.36	(0.40)	1.25	1.07
Diluted earnings (loss) per common share	1.58	1.36	(0.40)	1.25	1.07
Dividends declared per common share	2.16	2.16	2.16	2.90	2.90
Weighted average basic common shares outstanding	554,278	568,435	600,892	620,205	532,780
Weighted average diluted common shares outstanding	555,093	569,739	600,892	622,285	534,121

⁽¹⁾ See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations" in Item 7 of Part II of this Annual Report for a discussion of unusual items affecting the results for the years ended December 31, 2015, 2014 and 2013.

⁽²⁾ During 2015, we recognized an incremental \$215 million of revenue associated with the Federal Communications Commission ("FCC") Connect America Fund Phase 2 support program. For additional information, see Note 1—Basis of Presentation and Summary of Significant Accounting Policies to our consolidated financial statements in Item 8 of Part II of this Annual Report.

⁽³⁾ During 2014, we recognized a \$60 million tax benefit associated with a deduction for the tax basis for worthless stock in a wholly-owned foreign subsidiary and a \$63 million pension settlement charge. For additional information, see Note 13—Quarterly Financial Data (Unaudited) to our consolidated financial statements included in Item 8 of Part II of this Annual Report.

⁽⁴⁾ During 2013, we recorded a non-cash, non-tax-deductible goodwill impairment charge of \$1.092 billion for goodwill attributed to one of our previous operating segments and a litigation settlement charge of \$235 million.

Selected financial information from our consolidated balance sheets is as follows:

	As of December 31,				
	2015	2014	2013	2012	2011
	(Dollars in millions)				
Net property, plant and equipment	\$ 18,069	18,433	18,646	18,909	19,361
Goodwill ⁽¹⁾	20,742	20,755	20,674	21,627	21,627
Total assets ⁽²⁾	47,604	49,103	50,471	52,901	54,842
Total long-term debt ⁽²⁾⁽³⁾	20,225	20,503	20,809	20,481	21,758
Total stockholders' equity ⁽¹⁾	14,060	15,023	17,191	19,289	20,827

- (1) During 2013, we recorded a non-cash, non-tax-deductible goodwill impairment charge of \$1.092 billion for goodwill attributed to one of our previous operating segments. For additional information, see Note 2—Goodwill, Customer Relationships and Other Intangible Assets to our consolidated financial statements in Item 8 of Part II of this Annual Report.
- (2) We adopted both ASU 2015-03 "Simplifying the Presentation of Debt Issuance Costs" and ASU 2015-17 "Balance Sheet Classification of Deferred Taxes" by retrospectively applying the requirements of the ASUs to our previously issued consolidated financial statements. The adoption of both ASU 2015-03 and ASU 2015-17 reduced total assets by \$1.044 billion, \$1.316 billion, \$1.039 billion and \$1.122 billion in each year for the four years ended December 31, 2014, 2015-17 reduced total assets by \$1.044 billion, \$1.316 billion, \$1.039 billion and \$1.122 billion in each year for the four years ended December 31, 2014, respectively, and ASU 2015-03 reduced total long-term debt by \$168 million, \$157 million, \$124 million and \$78 million in each year for the four years ended December 31, 2014, respectively. See further discussion in Note 1—Basis of Presentation and Summary of Significant Accounting Policies to our consolidated financial statements in Item 8 of Part II of this Annual Report.
- (3) Total long-term debt is the sum of current maturities of long-term debt and long-term debt on our consolidated balance sheets. For additional information on our total long-term debt, see Note 3—Long-Term Debt and Credit Facilities to our consolidated financial statements in Item 8 of Part II of this Annual Report. For total contractual obligations, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Future Contractual Obligations" in Item 7 of Part II of this Annual Report.

Selected financial information from our consolidated statements of cash flows is as follows:

	Years Ended December 31,				
	2015	2014	2013	2012	2011
	(Dollars in millions)				
Net cash provided by operating activities	\$ 5,152	5,188	5,559	6,065	4,201
Net cash used in investing activities	(2,853)	(3,077)	(3,148)	(2,690)	(3,647)
Net cash used in financing activities	(2,301)	(2,151)	(2,454)	(3,295)	(577)
Payments for property, plant and equipment and capitalized software	(2,872)	(3,047)	(3,048)	(2,919)	(2,411)

The following table presents certain of our selected operational metrics:

	As of December 31,				
	2015	2014	2013	2012	2011
	(in thousands except for data centers, which are actuals)				
Operational metrics:					
Total access lines ⁽¹⁾	11,748	12,394	13,002	13,751	14,587
Total high-speed Internet subscribers ⁽¹⁾	6,048	6,082	5,991	5,851	5,655
Prism TV subscribers	285	242	175	106	65
Total data centers ⁽²⁾	59	58	55	54	51

- (1) Access lines are lines reaching from the customers' premises to a connection with the public network and high-speed Internet subscribers are customers that purchase high-speed Internet connection service through their existing telephone lines, stand-alone telephone lines, or fiber-optic cables. Our methodology for counting our access lines and high-speed Internet subscribers includes only those lines that we use to provide services to external customers and excludes lines used solely by us and our affiliates. It also excludes unbundled loops and includes stand-alone high-speed Internet subscribers. We count lines when we install the service.
- (2) We define a data center as any facility where we market, sell and deliver either colocation services, multi-tenant managed services, or both. Our data centers are located in North America, Europe and Asia.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

All references to "Notes" in this Item 7 of Part II refer to the Notes to Consolidated Financial Statements included in Item 8 of Part II of this Annual Report. Certain statements in this Annual Report constitute forward-looking statements. See "Special Note Regarding Forward-Looking Statements and Related Matters" in Item 1 of Part I of this Annual Report for factors relating to these statements and "Risk Factors" in Item 1A of Part I of this Annual Report for a discussion of certain risk factors applicable to our business, financial condition, results of operations, liquidity or prospects.

Overview

We are an integrated communications company engaged primarily in providing an array of communications services to our residential and business customers. Our communications services include local and long-distance voice, high-speed Internet, Multi-Protocol Label Switching ("MPLS"), private line (including special access), data integration, Ethernet, colocation, managed hosting (including cloud hosting), network, public access, video, wireless and other ancillary services. We strive to maintain our customer relationships by, among other things, bundling our service offerings to provide our customers with a complete offering of integrated communications services.

At December 31, 2015, we operated approximately 11.7 million access lines in 37 states and served approximately 6.0 million high-speed Internet subscribers and 285 thousand Prism TV subscribers. We also operated 59 data centers throughout North America, Europe and Asia. Our methodology for counting access lines, high-speed Internet subscribers and data centers, which is described further in the operational metrics table below under "Results of Operations", may not be comparable to those of other companies.

Our consolidated financial statements include the accounts of CenturyLink, Inc. and its majority-owned subsidiaries ("CenturyLink").

We are organized into operating segments based on customer type, business and consumer. These operating segments are our two reportable segments in our consolidated financial statements:

- *Business Segment.* Consists generally of providing strategic, legacy and data integration products and services to small, medium and enterprise business, wholesale and governmental customers, including other communication providers. Our strategic products and services offered to these customers include our MPLS, private line (including special access), Ethernet, high-speed Internet, colocation, managed hosting, cloud hosting and other ancillary services. Our legacy services offered to these customers primarily include switched access, local and long-distance voice services, including the sale of unbundled network elements ("UNEs") which allow our wholesale customers to use all or part of our network to provide voice and data services to their customers. Our data integration offerings include the sale of telecommunications equipment located on customers' premises and related professional services. These services include network management, installation and maintenance of data equipment and the building of proprietary fiber-optic broadband networks; and
- *Consumer Segment.* Consists generally of providing strategic and legacy products and services to residential customers. Our strategic products and services offered to these customers include our high-speed Internet, video (including our Prism TV services) and wireless services. Our legacy services offered to these customers include local and long-distance voice service.

Results of Operations

The following table summarizes the results of our consolidated operations for the years ended December 31, 2015, 2014 and 2013:

	Years Ended December 31,		
	2015 ⁽¹⁾	2014 ⁽²⁾	2013 ⁽³⁾
	(Dollars in millions except per share amounts)		
Operating revenues	\$ 17,900	18,031	18,095
Operating expenses	15,295	15,621	16,642
Operating income	2,605	2,410	1,453
Other expense, net	1,289	1,300	1,229
Income tax expense	438	338	463
Net income (loss)	\$ 878	772	(239)
Basic earnings (loss) per common share	\$ 1.58	1.36	(0.40)
Diluted earnings (loss) per common share	\$ 1.58	1.36	(0.40)

- (1) During 2015, we recognized an incremental \$215 million of revenue associated with the Federal Communications Commission ("FCC") Connect America Fund Phase 2 support program. For additional information, see Note 1—Basis of Presentation and Summary of Significant Accounting Policies to our consolidated financial statements in Item 8 of Part II of this Annual Report.
- (2) During 2014, we recognized a \$60 million tax benefit associated with a deduction for the tax basis for worthless stock in a wholly-owned foreign subsidiary and a \$63 million pension settlement charge. For additional information, see Note 13—Quarterly Financial Data (Unaudited) to our consolidated financial statements included in Item 8 of Part II of this Annual Report.
- (3) During 2013, we recorded a non-cash, non-tax-deductible goodwill impairment charge of \$1.092 billion for goodwill attributed to one of our previous operating segments and a litigation settlement charge of \$235 million.

The following table summarizes our access lines, high-speed Internet subscribers, Prism TV subscribers, data centers and number of employees:

	As of December 31,		
	2015	2014	2013
	(in thousands except for data centers, which are actuals)		
Operational metrics:			
Total access lines ⁽¹⁾	11,748	12,394	13,002
Total high-speed Internet subscribers ⁽¹⁾	6,048	6,082	5,991
Total Prism TV subscribers	285	242	175
Total data centers ⁽²⁾	59	58	55
Total employees	43	45	47

- (1) Access lines are lines reaching from the customers' premises to a connection with the public network and high-speed Internet subscribers are customers that purchase high-speed Internet connection service through their existing telephone lines, stand-alone telephone lines, or fiber-optic cables. Our methodology for counting our access lines and high-speed Internet subscribers includes only those lines that we use to provide services to external customers and excludes lines used solely by us and our affiliates. It also excludes unbundled loops and includes stand-alone high-speed Internet subscribers. We count lines when we install the service.
- (2) We define a data center as any facility where we market, sell and deliver either colocation services, multi-tenant managed services, or both. Our data centers are located in North America, Europe and Asia.

During the last decade, we have experienced revenue declines primarily due to declines in access lines, private line customers, switched access rates and minutes of use. To mitigate these revenue declines, we remain focused on efforts to, among other things:

- promote long-term relationships with our customers through bundling of integrated services;
- provide a wide array of diverse services, including enhanced or additional services that may become available in the future due to, among other things, advances in technology or improvements in our infrastructure;

- provide our high-speed Internet and premium services to a higher percentage of our customers;
- pursue acquisitions of additional assets if available at attractive prices;
- increase prices on our products and services if and when practicable;
- increase the capacity and speed of our networks;
- increase usage of our networks; and
- market our products and services to new customers.

Operating Revenues

We currently categorize our products, services and revenues among the following four categories:

- *Strategic services*, which include primarily high-speed Internet, MPLS (which is a data networking technology that can deliver the quality of service required to support real-time voice and video), private line (including special access), Ethernet, colocation, hosting (including cloud hosting and managed hosting), video (including our facilities-based video services, which we now offer in 16 markets), VoIP and Verizon Wireless services;
- *Legacy services*, which include primarily local and long-distance voice services, including the sale of UNEs, switched access, and Integrated Services Digital Network ("ISDN") services (which use regular telephone lines to support voice, video and data applications);
- *Data integration*, which includes the sale of telecommunications equipment located on customers' premises and related professional services, such as network management, installation and maintenance of data equipment and building of proprietary fiber-optic broadband networks for our business customers; and
- *Other operating revenues*, which consists primarily of Connect America Fund ("CAF") support payments, Universal Service Fund ("USF") support payments and USF surcharges. We receive federal support payments from both CAF Phase 1 and CAF Phase 2 programs, and support payments from both federal and state USF programs. These support payments are government subsidies designed to reimburse us for various costs related to certain telecommunications services, including the costs of deploying, maintaining and operating voice and high-speed Internet infrastructure in high-cost rural areas where we are not able to recover our costs from our customers. USF surcharges are the amounts we collect based on specific items we list on our customers' invoices to fund the Federal Communications Commission's ("FCC") universal service programs. We also generate other operating revenues from leasing and subleasing of space in our office buildings, warehouses and other properties. Because we centrally manage the activities that generate these other operating revenues, these revenues are not included in our segment revenues.

The following tables summarize our consolidated operating revenues recorded under our four revenue categories:

	Years Ended December 31,		Increase / (Decrease)	% Change
	2015	2014		
	(Dollars in millions)			
Strategic services	\$ 9,343	9,166	177	2 %
Legacy services	6,752	7,172	(420)	(6)%
Data integration	573	690	(117)	(17)%
Other	1,232	1,003	229	23 %
Total operating revenues	\$ 17,900	18,031	(131)	(1)%

	Years Ended December 31,		Increase / (Decrease)	% Change
	2014	2013		
	(Dollars in millions)			
Strategic services	\$ 9,166	8,776	390	4 %
Legacy services	7,172	7,663	(491)	(6)%
Data integration	690	656	34	5 %
Other	1,003	1,000	3	— %
Total operating revenues	<u>\$ 18,031</u>	<u>18,095</u>	<u>(64)</u>	<u>— %</u>

During the first quarter of 2015, we determined that certain products and services associated with our acquisition of SAVVIS, Inc. ("Savvis") are more closely aligned to legacy services than to strategic services. As a result, these operating revenues are now reflected as legacy services. The revision resulted in a reduction of revenue from strategic services of \$34 million and \$47 million, respectively, and a corresponding increase in revenue from legacy services for the years ended December 31, 2014 and 2013, respectively.

Our total operating revenues decreased by \$131 million, or 1%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014 and operating revenues decreased by \$64 million, or less than 1%, for the year ended December 31, 2014 as compared to the year ended December 31, 2013. The decline in revenues for both periods was primarily due to lower legacy services revenues, which decreased by \$420 million, or 6%, and \$491 million, or 6%, for the respective periods. The decline in legacy services revenues reflects the continuing loss of access lines and loss of long-distance revenues primarily due to the displacement of traditional wireline telephone services by other competitive products and services, including Internet and wireless communication services. At December 31, 2015, we had approximately 11.7 million access lines, or approximately 5.2% less than the number of access lines we operated at December 31, 2014. At December 31, 2014, we had approximately 12.4 million access lines, or approximately 4.7% less than the number of access lines we operated at December 31, 2013. We estimate that the rate of our access lines losses will be between 5.0% and 6.0% over the full year of 2016. The growth in our strategic services revenues for both periods was primarily due to increases in high-speed Internet, Ethernet, MPLS, facilities-based video and IT services and from rate increases on various services, which were substantially offset by declines in private line (including special access) services, colocation and hosting services. The level of strategic revenue growth in 2015 was lower than 2014, primarily driven by revenue declines in hosting products as well as a pricing change for a large wholesale customer in exchange for a longer term commitment. Data integration revenues, which are typically more volatile than our other sources of revenues, decreased by \$117 million, or 17%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014. The decline in data integration revenues was primarily due to declines in governmental sales and professional services, which were partially offset by an increase in maintenance services. Data integration revenues increased by \$34 million, or 5%, for the year ended December 31, 2014 as compared to the year ended December 31, 2013 primarily due to several large sales of customer premises equipment to governmental customers and related professional services in 2014. Other operating revenues increased by \$229 million, or 23%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014. The increase in other operating revenues was primarily due to additional revenue recorded under the CAF Phase 2 support program. Other operating revenues increased by \$3 million, or less than 1%, for the year ended December 31, 2014 as compared to the year ended December 31, 2013 primarily due to higher USF surcharge revenues related to increased universal service fund contribution factors. For additional information about the CAF Phase 2 support program, see the discussion below in "Liquidity and Capital Resources—Connect America Fund."

We are aggressively marketing our strategic services in an effort to partially offset the continuing declines in our legacy and private line services.

Further analysis of our segment operating revenues and trends impacting our performance are provided below in "Segment Results."

Operating Expenses

Our current definitions of operating expenses are as follows:

- *Cost of services and products (exclusive of depreciation and amortization)* are expenses incurred in providing products and services to our customers. These expenses include: employee-related expenses directly attributable to operating and maintaining our network (such as salaries, wages, benefits and professional fees); facilities expenses (which include third-party telecommunications expenses we incur for using other carriers' networks to provide services to our customers); rents and utilities expenses; equipment sales expenses (such as data integration and modem expenses); payments to universal service funds (which are federal and state funds that are established to promote the availability of telecommunications services to all consumers at reasonable and affordable rates, among other things, and to which we are often required to contribute); certain litigation expenses associated with our operations; and other expenses directly related to our operations; and
- *Selling, general and administrative expenses* are corporate overhead and other operating expenses. These expenses include: employee-related expenses (such as salaries, wages, internal commissions, benefits and professional fees) directly attributable to selling products or services and employee-related expenses for administrative functions; marketing and advertising; property and other operating taxes and fees; external commissions; litigation expenses associated with general matters; bad debt expense; and other selling, general and administrative expenses.

These expense classifications may not be comparable to those of other companies.

The following tables summarize our operating expenses:

	Years Ended December 31,		Increase / (Decrease)	% Change
	2015	2014		
	(Dollars in millions)			
Cost of services and products (exclusive of depreciation and amortization)	\$ 7,778	7,846	(68)	(1)%
Selling, general and administrative	3,328	3,347	(19)	(1)%
Depreciation and amortization	4,189	4,428	(239)	(5)%
Total operating expenses	\$ 15,295	15,621	(326)	(2)%

	Years Ended December 31,		Increase / (Decrease)	% Change
	2014	2013		
	(Dollars in millions)			
Cost of services and products (exclusive of depreciation and amortization)	\$ 7,846	7,507	339	5%
Selling, general and administrative	3,347	3,502	(155)	(4)%
Depreciation and amortization	4,428	4,541	(113)	(2)%
Impairment of goodwill	—	1,092	(1,092)	nm
Total operating expenses	\$ 15,621	16,642	(1,021)	(6)%

nm - Attributing changes in impairment of goodwill to the 2013 goodwill impairment charge are considered not meaningful.

Cost of Services and Products (exclusive of depreciation and amortization)

Cost of services and products (exclusive of depreciation and amortization) decreased by \$68 million, or 1%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014. Excluding the lower customer premises equipment costs, cost of services and products increased by \$56 million for the year ended December 31, 2015 as compared to the year ended December 31, 2014. The increase in costs of services and products was primarily due to increases in pension and postretirement costs, USF rate increases, higher network expenses and increases in content costs for Prism TV. These increases were partially offset by decreases in salaries and wages from lower headcount, professional fees and contract labor costs. Cost of services and products (exclusive of depreciation and amortization) increased by \$339 million, or 5%, for the year ended December 31, 2014 as compared to the year ended December 31, 2013 primarily due to increases in employee-related costs (which was significantly impacted by the below-noted lump sum pension payments), customer premises equipment installation expenses related to the increase in data integration revenues, facility and network costs, real estate and power costs and content costs for Prism TV.

Selling, General and Administrative

Selling, general and administrative expenses decreased by \$19 million, or less than 1%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014. The decrease in selling, general and administrative expenses was primarily due to lower benefit expenses, insurance costs and asset impairment charges. These decreases were partially offset by increases in bad debt expense, external commissions and regulatory fines of \$15 million associated with a 911 system outage. Selling, general and administrative expenses decreased by \$155 million, or 4%, for the year ended December 31, 2014 as compared to the year ended December 31, 2013 primarily due to a charge in 2013 of \$235 million in connection with a litigation settlement. The decrease was partially offset by increases in employee-related costs (including severance costs), insurance costs and impairment charges related to office buildings sold and currently being held for sale.

Pension Lump Sum Offer

Our pension plan contains provisions that allow us, from time to time, to offer lump sum payment options to certain former employees in settlement of their future retirement benefits. We record an accounting settlement charge associated with these lump sum payments only if, in the aggregate, they exceed the sum of the annual service and interest costs for the plan's net periodic pension benefit cost, which represents the settlement threshold. In September 2015, we offered to make cash settlement payments in December 2015 to a group of former employees provided they accepted the offer by the end of October 2015. During the fourth quarter of 2015, we made cash settlement payments for the lump sum offer of approximately \$356 million. The total amount of the lump sum settlement payments for the year ended December 31, 2015, which included the lump sum offer and lump sum elections from employees who terminated employment during the year, was less than the settlement threshold, therefore settlement accounting was not triggered in 2015. We made cash settlement payments of approximately \$460 million, which triggered settlement accounting and resulted in us recording additional pension expense of \$63 million for the year ended December 31, 2014. Pension expense is allocated to cost of services and products (exclusive of depreciation and amortization) and to selling, general and administrative.

Non-recurring Operating Expenses Related to Acquisitions

We have incurred certain non-recurring operating expenses related to our acquisitions since 2009, including our acquisitions of Qwest in April 2011 and Savvis in July 2011. These expenses are reflected in cost of services and products and selling, general and administrative expenses in our consolidated statements of operations, as summarized below.

	Years Ended December 31,		
	2015	2014	2013
	(Dollars in millions)		
Cost of services and products:			
Integration and other expenses associated with acquisitions	\$ 14	15	15
Total	\$ 14	15	15
Selling, general and administrative:			
Integration and other expenses associated with acquisitions	\$ 18	36	28
Severance expenses, accelerated recognition of share-based awards and retention compensation associated with acquisitions	—	—	10
Total	\$ 18	36	38

Based on current plans and information, we estimate, in relation to our Qwest acquisition, total integration, severance and retention expenses to be between \$600 million to \$625 million (which includes approximately \$594 million of cumulative expenses incurred through December 31, 2015) and our capital expenditures associated with integration activities will approximate \$170 million (which includes approximately \$144 million of cumulative capital expenditures incurred through December 31, 2015). We anticipate that the amount of our integration costs in future years will vary substantially based on integration activities conducted during those periods and could in certain cases be higher than those incurred by us during the year ended December 31, 2015.

Depreciation and Amortization

The following tables provide detail of our depreciation and amortization expense:

	Years Ended December 31,		Increase / (Decrease)	% Change
	2015	2014		
(Dollars in millions)				
Depreciation	\$ 2,836	2,958	(122)	(4)%
Amortization	1,353	1,470	(117)	(8)%
Total depreciation and amortization	\$ 4,189	4,428	(239)	(5)%

	Years Ended December 31,		Increase / (Decrease)	% Change
	2014	2013		
(Dollars in millions)				
Depreciation	\$ 2,958	2,952	6	—%
Amortization	1,470	1,589	(119)	(7)%
Total depreciation and amortization	\$ 4,428	4,541	(113)	(2)%

Annual depreciation expense is impacted by several factors, including changes in our depreciable cost basis, changes in our estimates of the remaining economic life of certain network assets and the addition of new plant. Depreciation expense decreased by \$122 million, or 4%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014. The depreciation expense related to our plant for the year ended December 31, 2015 was lower than the depreciation expense for the year ended December 31, 2014 due to full depreciation and retirement of certain plant placed in service prior to 2015. This decrease was partially offset by increases in depreciation attributable to new plant placed in service during the year ended December 31, 2015 and the impact of changes in the estimated lives of certain property, plant and equipment which resulted in additional depreciation during 2015. The changes in the estimated lives of certain property, plant and equipment resulted in an increase in depreciation expense of approximately \$48 million for 2015, which was more than fully offset by the decrease in depreciation expense noted above. Depreciation expense increased by \$6 million, or less than 1%, for the year ended December 31, 2014 as compared to the year ended December 31, 2013. The 2014 depreciation expense was higher than the respective prior period depreciation expense due to new plant additions in 2014 and changes in the estimated lives of certain property, plant and equipment, which were partially offset by our plant aging and becoming fully depreciated or retired. During January 2014, we implemented changes in estimates that reduced the remaining economic lives of certain switch and circuit network equipment, which resulted in increased 2014 annual depreciation expense. Additionally, we developed a plan to migrate customers from one of our networks to another between late 2014 and late 2015. As a result, we implemented changes in estimates that reduced the remaining economic lives of certain network assets. The impact from the above-noted changes in estimates and network migration resulted in an increase in depreciation expense of approximately \$90 million for the year ended December 31, 2014. For more information about the changes in our estimates of the remaining economic lives of these assets, see Note 1—Basis of Presentation and Summary of Significant Accounting Policies to our consolidated financial statements in Item 8 of Part II of this Annual Report.

Amortization expense decreased by \$117 million, or 8%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014 and amortization expense decreased by \$119 million, or 7%, for the year ended December 31, 2014 as compared to the year ended December 31, 2013. The decrease in amortization expense for both periods was primarily due to software becoming fully amortized faster than new software was acquired or developed.

Goodwill Impairment

During our 2013 annual goodwill impairment assessment, we concluded the carrying value of goodwill assigned to one of our previous reporting units exceeded its estimated implied fair value by \$1.092 billion. The decline in estimated fair value of this previous reporting unit was the result of slower than previously projected revenue and margin growth and greater than anticipated competitive pressures.

For additional information on the risk associated with intangible assets, see "Critical Accounting Policies and Estimates-Goodwill, Customer Relationships and Other Intangibles Assets" below and "Risk Factors" in Item 1A of Part I of this Annual Report.

Further analysis of our operating expenses by segment is provided below in "Segment Results."

Other Consolidated Results

The following tables summarize our total other expense, net and income tax expense:

	Years Ended December 31,		Increase / (Decrease)	% Change
	2015	2014		
	(Dollars in millions)			
Interest expense	\$ (1,312)	(1,311)	1	— %
Other income, net	23	11	12	109 %
Total other expense, net	\$ (1,289)	(1,300)	(11)	(1)%
Income tax expense	\$ 438	338	100	30 %

	Years Ended December 31,		Increase / (Decrease)	% Change
	2014	2013		
	(Dollars in millions)			
Interest expense	\$ (1,311)	(1,298)	13	1 %
Net gain on early retirement of debt	—	10	(10)	(100)%
Other income, net	11	59	(48)	(81)%
Total other expense, net	\$ (1,300)	(1,229)	71	6 %
Income tax expense	\$ 338	463	(125)	(27)%

Interest Expense

Interest expense increased by \$1 million, or less than 1%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014. The increase in interest expense was primarily due to a reduction in the amortization of debt premiums, which was substantially offset by higher capitalized interest, lower bond coupon rates and lower interest under our Credit Facility. Interest expense increased by \$13 million, or 1%, for the year ended December 31, 2014 as compared to the year ended December 31, 2013. The increase in interest expense was primarily due to a reduction in the amortization of debt premiums, which was partially offset by the reversal of certain tax interest reserves and increased capitalized interest.

Net Gain on Early Retirement of Debt

In the fourth quarter of 2013, Qwest redeemed its outstanding debt securities, which resulted in a gain of \$10 million.

Other Income, Net

Other income, net reflects certain items not directly related to our core operations, including our share of income from partnerships we do not control, interest income, gains and losses from non-operating asset dispositions and foreign currency gains and losses. Other income, net increased by \$12 million, or 109%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014. This increase in other income, net was primarily due to the impact of a 2014 impairment charge of \$14 million recorded in connection with the sale of our 700 MHz A-Block Wireless Spectrum licenses, which was partially offset by a net loss on early retirement of debt in 2015. Other income, net decreased by \$48 million, or 81%, for the year ended December 31, 2014 as compared to the year ended December 31, 2013 primarily due to the above-noted impairment charge and a \$32 million gain on the sale of wireless spectrum in 2013.

Income Tax Expense

Income tax expense increased by \$100 million for the year ended December 31, 2015 as compared to the year ended December 31, 2014. Our income tax expense for the year ended December 31, 2014 decreased by \$125 million from the amounts for the comparable prior year. For the years ended December 31, 2015, 2014 and 2013, our effective income tax rate was 33.3%, 30.5% and 206.7%, respectively. The effective tax rate for the year ended December 31, 2015, reflects a tax benefit of approximately \$34 million related to affiliate debt rationalization, research and development tax credits of \$28 million for 2011 through 2015, and a \$16 million tax decrease due to changes in state taxes caused by apportionment changes, state tax rate changes and the changes in the expected utilization of net operating losses ("NOLs"). The effective tax rate for the year ended December 31, 2014, reflects a \$60 million tax benefit associated with a worthless stock deduction for the tax basis in a wholly-owned foreign subsidiary as a result of developments in bankruptcy proceedings involving its sole asset, an indirect investment in KPNQwest, N.V. The subsidiary was acquired as part of the acquisition of Qwest and we assigned it no fair value in the acquisition due to the bankruptcy proceedings, which were then ongoing. The effective tax rate for the year ended December 31, 2014 also reflects a \$13 million tax decrease due to changes in state taxes caused by apportionment changes, state tax rate changes and the changes in the expected utilization of NOLs. The rate also reflects the absence of tax benefits from the impairment and disposition of our 700 MHz A-Block wireless spectrum licenses in 2014, because we are not likely to generate income of a character required to realize a tax benefit from the loss on disposition during the period permitted by law for utilization of that loss. The 2013 effective tax rate reflects the impacts of the \$1.092 billion non-deductible goodwill impairment and of an unfavorable accounting adjustment of \$17 million related to non-deductible life insurance costs. The 2013 tax expense also includes the impacts of a favorable settlement with the Internal Revenue Service ("IRS") of \$33 million and a favorable adjustment of \$22 million related to the reversal of liabilities for uncertain tax positions. See Note 11—Income Taxes to our consolidated financial statements in Item 8 of Part II of this Annual Report and "Critical Accounting Policies and Estimates—Income Taxes" below for additional information.

Segment Results

The results for our business and consumer segments are summarized below for the years ended December 31, 2015, 2014 and 2013:

	Years Ended December 31,		
	2015	2014	2013
	(Dollars in millions)		
Total segment revenues	\$ 16,668	17,028	17,095
Total segment expenses	8,459	8,509	8,167
Total segment income	\$ 8,209	8,519	8,928
Total margin percentage	49%	50%	52%
Business segment:			
Revenues	\$ 10,647	11,034	11,091
Expenses	6,034	6,089	5,808
Income	\$ 4,613	4,945	5,283
Margin percentage	43%	45%	48%
Consumer segment:			
Revenues	\$ 6,021	5,994	6,004
Expenses	2,425	2,420	2,359
Income	\$ 3,596	3,574	3,645
Margin percentage	60%	60%	61%

The following table reconciles our total segment revenues and total segment income presented above to consolidated operating revenues and consolidated operating income reported in our consolidated statements of operations.

	Years Ended December 31,		
	2015	2014	2013
	(Dollars in millions)		
Total segment revenues	\$ 16,668	17,028	17,095
Other operating revenues	1,232	1,003	1,000
Operating revenues reported in our consolidated statements of operations	\$ 17,900	18,031	18,095
Total segment income	\$ 8,209	8,519	8,928
Other operating revenues	1,232	1,003	1,000
Depreciation and amortization	(4,189)	(4,428)	(4,541)
Impairment of goodwill (Note 2)	—	—	(1,092)
Other unassigned operating expenses	(2,647)	(2,684)	(2,842)
Operating income reported in our consolidated statement of operations	\$ 2,605	2,410	1,453

Allocation of Revenues and Expenses

Our segment revenues include all revenues from our strategic services, legacy services and data integration as described in more detail above. Segment revenues are based upon each customer's classification to an individual segment. We report our segment revenues based upon all services provided to that segment's customers. For information on how we allocate expenses to our segments, as well as other additional information about our segments, see Note 12—Segment Information to our consolidated financial statements in Item 8 of Part II of this Annual Report.

Business Segment

The operations of our business segment have been impacted by several significant trends, including those described below:

- Strategic services.* Our mix of total business segment revenues continues to migrate from legacy services to strategic services as our small, medium and enterprise business, wholesale and governmental customers increasingly demand integrated data, Internet, hosting and voice services. During 2015, our strategic revenues were negatively impacted by several factors, including competitive pressures, customer losses, migration from traditional hosting services to lower priced cloud-based services and transitioning to our new management structure negatively impacted the growth of our strategic revenues. Demand for our private line services (including special access) continues to decline due to our customers' optimization of their networks, industry consolidation and technological migration to higher-speed services. Additionally, we face competition in Ethernet based services in the wholesale market from cable companies and fiber based CLEC providers. We anticipate continued pricing pressure for our colocation services as vendors continue to expand their enterprise colocation operations. In recent years, our competitors, as well as several large, diversified technology companies, have made substantial investments in cloud computing, which has intensified competitive pressures. This expansion in competitive cloud computing offerings has led to increased pricing pressure and competition for enterprise customers, and we expect these trends to continue. The demand for new technology has also increased the number of competitors offering strategic services similar to ours. Price compression from each of these above-mentioned competitive pressures has negatively impacted the operating margins of our strategic services and we expect this trend to continue. Operating costs also impact the operating margins of our strategic services, but to a lesser extent than price compression and customer disconnects. These operating costs include sales commissions, modem costs, software costs on selected services, installation costs and third-party facility costs. We believe increases in operating costs have generally had a greater impact on the operating margins of our strategic services as compared to our legacy services, principally because our strategic services rely more heavily upon the above-listed costs;

- *Legacy services.* We continue to experience customers migrating away from our higher margin legacy services into lower margin strategic services. Our legacy services revenues have been, and we expect they will continue to be, adversely affected by access line losses and price compression. In particular, our access, local services and long-distance revenues have been, and we expect will continue to be, adversely affected by customer migration to more technologically advanced services, declining demand for traditional voice services, industry consolidation and price compression caused by regulation and rate reductions. For example, many of our business segment customers are substituting cable, wireless and VoIP services for traditional voice telecommunications services, resulting in continued access revenue loss. Beginning in 2016, we expect that a recent FCC order will also reduce our revenue that we collect for local voice and long-distance services provided to correctional facilities. Although our legacy services generally face fewer direct competitors than certain of our strategic services, customer migration and, to a lesser degree, price compression from competitive pressures have negatively impacted our legacy revenues and the operating margins of our legacy services. We expect this trend to continue. Operating costs, such as installation costs and third-party facility costs, have also negatively impacted the operating margins of our legacy services, but to a lesser extent than customer migration and price compression. Operating costs also tend to impact our strategic services to a greater extent than legacy services as noted above;
- *Data integration.* We expect both data integration revenue and the related costs will fluctuate from year to year as this offering tends to be more sensitive than others to changes in the economy and in spending trends of our federal, state and local governmental customers, many of whom have recently experienced substantial budget cuts with the possibility of additional future budget cuts. Our data integration operating margins are typically smaller than most of our other offerings; and
- *Operating efficiencies.* We continue to evaluate our segment operating structure and focus. This involves balancing our workforce in response to our workload requirements, productivity improvements and changes in industry, competitive, technological and regulatory conditions, while achieving operational efficiencies and improving our processes through automation. However, our ongoing efforts to increase revenue will continue to require that we incur higher costs in some areas. We also expect our business segment to benefit indirectly from enhanced efficiencies in our company-wide network operations.

The following tables summarize the results of operations from our business segment:

	Business Segment			
	Years Ended December 31,		Increase / (Decrease)	% Change
	2015	2014		
	(Dollars in millions)			
Segment revenues:				
Strategic services				
High-bandwidth data services (1)	\$ 2,816	2,579	237	9%
Low-bandwidth data services (2)	2,052	2,345	(293)	(12)%
Hosting services (3)	1,281	1,316	(35)	(3)%
Other strategic services (4)	162	76	86	113%
Total strategic services revenues	6,311	6,316	(5)	—%
Legacy services				
Voice services (5)	2,590	2,780	(190)	(7)%
Other legacy services (6)	1,175	1,252	(77)	(6)%
Total legacy services revenues	3,765	4,032	(267)	(7)%
Data integration	571	686	(115)	(17)%
Total revenues	10,647	11,034	(387)	(4)%
Segment expenses:				
Total expenses	6,034	6,089	(55)	(1)%
Segment income	\$ 4,613	4,945	(332)	(7)%
Segment margin percentage	43%	45%		

	Business Segment			
	Years Ended December 31,		Increase / (Decrease)	% Change
	2014	2013		
(Dollars in millions)				
Segment revenues:				
Strategic services				
High-bandwidth data services (1)	\$ 2,579	2,230	349	16 %
Low-bandwidth data services (2)	2,345	2,577	(232)	(9)%
Hosting services (3)	1,316	1,259	57	5 %
Other strategic services (4)	76	60	16	27 %
Total strategic services revenues	6,316	6,126	190	3 %
Legacy services				
Voice services (5)	2,780	2,916	(136)	(5)%
Other legacy services (6)	1,252	1,398	(146)	(10)%
Total legacy services revenues	4,032	4,314	(282)	(7)%
Data integration	686	651	35	5 %
Total revenues	11,034	11,091	(57)	(1)%
Segment expenses:				
Total expenses	6,089	5,808	281	5 %
Segment income	\$ 4,945	5,283	(338)	(6)%
Segment margin percentage	45%	48%		

(1) Includes MPLS and Ethernet revenue

(2) Includes private line and high-speed Internet revenue

(3) Includes colocation, hosting (including cloud hosting and managed hosting) and hosting area network revenue

(4) Includes primarily VoIP, video and IT services revenue

(5) Includes local and long-distance voice revenue

(6) Includes UNEs, public access and other ancillary revenue

Segment Revenues

Business segment revenues decreased by \$387 million, or 4%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014. The decrease in business segment revenues was primarily due to declines in legacy services revenues, private line (including special access) revenues in our strategic services and data integration revenues. The decline in legacy services revenues was attributable to a reduction in local service access lines and lower volumes of long-distance, access and traditional WAN services for the reasons noted above. The decline in our strategic services revenues was primarily due to a reduction in hosting services and private line (including special access) volumes, as well as a pricing change on private line services for a large wholesale customer in exchange for a longer term commitment. These declines were partially offset by MPLS unit growth and higher Ethernet volumes. The decrease in data integration revenues was primarily due to lower sales of customer premises equipment to governmental and business customers during the period. Business segment revenues decreased by \$57 million, or 1%, for the year ended December 31, 2014 as compared to the year ended December 31, 2013. The decrease in business segment revenues was primarily due to the decline in legacy services revenues, which were partially offset by the growth in our strategic services and data integration revenues. The decline in legacy services revenues was attributable to lower volumes of local access and traditional WAN services. The growth in our strategic services revenues was primarily due to MPLS unit growth and higher Ethernet volume, which were substantially offset by a decline in private line (including special access) services. The increase in data integration revenues was primarily due to higher sales of customer premises equipment to governmental customers during the period.

Segment Expenses

Business segment expenses decreased by \$55 million, or 1%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014. The decrease was due primarily to reductions in customer premises equipment costs resulting from the lower sales noted above in segment revenues. Excluding the lower customer premises equipment costs, business expenses increased by \$59 million for the year ended December 31, 2015 as compared to the year ended December 31, 2014. The increase is primarily due to increases in salaries and wages, benefits expense, external commissions, network expense and facility costs, which were partially offset by decreases in professional fees, materials and supplies and fleet expenses. Business segment expenses increased by \$281 million, or 5%, for the year ended December 31, 2014 as compared to the year ended December 31, 2013. The increase was primarily due to increases in employee-related costs attributable to higher wages, benefits and internal commissions, customer premises equipment costs resulting from higher sales noted above, facility costs driven by MPLS unit growth and real estate and power costs.

Segment Income

Business segment income decreased by \$332 million, or 7%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014. The decrease in business segment income was due to the loss of customers and lower service volumes in our legacy services and to the increase in operating expenses, excluding the impact of the reduction in customer premises equipment costs. Business segment income decreased by \$338 million, or 6%, for the year ended December 31, 2014 as compared to the year ended December 31, 2013. The decrease was primarily due to customers migrating from legacy services to lower margin strategic services.

Consumer Segment

The operations of our consumer segment have been impacted by several significant trends, including those described below:

- *Strategic services.* In order to remain competitive and attract additional residential high-speed Internet subscribers, we believe it is important to continually increase our broadband network's scope and connection speeds. As a result, we continue to invest in our broadband network, which allows for the delivery of higher-speed broadband services to a greater number of customers. We compete in a maturing broadband market in which most consumers already have broadband services and growth rates in new subscribers have slowed. Moreover, as described further in Item 1A of Part II of this Annual Report, certain of our competitors continue to provide high-speed Internet services at higher average transmission speeds than ours or through advanced wireless data service offerings, both of which we believe have impacted the competitiveness of certain of our high-speed Internet offerings. We also continue to expand our other strategic product offerings, including facilities-based video services. The expansion of our facilities-based video service infrastructure requires us to incur substantial start-up expenses in advance of marketing and selling the service. Also, our associated content costs continue to increase and the video business has become more competitive as more options become available to customers to access video services through new technologies. The demand for new technology has increased the number of competitors offering strategic services similar to ours. Price compression and new technology from our competitors have negatively impacted the operating margins of our strategic services and we expect this trend to continue. Operating costs also impact the operating margins of our strategic services, but to a lesser extent than price compression and customer disconnects caused by competition. These operating costs include sales commissions, modem costs, Prism TV content costs, software costs on selected services and installation costs. We believe increases in operating costs have generally had a greater impact on our operating margins of our strategic services as compared to our legacy services, principally because our strategic services rely more heavily upon the above-listed costs;
- *Legacy services.* Our voice revenues have been, and we expect they will continue to be, adversely affected by access line losses. Intense competition and product substitution continue to drive our access line losses. For example, many consumers are substituting cable and wireless voice services and electronic mail, texting and social networking non-voice services for traditional voice telecommunications services. We expect that these factors will continue to negatively impact our business. As a result of the expected loss of higher margin services associated with access lines, we continue to offer our customers service bundling and other product promotions to help mitigate this trend, as described below. Customer migration and price compression from competitive pressures have not only negatively impacted our legacy revenues, but they have also negatively impacted the operating margins of our legacy services and we expect this trend to continue. Operating costs, such as installation costs and third-party facility costs, have also negatively impacted the operating margins of our legacy services, but to a lesser extent than customer migration and price compression. The operating costs also tend to impact our strategic services to a greater extent than legacy services as noted above;

- *Service bundling and product promotions.* We offer our customers the ability to bundle multiple products and services. These customers can bundle local services with other services such as high-speed Internet, video, long-distance and wireless. While we believe our bundled service offerings can help retain customers, they also tend to lower our profit margins in the consumer segment; and
- *Operating efficiencies.* We continue to evaluate our segment operating structure and focus. This involves balancing our workforce in response to our workload requirements, productivity improvements and changes in industry, competitive, technological and regulatory conditions. We also expect our consumer segment to benefit indirectly from enhanced efficiencies in our company-wide network operations.

The following tables summarize the results of operations from our consumer segment:

	Consumer Segment			
	Years Ended December 31,		Increase / (Decrease)	% Change
	2015	2014		
	(Dollars in millions)			
Segment revenues:				
Strategic services				
High-speed Internet services (1)	\$ 2,611	2,469	142	6 %
Other strategic services (2)	421	381	40	10 %
Total strategic services revenues	3,032	2,850	182	6 %
Legacy services				
Voice services (3)	2,676	2,864	(188)	(7)%
Other legacy services (4)	311	276	35	13 %
Total legacy services revenues	2,987	3,140	(153)	(5)%
Data integration	2	4	(2)	(50)%
Total revenues	6,021	5,994	27	— %
Segment expenses:				
Total expenses	2,425	2,420	5	— %
Segment income	\$ 3,596	3,574	22	1 %
Segment income margin percentage	60%	60%		

Consumer Segment			
Years Ended December 31,		Increase / (Decrease)	% Change
2014	2013		
(Dollars in millions)			

Segment revenues:				
Strategic services				
High-speed Internet services (1)	\$ 2,469	2,358	111	5 %
Other strategic services (2)	381	292	89	30 %
Total strategic services revenues	2,850	2,650	200	8 %
Legacy services				
Voice services (3)	2,864	3,101	(237)	(8)%
Other legacy services (4)	276	248	28	11 %
Total legacy services revenues	3,140	3,349	(209)	(6)%
Data integration	4	5	(1)	(20)%
Total revenues	5,994	6,004	(10)	— %
Segment expenses:				
Total expenses	2,420	2,359	61	3 %
Segment income	\$ 3,574	3,645	(71)	(2)%
Segment income margin percentage	60%	61%		

- (1) Includes high-speed Internet and related services revenue
(2) Includes video and Verizon wireless revenue
(3) Includes local and long-distance voice revenue
(4) Includes switched access and other ancillary revenue

Segment Revenues

Consumer segment revenues increased by \$27 million, or less than 1%, for year ended December 31, 2015 as compared to the year ended December 31, 2014. The increase in strategic services revenues was primarily due to increases in the number of Prism TV customers, as well as from 2015 price increases on various services. The decline in legacy services revenues was primarily due to declines in local and long-distance services volumes associated with access line losses resulting from the competitive and technological changes as further described above. Consumer segment revenues decreased by \$10 million, or less than 1%, for the year ended December 31, 2014 as compared to the year ended December 31, 2013. The decline in legacy services revenues was due to the same reasons noted above. The increase in strategic services revenues was primarily due to growth in the number of high-speed Internet subscribers and increases in the number of Prism TV customers, as well as from 2014 price increases on various services. The increase in consumer segment revenues during 2015 as compared to the decline in revenues for 2014 was primarily attributable to the above-noted price increases.

Segment Expenses

Consumer segment expenses increased by \$5 million, or less than 1%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014. This increase was primarily due to increases in Prism TV content costs (resulting from higher volume and rates) and bad debt expense, which were partially offset by reductions in employee-related costs, marketing and advertising expenses and fleet expenses. Consumer segment expenses increased by \$61 million, or 3%, for the year ended December 31, 2014 as compared to the year ended December 31, 2013. This increase was primarily due to increases in marketing and advertising expenses, Prism TV content costs resulting from subscriber growth in our Prism TV markets and the number of modems shipped for Prism TV customers, which were partially offset by reductions in employee-related costs and facility costs.

Segment Income

Consumer segment income increased by \$22 million, or 1%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014. This increase was primarily due to price increases on various services and reduction of costs. Consumer segment income decreased by \$71 million, or 2%, for the year ended December 31, 2014 as compared to the year ended December 31, 2013. This decrease was primarily due to customers migrating from legacy services to lower margin strategic services, and the increase in Prism TV content costs.

Critical Accounting Policies and Estimates

Our consolidated financial statements are prepared in accordance with accounting principles that are generally accepted in the United States. The preparation of these consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of our assets, liabilities, revenues and expenses. We have identified certain policies and estimates as critical to our business operations and the understanding of our past or present results of operations related to (i) goodwill, customer relationships and other intangible assets; (ii) property, plant and equipment; (iii) pension and post-retirement benefits; (iv) loss contingencies and litigation reserves; (v) Connect America Fund support payments; and (vi) income taxes. These policies and estimates are considered critical because they had a material impact, or they have the potential to have a material impact, on our consolidated financial statements and because they require us to make significant judgments, assumptions or estimates. We believe that the estimates, judgments and assumptions made when accounting for the items described below were reasonable, based on information available at the time they were made. However, there can be no assurance that actual results will not differ from those estimates.

Goodwill, Customer Relationships and Other Intangible Assets

We amortize customer relationships primarily over an estimated life of 10 to 15 years, using either the sum-of-the-years-digits or the straight-line methods, depending on the type of customer. We amortize capitalized software using the straight-line method over estimated lives ranging up to 7 years, except for approximately \$237 million of our capitalized software costs, which represents costs to develop an integrated billing and customer care system which is amortized using the straight-line method over a 20 year period. We annually review the estimated lives and methods used to amortize our other intangible assets, primarily capitalized software. The amount of future amortization expense may differ materially from current amounts, depending on the results of our annual reviews.

Our goodwill was derived from numerous acquisitions where the purchase price exceeded the fair value of the net assets acquired.

We are required to reassign goodwill to reporting units each time we reorganize our internal reporting structure which causes a change in the composition of our reporting units. We assign goodwill to the reporting units using a relative fair value approach. We utilize the trailing twelve months earnings before interest, taxes, depreciation and amortization as our allocation methodology as we believe that it represents a reasonable proxy for the fair value of the operations being reorganized. The use of other fair value assignment methods could result in materially different results. For additional information on our segments, see Note 12—Segment Information to our consolidated financial statements in Item 8 of Part II of this Annual Report.

We are required to assess goodwill for impairment at least annually, or more frequently, if an event occurs or circumstances change that would indicate an impairment may have occurred. We are required to write-down the value of goodwill in periods in which the recorded amount of goodwill exceeds the implied fair value of goodwill. Our reporting units are not discrete legal entities with discrete financial statements. Our assets and liabilities are employed in and relate to the operations of our reporting units. Therefore, the equity carrying value and future cash flows must be estimated each time a goodwill impairment analysis is performed on a reporting unit. As a result, our assets, liabilities and cash flows are assigned to reporting units using reasonable and consistent allocation methodologies. Certain estimates, judgments and assumptions are required to perform these assignments. We believe these estimates, judgments and assumptions to be reasonable, but changes in many of these can significantly affect each reporting unit's equity carrying value and future cash flows utilized for our goodwill impairment test. Our annual assessment date for testing goodwill impairment is October 31.

As of October 31, 2015, we assessed goodwill for impairment for our three reporting units, which we determined to be business (excluding wholesale), consumer and wholesale and determined that the estimated fair value of our wholesale reporting unit was substantially in excess of our carrying value of equity and the estimated fair value of our business and consumer reporting units exceeded our carrying value of equity by 23% and 8%, respectively.

For additional information on our goodwill balances by segment, see Note 2—Goodwill, Customer Relationships and Other Intangible Assets in Item 8 of Part II of this Annual Report.

We may be required to assess our goodwill for impairment before our next required assessment date of October 31, 2016 under certain circumstances, including any failure to meet our forecasted future operating results or any significant increases in our weighted average cost of capital. In addition, we cannot assure that adverse conditions will not trigger future goodwill impairment assessments or impairment charges. A number of factors, many of which we cannot control, could affect our financial condition, operating results and business prospects and could cause our actual results to differ from the estimates and assumptions we employed in our goodwill impairment assessment. These factors include, but are not limited to, (i) further weakening in the overall economy; (ii) a significant decline in our stock price and resulting market capitalization as a result of an adverse change to our overall business operations; (iii) changes in the discount rate we use in our testing; (iv) successful efforts by our competitors to gain market share in our markets; (v) adverse changes as a result of regulatory or legislative actions; (vi) a significant adverse change in our legal affairs or in the overall business climate; and (vii) recognition of a goodwill impairment loss in the financial statements of one or more of our subsidiaries that are a component of our segments. We will continue to monitor certain events that impact our operations to determine if an interim assessment of goodwill impairment should be performed prior to the next required assessment date of October 31, 2016.

Property, Plant and Equipment

Property, plant and equipment acquired in connection with our acquisitions was recorded based on its estimated fair value as of its acquisition date, plus the estimated value of any associated legally or contractually required asset retirement obligation. Purchased and constructed property, plant and equipment is recorded at cost, plus the estimated value of any associated legally or contractually required asset retirement obligation. Renewals and betterments of plant and equipment are capitalized while repairs, as well as renewals of minor items, are charged to operating expense. Depreciation of property, plant and equipment is provided on the straight-line method using class or overall group rates. The group method provides for the recognition of the remaining net investment, less anticipated net salvage value, over the remaining useful life of the assets. This method requires the periodic revision of depreciation rates.

Normal retirements of property, plant and equipment are charged against accumulated depreciation, with no gain or loss recognized. We depreciate such property on the straight-line method over estimated service lives ranging from 3 to 45 years.

We perform annual internal reviews to evaluate the reasonableness of the depreciable lives for our property, plant and equipment. Our reviews utilize models that take into account actual usage, physical wear and tear, replacement history, assumptions about technology evolution and, in certain instances, actuarially determined probabilities to estimate the remaining life of our asset base.

Due to rapid changes in technology and the competitive environment, determining the estimated economic life of telecommunications plant, equipment and software requires a significant amount of judgment. We regularly review data on utilization of equipment, asset retirements and salvage values to determine adjustments to our depreciation rates. The effect of a hypothetical one year increase or decrease in the estimated remaining useful lives of our property, plant and equipment would have decreased depreciation expense by approximately \$410 million annually or increased depreciation expense by approximately \$580 million annually, respectively.

Pension and Post-retirement Benefits

We sponsor a noncontributory qualified defined benefit pension plan (referred to as our pension plan) for a substantial portion of our employees. In addition to this tax qualified pension plan, we also maintain several non-qualified pension plans for certain eligible highly compensated employees. We also maintain post-retirement benefit plans that provide health care and life insurance benefits for certain eligible retirees.

In 2015, approximately 45% of the qualified pension plan's January 1, 2015 net actuarial loss balance of \$2.740 billion was subject to amortization as a component of net periodic expense over the average remaining service period of participating employees expected to receive benefits, which ranges from 8 to 9 years for the plan. The other 55% of the qualified pension plan's beginning net actuarial loss balance was treated as indefinitely deferred during 2015. The entire beginning net actuarial loss of \$277 million for the post-retirement benefit plans was treated as indefinitely deferred during 2015.

In 2014, approximately 16% of the qualified pension plans' January 1, 2014 net actuarial loss balance of \$1.048 billion was subject to amortization as a component of net periodic expense over the average remaining service period of participating employees expected to receive benefits, which ranges from 8 to 9 years for the plans. The other 84% of the pension plan's beginning net actuarial loss balance was treated as indefinitely deferred during 2014. The entire beginning net actuarial loss of \$37 million for the post-retirement benefit plans was treated as indefinitely deferred during 2014.

In 2013, approximately 33% of the qualified pension plans' January 1, 2013 net actuarial loss balance of \$2.221 billion was subject to amortization as a component of net periodic expense over the average remaining service period of participating employees expected to receive benefits, which ranges from 8 to 12 years for the plans. The other 67% of the pension plans' beginning net actuarial loss balance was treated as indefinitely deferred during 2013. The entire beginning net actuarial loss of \$446 million for the post-retirement benefit plans was treated as indefinitely deferred during 2013.

In computing our pension and post-retirement health care and life insurance benefit obligations, our most significant assumptions are the discount rate and mortality rates. In computing our periodic pension and post-retirement benefit expense, our most significant assumptions are the discount rate and the expected rate of return on plan assets.

The discount rate for each plan is the rate at which we believe we could effectively settle the plan's benefit obligations as of the end of the year. We selected each plan's discount rate based on a cash flow matching analysis using hypothetical yield curves from U.S. corporate bonds rated high quality and projections of the future benefit payments that constitute the projected benefit obligation for the plans. This process establishes the uniform discount rate that produces the same present value of the estimated future benefit payments as is generated by discounting each year's benefit payments by a spot rate applicable to that year. The spot rates used in this process are derived from a yield curve created from yields on the 60th to 90th percentile of U.S. high quality bonds.

In 2016, we plan to change the method we use to estimate the service and interest components of net periodic benefit cost for pension and other postretirement benefits. This change will result in a decrease in the service and interest components in 2016. Beginning in 2016, we plan to utilize a full yield curve approach in the estimation of these components by applying the specific spot rates along the yield curve used in the determination of the benefit obligation to the relevant projected cash flows, as opposed to the single weighted-average discount rate derived from the yield curve that we have used in the past. We believe this change provides a more precise measurement of service and interest costs by improving the correlation between projected benefit cash flows to the corresponding spot yield curve rates. This change will not affect the measurement of our total benefit obligations but is currently expected to lower our annual net periodic benefit cost by approximately \$150 million in 2016. If implemented as expected, this change will be accounted for as a change in accounting estimate and accordingly will be accounted for prospectively.

Mortality rates help predict the expected life of plan participants and are based on historical demographic studies by the Society of Actuaries. In 2015, we adopted the revised mortality table and projection scale released by the Society of Actuaries ("SOA"), which decreased the projected benefit obligation of our benefit plans by \$379 million. In 2014, the SOA published new mortality rate tables reflecting increases in the projected life expectancies of North Americans since its publications of earlier tables. We adopted the new tables immediately. This resulted in an increase to the projected benefit obligation of approximately \$1.3 billion for our pension and post-retirement benefit plans.

The expected rate of return on plan assets is the long-term rate of return we expect to earn on the plans' assets in the future, net of administrative expenses paid from plan assets. The rate of return is determined by the strategic allocation of plan assets and the long-term risk and return forecast for each asset class. The forecasts for each asset class are generated primarily from an analysis of the long-term expectations of various third party investment management organizations to which we then add a factor of 50 basis points to reflect the benefit we expect to result from our active management of the assets. The expected rate of return on plan assets is reviewed annually and revised, as necessary, to reflect changes in the financial markets and our investment strategy.

To compute the expected return on pension and post-retirement benefit plan assets, we apply an expected rate of return to the fair value of the pension plan assets and to the fair value of the post-retirement benefit plan assets adjusted for contribution timing and for projected benefit payments to be made from the plan assets. Annual market volatility for these assets (higher or lower than expected return) is reflected in the net actuarial losses.

Changes in any of the above factors could significantly impact operating expenses in the consolidated statements of operations and other comprehensive income (loss) in the consolidated statements of comprehensive income (loss) as well as the value of the liability and accumulated other comprehensive loss of stockholders' equity on our consolidated balance sheets. The expected return on plan assets is reflected as a reduction to our pension and post-retirement benefit expense. If our assumed expected rates of return for 2015 were 100 basis points lower, our qualified pension and post-retirement benefit expenses for 2015 would have increased by \$121 million. If our assumed discount rates for 2015 were 100 basis points lower, our qualified pension and post-retirement benefit expenses for 2015 would have increased by \$119 million and our projected benefit obligation for 2015 would have increased by approximately \$1.821 billion.

Loss Contingencies and Litigation Reserves

We are involved in several material legal proceedings, as described in more detail in Note 14—Commitments and Contingencies to our consolidated financial statements in Item 8 of Part II of this Annual Report. We assess potential losses in relation to these and other pending or threatened tax and legal matters. For matters not related to income taxes, if a loss is considered probable and the amount can be reasonably estimated, we recognize an expense for the estimated loss. To the extent these estimates are more or less than the actual liability resulting from the resolution of these matters, our earnings will be increased or decreased accordingly. If the differences are material, our consolidated financial statements could be materially impacted.

For matters related to income taxes, if we determine in our judgment that the impact of an uncertain tax position is more likely than not to be sustained upon audit by the relevant taxing authority, then we recognize in our financial statements a benefit for the largest amount that is more likely than not to be sustained. No portion of an uncertain tax position will be recognized if we determine in our judgment that the position has less than a 50% likelihood of being sustained. Though the validity of any tax position is a matter of tax law, the body of statutory, regulatory and interpretive guidance on the application of the law is complex and often ambiguous. Because of this, whether a tax position will ultimately be sustained may be uncertain.

Connect America Fund Support Payments

In 2015, we accepted funding from the Connect America Fund ("CAF") from the Federal Communications Commission ("FCC") of approximately \$500 million per year for six years to fund the deployment of voice and high-speed Internet infrastructure for approximately 1.2 million rural households and businesses (living units) in 33 states under the CAF Phase 2 high-cost support program. This program provides a monthly high-cost subsidy similar to the support provided by the FCC's previous cost reimbursement programs. Although we believe that there is no specific authoritative U.S. GAAP guidance for the treatment of government assistance, we identified three acceptable methods to account for these funds; 1) recognize revenue when entitled to receive cash, 2) defer cash received until the living units are enabled to receive the service at the FCC specified level, or 3) record the cash received as contra capital. After assessing these alternatives, we have determined that we will recognize CAF Phase 2 funds each month as revenue when we are entitled to receive the cash less a deferred amount. The amount of revenue deferred in 2015 was approximately \$12 million. We believe our recognition methodology is consistent with other companies in our industry in the United States, but may not necessarily be consistent with companies outside the United States that receive similar government funding, and we cannot provide assurances to this effect.

In computing the amount of revenue to recognize, we assume that we will not be able to economically enable 100% of the required living units in every state with voice and high-speed Internet capabilities under the CAF Phase 2 program. We defer recognition of the funds related to potential living units that we estimate we will not enable until we can precisely determine that we can fully meet the enablement targets. As disclosed elsewhere herein, in some limited instances, a portion of the funds must be returned. The effect of a hypothetical 1% change in our estimate of living units we will not enable with voice and high-speed Internet capabilities under the CAF Phase 2 program would have increased or decreased our revenue up to \$3 million or \$9 million, respectively, in 2015.

For additional information about the CAF Phase 2 support program, see the discussion below in "Liquidity and Capital Resources—Connect America Fund."

Income Taxes

Our provision for income taxes includes amounts for tax consequences deferred to future periods. We record deferred income tax assets and liabilities reflecting future tax consequences attributable to tax credit carryforwards, differences between the financial statement carrying value of assets and liabilities and the tax bases of those assets and liabilities and tax net operating losses, or NOLs. Deferred taxes are computed using enacted tax rates expected to apply in the year in which the differences are expected to affect taxable income. The effect on deferred income tax assets and liabilities of a change in tax rate is recognized in earnings in the period that includes the enactment date.

The measurement of deferred taxes often involves the exercise of considerable judgment related to the realization of tax basis. Our deferred tax assets and liabilities reflect our assessment that tax positions taken in filed tax returns and the resulting tax basis, are more likely than not to be sustained if they are audited by taxing authorities. Assessing tax rates that we expect to apply and determining the years when the temporary differences are expected to affect taxable income requires judgment about the future apportionment of our income among the states in which we operate. Any changes in our practices or judgments involved in the measurement of deferred tax assets and liabilities could materially impact our financial condition or results of operations.

In connection with recording deferred income tax assets and liabilities, we establish valuation allowances when necessary to reduce deferred income tax assets to amounts that we believe are more likely than not to be realized. We evaluate our deferred tax assets quarterly to determine whether adjustments to our valuation allowance are appropriate in light of changes in facts or circumstances, such as changes in tax law, interactions with taxing authorities and developments in case law. In making this evaluation, we rely on our recent history of pre-tax earnings. We also rely on our forecasts of future earnings and the nature and timing of future deductions and benefits represented by the deferred tax assets, all which involve the exercise of significant judgment. At December 31, 2015, we established a valuation allowance of \$380 million, primarily related to state NOLs, as it is more likely than not that these NOLs will expire unused. If forecasts of future earnings and the nature and estimated timing of future deductions and benefits change in the future, we may determine that a valuation allowance for certain deferred tax assets is appropriate, which could materially impact our financial condition or results of operations. See Note 11—Income Taxes to our consolidated financial statements in Item 8 of Part II of this Annual Report for additional information.

Liquidity and Capital Resources

Overview

At December 31, 2015, we held cash and cash equivalents of \$126 million and we had approximately \$1.7 billion of borrowing capacity available under our \$2.0 billion amended and restated revolving credit facility (referred to as our "Credit Facility", which is described further below). At December 31, 2015, cash and cash equivalents of \$62 million were held in foreign bank accounts for the purpose of funding our foreign operations. Due to various factors, our access to foreign cash is generally much more restricted than our access to domestic cash.

In connection with our budgeting process in early 2016, our executive officers and our Board of Directors reviewed our sources and potential uses of cash over the next several years, including among other things the previously-disclosed effect of the anticipated depletion of our federal net operating loss carryforwards during 2016. Generally speaking, our principal funding source is cash from operating activities and our principal cash requirements include operating expenses, capital expenditures, income taxes, debt repayments, dividends, periodic stock repurchases and periodic pension contributions.

Based on our current capital allocation objectives, during 2016 we anticipate expending approximately \$3.0 billion of cash for capital investment in property, plant and equipment and up to \$1.2 billion for dividends on our common stock, based on the current annual common stock dividend rate of \$2.16 and the current number of outstanding common shares. During 2016, we have debt maturities of approximately \$1.4 billion, scheduled debt principal payments of approximately \$22 million and capital lease and other fixed payments of approximately \$62 million.

We will continue to monitor our future sources and uses of cash, and anticipate that we will make adjustments to our capital allocation strategies when, as and if determined by our Board of Directors. We typically use our revolving credit facility as a source of liquidity for operating activities and our other cash requirements.

Connect America Fund

In 2015, we accepted CAF funding from the FCC of approximately \$500 million per year for six years to fund the deployment of voice and high-speed Internet infrastructure for approximately 1.2 million rural households and businesses in 33 states under the CAF Phase 2 support program. The funding from the CAF Phase 2 support program is expected to substantially supplant the funding we previously received from the interstate USF program that we previously utilized to support voice services in high-cost rural markets in these 33 states. In September of 2015, we began receiving these payments from the FCC under the new CAF Phase 2 support program, which included (i) monthly support payments at a higher rate than under the interstate USF support program and (ii) a one-time cumulative catch-up payment representing the incrementally higher funding under the CAF Phase 2 support program over the interstate USF Support program for the first seven months of 2015. During 2015, we received \$209 million more cash than we would have otherwise received during the same period under the interstate USF support program.

We declined annual funding of approximately \$10 million in four states, and we expect the funding from the CAF Phase 2 support program for these four states will be auctioned by the FCC, perhaps in the latter part of 2016. In these four states, the interstate USF support we have historically received is expected to continue until the CAF Phase 2 auctions are completed.

As a result of accepting CAF Phase 2 support payments for 33 states, we will be obligated to make substantial capital expenditures to build infrastructure. See "Capital Expenditures" below.

For additional information on the FCC's CAF order and the USF program, see "Business—Regulation" in Item 1 of Part I of this Annual Report. See "Risk Factors—Risks Affecting our Liquidity and Capital Resources" in Item 1A of Part I of this Annual Report.

In 2013, under the second round of the first phase of the CAF program, we received \$40 million in funding for deployment of broadband services in rural areas. The CAF Phase 2 support program overlaps certain eligible areas of the second round of CAF 1 funding, and we are continuing to evaluate how much of the \$40 million in funding we will utilize or return to the FCC. As of the date of this Annual Report, we are past one of the benchmark deadlines for completing a portion of the broadband deployment. Due to the delays we encountered in evaluating the eligible areas, we have requested relief and an extension of the deadline with the FCC. If the FCC does not grant us relief, we will be requested to refund a substantial portion of the \$40 million in funding we received. This \$40 million of CAF 1 Round 2 funding is included in other noncurrent liabilities on our consolidated balance sheet as of December 31, 2015.

Capital Expenditures

We incur capital expenditures on an ongoing basis in order to enhance and modernize our networks, compete effectively in our markets and expand our service offerings. We evaluate capital expenditure projects based on a variety of factors, including expected strategic impacts (such as forecasted impact on revenue growth, productivity, expenses, service levels and customer retention) and our expected return on investment. The amount of capital investment is influenced by, among other things, demand for our services and products, cash flow generated by operating activities, cash required for other purposes and regulatory considerations (such as the CAF Phase 2 infrastructure buildout requirements). Based on current circumstances, we estimate that our total capital expenditures for 2016 will be approximately \$3.0 billion, inclusive of CAF Phase 2 related capital expenditures.

Our capital expenditures continue to be focused on our strategic services. For more information on capital spending, see Items 1 and 1A of Part I of this Annual Report.

Debt and Other Financing Arrangements

Subject to market conditions, we expect to continue to issue debt securities from time to time in the future to refinance a substantial portion of our maturing debt, including issuing Qwest Corporation debt securities to refinance its maturing debt to the extent feasible. The availability, interest rate and other terms of any new borrowings will depend on the ratings assigned to us and Qwest Corporation by credit rating agencies, among other factors. For further information on our debt maturities, see below "Future Contractual Obligations."

As of the date of this Annual Report, the credit ratings for the senior unsecured debt of CenturyLink, Inc. and Qwest Corporation were as follows:

Agency	CenturyLink, Inc.	Qwest Corporation
Standard & Poor's	BB	BBB-
Moody's Investors Service, Inc.	Ba2	Baa3
Fitch Ratings	BB+	BBB-

Our credit ratings are reviewed and adjusted from time to time by the rating agencies, and downgrades of CenturyLink, Inc.'s senior unsecured debt ratings could, under certain circumstances, incrementally increase the cost of our borrowing under the Credit Facility. Moreover, any downgrades of CenturyLink, Inc.'s or Qwest Corporation's senior unsecured debt ratings could impact our access to debt capital or further raise our borrowing costs. See "Risk Factors—Risks Affecting our Liquidity and Capital Resources" in Item 1A of Part I of this Annual Report.

In January 2016, Qwest Corporation issued \$235 million aggregate principal amount of 7% Notes due 2056, in exchange for net proceeds, after deducting underwriting discounts and other expenses, of approximately \$227 million. All of the 7% Notes are unsecured obligations and may be redeemed by Qwest Corporation, in whole or in part, on or after February 1, 2021, at a redemption price equal to 100% of the principal amount redeemed plus accrued and unpaid interest to the redemption date.

Net Operating Loss Carryforwards

We have been using NOLs to offset our federal taxable income. At December 31, 2015, we had approximately \$72 million of federal net operating losses. Since the remainder of our NOLs are subject to the limitations imposed by section 382 of the Internal Revenue Code, we expect that the amounts of our cash flows dedicated to the payment of federal taxes will increase substantially. The amounts of those payments will depend upon many factors, including future earnings, tax law changes and future tax circumstances. Based on current laws (including the extension of bonus depreciation) and circumstances applied to estimates of 2016 earnings, we estimate our cash income tax liability related to 2016 will be between \$400 million to \$600 million.

Dividends

We currently expect to continue our current practice of paying quarterly cash dividends in respect of our common stock subject to our Board of Directors' discretion to modify or terminate this practice at any time and for any reason without prior notice. Our current quarterly common stock dividend rate is \$0.54 per share, as approved by our Board of Directors, which we believe is a dividend rate per share that gives us the flexibility to balance our multiple objectives of managing our business, paying our fixed commitments and returning cash to our shareholders. Assuming continued payment during 2016 at this rate of \$0.54 per share, our total dividends paid each quarter would be approximately \$292 million based on our current number of outstanding shares (which does not reflect shares that we might repurchase or issue in future periods). See "Risk Factors—Risks Affecting Our Business" in Item 1A of Part I of this Annual Report.

Credit Facility

Our \$2.0 billion Credit Facility matures on December 3, 2019 and has 16 lenders, each with commitments ranging from \$3.5 million to \$198.5 million. The Credit Facility allows us to obtain revolving loans and to issue up to \$400 million of letters of credit, which upon issuance reduce the amount available for other extensions of credit. Interest is assessed on borrowings using either the LIBOR or the base rate (each as defined in the Credit Facility) plus an applicable margin between 1.00% and 2.25% per annum for LIBOR loans and 0.00% and 1.25% per annum for base rate loans depending on our then current senior unsecured long-term debt rating. Our obligations under the Credit Facility are guaranteed by nine of our subsidiaries. At December 31, 2015, we had \$330 million in borrowings and no amounts of letters of credit outstanding under the Credit Facility.

Under the Credit Facility, we, and our indirect subsidiary, Qwest Corporation, must maintain a debt to EBITDA (earnings before interest, taxes, depreciation and amortization, as defined in our Credit Facility) ratio of not more than 4.0:1.0 and 2.85:1.0, respectively, as of the last day of each fiscal quarter for the four quarters then ended. The Credit Facility also contains a negative pledge covenant, which generally requires us to secure equally and ratably any advances under the Credit Facility if we pledge assets or permit liens on our property for the benefit of other debtholders. The Credit Facility also has a cross payment default provision, and the Credit Facility and certain of our debt securities also have cross acceleration provisions. When present, these provisions could have a wider impact on liquidity than might otherwise arise from a default or acceleration of a single debt instrument. Our debt to EBITDA ratios could be adversely affected by a wide variety of events, including unforeseen expenses or contingencies. This could reduce our financing flexibility due to potential restrictions on incurring additional debt under certain provisions of our debt agreements or, in certain circumstances, could result in a default under certain provisions of such agreements.

Term Loans, Revolving Line of Credit and Revolving Letter of Credit

At December 31, 2015, CenturyLink, Inc. owed \$358 million under a term loan maturing in 2019 and Qwest Corporation owed \$100 million under a term loan maturing in 2025. Both of these term loans include covenants substantially similar to those set forth in the Credit Facility.

In January 2015, CenturyLink, Inc. entered into a \$100 million uncommitted revolving line of credit with one of the lenders under the Credit Facility. The amount available under this uncommitted revolving line of credit is reduced by any amount outstanding under the Credit Facility with the same lender. Interest is paid monthly based upon the LIBOR plus an applicable margin between 1.00% and 2.25% per annum. At December 31, 2015, we had \$80 million borrowings outstanding under this uncommitted revolving line of credit.

We have a \$160 million uncommitted revolving letter of credit facility which enables us to provide letters of credit under terms that may be more favorable than those under the Credit Facility. At December 31, 2015, our outstanding letters of credit totaled \$109 million under this facility.

For information on our outstanding debt securities, see immediately below "Future Contractual Obligations" and Note 3—Long-Term Debt and Credit Facilities to our consolidated financial statements in Item 8 of Part II of this Annual Report.

Future Contractual Obligations

The following table summarizes our estimated future contractual obligations as of December 31, 2015:

	2016	2017	2018	2019	2020	2021 and thereafter	Total
	(Dollars in millions)						
Long-term debt ⁽¹⁾	\$ 1,503	1,501	251	1,160	1,032	15,082	20,529
Interest on long-term debt and capital leases ⁽²⁾	1,294	1,195	1,155	1,129	1,061	15,634	21,468
Operating leases	301	289	268	235	209	1,075	2,377
Purchase commitments ⁽³⁾	364	91	53	26	20	71	625
Post-retirement benefit obligation ⁽⁴⁾	56	73	90	87	83	872	1,261
Non-qualified pension obligations ⁽⁴⁾	5	5	5	5	5	21	46
Unrecognized tax benefits ⁽⁵⁾	—	—	—	—	—	48	48
Other	7	5	7	5	7	60	91
Total future contractual obligations ⁽⁶⁾	\$ 3,530	3,159	1,829	2,647	2,417	32,863	46,445

(1) Includes current maturities and capital lease obligations, but excludes unamortized discounts, net and unamortized debt issuance costs.

(2) Actual principal and interest paid in all years may differ due to future refinancing of outstanding debt or issuance of new debt. Interest on our floating rate debt was calculated for all years using the rates effective at December 31, 2015.

(3) We have various long-term, non-cancelable purchase commitments for advertising and promotion services, including advertising and marketing at sports arenas and other venues and events. We also have service related commitments with various vendors for data processing, technical and software support services. Future payments under certain service contracts will vary depending on our actual usage. In the table above we estimated payments for these service contracts based on estimates of the level of services we expect to receive.

(4) Reflects only the portion of total obligation that is contractual in nature. See Note 6 below.

(5) Represents the amount of tax and interest we would pay for our unrecognized tax benefits. The \$48 million is composed of unrecognized tax benefits of \$15 million and related estimated interest of \$33 million, which would result in future cash payments if our tax positions were not upheld. See Note 11—Income Taxes to our consolidated financial statements in Item 8 of Part II of this Annual Report for additional information. The timing of any payments for our unrecognized tax benefits cannot be predicted with certainty; therefore, such amount is reflected in the "2021 and thereafter" column in the above table.

(6) The table is limited to contractual obligations only and does not include:

- contingent liabilities;
- our open purchase orders as of December 31, 2015. These purchase orders are generally issued at fair value, and are generally cancelable without penalty;
- other long-term liabilities, such as accruals for legal matters and other taxes that are not contractual obligations by nature. We cannot determine with any degree of reliability the years in which these liabilities might ultimately settle;
- cash funding requirements for qualified pension benefits payable to certain eligible current and future retirees. Benefits paid by our qualified pension plan are paid through a trust. Cash funding requirements for this trust are not included in this table as we are not able to reliably estimate required contributions to this trust. Our funding projections are discussed further below;
- certain post-retirement benefits payable to certain eligible current and future retirees. Not all of our post-retirement benefit obligation amount is a contractual obligation and only the portion that we believe is a contractual obligation is reported in the table. See additional information on our benefits plans in Note 7—Employee Benefits to our consolidated financial statements in Item 8 of Part II of this Annual Report;
- contract termination fees. These fees are non-recurring payments, the timing and payment of which, if any, is uncertain. In the ordinary course of business and to optimize our cost structure, we enter into contracts with terms greater than one year to use the network facilities of other carriers and to purchase other goods and services. Our contracts to use other carriers' network facilities generally have no minimum volume requirements and are based on an interrelationship of volumes and discounted rates. Assuming we terminate these contracts in 2016, the contract termination fees would be approximately \$399 million. Under the same assumption, we estimate that our termination fees for these contracts to purchase goods and services would be approximately \$154 million. In the normal course of business, we do not believe payment of these fees is likely; and
- potential indemnification obligations to counterparties in certain agreements entered into in the normal course of business. The nature and terms of these arrangements vary.

Pension and Post-retirement Benefit Obligations

We are subject to material obligations under our existing defined benefit pension plans and post-retirement benefit plans. At December 31, 2015, the accounting unfunded status of our defined benefit pension plans and post-retirement benefit plans were \$2.277 billion and \$3.374 billion, respectively. See Note 7—Employee Benefits to our consolidated financial statements in Item 8 of Part II of this Annual Report for additional information about our pension and post-retirement benefit arrangements.

Benefits paid by our qualified pension plan are paid through a trust that holds all of the plan's assets. Based on current laws and circumstances, we do not expect any contributions to be required for our qualified pension plan for 2016. The amount of required contributions to our qualified pension plan in 2017 and beyond will depend on a variety of factors, most of which are beyond our control, including earnings on plan investments, prevailing interest rates, demographic experience, changes in plan benefits and changes in funding laws and regulations. We occasionally make voluntary contributions in addition to required contributions.

Certain of our post-retirement health care and life insurance benefits plans are unfunded. Several trusts hold assets that are used to help cover the health care costs of certain retirees. As of December 31, 2015, the fair value of these trust assets was approximately \$193 million; however, a portion of these assets is comprised of investments with restricted liquidity. We estimate that the more liquid assets in these trusts will be adequate to provide continuing reimbursements for covered post-retirement health care costs for approximately one year. Thereafter, covered benefits will be paid either directly by us or from these trusts as the remaining assets become liquid. This projected one year period could be shorter or longer depending on returns on plan assets, the timing of maturities of illiquid plan assets and future changes in benefits.

For 2016, our estimated annual long-term rate of return is 7.0% for both the pension plan trust assets and post-retirement plans trust assets, based on the assets currently held. However, actual returns could be substantially different.

Historical Information

The following tables summarize our consolidated cash flow activities:

	Years Ended December 31,		Increase / (Decrease)
	2015	2014	
	(Dollars in millions)		
Net cash provided by operating activities	\$ 5,152	5,188	(36)
Net cash used in investing activities	(2,853)	(3,077)	(224)
Net cash used in financing activities	(2,301)	(2,151)	150

	Years Ended December 31,		Increase / (Decrease)
	2014	2013	
	(Dollars in millions)		
Net cash provided by operating activities	\$ 5,188	5,559	(371)
Net cash used in investing activities	(3,077)	(3,148)	(71)
Net cash used in financing activities	(2,151)	(2,454)	(303)

Net cash provided by operating activities decreased by \$36 million for the year ended December 31, 2015 as compared to the year ended December 31, 2014 primarily due to a slight negative variance in net income adjusted for non-cash items along with negative variances in accounts payable and other noncurrent assets and liabilities, net. The decreases were substantially offset with positive variances in accrued income and other taxes and other current assets and liabilities, net, which was primarily due to a payment of approximately \$235 million in 2014 to settle certain litigation. Our net cash provided by operating activities in 2015 was also positively impacted by the cash received from the CAF Phase 2 support program, which was \$209 million greater than the cash we would have otherwise received during the same period under the interstate USF support program. Net cash provided by operating activities decreased by \$371 million for the year ended December 31, 2014 as compared to the year ended December 31, 2013 primarily due to a negative variance in net income adjusted for non-cash items along with a payment of approximately \$235 million in the first quarter of 2014 to settle certain litigation. These decreases were substantially offset by positive variances in the changes in accounts payable and retirement benefits.

During the year ended December 31, 2015, we made a voluntary cash contribution to the trust of \$100 million to fund our qualified pension plan. During the years ended December 31, 2014 and 2013, and prior to the pension plan merger, we made required cash contributions to the trust of \$157 million and \$146 million, respectively, to fund our qualified pension plans.

Net cash used in investing activities decreased by \$224 million for the year end December 31, 2015 as compared to the year ended December 31, 2014 primarily due to a decrease in payments of property, plant and equipment and amounts paid for acquisitions in 2015. Net cash used in investing activities decreased by \$71 million for the year ended December 31, 2014 as compared to the year ended December 31, 2013 primarily due to less cash paid for acquisitions.

Net cash used in financing activities increased by \$150 million for the year ended December 31, 2015 as compared to the year ended December 31, 2014 primarily due to additional common stock repurchases as the net debt repayments were approximately the same in both years. Net cash used in financing activities decreased by \$303 million for the year ended December 31, 2014 as compared to the year ended December 31, 2013 primarily due to reductions in net debt paydowns in 2014 versus net borrowings in 2013 and common stock repurchases.

During the year ended December 31, 2015, we repurchased 27.1 million shares of the company's outstanding common stock in the open market. These shares were repurchased for an aggregate market price of \$800 million, or an average purchase price of \$29.56 per share. The repurchased common stock has been retired. For additional information, see "Note 17—Repurchase of CenturyLink, Inc. Common Stock" in Item 8 of Part II of this Annual Report.

On October 13, 2015, Qwest Corporation redeemed all \$250 million of its 7.2% Notes due 2026, which resulted in an immaterial gain, and redeemed \$150 million of its 6.875% Notes due 2033, which resulted in an immaterial loss.

On September 21, 2015, Qwest Corporation issued \$400 million aggregate principal amount of 6.625% Notes due 2055, in exchange for net proceeds, after deducting underwriting discounts and other expenses, of approximately \$386 million. The underwriting agreement included an over-allotment option granting the underwriters for the offering an opportunity to purchase additional 6.625% Notes due 2055. On September 30, 2015, Qwest Corporation issued an additional \$10 million aggregate principal amount of its 6.625% Notes under this over-allotment option. All of the 6.625% Notes are unsecured obligations and may be redeemed by Qwest Corporation, in whole or in part, on or after September 15, 2020, at a redemption price equal to 100% of the principal amount redeemed plus accrued and unpaid interest to the redemption date.

On June 15, 2015, Qwest Corporation paid at maturity the \$92 million principal amount of its 7.625% Notes.

On March 19, 2015, CenturyLink, Inc. issued in a private offering \$500 million aggregate principal amount of 5.625% Notes due 2025, in exchange for net proceeds, after deducting underwriting discounts and other expenses, of approximately \$494 million. The Notes are senior unsecured obligations and may be redeemed, in whole or in part, at any time before January 1, 2025 at a redemption price equal to the greater of 100% of the principal amount of the Notes or the sum of the present value of the remaining scheduled payments of principal and interest on the Notes, discounted to the redemption date in the manner described in the Notes, plus accrued and unpaid interest to the redemption date. At any time on or after January 1, 2025, CenturyLink, Inc. may redeem the Notes at par plus accrued and unpaid interest to the redemption date. In addition, at any time on or prior to April 1, 2018, CenturyLink, Inc. may redeem up to 35% of the principal amount of the Notes at a redemption price equal to 105.625% of the principal amount thereof, plus accrued and unpaid interest to the redemption date, with net cash proceeds of certain equity offerings. Under certain circumstances, CenturyLink, Inc. will be required to make an offer to repurchase the Notes at a price of 101% of the aggregate principal amount plus accrued and unpaid interest to the repurchase date. In October 2015, CenturyLink, Inc. exchanged all of the unregistered Notes issued on March 19, 2015 for fully-registered Notes.

On February 20, 2015, Qwest Corporation entered into a new credit agreement with several lenders that allows Qwest Corporation to borrow up to \$100 million under a term loan. Under this new credit agreement, Qwest Corporation borrowed \$100 million under a ten-year term note that expires on February 20, 2025.

On February 17, 2015, CenturyLink, Inc. paid at maturity the \$350 million plus accrued and unpaid interest due under its Series M 5.00% notes.

In January 2015, CenturyLink, Inc. entered into a \$100 million uncommitted revolving line of credit with one of the lenders under the Credit Facility.

Certain Matters Related to Acquisitions

When we acquired Qwest and Savvis in 2011, Qwest's pre-acquisition debt obligations consisted primarily of debt securities issued by Qwest and two of its subsidiaries while Savvis' long-term debt obligations (after the discharge of its convertible senior notes in connection with the completion of the acquisition) consisted primarily of capital leases, the remaining outstanding portions of which are all now included in our consolidated debt balances. The indentures governing Qwest's remaining debt securities contain customary covenants that restrict the ability of Qwest or its subsidiaries from making certain payments and investments, granting liens and selling or transferring assets. Based on current circumstances, we do not anticipate that these covenants will significantly restrict our ability to manage cash balances or transfer cash between entities within our consolidated group of companies as needed.

In accounting for the Qwest acquisition, we recorded Qwest's debt securities at their estimated fair values, which totaled \$12.292 billion as of April 1, 2011. Our acquisition date fair value estimates were based primarily on quoted market prices in active markets and other observable inputs where quoted market prices were not available. We determined that the fair value of Qwest's debt securities exceeded their stated principal balances on the acquisition date by \$693 million, which we recorded as a premium.

The table below summarizes the portions of this premium recognized as a reduction to interest expense or extinguished during the periods indicated:

	Years Ended December 31,		From April 1, 2011	Total Since Acquisition
	2015	2014	through December 31, 2013	
	(Dollars in millions)			
Amortized	\$ 22	42	302	366
Extinguished ⁽¹⁾	1	—	276	277
Total	\$ 23	42	578	643

(1) Extinguished in connection with the payment of Qwest debt securities prior to maturity.

The remaining premium of \$50 million as of December 31, 2015, will reduce interest expense in future periods, unless otherwise extinguished.

Other Matters

In February 2015, the FCC adopted new regulations that regulate Internet services as a public utility under Title II of the Communications Act. Although it is premature for us to determine the ultimate impact of the new regulations on our operations, we currently expect that they will negatively impact our current operations. For additional information, see "Risk Factors—Risks Relating to Legal and Regulatory Matters" in Item 1A of Part I of this Annual Report.

CenturyLink has cash management arrangements with certain of its principal subsidiaries, in which substantial portions of the subsidiaries' cash is regularly advanced to CenturyLink. Although CenturyLink periodically repays these advances to fund the subsidiaries' cash requirements throughout the year, at any given point in time CenturyLink may owe a substantial sum to our subsidiaries under these advances, which, in accordance with generally accepted accounting principles, are eliminated in consolidation and therefore not recognized on our consolidated balance sheets.

We also are involved in various legal proceedings that could substantially impact our financial position. See Note 14—Commitments and Contingencies to our consolidated financial statements in Item 8 of Part II of this Annual Report for the current status of such legal proceedings.

On November 4, 2015, we announced that we have retained financial advisors to assist in the exploration of strategic alternatives for our data centers and colocation business operations. The review of strategic alternatives will involve a full range of options, including, but not limited to, a partnership or joint venture, a sale of all or a portion of the data centers, as well as keeping some or all of these assets and operations as part of our portfolio. Strategic services revenues generated from our colocation services was approximately \$626 million, \$644 million and \$623 million for the years ended December 31, 2015, 2014 and 2013, respectively.

The following tables present additional metrics related to our data centers:

	As of December 31,		Increase / (Decrease)	% Change
	2015	2014		
(Dollars in millions)				
Hosting Data Center Metrics				
Number of data centers (1)	59	58	1	2%
Sellable square feet, million sq ft	1.58	1.46	0.12	8%
Billed square feet, million sq feet	0.99	0.92	0.07	8%
Utilization	63%	63%	—%	—%

	As of December 31,		Increase / (Decrease)	% Change
	2014	2013		
(Dollars in millions)				
Hosting Data Center Metrics				
Number of data centers (1)	58	55	3	5%
Sellable square feet, million sq ft	1.46	1.39	0.07	5%
Billed square feet, million sq feet	0.92	0.96	(0.04)	(4)%
Utilization	63%	69%	(6)%	(9)%

- (1) We define a data center as any facility where we market, sell and deliver colocation services, managed hosting (including cloud hosting) services, multi-tenant managed services or any combination of.

Market Risk

We are exposed to market risk from changes in interest rates on our variable rate long-term debt obligations and fluctuations in certain foreign currencies. We seek to maintain a favorable mix of fixed and variable rate debt in an effort to limit interest costs and cash flow volatility resulting from changes in rates.

Management periodically reviews our exposure to interest rate fluctuations and periodically implements strategies to manage the exposure. From time to time, we have used derivative instruments to (i) lock-in or swap our exposure to changing or variable interest rates for fixed interest rates or (ii) to swap obligations to pay fixed interest rates for variable interest rates. As of December 31, 2015, we had no such instruments outstanding. We have established policies and procedures for risk assessment and the approval, reporting and monitoring of derivative instrument activities. We do not hold or issue derivative financial instruments for trading or speculative purposes.

At December 31, 2015, we had approximately \$19.8 billion (excluding capital lease and other obligations with a carrying amount of \$425 million) of long-term debt outstanding, approximately 95.6% of which bears interest at fixed rates and is therefore not exposed to interest rate risk. At December 31, 2015, we had \$738 million floating rate debt exposed to changes in the London InterBank Offered Rate (LIBOR). A hypothetical increase of 100 basis points in LIBOR relative to this debt would decrease our annual pre-tax earnings by \$7 million.

By operating internationally, we are exposed to the risk of fluctuations in the foreign currencies used by our international subsidiaries, primarily the British Pound, the Canadian Dollar, the Japanese Yen, the Hong Kong Dollar and the Singapore Dollar. Although the percentages of our consolidated revenues and costs that are denominated in these currencies are immaterial, future volatility in exchange rates and an increase in the number of transactions could adversely impact our consolidated results of operations. We use a sensitivity analysis to estimate our exposure to this foreign currency risk, measuring the change in financial position arising from hypothetical 10% change in the exchange rates of these currencies, relative to the U.S. Dollar, with all other variables held constant. The aggregate potential change in the fair value of financial assets resulting from a hypothetical 10% change in these exchange rates was \$19 million at December 31, 2015.

Certain shortcomings are inherent in the method of analysis presented in the computation of exposures to market risks. Actual values may differ materially from those disclosed by us from time to time if market conditions vary from the assumptions used in the analyses performed. These analyses only incorporate the risk exposures that existed at December 31, 2015.

Off-Balance Sheet Arrangements

We have no special purpose or limited purpose entities that provide off-balance sheet financing, liquidity, or market or credit risk support and we do not engage in leasing, hedging or other similar activities that expose us to any significant liabilities that are not (i) reflected on the face of the consolidated financial statements, (ii) disclosed in Note 14—Commitments and Contingencies to our consolidated financial statements in Item 8 of Part II of this Annual Report, or in the Future Contractual Obligations table included in this Item 7 of Part II above, or (iii) discussed under the heading "Market Risk" above.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The information in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Market Risk" in Item 7 of Part II of this Annual Report is incorporated herein by reference.

ITEM 8. CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
CenturyLink, Inc.:

We have audited the accompanying consolidated balance sheets of CenturyLink, Inc. and subsidiaries (the Company) as of December 31, 2015 and 2014, and the related consolidated statements of operations, comprehensive income (loss), cash flows, and stockholders' equity for each of the years in the three-year period ended December 31, 2015. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2015 and 2014, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2015, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 1 to the consolidated financial statements, the Company changed its method of accounting for debt issuance costs effective January 1, 2014 due to the adoption of FASB ASU 2015-03, Simplifying the Presentation of Debt Issuance Costs. Additionally, as discussed in Note 1 to the consolidated financial statements, the Company changed its method of accounting for deferred income taxes effective January 1, 2014 due to the adoption of FASB ASU 2015-17, Balance Sheet Classification of Deferred Taxes.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated February 24, 2016 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG LLP

Shreveport, Louisiana
February 24, 2016

Report of Independent Registered Public Accounting Firm

the Board of Directors and Stockholders
CenturyLink, Inc.:

We have audited CenturyLink, Inc. and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting (Item 9A). Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any valuation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of the Company as of December 31, 2015 and 2014, and the related consolidated statements of operations, comprehensive income (loss), cash flows, and stockholders' equity for each of the years in the three-year period ended December 31, 2015, and our report dated February 24, 2016 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

Shreveport, Louisiana
February 24, 2016

CENTURYLINK, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,		
	2015	2014	2013
	(Dollars in millions, except per share amounts and shares in thousands)		
OPERATING REVENUES	\$ 17,900	18,031	18,095
OPERATING EXPENSES			
Cost of services and products (exclusive of depreciation and amortization)	7,778	7,846	7,507
Selling, general and administrative	3,328	3,347	3,502
Depreciation and amortization	4,189	4,428	4,541
Impairment of goodwill (Note 2)	—	—	1,092
Total operating expenses	15,295	15,621	16,642
OPERATING INCOME	2,605	2,410	1,453
OTHER (EXPENSE) INCOME			
Interest expense	(1,312)	(1,311)	(1,298)
Net gain on early retirement of debt	—	—	10
Other income, net	23	11	59
Total other expense, net	(1,289)	(1,300)	(1,229)
INCOME BEFORE INCOME TAX EXPENSE	1,316	1,110	224
Income tax expense	438	338	463
NET INCOME (LOSS)	\$ 878	772	(239)
BASIC AND DILUTED EARNINGS (LOSS) PER COMMON SHARE			
BASIC	\$ 1.58	1.36	(0.40)
DILUTED	\$ 1.58	1.36	(0.40)
WEIGHTED AVERAGE COMMON SHARES OUTSTANDING			
BASIC	554,278	568,435	600,892
DILUTED	555,093	569,739	600,892

See accompanying notes to consolidated financial statements.

CENTURYLINK, INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	Years Ended December 31,		
	2015	2014	2013
	(Dollars in millions)		
NET INCOME (LOSS)	\$ 878	772	(239)
OTHER COMPREHENSIVE INCOME (LOSS):			
Items related to employee benefit plans:			
Change in net actuarial gain (loss), net of \$(12), \$742 and \$(606) tax	21	(1,200)	981
Change in net prior service credit (costs), net of \$(47), \$1 and \$52 tax	76	(1)	(84)
Foreign currency translation adjustment and other, net of \$—, \$1 and \$— tax	(14)	(14)	2
Other comprehensive income (loss)	83	(1,215)	899
COMPREHENSIVE INCOME (LOSS)	\$ 961	(443)	660

See accompanying notes to consolidated financial statements.

CENTURYLINK, INC.

CONSOLIDATED BALANCE SHEETS

	As of December 31,	
	2015	2014
(Dollars in millions and shares in thousands)		
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	\$ 126	128
Accounts receivable, less allowance of \$152 and \$162	1,943	1,988
Other	581	580
Total current assets	2,650	2,696
NET PROPERTY, PLANT AND EQUIPMENT		
Property, plant and equipment	38,785	36,718
Accumulated depreciation	(20,716)	(18,285)
Net property, plant and equipment	18,069	18,433
GOODWILL AND OTHER ASSETS		
Goodwill	20,742	20,755
Customer relationships, net	3,928	4,893
Other intangible assets, net	1,555	1,647
Other, net	660	679
Total goodwill and other assets	26,885	27,974
TOTAL ASSETS	\$ 47,604	49,103
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Current maturities of long-term debt	\$ 1,503	550
Accounts payable	968	1,226
Accrued expenses and other liabilities		
Salaries and benefits	602	641
Income and other taxes	318	309
Interest	250	256
Other	220	210
Advance billings and customer deposits	743	726
Total current liabilities	4,604	3,918
LONG-TERM DEBT	18,722	19,953
DEFERRED CREDITS AND OTHER LIABILITIES		
Deferred income taxes, net	3,569	3,154
Benefit plan obligations, net	5,511	5,808
Other	1,138	1,247
Total deferred credits and other liabilities	10,218	10,209
COMMITMENTS AND CONTINGENCIES (Note 14)		
STOCKHOLDERS' EQUITY		
Preferred stock — non-redeemable, \$25.00 par value, authorized 2,000 shares, issued and outstanding 7 and 7 shares	—	—
Common stock, \$1.00 par value, authorized 1,600,000 and 1,600,000 shares, issued and outstanding 543,800 and 568,517 shares	544	569
Additional paid-in capital	15,178	16,324
Accumulated other comprehensive loss	(1,934)	(2,017)
Retained earnings	272	147
Total stockholders' equity	14,060	15,023
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$ 47,604	49,103

See accompanying notes to consolidated financial statements.

CENTURYLINK, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2015	2014	2013
	(Dollars in millions)		
OPERATING ACTIVITIES			
Net income (loss)	\$ 878	772	(239)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization	4,189	4,428	4,541
Impairment of goodwill (Note 2)	—	—	1,092
Impairment of assets	9	32	—
Deferred income taxes	350	291	391
Provision for uncollectible accounts	177	159	152
Gain on sale of intangible assets	—	—	(32)
Net long-term debt issuance costs and premium amortization	(3)	(21)	(46)
Net gain on early retirement of debt	—	—	(10)
Share-based compensation	73	79	71
Changes in current assets and liabilities:			
Accounts receivable	(132)	(163)	(212)
Accounts payable	(168)	70	(76)
Accrued income and other taxes	32	(84)	28
Other current assets and liabilities, net	(53)	(270)	263
Retirement benefits	(141)	(184)	(342)
Changes in other noncurrent assets and liabilities, net	(78)	99	8
Other, net	19	(20)	(30)
Net cash provided by operating activities	<u>5,152</u>	<u>5,188</u>	<u>5,559</u>
INVESTING ACTIVITIES			
Payments for property, plant and equipment and capitalized software	(2,872)	(3,047)	(3,048)
Cash paid for acquisitions	(4)	(93)	(160)
Proceeds from sale of property and intangible assets	31	63	80
Other, net	(8)	—	(20)
Net cash used in investing activities	<u>(2,853)</u>	<u>(3,077)</u>	<u>(3,148)</u>
FINANCING ACTIVITIES			
Net proceeds from issuance of long-term debt	989	483	2,481
Payments of long-term debt	(966)	(800)	(2,010)
Net payments on credit facility and revolving line of credit	(315)	(4)	(95)
Early retirement of debt costs	(1)	—	(31)
Dividends paid	(1,198)	(1,228)	(1,301)
Net proceeds from issuance of common stock	11	50	73
Repurchase of common stock	(819)	(650)	(1,586)
Other, net	(2)	(2)	15
Net cash used in financing activities	<u>(2,301)</u>	<u>(2,151)</u>	<u>(2,454)</u>
Net decrease in cash and cash equivalents	(2)	(40)	(43)
Cash and cash equivalents at beginning of period	128	168	211
Cash and cash equivalents at end of period	<u>\$ 126</u>	<u>128</u>	<u>168</u>
Supplemental cash flow information:			
Income taxes paid, net	\$ (63)	(27)	(48)
Interest paid (net of capitalized interest of \$52, \$47 and \$41)	\$ (1,310)	(1,338)	(1,333)

See accompanying notes to consolidated financial statements.

CENTURYLINK, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Years Ended December 31,		
	2015	2014	2013
	(Dollars in millions)		
COMMON STOCK (represents dollars and shares)			
Balance at beginning of period	\$ 569	584	626
Issuance of common stock through dividend reinvestment, incentive and benefit plans	2	4	4
Repurchase of common stock	(27)	(19)	(46)
Balance at end of period	544	569	584
ADDITIONAL PAID-IN CAPITAL			
Balance at beginning of period	16,324	17,343	19,079
Issuance of common stock through dividend reinvestment, incentive and benefit plans	9	46	69
Repurchase of common stock	(767)	(591)	(1,551)
Shares withheld to satisfy tax withholdings	(19)	(16)	(18)
Share-based compensation and other, net	77	82	85
Dividends declared	(446)	(540)	(321)
Balance at end of period	15,178	16,324	17,343
ACCUMULATED OTHER COMPREHENSIVE LOSS			
Balance at beginning of period	(2,017)	(802)	(1,701)
Other comprehensive income (loss)	83	(1,215)	899
Balance at end of period	(1,934)	(2,017)	(802)
RETAINED EARNINGS			
Balance at beginning of period	147	66	1,285
Net income (loss)	878	772	(239)
Dividends declared	(753)	(691)	(980)
Balance at end of period	272	147	66
TOTAL STOCKHOLDERS' EQUITY	\$ 14,060	15,023	17,191

See accompanying notes to consolidated financial statements.

CENTURYLINK, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

References in the Notes to "CenturyLink," "we," "us" and "our" refer to CenturyLink, Inc. and its consolidated subsidiaries, unless the content otherwise requires and except in Note 3, where such references refer solely to CenturyLink, Inc.

(1) Basis of Presentation and Summary of Significant Accounting Policies

Basis of Presentation

We are an integrated communications company engaged primarily in providing an array of communications services to our residential and business customers. Our communications services include local and long-distance voice, high-speed Internet, Multi-Protocol Label Switching ("MPLS"), private line (including special access), data integration, Ethernet, colocation, managed hosting (including cloud hosting), network, public access, wireless, video and other ancillary services.

The accompanying consolidated financial statements include our accounts and the accounts of our subsidiaries. Intercompany amounts and transactions with our consolidated subsidiaries have been eliminated.

To simplify the overall presentation of our consolidated financial statements, we report immaterial amounts attributable to noncontrolling interests in certain of our subsidiaries as follows: (i) income attributable to noncontrolling interests in other income, net, (ii) equity attributable to noncontrolling interests in additional paid-in capital and (iii) cash flows attributable to noncontrolling interests in other, net financing activities.

We reclassified certain prior period amounts to conform to the current period presentation, including the categorization of our revenues and our segment reporting. See Note 12—Segment Information for additional information. These changes had no impact on total revenues, total operating expenses or net income (loss) for any period.

Connect America Fund Support Payments

In 2015, we accepted funding from the Federal Communications Commission's ("FCC") Connect America Fund ("CAF") of approximately \$500 million per year for six years to fund the deployment of voice and high-speed Internet infrastructure for approximately 1.2 million rural households and businesses in 33 states under the CAF Phase 2 high-cost support program. The funding from the CAF Phase 2 support program in these 33 states will substantially supplant funding from the interstate Universal Service Fund ("USF") high-cost program that we previously utilized to support voice services in high-cost rural markets. In September of 2015, we began receiving these support payments from the FCC under the new CAF Phase 2 support program, which included (i) monthly support payments at a higher rate than under the interstate USF support program and (ii) a one-time cumulative catch-up payment representing the incrementally higher funding under the CAF Phase 2 support program over the interstate USF support program for the first seven months of 2015. During 2015, we recorded \$215 million more revenue than we would have otherwise recorded during the same period under the interstate USF support program.

Changes in Estimates

As a result of our annual reviews to evaluate the reasonableness of the depreciable lives for our property, plant and equipment, effective January 2014, we changed the estimates of the remaining economic lives of certain switch and circuit network equipment. These changes resulted in a net increase in depreciation expense of approximately \$78 million for the year ended December 31, 2014. This net increase in depreciation expense, net of tax, reduced consolidated net income by approximately \$48 million, or \$0.08 per basic and diluted common share, for the year ended December 31, 2014.

Additionally, during the third quarter of 2014, we developed a plan to migrate customers from one of our networks to another over a one-year period beginning in the fourth quarter of 2014. As a result, we implemented changes in estimates that reduced the remaining economic lives of certain network assets. The increase in depreciation expense from the changes in estimates was more than fully offset by decreases in depreciation expense resulting from normal aging of our property, plant and equipment. These changes in the estimated remaining economic lives resulted in an increase in depreciation expense of approximately \$48 million and \$12 million for the years ended December 31, 2015 and 2014, respectively. This increase in depreciation expense, net of tax, reduced consolidated net income by approximately \$32 million, or \$0.06 per basic and diluted common share and \$7 million, or \$0.01 per basic and diluted common share, for the years ended December 31, 2015 and 2014, respectively.

Summary of Significant Accounting Policies

Use of Estimates

Our consolidated financial statements are prepared in accordance with U.S. generally accepted accounting principles. These accounting principles require us to make certain estimates, judgments and assumptions. We believe that the estimates, judgments and assumptions we make when accounting for specific items and matters, including, but not limited to, investments, long-term contracts, customer retention patterns, allowance for doubtful accounts, depreciation, amortization, asset valuations, internal labor capitalization rates, recoverability of assets (including deferred tax assets), impairment assessments, pension, post-retirement and other post-employment benefits, taxes, certain liabilities and other provisions and contingencies, are reasonable, based on information available at the time they are made. These estimates, judgments and assumptions can materially affect the reported amounts of assets, liabilities and components of stockholders' equity as of the dates of the consolidated balance sheets, as well as the reported amounts of revenues, expenses and components of cash flows during the periods presented in our other consolidated financial statements. We also make estimates in our assessments of potential losses in relation to threatened or pending tax and legal matters. See Note 11—Income Taxes and Note 14—Commitments and Contingencies for additional information.

For matters not related to income taxes, if a loss is considered probable and the amount can be reasonably estimated, we recognize an expense for the estimated loss. If we have the potential to recover a portion of the estimated loss from a third party, we make a separate assessment of recoverability and reduce the estimated loss if recovery is also deemed probable.

For matters related to income taxes, if we determine that the impact of an uncertain tax position is more likely than not to be sustained upon audit by the relevant taxing authority, then we recognize a benefit for the largest amount that is more likely than not to be sustained. No portion of an uncertain tax position will be recognized if the position has less than a 50% likelihood of being sustained. Interest is recognized on the amount of unrecognized benefit from uncertain tax positions.

For all of these and other matters, actual results could differ materially from our estimates.

Revenue Recognition

We recognize revenue for services when the related services are provided. Recognition of certain payments received in advance of services being provided is deferred until the service is provided. These advance payments include activation and installation charges, which we recognize a revenue over the expected customer relationship period, which ranges from eighteen months to over ten years depending on the service. We also defer costs for customer activations and installations. The deferral of customer activation and installation costs is limited to the amount of revenue deferred on advance payments. Costs in excess of advance payments are recorded as expense in the period such costs are incurred. Expected customer relationship periods are estimated using historical experience. In most cases, termination fees or other fees on existing contracts that are negotiated in conjunction with new contracts are deferred and recognized over the new contract term.

We offer bundle discounts to our customers who receive certain groupings of services. These bundle discounts are recognized concurrently with the associated revenue and are allocated to the various services in the bundled offering based on the estimated selling price of services included in each bundled combination.

Customer arrangements that include both equipment and services are evaluated to determine whether the elements are separable. If the elements are deemed separable and separate earnings processes exist, the revenue associated with the customer arrangement is allocated to each element based on the relative estimated selling price of the separate elements. We have estimated the selling prices of each element by reference to vendor-specific objective evidence of selling prices when the elements are sold separately. The revenue associated with each element is then recognized as earned. For example, if we receive an advance payment when we sell equipment and continuing service together, we immediately recognize as revenue the amount allocated to the equipment as long as all the conditions for revenue recognition have been satisfied. The portion of the advance payment allocated to the service based upon its relative selling price is recognized ratably over the longer of the contractual period or the expected customer relationship period.

We periodically transfer optical capacity assets on our network to other telecommunications service carriers. These transactions are structured as indefeasible rights of use, commonly referred to as IRUs, which are the exclusive right to use a specified amount of capacity or fiber for a specified term, typically 20 years. We account for the cash consideration received on transfers of optical capacity assets and on all of the other elements deliverable under an IRU, as revenue ratably over the term of the agreement. We have not recognized revenue on any contemporaneous exchanges of our optical capacity assets for other optical capacity assets.

In connection with offering products and services provided by third-party vendors, we review the relationship between us, the vendor and the end customer to assess whether revenue should be reported on a gross or net basis. In assessing whether revenue should be reported on a gross or net basis, we consider whether we act as a principal in the transaction, take title to the products, have risk and rewards of ownership or act as an agent or broker. Based on our agreements with DIRECTV and Verizon Wireless, we offer these services through sales agency relationships which are reported on a net basis.

We have service level commitments pursuant to contracts with certain of our customers. To the extent that such service levels are not achieved or are otherwise disputed due to performance or service issues or other service interruptions or conditions, we will estimate the amount of credits to be issued and record a reduction to revenues, with a corresponding increase in the credit reserve.

USF, Gross Receipts Taxes and Other Surcharges

In determining whether to include in our revenues and expenses the taxes and surcharges collected from customers and remitted to government authorities, including USF charges, sales, use, value added and some excise taxes, we assess, among other things, whether we are the primary obligor or principal taxpayer for the taxes assessed in each jurisdiction where we do business. In jurisdictions where we determine that we are the principal taxpayer, we record the surcharges on a gross basis and include them in our revenues and costs of services and products. In jurisdictions where we determine that we are merely a collection agent for the government authority, we record the taxes on a net basis and do not include them in our revenues and costs of services and products.

Advertising Costs

Costs related to advertising are expensed as incurred and included in selling, general and administrative expenses in our consolidated statements of operations. Our advertising expense was \$210 million, \$214 million and \$210 million for the years ended December 31, 2015, 2014 and 2013, respectively.

Legal Costs

In the normal course of our business, we incur costs to hire and retain external legal counsel to advise us on regulatory, litigation and other matters. We expense these costs as the related services are received.

Income Taxes

We file a consolidated federal income tax return with our eligible subsidiaries. The provision for income taxes consists of an amount for taxes currently payable, an amount for tax consequences deferred to future periods, adjustments to our liabilities for uncertain tax positions and amortization of investment tax credits. We record deferred income tax assets and liabilities reflecting future tax consequences attributable to tax net operating losses ("NOLs"), tax credit carryforwards and differences between the financial statement carrying value of assets and liabilities and the tax bases of those assets and liabilities. Deferred taxes are computed using enacted tax rates expected to apply in the year in which the differences are expected to affect taxable income. The effect on deferred income tax assets and liabilities of a change in tax rate is recognized in earnings in the period that includes the enactment date.

We establish valuation allowances when necessary to reduce deferred income tax assets to the amounts that we believe are more likely than not to be recovered. Each quarter we evaluate the need to retain all or a portion of the valuation allowance on our deferred tax assets. See Note 11—Income Taxes for additional information.

Cash and Cash Equivalents

Cash and cash equivalents include highly liquid investments that are readily convertible into cash and are not subject to significant risk from fluctuations in interest rates. As a result, the value at which cash and cash equivalents are reported in our consolidated financial statements approximates their fair value. In evaluating investments for classification as cash equivalents, we require that individual securities have original maturities of ninety days or less and that individual investment funds have dollar-weighted average maturities of ninety days or less. To preserve capital and maintain liquidity, we invest with financial institutions we deem to be of sound financial condition and in high quality and relatively risk-free investment products. Our cash investment policy limits the concentration of investments with specific financial institutions or among certain products and includes criteria related to credit worthiness of any particular financial institution.

Book overdrafts occur when checks have been issued but have not been presented to our controlled disbursement bank accounts for payment. Disbursement bank accounts allow us to delay funding of issued checks until the checks are presented for payment. Until the issued checks are presented for payment, the book overdrafts are included in accounts payable on our consolidated balance sheet. This activity is included in the operating activities section in our consolidated statements of cash flows.



Accounts Receivable and Allowance for Doubtful Accounts

Accounts receivable are recognized based upon the amount due from customers for the services provided or at cost for purchased and other receivables less an allowance for doubtful accounts. The allowance for doubtful accounts receivable reflects our best estimate of probable losses inherent in our receivable portfolio determined on the basis of historical experience, specific allowances for known troubled accounts and other currently available evidence. We generally consider our accounts past due if they are outstanding over 30 days. Our collection process varies by the customer segment, amount of the receivable, and our evaluation of the customer's credit risk. Our past due accounts are written off against our allowance for doubtful accounts when collection is considered to be not probable. Any recoveries of accounts previously written off are generally recognized as a reduction in bad debt expense in the period received. The carrying value of accounts receivable net of the allowance for doubtful accounts approximates fair value.

Property, Plant and Equipment

Property, plant and equipment acquired in connection with our acquisitions was recorded based on its estimated fair value as of its acquisition date plus the estimated value of any associated legally or contractually required retirement obligations. Purchased and constructed property, plant and equipment is recorded at cost, plus the estimated value of any associated legally or contractually required retirement obligations. Property, plant and equipment is depreciated primarily using the straight-line group method. Under the straight-line group method, assets dedicated to providing telecommunications services (which comprise the majority of our property, plant and equipment) that have similar physical characteristics, use and expected useful lives are pooled for purposes of depreciation and tracking. The equal life group procedure is used to establish each pool's average remaining useful life. Generally, under the straight-line group method, when an asset is sold or retired in the course of normal business activities, the cost is deducted from property, plant and equipment and charged to accumulated depreciation without recognition of a gain or loss. A gain or loss is recognized in our consolidated statements of operations only if a disposal is abnormal or unusual. Leasehold improvements are amortized over the shorter of the useful lives of the assets or the expected lease term. Expenditures for maintenance and repairs are expensed as incurred. Interest is capitalized during the construction phase of network and other internal-use capital projects. Employee-related costs for construction of network and other internal use assets are also capitalized during the construction phase. Property, plant and equipment supplies used internally are carried at average cost, except for significant individual items for which cost is based on specific identification.

We perform annual internal reviews to evaluate the reasonableness of the depreciable lives for our property, plant and equipment. Our reviews utilize models that take into account actual usage, physical wear and tear, replacement history, assumptions about technology evolution and, in certain instances, actuarially determined probabilities to estimate the remaining useful life of our asset base. Our remaining useful life assessments anticipate the loss in service value of assets that may precede the physical retirement. Assets shared among many customers may lose service value as those customers leave the network. However, the asset is not retired until all customers no longer utilize the asset and we determine there is no alternative use for the asset.

We have asset retirement obligations associated with the legally or contractually required removal of a limited group of property, plant and equipment assets from leased properties and the disposal of certain hazardous materials present in our owned properties. When an asset retirement obligation is identified, usually in association with the acquisition of the asset, we record the fair value of the obligation as a liability. The fair value of the obligation is also capitalized as property, plant and equipment and then amortized over the estimated remaining useful life of the associated asset. Where the removal obligation is not legally binding, the net cost to remove assets is expensed in the period in which the costs are actually incurred.

We review long-lived tangible assets for impairment whenever facts and circumstances indicate that the carrying amounts of the assets may not be recoverable. For assessment purposes, long-lived assets are grouped with other assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities, absent a material change in operations. An impairment loss is recognized only if the carrying amount of the asset group is not recoverable and exceeds its fair value. Recoverability of the asset group to be held and used is assessed by comparing the carrying amount of the asset group to the estimated undiscounted future net cash flows expected to be generated by the asset group. If the asset group's carrying value is not recoverable, an impairment charge is recognized for the amount by which the carrying amount of the asset group exceeds its fair value. We determine fair values by using a combination of comparable market values and discounted cash flows, as appropriate.

Goodwill, Customer Relationships and Other Intangible Assets

Intangible assets arising from business combinations, such as goodwill, customer relationships, capitalized software, trademarks and trade names, are initially recorded at estimated fair value. We amortize customer relationships primarily over an estimated life of 10 to 15 years, using either the sum-of-the-years-digits or the straight-line methods, depending on the type of customer. We amortize capitalized software using the straight-line method over estimated lives ranging up to 7 years, except for approximately \$237 million of our capitalized software costs, which represents costs to develop an integrated billing and customer care system which is amortized using the straight-line method over a 20 year period. We amortize our other intangible assets predominantly using the sum-of-the-years-digits method over an estimated life of 4 years. Other intangible assets not arising from business combinations are initially recorded at cost. Where there are no legal, regulatory, contractual or other factors that would reasonably limit the useful life of an intangible asset, we classify the intangible asset as indefinite-lived and such intangible assets are not amortized.

Internally used software, whether purchased or developed by us, is capitalized and amortized using the straight-line method over its estimated useful life. We have capitalized certain costs associated with software such as costs of employees devoting time to the projects and external direct costs for materials and services. Costs associated with software to be used for internal purposes are expensed until the point at which the project has reached the development stage. Subsequent additions, modifications or upgrades to internal-use software are capitalized only to the extent that they allow the software to perform a task it previously did not perform. Software maintenance, data conversion and training costs are expensed in the period in which they are incurred. We review the remaining economic lives of our capitalized software annually. Capitalized software is included in other intangible assets, net, in our consolidated balance sheets.

Our long-lived intangible assets, other than goodwill, with indefinite lives are assessed for impairment annually, or, under certain circumstances, more frequently, such as when events or changes in circumstances indicate there may be an impairment. These assets are carried at the estimated fair value at the time of acquisition and assets not acquired in acquisitions are recorded at historical cost. However, if their estimated fair value is less than the carrying amount, other indefinite-lived intangible assets are reduced to their estimated fair value through an impairment charge to our consolidated statements of operations.

We are required to assess goodwill for impairment at least annually, or more frequently, if an event occurs or circumstances change that would indicate an impairment may have occurred. We are required to write-down the value of goodwill in periods in which the recorded amount of goodwill exceeds the implied fair value of goodwill. Our reporting units are not discrete legal entities with discrete financial statements. Therefore, the equity carrying value and future cash flows must be estimated each time a goodwill impairment assessment is performed on a reporting unit. As a result, our assets, liabilities and cash flows are assigned to reporting units using reasonable and consistent allocation methodologies. Certain estimates, judgments and assumptions are required to perform these assignments. We believe these estimates, judgments and assumptions to be reasonable, but changes in many of these can significantly affect each reporting unit's equity carrying value and future cash flows utilized for our goodwill impairment assessment.

We are required to reassign goodwill to reporting units each time we reorganize our internal reporting structure which causes a change in the composition of our reporting units. Goodwill is reassigned to the reporting units using a relative fair value approach. We utilize the earnings before interest, taxes, depreciation and amortization as our allocation methodology as it represents a reasonable proxy for the fair value of the operations being reorganized.

See Note 2—Goodwill, Customer Relationships and Other Intangible Assets for additional information.

Pension and Post-Retirement Benefits

We recognize the funded status of our defined benefit and post-retirement plans as an asset or a liability on our consolidated balance sheet. Each year's actuarial gains or losses are a component of our other comprehensive income (loss), which is then included in our accumulated other comprehensive loss. Pension and post-retirement benefit expenses are recognized over the period in which the employee renders service and becomes eligible to receive benefits. We make significant assumptions (including the discount rate, expected rate of return on plan assets, mortality and health care trend rates) in computing the pension and post-retirement benefits expense and obligations. See Note 7—Employee Benefits for additional information.

Foreign Currency

Our results of operations include foreign subsidiaries, which are translated from the applicable functional currency to the United States Dollar using the average exchange rates during the reporting period, while assets and liabilities are translated at the reporting date. We include gains or losses from foreign currency remeasurement in other income, net in our consolidated statements of operations. Certain non-U.S. subsidiaries designate the local currency as their functional currency, and we record the translation of their assets and liabilities into U.S. Dollars at the balance sheet date as translation adjustments and include them as a component of accumulated other comprehensive loss in our consolidated balance sheets.

Common Stock

At December 31, 2015, we had 4 million unissued shares of CenturyLink, Inc. common stock reserved for acquisitions. In addition, we had 25 million shares authorized for future issuance under our equity incentive plans.

Preferred stock

Holders of outstanding CenturyLink, Inc. preferred stock are entitled to receive cumulative dividends, receive preferential distributions equal to \$25 per share plus unpaid dividends upon CenturyLink, Inc.'s liquidation and vote as a single class with the holders of common stock.

Dividends

We pay dividends out of retained earnings to the extent we have retained earnings on the date the dividend is declared. If the dividend is in excess of our retained earnings on the declaration date, then the excess is drawn from our additional paid-in capital.

Recently Adopted Accounting Pronouncements

In 2015, we adopted Accounting Standards Update (“ASU”) 2015-03 “Simplifying the Presentation of Debt Issuance Costs” (ASU 2015-03) and ASU 2015-17 “Balance Sheet Classification of Deferred Taxes” (ASU 2015-17). Both ASUs are intended to simplify the presentation of financial formation. ASU 2015-03 requires that debt issuance costs be presented as a reduction in the associated debt rather than as an other asset, net. ASU 2015-17 requires that deferred taxes be presented on a net basis by jurisdiction as either a net noncurrent asset or liability. The ASUs affect neither the timing of expense recognition related to the debt issuance costs nor the timing of income and expense recognition related to deferred income taxes.

We adopted both ASU 2015-03 and 2015-17 by retrospectively applying the requirements of the ASUs to our previously issued consolidated financial statements. The retrospective application had no impact on our net income (loss) or earnings (loss) per share for the years ended December 31, 2014 and 2013, but resulted in the following changes in our previously reported consolidated balance sheet as of December 31, 2014:

- A decrease of \$880 million in Total current assets;
- A decrease of \$164 million in Other assets, net;
- A decrease of \$168 million in Long-term debt; and
- A decrease of \$876 million in Deferred income taxes, net.

The adoption of the ASUs had no impact on our net cash provided by operating activities, but did change the presentation of the adjustments to reconcile net income and changes in other noncurrent assets and liabilities, net for the years ended December 31, 2014 and 2013.

In 2015, we adopted Accounting Standards Update (“ASU”) 2015-07 (“ASU 2015-07”), which retrospectively changed the disclosure requirements for certain investments that are valued based upon net asset value (“NAV”) as a practical expedient. ASU 2015-07 was issued to eliminate diversity among entities on what level in the fair value hierarchy such investments were assigned. Under ASU 2015-07, investments valued using NAV as a practical expedient are no longer assigned to a level in the fair value hierarchy rather the value associated with the investments is disclosed in a reconciliation of the total investments measured at fair value.

For us, the change in disclosure requirements as a result of the adoption of ASU 2015-07, only affects the disclosure of the fair value of our pension and post-retirement plan assets included in footnote 7, "Employee Benefits". ASU 2015-07 results in \$5.749 billion and \$264 million of pension plan and post-retirement plan assets, respectively as of December 31, 2014, not being assigned to a level in the fair value hierarchy but rather disclosed as a separate line added to the fair value hierarchy table to present total plan assets. There was no change in total pension or post-retirement plan assets as of December 31, 2014 due to the adoption of ASU 2015-07.

Recent Accounting Pronouncements

Revenue Recognition

On May 28, 2014, the FASB issued ASU 2014-09, "Revenue from Contracts with Customers" ("ASU 2014-09" or "new standard"). The new standard replaces virtually all existing generally accepted accounting principles ("GAAP") on revenue recognition and replaces them with a principles-based approach for determining revenue recognition using a new five step model. The core principle of ASU 2014-09 is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. ASU 2014-09 also includes new accounting principles related to the deferral and amortization of contract acquisition and fulfillment costs. We currently do not defer any contract acquisition costs and defer contract fulfillment costs only up to the extent of any revenue deferred.

On July 9, 2015, the FASB approved the deferral of the effective date of ASU 2014-09 by one year until January 1, 2018. Early adoption is permitted as of January 1, 2017. ASU 2014-09 may be adopted by applying the provisions of the new standard on a retrospective basis to the periods included in the financial statements or on a modified retrospective basis which would result in the recognition of a cumulative effect of adopting ASU 2014-09 in the first quarter of 2017, if adopting early, otherwise in the first quarter of 2018. We have not yet decided which implementation method we will adopt. We are studying the new standard and are in the early stages of assessing the impact the new standard will have on us and our consolidated financial statements. We cannot at this time, however, provide any estimate of the impact of adopting the new standard.

(2) Goodwill, Customer Relationships and Other Intangible Assets

Goodwill, customer relationships and other intangible assets consisted of the following:

	As of December 31,	
	2015	2014
	(Dollars in millions)	
Goodwill	\$ 20,742	20,755
Customer relationships, less accumulated amortization of \$5,648 and \$4,682	3,928	4,893
Indefinite-life intangible assets	269	268
Other intangible assets subject to amortization		
Capitalized software, less accumulated amortization of \$1,778 and \$1,533	1,248	1,338
Trade names and patents, less accumulated amortization of \$20 and \$196	38	41
Total other intangible assets, net	\$ 1,555	1,647

Total amortization expense for intangible assets for the years ended December 31, 2015, 2014 and 2013 was \$1.353 billion, \$1.470 billion and \$1.589 billion, respectively. As of December 31, 2015, the gross carrying amount of goodwill, customer relationships, indefinite-life and other intangible assets was \$33.671 billion.

We estimate that total amortization expense for intangible assets for the years ending December 31, 2016 through 2020 will be as follows:

	(Dollars in millions)
2016	\$ 1,161
2017	1,056
2018	944
2019	827
2020	726

Our goodwill was derived from numerous acquisitions where the purchase price exceeded the fair value of the net assets acquired.

We assess our goodwill and other indefinite-lived intangible assets for impairment annually, or, under certain circumstances, more frequently, such as when events or changes in circumstances indicate there may be impairment. We are required to write down the value of goodwill only when our assessment determines the recorded amount of goodwill exceeds the fair value. Our annual impairment assessment date for goodwill is October 31, at which date we assessed our reporting units, which are business (excluding wholesale), consumer and wholesale. Our annual impairment assessment date for indefinite-lived intangible assets other than goodwill is December 31.

Our reporting units are not discrete legal entities with discrete financial statements. Our assets and liabilities are employed in and relate to the operations of multiple reporting units. For each reporting unit, we compare its estimated fair value of equity to its carrying value of equity that we assign to the reporting unit. If the estimated fair value of the reporting unit is greater than the carrying value, we conclude that no impairment exists. If the estimated fair value of the reporting unit is less than the carrying value, a second calculation is required in which the implied fair value of goodwill is compared to the carrying value of goodwill that we assigned to the reporting unit. If the implied fair value of goodwill is less than its carrying value, goodwill must be written down to its implied fair value.

At October 31, 2015, we estimated the fair value of our business (excluding wholesale), consumer and wholesale reporting units by considering both a market approach and a discounted cash flow method, which resulted in a Level 3 fair value measurement. The market approach method includes the use of comparable multiples of publicly traded companies whose services are comparable to ours. The discounted cash flow method is based on the present value of projected cash flows and a terminal value, which represents the expected normalized cash flows of the reporting units beyond the cash flows from the discrete projection period. We discounted the estimated cash flows for our consumer and wholesale reporting units using a rate that represents their estimated weighted average cost of capital, which we determined to be approximately 6.0% as of the assessment date (which was comprised of an after-tax cost of debt of 3.3% and a cost of equity of 7.6%). We discounted the estimated cash flows of our business (excluding wholesale) reporting unit using a rate that represents its estimated weighted average cost of capital, which we determined to be approximately 7.0% as of the assessment date (which was comprised of an after-tax cost of debt of 3.3% and a cost of equity of 8.6%). We also reconciled the estimated fair values of the reporting units to our market capitalization as of October 31, 2015 and concluded that the indicated implied control premium of approximately 24.6% was reasonable based on recent transactions in the market place. As of October 31, 2015, based on our assessment performed with respect to these reporting units as described above, we concluded that our goodwill for our three reporting units was not impaired as of that date.

The following table shows the rollforward of goodwill assigned to our reportable segments from December 31, 2013 through December 31, 2015.

	Business	Consumer	Wholesale	Hosting	Total
	(Dollars in millions)				
As of December 31, 2013	\$ 6,363	10,348	3,274	689	20,674
Purchase accounting adjustments	—	—	—	(11)	(11)
November 1, 2014 reorganization	4,022	(70)	(3,274)	(678)	—
Acquisitions	92	—	—	—	92
As of December 31, 2014	\$ 10,477	10,278	—	—	20,755
Purchase accounting and other adjustments	(13)	—	—	—	(13)
As of December 31, 2015	\$ 10,464	10,278	—	—	20,742

During the year ended December 31, 2014, we acquired all of the outstanding stock of two companies for total consideration of \$95 million, net of \$2 million acquired cash and including immaterial future cash payments of which \$92 million was attributed to goodwill and the remainder to various assets and liabilities. During 2015, we finalized the valuations for these acquisitions resulting in a \$14 million decrease in goodwill, a \$13 million increase in other intangible assets and a \$1 million decrease in deferred income taxes, net. The acquisitions were consummated to expand the product offerings of our business segment and therefore the goodwill has been assigned to that segment. The goodwill is attributed primarily to expected future increases in business segment revenue from the sale of new products. The goodwill is not deductible for tax purposes.

The acquisitions did not materially impact the consolidated results of operations from the dates of the acquisitions in 2014 and would not materially impact pro forma results of operations.

For additional information on our segments, see Note 12—Segment Information.

We completed our qualitative assessment of our indefinite-lived intangible assets other than goodwill as of December 31, 2015 and concluded it is more likely than not that our indefinite-lived intangible assets are not impaired; thus, no impairment charge was recorded in 2015.

As of October 31, 2014, based on our assessment performed, we concluded that our goodwill for our then four reporting units was not impaired as of that date. During 2013, one of our previous reporting units experienced slower than previously projected revenues and margin growth and greater than anticipated competitive pressures and as a result, we recorded a non-cash, non-tax-deductible goodwill impairment charge of \$1.092 billion for goodwill assigned to one of our then four reporting units.

(3) Long-Term Debt and Credit Facilities

Long-term debt, including unamortized discounts and premiums and unamortized debt issuance costs, consisted of borrowings by CenturyLink, Inc. and certain of its subsidiaries, including Qwest Corporation, Qwest Capital Funding, Inc. and Embarq Corporation and subsidiaries ("Embarq"), were as follows:

	Interest Rates	Maturities	As of December 31,	
			2015	2014
(Dollars in millions)				
CenturyLink, Inc.				
Senior notes	5.150% - 7.650%	2017 - 2042	\$ 7,975	7,825
Credit facility and revolving line of credit ⁽¹⁾	2.010% - 4.250%	2019	410	725
Term loan	2.180%	2019	358	380
Subsidiaries				
Qwest Corporation				
Senior notes	6.125% - 8.375%	2016 - 2055	7,229	7,311
Term loan	2.180%	2025	100	—
Qwest Capital Funding, Inc.				
Senior notes	6.500% - 7.750%	2018 - 2031	981	981
Embarq Corporation and subsidiaries				
Senior notes	7.082% - 7.995%	2016 - 2036	2,669	2,669
First mortgage bonds	7.125% - 8.770%	2017 - 2025	232	232
Other	9.000%	2019	150	150
Capital lease and other obligations	Various	Various	425	509
Unamortized discounts, net			(125)	(111)
Unamortized debt issuance costs			(179)	(168)
Total long-term debt			20,225	20,503
Less current maturities			(1,503)	(550)
Long-term debt, excluding current maturities			\$ 18,722	19,953

⁽¹⁾ The aggregate amount outstanding on our Credit Facility and revolving line of credit borrowings at December 31, 2015 and 2014 was \$410 million and \$725 million, respectively, with weighted average interest rates of 2.756% and 2.270%, respectively. These amounts change on a regular basis.

New Issuances

2015

On September 21, 2015, Qwest Corporation issued \$400 million aggregate principal amount of 6.625% Notes due 2055, in exchange for net proceeds, after deducting underwriting discounts and other expenses, of approximately \$386 million. The underwriting agreement included an over-allotment option granting the underwriters for the offering an opportunity to purchase additional 6.625% Notes due 2055. On September 30, 2015, Qwest Corporation issued an additional \$10 million aggregate principal amount of the 6.625% Notes under this over-allotment option. All of the 6.625% Notes are unsecured obligations and may be redeemed by Qwest Corporation, in whole or in part, on or after September 15, 2020, at a redemption price equal to 100% of the principal amount redeemed plus accrued and unpaid interest to the redemption date.

On March 19, 2015, CenturyLink, Inc. issued in a private offering \$500 million aggregate principal amount of 5.625% Notes due 2025, in exchange for net proceeds, after deducting underwriting discounts and other expenses, of approximately \$494 million. The Notes are senior unsecured obligations and may be redeemed, in whole or in part, at any time before January 1, 2025 at a redemption price equal to the greater of 100% of the principal amount of the Notes or the sum of the present value of the remaining scheduled payments of principal and interest on the Notes, discounted to the redemption date in the manner described in the Notes, plus accrued and unpaid interest to the redemption date. At any time on or after January 1, 2025, CenturyLink, Inc. may redeem the Notes at par plus accrued and unpaid interest to the redemption date. In addition, at any time on or prior to April 1, 2018, CenturyLink, Inc. may redeem up to 35% of the principal amount of the Notes at a redemption price equal to 105.625% of the principal amount thereof, plus accrued and unpaid interest to the redemption date, with net cash proceeds of certain equity offerings. Under certain circumstances, CenturyLink, Inc. will be required to make an offer to repurchase the Notes at a price of 101% of the aggregate principal amount plus accrued and unpaid interest to the repurchase date. In October 2015, CenturyLink, Inc. exchanged all of the unregistered Notes issued on March 19, 2015 for fully-registered Notes.

2014

On September 29, 2014, Qwest Corporation issued \$500 million aggregate principal amount of 6.875% Notes due 2054, in exchange for net proceeds, after deducting underwriting discounts and other expenses, of \$483 million. The Notes are senior unsecured obligations and may be redeemed, in whole or in part, on or after October 1, 2019, at a redemption price equal to 100% of the principal amount redeemed plus accrued and unpaid interest to the redemption date.

Repayments

2015

On October 13, 2015, Qwest Corporation redeemed all \$250 million of its 7.2% Notes due 2026, which resulted in an immaterial gain, and redeemed \$150 million of its 6.875% Notes due 2033, which resulted in an immaterial loss.

On June 15, 2015, Qwest Corporation paid at maturity the \$92 million principal amount of its 7.625% Notes.

On February 17, 2015, CenturyLink, Inc. paid at maturity the \$350 million principal and accrued and unpaid interest due under its Series M 5.00% Notes.

2014

On October 1, 2014, Qwest Corporation paid at maturity the \$600 million principal amount of its 7.50% Notes.

On April 1, 2014, a subsidiary of Embarq paid at maturity the \$30 million principal amount of its 7.46% first mortgage bonds.

Credit Facility

On December 3, 2014, we amended our existing \$2 billion revolving credit facility to extend the maturity date to December 3, 2019. The amended Credit Facility (the "Credit Facility") has 16 lenders, each with commitments ranging from \$3.5 million to \$198.5 million. The Credit Facility allows us to obtain revolving loans and to issue up to \$400 million of letters of credit, which upon issuance reduce the amount available for other extensions of credit. Interest is assessed on borrowings using either the LIBOR or the base rate (each as defined in the Credit Facility) plus an applicable margin between 1.00% and 2.25% per annum for LIBOR loans and 0.00% and 1.25% per annum for base rate loans depending on our then current senior unsecured long-term debt rating. Our obligations under the Credit Facility are guaranteed by nine of our subsidiaries.

Term Loans, Revolving Line of Credit and Revolving Letter of Credit

On March 13, 2015, CenturyLink, Inc. amended its term loan agreement to reduce the interest rate payable by it thereunder and to modify some covenants to provide additional flexibility.

On February 20, 2015, Qwest Corporation entered into a term loan in the amount of \$100 million with CoBank, ACB. The outstanding unpaid principal amount of this term loan plus any accrued and unpaid interest is due on February 20, 2025. Interest is paid monthly based upon either the London Interbank Offered Rate ("LIBOR") or the base rate (as defined in the credit agreement) plus an applicable margin between 1.50% to 2.50% per annum for LIBOR loans and 0.50% to 1.50% per annum for base rate loans depending on Qwest Corporation's then current senior unsecured long-term debt rating. At December 31, 2015, the outstanding principal balance on this term loan was \$100 million.

In January 2015, CenturyLink, Inc. entered into a \$100 million uncommitted revolving line of credit with one of the lenders under the Credit Facility. The amount available under this uncommitted revolving line of credit is reduced by any amount outstanding under the Credit Facility with the same lender. Interest is paid monthly based upon the LIBOR plus an applicable margin between 1.00% and 2.25% per annum. At December 31, 2015, CenturyLink, Inc. had \$80 million borrowings outstanding under this uncommitted revolving line of credit.

In April 2011, we entered into a \$160 million uncommitted revolving letter of credit facility which enables us to provide letters of credit under terms that may be more favorable than those under the Credit Facility. At December 31, 2015 and 2014, our outstanding letters of credit totaled \$109 million and \$124 million, respectively, under this facility.

Aggregate Maturities of Long-Term Debt

Set forth below is the aggregate principal amount of our long-term debt (excluding unamortized discounts, net and unamortized debt issuance costs) maturing during the following years:

	(Dollars in millions)⁽¹⁾
2016	\$ 1,503
2017	1,501
2018	251
2019	1,160
2020	1,032
2021 and thereafter	15,082
Total long-term debt	\$ 20,529

⁽¹⁾ Actual principal paid in all years may differ due to the possible future refinancing of outstanding debt or the issuance of new debt.

Interest Expense

Interest expense includes interest on long-term debt. The following table presents the amount of gross interest expense, net of capitalized interest:

	Years Ended December 31,		
	2015	2014	2013
	(Dollars in millions)		
Interest expense:			
Gross interest expense	\$ 1,364	1,358	1,339
Capitalized interest	(52)	(47)	(41)
Total interest expense	\$ 1,312	1,311	1,298

Covenants

Certain of our loan agreements contain various restrictions, as described more fully below. Under current circumstances, we believe the covenants currently in effect place no significant restriction on the transfer of funds from our consolidated subsidiaries to CenturyLink.

The senior notes of CenturyLink, Inc. were issued under an indenture dated March 31, 1994. This indenture restricts our ability to (i) incur, issue or create liens upon our property and (ii) consolidate with or merge into, or transfer or lease all or substantially all of our assets to any other party. The indenture does not contain any provisions that are impacted by our credit ratings or that restrict the issuance of new securities in the event of a material adverse change to us. However, if the credit ratings relating to certain of our long-term debt securities issued under this indenture are downgraded in the manner specified thereunder in connection with a "change of control" of CenturyLink, Inc., then we will be required to offer to repurchase such debt securities.

The senior notes of Qwest Corporation were issued under indentures dated April 15, 1990 and October 15, 1999. These indentures contain restrictions on the incurrence of liens and the consummation of certain transactions substantially similar to the above-described covenants in CenturyLink, Inc.'s March 31, 1994 indenture. The senior notes of Qwest Capital Funding, Inc. were issued under an indenture dated June 29, 1998 containing terms substantially similar to those set forth in Qwest Corporation's indentures.

Embarq's senior notes were issued pursuant to an indenture dated as of May 17, 2006. While Embarq is generally prohibited from creating liens on its property unless its senior notes are secured equally and ratably, Embarq can create liens on its property without equally and ratably securing its senior notes so long as the sum of all indebtedness so secured does not exceed 15% of Embarq's consolidated net tangible assets. The indenture contains customary events of default, none of which are impacted by Embarq's credit rating.

None of the above-listed indentures of CenturyLink, Inc., Qwest Corporation, Qwest Capital Funding, Inc. and Embarq contain any financial covenants or restrictions on the ability to issue new securities in accordance with the terms of the indenture.

Several of our Embarq subsidiaries have outstanding first mortgage bonds. Each issue of these first mortgage bonds is secured by substantially all of the property, plant and equipment of the issuing subsidiary. Approximately 10% of our net property, plant and equipment is pledged to secure the long-term debt of subsidiaries.

Under the Credit Facility, we, and our indirect subsidiary, Qwest Corporation, must maintain a debt to EBITDA (earnings before interest, taxes, depreciation and amortization, as defined in our Credit Facility) ratio of not more than 4.0:1.0 and 2.85:1.0, respectively, as of the last day of each fiscal quarter for the four quarters then ended. The Credit Facility also contains a negative pledge covenant, which generally requires us to secure equally and ratably any advances under the Credit Facility if we pledge assets or permit liens on our property for the benefit of other debtholders. The Credit Facility also has a cross payment default provision, and the Credit Facility and certain of our debt securities also have cross acceleration provisions. When present, these provisions could have a wider impact on liquidity than might otherwise arise from a default or acceleration of a single debt instrument. Our debt to EBITDA ratios could be adversely affected by a wide range of events, including unforeseen expenses or contingencies. This could reduce our financing flexibility due to potential restrictions on incurring additional debt under certain provisions of our debt agreements or, in certain circumstances, could result in a default under certain provisions of such agreements.

CenturyLink, Inc. and Qwest Corporation are both indebted under term loans, each of which includes covenants substantially similar to those set forth in the Credit Facility.

At December 31, 2015, we believe we were in compliance with all of the provisions and covenants contained in our Credit Facility and other material debt agreements.

Guarantees

We do not guarantee the debt of any unaffiliated parties, but certain of our subsidiaries guarantee the outstanding senior notes issued by other subsidiaries. In addition, seven of our largest non-regulated subsidiaries guarantee the obligations of (i) CenturyLink, Inc. under the Credit Facility and its term loan and (ii) Qwest Corporation under its term loan.

Subsequent Event

In January 2016, Qwest Corporation issued \$235 million aggregate principal amount of 7% Notes due 2056, in exchange for net proceeds, after deducting underwriting discounts and other expenses, of approximately \$227 million. All of the 7% Notes are unsecured obligations and may be redeemed by Qwest Corporation, in whole or in part, on or after February 1, 2021, at a redemption price equal to 100% of the principal amount redeemed plus accrued and unpaid interest to the redemption date.

(4) Accounts Receivable

The following table presents details of our accounts receivable balances:

	As of December 31,	
	2015	2014
	(Dollars in millions)	
Trade and purchased receivables	\$ 1,789	1,821
Earned and unbilled receivables	288	307
Other	18	22
Total accounts receivable	2,095	2,150
Less: allowance for doubtful accounts	(152)	(162)
Accounts receivable, less allowance	<u>\$ 1,943</u>	<u>1,988</u>

We are exposed to concentrations of credit risk from residential and business customers within our local service area, business customers outside of our local service area and from other telecommunications service providers. We generally do not require collateral to secure our receivable balances. We have agreements with other telecommunications service providers whereby we agree to bill and collect on their behalf for services rendered by those providers to our customers within our local service area. We purchase accounts receivable from other telecommunications service providers primarily on a recourse basis and include these amounts in our accounts receivable balance. We have not experienced any significant loss associated with these purchased receivables.

The following table presents details of our allowance for doubtful accounts:

	Beginning Balance	Additions	Deductions	Ending Balance
	(Dollars in millions)			
2015	\$ 162	177	(187)	152
2014	\$ 155	159	(152)	162
2013	\$ 158	152	(155)	155

(5) Property, Plant and Equipment

Net property, plant and equipment is composed of the following:

	Depreciable Lives	As of December 31,	
		2015	2014
		(Dollars in millions)	
Land	n/a	\$ 571	575
Fiber, conduit and other outside plant ⁽¹⁾	15-45	16,166	15,151
Central office and other network electronics ⁽²⁾	3-10	14,144	13,248
Support assets ⁽³⁾	3-30	7,000	6,578
Construction in progress ⁽⁴⁾	n/a	904	1,166
Gross property, plant and equipment		38,785	36,718
Accumulated depreciation		(20,716)	(18,285)
Net property, plant and equipment		\$ 18,069	18,433

(1) Fiber, conduit and other outside plant consists of fiber and metallic cable, conduit, poles and other supporting structures.

(2) Central office and other network electronics consists of circuit and packet switches, routers, transmission electronics and electronics providing service to customers.

(3) Support assets consist of buildings, data centers, computers and other administrative and support equipment.

(4) Construction in progress includes inventory held for construction and property of the aforementioned categories that has not been placed in service as it is still under construction.

We recorded depreciation expense of \$2.836 billion, \$2.958 billion and \$2.952 billion for the years ended December 31, 2015, 2014 and 2013, respectively.

In 2014, we recorded an impairment charge of \$17 million in connection with a sale-leaseback transaction involving an office building which closed in the fourth quarter of 2014. This impairment charge is included in selling, general and administrative expense in our consolidated statement of operations for the year ended December 31, 2014.

Additionally, in 2014 we sold an office building for \$12 million.

Asset Retirement Obligations

At December 31, 2015, our asset retirement obligations balance was primarily related to estimated future costs of removing equipment from leased properties and estimated future costs of properly disposing of asbestos and other hazardous materials upon remodeling or demolishing buildings. Asset retirement obligations are included in other long-term liabilities on our consolidated balance sheets.

The following table provides asset retirement obligation activity:

	Years Ended December 31,		
	2015	2014	2013
	(Dollars in millions)		
Balance at beginning of year	\$ 107	106	106
Accretion expense	7	7	7
Liabilities incurred	—	6	—
Liabilities settled	(2)	(2)	(4)
Change in estimate	(21)	(10)	(3)
Balance at end of year	\$ 91	107	106

During 2015, 2014 and 2013, we revised our estimates for the cost of removal of network equipment, asbestos remediation, and other obligations by \$21 million, \$10 million and \$3 million, respectively. These revisions resulted in a reduction of the asset retirement obligation and offsetting reduction to gross property, plant and equipment and revisions to assets specifically identified are recorded as a reduction to accretion expense.

(6) Severance and Leased Real Estate

Periodically, we have reductions in our workforce and have accrued liabilities for the related severance costs. These workforce reductions resulted primarily from the progression or completion of our post-acquisition integration plans, increased competitive pressures, cost reduction initiatives and reduced workload demands due to the loss of customers purchasing certain legacy services.

We report severance liabilities within accrued expenses and other liabilities - salaries and benefits in our consolidated balance sheets and report severance expenses in cost of services and products and selling, general and administrative expenses in our consolidated statements of operations. As noted in Note 12—Segment Information, we do not allocate these severance expenses to our segments.

We have recognized liabilities to reflect our estimates of the fair values of the existing lease obligations for real estate for which we have ceased using, net of estimated sublease rentals. Our fair value estimates were determined using discounted cash flow methods. We recognize expense to reflect accretion of the discounted liabilities and periodically, we adjust the expense when our actual subleasing experience differs from our initial estimates. We report the current portion of liabilities for ceased-use real estate leases in accrued expenses and other liabilities-other and report the noncurrent portion in deferred credits and other liabilities in our consolidated balance sheets. We report the related expenses in selling, general and administrative expenses in our consolidated statements of operations. At December 31, 2015, the current and noncurrent portions of our leased real estate accrual were \$9 million and \$71 million, respectively. The remaining lease terms range from 0.3 years to 10 years, with a weighted average of 8 years.

Changes in our accrued liabilities for severance expenses and leased real estate were as follows:

	Severance	Real Estate
	(Dollars in millions)	
Balance at December 31, 2013	\$ 17	113
Accrued to expense	87	1
Payments, net	(78)	(16)
Reversals and adjustments	—	(2)
Balance at December 31, 2014	26	96
Accrued to expense	96	—
Payments, net	(108)	(13)
Reversals and adjustments	—	(3)
Balance at December 31, 2015	\$ 14	80

(7) Employee Benefits

Pension, Post-Retirement and Other Post-Employment Benefits

We sponsor various defined benefit pension plans (qualified and non-qualified), which in the aggregate cover a substantial portion of our employees including legacy CenturyLink, legacy Qwest Communications International, Inc. ("Qwest") and legacy Embarq employees. On December 31, 2014, we merged our existing qualified pension plans, which included merging the Qwest Pension Plan and Embarq Retirement Pension Plan into the CenturyLink Retirement Plan. The CenturyLink Retirement Plan was renamed the CenturyLink Combined Pension Plan ("Combined Plan"). Pension benefits for participants of the new Combined Plan who are represented by a collective bargaining agreement are based on negotiated schedules. All other participants' pension benefits are based on each individual participant's years of service and compensation. We also maintain non-qualified pension plans for certain current and former highly compensated employees. We maintain post-retirement benefit plans that provide health care and life insurance benefits for certain eligible retirees. We also provide other post-employment benefits for eligible former employees. We use a December 31 measurement date for all our plans.

Pension Benefits

Current funding laws require a company with a pension shortfall to fund the annual cost of benefits earned in addition to a seven-year amortization of the shortfall. Our funding policy for our Combined Plan is to make contributions with the objective of accumulating sufficient assets to pay all qualified pension benefits when due under the terms of the plan. The accounting unfunded status of our qualified pension plan was \$2.215 billion and \$2.403 billion as of December 31, 2015 and 2014, respectively.

In 2015, we made a voluntary cash contribution of \$100 million to our qualified pension plan and paid approximately \$6 million of benefits directly to participants of our non-qualified pension plans. Based on current laws and circumstances, we are not required to make any contributions to our qualified pension plan in 2016, but we estimate that we will pay approximately \$5 million of benefits to participants of our non-qualified pension plans.

Our pension plans contain provisions that allow us, from time to time, to offer lump sum payment options to certain former employees in settlement of their future retirement benefits. We record these payments as a settlement only if, in the aggregate, they exceed the sum of the annual service and interest costs for the plan's net periodic pension benefit costs, which represents the settlement threshold. In September 2015, we offered to make cash settlement payments in December 2015 to a group of former employees provided they accepted the offer by the end of October 2015. During the fourth quarter of 2015, we made cash settlement payments for the lump sum offer of approximately \$356 million. The total amount of the lump sum settlement payments for the year ended December 31, 2015, which included the lump sum offer and lump sum elections from employees who terminated employment during the year, was less than the settlement threshold, therefore settlement accounting was not triggered in 2015. On December 8, 2014, lump sum pension settlement payments to terminated, but not-yet-retired legacy Qwest participants was \$460 million, which exceeded the settlement threshold of \$418 million. As a result, we were required to recognize a settlement charge of \$63 million in 2014 to accelerate the recognition of a portion of the previously unrecognized actuarial losses in the qualified pension plan, which has been allocated and reflected in cost of services and products (exclusive of depreciation and amortization) and selling, general and administrative in our consolidated statement of operations for the year ended December 31, 2014. This charge reduced our recorded net income and retained earnings, with an offset to accumulated other comprehensive loss in shareholders' equity. The amount of any future non-cash settlement charges will depend on the level of lump sum benefit payments made in 2016 and beyond.

Post-Retirement Benefits

Our post-retirement benefit plans provide post-retirement benefits to qualified retirees and allow (i) eligible employees retiring before certain dates to receive benefits at no or reduced cost and (ii) eligible employees retiring after certain dates to receive benefits on a shared cost basis. The post-retirement benefits not paid by the trust are funded by us and we expect to continue funding these post-retirement obligations as benefits are paid. The accounting unfunded status of our qualified post-retirement benefit plan was \$3.374 billion and \$3.477 billion as of December 31, 2015 and 2014, respectively.

No contributions were made to the post-retirement trusts in 2015, and we do not expect to make a contribution in 2016. However, in 2015 we paid approximately \$116 million of benefits (net of participant contributions and direct subsidies) that were not payable by the trusts. We estimate that in 2016, we will pay approximately \$137 million of benefits (net of participant contributions and direct subsidies) that are not payable by the trusts.

We expect our health care cost trend rate to decrease between 0.05% to 0.10% per year from 5.00% in 2016 to an ultimate rate of 4.50% in 2025. Our post-retirement benefit expense, for certain eligible legacy Qwest retirees and certain eligible legacy CenturyLink retirees, is capped at a set dollar amount. Therefore, those health care benefit obligations are not subject to increasing health care trends after the effective date of the caps.

A change of 100 basis points in the assumed initial health care cost trend rate would have had the following effects in 2015:

	100 Basis Points Change	
	Increase	(Decrease)
	(Dollars in millions)	
Effect on the aggregate of the service and interest cost components of net periodic post-retirement benefit expense (consolidated statement of operations)	\$ 3	(3)
Effect on benefit obligation (consolidated balance sheet)	73	(68)

Expected Cash Flows

The qualified pension, non-qualified pension and post-retirement health care benefit payments and premiums and life insurance premium payments are paid by us or distributed from plan assets. The estimated benefit payments provided below are based on actuarial assumptions using the demographics of the employee and retiree populations and have been reduced by estimated participant contributions.

	Pension Plans	Post-Retirement Benefit Plans	Medicare Part D Subsidy Receipts
	(Dollars in millions)		
Estimated future benefit payments:			
2016	\$ 1,059	309	(7)
2017	1,010	300	(7)
2018	991	290	(7)
2019	973	283	(7)
2020	954	276	(7)
2021 - 2025	4,433	1,256	(30)

Net Periodic Benefit Expense

The actuarial assumptions used to compute the net periodic benefit expense for our qualified pension, non-qualified pension and post-retirement benefit plans are based upon information available as of the beginning of the year, as presented in the following table.

	Pension Plans			Post-Retirement Benefit Plans		
	2015	2014	2013	2015	2014	2013
Actuarial assumptions at beginning of year:						
Discount rate	3.50% - 4.10%	4.20% - 5.10%	3.50% - 4.20%	3.80%	4.50%	3.60%
Rate of compensation increase	3.25%	3.25%	3.25%	N/A	N/A	N/A
Expected long-term rate of return on plan assets	7.50%	7.50%	7.50%	7.50%	6.00% - 7.50%	6.00% - 7.30%
Initial health care cost trend rate	N/A	N/A	N/A	6.00% / 6.50%	6.00% / 6.50%	6.50% / 7.00%
Ultimate health care cost trend rate	N/A	N/A	N/A	4.50%	4.50%	4.50%
Year ultimate trend rate is reached	N/A	N/A	N/A	2025	2024	2022

N/A-Not applicable

Net periodic (income) expense for our qualified and non-qualified pension plans includes the following components:

	Pension Plans		
	Years Ended December 31,		
	2015	2014	2013
	(Dollars in millions)		
Service cost	\$ 83	77	91
Interest cost	568	602	544
Expected return on plan assets	(898)	(891)	(896)
Settlements	—	63	—
Recognition of prior service cost	5	5	5
Recognition of actuarial loss	161	22	84
Net periodic pension benefit income	<u>\$ (81)</u>	<u>(122)</u>	<u>(172)</u>

Net periodic expense (income) for our post-retirement benefit plans includes the following components:

	Post-Retirement Plans		
	Years Ended December 31,		
	2015	2014	2013
	(Dollars in millions)		
Service cost	\$ 24	22	24
Interest cost	140	159	140
Expected return on plan assets	(21)	(33)	(39)
Recognition of prior service cost	19	20	—
Recognition of actuarial loss	—	—	4
Net periodic post-retirement benefit expense	<u>\$ 162</u>	<u>168</u>	<u>129</u>

We report net periodic benefit (income) expense for our qualified pension, non-qualified pension and post-retirement benefit plans in both cost of services and products and selling, general and administrative expenses on our consolidated statements of operations for the years ended December 31, 2015, 2014 and 2013.

Benefit Obligations

The actuarial assumptions used to compute the funded status for the plans are based upon information available as of December 31, 2015 and 2014 and are as follows:

	Pension Plans		Post-Retirement Benefit Plans	
	December 31,		December 31,	
	2015	2014	2015	2014
Actuarial assumptions at end of year:				
Discount rate	3.50% - 4.50%	3.50% - 4.10%	4.15%	3.80%
Rate of compensation increase	3.25%	3.25%	N/A	N/A
Initial health care cost trend rate	N/A	N/A	5.00% / 5.25%	6.00% / 6.50%
Ultimate health care cost trend rate	N/A	N/A	4.50%	4.50%
Year ultimate trend rate is reached	N/A	N/A	2025	2024

N/A-Not applicable

In 2015, we adopted the revised mortality table and projection scale released by the Society of Actuaries ("SOA"), which decreased the projected benefit obligation of our benefit plans by \$379 million. In 2014, to better reflect the expected lifetimes of our plan participants, we adopted new mortality table for our defined benefit plan. The table used was based on SOA tables and increased the projected benefit obligation by approximately \$1.3 billion. The 2014 increase in the projected obligation was recognized as part of the net actuarial loss and is included in the other comprehensive loss, a portion of which is subject to be amortized over the remaining estimated life of plan participants (approximately 8 years).

The following tables summarize the change in the benefit obligations for the pension and post-retirement benefit plans:

	Pension Plans		
	Years Ended December 31,		
	2015	2014	2013
	(Dollars in millions)		
Change in benefit obligation			
Benefit obligation at beginning of year	\$ 15,042	13,401	14,881
Service cost	83	77	91
Interest cost	568	602	544
Plan amendments	(100)	4	—
Actuarial loss (gain)	(800)	2,269	(1,179)
Settlements	—	(460)	—
Benefits paid by company	(6)	(6)	(5)
Benefits paid from plan assets	(1,438)	(845)	(931)
Benefit obligation at end of year	<u>\$ 13,349</u>	<u>15,042</u>	<u>13,401</u>

	Post-Retirement Benefit Plans		
	Years Ended December 31,		
	2015	2014	2013
	(Dollars in millions)		
Change in benefit obligation			
Benefit obligation at beginning of year	\$ 3,830	3,688	4,075
Service cost	24	22	24
Interest cost	140	159	140
Participant contributions	57	69	96
Plan amendments	—	23	141
Direct subsidy receipts	8	9	13
Actuarial loss (gain)	(148)	245	(399)
Benefits paid by company	(181)	(166)	(266)
Benefits paid from plan assets	(163)	(219)	(136)
Benefit obligation at end of year	<u>\$ 3,567</u>	<u>3,830</u>	<u>3,688</u>

Our aggregate benefit obligation as of December 31, 2015, 2014 and 2013 was \$16.916 billion, \$18.872 billion and \$17.089 billion, respectively.

Plan Assets

We maintain plan assets for our qualified pension plan and certain post-retirement benefit plans. The qualified pension plan's assets are used for the payment of pension benefits and certain eligible plan expenses. The post-retirement benefit plan's assets are used to pay health care benefits and premiums on behalf of eligible retirees and to pay certain eligible plan expenses. The expected rate of return on plan assets is the long-term rate of return we expect to earn on the plans' assets, net of administrative expenses paid from plan assets. The rate of return is determined by the strategic allocation of plan assets and the long-term risk and return forecast for each asset class. The forecasts for each asset class are generated primarily from an analysis of the long-term expectations of various third party investment management organizations. The expected rate of return on plan assets is reviewed annually and revised, as necessary, to reflect changes in the financial markets and our investment strategy.

The following tables summarize the change in the fair value of plan assets for the pension and post-retirement benefit plans:

	Pension Plans		
	Years Ended December 31,		
	2015	2014	2013
	(Dollars in millions)		
Change in plan assets			
Fair value of plan assets at beginning of year	\$ 12,571	12,346	12,321
Return on plan assets	(161)	1,373	810
Employer contributions	100	157	146
Settlements	—	(460)	—
Benefits paid from plan assets	(1,438)	(845)	(931)
Fair value of plan assets at end of year	<u>\$ 11,072</u>	<u>12,571</u>	<u>12,346</u>

	Post-Retirement Benefit Plans		
	Years Ended December 31,		
	2015	2014	2013
	(Dollars in millions)		
Change in plan assets			
Fair value of plan assets at beginning of year	\$ 353	535	626
Return on plan assets	3	37	45
Benefits paid from plan assets	(163)	(219)	(136)
Fair value of plan assets at end of year	<u>\$ 193</u>	<u>353</u>	<u>535</u>

Pension Plans: Our investment objective for the qualified pension plan assets is to achieve an attractive risk-adjusted return over time that will provide for the payment of benefits and minimize the risk of large losses. Our pension plan investment strategy is designed to meet this objective by broadly diversifying plan assets across numerous strategies with differing expected returns, volatilities and correlations. The pension plan assets have target allocations of 45% to interest rate sensitive investments and 55% to investments designed to provide higher expected returns than the interest rate sensitive investments. Interest rate sensitive investments include 30% of plan assets targeted primarily to long-duration investment grade bonds, 10% targeted to high yield and emerging market bonds and 5% targeted to diversified strategies, which primarily have exposures to global bonds, as well as some exposures to global stocks and commodities. Assets expected to provide higher returns than the interest rate sensitive assets include broadly diversified equity investments with targets of approximately 15% to U.S. equity markets and 15% to non-U.S. developed and emerging markets. Approximately 7% is targeted to broadly diversified multi-asset class strategies that have the flexibility to adjust exposures to different asset classes. Approximately 10% is allocated to private markets investments including funds primarily invested in private equity, private debt and hedge funds. Real estate investments are targeted at 8% of plan assets. At the beginning of 2016, our expected annual long-term rate of return on pension assets before consideration of administrative expenses is assumed to be 7.5%. However, projected increases in PBGC (Pension Benefit Guaranty Corporation) premium rates have now become large enough to reduce the annual long-term expected return net of administrative expenses to 7.0%.

Our non-qualified pension plans are not funded. We pay benefits directly to the participants of these plans.

Post-Retirement Benefit Plans: Our investment objective for the post-retirement benefit plans' assets is to achieve an attractive risk-adjusted return and minimize the risk of large losses over the expected life of the assets. Investment risk is managed by broadly diversifying assets across numerous strategies with differing expected returns, volatilities and correlations. Our investment strategy is designed to be consistent with the investment objective, with particular focus on providing liquidity for the reimbursement of our union-represented employees' post-retirement health care costs. The liquid post-retirement benefit plan assets (excluding private market investments) have target allocations of 20% to equities and 80% to non-equity investments. Specific target allocations within these broad categories are allowed to vary to meet reimbursement requirements. Liquid equity investments are broadly diversified with exposure to publicly traded U.S., non-U.S. and emerging market stocks. The 80% non-equity allocation includes investment grade bonds, real estate, hedge funds and diversified strategies. While no new private market investments have been made in recent years, the percent allocation to existing private market investments is expected to increase as liquid, publicly traded stocks are drawn down for the reimbursement of health care costs. At the beginning of 2016, our expected annual long-term rate of return on post-retirement benefit plan assets is assumed to be 7.0%.

Permitted investments: Plan assets are managed consistent with the restrictions set forth by the Employee Retirement Income Security Act of 1974, as amended, which requires diversification of assets and also generally prohibits defined benefit and welfare plans from investing more than 10% of their assets in securities issued by the sponsor company. At December 31, 2015 and 2014, the pension and post-retirement benefit plans did not directly own any shares of our common stock or any of our debt.

Derivative instruments: Derivative instruments are used to reduce risk as well as provide return. The pension and post-retirement benefit plans use exchange traded futures and swaps to gain exposure to equity and interest rate markets consistent with target asset allocations and to reduce risk relative to measurement of the benefit obligation, which is sensitive to interest rate changes. Foreign exchange forward contracts are used to manage currency exposures. Credit default swaps are used to manage credit risk exposures in a cost effective and targeted manner relative to transacting with physical corporate fixed income securities. Options are currently used to manage interest rate exposure taking into account the implied volatility and current pricing of the specific underlying market instrument. Some derivative instruments subject the plans to counterparty risk. The external investment managers, along with Plan Management, monitor counterparty exposure and mitigate this risk by diversifying the exposure among multiple high credit quality counterparties, requiring collateral and limiting exposure by periodically settling contracts.

The gross notional exposure of the derivative instruments directly held by the plans is shown below. The notional amount of the derivatives corresponds to market exposure but does not represent an actual cash investment.

	Gross Notional Exposure			
	Pension Plans		Post-Retirement Benefit Plans	
	Years Ended December 31,			
	2015	2014	2015	2014
	(Dollars in millions)			
Derivative instruments:				
Exchange-traded U.S. equity futures	\$ 79	134	—	7
Exchange-traded Treasury and other interest rate futures	1,767	2,451	—	—
Interest rate swaps	550	579	—	—
Credit default swaps	189	382	—	—
Foreign exchange forwards	992	1,195	—	13
Options	285	529	—	—

Fair Value Measurements: Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between independent and knowledgeable parties who are willing and able to transact for an asset or liability at the measurement date. We use valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs when determining fair value and then we rank the estimated values based on the reliability of the inputs used following the fair value hierarchy set forth by the FASB. For additional information on the fair value hierarchy, see Note 10—Fair Value Disclosure.

At December 31, 2015, we used the following valuation techniques to measure fair value for assets. There were no changes to these methodologies during 2015:

- Level 1—Assets were valued using the closing price reported in the active market in which the individual security was traded.
- Level 2—Assets were valued using quoted prices in markets that are not active, broker dealer quotations, net asset value of shares held by the plans and other methods by which all significant inputs were observable at the measurement date.
- Level 3—Assets were valued using unobservable inputs in which little or no market data exists as reported by the respective institutions at the measurement date.

The tables below present the fair value of plan assets by category and the input levels used to determine those fair values at December 31, 2015. It is important to note that the asset allocations do not include market exposures that are gained with derivatives. Investments include dividend and interest receivables, pending trades and accrued expenses.

	Level 1	Level 2	Level 3	Total
	(Dollars in millions)			
Investment grade bonds (a)	\$ 841	1,045	—	\$ 1,886
High yield bonds (b)	—	544	13	557
Emerging market bonds (c)	208	232	1	441
Convertible bonds (d)	—	2	—	2
U.S. stocks (f)	1,201	—	—	1,201
Non-U.S. stocks (g)	1,127	1	—	1,128
Multi-asset strategies (m)	376	—	—	376
Derivatives (n)	2	(6)	—	(4)
Cash equivalents and short-term investments (o)	—	192	—	192
Total investments, excluding investments valued at NAV	\$ 3,755	2,010	14	5,779
Investments valued at NAV				5,293
Total pension plan assets				\$ 11,072

	Level 1	Level 2	Level 3	Total
	(Dollars in millions)			
Investment grade bonds (a)	\$ 2	1	—	\$ 3
High yield bonds (b)	—	1	—	1
U.S. stocks (f)	16	—	—	16
Non-U.S. stocks (g)	12	—	—	12
Emerging market stocks (h)	4	—	—	4
Cash equivalents and short-term investments (o)	—	4	—	4
Total investments, excluding investments valued at NAV	\$ 34	6	—	40
Investments valued at NAV				153
Total post-retirement plan assets				\$ 193

The tables below present the fair value of plan assets by category and the input levels used to determine those fair values at December 31, 2014. It is important to note that the asset allocations do not include market exposures that are gained with derivatives. Investments include dividend and interest receivable, pending trades and accrued expenses.

Fair Value of Pension Plan Assets at December 31, 2014

	Level 1	Level 2	Level 3	Total
(Dollars in millions)				
Investment grade bonds (a)	\$ 1,068	1,278	—	\$ 2,346
High yield bonds (b)	—	647	7	654
Emerging market bonds (c)	208	407	—	615
Convertible bonds (d)	—	4	—	4
U.S. stocks (f)	1,389	1	—	1,390
Non-U.S. stocks (g)	1,169	1	—	1,170
Derivatives (n)	2	15	—	17
Cash equivalents and short-term investments (o)	—	626	—	626
Total investments, excluding investments valued at NAV	<u>\$ 3,836</u>	<u>2,979</u>	<u>7</u>	<u>6,822</u>
Investments valued at NAV				5,749
Total pension plan assets				<u>\$ 12,571</u>

**Fair Value of Post-Retirement Plan Assets
at December 31, 2014**

	Level 1	Level 2	Level 3	Total
(Dollars in millions)				
Investment grade bonds (a)	\$ 5	1	—	\$ 6
High yield bonds (b)	—	1	—	1
U.S. stocks (f)	35	—	—	35
Non-U.S. stocks (g)	33	—	—	33
Emerging market stocks (h)	6	—	—	6
Cash equivalents and short-term investments (o)	—	8	—	8
Total investments, excluding investments valued at NAV	<u>\$ 79</u>	<u>10</u>	<u>—</u>	<u>89</u>
Investments valued at NAV				264
Total post-retirement plan assets				<u>\$ 353</u>

The table below presents the fair value of plan assets valued at NAV by category for our pension and post-retirement plans at December 31, 2015 and 2014. See Note 1 - Basis of Presentation and Summary of Significant Accounting Policies for additional information regarding the 2015 adoption of ASU 2015-07.

	Fair Value of Plan Assets Valued at NAV			
	Pension Plans at December 31,		Post-Retirement Benefit Plans at December 31,	
	2015	2014	2015	2014
	(Dollars in millions)			
Investment grade bonds (a)	\$ 115	148	35	71
High yield bonds (b)	512	860	1	14
Emerging market bonds (c)	9	27	—	—
Convertible bonds (d)	—	10	—	—
Diversified strategies (e)	516	718	54	89
U.S. stocks (f)	70	86	—	—
Non-U.S. stocks (g)	289	384	—	—
Emerging market stocks (h)	64	102	—	—
Private equity (i)	526	673	21	28
Private debt (j)	371	394	2	3
Market neutral hedge funds (k)	825	1,026	17	25
Directional hedge funds (k)	594	558	1	1
Real estate (l)	968	699	20	28
Multi-asset strategies (m)	386	—	—	—
Cash equivalents and short-term investments (o)	48	64	2	5
Total investments valued at NAV	\$ 5,293	5,749	153	264

The plans' assets are invested in various asset categories utilizing multiple strategies and investment managers. For several of the investments in the tables above and discussed below, the plans own units in commingled funds and limited partnerships that invest in various types of assets. Interests in commingled funds are valued using the net asset value ("NAV") per unit of each fund. The NAV reported by the fund manager is based on the market value of the underlying investments owned by each fund, minus its liabilities, divided by the number of shares outstanding. Commingled funds can be redeemed at NAV within a year of the financial statement date. Investments in limited partnerships represent long-term commitments with a fixed maturity date, typically ten years and are also valued at NAV. Valuation inputs for these limited partnership interests are generally based on assumptions and other information not observable in the market. The assumptions and valuation methodologies of the pricing vendors, account managers, fund managers and partnerships are monitored and evaluated for reasonableness. Below is an overview of the asset categories, the underlying strategies and valuation inputs used to value the assets in the preceding tables:

(a) *Investment grade bonds* represent investments in fixed income securities as well as commingled bond funds comprised of U.S. Treasury securities, agencies, corporate bonds, mortgage-backed securities, asset-backed securities and commercial mortgage-backed securities. Treasury securities are valued at the bid price reported in the active market in which the security is traded and are classified as Level 1. The valuation inputs of other investment grade bonds primarily utilize observable market information and are based on a spread to U.S. Treasury securities and consider yields available on comparable securities of issuers with similar credit ratings. The primary observable inputs include references to the new issue market for similar securities, the secondary trading markets and dealer quotes. Option adjusted spread models are utilized to evaluate securities such as asset backed securities that have early redemption features. These securities are classified as Level 2. The commingled funds are valued at NAV based on the market value of the underlying fixed income securities using the same valuation inputs described above.

(b) *High yield bonds* represent investments in below investment grade fixed income securities as well as commingled high yield bond funds. The valuation inputs for the securities primarily utilize observable market information and are based on a spread to U.S. Treasury securities and consider yields available on comparable securities of issuers with similar credit ratings. These securities are primarily classified as Level 2. The commingled funds are valued at NAV based on the market value of the underlying high yield instruments using the same valuation inputs described above.

(c) *Emerging market bonds* represent investments in securities issued by governments and other entities located in developing countries as well as registered mutual funds and commingled emerging market bond funds. The valuation inputs for the securities utilize observable market information and are primarily based on dealer quotes or a spread relative to the local government bonds. The registered mutual fund is classified as Level 1 while individual securities are classified as Level 2. The commingled funds are valued at NAV based on the market value of the underlying emerging market bonds using the same valuation inputs described above.

(d) *Convertible bonds* primarily represent investments in corporate debt securities that have features that allow the debt to be converted into equity securities under certain circumstances. The valuation inputs for the individual convertible bonds primarily utilize observable market information including a spread to U.S. Treasuries and the value and volatility of the underlying equity security. Convertible bonds are classified as Level 2.

(e) *Diversified strategies* represent an investment in a commingled fund that primarily has exposures to global government, corporate and inflation linked bonds, global stocks and commodities. The commingled fund is valued at NAV based on the market value of the underlying investments. The valuation inputs utilize observable market information including published prices for exchange traded securities, bid prices for government bonds, and spreads and yields available for comparable fixed income securities with similar credit ratings.

(f) *U.S. stocks* represent investments in stocks of U.S. based companies as well as commingled U.S. stock funds. The valuation inputs for U.S. stocks are based on the last published price reported on the major stock market on which the securities are traded and are classified as Level 1. The commingled funds are valued at NAV based on the market value of the underlying investments using the same valuation inputs described above.

(g) *Non-U.S. stocks* represent investments in stocks of companies based in developed countries outside the U.S. as well as commingled funds. The valuation inputs for non-U.S. stocks are based on the last published price reported on the major stock market on which the securities are traded and are primarily classified as Level 1. The commingled funds are valued at NAV based on the market value of the underlying investments using the same valuation inputs described above.

(h) *Emerging market stocks* represent investments in a registered mutual fund and commingled funds comprised of stocks of companies located in developing markets. Registered mutual funds trade at the daily NAV, as determined by the market value of the underlying investments, and are classified as Level 1. The commingled funds are valued at NAV based on the market value of the underlying investments using the same valuation inputs described previously for individual stocks.

(i) *Private equity* represents non-public investments in domestic and foreign buy out and venture capital funds. Private equity funds are structured as limited partnerships and are valued according to the valuation policy of each partnership, subject to prevailing accounting and other regulatory guidelines. The partnerships are valued at NAV using valuation methodologies that give consideration to a range of factors, including but not limited to the price at which investments were acquired, the nature of the investments, market conditions, trading values on comparable public securities, current and projected operating performance, and financing transactions subsequent to the acquisition of the investments. These valuation methodologies involve a significant degree of judgment.

(j) *Private debt* represents non-public investments in distressed or mezzanine debt funds. Mezzanine debt instruments are debt instruments that are subordinated to other debt issues and may include embedded equity instruments such as warrants. Private debt funds are structured as limited partnerships and are valued at NAV according to the valuation policy of each partnership, subject to prevailing accounting and other regulatory guidelines. The valuation of underlying fund investments are based on factors including the issuer's current and projected credit worthiness, the security's terms, reference to the securities of comparable companies, and other market factors. These valuation methodologies involve a significant degree of judgment.

(k) *Market neutral hedge funds* hold investments in a diversified mix of instruments that are intended in combination to exhibit low correlations to market fluctuations. These investments are typically combined with futures to achieve uncorrelated excess returns over various markets. *Directional hedge funds*—This asset category represents investments that may exhibit somewhat higher correlations to market fluctuations than the market neutral hedge funds. Investments in hedge funds include both direct investments and investments in diversified funds of funds. Hedge Funds are valued at NAV based on the market value of the underlying investments which include publicly traded equity and fixed income securities and privately negotiated debt securities. The hedge funds are valued by third party administrators using the same valuation inputs previously described.

(l) *Real estate* represents investments in commingled funds and limited partnerships that invest in a diversified portfolio of real estate properties. These investments are valued at NAV according to the valuation policy of each fund or partnership, subject to prevailing accounting and other regulatory guidelines. The valuation inputs of the underlying properties are generally based on third-party appraisals that use comparable sales or a projection of future cash flows to determine fair value.

(m) *Multi-asset strategies* is a new allocation in 2015 and represents broadly diversified strategies that have the flexibility to tactically adjust exposures to different asset classes through time. This asset category includes investments in a registered mutual fund which is classified as Level 1 and a commingled fund which is valued at NAV based on the market value of the underlying investments.

(n) *Derivatives* include exchange traded futures contracts which are classified as Level 1, as well as privately negotiated over-the-counter swaps and options that are valued based on the change in interest rates or a specific market index and are classified as Level 2. The market values represent gains or losses that occur due to fluctuations in interest rates, foreign currency exchange rates, security prices, or other factors.

(o) *Cash equivalents and short-term investments* represent investments that are used in conjunction with derivatives positions or are used to provide liquidity for the payment of benefits or other purposes. The valuation inputs of securities are based on a spread to U.S. Treasury Bills, the Federal Funds Rate, or London Interbank Offered Rate and consider yields available on comparable securities of issuers with similar credit ratings and are classified as Level 2. The commingled funds are valued at NAV based on the market value of the underlying investments using the same valuation inputs described above.

Concentrations of Risk: Investments, in general, are exposed to various risks, such as significant world events, interest rate, credit, foreign currency and overall market volatility risk. These risks are managed by broadly diversifying assets across numerous asset classes and strategies with differing expected returns, volatilities and correlations. Risk is also broadly diversified across numerous market sectors and individual companies. Financial instruments that potentially subject the plans to concentrations of counterparty risk consist principally of investment contracts with high quality financial institutions. These investment contracts are typically collateralized obligations and/or are actively managed, limiting the amount of counterparty exposure to any one financial institution. Although the investments are well diversified, the value of plan assets could change materially depending upon the overall market volatility, which could affect the funded status of the plans.

The table below presents a rollforward of the pension plan assets valued using Level 3 inputs:

	Pension Plan Assets Valued Using Level 3 Inputs		
	High Yield Bonds	Emerging Market Bonds	Total
	(Dollars in millions)		
Balance at December 31, 2013	\$ —	—	—
Net transfers	6	—	6
Acquisitions	1	—	1
Dispositions	(3)	—	(3)
Actual return on plan assets:			
Gains relating to assets sold during the year	4	—	4
(Losses) gains relating to assets still held at year-end	(1)	—	(1)
Balance at December 31, 2014	7	—	7
Net transfers	4	1	5
Acquisitions	4	—	4
Dispositions	(2)	—	(2)
Actual return on plan assets:			
Gains relating to assets sold during the year	—	—	—
(Losses) gains relating to assets still held at year-end	—	—	—
Balance at December 31, 2015	\$ 13	1	14

Certain gains and losses are allocated between assets sold during the year and assets still held at year-end based on transactions and changes in valuations that occurred during the year. These allocations also impact our calculation of net acquisitions and dispositions.

For the year ended December 31, 2015, the investment program produced actual losses on qualified pension and post-retirement plan assets of \$158 million as compared to expected returns of \$919 million for a difference of \$1.077 billion. For the year ended December 31, 2014, the investment program produced actual gains on pension and post-retirement plan assets of \$1.410 billion as compared to the expected returns of \$924 million for a difference of \$486 million. The short-term annual returns on plan assets will almost always be different from the expected long-term returns and the plans could experience net gains or losses, due primarily to the volatility occurring in the financial markets during any given year.

Unfunded Status

The following table presents the unfunded status of the pensions and post-retirement benefit plans:

	Pension Plans		Post-Retirement Benefit Plans	
	Years Ended December 31,		Years Ended December 31,	
	2015	2014	2015	2014
	(Dollars in millions)			
Benefit obligation	\$ (13,349)	(15,042)	(3,567)	(3,830)
Fair value of plan assets	11,072	12,571	193	353
Unfunded status	<u>(2,277)</u>	<u>(2,471)</u>	<u>(3,374)</u>	<u>(3,477)</u>
Current portion of unfunded status	\$ (5)	(6)	(135)	(134)
Non-current portion of unfunded status	\$ (2,272)	(2,465)	(3,239)	(3,343)

The current portion of our post-retirement benefit obligations is recorded on our consolidated balance sheets in accrued expenses and other current liabilities-salaries and benefits.

Accumulated Other Comprehensive Loss-Recognition and Deferrals

The following tables present cumulative items not recognized as a component of net periodic benefits expense as of December 31, 2014, items recognized as a component of net periodic benefits expense in 2015, additional items deferred during 2015 and cumulative items not recognized as a component of net periodic benefits expense as of December 31, 2015. The items not recognized as a component of net periodic benefits expense have been recorded on our consolidated balance sheets in accumulated other comprehensive loss:

	As of and for the Years Ended December 31,				2015
	2014	Recognition of Net Periodic Benefits Expense	Deferrals	Net Change in AOCL	
	(Dollars in millions)				
Accumulated other comprehensive loss:					
Pension plans:					
Net actuarial (loss) gain	\$ (2,760)	161	(258)	(97)	(2,857)
Prior service (cost) benefit	(32)	5	99	104	72
Deferred income tax benefit (expense)	1,072	(63)	61	(2)	1,070
Total pension plans	<u>(1,720)</u>	<u>103</u>	<u>(98)</u>	<u>5</u>	<u>(1,715)</u>
Post-retirement benefit plans:					
Net actuarial (loss) gain	(277)	—	130	130	(147)
Prior service (cost) benefit	(166)	19	—	19	(147)
Deferred income tax benefit (expense)	171	(7)	(50)	(57)	114
Total post-retirement benefit plans	<u>(272)</u>	<u>12</u>	<u>80</u>	<u>92</u>	<u>(180)</u>
Total accumulated other comprehensive loss	\$ <u>(1,992)</u>	<u>115</u>	<u>(18)</u>	<u>97</u>	<u>(1,895)</u>

The following table presents estimated items to be recognized in 2016 as a component of net periodic benefit expense of the pension, non-qualified pension and post-retirement benefit plans:

	Pension Plans	Post-Retirement Plans
	(Dollars in millions)	
Estimated recognition of net periodic benefit (cost)/income in 2016:		
Net actuarial loss	\$ (168)	—
Prior service (cost)/income	8	(20)
Deferred income tax benefit	61	8
Estimated net periodic benefit expense to be recorded in 2016 as a component of other comprehensive income (loss)	<u>\$ (99)</u>	<u>(12)</u>

Medicare Prescription Drug, Improvement and Modernization Act of 2003

We sponsor post-retirement health care plans with several benefit options that provide prescription drug benefits that we deem actuarially equivalent to or exceeding Medicare Part D. We recognize the impact of the federal subsidy received under the Medicare Prescription Drug, Improvement and Modernization Act of 2003 in the calculation of our post-retirement benefit obligation and net periodic post-retirement benefit expense.

Other Benefit Plans

Health Care and Life Insurance

We provide health care and life insurance benefits to essentially all of our active employees. We are largely self-funded for the cost of the health care plan. Our health care benefit expense for current employees was \$381 million, \$381 million and \$362 million for the years ended December 31, 2015, 2014 and 2013, respectively. Union-represented employee benefits are based on negotiated collective bargaining agreements. Employees contributed \$125 million, \$136 million and \$117 million for the years ended December 31, 2015, 2014 and 2013, respectively. Our group basic life insurance plans are fully insured and the premiums are paid by us.

401(k) Plans

We sponsor qualified defined contribution plans covering substantially all of our employees. Under these plans, employees may contribute a percentage of their annual compensation up to certain maximums, as defined by the plans and by the Internal Revenue Service ("IRS"). Currently, we match a percentage of employee contributions in cash. At both December 31, 2015 and 2014, the assets of the plans included approximately 8 million shares of our common stock as a result of the combination of previous employer match and participant directed contributions. We recognized expenses related to these plans of \$83 million, \$81 million and \$89 million and for the years ended December 31, 2015, 2014 and 2013, respectively.

Deferred Compensation Plans

We sponsored non-qualified unfunded deferred compensation plans for various groups that included certain of our current and former highly compensated employees. The value of liabilities related to these plans was not significant.

(8) Share-based Compensation

We maintain equity programs that allow our Board of Directors (through its Compensation Committee or our Chief Executive Officer as its delegate) to grant incentives to certain employees and our outside directors in any one or a combination of several forms, including incentive and non-qualified stock options, stock appreciation rights, restricted stock awards, restricted stock units and market and performance shares. Stock options generally expire ten years from the date of grant. Until June 30, 2014, we offered an employee stock purchase plan, which allowed eligible employees to purchase our common stock at a 15% discount based on the lower of the beginning or ending stock price during recurring six month offering periods.

Stock Options

The following table summarizes activity involving stock option awards for the year ended December 31, 2015:

	Number of Options (in thousands)	Weighted- Average Exercise Price
Outstanding and Exercisable at December 31, 2014	4,106	\$ 37.99
Exercised	(335)	26.00
Forfeited/Expired	(246)	30.33
Outstanding and Exercisable at December 31, 2015	3,525	39.67

The aggregate intrinsic value of our options outstanding and exercisable at December 31, 2015 was \$1 million. The weighted average remaining contractual term for such options was 1.9 years.

During 2015, we received net cash proceeds of \$9 million in connection with our option exercises. The tax benefit realized from these exercises was \$1 million. The total intrinsic value of options exercised for the years ended December 31, 2015, 2014 and 2013, was \$4 million, \$9 million and \$11 million, respectively.

Restricted Stock Awards

For equity based awards that contain only service conditions for vesting, we calculate the award fair value based on the closing stock price on the accounting grant date. For equity based restricted stock awards that contain market conditions, the award fair value is calculated through Monte-Carlo simulations.

During the first quarter of 2015, we granted approximately 496 thousand shares of restricted stock to certain executive-level employees as part of our long-term incentive program, of which approximately 198 thousand contained only service conditions and will vest on a straight-line basis on February 23, 2016, 2017 and 2018. The remaining awards contain market and service conditions and are scheduled to vest on February 23, 2018. These shares, with market and service conditions, represent only the target for the award, as each recipient has the opportunity to ultimately receive a number of shares between 0% and 200% of the target restricted stock award depending on our total shareholder return versus that of selected peer companies for 2015, 2016 and 2017.

At the end of the first quarter of 2015, we granted approximately 1.2 million shares to certain key employees as part of our annual equity compensation program. These awards contained only service conditions and will vest on a straight-line basis on March 12, 2016, 2017 and 2018. During the third quarter of 2015 we granted shares to certain key employees as part of our long-term equity retention program. These awards will vest over a three to seven year period with approximately 193 thousand, 423 thousand and 230 thousand shares vesting on August 14, 2018, 2020 and 2022, respectively, and 55 thousand shares vesting equally on August 14, 2017, 2019, and 2021. The remaining awards granted throughout 2015 to certain other key employees and our outside directors were made as part of our equity compensation and retention programs. These awards require only service conditions for vesting and typically vest equally over a three year period.

During the first quarter of 2014, we granted approximately 440 thousand shares of restricted stock to certain executive-level employees as part of our long-term incentive program, of which approximately 250 thousand contained only service conditions and will vest on a straight-line basis on February 20, 2015, 2016 and 2017. The remaining awards contain market and service conditions and are scheduled to vest on February 20, 2017. These shares, with market and service conditions, represent only the target for the award, as each recipient has the opportunity to ultimately receive a number of shares between 0% and 200% of the target restricted stock award depending on our total shareholder return versus that of selected peer companies for 2014, 2015 and 2016.

During the second quarter of 2014, we granted approximately 1.5 million shares to certain key employees as part of our annual equity compensation program. These awards contained only service conditions and will vest on a straight-line basis on March 26, 2015, 2016 and 2017. During the third quarter of 2014 we granted shares to certain key employees as part of our long-term equity retention program. These awards will vest over a three to seven year period with approximately 105 thousand, 325 thousand and 220 thousand vesting on August 4, 2017, 2019 and 2021, respectively. The remaining awards granted throughout 2014 to certain other key employees and our outside directors were made as part of our equity compensation and retention programs. These awards require only service conditions for vesting and typically vest equally over a three year period.

During the second quarter of 2013, we granted approximately 335 thousand shares of restricted stock to certain executive-level employees as part of our long-term incentive program, of which approximately 223 thousand contained only service conditions and are scheduled to vest on a straight-line basis on May 23, 2014, 2015 and 2016. The remaining awards contain market and service conditions and will vest on May 23, 2016. These shares, with market and service conditions, represent only the target for the award as each recipient has the opportunity to ultimately receive a number of shares between 0% and 200% of the target restricted stock award depending on, our total shareholder return versus that of selected peer companies for 2013, 2014 and 2015.

In addition, during the first and second quarter of 2013, we granted approximately 1.2 million shares to certain key employees as part of our annual equity compensation program. These awards contained only service conditions. The remaining awards granted throughout 2013 to certain other key employees and our outside directors were made as part of our equity compensation and retention programs. These awards require only service conditions for vesting and typically vest equally over a three year period.

The following table summarizes activity involving restricted stock and restricted stock unit awards for the year ended December 31, 2015:

	Number of Shares	Weighted- Average Grant Date Fair Value
	(in thousands)	
Non-vested at December 31, 2014	4,400	\$ 36.59
Granted	2,904	31.83
Vested	(1,724)	35.71
Forfeited	(678)	38.95
Non-vested at December 31, 2015	4,902	33.86

During 2014, we granted 2.9 million shares of restricted stock and restricted stock unit awards at a weighted-average price of \$35.87. The total fair value of restricted stock that vested during 2015, 2014 and 2013, was \$59 million, \$53 million and \$52 million, respectively.

Compensation Expense and Tax Benefit

We recognize compensation expense related to our market and performance share-based awards with graded vesting that only have a service condition on a straight-line basis over the requisite service period for the entire award. Total compensation expense for all share-based payment arrangements for the years ended December 31, 2015, 2014 and 2013, was \$73 million, \$75 million and \$63 million, respectively. Our tax benefit recognized in the consolidated statements of operations for our share-based payment arrangements for the years ended December 31, 2015, 2014 and 2013, was \$28 million, \$29 million and \$25 million, respectively. At December 31, 2015, there was \$113 million of total unrecognized compensation expense related to our share-based payment arrangements, which we expect to recognize over a weighted-average period of 2.5 years.

(9) Earnings (Loss) Per Common Share

Basic and diluted earnings (loss) per common share for the years ended December 31, 2015, 2014 and 2013 were calculated as follows:

	Years Ended December 31,		
	2015	2014	2013
	(Dollars in millions, except per share amounts, shares in thousands)		
Income (Loss) (Numerator):			
Net income (loss)	\$ 878	772	(239)
Earnings applicable to non-vested restricted stock	—	—	—
Net income (loss) applicable to common stock for computing basic earnings (loss) per common share	878	772	(239)
Net income (loss) as adjusted for purposes of computing diluted earnings (loss) per common share	\$ 878	772	(239)
Shares (Denominator):			
Weighted average number of shares:			
Outstanding during period	559,260	572,748	604,404
Non-vested restricted stock	(4,982)	(4,313)	(3,512)
Weighted average shares outstanding for computing basic earnings (loss) per common share	554,278	568,435	600,892
Incremental common shares attributable to dilutive securities:			
Shares issuable under convertible securities	10	10	—
Shares issuable under incentive compensation plans	805	1,294	—
Number of shares as adjusted for purposes of computing diluted earnings (loss) per common share	555,093	569,739	600,892
Basic earnings (loss) per common share	\$ 1.58	1.36	(0.40)
Diluted earnings (loss) per common share	\$ 1.58	1.36	(0.40)

Our calculation of diluted earnings (loss) per common share excludes shares of common stock that are issuable upon exercise of stock options when the exercise price is greater than the average market price of our common stock. We also exclude unvested restricted stock awards that are antidilutive as a result of unrecognized compensation cost. Such shares averaged 3.1 million, 2.5 million and 2.7 million for 2015, 2014 and 2013, respectively. For the year ended December 31, 2013, due to the net loss position, we excluded from the calculation of diluted loss per share 1.3 million shares which were potentially issuable under incentive compensation plans or convertible securities, as their effect, if included, would have been anti-dilutive.

(10) Fair Value Disclosure

Our financial instruments consist of cash and cash equivalents, accounts receivable, accounts payable and long-term debt, excluding capital lease obligations. Due to their short-term nature, the carrying amounts of our cash and cash equivalents, accounts receivable and accounts payable approximate their fair values.

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between independent and knowledgeable parties who are willing and able to transact for an asset or liability at the measurement date. We use valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs when determining fair value and then we rank the estimated values based on the reliability of the inputs used following the fair value hierarchy set forth by the FASB.

We determined the fair values of our long-term debt, including the current portion, based on quoted market prices where available or, if not available, based on discounted future cash flows using current market interest rates.

The three input levels in the hierarchy of fair value measurements are defined by the FASB generally as follows:

Input Level	Description of Input
Level 1	Observable inputs such as quoted market prices in active markets.
Level 2	Inputs other than quoted prices in active markets that are either directly or indirectly observable.
Level 3	Unobservable inputs in which little or no market data exists.

The following table presents the carrying amounts and estimated fair values of our long-term debt, excluding capital lease and other obligations, as well as the input levels used to determine the fair values indicated below:

	Input Level	As of December 31, 2015		As of December 31, 2014	
		Carrying Amount	Fair Value	Carrying Amount	Fair Value
(Dollars in millions)					
Liabilities-Long-term debt excluding capital lease and other obligations	2	\$ 19,800	19,473	19,994	21,255

(11) Income Taxes

	Years Ended December 31,		
	2015	2014	2013
(Dollars in millions)			
Income tax expense was as follows:			
Federal			
Current	\$ 28	18	1
Deferred	329	305	403
State			
Current	40	26	62
Deferred	21	(14)	(8)
Foreign			
Current	16	3	9
Deferred	4	—	(4)
Total income tax expense	\$ 438	338	463

	Years Ended December 31,		
	2015	2014	2013
(Dollars in millions)			
Income tax expense was allocated as follows:			
Income tax expense in the consolidated statements of operations:			
Attributable to income	\$ 438	338	463
Stockholders' equity:			
Compensation expense for tax purposes in excess of amounts recognized for financial reporting purposes	(5)	(5)	(14)
Tax effect of the change in accumulated other comprehensive loss	59	(744)	554

The following is a reconciliation from the statutory federal income tax rate to our effective income tax rate:

	Years Ended December 31,		
	2015	2014	2013
	(Percentage of pre-tax income)		
Statutory federal income tax rate	35.0 %	35.0 %	35.0 %
State income taxes, net of federal income tax benefit	2.6 %	2.7 %	2.8 %
Impairment of goodwill	— %	— %	188.5 %
Change in liability for unrecognized tax position	0.4 %	0.4 %	(24.5)%
Foreign income taxes	0.7 %	0.4 %	2.7 %
Nondeductible accounting adjustment for life insurance	— %	— %	3.1 %
Affiliate debt rationalization	(2.6)%	— %	— %
Release state valuation allowance	— %	— %	(2.3)%
Research and development credits	(2.1)%	— %	— %
Loss on worthless investment in foreign subsidiary	— %	(5.4)%	— %
Other, net	(0.7)%	(2.6)%	1.4 %
Effective income tax rate	33.3 %	30.5 %	206.7 %

The 2015 effective tax rate is 33.3% compared to 30.5% for 2014. The 2015 rate reflects a tax benefit of approximately \$34 million related to affiliate debt rationalization, research and development tax credits of \$28 million for 2011 through 2015 and a \$16 million tax decrease due to changes in state taxes caused by apportionment changes, state tax rate changes and the changes in the expected utilization of net operating losses ("NOLs"). The 2014 rate reflects a \$60 million tax benefit associated with a deduction for tax basis for worthless stock in a wholly-owned foreign subsidiary as a result of developments in bankruptcy proceedings involving its sole asset and a \$13 million tax decrease due to changes in the state taxes caused by apportionment changes, state tax rate changes and the changes in the expected utilization of NOLs. The 2013 rate reflects the tax effect of a \$1.092 billion non-deductible goodwill impairment charge, a favorable settlement with the Internal Revenue Service of \$33 million, a \$22 million reduction due to the reversal of an uncertain tax position and the tax effect of a \$17 million unfavorable accounting adjustment for non-deductible life insurance costs. Also in 2013, the tax rate was decreased by a \$5 million reduction to the valuation allowance due to the estimated ability to utilize more state NOLs than previously expected.

The tax effects of temporary differences that gave rise to significant portions of the deferred tax assets and deferred tax liabilities were as follows:

	As of December 31,	
	2015	2014
	(Dollars in millions)	
Deferred tax assets		
Post-retirement and pension benefit costs	\$ 2,154	2,276
Net operating loss carryforwards	487	1,091
Other employee benefits	182	214
Other	458	602
Gross deferred tax assets	3,281	4,183
Less valuation allowance	(380)	(409)
Net deferred tax assets	2,901	3,774
Deferred tax liabilities		
Property, plant and equipment, primarily due to depreciation differences	(3,841)	(3,869)
Goodwill and other intangible assets	(2,588)	(2,908)
Other	(38)	(147)
Gross deferred tax liabilities	(6,467)	(6,924)
Net deferred tax liability	\$ (3,566)	(3,150)

Of the \$3.566 billion and \$3.150 billion net deferred tax liability at December 31, 2015 and 2014, respectively, \$3.569 billion and \$3.154 billion is reflected as a long-term liability and \$3 million and \$4 million is reflected as a net noncurrent deferred tax asset at December 31, 2015 and 2014, respectively.

At December 31, 2015, we had federal NOLs of \$72 million and state NOLs of \$13 billion. If unused, the NOLs will expire between 2016 and 2032; however, no significant amounts expire until 2021. At December 31, 2015, we had federal tax credits of \$28 million. Additionally, we had \$36 million (\$23 million net of federal income tax) of state investment tax credit carryforwards that will expire between 2016 and 2025 if not utilized. In addition, at December 31, 2015, we had \$79 million of federal alternative minimum tax, or AMT, credits. Our acquisitions of Qwest and SAVVIS, Inc. ("Savvis") caused "ownership changes" within the meaning of Section 382 of the Internal Revenue Code ("Section 382"). As a result, our ability to use these NOLs and AMT credits are subject to annual limits imposed by Section 382. Despite this, we expect to use substantially all of these tax attributes to reduce our future federal tax liabilities, although the timing of that use will depend upon our future earnings and future tax circumstances.

We establish valuation allowances when necessary to reduce the deferred tax assets to amounts we expect to realize. As of December 31, 2015, a valuation allowance of \$380 million was established as it is more likely than not that this amount of net operating loss and tax credit carryforwards will not be utilized prior to expiration. Our valuation allowance at December 31, 2015 and 2014 is primarily related to state NOL carryforwards. This valuation allowance decreased by \$29 million during 2015.

A reconciliation of the change in our gross unrecognized tax benefits (excluding both interest and any related federal benefit) from January 1 to December 31 for 2015 and 2014 is as follows:

	2015	2014
	(Dollars in millions)	
Unrecognized tax benefits at beginning of year	\$ 17	14
Increase in tax positions taken in the current year	1	—
Increase in tax positions taken in the prior year	7	9
Decrease due to the reversal of tax positions taken in a prior year	(9)	(2)
Decrease from the lapse of statute of limitations	(1)	(1)
Settlements	—	(3)
Unrecognized tax benefits at end of year	<u>\$ 15</u>	<u>17</u>

The total amount of unrecognized tax benefits that, if recognized, would impact the effective income tax rate was \$32 million at both December 31, 2015 and 2014.

Our policy is to reflect interest expense associated with unrecognized tax benefits in income tax expense. We had accrued interest (presented before related tax benefits) of approximately \$33 million and \$30 million at December 31, 2015 and 2014, respectively.

We file income tax returns, including returns for our subsidiaries, with federal, state and local jurisdictions. Our uncertain income tax positions are related to tax years that are currently under or remain subject to examination by the relevant taxing authorities.

In 2013, Qwest filed an amended 2009 federal income tax return primarily to report the carryforward impact of prior year settlements. The refund for the 2009 amended return filed in 2013 was received in 2014. In 2014, Qwest filed an amended federal income tax return for 2010. The refund claim filed for 2010 was accepted by the IRS, and the refund was received in 2015. The 2010 amended return released certain general business credits that were required to be carried back to 2009. As a result, a subsequent 2009 federal amended return was filed by Qwest in 2014 to reflect the carrybacks from 2010. The 2009 refund claim filed in 2014 was accepted by the IRS and the refund was received in 2015.

Beginning with the 2012 tax year, our federal consolidated returns are subject to annual examination by the IRS.

Our open income tax years by major jurisdiction are as follows at December 31, 2015:

Jurisdiction	Open Tax Years
Federal	2012—current
State	
Arizona	2010—current
Florida	2010—current
Other states	2011—current

Since the period for assessing additional liability typically begins upon the filing of a return, it is possible that certain jurisdictions could assess tax for years prior to the open tax years disclosed above. Additionally, it is possible that certain jurisdictions in which we do not believe we have an income tax filing responsibility, and accordingly did not file a return, may attempt to assess a liability, or that other jurisdictions to which we pay taxes may attempt to assert that we owe additional taxes.

Based on our current assessment of various factors, including (i) the potential outcomes of these ongoing examinations, (ii) the expiration of statute of limitations for specific jurisdictions, (iii) the negotiated settlement of certain disputed issues, and (iv) the administrative practices of applicable taxing jurisdictions, it is reasonably possible that the related unrecognized tax benefits for uncertain tax positions previously taken may decrease by up to \$11 million within the next 12 months. The actual amount of such decrease, if any, will depend on several future developments and events, many of which are outside our control.

(12) Segment Information

We are organized into operating segments based on customer type, business and consumer. These operating segments are our two reportable segments in our consolidated financial statements:

- *Business Segment.* Consists generally of providing strategic, legacy and data integration products and services to small, medium and enterprise business, wholesale and governmental customers, including other communication providers. Our strategic products and services offered to these customers include our MPLS, private line (including special access), Ethernet, high-speed Internet, colocation, managed hosting, cloud hosting and other ancillary services. Our legacy services offered to these customers primarily include switched access and local and long-distance voice services, including the sale of unbundled network elements ("UNEs") which allow our wholesale customers to use all or part of our network to provide voice and data services to their customers. Our data integration offerings include the sale of telecommunications equipment located on customers' premises and related professional services. These services include network management, installation and maintenance of data equipment and the building of proprietary fiber-optic broadband networks; and
- *Consumer Segment.* Consists generally of providing strategic and legacy products and services to residential customers. Our strategic products and services offered to these customers include our high-speed Internet, video (including our Prism TV services) and wireless services. Our legacy services offered to these customers include local and long-distance voice services.

The following table summarizes our segment results for 2015, 2014 and 2013 based on the segment categorization we were operating under at December 31, 2015.

	Years Ended December 31,		
	2015	2014	2013
	(Dollars in millions)		
Total segment revenues	\$ 16,668	17,028	17,095
Total segment expenses	8,459	8,509	8,167
Total segment income	\$ 8,209	8,519	8,928
Total margin percentage	49%	50%	52%
Business segment:			
Revenues	\$ 10,647	11,034	11,091
Expenses	6,034	6,089	5,808
Income	\$ 4,613	4,945	5,283
Margin percentage	43%	45%	48%
Consumer segment:			
Revenues	\$ 6,021	5,994	6,004
Expenses	2,425	2,420	2,359
Income	\$ 3,596	3,574	3,645
Margin percentage	60%	60%	61%

Product and Service Categories

We categorize our products, services and revenues among the following four categories:

- *Strategic services*, which include primarily high-speed Internet, MPLS (which is a data networking technology that can deliver the quality of service required to support real-time voice and video), private line (including special access), Ethernet, colocation, hosting (including cloud hosting and managed hosting), video (including our facilities-based video services, which we now offer in 16 markets), VoIP and Verizon Wireless and other ancillary services;
- *Legacy services*, which include primarily local and long-distance voice services, including the sale of UNEs, switched access and Integrated Services Digital Network ("ISDN") services (which use regular telephone lines to support voice, video and data applications);
- *Data integration*, which includes the sale of telecommunications equipment located on customers' premises and related professional services, such as network management, installation and maintenance of data equipment and building of proprietary fiber-optic broadband networks for our governmental and business customers; and
- *Other operating revenues*, which consist primarily of CAF support payments, USF support payments and USF surcharges. We receive federal support payments from both CAF Phase 1 and CAF Phase 2 programs, and support payments from both federal and state USF programs. These support payments are government subsidies designed to reimburse us for various costs related to certain telecommunications services, including the costs of deploying, maintaining and operating voice and high-speed Internet infrastructure in high-cost rural areas where we are not able to recover our costs from our customers. USF surcharges are the amounts we collect based on specific items we list on our customers' invoices to fund the FCC's universal service programs. We also generate other operating revenues from leasing and subleasing of space in our office buildings, warehouses and other properties. Because we centrally manage the activities that generate these other operating revenues, these revenues are not included in our segment revenues.

Our operating revenues for our products and services consisted of the following categories for the years ended December 31, 2015, 2014 and 2013:

	Years Ended December 31,		
	2015	2014	2013
(Dollars in millions)			
Strategic services			
Business high-bandwidth data services (1)	\$ 2,816	2,579	2,230
Business low-bandwidth data services (2)	2,052	2,345	2,577
Business hosting services (3)	1,281	1,316	1,259
Other business strategic services (4)	162	76	60
Consumer high-speed Internet services (5)	2,611	2,469	2,358
Other consumer strategic services (6)	421	381	292
Total strategic services revenues	<u>9,343</u>	<u>9,166</u>	<u>8,776</u>
Legacy services			
Business legacy voice services (7)	2,590	2,780	2,916
Other business legacy services (8)	1,175	1,252	1,398
Consumer legacy voice services (7)	2,676	2,864	3,101
Other consumer legacy services (9)	311	276	248
Total legacy services revenues	<u>6,752</u>	<u>7,172</u>	<u>7,663</u>
Data integration			
Business data integration	571	686	651
Consumer data integration	2	4	5
Total data integration revenues	<u>573</u>	<u>690</u>	<u>656</u>
Other revenues			
High-cost support revenue (10)	732	528	547
Other revenue (11)	500	475	453
Total other revenues	<u>1,232</u>	<u>1,003</u>	<u>1,000</u>
Total revenues	<u>\$ 17,900</u>	<u>18,031</u>	<u>18,095</u>

- (1) Includes MPLS and Ethernet revenue
- (2) Includes private line and high-speed Internet revenue
- (3) Includes colocation, hosting (including cloud hosting and managed hosting) and hosting area network revenue
- (4) Includes primarily VoIP, video and IT services revenue
- (5) Includes high-speed Internet and related services revenue
- (6) Includes video and Verizon wireless revenue
- (7) Includes local and long-distance voice revenue
- (8) Includes UNEs, public access and other ancillary revenue
- (9) Includes switched access and other ancillary revenue
- (10) Includes CAF Phase 1, CAF Phase 2 and federal and state USF support revenue
- (11) Includes USF surcharges

During the first quarter of 2015, we determined that certain products and services associated with our acquisition of Savvis are more closely aligned to legacy services than to strategic services. As a result, these operating revenues are now reflected as legacy services. The revision resulted in a reduction of revenue from strategic services of \$34 million and \$47 million and a corresponding increase in revenue from legacy services for the years ended December 31, 2014 and 2013, respectively.

We recognize revenues in our consolidated statements of operations for certain USF surcharges and transaction taxes that we bill to our customers. Our consolidated statements of operations also reflect the related expense for the amounts we remit to the government agencies. The total amount of such surcharges that we included in revenues aggregated approximately \$544 million, \$526 million and \$489 million for the years ended December 31, 2015, 2014 and 2013, respectively. Those USF surcharges, where we record revenue, are included in "other" operating revenues and transaction tax surcharges are included in "legacy services" revenues. We also act as a collection agent for certain other USF and transaction taxes that we are required by government agencies to include in our bills to customers, for which we do not record any revenue or expense because we only act as a pass-through agent.

Allocations of Revenues and Expenses

Our segment revenues include all revenues from our strategic, legacy and data integration operations as described in more detail above. Segment revenues are based upon each customer's classification to an individual segment. We report our segment revenues based upon all services provided to that segment's customers. Our segment expenses for our two segments include specific expenses incurred as a direct result of providing services and products to segment customers, along with selling, general and administrative expenses that are directly associated with specific segment customers or activities; and allocated expenses which include network expenses, facilities expenses and other expenses such as fleet and real estate expenses. We do not assign depreciation and amortization expense or impairments to our segments, as the related assets and capital expenditures are centrally managed and are not monitored by or reported to the chief operating decision maker ("CODM") by segment. Generally speaking, severance expenses, restructuring expenses and certain centrally managed administrative functions (such as finance, information technology, legal and human resources) are not assigned to our segments. Interest expense is also excluded from segment results because we manage our financing on a total company basis and have not allocated assets or debt to specific segments. Other income, net is not monitored as a part of our segment operations and is therefore excluded from our segment results.

The following table reconciles segment income to net income for the years ended December 31, 2015, 2014 and 2013:

	Years Ended December 31,		
	2015	2014	2013
	(Dollars in millions)		
Total segment income	\$ 8,209	8,519	8,928
Other operating revenues	1,232	1,003	1,000
Depreciation and amortization	(4,189)	(4,428)	(4,541)
Impairment of goodwill	—	—	(1,092)
Other unassigned operating expenses	(2,647)	(2,684)	(2,842)
Other expenses, net	(1,289)	(1,300)	(1,229)
Income tax expense	(438)	(338)	(463)
Net income (loss)	<u>\$ 878</u>	<u>772</u>	<u>(239)</u>

We do not have any single customer that provides more than 10% of our total consolidated operating revenues. Substantially all of our consolidated revenues come from customers located in the United States.

(13) Quarterly Financial Data (Unaudited)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
(Dollars in millions, except per share amounts)					
2015					
Operating revenues	\$ 4,451	4,419	4,554	4,476	17,900
Operating income	649	549	656	751	2,605
Net income	192	143	205	338	878
Basic earnings per common share	0.34	0.26	0.37	0.62	1.58
Diluted earnings per common share	0.34	0.26	0.37	0.62	1.58
2014					
Operating revenues	\$ 4,538	4,541	4,514	4,438	18,031
Operating income	653	655	619	483	2,410
Net income	203	193	188	188	772
Basic earnings per common share	0.35	0.34	0.33	0.33	1.36
Diluted earnings per common share	0.35	0.34	0.33	0.33	1.36

During the third quarter of 2015, we recognized an incremental \$158 million of revenue associated with the FCC's CAF Phase 2 support program, and an additional incremental \$57 million in the fourth quarter of 2015. During the fourth quarter of 2015, we also recognized a tax benefit of approximately \$34 million related to affiliate debt rationalization, research and development tax credits of \$28 million for 2011 through 2015, and a \$16 million tax decrease due to changes in state taxes caused by apportionment changes, state tax rate changes and the changes in the expected utilization of net operating losses ("NOLs").

During the fourth quarter of 2014, we recognized a \$60 million tax benefit associated with a deduction for the tax basis for worthless stock in a wholly-owned foreign subsidiary as a result of developments in bankruptcy proceedings involving its sole asset that occurred in the first quarter of 2014. During the fourth quarter of 2014, we also recognized a pension settlement charge of \$63 million.

(14) Commitments and Contingencies

We are vigorously defending against all of the matters described below under the headings "Pending Matters" and "Other Proceedings and Disputes." As a matter of course, we are prepared both to litigate these matters to judgment, as well as to evaluate and consider all reasonable settlement opportunities. In this Note, when we refer to a class action as "putative" it is because a class has been alleged, but not certified in that matter. We have established accrued liabilities for these matters described below where losses are deemed probable and reasonably estimable.

Pending Matters

In *William Douglas Fulghum, et al. v. Embarq Corporation, et al.*, filed on December 28, 2007 in the United States District Court for the District of Kansas, a group of retirees filed a class action lawsuit challenging the decision to make certain modifications in retiree benefits programs relating to life insurance, medical insurance and prescription drug benefits, generally effective January 1, 2006 and January 1, 2008 (which, at the time of the modifications, was expected to reduce estimated future expenses for the subject benefits by more than \$300 million). Defendants include Embarq, certain of its benefit plans, its Employee Benefits Committee and the individual plan administrator of certain of its benefits plans. Additional defendants include Sprint Nextel and certain of its benefit plans. The Court certified a class on certain of plaintiffs' claims, but rejected class certification as to other claims. On October 14, 2011, the Fulghum lawyers filed a new, related lawsuit, *Abbott et al. v. Sprint Nextel et al.* In *Abbott*, approximately 1,500 plaintiffs allege breach of fiduciary duty in connection with the changes in retiree benefits that also are at issue in the Fulghum case. The *Abbott* plaintiffs are all members of the class that was certified in Fulghum on claims for allegedly vested benefits (Counts I and III), and the *Abbott* claims are similar to the Fulghum breach of fiduciary duty claim (Count II), on which the Fulghum court denied class certification. The Court has stayed proceedings in *Abbott* indefinitely, except for limited discovery and motion practice as to approximately 80 of the plaintiffs. On February 14, 2013, the Fulghum court dismissed the majority of the plaintiffs' claims in the case. On interlocutory appeal, the United States Court of Appeals for the Tenth Circuit ruled on February 24, 2015, that the plan documents reviewed do not support any claim for vested benefits, and affirmed the district court's dismissal of claims based on those documents. The Tenth Circuit decision allowed a subset of claims for vested benefits to return to the district court for further proceedings. The Tenth Circuit also affirmed the district court's dismissal of all age discrimination claims. The Tenth Circuit reversed the district court's determination that the statute of repose under the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), is a time bar to the breach of fiduciary duty claims of fifteen named plaintiffs. On June 10, 2015, the district court in Fulghum granted summary judgment to defendants on an additional group of claims for vested benefits. On July 27, 2015, pursuant to the terms of a stipulation by the parties, the district court in Fulghum granted judgment in favor of defendants on all remaining and unadjudicated vested benefits claims. This judgment is without prejudice to any rights the parties may have to pursue any additional appellate relief. As to any further proceedings that may occur in the district court, defendants will continue to vigorously contest any remaining claims in Fulghum and *Abbott*. We have not accrued a liability for these matters because we believe it is premature (i) to determine whether an accrual is warranted and (ii) if so, to determine a reasonable estimate of probable liability.

On July 16, 2013, Comcast MO Group, Inc. ("Comcast") filed a lawsuit in Colorado state court against Qwest Communications International, Inc. ("Qwest"). Comcast alleges Qwest breached the parties' 1998 tax sharing agreement ("TSA") when it refused to partially indemnify Comcast for a tax liability settlement Comcast reached with the Commonwealth of Massachusetts in a dispute to which we were not a party. Comcast seeks approximately \$80 million in damages, excluding interest. Qwest and Comcast are parties to the TSA in their capacities as successors to the TSA's original parties, U S WEST, Inc., a telecommunications company, and MediaOne Group, Inc., a cable television company, respectively. In October 2014, the state court granted summary judgment in Qwest's favor. In December 2015, the Colorado Court of Appeals affirmed the judgment. Comcast has filed a petition with the Colorado Supreme Court to review the Court of Appeals judgment. We have not accrued a liability for this matter because we do not believe that liability is probable.

The local exchange carrier subsidiaries of CenturyLink are among hundreds of defendants nationwide in dozens of lawsuits filed by Sprint Communications Company and affiliates of Verizon Communications Inc. The plaintiffs in these suits have challenged the right of local exchange carriers to bill interexchange carriers for switched access charges for certain calls between mobile and wireline devices that are routed through an interexchange carrier. In the lawsuits, the plaintiffs are seeking refunds of access charges previously paid and relief from future access charges. In addition, these and some other interexchange carriers have ceased paying switched access charges on these calls. These lawsuits involving our local exchange carriers and many other carriers have been consolidated for pretrial purposes in the United States District Court for the District of Northern Texas. In November 2015, the Court dismissed the plaintiffs' federal law claims and granted them leave to file state law claims, if any. Some of the defendants, including our affiliated carriers, have petitioned the Federal Communications Commission to address these issues on an industry-wide basis.

As both an interexchange carrier and a local exchange carrier, we both pay and assess significant amounts of the access charges in question. The outcome of these disputes and suits, as well as any related regulatory proceedings that could ensue, are currently not predictable. If we are required to stop assessing these charges or to pay refunds of any such charges, our financial results could be negatively affected.

Other Proceedings and Disputes

From time to time, we are involved in other proceedings incidental to our business, including patent infringement allegations, administrative hearings of state public utility commissions relating primarily to our rates or services, actions relating to employee claims, various tax issues, environmental law issues, grievance hearings before labor regulatory agencies, and miscellaneous third party tort actions.

We are currently defending several patent infringement lawsuits asserted against us by non-practicing entities, many of whom are seeking substantial recoveries. These cases have progressed to various stages and one or more may go to trial in the coming 24 months if they are not otherwise resolved. Where applicable, we are seeking full or partial indemnification from our vendors and suppliers. As with all litigation, we are vigorously defending these actions and, as a matter of course, are prepared to litigate the matters to judgment, as well as to evaluate and consider all reasonable settlement opportunities.

We are subject to various foreign, federal, state and local environmental protection and health and safety laws. From time to time, we are subject to judicial and administrative proceedings brought by various governmental authorities under these laws. Several such proceedings are currently pending, but none is reasonably expected to exceed \$100,000 in fines and penalties.

The outcome of these other proceedings is not predictable. However, based on current circumstances, we do not believe that the ultimate resolution of these other proceedings, after considering available defenses and any insurance coverage or indemnification rights, will have a material adverse effect on our financial position, results of operations or cash flows.

Capital Leases

We lease certain facilities and equipment under various capital lease arrangements. Depreciation of assets under capital leases is included in depreciation and amortization expense in our consolidated statements of operations. Payments on capital leases are included in repayments of long-term debt, including current maturities in our consolidated statements of cash flows.

The tables below summarize our capital lease activity:

	Years Ended December 31,		
	2015	2014	2013
	(Dollars in millions)		
Assets acquired through capital leases	\$ 17	37	12
Depreciation expense	96	126	136
Cash payments towards capital leases	89	118	119

	As of December 31,	
	2015	2014
	(Dollars in millions)	
Assets included in property, plant and equipment	\$ 722	850
Accumulated depreciation	352	393

The future annual minimum payments under capital lease arrangements as of December 31, 2015 were as follows:

	Future Minimum Payments
	(Dollars in millions)
Capital lease obligations:	
2016	\$ 85
2017	78
2018	76
2019	62
2020	47
2021 and thereafter	223
Total minimum payments	571
Less: amount representing interest and executory costs	(153)
Present value of minimum payments	418
Less: current portion	(56)
Long-term portion	\$ 362

Operating Leases

CenturyLink leases various equipment, office facilities, retail outlets, switching facilities, and other network sites. These leases, with few exceptions, provide for renewal options and escalations that are either fixed or based on the consumer price index. Any rent abatements, along with rent escalations, are included in the computation of rent expense calculated on a straight-line basis over the lease term. The lease term for most leases includes the initial non-cancelable term plus any term under renewal options that are reasonably assured. For the years ended December 31, 2015, 2014 and 2013, our gross rental expense was \$467 million, \$446 million and \$455 million, respectively. We also received sublease rental income for the years ended December 31, 2015, 2014 and 2013 of \$12 million, \$14 million and \$16 million, respectively.

At December 31, 2015, our future rental commitments for operating leases were as follows:

	Future Minimum Payments
	(Dollars in millions)
2016	\$ 301
2017	289
2018	268
2019	235
2020	209
2021 and thereafter	1,075
Total future minimum payments ⁽¹⁾	\$ 2,377

⁽¹⁾ Minimum payments have not been reduced by minimum sublease rentals of \$87 million due in the future under non-cancelable subleases.

Purchase Commitments

We have several commitments primarily for marketing activities and support services from a variety of vendors to be used in the ordinary course of business totaling \$625 million at December 31, 2015. Of this amount, we expect to purchase \$364 million in 2016, \$144 million in 2017 through 2018, \$46 million in 2019 through 2020 and \$71 million in 2021 and thereafter. These amounts do not represent our entire anticipated purchases in the future, but represent only those items for which we were contractually committed as of December 31, 2015.

(15) Other Financial Information

Other Current Assets

The following table presents details of other current assets in our consolidated balance sheets:

	As of December 31,	
	2015	2014
	(Dollars in millions)	
Prepaid expenses	\$ 238	260
Materials, supplies and inventory	144	132
Assets held for sale	8	14
Deferred activation and installation charges	105	103
Other	86	71
Total other current assets	<u>\$ 581</u>	<u>580</u>

Assets held for sale includes several assets that we expect to sell within the next twelve months. During 2014, we sold our remaining 700 MHz A-Block wireless spectrum licenses, which we purchased in 2008 but never placed into service. As a result of changes in market conditions and prevailing spectrum prices, we recorded an impairment charge of \$14 million, which is included in other income, net in our consolidated statements of operations for the for the year ended December 31, 2014. The sale closed on November 3, 2014, and we received \$39 million in cash in the aggregate.

In January 2013, we sold \$43 million of our wireless spectrum assets held for sale. The sale resulted in a gain of \$32 million, which is recorded as other income, net on our consolidated statements of operations.

Selected Current Liabilities

Current liabilities reflected in our consolidated balance sheets include accounts payable and other current liabilities as follows:

	As of December 31	
	2015	2014
	(Dollars in millions)	
Accounts payable	\$ 968	1,226
Other current liabilities:		
Accrued rent	\$ 32	34
Legal reserves	20	27
Other	168	149
Total other current liabilities	<u>\$ 220</u>	<u>210</u>

Included in accounts payable at December 31, 2015 and 2014, were \$68 million and \$80 million, respectively, representing book overdrafts and \$94 million and \$185 million, respectively, associated with capital expenditures.

(16) Labor Union Contracts

Approximately 37% of our employees are members of various bargaining units represented by the Communications Workers of America ("CWA") or the International Brotherhood of Electrical Workers ("IBEW"). As of December 31, 2015, approximately three hundred, or 2%, of our employees are subject to collective bargaining agreements that expired in 2015. We believe that relations with our employees continue to be generally good. We are currently negotiating the terms of new agreements covering these employees. Approximately one thousand, or 6%, of our employees are subject to collective bargaining agreements that expire in 2016.

(17) Repurchase of CenturyLink, Inc. Common Stock

In February 2014, our Board of Directors authorized a 24-month program to repurchase up to an aggregate of \$1 billion of our outstanding common stock. This 2014 stock repurchase program took effect on May 29, 2014, immediately upon the completion of our predecessor 2013 stock repurchase program. On December 7, 2015, we completed the 2014 stock repurchase program, repurchasing over the course of the program a total of 32.3 million shares in the open market at an average purchase price of \$30.99 per share. During the year ended December 31, 2015, we repurchased 27.1 million shares of our outstanding common stock in the open market. These shares were repurchased for an aggregate market price of \$800 million, or an average purchase price of \$29.56 per share. The repurchased common stock has been retired.

(18) Accumulated Other Comprehensive Loss

The table below summarizes changes in accumulated other comprehensive loss recorded on our consolidated balance sheet by component for the year ended December 31, 2015:

	Pension Plans	Post-Retirement Benefit Plans	Foreign Currency Translation Adjustment and Other	Total
	(Dollars in millions)			
Balance at December 31, 2014	\$ (1,720)	(272)	(25)	(2,017)
Other comprehensive income (loss) before reclassifications	(98)	80	(14)	(32)
Amounts reclassified from accumulated other comprehensive income	103	12	—	115
Net current-period other comprehensive income (loss)	5	92	(14)	83
Balance at December 31, 2015	\$ (1,715)	(180)	(39)	(1,934)

The table below presents further information about our reclassifications out of accumulated other comprehensive loss by component for the year ended December 31, 2015:

Year Ended December 31, 2015	Decrease (Increase) in Net Income	Affected Line Item in Consolidated Statement of Operations or Footnote Where Additional Information is Presented If The Amount is not Recognized in Net Income in Total
	(Dollars in millions)	
Amortization of pension & post-retirement plans		
Net actuarial loss	\$ 161	See Note 7—Employee Benefits
Prior service cost	24	See Note 7—Employee Benefits
Total before tax	185	
Income tax expense (benefit)	(70)	Income tax expense
Net of tax	\$ 115	

The table below summarizes changes in accumulated other comprehensive loss recorded on our consolidated balance sheet by component for the year ended December 31, 2014:

	Pension Plans	Post-Retirement Benefit Plans	Foreign Currency Translation Adjustment and Other	Total
	(Dollars in millions)			
Balance at December 31, 2013	\$ (669)	(122)	(11)	(802)
Other comprehensive income (loss) before reclassifications	(1,107)	(162)	(15)	(1,284)
Amounts reclassified from accumulated other comprehensive income	56	12	1	69
Net current-period other comprehensive income (loss)	(1,051)	(150)	(14)	(1,215)
Balance at December 31, 2014	\$ (1,720)	(272)	(25)	(2,017)

The table below presents further information about our reclassifications out of accumulated other comprehensive loss by component for the year ended December 31, 2014:

Year Ended December 31, 2014	Decrease (Increase) in Net Loss	Affected Line Item in Consolidated Statement of Operations or Footnote Where Additional Information is Presented If The Amount is not Recognized in Net Income in Total
(Dollars in millions)		
Amortization of pension & post-retirement plans		
Net actuarial loss	\$ 85	See Note 7—Employee Benefits
Prior service cost	25	See Note 7—Employee Benefits
Total before tax	110	
Income tax expense (benefit)	(42)	Income tax expense
Insignificant items	1	
Net of tax	\$ 69	

(19) Dividends

Our Board of Directors declared the following dividends payable in 2015 and 2014:

Date Declared	Record Date	Dividend Per Share	Total Amount (in millions)	Payment Date
November 10, 2015	11/24/2015	\$ 0.540	\$ 293	12/8/2015
August 25, 2015	9/8/2015	0.540	300	9/22/2015
May 20, 2015	6/2/2015	0.540	303	6/16/2015
February 23, 2015	3/6/2015	0.540	303	3/20/2015
November 11, 2014	11/24/2014	0.540	307	12/5/2014
August 19, 2014	8/29/2014	0.540	308	9/12/2014
May 28, 2014	6/9/2014	0.540	307	6/20/2014
February 24, 2014	3/10/2014	0.540	309	3/21/2014

The declaration of dividends is solely at the discretion of our Board of Directors.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures (as defined in Rule 13a-15(e) of the Securities Exchange Act (the "Exchange Act")) designed to provide reasonable assurance that the information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms. These include controls and procedures designed to ensure that this information is accumulated and communicated to the Company's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. Management, with the participation of our Chief Executive Officer, Glen F. Post, III, and our Chief Financial Officer, R. Stewart Ewing, Jr., evaluated the effectiveness of the Company's disclosure controls and procedures as of December 31, 2015. Based on this evaluation, the Company's Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures were effective as of December 31, 2015, at the reasonable assurance level.

The effectiveness of our or any system of disclosure controls and procedures is subject to certain limitations, including the exercise of judgment in designing, implementing and evaluating the controls and procedures, the assumptions used in identifying the likelihood of future events and the inability to eliminate misconduct completely. As a result, there can be no assurance that our disclosure controls and procedures will detect all errors or fraud. By their nature, our or any system of disclosure controls and procedures can provide only reasonable assurance regarding management's control objectives.

Internal Control Over Financial Reporting

Management's Report on Internal Control Over Financial Reporting

Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act), a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States. Under the supervision and with the participation of management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control-Integrated Framework (2013) issued by the COSO. Based on our evaluation under the framework of COSO, management concluded that our internal control over financial reporting was effective at December 31, 2015. The effectiveness of our internal control over financial reporting at December 31, 2015 has been audited by KPMG LLP, as stated in their report. See the Report of Independent Registered Public Accounting Firm on our internal control over financial reporting in Item 8, which is incorporated herein by reference.

Management's Report on the Consolidated Financial Statements

Management has prepared and is responsible for the integrity and objectivity of our consolidated financial statements for the year ended December 31, 2015. The consolidated financial statements included in this Annual Report have been prepared in accordance with accounting principles generally accepted in the United States and necessarily include amounts determined using our best judgments and estimates.

Our consolidated financial statements have been audited by KPMG LLP, an independent registered public accounting firm, who have expressed their opinion with respect to the fairness of the consolidated financial statements. Their audit was conducted in accordance with standards of the Public Company Accounting Oversight Board (United States).

Audit Committee

The Audit Committee of the Board of Directors is composed of independent directors who are not officers or employees. The Committee meets periodically with the external auditors, internal auditors and management. The Committee considers the independence of the external auditors and the audit scope and discusses internal control, financial and reporting matters. Both the external and internal auditors have free access to the Committee.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting during the quarter ended December 31, 2015 that materially affected, or that we believe are reasonably likely to materially affect, our internal control over financial reporting.

/s/ Glen F. Post, III

Glen F. Post, III

Chief Executive Officer, President and Director

/s/ R. Stewart Ewing, Jr.

R. Stewart Ewing, Jr.

Executive Vice President, Chief Financial Officer and Assistant Secretary

February 24, 2016

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by Item 10 is incorporated by reference to the Proxy Statement.

ITEM 11. EXECUTIVE COMPENSATION

The information required by Item 11 is incorporated by reference to the Proxy Statement.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**Equity Compensation Plan Information**

The following table provides information as of December 31, 2015 about our equity compensation plans under which Common Shares are authorized for issuance:

	Number of securities to be issued upon exercise of outstanding options and rights (a)	Weighted-average exercise price of outstanding options and rights (b)	Number of securities remaining available for future issuance under plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by shareholders	1,731,186 ⁽¹⁾	\$ 44.43 ⁽²⁾	20,759,094
Equity compensation plans not approved by shareholders ⁽³⁾	2,640,563	38.07	—
Totals	4,371,749 ⁽¹⁾	\$ 39.67 ⁽²⁾	20,759,094

(1) These amounts include restricted stock units, which represent the difference between the number of shares of restricted stock subject to market conditions granted at target and the maximum possible payout for these awards. Depending on performance, the actual share payout of these awards may range between 0-200% of target.

(2) The amounts in column (a) include restricted stock units, which do not have an exercise price. Consequently, those awards were excluded from the calculation of this exercise price.

(3) These amounts represent common shares to be issued upon exercise of options that were assumed in connection with certain acquisitions.

The balance of the information required by Item 12 is incorporated by reference to the Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by Item 13 is incorporated by reference to the Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by Item 14 is incorporated by reference to the Proxy Statement.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

Exhibits identified in parentheses below are on file with the SEC and are incorporated herein by reference. All other exhibits are provided as part of this electronic submission.

Exhibit Number	Description
3.1	Amended and Restated Articles of Incorporation of CenturyLink, Inc., as amended through May 23, 2012 (incorporated by reference to Exhibit 3.1 of CenturyLink, Inc.'s Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on May 30, 2012).
3.2	Bylaws of CenturyLink, Inc., as amended and restated through May 28, 2014 (incorporated by reference to Exhibit 3.1 of CenturyLink, Inc.'s Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on June 2, 2014).
4.2	Instruments relating to CenturyLink, Inc.'s Revolving Credit Facility. <ol style="list-style-type: none">Amended and Restated Credit Agreement, dated as of April 6, 2012, by and among CenturyLink, Inc. and the lenders and agents named therein (incorporated by reference to Exhibit 4.1 of CenturyLink, Inc.'s Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on April 11, 2012, as amended by the First Amendment to Amended and Restated Credit Agreement, dated as of December 3, 2014, among CenturyLink, Inc. and the lenders and agents named therein (incorporated by reference to Exhibit 4.3 of CenturyLink's Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on December 5, 2014).Guarantee Agreement, dated as of April 6, 2012, by and among the original guarantors named therein (incorporated by reference to Exhibit 4.2 of CenturyLink, Inc.'s Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on April 11, 2012), as assumed by two additional guarantors under an assumption agreement, dated as of May 23, 2013 (incorporated by reference to Exhibit 4.2(b) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2013 (File No. 001-07784) filed with the Securities and Exchange Commission on August 8, 2013), as amended by the Amendment to Guarantee Agreement and Reaffirmation Agreement, dated as of December 3, 2014, among CenturyLink, Inc. and the affiliated guarantors named therein (incorporated by reference to Exhibit 4.4 of CenturyLink, Inc.'s Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on December 5, 2014).
4.3	Instruments relating to CenturyLink, Inc.'s Term Loan. <ol style="list-style-type: none">Credit Agreement, dated as of April 18, 2012, by and among CenturyLink, Inc., the several banks and other financial institutions or entities from time to time parties thereto, and CoBank, ACB, as administrative agent (incorporated by reference to Exhibit 4.1 of CenturyLink, Inc.'s Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on April 20, 2012), as amended by the amendment dated as of March 13, 2015.Guarantee Agreement, dated as of April 18, 2012, by and among the original guarantors named therein (incorporated by reference to Exhibit 4.2 of CenturyLink, Inc.'s Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on April 20, 2012), as assumed by two additional guarantors under an assumption agreement, dated as of May 23, 2013 (incorporated by reference to Exhibit 4.3(b) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2013 (File No. 001-07784) filed with the Securities and Exchange Commission on August 8, 2013), as amended by the amendment dated as of March 13, 2015 (incorporated by reference to Exhibit 4.3(b) of CenturyLink's Quarterly Report on Form 10-Q for the period ended March 31, 2015 (File No. 001-07784) filed with the Securities and Exchange Commission on May 6, 2015).
4.4	Instruments relating to CenturyLink, Inc.'s public senior debt. ⁽¹⁾ <ol style="list-style-type: none">Indenture, dated as of March 31, 1994, by and between Century Telephone Enterprises, Inc. (currently named CenturyLink, Inc.) and Regions Bank (successor-in-interest to First American Bank & Trust of Louisiana), as Trustee.<ol style="list-style-type: none">Form of 7.2% Senior Notes, Series D, due 2025 (incorporated by reference to Exhibit 4.27 of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 1995 (File No. 001-07784) filed with the Securities and Exchange Commission on March 18, 1996).Form of 6.875% Debentures, Series G, due 2028, (incorporated by reference to Exhibit 4.9 of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 1997 (File No. 001-07784) filed with the Securities and Exchange Commission on March 16, 1998).

Exhibit Number	Description
b.	Fourth Supplemental Indenture, dated as of March 26, 2007, by and between CenturyTel, Inc. (currently named CenturyLink, Inc.) and Regions Bank, as Trustee, designating and outlining the terms and conditions of CenturyLink's 6.0% Senior Notes, Series N, due 2017 and 5.5% Senior Notes, Series O, due 2013 (incorporated by reference to Exhibit 4.1 of CenturyLink, Inc.'s Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on March 29, 2007).
(i).	Form of 6.0% Senior Notes, Series N, due 2017 and 5.5% Senior Notes, Series O, due 2013 (incorporated by reference to Exhibit A to Exhibit 4.1 of CenturyLink, Inc.'s Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on March 29, 2007).
c.	Fifth Supplemental Indenture, dated as of September 21, 2009, by and between CenturyTel, Inc. (currently named CenturyLink, Inc.) and Regions Bank, as Trustee, designating and outlining the terms and conditions of CenturyLink's 7.60% Senior Notes, Series P, due 2039 and 6.15% Senior Notes, Series Q, due 2019 (incorporated by reference to Exhibit 4.1 of CenturyLink, Inc.'s Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on September 22, 2009).
(i).	Form of 7.60% Senior Notes, Series P, due 2039 and 6.15% Senior Notes, Series Q, due 2019 (incorporated by reference to Exhibit A to Exhibit 4.1 of CenturyLink, Inc.'s Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on September 22, 2009).
d.	Sixth Supplemental Indenture, dated as of June 16, 2011, by and between CenturyLink, Inc. and Regions Bank, as Trustee, designating and outlining the terms and conditions of CenturyLink's 5.15% Senior Notes, Series R, due 2017 and 6.45% Senior Notes, Series S, due 2021 (incorporated by reference to Exhibit 4.2 of CenturyLink, Inc.'s Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on June 16, 2011).
(i).	Form of 5.15% Senior Notes, Series R, due 2017 and 6.45% Senior Notes, Series S, due 2021 (incorporated by reference to Exhibit A to Exhibit 4.2 of CenturyLink, Inc.'s Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on June 16, 2011).
e.	Seventh Supplemental Indenture, dated as of March 12, 2012, by and between CenturyLink, Inc. and Regions Bank, as Trustee, designating and outlining the terms and conditions of CenturyLink's 5.80% Senior Notes, Series T, due 2022 and 7.65% Senior Notes, Series U, due 2042 (incorporated by reference to Exhibit 4.1 of CenturyLink's Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on March 12, 2012).
(i).	Form of 5.80% Senior Notes, Series T, due 2022 and 7.65% Senior Notes, Series U, due 2042 (incorporated by reference to Exhibit A to Exhibit 4.1 of CenturyLink, Inc.'s Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on March 12, 2012).
f.	Eighth Supplemental Indenture, dated as of March 21, 2013, by and between CenturyLink, Inc. and Regions Bank, as Trustee, designating and outlining the terms and conditions of CenturyLink's 5.625% Senior Notes, Series V, due 2020 (incorporated by reference to Exhibit 4.1 of CenturyLink's Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on March 21, 2013).
(i).	Form of 5.625% Senior Notes, Series V, due 2020 (incorporated by reference to Exhibit A to Exhibit 4.1 of CenturyLink, Inc.'s Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on March 21, 2013).
g.	Ninth Supplemental Indenture, dated as of November 27, 2013, by and between CenturyLink, Inc. and Regions Bank, as Trustee, designating and outlining the terms and conditions of CenturyLink's 6.75% Senior Notes, Series W, due 2023 (incorporated by reference to Exhibit 4.1 of CenturyLink's Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on November 27, 2013).
(i).	Form of 6.75% Senior Notes, Series W, due 2023 (incorporated by reference to Exhibit A to Exhibit 4.1 of CenturyLink, Inc.'s Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on November 27, 2013).
h.	Tenth Supplemental Indenture, dated as of March 19, 2015, by and between CenturyLink, Inc. and Regions Bank, as Trustee, designating and outlining the terms and conditions of CenturyLink's 5.625% Senior Notes, Series X, due 2025 (incorporated by reference to Exhibit 4.1 of CenturyLink's Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on March 19, 2015).
(i).	Form of 5.625% Senior Notes, Series X, due 2025 (incorporated by reference to Exhibit A to Exhibit 4.1 of CenturyLink, Inc.'s Current Report on Form 8-K (File No. 001-07784) filed with the Securities and Exchange Commission on March 19, 2015).

Exhibit Number	Description
4.5	Instruments relating to indebtedness of Qwest Communications International, Inc. and its subsidiaries. ⁽¹⁾ <ul style="list-style-type: none"> a. Indenture, dated as of April 15, 1990, by and between The Mountain States Telephone and Telegraph Company (currently named Qwest Corporation) and The First National Bank of Chicago (incorporated by reference to Exhibit 4.2 of Qwest Corporation's Annual Report on Form 10-K for the year ended December 31, 2002 (File No. 001-03040) filed with the Securities and Exchange Commission on January 13, 2004). <ul style="list-style-type: none"> (i). First Supplemental Indenture, dated as of April 16, 1991, by and between U S WEST Communications, Inc. (currently named Qwest Corporation) and The First National Bank of Chicago (incorporated by reference to Exhibit 4.3 of Qwest Corporation's Annual Report on Form 10-K for the year ended December 31, 2002 (File No. 001-03040) filed with the Securities and Exchange Commission on January 13, 2004). b. Indenture, dated as of April 15, 1990, by and between Northwestern Bell Telephone Company (predecessor to Qwest Corporation) and The First National Bank of Chicago (incorporated by reference to Exhibit 4.5(b) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended March 31, 2012 (File No. 001-07784) filed with the Securities and Exchange Commission on May 10, 2012). <ul style="list-style-type: none"> (i). First Supplemental Indenture, dated as of April 16, 1991, by and between U S WEST Communications, Inc. (currently named Qwest Corporation) and The First National Bank of Chicago (incorporated by reference to Exhibit 4.3 of Qwest Corporation's Annual Report on Form 10-K for the year ended December 31, 2002 (File No. 001-03040) filed with the Securities and Exchange Commission on January 13, 2004). c. Indenture, dated as of June 29, 1998, by and among U S WEST Capital Funding, Inc. (currently named Qwest Capital Funding, Inc.), U S WEST, Inc. (predecessor to Qwest Communications International Inc.) and The First National Bank of Chicago, as trustee (incorporated by reference to Exhibit 4(a) of U S WEST, Inc.'s Current Report on Form 8-K (File No. 001-14087) filed with the Securities and Exchange Commission on November 18, 1998). <ul style="list-style-type: none"> (i). First Supplemental Indenture, dated as of June 30, 2000, by and among U S WEST Capital Funding, Inc. (currently named Qwest Capital Funding, Inc.), U S WEST, Inc. (predecessor to Qwest Communications International Inc.) and Bank One Trust Company, N.A., as trustee (incorporated by reference to Exhibit 4.10 of Qwest Communications International Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2000 (File No. 001-15577) filed with the Securities and Exchange Commission on August 11, 2000). d. Indenture, dated as of October 15, 1999, by and between US West Communications, Inc. (currently named Qwest Corporation) and Bank One Trust Company, N.A., as trustee (incorporated by reference to Exhibit 4(b) of Qwest Corporation's Annual Report on Form 10-K for the year ended December 31, 1999 (File No. 001-03040) filed with the Securities and Exchange Commission on March 3, 2000). <ul style="list-style-type: none"> (i). Fifth Supplemental Indenture, dated as of May 16, 2007, by and between Qwest Corporation and U.S. Bank National Association (incorporated by reference to Exhibit 4.1 of Qwest Communications International Inc.'s Current Report on Form 8-K (File No. 001-15577) filed with the Securities and Exchange Commission on May 18, 2007). (ii). Sixth Supplemental Indenture, dated as of April 13, 2009, by and between Qwest Corporation and U.S. Bank National Association (incorporated by reference to Exhibit 4.1 of Qwest Communications International Inc.'s Current Report on Form 8-K (File No. 001-15577) filed with the Securities and Exchange Commission on April 13, 2009). (iii). Seventh Supplemental Indenture, dated as of June 8, 2011, by and between Qwest Corporation and U.S. Bank National Association (incorporated by reference to Exhibit 4.8 of Qwest Corporation's Form 8-A (File No. 001-03040) filed with the Securities and Exchange Commission on June 7, 2011). (iv). Eighth Supplemental Indenture, dated as of September 21, 2011, by and between Qwest Corporation and U.S. Bank National Association (incorporated by reference to Exhibit 4.9 of Qwest Corporation's Form 8-A (File No. 001-03040) filed with the Securities and Exchange Commission on September 20, 2011). (v). Ninth Supplemental Indenture, dated as of October 4, 2011, by and between Qwest Corporation and U.S. Bank National Association (incorporated by reference to Exhibit 4.1 of Qwest Corporation's Current Report on Form 8-K (File No. 001-03040) filed with the Securities and Exchange Commission on October 4, 2011). (vi). Tenth Supplemental Indenture, dated as of April 2, 2012, by and between Qwest Corporation and U.S. Bank National Association (incorporated by reference to Exhibit 4.11 of Qwest Corporation's Form 8-A (File No. 001-03040) filed with the Securities and Exchange Commission on March 30, 2012).

Exhibit Number	Description
	(vii) Eleventh Supplemental Indenture, dated as of June 25, 2012, by and between Qwest Corporation and U.S. Bank National Association (incorporated by reference to Exhibit 4.12 of Qwest Corporation's Form 8-A (File No. 001-03040) filed with the Securities and Exchange Commission on June 22, 2012).
	(viii) Twelfth Supplemental Indenture, dated as of May 23, 2013, by and between Qwest Corporation and U.S. Bank National Association (incorporated by reference to Exhibit 4.13 of Qwest Corporation's Form 8-A (File No. 001-03040) filed with the Securities and Exchange Commission on May 22, 2013).
	(ix) Thirteenth Supplemental Indenture, dated as of September 29, 2014, by and between Qwest Corporation and U.S. Bank National Association (incorporated by reference to Exhibit 4.14 of Qwest Corporation's Form 8-A (File No. 001-03040) filed with the Securities and Exchange Commission on September 26, 2014).
	(x) Fourteenth Supplemental Indenture, dated as of September 21, 2015, by and between Qwest Corporation and U.S. Bank National Association (incorporated by reference to Exhibit 4.15 of Qwest Corporation's Form 8-A (File No. 001-03040) filed with the Securities and Exchange Commission on September 21, 2015).
	(xi) Fifteenth Supplemental Indenture, dated as of January 29, 2016, by and between Qwest Corporation and U.S. Bank National Association (incorporated by reference to Exhibit 4.16 of Qwest Corporation's Form 8-A (File No. 001-03040) filed with the Securities and Exchange Commission on January 29, 2016).
	e. Credit Agreement, dated as of February 20, 2015, by and among Qwest Corporation, the several lenders from time to time parties thereto, and CoBank, ACB, as administrative agent.
4.6	Instruments relating to indebtedness of Embarq Corporation. ⁽¹⁾
	a. Indenture, dated as of May 17, 2006, by and between Embarq Corporation and J.P. Morgan Trust Company, National Association, a national banking association, as trustee (incorporated by reference to Exhibit 4.1 of Embarq Corporation's Current Report on Form 8-K (File No. 001-32732) filed with the Securities and Exchange Commission on May 18, 2006).
	b. 7.082% Global Note due 2016 of Embarq Corporation (incorporated by reference to Exhibit 4.3 to Embarq Corporation's Annual Report on Form 10-K for the year ended December 31, 2006 (File No. 001-32372) filed with the Securities and Exchange Commission on March 9, 2007).
	c. 7.995% Global Note due 2036 of Embarq Corporation (incorporated by reference to Exhibit 4.4 to Embarq Corporation's Annual Report on Form 10-K for the year ended December 31, 2006 (File No. 001-32372) filed with the Securities and Exchange Commission on March 9, 2007).
4.7	Intercompany debt instruments.
	a. Revolving Promissory Note, dated as of April 2, 2012 pursuant to which Embarq Corporation may borrow from an affiliate of CenturyLink, Inc. up to \$2.5 billion on a revolving basis (incorporated by reference to Exhibit 4.7(a) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended September 30, 2012 (File No. 001-07784) filed with the Securities and Exchange Commission on November 8, 2012).
	b. Revolving Promissory Note, dated as of April 18, 2012, pursuant to which Qwest Corporation may borrow from an affiliate of CenturyLink, Inc. up to \$1.0 billion on a revolving basis (incorporated by reference to Exhibit 4.7(b) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended September 30, 2012 (File No. 001-07784) filed with the Securities and Exchange Commission on November 8, 2012).
	c. Revolving Promissory Note, dated as of September 27, 2012, pursuant to which Qwest Communications International, Inc. may borrow from an affiliate of CenturyLink, Inc. up to \$3.0 billion on a revolving basis (incorporated by reference to Exhibit 4.7(c) of CenturyLink Inc.'s Annual Report on Form 10-K for the year ended December 31, 2012 (File No. 001-07844) filed with the Securities and Exchange Commission on March 1, 2013).
10.1	Qualified Employee Benefit Plans of CenturyLink, Inc. (excluding several narrow-based qualified plans that cover union employees or other limited groups of employees).

Exhibit Number	Description
a.	<p>CenturyLink Dollars & Sense 401(k) Plan and Trust, as amended and restated through December 31, 2006 (incorporated by reference to Exhibit 10.1(a) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2006 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2007), as amended by the First Amendment and the Second Amendment thereto, each dated as of December 31, 2007 (incorporated by reference to Exhibit 10.1(a) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2007 (File No. 001-07784) filed with the Securities and Exchange Commission on February 29, 2008), as amended by the Third Amendment thereto dated as of November 20, 2008 (incorporated by reference to Exhibit 10.1(a) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-07784) filed with the Securities and Exchange Commission on February 27, 2009), as amended by the Fourth Amendment thereto dated as of June 30, 2009 (incorporated by reference to Exhibit 10.1(a) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on August 7, 2009), as amended by the Fifth Amendment thereto dated as of September 15, 2009 (incorporated by reference to Exhibit 10.1(a) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2010), as amended by the Sixth Amendment thereto, dated as of December 30, 2009 (incorporated by reference to Exhibit 10.1(a) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2010), as amended by the Seventh Amendment thereto, effective May 20, 2010 (incorporated by reference to Exhibit 10.1(a) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended September 30, 2010 (File No. 001-07784) filed with the Securities and Exchange Commission on November 5, 2010) and as amended by the Eighth Amendment thereto, effective January 1, 2011 (incorporated by reference to Exhibit 10.1(a) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2010 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2011).</p>
b.	<p>CenturyLink Union 401(k) Plan and Trust, as amended and restated through December 31, 2006 (incorporated by reference to Exhibit 10.1(b) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2006 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2007), as amended by the First Amendment thereto dated as of May 29, 2007 (incorporated by reference to Exhibit 10.1(b) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended March 31, 2008 (File No. 001-07784) filed with the Securities and Exchange Commission on May 7, 2008), as amended by the Second Amendment thereto dated as of December 31, 2007 (incorporated by reference to Exhibit 10.1(b) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2007 (File No. 001-07784) filed with the Securities and Exchange Commission on February 29, 2008), as amended by the Third Amendment thereto dated as of November 20, 2008 (incorporated by reference to Exhibit 10.1(b) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-07784) filed with the Securities and Exchange Commission on February 27, 2009), as amended by the Fourth Amendment thereto dated as of June 30, 2009 (incorporated by reference to Exhibit 10.1(b) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on August 7, 2009), as amended by the Fifth Amendment thereto dated as of September 15, 2009 (incorporated by reference to Exhibit 10.1(b) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2010), as amended by the Sixth Amendment thereto, dated as of December 30, 2009 (incorporated by reference to Exhibit 10.1(b) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2010), as amended by the Seventh Amendment thereto, effective May 20, 2010 (incorporated by reference to Exhibit 10.1(b) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended September 30, 2010 (File No. 001-07784) filed with the Securities and Exchange Commission on November 5, 2010) and as amended by the Eighth Amendment thereto, effective January 1, 2011 (incorporated by reference to Exhibit 10.1(b) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2010 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2011).</p>

Exhibit Number	Description
c.	CenturyLink Retirement Plan, as amended and restated through December 31, 2006 (incorporated by reference to Exhibit 10.1(c) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2006 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2007), as amended by Amendment No. 1 thereto dated as of April 2, 2007 (incorporated by reference to Exhibit 10.1(c) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended March 31, 2008 (File No. 001-07784) filed with the Securities and Exchange Commission on May 7, 2008), as amended by Amendment No. 2 thereto dated as of December 31, 2007 (incorporated by reference to Exhibit 10.1(c) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2007 (File No. 001-07784) filed with the Securities and Exchange Commission on February 29, 2008), as amended by Amendment No. 3 thereto dated as of October 24, 2008 (incorporated by reference to Exhibit 10.1(c) CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-07784) filed with the Securities and Exchange Commission on February 27, 2009), as amended by Amendment No. 4 dated as of June 30, 2009 (incorporated by reference to Exhibit 10.1(c) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on August 7, 2009), as amended by Amendment No. 5 thereto dated as of September 15, 2009 (incorporated by reference to Exhibit 10.1(c) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2010), as amended by Amendment No. 6 thereto, dated as of December 30, 2009 (incorporated by reference to Exhibit 10.1(c) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2010), as amended by Amendment No. 7 thereto, effective at various dates during 2010 (incorporated by reference to Exhibit 10.1(c) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended September 30, 2010 (File No. 001-07784) filed with the Securities and Exchange Commission on November 5, 2010) and as amended by Amendment No. 8 thereto, effective January 1, 2011 (incorporated by reference to Exhibit 10.1(c) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2010 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2011).
10.2	Stock-based Incentive Plans and Agreements of CenturyLink.
a.	Amended and Restated 1983 Restricted Stock Plan, as amended and restated through February 23, 2010 (incorporated by reference to Exhibit 10.2(a) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2010).
b.	Amended and Restated 2000 Incentive Compensation Plan, as amended through May 23, 2000 (incorporated by reference to Exhibit 10.2 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2000 (File No. 001-07784) filed with the Securities and Exchange Commission on August 11, 2000) and amendment thereto dated as of May 29, 2003 (incorporated by reference to Exhibit 10.2 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2003 (File No. 001-7784) filed with the Securities and Exchange Commission on August 14, 2003). <ul style="list-style-type: none"> (i) Form of Stock Option Agreement, pursuant to the 2000 Incentive Compensation Plan and dated as of May 21, 2001, entered into between CenturyLink, Inc. and its officers (incorporated by reference to Exhibit 10.2(e) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2001 (File No. 001-07784) filed with the Securities and Exchange Commission on March 15, 2002). (ii) Form of Stock Option Agreement, pursuant to the 2000 Incentive Compensation Plan and dated as of February 25, 2002, entered into between CenturyLink, Inc. and its officers (incorporated by reference to Exhibit 10.2(d) (ii) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2002 (File No. 001-07784) filed with the Securities and Exchange Commission on March 27, 2003).
c.	Amended and Restated 2002 Directors Stock Option Plan, dated as of February 25, 2004 (incorporated by reference to Exhibit 10.2(e) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2003 (File No. 001-07784) filed with the Securities and Exchange Commission on March 12, 2004) and amendment thereto dated as of October 24, 2008 (incorporated by reference to Exhibit 10.2(d) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-07784) filed with the Securities and Exchange Commission on February 27, 2009). <ul style="list-style-type: none"> (i) Form of Stock Option Agreement, pursuant to the foregoing plan, entered into between CenturyLink, Inc. in connection with options granted to the outside directors as of May 10, 2002 (incorporated by reference to Exhibit 10.2 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended September 30, 2002 (File No. 001-07784) filed with the Securities and Exchange Commission on November 14, 2002).

Exhibit Number	Description
	(ii) Form of Stock Option Agreement, pursuant to the foregoing plan, entered into between CenturyLink, Inc. in connection with options granted to the outside directors as of May 9, 2003 (incorporated by reference to Exhibit 10.2(e) (ii) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2003 (File No. 001-07784) filed with the Securities and Exchange Commission on March 12, 2004).
	(iii) Form of Stock Option Agreement, pursuant to the foregoing plan, entered into between CenturyLink, Inc. in connection with options granted to the outside directors as of May 7, 2004 (incorporated by reference to Exhibit 10.2(d) (iii) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2005 (File No. 001-07784) filed with the Securities and Exchange Commission on March 16, 2006).
d.	Amended and Restated 2002 Management Incentive Compensation Plan, dated as of February 25, 2004 (incorporated by reference to Exhibit 10.2(f) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2003 (File No. 001-07784) filed with the Securities and Exchange Commission on March 12, 2004) and amendment thereto dated as of October 24, 2008 (incorporated by reference to Exhibit 10.2(e) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-07784) filed with the Securities and Exchange Commission on February 27, 2009).
	(i) Form of Stock Option Agreement, pursuant to the foregoing plan, entered into between CenturyLink, Inc. and certain of its officers and key employees at various dates during 2002 following May 9, 2002 (incorporated by reference to Exhibit 10.4 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended September 30, 2002 (File No. 001-07784) filed with the Securities and Exchange Commission on November 14, 2002).
	(ii) Form of Stock Option Agreement, pursuant to foregoing plan and dated as of February 24, 2003, entered into between CenturyLink, Inc. and its officers (incorporated by reference to Exhibit 10.2(f) (ii) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2002 (File No. 001-07784) filed with the Securities and Exchange Commission on March 27, 2003).
	(iii) Form of Stock Option Agreement, pursuant to foregoing plan and dated as of February 25, 2004, entered into between CenturyLink, Inc. and its officers (incorporated by reference to Exhibit 10.2(f) (iii) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2003 (File No. 001-07784) filed with the Securities and Exchange Commission on March 12, 2004).
	(iv) Form of Restricted Stock Agreement, pursuant to the foregoing plan and dated as of February 24, 2003, entered into between CenturyLink, Inc. and its executive officers (incorporated by reference to Exhibit 10.1 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended March 31, 2003 (File No. 001-07784) filed with the Securities and Exchange Commission on May 14, 2003).
	(v) Form of Restricted Stock Agreement, pursuant to the foregoing plan and dated as of February 25, 2004, entered into between CenturyLink, Inc. and its executive officers (incorporated by reference to Exhibit 10.2(f) (v) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended March 31, 2004 (File No. 000-50260) filed with the Securities and Exchange Commission on May 7, 2004).
	(vi) Form of Stock Option Agreement, pursuant to foregoing plan and dated as of February 17, 2005, entered into between CenturyLink, Inc. and its executive officers (incorporated by reference to Exhibit 10.2(e) (v) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2004 (File No. 000-50260) filed with the Securities and Exchange Commission on March 16, 2005).
	(vii) Form of Restricted Stock Agreement, pursuant to the foregoing plan and dated as of February 17, 2005, entered into between CenturyLink, Inc. and its executive officers (incorporated by reference to Exhibit 10.2(e) (vi) of CenturyLink, Inc.'s Annual Report on Form 10-K for the period ended December 31, 2004 (File No. 000-50260) filed with the Securities and Exchange Commission on March 16, 2005).
e.	Amended and Restated 2005 Directors Stock Plan, as amended and restated through February 23, 2010 (incorporated by reference to Exhibit 10.2(f) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2010).
	(i) Form of Restricted Stock Agreement, pursuant to the foregoing plan, entered into between CenturyLink, Inc. and each of its outside directors as of May 13, 2005 (incorporated by reference to Exhibit 10.4 of CenturyLink, Inc.'s Current Report on Form 8-K (File No. 000-50260) filed with the Securities and Exchange Commission on May 13, 2005).

Exhibit Number	Description
(ii)	Form of Restricted Stock Agreement, pursuant to the foregoing plan, entered into between CenturyLink, Inc. and each of its outside directors as of May 12, 2006 (incorporated by reference to Exhibit 10.1 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2006 (File No. 001-07784) filed with the Securities and Exchange Commission on August 3, 2006).
(iii)	Form of Restricted Stock Agreement, pursuant to the foregoing plan, entered into between CenturyLink, Inc. and each of its outside directors as of May 11, 2007 (incorporated by reference to Exhibit 10.2(f) (iii) of CenturyLink, Inc.'s Annual Report on Form 10-K for the period ended December 31, 2008 (File No. 001-07784) filed with the Securities and Exchange Commission on February 27, 2009).
(iv)	Form of Restricted Stock Agreement, pursuant to the foregoing plan, entered into between CenturyLink, Inc. and each of its outside directors as of May 9, 2008 (incorporated by reference to Exhibit 10.2 (f) (iv) of CenturyLink, Inc.'s Annual Report on Form 10-K for the period ended December 31, 2008 (File No. 001-07784) filed with the Securities and Exchange Commission on February 27, 2009).
(v)	Form of Restricted Stock Agreement, pursuant to the foregoing plan and dated as of May 8, 2009, entered into between CenturyLink, Inc. and each of its outside directors on such date who remained on the Board following July 1, 2009 (incorporated by reference to Exhibit 10.2(b) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on August 7, 2009).
(vi)	Form of Restricted Stock Agreement, pursuant to the foregoing plan and dated as of May 8, 2009, entered into between CenturyLink, Inc. and each of its outside directors who retired on July 1, 2009 (incorporated by reference to Exhibit 10.2(c) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on August 7, 2009).
(vii)	Form of Restricted Stock Agreement, pursuant to the foregoing plan and dated as of July 2, 2009, entered into between CenturyLink, Inc. and each of its outside directors named to the Board on July 1, 2009 (incorporated by reference to Exhibit 10.1(d) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on August 7, 2009).
(viii)	Restricted Stock Agreement, pursuant to the foregoing plan and dated as of July 2, 2009, entered into between CenturyLink, Inc. and William A. Owens in payment of Mr. Owens' 2009 supplemental chairman's fees (incorporated by reference to Exhibit 10.2(e) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on August 7, 2009).
(ix)	Form of Restricted Stock Agreement, pursuant to the foregoing plan and dated as of May 21, 2010, entered into between CenturyLink, Inc. and seven of its outside directors on such date (incorporated by reference to Exhibit 10.1 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2010 (File No. 001-07784) filed with the Securities and Exchange Commission on August 6, 2010).
f.	Amended and Restated 2005 Management Incentive Compensation Plan, as amended and restated through February 23, 2010 (incorporated by reference to Exhibit 10.2(g) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2010).
(i)	Form of Stock Option Agreement, pursuant to the foregoing plan, entered into between CenturyLink, Inc. and certain officers and key employees at various dates since May 12, 2005 (incorporated by reference to Exhibit 10.2 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended September 30, 2005 (File No. 001-07784) filed with the Securities and Exchange Commission on November 9, 2005).
(ii)	Form of Restricted Stock Agreement, pursuant to the foregoing plan, entered into between CenturyLink, Inc. and certain officers and key employees at various dates since May 12, 2005 (incorporated by reference to Exhibit 10.3 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended September 30, 2005 (File No. 001-07784) filed with the Securities and Exchange Commission on November 9, 2005).
(iii)	Form of Stock Option Agreement, pursuant to the foregoing plan and dated as of February 21, 2006, entered into between CenturyLink, Inc. and its executive officers (incorporated by reference to Exhibit 10.2(g) (iii) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2005 (File No. 001-07784) filed with the Securities and Exchange Commission on March 16, 2006).

Exhibit Number	Description
(iv)	Form of Restricted Stock Agreement, pursuant to the foregoing plan and dated as of February 21, 2006, entered into between CenturyLink, Inc. and its executive officers (incorporated by reference to Exhibit 10.2(g) (iv) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2005 (File No. 001-07784) filed with the Securities and Exchange Commission on March 16, 2006).
(v)	Form of Stock Option Agreement, pursuant to the foregoing plan and dated as of February 26, 2007, entered into between CenturyLink, Inc. and its executive officers (incorporated by reference to Exhibit 10.1 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended March 31, 2007 (File No. 001-07784) filed with the Securities and Exchange Commission on May 9, 2007).
(vi)	Form of Restricted Stock Agreement, pursuant to the foregoing plan and dated as of February 26, 2007, entered into between CenturyLink, Inc. and its executive officers (incorporated by reference to Exhibit 10.2 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended March 31, 2007 (File No. 001-07784) filed with the Securities and Exchange Commission on May 9, 2007).
(vii)	Form of Restricted Stock Agreement, pursuant to the foregoing plan and dated as of February 21, 2008, entered into between CenturyLink, Inc. and its executive officers (incorporated by reference to Exhibit 10.2 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended March 31, 2008 (File No. 001-07784) filed with the Securities and Exchange Commission on May 7, 2008).
(viii)	Form of Restricted Stock Agreement, pursuant to the foregoing plan and dated as of February 26, 2009 (incorporated by reference to Exhibit 10.2(g) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended March 31, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on May 1, 2009).
(ix)	Form of Restricted Stock Agreement, pursuant to the foregoing plan and dated as of March 8, 2010 (incorporated by reference to Exhibit 10.2 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended March 31, 2010 (File No. 001-07784) filed with the Securities and Exchange Commission on May 7, 2010).
g.	Amended and Restated CenturyLink Legacy Embarq 2008 Equity Incentive Plan, as amended and restated through February 23, 2010 (incorporated by reference to Exhibit 10.2(h) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2010).
(i)	Form of Restricted Stock Agreement, pursuant to the foregoing plan and dated as of May 21, 2010, entered into between CenturyLink, Inc. and four of its outside directors as of such date (incorporated by reference to Exhibit 10.2 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2010 (File No. 001-07784) filed with the Securities and Exchange Commission on August 6, 2010).
(ii)	Form of Restricted Stock Agreement, pursuant to the foregoing plan and dated as of May 21, 2010, entered into between CenturyLink, Inc. and William A. Owens in payment of Mr. Owens' 2010 supplemental chairman's fees (incorporated by reference to Exhibit 10.3 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2010 (File No. 001-07784) filed with the Securities and Exchange Commission on August 6, 2010).
(iii)	Form of Restricted Stock Agreement, dated as of September 7, 2010, entered into between CenturyLink, Inc. and Dennis G. Huber (incorporated by reference to Exhibit 10.16 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended September 30, 2010 (File No. 001-07784) filed with the Securities and Exchange Commission on November 5, 2010).
h.	Form of Retention Award Agreement, pursuant to the equity incentive plans of CenturyLink or Embarq and dated as of August 23, 2010, entered into between CenturyLink, Inc. and certain officers and key employees as of such date (incorporated by reference to Exhibit 10.2 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended September 30, 2010 (File No. 001-07784) filed with the Securities and Exchange Commission on November 5, 2010).
i.	CenturyLink 2011 Equity Incentive Plan (incorporated by reference to Appendix B of CenturyLink, Inc.'s Proxy Statement for its 2011 Annual Meeting of Shareholders (File No. 001-07784) filed with the Securities and Exchange Commission on April 6, 2011).
(i)	Form of Restricted Stock Agreement for executive officers used in 2011 and 2012 (incorporated by reference to Exhibit 10.2(a) (i) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2011 (File No. 001-07784) filed with the Securities and Exchange Commission on August 9, 2011).

Exhibit Number	Description
	(ii) Form of Restricted Stock Agreement for non-management directors used since 2011 (incorporated by reference to Exhibit 10.2(a) (ii) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2011 (File No. 001-07784) filed with the Securities and Exchange Commission on August 9, 2011).
	(iii) Form of Restricted Stock Agreement for executive officers used since May 2013.
10.3	Key Employee Incentive Compensation Plan, dated as of January 1, 1984, as amended and restated as of November 16, 1995 (incorporated by reference to Exhibit 10.1(f) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 1995 (File No. 001-07784) filed with the Securities and Exchange Commission on March 18, 1996) and amendment thereto dated as of November 21, 1996 (incorporated by reference to Exhibit 10.1(f) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 1996 (File No. 001-07784) filed with the Securities and Exchange Commission on March 17, 1997), amendment thereto dated as of February 25, 1997 (incorporated by reference to Exhibit 10.2 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended March 31, 1997 (File No. 001-07784) filed with the Securities and Exchange Commission on May 8, 1997), amendment thereto dated as of April 25, 2001 (incorporated by reference to Exhibit 10.2 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended March 31, 2001 (File No. 001-07784) filed with the Securities and Exchange Commission on May 15, 2001), amendment thereto dated as of April 17, 2000 (incorporated by reference to Exhibit 10.3(a) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2001 (File No. 001-07784) filed with the Securities and Exchange Commission on March 15, 2002) and amendment thereto dated as of February 27, 2007 (incorporated by reference to Exhibit 10.1 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2007 (File No. 001-07784) filed with the Securities and Exchange Commission on August 8, 2007).
10.4	Supplemental Dollars & Sense Plan, 2008 Restatement, effective January 1, 2008, (incorporated by reference to Exhibit 10.3(c) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2007 (File No. 001-07784) filed with the Securities and Exchange Commission on February 29, 2009) and amendment thereto dated as of October 24, 2008 (incorporated by reference to Exhibit 10.3(c) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-07784) filed with the Securities and Exchange Commission on March 27, 2009) and amendment thereto dated as of December 27, 2010 (incorporated by reference to Exhibit 10.4 of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2010 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2011).
10.5	Supplemental Defined Benefit Pension Plan, effective as of January 1, 2012 (incorporated by reference to Exhibit 10.5 of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2011 (File No. 001-07784) filed with the Securities and Exchange Commission on February 28, 2012).
10.6	Amended and Restated Salary Continuation (Disability) Plan for Officers, dated as of November 26, 1991 (incorporated by reference to Exhibit 10.16 of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 1991).
10.7	2015 Executive Officer Short-Term Incentive Program (incorporated by reference to Exhibit A of CenturyLink's 2015 Proxy Statement on Form 14A (File No. 001-07784) filed with the Securities and Exchange Commission on April 8, 2015).
10.8	Form of Indemnification Agreement entered into between CenturyLink, Inc. and each of its directors as of July 1, 2009 (incorporated by reference to Exhibit 99.3 of CenturyLink, Inc.'s Current Report on Form 8-K (File No. 001-07784) with the Securities and Exchange Commission on July 1, 2009).
10.9	Form of Indemnification Agreement entered into between CenturyLink, Inc. and each of its officers as of July 1, 2009 (incorporated by reference to Exhibit 10.5 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on August 7, 2009).
10.10	Change of Control Agreement, effective January 1, 2011, by and between Glen F. Post, III and CenturyLink, Inc. (incorporated by reference to Exhibit 10.11 of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2010 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2011).
10.11	Form of Change of Control Agreement, effective January 1, 2011 between CenturyLink, Inc. and each of its other executive officers (incorporated by reference to Exhibit 10.12 of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2010 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2011).
10.12	CenturyLink Executive Severance Plan (incorporated by reference to Exhibit 10.13 of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2014 (File No. 001-07784) filed with the Securities and Exchange Commission on February 24, 2015.)

Exhibit Number	Description
10.13	Amended and Restated CenturyLink, Inc. Bonus Life Insurance Plan for Executive Officers, dated as of April 3, 2008 (incorporated by reference to Exhibit 10.4 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended March 31, 2008 (File No. 001-07784) filed with the Securities and Exchange Commission on May 7, 2008) and First Amendment thereto (incorporated by reference to Exhibit 10.13 of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended September 30, 2010 (File No. 001-07784) filed with the Securities and Exchange Commission on November 5, 2010).
10.14	<p>Certain Material Agreements and Plans of Embarq Corporation.</p> <p>a. Embarq Corporation 2006 Equity Incentive Plan, as amended and restated (incorporated by reference to Exhibit 99.1 of the Registration Statement on Form S-8 filed by CenturyLink, Inc. (File No. 001-07784) with the Securities and Exchange Commission on July 1, 2009).</p> <p>b. Form of 2007 Award Agreement for executive officers of Embarq Corporation (incorporated by reference to Exhibit 10.1 of Embarq Corporation's Current Report on Form 8-K (File No. 001-32372) filed with the Securities and Exchange Commission on February 27, 2007).</p> <p>c. Form of 2008 Restricted Stock Unit Award Agreement (incorporated by reference to Exhibit 10.2 of Embarq Corporation's Current Report on Form 8-K (File No. 001-32372) filed with the Securities and Exchange Commission on March 4, 2008).</p> <p>d. Form of 2009 Restricted Stock Unit Award Agreement (incorporated by reference to Exhibit 10.1 of Embarq Corporation's Current Report on Form 8-K (File No. 001-32732) filed with the Securities and Exchange Commission on March 5, 2009).</p> <p>e. Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.3 of Embarq Corporation's Current Report on Form 8-K (File No. 001-32372) filed with the Securities and Exchange Commission on March 4, 2008).</p> <p>f. Amendment to Outstanding RSUs granted in 2007 and 2008 under the Embarq Corporation 2006 Equity Incentive Plan (incorporated by reference to Exhibit 10.16 of Embarq Corporation's Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-32372) filed with the Securities and Exchange Commission on February 13, 2009).</p> <p>g. Form of 2006 Award Agreement, entered into between Embarq Corporation and Richard A. Gephart (incorporated by reference to Exhibit 10.3 of Embarq Corporation's Current Report on Form 8-K (File No. 001-32372) filed with the Securities and Exchange Commission on August 1, 2006), as amended by the amendment thereto dated as of June 26, 2009 (incorporated by reference to Exhibit 10.6 (m) of CenturyLink, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2009 (File No. 001-07784) filed with the Securities and Exchange Commission on August 7, 2009).</p> <p>h. Amended and Restated Executive Severance Plan, including Form of Participation Agreement entered into between Embarq Corporation and William E. Cheek (incorporated by reference to Exhibit 10.4 of Embarq Corporation's Quarterly Report on Form 10-Q for the period ended September 30, 2008 (File No. 001-32372) filed with the Securities and Exchange Commission on October 30, 2008).</p> <p>i. Embarq Supplemental Executive Retirement Plan, as amended and restated as of January 1, 2009 (incorporated by reference to Exhibit 10.27 of Embarq Corporation's Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-32372) filed with the Securities and Exchange Commission on February 13, 2009), amendment thereto dated as of December 27, 2010 (incorporated by reference to Exhibit 10.14(o) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2010 (File No. 001-07784) filed with the Securities and Exchange Commission on March 1, 2011) and second amendment thereto as of dated as of November 15, 2011 (incorporated by reference to Exhibit 10.14(k) of CenturyLink, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2011 (File No. 001-07784) filed with the Securities and Exchange Commission on February 28, 2012).</p>
10.15	<p>Certain Material Agreements and Plans of Qwest Communications International Inc. or Savvis, Inc.</p> <p>a. Equity Incentive Plan, as amended and restated (incorporated by reference to Annex A of Qwest Communications International Inc.'s Proxy Statement for the 2007 Annual Meeting of Stockholders (File No. 001-15577) filed with the Securities and Exchange Commission on March 29, 2007).</p>

Exhibit Number	Description
b.	Forms of restricted stock, performance share and option agreements used under Equity Incentive Plan, as amended and restated (incorporated by reference to Exhibit 10.2 of Qwest Communications International Inc.'s Current Report on Form 8-K (File No. 001-15577) filed with the Securities and Exchange Commission on October 24, 2005; Exhibit 10.2 of Qwest Communication International Inc.'s Annual Report on Form 10-K for the year ended December 31, 2005 (File No. 001-15577) filed with the Securities and Exchange Commission on February 16, 2006; Exhibit 10.2 of Qwest Communication International Inc.'s Quarterly Report on Form 10-Q for the period ended March 31, 2006 (File No. 001-15577) filed with the Securities and Exchange Commission on May 3, 2006; Exhibit 10.2 of Qwest Communication International Inc.'s Annual Report on Form 10-K for the year ended December 31, 2006 (File No. 001-15577) filed with the Securities and Exchange Commission on February 8, 2007; Exhibit 10.3 of Qwest Communication International Inc.'s Current Report on Form 8-K (File No. 001-15577) filed with the Securities and Exchange Commission on September 15, 2008; Exhibit 10.2 of Qwest Communication International Inc.'s Quarterly Report on Form 10-Q for the period ended March 31, 2009 (File No. 001-15577) filed with the Securities and Exchange Commission on April 30, 2009; and Exhibit 10.2 of Qwest Communication International Inc.'s Annual Report on Form 10-K for the year ended December 31, 2010 (File No. 001-15577) filed with the Securities and Exchange Commission on February 15, 2011).
c.	Deferred Compensation Plan for Nonemployee Directors, as amended and restated, Amendment to Deferred Compensation Plan for Nonemployee Directors (incorporated by reference to Exhibit 10.2 of Qwest Communications International Inc.'s Current Report on Form 8-K (File No. 001-15577) filed with the Securities and Exchange Commission on December 16, 2005 and Exhibit 10.8 to Qwest Communication International Inc.'s Quarterly Report on Form 10-Q for the period ended September 30, 2008 (File No. 001-15577) filed with the Securities and Exchange Commission on October 29, 2008) and Amendment No. 2011-1 to Deferred Compensation Plan for Nonemployee Directors (incorporated by reference to Exhibit 10.15(c) of CenturyLink, Inc.'s Annual Report for the year ended December 31, 2011 (File No. 001-07784) filed with the Securities and Exchange Commission on February 28, 2012).
d.	Qwest Nonqualified Pension Plan (incorporated by reference to Exhibit 10.9 of Qwest Communications International Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009 (File No. 001-15577) filed with the Securities and Exchange Commission on February 16, 2010).
e.	SAVVIS, Inc. Amended and Restated 2003 Incentive Compensation Plan (incorporated by reference to Exhibit 10.4 of SAVVIS, Inc.'s Quarterly Report on Form 10-Q for the period ended March 31, 2006 (File No. 000-29375) filed with the Securities and Exchange Commission on May 5, 2006), as amended by Amendment No. 1 (incorporated by reference to Exhibit 10.6 of SAVVIS, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2006 (File No. 000-29375) filed with the Securities and Exchange Commission on February 26, 2007); Amendment No. 2 (incorporated by reference to Exhibit 10.1 of SAVVIS, Inc.'s Current Report on Form 8-K (File No. 000-29375) filed with the Securities and Exchange Commission on May 15, 2007); Amendment No. 3 (incorporated by reference to Exhibit 10.3 of SAVVIS, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2007 (File No. 000-29375) filed with the Securities and Exchange Commission on July 31, 2007); Amendment No. 4 (incorporated by reference to Exhibit 10.2 of SAVVIS, Inc.'s Current Report on Form 8-K (File No. 000-29375) filed with the Securities and Exchange Commission on May 22, 2009); and Amendment No. 5 (incorporated by reference to Exhibit 10.2 of SAVVIS, Inc.'s Current Report on Form 8-K (File No. 000-29375) filed with the Securities and Exchange Commission on May 22, 2009).
12*	Ratio of Earnings to Fixed Charges.
21*	Subsidiaries of CenturyLink, Inc.
23*	Independent Registered Public Accounting Firm Consent
31.1*	Certification of the Chief Executive Officer of CenturyLink, Inc. pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of the Chief Financial Officer of CenturyLink, Inc. pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32*	Certification of the Chief Executive Officer and Chief Financial Officer of CenturyLink, Inc. pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

Exhibit Number	Description
101*	Financial statements from the Annual Report on Form 10-K of CenturyLink, Inc. for the period ended December 31, 2015, formatted in XBRL: (i) the Consolidated Statements of Operations, (ii) the Consolidated Statements of Comprehensive Income (Loss), (iii) the Consolidated Balance Sheets, (iv) the Consolidated Statements of Cash Flows, (v) the Consolidated Statements of Stockholders' Equity and (vi) the Notes to Consolidated Financial Statements.

* Exhibit filed herewith.

(1) Certain of the items in Sections 4.4, 4.5 and 4.6 (i) omit supplemental indentures or other instruments governing debt that has been retired, or (ii) refer to trustees who may have been replaced, acquired or affected by similar changes. In accordance with Item 601(b) (4) (iii) (A) of Regulation S-K, copies of certain instruments defining the rights of holders of certain of our long-term debt are not filed herewith. Pursuant to this regulation, we hereby agree to furnish a copy of any such instrument to the SEC upon request.

<u>/s/ Gregory J. McCray</u>	Director	February 24, 2016
Gregory J. McCray		
<u>/s/ C. G. Melville, Jr.</u>	Director	February 24, 2016
C. G. Melville, Jr.		
<u>/s/ Harvey P. Perry</u>	Director	February 24, 2016
Harvey P. Perry		
<u>/s/ Michael J. Roberts</u>	Director	February 24, 2016
Michael J. Roberts		
<u>/s/ Laurie A. Siegel</u>	Director	February 24, 2016
Laurie A. Siegel		

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Section 2: EX-12 (EXHIBIT 12)

Exhibit 12

CENTURYLINK, INC.

CALCULATION OF RATIO OF EARNINGS TO FIXED CHARGES

(UNAUDITED)

	Years Ended December 31,				
	2015	2014	2013	2012	2011
	(Dollars in millions)				
Income before income taxes and cumulative effect of change in accounting principle	\$ 1,316	1,110	224	1,250	948
Less: income from equity investee	(25)	(22)	(24)	(15)	(13)
Add: estimated fixed charges	1,516	1,502	1,486	1,504	1,223
Add: estimated amortization of capitalized interest	19	17	16	15	12
Add: distributed income of equity investee	19	22	14	12	14
Less: interest capitalized	(52)	(47)	(41)	(43)	(25)
Total earnings available for fixed charges	\$ 2,793	2,582	1,675	2,723	2,159
Estimate of interest factor on rentals	\$ 152	144	147	142	126
Interest expense, including amortization of premiums, discounts and debt issuance costs	1,312	1,311	1,298	1,319	1,072
Interest capitalized	52	47	41	43	25
Total fixed charges	\$ 1,516	1,502	1,486	1,504	1,223
Ratio of earnings to fixed charges	1.84	1.72	1.13	1.81	1.77

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Section 3: EX-21 (EXHIBIT 21)

Exhibit 21

CENTURYLINK, INC.
SUBSIDIARIES OF THE REGISTRANT
AS OF DECEMBER 31, 2015

<u>Subsidiary</u>	<u>State of incorporation or formation</u>
Actel, LLC	Delaware
Bloomington Telephone Company, Inc. (20%)	Michigan
Century Cellunet International, Inc.	Louisiana
Cellunet of India Limited	Mauritius
Century Telephone of West Virginia, Inc.	West Virginia
CenturyLink – Clarke M. Williams Foundation	Colorado
CenturyLink Communications, LLC	Delaware
Cognilytics, Inc.	California
Cognilytics Software and Consulting Private Limited	India
Qwest International Services Corporation	Delaware
Qwest N Limited Partnership (98.5%)	Delaware
Qwest Transoceanic, Inc.	Delaware
Qwest Communications International Ltd.	United Kingdom
Qwest Holdings, BV	Netherlands
CenturyLink Belgium Sprl	Belgium
Qwest France SAS	France
Qwest Germany GmbH	Germany
Qwest Netherlands BV	Netherlands
Qwest Peru S.R.L.	Peru
Qwest Telecommunications Asia, Limited	Hong Kong
Qwest Australia Pty Limited	Australia
Qwest Communications Japan Corporation	Japan
Qwest Communications Korea, Limited	Korea
Qwest Hong Kong Telecommunications, Limited	Hong Kong
Qwest Singapore Pte Ltd.	Singapore
Qwest Taiwan Telecommunications, Limited	Taiwan
CenturyTel of Adamsville, Inc.	Tennessee
CenturyTel of Arkansas, Inc.	Arkansas
CenturyTel Broadband Services, LLC	Louisiana
CenturyTel TeleVideo, Inc.	Wisconsin
CenturyTel/Televue of Wisconsin, Inc.	Wisconsin
Qwest Broadband Services, Inc.	Delaware
CenturyTel Broadband Wireless, LLC	Louisiana
CenturyTel of Central Indiana, Inc.	Indiana
CenturyTel of Central Louisiana, LLC	Louisiana
CenturyTel of Chatham, LLC	Louisiana
CenturyTel of Chester, Inc.	Iowa
CenturyTel of Claiborne, Inc.	Tennessee
CenturyTel of East Louisiana, LLC	Louisiana
CenturyTel of Evangeline, LLC	Louisiana

Subsidiary	State of incorporation or formation
CenturyTel Holdings, Inc.	Louisiana
Century Marketing Solutions, LLC	Louisiana
CenturyTel Arkansas Holdings, Inc.	Arkansas
CenturyTel of Central Arkansas, LLC	Louisiana
CenturyTel of Northwest Arkansas, LLC	Louisiana
CenturyTel Holdings Alabama, Inc.	Alabama
CenturyTel of Alabama, LLC	Louisiana
CenturyTel Holdings Missouri, Inc.	Missouri
CenturyTel of Missouri, LLC	Louisiana
CenturyTel Investments of Texas, Inc.	Delaware
CenturyTel of the Northwest, Inc.	Washington
Brown Equipment Corp.	Nevada
Carter Company, Inc.	Hawaii
Honomach PR, Inc.	Puerto Rico
Cascade Autovon Company	Washington
CenturyTel/Cable Layers, Inc.	Wisconsin
CenturyTel of Central Wisconsin, LLC	Delaware
CenturyTel of Colorado, Inc.	Colorado
CenturyTel of Eagle, Inc.	Colorado
CenturyTel of Eastern Oregon, Inc.	Oregon
CenturyTel Entertainment, Inc.	Washington
CenturyTel of Fairwater-Brandon-Alto, LLC	Delaware
CenturyTel of Forestville, LLC	Delaware
CenturyTel of the Gem State, Inc. (97%)	Idaho
CenturyTel of Inter Island, Inc.	Washington
CenturyTel of Larsen-Readfield, LLC	Delaware
CenturyTel of the Midwest-Kendall, LLC	Delaware
CenturyTel of the Midwest-Wisconsin, LLC	Delaware
CenturyTel of Minnesota, Inc.	Minnesota
CenturyTel of Monroe County, LLC	Delaware
CenturyTel of Montana, Inc. (99%)	Oregon
CenturyTel of Northern Wisconsin, LLC	Delaware
CenturyTel of Northwest Wisconsin, LLC	Delaware
CenturyTel of Oregon, Inc.	Oregon
CenturyTel of Paradise, Inc.	Washington
CenturyTel of Cowiche, Inc.	Washington
CenturyTel of Postville, Inc.	Iowa
CenturyTel of Southern Wisconsin, LLC	Delaware
CenturyTel of the Southwest, Inc.	New Mexico
CenturyTel Telecom Service, Inc.	Washington
CenturyTel Telephone Utilities, Inc.	Washington
CenturyTel of Upper Michigan, Inc.	Michigan
CenturyTel of Washington, Inc.	Washington
CenturyTel/WORLDVOX, Inc.	Oregon

<u>Subsidiary</u>	<u>State of incorporation or formation</u>
CenturyTel of Wyoming, Inc.	Wyoming
Eagle Valley Communications Corporation	Colorado
International Communications Holdings, Inc.	Delaware
Pacific Telecom, Inc. (Shell)	Oregon
PTI Communications of Ketchikan, Inc.	Alaska
PTI Communications of Minnesota, Inc.	Minnesota
PTI Transponders, Inc.	Oregon
Universal Manufacturing Corp.	Wisconsin
CenturyTel of Idaho, Inc.	Delaware
CenturyTel Internet Holdings, Inc.	Louisiana
centurytel.com, LLC	Louisiana
CenturyTel Investments, LLC	Louisiana
CenturyTel of Michigan, Inc.	Michigan
CenturyTel Midwest - Michigan, Inc.	Michigan
CenturyTel Mobile Communications, Inc.	Louisiana
CenturyTel of Mountain Home, Inc.	Arkansas
CenturyTel of North Louisiana, LLC	Louisiana
CenturyTel of North Mississippi, Inc.	Mississippi
CenturyTel of Northern Michigan, Inc.	Michigan
CenturyTel of Northwest Louisiana, Inc.	Louisiana
CenturyTel of Odon, Inc.	Indiana
CenturyTel of Ohio, Inc.	Ohio
CenturyTel of Ooltewah-Collegedale, Inc.	Tennessee
CenturyTel of Port Aransas, Inc.	Texas
CenturyTel of Redfield, Inc.	Arkansas
CenturyTel of Ringgold, LLC	Louisiana
CenturyTel SM Telecorp, Inc.	Texas
CenturyTel Telecommunications, Inc.	Texas
CenturyTel of San Marcos, Inc.	Texas
CenturyTel San Marcos Investments, LLC	Delaware
CenturyTel Security Systems, Inc.	Louisiana
CenturyTel Service Group, LLC	Louisiana
CenturyTel of South Arkansas, Inc.	Arkansas
CenturyTel of Southeast Louisiana, LLC	Louisiana
CenturyTel of Southwest Louisiana, LLC	Louisiana
CenturyTel Supply Group, Inc.	Louisiana
CenturyTel/Tele-Max, Inc.	Texas
CenturyTel of Lake Dallas, Inc.	Texas
CenturyTel Web Solutions, LLC	Louisiana
CenturyTel of Wisconsin, LLC	Louisiana
Embarq Corporation	Delaware
Carolina Telephone and Telegraph Company LLC	North Carolina
NOCUTS, Inc.	Pennsylvania
SC One Company	Kansas

<u>Subsidiary</u>	<u>State of incorporation or formation</u>
Centel Corporation	Kansas
Centel Capital Corporation	Delaware
Centel-Texas, Inc.	Texas
Central Telephone Company of Texas	Texas
EQ Central Texas Equipment LLC	Texas
Central Telephone Company	Delaware
Central Telephone Company of Virginia	Virginia
Embarq Florida, Inc.	Florida
The Winter Park Telephone Company	Florida
CenturyLink Intellectual Property LLC	Delaware
Embarq Directory Trademark Company, LLC	Delaware
CenturyLink Public Communications, Inc.	Florida
CenturyLink Sales Solutions, Inc.	Delaware
Embarq, Inc.	Kansas
Embarq Capital Corporation	Delaware
SC Seven Company	Kansas
Embarq Interactive Holdings LLC	Delaware
Embarq Interactive Markets LLC	Delaware
Embarq Management Company	Delaware
EQ Management Equipment LP	Nevada
Embarq Mid-Atlantic Management Services Company	North Carolina
Embarq Minnesota, Inc.	Minnesota
Embarq Missouri, Inc.	Missouri
SC Eight Company	Kansas
Embarq Network Company LLC	Delaware
EQ Equipment Leasing, Inc.	Delaware
United Telephone Company of the Carolinas LLC	South Carolina
SC Two Company	Kansas
United Telephone Company of Eastern Kansas	Delaware
United Telephone Company of Florida	Florida
United Telephone Company of Indiana, Inc.	Indiana
SC Four Company	Kansas
United Telephone Company of Kansas	Kansas
Embarq Midwest Management Services Company	Kansas
United Teleservices, Inc.	Kansas
United Telephone Company of New Jersey, Inc.	New Jersey
United Telephone Company of the Northwest	Oregon
United Telephone Company of Ohio	Ohio
SC Five Company	Kansas
United Telephone Company of Pennsylvania LLC, The	Pennsylvania
SC Six Company	Kansas
Valley Network Partnership (40% aggregate)	Virginia
United Telephone Company of Southcentral Kansas	Arkansas
United Telephone Company of Texas, Inc.	Texas

<u>Subsidiary</u>	<u>State of incorporation or formation</u>
EQ United Texas Equipment LLC	Texas
United Telephone Company of the West	Delaware
United Telephone Southeast LLC	Virginia
SC Three Company	Kansas
Hillsboro Telephone Company, Inc. (20%)	Wisconsin
Lafayette MSA Limited Partnership (49%)	Delaware
Madison River Communications Corp.	Delaware
Gallatin River Holdings L.L.C.	Delaware
Gallatin River Communications L.L.C.	Delaware
Madison River Finance Corp.	Delaware
Madison River Holdings LLC	Delaware
Madison River LTD Funding LLC	Delaware
Coastal Utilities, Inc.	Georgia
Gulf Coast Services, LLC	Alabama
Gulf Telephone Company, LLC	Alabama
Madison River Management LLC	Delaware
Mebtel, Inc.	North Carolina
Pacific Telecom Cellular of Alaska RSA #1, Inc.	Alaska
Qwest Communications International, Inc.	Delaware
EUnet International Limited	United Kingdom
EUnet International B.V.	Netherlands
Qwest B.V.	Netherlands
KPNQwest N.V. (44.34%)	Netherlands
Qwest Capital Funding, Inc.	Colorado
Qwest Europe LLC	Delaware
Qwest Services Corporation	Colorado
CenturyLink Investment Management Company	Colorado
Qwest Corporation	Colorado
1200 Landmark Center Condominium Association, Inc.	Nebraska
Block 142 Parking Garage Association	Colorado
Qwest Database Services, Inc.	Colorado
SMS/800, Inc. (33.3%)	District of Columbia
Qwest India Holdings, LLC	Delaware
CenturyLink Technologies India Private Limited	India
The El Paso County Telephone Company	Colorado
MoveARoo, LLC (33.3%)	Delaware
Qwest Dex Holdings, Inc.	Delaware
Qwest Government Services, Inc.	Colorado
Qwest Wireless, L.L.C.	Delaware
SAVVIS, Inc.	Delaware
AppFog, Inc.	Delaware
CenturyLink Australia Pty. Ltd.	Australia
CenturyLink do Brasil Participações Ltda.	Brazil
CenturyLink Comunicações Ltda.	Brazil

Subsidiary	State of incorporation or formation
CenturyLink Europe B.V.	Netherlands
CenturyLink Europe B.V., The Netherlands, filial Sweden	Sweden
SAVVIS Europe BV Sucursal en España	Spain
CenturyLink France S.A.S.	France
CenturyLink Germany GmbH	Germany
CenturyLink Italia S.r.l.	Italy
CenturyLink Japan, Ltd	Japan
CenturyLink New Zealand Limited	New Zealand
CenturyLink Philippines, Inc.	Philippines
CenturyLink Poland Sp Zo.o.	Poland
CenturyLink Singapore Pte. Ltd.	Singapore
CenturyLink Switzerland A.G.	Switzerland
CenturyLink Taiwan Limited	Taiwan
CenturyLink Technology Hong Kong Limited	Hong Kong
CenturyLink IT Consulting (Shanghai) Co., Ltd.	China
CenturyLink Technology Malaysia Sdn. Bhd.	Malaysia
CenturyLink Technology UK Limited	United Kingdom
CenturyLink Austria GmbH	Austria
CenturyLink Limited	United Kingdom
CenturyLink (Thailand) Limited	Thailand
DataGardens, Inc.	Canada
Digital Savvis HK JV	British VI
Digital Savvis HK Holding 1 Limited	British VI
Digital Savvis Investment Management HK Limited	Hong Kong
Digital Savvis Management Subsidiary Limited	Hong Kong
SAVVIS Canada, Inc.	Delaware
SAVVIS Communications Canada, Inc.	Canada
SAVVIS Communications Chile, S.A.	Chile
SAVVIS Communications Corporation	Missouri
SAVVIS Federal Systems, Inc.	Delaware
SAVVIS Communications International, Inc.	Delaware
CenturyLink Korea Limited	Korea
SAVVIS Communications Private Limited	India
SAVVIS do Brasil Ltda.	Brazil
SAVVIS Telecomunicacões Ltda.	Brazil
SAVVIS Hungary Telecommunications KFT	Hungary
SAVVIS Mexico, S.A. de C.V.	Mexico
Tier 3, Inc.	Washington
SkyComm Technologies Corporation (50.0%)	Delaware
Spectra Communications Group, LLC	Delaware
TelUSA Holdings, LLC (89%)	Delaware
Telephone USA of Wisconsin, LLC	Delaware
Western Re, Inc.	Louisiana

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Section 4: EX-23 (EXHIBIT 23)

Consent of Independent Registered Public Accounting Firm

The Board of Directors
CenturyLink, Inc.:

We consent to the incorporation by reference in the Registration Statements (No. 333-202411 and No. 333-187366) on Form S-3, the Registration Statements (No. 33-60061, No. 333-160391, No. 333-37148, No. 333-60806, No. 333-150157, No. 333-124854, No. 333-150188, and No. 333-174571) on Form S-8, and the Registration Statements (No. 33-48956, No. 333-17015, No. 333-167339, No. 333-174291, No. 333-155521, and No. 333-206725) on Form S-4 of CenturyLink, Inc. of our reports dated February 24, 2016, with respect to the consolidated balance sheets of CenturyLink, Inc. and subsidiaries as of December 31, 2015 and 2014, and the related consolidated statements of operations, comprehensive income (loss), cash flows, and stockholders' equity for each of the years in the three-year period ended December 31, 2015, and the effectiveness of internal control over financial reporting as of December 31, 2015, which reports appear in the December 31, 2015 annual report on Form 10-K of CenturyLink, Inc.

Our report on the consolidated financial statements dated February 24, 2016 refers to a change in accounting for debt issuance costs and accounting for deferred income taxes.

/s/ KPMG LLP

Shreveport, Louisiana
February 24, 2016

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Section 5: EX-31.1 (EXHIBIT 31.1)

Exhibit 31.1

CERTIFICATION

I, Glen F. Post, III, Chief Executive Officer and President, certify that:

1. I have reviewed this annual report on Form 10-K of CenturyLink, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15 (e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions

about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

- d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors:
- a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 24, 2016

/s/ Glen F. Post, III

Glen F. Post, III

Chief Executive Officer and President

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Section 6: EX-31.2 (EXHIBIT 31.2)

Exhibit 31.2

CERTIFICATION

I, R. Stewart Ewing, Jr., Executive Vice President, Chief Financial Officer and Assistant Secretary, certify that:

1. I have reviewed this annual report on Form 10-K of CenturyLink, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15 (e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors:
- a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 24, 2016

/s/ R. Stewart Ewing, Jr.

R. Stewart Ewing, Jr.
Executive Vice President, Chief
Financial Officer and Assistant
Secretary

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Section 7: EX-32 (EXHIBIT 32)

Exhibit 32

Chief Executive Officer and Chief Financial Officer Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Each of the undersigned, acting in his capacity as the Chief Executive Officer or Chief Financial Officer of CenturyLink, Inc. ("CenturyLink"), certifies that, to his knowledge, the Annual Report on Form 10-K for the year ended December 31, 2015 of CenturyLink fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 and that the information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of CenturyLink as of the dates and for the periods covered by such report.

A signed original of this statement has been provided to CenturyLink and will be retained by CenturyLink and furnished to the Securities and Exchange Commission or its staff upon request.

Date: February 24, 2016

/s/ Glen F. Post, III

Glen F. Post, III

Chief Executive Officer and
President

/s/ R. Stewart Ewing, Jr.

R. Stewart Ewing, Jr.

Executive Vice President, Chief
Financial Officer and Assistant
Secretary

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CenturyLinkTM

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Alltel	300	Alltel	0395	ACCUCOMM TELECOMM	Active
Alltel	300	Alltel	0302	ALLTEL ALABAMA	Active
Alltel	300	Alltel	1691	ALLTEL ARKANSAS INC	Active
Alltel	300	Alltel	0476	ALLTEL CAROLINA INC	Active
Alltel	300	Alltel	1568	ALLTEL COMMUNICATIONS CO.	Active
Alltel	300	Alltel	0336	ALLTEL FLORIDA INC	Active
Alltel	300	Alltel	4332	ALLTEL GA COMM CORP	Active
Alltel	300	Alltel	0357	ALLTEL GA INC	Active
Alltel	300	Alltel	0402	ALLTEL KENTUCKY INC	Active
Alltel	300	Alltel	0453	ALLTEL MISSISSIPPI	Active
Alltel	300	Alltel	1873	ALLTEL MISSOURI	Active
Alltel	300	Alltel	1904	ALLTEL MISSOURI	Active
Alltel	300	Alltel	1885	ALLTEL MISSOURI INC	Active
Alltel	300	Alltel	0106	ALLTEL NY INC FLTN	Active
Alltel	300	Alltel	0109	ALLTEL NY INC JAMEST	Active
Alltel	300	Alltel	0113	ALLTEL NY INC RED JK	Active
Alltel	300	Alltel	0665	ALLTEL OH INC WO	Active
Alltel	300	Alltel	1965	ALLTEL OKLAHOMA INC	Active
Alltel	300	Alltel	0176	ALLTEL PENNA INC	Active
Alltel	300	Alltel	0517	ALLTEL SO CAROLINA	Active
Alltel	300	Alltel	4425	GA ALLTEL TELECOM	Active
Alltel	300	Alltel	0364	GEORGIA TEL CORP	Active
Alltel	300	Alltel	9690	KY ALLTEL LEXINGTON	Active
Alltel	300	Alltel	9691	KY ALLTEL LONDON	Active
Alltel	300	Alltel	0483	LEXCOM TELEPHONE	Active
Alltel	300	Alltel	2011	OKLAHOMA ALLTEL INC	Active
Alltel	300	Alltel	0499	SANDHILL TEL CO	Active
Alltel	300	Alltel	0386	STANDARD TEL CO	Active
Alltel	300	Alltel	2147	SUGAR LAND TEL CO	Active
Alltel	300	Alltel	2153	TEXAS ALLTEL INC	Active
Alltel	300	Alltel	0157	TUOLUMNE ALLTEL PA	Active
Alltel	300	Alltel	0666	WESTERN RESERVE TEL	Active
Alltel	300	Alltel	0474	Windstream - CONCORD TEL CO	Active
SNET	047	AT&T East	5200	SO NEW ENGLAND TELCT	Active
SNET	047	AT&T East	2454	WOODBURY TEL CO	Active
Ameritech	029	AT&T Midwest - Illinois	9329	AMERITECH ILLINOIS	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Ameritech	025	AT&T Midwest - Indiana	9325	AMERITECH INDIANA	Active
Ameritech	023	AT&T Midwest - Michigan	9323	AMERITECH MICHIGAN	Active
Ameritech	021	AT&T Midwest - Ohio	9321	AMERITECH OHIO	Active
Ameritech	027	AT&T Midwest - Wisconsin	9327	AMERITECH WISCONSIN	Active
BillToMobile	956	AT&T Mobile	ZZ02	Bill to Mobile ATT	Active
Southwestern Bell	033	AT&T Southwest	9533	SOUTHWESTERN BELL	Active
Southwestern Bell	033	AT&T Southwest	7726	SOUTHWESTERN BELL TX	Active
Southwestern Bell	033	AT&T Southwest	5211	SOUTHWESTERN BELL-AR	Active
Southwestern Bell	033	AT&T Southwest	5214	SOUTHWESTERN BELL-KS	Active
Southwestern Bell	033	AT&T Southwest	5213	SOUTHWESTERN BELL-MO	Active
Southwestern Bell	033	AT&T Southwest	5215	SOUTHWESTERN BELL-OK	Active
Southwestern Bell	033	AT&T Southwest	5216	SOUTHWESTERN BELL-TX	Active
Pac/Nevada Bell	040	AT&T West - Northern	9740	PACIFIC BELL	Active
Pac/Nevada Bell	040	AT&T West - Northern	5170	PACIFIC BELL - CA	Active
Pac/Nevada Bell	040	AT&T West - Northern	9700	PACIFIC BELL REGION	Active
Pac/Nevada Bell	042	AT&T West - Southern	9742	NEVADA BELL	Active
Pac/Nevada Bell	042	AT&T West - Southern	5173	NEVADA BELL - NV	Active
Bell South	020	Bell South	5181	BELLSOUTH TELECOM-AL	Active
Bell South	020	Bell South	5191	BELLSOUTH TELECOM-FL	Active
Bell South	020	Bell South	5192	BELLSOUTH TELECOM-GA	Active
Bell South	020	Bell South	5182	BELLSOUTH TELECOM-KY	Active
Bell South	020	Bell South	5183	BELLSOUTH TELECOM-LA	Active
Bell South	020	Bell South	5184	BELLSOUTH TELECOM-MS	Active
Bell South	020	Bell South	5193	BELLSOUTH TELECOM-NC	Active
Bell South	020	Bell South	5194	BELLSOUTH TELECOM-SC	Active
Bell South	020	Bell South	5185	BELLSOUTH TELECOM-TN	Active
Bell South	020	Bell South	9419	SOUTH CENTRAL BELL	Active
Bell South	020	Bell South	9417	SOUTHERN BELL TEL CO	Active
Century Link	070	Century Link	0661	UNITED TELCO OF OHIO	Active
Century Link	071	CenturyLink NC	0471	CENTRAL TEL CO OF NC	Active
Century Link	071	CenturyLink NC	0470	SPRINT MID ATLANTIC	Active
Century Link	072	CenturyLink NJ	0138	UNITED TEL CO OF NJ	Active
Century Link	073	CenturyLink NV	2348	CENTRAL TEL CO NV	Active
Century Link	074	CenturyLink TN	4510	UNITED TEL - SE - TN	Active
Century Link	075	CenturyLink VA	0254	CENTRAL TEL OF VA	Active
Century Link	075	CenturyLink VA	0567	UNITED INTER-MTN TEL	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Century Link	075	CenturyLink VA	4511	UNITED TEL - SE - VA	Active
Cincinnati Bell	048	Cincinnati Bell	9348	CINCINNATI BELL	Active
Cincinnati Bell	048	Cincinnati Bell	5061	CINCINNATI BELL - KY	Active
Cincinnati Bell	048	Cincinnati Bell	5062	CINCINNATI BELL - OH	Active
Cincinnati Bell	048	Cincinnati Bell	309B	CINCINNATI BELL TELC	Active
Citizens	656	Citizens	127G	BELL ATLANTIC VA INC	Active
Citizens	656	Citizens	9214	BELL ATLANTIC WV INC	Active
Citizens	656	Citizens	4336	CITIZENS COMM CO TN	Active
Citizens	656	Citizens	1183	CITIZENS COMM OF IL	Active
Citizens	656	Citizens	1122	CITIZENS TELECOM IA	Active
Citizens	656	Citizens	4427	CITIZENS TELECOM ID	Active
Citizens	656	Citizens	1123	CITIZENS TELECOM MN	Active
Citizens	656	Citizens	4322	CITIZENS TELECOM MT	Active
Citizens	656	Citizens	1131	CITIZENS TELECOM ND	Active
Citizens	656	Citizens	1128	CITIZENS TELECOM NE	Active
Citizens	656	Citizens	2354	CITIZENS TELECOM NV	Active
Citizens	656	Citizens	0096	CITIZENS TELECOM NY	Active
Citizens	656	Citizens	3401	CITIZENS TELECOM OR	Active
Citizens	656	Citizens	4429	CITIZENS TELECOM UT	Active
Citizens	656	Citizens	0270	CITIZENS TELECOM W V	Active
Citizens	656	Citizens	0577	CITIZENS VOLUNTEER	Active
Citizens	656	Citizens	2275	NAVAJO COMM CO INC	Active
Citizens	656	Citizens	4450	NAVAJO COMM CO- NM	Active
Citizens	656	Citizens	4451	NAVAJO COMM CO- UT	Active
Citizens	651	Citizens - Arizona	4426	CITIZENS COMM CO -AZ	Active
Citizens	651	Citizens - Arizona	2172	CITIZENS UTIL RURAL	Active
Citizens	651	Citizens - Arizona	4449	NAVAJO COMM CO- AZ	Active
Citizens	650	Citizens - California	3402	CITIZENS GOLDEN ST	Active
Citizens	650	Citizens - California	2308	CITIZENS TELECOM CA	Active
Citizens	650	Citizens - California	2342	CITIZENS TUOLUMNE	Active
Citizens	654	Citizens - West Virginia	4338	CITIZENS COMM CO WV	Active
Citizens	658	CitizFront FMR GTE CA	2319	VERIZON CALIFORNIA/GTE	Active
Citizens	657	CitizFront FMR GTE FL/TX	4420	CONTEL OF CA INC -CA	Active
Citizens	657	CitizFront FMR GTE FL/TX	0328	VERIZON FLORIDA INC/GTE	Active
Citizens	657	CitizFront FMR GTE FL/TX	2154	VERIZON SW INC.-TX/GTE	Active
Citizens	657	CitizFront FMR GTE FL/TX	4344	VERIZON SW INC.-TX/GTE	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Frontier/Rochester	929	Frontier (SNET)	9147	SO NEW ENGLAND TEL	Active
Frontier/Rochester	925	Frontier Legacy	0772	FRONTIER LEGACY IN	Active
Frontier/Rochester	925	Frontier Legacy	0779	FRONTIER LEGACY IN	Active
Frontier/Rochester	925	Frontier Legacy	0831	FRONTIER LEGACY IN	Active
Frontier/Rochester	925	Frontier Legacy	0681	FRONTIER LEGACY MI	Active
Frontier/Rochester	925	Frontier Legacy	0695	FRONTIER LEGACY MI	Active
Frontier/Rochester	925	Frontier Legacy	0509	FRONTIER LEGACY NC	Active
Frontier/Rochester	925	Frontier Legacy	4334	FRONTIER LEGACY NC	Active
Frontier/Rochester	925	Frontier Legacy	0526	FRONTIER LEGACY SC	Active
Frontier/Rochester	925	Frontier Legacy	4335	FRONTIER LEGACY SC	Active
Frontier/Rochester	927	Frontier Legacy 2	4419	CONTEL OF CA INC -AZ	Active
Frontier/Rochester	927	Frontier Legacy 2	4421	CONTEL OF NEVADA-NV	Active
Frontier/Rochester	927	Frontier Legacy 2	1000	Frontier SOUTH-IL/GTE	Active
Frontier/Rochester	927	Frontier Legacy 2	2344	Frontier W Coast CA	Active
Frontier/Rochester	927	Frontier Legacy 2	4311	GTE NORTH INC - IA	Active
Frontier/Rochester	927	Frontier Legacy 2	4312	GTE NORTH INC - MN	Active
Frontier/Rochester	927	Frontier Legacy 2	4313	GTE NORTH INC - MO	Active
Frontier/Rochester	927	Frontier Legacy 2	4314	GTE NORTH INC - NE	Active
Frontier/Rochester	927	Frontier Legacy 2	4423	GTE NORTHWEST - WA	Active
Frontier/Rochester	927	Frontier Legacy 2	1883	KANSAS STATE TEL CO	Active
Frontier/Rochester	927	Frontier Legacy 2	1186	VERIZON NORTH INC/GTE	Active
Frontier/Rochester	927	Frontier Legacy 2	1015	VERIZON NORTH-IL/GTE	Active
Frontier/Rochester	927	Frontier Legacy 2	1036	VERIZON NORTH-IL/GTE	Active
Frontier/Rochester	927	Frontier Legacy 2	0615	VERIZON NORTH-OH/GTE	Active
Frontier/Rochester	927	Frontier Legacy 2	0886	VERIZON NORTH-WI/GTE	Active
Frontier/Rochester	927	Frontier Legacy 2	4321	VERIZON NW-ID/GTE	Active
Frontier/Rochester	927	Frontier Legacy 2	4323	VERIZON NW-OR/GTE	Active
Frontier/Rochester	927	Frontier Legacy 2	4324	VERIZON NW-WA/GTE	Active
GTE	130	GTE Northwest	2302	CONTEL CA DBA GTE CA	Active
GTE	130	GTE Northwest	2449	CONTEL NW DBA GTE NW	Active
GTE	130	GTE Northwest	2416	VERIZON NORTHWEST/GTE	Active
GTE	110	GTE South	0281	CONTEL SO DBA GTE SO	Active
GTE	110	GTE South	0407	GTE South	Active
GTE	110	GTE South	0479	VERIZON SOUTH INC/GTE	Active
GTE	110	GTE South	4331	VERIZON SOUTH-AL/GTE	Active
GTE	110	GTE South	0410	VERIZON SOUTH-KY/GTE	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
GTE	140	GTE Southwest	1730	CONTEL AR DBA GTE AR	Active
GTE	140	GTE Southwest	2177	CONTEL DBA GTE WEST	Active
GTE	140	GTE Southwest	1207	CONTEL IA DBA GTE IA	Active
GTE	140	GTE Southwest	1135	CONTEL KS DBA GTE IA	Active
GTE	140	GTE Southwest	1140	CONTEL MN DBA GTE MN	Active
GTE	140	GTE Southwest	1700	CONTEL OF KS INC -AR	Active
GTE	140	GTE Southwest	1790	GTE OF AR	Active
GTE	140	GTE Southwest	4341	GTE SOUTHWEST - AR	Active
GTE	140	GTE Southwest	4342	GTE SOUTHWEST - NM	Active
GTE	140	GTE Southwest	4343	GTE SOUTHWEST - OK	Active
GTE	140	GTE Southwest	1846	VERIZON MW INC.-MO/GTE	Active
GTE	140	GTE Southwest	1922	VERIZON MW INC.-MO/GTE	Active
GTE	140	GTE Southwest	2080	VERIZON SW INC/GTE	Active
Lufkin	710	Lufkin Telephone	2109	TXU COMM TEL COMPANY	Active
Qwest	036	Qwest - Central	5101	QWEST CORPORATION-AZ	Active
Qwest	036	Qwest - Central	5102	QWEST CORPORATION-CO	Active
Qwest	036	Qwest - Central	5104	QWEST CORPORATION-MT	Active
Qwest	036	Qwest - Central	5105	QWEST CORPORATION-NM	Active
Qwest	036	Qwest - Central	5107	QWEST CORPORATION-UT	Active
Qwest	036	Qwest - Central	5108	QWEST CORPORATION-WY	Active
Qwest	036	Qwest - Central	9636	QWEST/US WEST MTN	Active
Qwest	039	Qwest - Eastern	5141	QWEST CORPORATION-IA	Active
Qwest	039	Qwest - Eastern	5142	QWEST CORPORATION-MN	Active
Qwest	039	Qwest - Eastern	5144	QWEST CORPORATION-ND	Active
Qwest	039	Qwest - Eastern	5143	QWEST CORPORATION-NE	Active
Qwest	039	Qwest - Eastern	5145	QWEST CORPORATION-SD	Active
Qwest	039	Qwest - Eastern	9631	QWEST/US WEST NW	Active
Qwest	039	Qwest - Eastern	9920	US WEST NW BELL	Active
Qwest	038	Qwest - Western	2456	MALHEUR HOME TEL CO	Active
Qwest	038	Qwest - Western	5103	QWEST CORPORATION-ID	Active
Qwest	038	Qwest - Western	5162	QWEST CORPORATION-ID	Active
Qwest	038	Qwest - Western	5163	QWEST CORPORATION-OR	Active
Qwest	038	Qwest - Western	5161	QWEST CORPORATION-WA	Active
Qwest	038	Qwest - Western	9638	QWEST/US WEST PNW	Active
Frontier/Rochester	920	Rochester Telephone	7513	COMMONWEALTH TEL - P	Active
Frontier/Rochester	920	Rochester Telephone	0306	FRONTIER CM AL	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Frontier/Rochester	920	Rochester Telephone	0072	FRONTIER CM AUSABLE	Active
Frontier/Rochester	920	Rochester Telephone	0149	FRONTIER CM BREEZEW	Active
Frontier/Rochester	920	Rochester Telephone	0152	FRONTIER CM CANTON	Active
Frontier/Rochester	920	Rochester Telephone	0362	FRONTIER CM FAIRMNT	Active
Frontier/Rochester	920	Rochester Telephone	0387	FRONTIER CM GA	Active
Frontier/Rochester	920	Rochester Telephone	1127	FRONTIER CM IA	Active
Frontier/Rochester	920	Rochester Telephone	1038	FRONTIER CM IL	Active
Frontier/Rochester	920	Rochester Telephone	0750	FRONTIER CM IN	Active
Frontier/Rochester	920	Rochester Telephone	1011	FRONTIER CM LAKESIDE	Active
Frontier/Rochester	920	Rochester Telephone	0178	FRONTIER CM LAKEWD	Active
Frontier/Rochester	920	Rochester Telephone	0301	FRONTIER CM LAMAR CT	Active
Frontier/Rochester	920	Rochester Telephone	4418	FRONTIER CM MI-OH	Active
Frontier/Rochester	920	Rochester Telephone	4417	FRONTIER CM MICH	Active
Frontier/Rochester	920	Rochester Telephone	1055	FRONTIER CM MIDLAND	Active
Frontier/Rochester	920	Rochester Telephone	1367	FRONTIER CM MN	Active
Frontier/Rochester	920	Rochester Telephone	0912	FRONTIER CM MONDOVI	Active
Frontier/Rochester	920	Rochester Telephone	0460	FRONTIER CM MS	Active
Frontier/Rochester	920	Rochester Telephone	1061	FRONTIER CM MTPULSKI	Active
Frontier/Rochester	920	Rochester Telephone	0998	FRONTIER CM OF DEPUE	Active
Frontier/Rochester	920	Rochester Telephone	1067	FRONTIER CM OF ORION	Active
Frontier/Rochester	920	Rochester Telephone	0194	FRONTIER CM OSWAYO	Active
Frontier/Rochester	920	Rochester Telephone	0122	FRONTIER CM SENECA	Active
Frontier/Rochester	920	Rochester Telephone	4464	FRONTIER CM SO - AL	Active
Frontier/Rochester	920	Rochester Telephone	4465	FRONTIER CM SO - FL	Active
Frontier/Rochester	920	Rochester Telephone	0944	FRONTIER CM ST CROIX	Active
Frontier/Rochester	920	Rochester Telephone	0128	FRONTIER CM SYLV LK	Active
Frontier/Rochester	920	Rochester Telephone	0828	FRONTIER CM THORNTWN	Active
Frontier/Rochester	920	Rochester Telephone	0967	FRONTIER CM VA	Active
Frontier/Rochester	920	Rochester Telephone	0964	FRONTIER CM WI	Active
Frontier/Rochester	920	Rochester Telephone	0100	FRONTIER COM. OF NY	Active
Frontier/Rochester	920	Rochester Telephone	0168	FRONTIER COMM OF PA	Active
Frontier/Rochester	920	Rochester Telephone	1073	FRONTIER COMM PRARIE	Active
Frontier/Rochester	920	Rochester Telephone	0121	FRONTIER ROCHESTER	Active
Frontier/Rochester	920	Rochester Telephone	1079	FRONTIER SCHUYLER IL	Active
Frontier/Rochester	920	Rochester Telephone	0161	Frontier, aka CommonWealth Tel	Active
Frontier/Rochester	920	Rochester Telephone	0110	OGDEN TEL CO - NY	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Frontier/Rochester	920	Rochester Telephone	0870	RHINELANDER TELEPHONE LLC	Active
Century Link	211	Sprint Mid-Atlantic	0506	UNITED TEL CO CAROL	Active
Century Link	280	Sprint United	0832	UNITED TEL CO OF IN	Active
Century Link	280	Sprint United	0209	UNITED TEL CO OF PA	Active
Telus	057	Telus	8304	ALLSTREAM CORP.	Active
Telus	057	Telus	8051	BELL ONTARIO	Active
Telus	057	Telus	8050	BELL QUEBEC	Active
Telus	057	Telus	8204	BROOKE TELECOM CO OP	Active
Telus	057	Telus	8377	CALL-NET COMM. INC.	Active
Telus	057	Telus	4878	EASTLINK LIMITED	Active
Telus	057	Telus	8081	EDMONTON TEL CO	Active
Telus	057	Telus	8216	EXCULINK TELECOM ON	Active
Telus	057	Telus	8212	GOSFIELD NO COMM	Active
Telus	057	Telus	8214	HAY COMM COOP LTD	Active
Telus	057	Telus	8215	HURON TELECOMM CO OP	Active
Telus	057	Telus	8087	ISLAND TEL CO LTD	Active
Telus	057	Telus	8220	LANSDOWNE RURAL TEL	Active
Telus	057	Telus	8088	MANITOBA TEL SYS	Active
Telus	057	Telus	8089	MARITIME TEL LTD	Active
Telus	057	Telus	8223	MORNINGTON COM COOP	Active
Telus	057	Telus	8090	NEW BRUNSWICK TEL	Active
Telus	057	Telus	8085	NEWTEL CO	Active
Telus	057	Telus	8211	NEXICOM TELECOMM	Active
Telus	057	Telus	8230	NEXICOM TELEPHONES	Active
Telus	057	Telus	8225	NO FRONTENAC TEL CO	Active
Telus	057	Telus	8227	NO RENFREW TEL CO.	Active
Telus	057	Telus	8228	NORTHERN TELEPHONE	Active
Telus	057	Telus	8092	NORTHWESTEL INC	Active
Telus	057	Telus	8231	PEOPLES TELCO FOREST	Active
Telus	057	Telus	8203	QUADRO COMMUNICATION	Active
Telus	057	Telus	8232	ROXBOROUGH TELCO INC	Active
Telus	057	Telus	8091	SASKATCHEWAN TEL COM	Active
Telus	057	Telus	8237	SOGETEL INC	Active
Telus	057	Telus	8239	TELEBEC LTEE	Active
Telus	057	Telus	8086	TELUS COMM /BC TEL	Active
Telus	057	Telus	2243	TELUS COMM QUEBEC - Alize	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Telus	057	Telus	8084	TELUS COMMUN /ALBERTA GOV TEL	Active
Telus	057	Telus	8083	TELUS COMMUN /QUEBEC TELEPHONE	Active
Telus	057	Telus	2782	TELUS INTEGRATED COM	Active
Telus	057	Telus	8094	Thunder Bay Tel	Active
Telus	057	Telus	8240	TUCKERSMITH COMM	Active
Telus	057	Telus	8244	WESTPORT TEL CO LTD.	Active
Telus	057	Telus	8245	WIGHTMAN TEL LTD.	Active
Illuminet	700	The Billing Solution Group	3497	1STEL, INC. - TX	Active
Illuminet	700	The Billing Solution Group	1601	ABSARAKA COOP TEL CO	Active
Illuminet	700	The Billing Solution Group	3000	ACS OF ANCHORAGE	Active
Illuminet	700	The Billing Solution Group	3008	ACS OF FAIRBANKS	Active
Illuminet	700	The Billing Solution Group	8839	ADVANCED TEL - LA	Active
Illuminet	700	The Billing Solution Group	7774	ADVANCED TEL INC.	Active
Illuminet	700	The Billing Solution Group	234B	ADVANCED TEL. - MS	Active
Illuminet	700	The Billing Solution Group	3808	AERO COMM INC - IL	Active
Illuminet	700	The Billing Solution Group	3786	AERO COMM INC - KY	Active
Illuminet	700	The Billing Solution Group	3809	AERO COMMUNICATIONS	Active
Illuminet	700	The Billing Solution Group	443F	AERO NORTH COMM - IL	Active
Illuminet	700	The Billing Solution Group	2178	AGATE TEL CO	Active
Illuminet	700	The Billing Solution Group	3017	ALASKA TEL CO	Active
Illuminet	700	The Billing Solution Group	1860	ALMA TELEPHONE CO	Active
Illuminet	700	The Billing Solution Group	1106	ALPINE COMM L.C.	Active
Illuminet	700	The Billing Solution Group	3097	ALTA MUNICIPAL UT-IA	Active
Illuminet	700	The Billing Solution Group	0217	AMELIA TEL CORP	Active
Illuminet	700	The Billing Solution Group	1516	ARAPAHOE TEL COMPANY	Active
Illuminet	700	The Billing Solution Group	0585	ARCADIA TEL CO	Active
Illuminet	700	The Billing Solution Group	2171	ARIZONA TEL CO	Active
Illuminet	700	The Billing Solution Group	0586	ARTHUR MUTUAL TEL CO	Active
Illuminet	700	The Billing Solution Group	1350	ARVIG TEL CO	Active
Illuminet	700	The Billing Solution Group	2404	ASOTIN TEL CO	Active
Illuminet	700	The Billing Solution Group	1966	ATLAS TELEPHONE CO	Active
Illuminet	700	The Billing Solution Group	1105	AYRSHIRE FMR MUT TEL	Active
Illuminet	700	The Billing Solution Group	0844	BADGER TELECOM INC	Active
Illuminet	700	The Billing Solution Group	0469	BARNARDSVILLE TEL CO	Active
Illuminet	700	The Billing Solution Group	1108	BARNES CITY COOP TEL	Active
Illuminet	700	The Billing Solution Group	8614	BAYLAND COMM INC.	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Illuminet	700	The Billing Solution Group	0925	BAYLAND TEL INC	Active
Illuminet	700	The Billing Solution Group	7896	BCN TELECOM, INC.	Active
Illuminet	700	The Billing Solution Group	3032	BEAR LAKE COMM INC	Active
Illuminet	700	The Billing Solution Group	1968	BEGGS TELEPHONE CO	Active
Illuminet	700	The Billing Solution Group	1604	BEK COMM COOPERATIVE	Active
Illuminet	700	The Billing Solution Group	0847	BELMONT TEL CO	Active
Illuminet	700	The Billing Solution Group	0590	BENTON RIDGE TEL CO	Active
Illuminet	700	The Billing Solution Group	1110	BERNARD TEL CO INC	Active
Illuminet	700	The Billing Solution Group	3002	BETTLES TEL CO	Active
Illuminet	700	The Billing Solution Group	9472	BIDDEFORD INTERNT ME	Active
Illuminet	700	The Billing Solution Group	0849	BLACK EARTH TEL CO	Active
Illuminet	700	The Billing Solution Group	2182	BLANCA TEL CO	Active
Illuminet	700	The Billing Solution Group	0678	BLANCHARD TEL ASSOC	Active
Illuminet	700	The Billing Solution Group	0742	BLOOMINGDALE HM TEL	Active
Illuminet	700	The Billing Solution Group	2038	BLOSSOM TEL CO	Active
Illuminet	700	The Billing Solution Group	0282	BLOUNTSVILLE TEL CO	Active
Illuminet	700	The Billing Solution Group	0346	BLUE RIDGE TEL CO	Active
Illuminet	700	The Billing Solution Group	0851	BONDUEL TEL CO	Active
Illuminet	700	The Billing Solution Group	0398	BRANDENBURG TEL CO	Active
Illuminet	700	The Billing Solution Group	2041	BRAZOS TEL COOP INC	Active
Illuminet	700	The Billing Solution Group	0332	BRAZOS TELECOM	Active
Illuminet	700	The Billing Solution Group	1112	BREDA TEL CORP	Active
Illuminet	700	The Billing Solution Group	1362	BRIDGE WATER TEL CO	Active
Illuminet	700	The Billing Solution Group	0283	BRINDLEE MTN TEL CO	Active
Illuminet	700	The Billing Solution Group	1113	BROOKLYN MUT TEL CO	Active
Illuminet	700	The Billing Solution Group	6151	BTC, INC.	Active
Illuminet	700	The Billing Solution Group	0856	BURL BRI & WHE TEL	Active
Illuminet	700	The Billing Solution Group	0284	BUTLER TEL CO INC	Active
Illuminet	700	The Billing Solution Group	1133	C-M-L TEL OF MER IA	Active
Illuminet	700	The Billing Solution Group	0448	CALHOUN CITY TELCO	Active
Illuminet	700	The Billing Solution Group	1526	CAMBRIDGE TELCO	Active
Illuminet	700	The Billing Solution Group	0351	CAMDEN TEL & TEL CO	Active
Illuminet	700	The Billing Solution Group	0744	CAMDEN TEL CO INC	Active
Illuminet	700	The Billing Solution Group	0425	CAMERON TEL CO	Active
Illuminet	700	The Billing Solution Group	0426	CAMPTI-PLEA HILL TEL	Active
Illuminet	700	The Billing Solution Group	1974	CANADIAN VALLEY TEL	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Illuminet	700	The Billing Solution Group	1976	CARNEGIE TEL CO	Active
Illuminet	700	The Billing Solution Group	2371	CASCADE UTILITIES I	Active
Illuminet	700	The Billing Solution Group	1768	CBEYOND COMM	Active
Illuminet	700	The Billing Solution Group	2490	CBEYOND COMM - CO	Active
Illuminet	700	The Billing Solution Group	1769	CBEYOND COMM - GA	Active
Illuminet	700	The Billing Solution Group	2152	CBEYOND COMM - TX	Active
Illuminet	700	The Billing Solution Group	2491	CBEYOND COMM-IL	Active
Illuminet	700	The Billing Solution Group	1125	CENTRAL SCOTT TEL	Active
Illuminet	700	The Billing Solution Group	0859	CENTRAL STATE TEL CO	Active
Illuminet	700	The Billing Solution Group	2277	CENTRAL UTAH TEL INC	Active
Illuminet	700	The Billing Solution Group	0959	CENTRYTEL - THORP	Active
Illuminet	700	The Billing Solution Group	0857	CENTURY TEL CASCO	Active
Illuminet	700	The Billing Solution Group	4438	CENTURY TEL GEM State	Active
Illuminet	700	The Billing Solution Group	4437	CENTURY TEL Gem State Idaho	Active
Illuminet	700	The Billing Solution Group	0436	CENTURY TEL OF N LA	Active
Illuminet	700	The Billing Solution Group	2117	CENTURY TEL PORT ARA	Active
Illuminet	700	The Billing Solution Group	2274	CENTURY TEL SW - NM	Active
Illuminet	700	The Billing Solution Group	0427	CENTURYTEL CHATHAM	Active
Illuminet	700	The Billing Solution Group	0747	CENTURYTEL CNTL IN	Active
Illuminet	700	The Billing Solution Group	0440	CENTURYTEL EAST LA	Active
Illuminet	700	The Billing Solution Group	1711	CENTURYTEL MTN HOME	Active
Illuminet	700	The Billing Solution Group	2225	CENTURYTEL OF ID	Active
Illuminet	700	The Billing Solution Group	0458	CENTURYTEL OF NO MS	Active
Illuminet	700	The Billing Solution Group	2395	CENTURYTEL OF OREGON	Active
Illuminet	700	The Billing Solution Group	1727	CENTURYTEL OF SO AK	Active
Illuminet	700	The Billing Solution Group	0898	CENTURYTEL READFLD	Active
Illuminet	700	The Billing Solution Group	0439	CENTURYTEL RINGGOLD	Active
Illuminet	700	The Billing Solution Group	9789	CENTURYTEL AL (NO)	Active
Illuminet	700	The Billing Solution Group	9788	CENTURYTEL AL (SO)	Active
Illuminet	700	The Billing Solution Group	1126	CENTURYTEL CHESTER	Active
Illuminet	700	The Billing Solution Group	1144	CENTURYTEL CNTL AR	Active
Illuminet	700	The Billing Solution Group	0423	CENTURYTEL CNTL LA	Active
Illuminet	700	The Billing Solution Group	0574	CENTURYTEL COLT-COL	Active
Illuminet	700	The Billing Solution Group	2410	CENTURYTEL COWICHE	Active
Illuminet	700	The Billing Solution Group	0434	CENTURYTEL EVANGELN	Active
Illuminet	700	The Billing Solution Group	0884	CENTURYTEL FORESTVL	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Illuminet	700	The Billing Solution Group	0877	CENTURYTEL FRWT BRDN	Active
Illuminet	700	The Billing Solution Group	2422	CENTURYTEL INTER ISLAND, INC	Active
Illuminet	700	The Billing Solution Group	2101	CENTURYTEL LK DALLAS	Active
Illuminet	700	The Billing Solution Group	0671	CENTURYTEL MIDWEST	Active
Illuminet	700	The Billing Solution Group	9786	CENTURYTEL MO (SO)	Active
Illuminet	700	The Billing Solution Group	9787	CENTURYTEL MO (SW)	Active
Illuminet	700	The Billing Solution Group	9785	CENTURYTEL MO B-H	Active
Illuminet	700	The Billing Solution Group	0913	CENTURYTEL MONROE CT	Active
Illuminet	700	The Billing Solution Group	0924	CENTURYTEL MW-WISCONSIN	Active
Illuminet	700	The Billing Solution Group	0431	CENTURYTEL NE LA	Active
Illuminet	700	The Billing Solution Group	0956	CENTURYTEL NO WI	Active
Illuminet	700	The Billing Solution Group	1142	CENTURYTEL NW AR RSV	Active
Illuminet	700	The Billing Solution Group	0552	CENTURYTEL OF ADMSVL	Active
Illuminet	700	The Billing Solution Group	1706	CENTURYTEL OF AR	Active
Illuminet	700	The Billing Solution Group	0557	CENTURYTEL OF CLAIBN	Active
Illuminet	700	The Billing Solution Group	2208	CENTURYTEL OF CO	Active
Illuminet	700	The Billing Solution Group	1159	CENTURYTEL OF CTL WI	Active
Illuminet	700	The Billing Solution Group	2185	CENTURYTEL OF EAGLE	Active
Illuminet	700	The Billing Solution Group	2360	CENTURYTEL OF EASTERN OREGON	Active
Illuminet	700	The Billing Solution Group	0931	CENTURYTEL OF FAIRWATER-BRNDN	Active
Illuminet	700	The Billing Solution Group	0702	CENTURYTEL OF MI	Active
Illuminet	700	The Billing Solution Group	0841	CENTURYTEL OF MIDWST WISCONSIN	Active
Illuminet	700	The Billing Solution Group	1445	CENTURYTEL OF MN	Active
Illuminet	700	The Billing Solution Group	9784	CENTURYTEL OF MO	Active
Illuminet	700	The Billing Solution Group	2249	CENTURYTEL OF MONTANA, INC	Active
Illuminet	700	The Billing Solution Group	0705	CENTURYTEL OF N MI	Active
Illuminet	700	The Billing Solution Group	0950	CENTURYTEL OF NW WI	Active
Illuminet	700	The Billing Solution Group	0801	CENTURYTEL OF ODON	Active
Illuminet	700	The Billing Solution Group	0630	CENTURYTEL OF OHIO	Active
Illuminet	700	The Billing Solution Group	1720	CENTURYTEL OF REDFLD	Active
Illuminet	700	The Billing Solution Group	0442	CENTURYTEL OF SW LA	Active
Illuminet	700	The Billing Solution Group	0922	CENTURYTEL OF THE MW-WISCONSIN	Active
Illuminet	700	The Billing Solution Group	2408	CENTURYTEL OF WA	Active
Illuminet	700	The Billing Solution Group	0895	CENTURYTEL OF WI	Active
Illuminet	700	The Billing Solution Group	2299	CENTURYTEL OF WY	Active
Illuminet	700	The Billing Solution Group	0934	CENTURYTEL PLATTEVL	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Illuminet	700	The Billing Solution Group	2140	CENTURYTEL SANMARCOS	Active
Illuminet	700	The Billing Solution Group	0424	CENTURYTEL SE LA	Active
Illuminet	700	The Billing Solution Group	1143	CENTURYTEL SILOAM SP	Active
Illuminet	700	The Billing Solution Group	0689	CENTURYTEL UPPER MI	Active
Illuminet	700	The Billing Solution Group	0970	CENTURYTEL-WAYSIDE	Active
Illuminet	700	The Billing Solution Group	0077	CHAMPLAIN TEL CO	Active
Illuminet	700	The Billing Solution Group	0685	CHATHAM TEL CO	Active
Illuminet	700	The Billing Solution Group	0079	CHAZY & WESTPORT TEL	Active
Illuminet	700	The Billing Solution Group	0516	CHESTER TEL CO	Active
Illuminet	700	The Billing Solution Group	1647	CHEYENNE RIVER SIOX	Active
Illuminet	700	The Billing Solution Group	1980	CHICKASAW TEL CO	Active
Illuminet	700	The Billing Solution Group	4630	CHICKASAW TELECOMM	Active
Illuminet	700	The Billing Solution Group	0680	CHIPPEWA CNTY TEL CO	Active
Illuminet	700	The Billing Solution Group	2289	CHUGWATER TEL CO	Active
Illuminet	700	The Billing Solution Group	1982	CIMARRON TEL CO	Active
Illuminet	700	The Billing Solution Group	0473	CITIZENS TEL CO - NC	Active
Illuminet	700	The Billing Solution Group	0751	CITIZENS TEL CORP	Active
Illuminet	700	The Billing Solution Group	0081	CITIZENS TELEPHONE CO. OF NY	Active
Illuminet	700	The Billing Solution Group	1130	CLARENCE TEL CO INC	Active
Illuminet	700	The Billing Solution Group	1698	CLEVELAND CO TEL CO	Active
Illuminet	700	The Billing Solution Group	0356	COASTAL UTILITIES IN	Active
Illuminet	700	The Billing Solution Group	0005	COBBOSSECONTEE TEL	Active
Illuminet	700	The Billing Solution Group	2057	COLEMAN COUNTY TEL	Active
Illuminet	700	The Billing Solution Group	1134	COLO TELEPHONE CO	Active
Illuminet	700	The Billing Solution Group	1756	COLUMBUS TEL CO	Active
Illuminet	700	The Billing Solution Group	2060	COMANCHE CTY TEL CO	Active
Illuminet	700	The Billing Solution Group	0776	COMM CORP OF IND	Active
Illuminet	700	The Billing Solution Group	0672	COMM CORP OF MI	Active
Illuminet	700	The Billing Solution Group	0809	COMM CORP OF SO IN	Active
Illuminet	700	The Billing Solution Group	3112	COMMUNITY AGCY-IA	Active
Illuminet	700	The Billing Solution Group	2061	COMMUNITY TEL CO	Active
Illuminet	700	The Billing Solution Group	0559	CONCORD TEL EX INC	Active
Illuminet	700	The Billing Solution Group	463C	CONNECT I.T. - TX	Active
Illuminet	700	The Billing Solution Group	0607	CONTINENTAL OHIO	Active
Illuminet	700	The Billing Solution Group	3320	CONTOOCCOOK VALLEY TELEPHONE CO	Active
Illuminet	700	The Billing Solution Group	3723	CONVERSENT COMM	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Illuminet	700	The Billing Solution Group	3722	CONVERSENT COMM - CT	Active
Illuminet	700	The Billing Solution Group	4052	CONVERSENT COMM - MA	Active
Illuminet	700	The Billing Solution Group	3754	CONVERSENT COMM - ME	Active
Illuminet	700	The Billing Solution Group	4053	CONVERSENT COMM - NH	Active
Illuminet	700	The Billing Solution Group	0558	CONVERSENT COMM - NJ	Active
Illuminet	700	The Billing Solution Group	3724	CONVERSENT COMM - NY	Active
Illuminet	700	The Billing Solution Group	4054	CONVERSENT COMM - RI	Active
Illuminet	700	The Billing Solution Group	4051	CONVERSENT COMM LLC	Active
Illuminet	700	The Billing Solution Group	3227	CONVERSENT COMM ME	Active
Illuminet	700	The Billing Solution Group	0560	CONVERSENT COMM NJ	Active
Illuminet	700	The Billing Solution Group	3289	CONVERSENT COMM NY	Active
Illuminet	700	The Billing Solution Group	148B	CONVERSENT COMM. VT	Active
Illuminet	700	The Billing Solution Group	147B	CONVERSENT COMMS PA	Active
Illuminet	700	The Billing Solution Group	1136	COON CREEK TEL CO	Active
Illuminet	700	The Billing Solution Group	4189	COON CREEK TELECOMM	Active
Illuminet	700	The Billing Solution Group	4069	COON RAPIDS MUN UTLY	Active
Illuminet	700	The Billing Solution Group	1137	COON VLY COOP TEL A	Active
Illuminet	700	The Billing Solution Group	1303	COOPERATIVE TEL EXCH	Active
Illuminet	700	The Billing Solution Group	1141	CORN BELT TEL CO	Active
Illuminet	700	The Billing Solution Group	1534	COZAD TELEPHONE CO	Active
Illuminet	700	The Billing Solution Group	1762	CP-TEL NTWK SVCS LA	Active
Illuminet	700	The Billing Solution Group	1985	CROSS TEL CO	Active
Illuminet	700	The Billing Solution Group	1499	CROSSLAKE TEL CO	Active
Illuminet	700	The Billing Solution Group	0993	CROSSVILLE TEL CO	Active
Illuminet	700	The Billing Solution Group	0085	CROWN PT TEL CORP Y	Active
Illuminet	700	The Billing Solution Group	0872	CUBA CTY TEL EX CO I	Active
Illuminet	700	The Billing Solution Group	1146	CUMBERLAND TEL CO	Active
Illuminet	700	The Billing Solution Group	1761	CUNNINGHAM TEL CO	Active
Illuminet	700	The Billing Solution Group	1683	DAKOTA CNTL TELECOM	Active
Illuminet	700	The Billing Solution Group	1610	DAKOTA CTL TELECOM	Active
Illuminet	700	The Billing Solution Group	1799	DAKTEL COMM, LLC-ND	Active
Illuminet	700	The Billing Solution Group	0358	DARIEN TEL CO INC	Active
Illuminet	700	The Billing Solution Group	1699	DECATUR TEL CO	Active
Illuminet	700	The Billing Solution Group	0451	DECATUR TEL CO INC	Active
Illuminet	700	The Billing Solution Group	0428	DELCAMBRE TEL CO	Active
Illuminet	700	The Billing Solution Group	2184	DELTA CNTY TELE-COMM	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Illuminet	700	The Billing Solution Group	0089	DEPOSIT TEL CO INC	Active
Illuminet	700	The Billing Solution Group	6179	DICKEY RURAL ACCESS	Active
Illuminet	700	The Billing Solution Group	1681	DICKEY RURAL COMM	Active
Illuminet	700	The Billing Solution Group	1611	DICKEY RURL TEL COOP	Active
Illuminet	700	The Billing Solution Group	0875	DICKEYVILLE TEL CORP	Active
Illuminet	700	The Billing Solution Group	1150	DIXON TEL COMPANY	Active
Illuminet	700	The Billing Solution Group	0609	DOYLESTOWN TEL CO	Active
Illuminet	700	The Billing Solution Group	966C	DSCI CORPORATION MA	Active
Illuminet	700	The Billing Solution Group	2291	DUBOIS TEL EXCH INC	Active
Illuminet	700	The Billing Solution Group	0043	DUNBARTON TEL CO	Active
Illuminet	700	The Billing Solution Group	1381	DUNNELL TELE CO	Active
Illuminet	700	The Billing Solution Group	0429	E ASCENSION TEL CO	Active
Illuminet	700	The Billing Solution Group	1156	E BUCHANAN TEL COOP	Active
Illuminet	700	The Billing Solution Group	0914	EASTCOAST TELECOM	Active
Illuminet	700	The Billing Solution Group	3955	EASTERN OREG TEL-OR	Active
Illuminet	700	The Billing Solution Group	2068	EASTEX TEL COOP INC	Active
Illuminet	700	The Billing Solution Group	0092	EDWARDS TEL CO INC	Active
Illuminet	700	The Billing Solution Group	0430	ELIZABETH TEL CO	Active
Illuminet	700	The Billing Solution Group	0478	ELLERBE TEL CO	Active
Illuminet	700	The Billing Solution Group	1157	ELLSWORTH COOP TEL A	Active
Illuminet	700	The Billing Solution Group	1387	EMILY COOP TEL CO	Active
Illuminet	700	The Billing Solution Group	4607	ESSEX TELCOM, INC.	Active
Illuminet	700	The Billing Solution Group	5115	FAIRPOINT - VT	Active
Illuminet	700	The Billing Solution Group	5111	FAIRPOINT MAINE - ME	Active
Illuminet	700	The Billing Solution Group	5113	FAIRPOINT- NH	Active
Illuminet	700	The Billing Solution Group	1160	FARMERS & BUSINESS	Active
Illuminet	700	The Billing Solution Group	1166	FARMERS & MERCH MUT	Active
Illuminet	700	The Billing Solution Group	1162	FARMERS COOP TEL CO	Active
Illuminet	700	The Billing Solution Group	0612	FARMERS MUT TELCO OH	Active
Illuminet	700	The Billing Solution Group	1172	FARMERS MUTUAL TELC	Active
Illuminet	700	The Billing Solution Group	1177	FARMERS TEL CO	Active
Illuminet	700	The Billing Solution Group	1176	FARMERS TEL CO - IA	Active
Illuminet	700	The Billing Solution Group	0880	FARMERS TEL CO - WI	Active
Illuminet	700	The Billing Solution Group	1175	FARMERS TELEPHONE CO	Active
Illuminet	700	The Billing Solution Group	1179	FENTON COOP TEL CO	Active
Illuminet	700	The Billing Solution Group	7021	FIBERCOM, L.C.	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Illuminet	700	The Billing Solution Group	0095	FISHERS ISL TEL CO	Active
Illuminet	700	The Billing Solution Group	2071	FIVE AREA TEL CO-OP	Active
Illuminet	700	The Billing Solution Group	4085	FLORIDA DIGITAL NTWK	Active
Illuminet	700	The Billing Solution Group	0406	FOOTHILLS RURAL TEL	Active
Illuminet	700	The Billing Solution Group	0614	FORT JENNINGS TEL CO	Active
Illuminet	700	The Billing Solution Group	0521	FORT MILL TEL CO	Active
Illuminet	700	The Billing Solution Group	2200	FORT MOJAVE TELECOMM	Active
Illuminet	700	The Billing Solution Group	1057	GALLATIN RIVER COMM	Active
Illuminet	700	The Billing Solution Group	0456	GEORGETOWN TEL CO	Active
Illuminet	700	The Billing Solution Group	0619	GLANDORF TEL CO INC	Active
Illuminet	700	The Billing Solution Group	1017	GLASFORD TEL CO	Active
Illuminet	700	The Billing Solution Group	1188	GOLDFIELD TEL CO	Active
Illuminet	700	The Billing Solution Group	1886	GOODMAN TEL CO	Active
Illuminet	700	The Billing Solution Group	1778	GORHAM TEL CO INC	Active
Illuminet	700	The Billing Solution Group	1191	GRAND MOUND COOP TEL	Active
Illuminet	700	The Billing Solution Group	1994	GRAND TEL CO INC	Active
Illuminet	700	The Billing Solution Group	0930	GRANTLAND TELECOM	Active
Illuminet	700	The Billing Solution Group	1023	GRIDLEY TEL CO	Active
Illuminet	700	The Billing Solution Group	1615	GRIGGS COUNTY TEL CO	Active
Illuminet	700	The Billing Solution Group	3614	GRUNDY CTR COM UT IA	Active
Illuminet	700	The Billing Solution Group	0298	GULF TELEPHONE CO	Active
Illuminet	700	The Billing Solution Group	0010	HAMPDEN TEL CO	Active
Illuminet	700	The Billing Solution Group	0099	HANCOCK TEL CO - NY	Active
Illuminet	700	The Billing Solution Group	0775	HANCOCK TELECOM	Active
Illuminet	700	The Billing Solution Group	2321	HAPPY VALLEY TEL CO	Active
Illuminet	700	The Billing Solution Group	5361	HARLAN MUNICIPAL-IA	Active
Illuminet	700	The Billing Solution Group	1404	HARMONY TEL CO	Active
Illuminet	700	The Billing Solution Group	0368	HART TEL CO	Active
Illuminet	700	The Billing Solution Group	3100	HAWAIIAN TEL	Active
Illuminet	700	The Billing Solution Group	8708	HAWARDEN MUNCIPL UTL	Active
Illuminet	700	The Billing Solution Group	1199	HAWKEYE TEL CO	Active
Illuminet	700	The Billing Solution Group	0299	HAYNEVILLE TEL CO	Active
Illuminet	700	The Billing Solution Group	1558	HEMINGFORD COOP TEL	Active
Illuminet	700	The Billing Solution Group	1561	HERSHEY COOP TEL CO	Active
Illuminet	700	The Billing Solution Group	0713	HIAWATHA TEL CO	Active
Illuminet	700	The Billing Solution Group	1109	HICKORY TECH	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Illuminet	700	The Billing Solution Group	1375	HICKORY TECH	Active
Illuminet	700	The Billing Solution Group	1427	HICKORY TECH	Active
Illuminet	700	The Billing Solution Group	0237	HIGHLAND TEL COOP	Active
Illuminet	700	The Billing Solution Group	3321	HOLLIS TELEPHONE CO	Active
Illuminet	700	The Billing Solution Group	0777	HOME TEL - PITTSBORO	Active
Illuminet	700	The Billing Solution Group	0778	HOME TEL CO - IN	Active
Illuminet	700	The Billing Solution Group	1782	HOME TEL CO - KS	Active
Illuminet	700	The Billing Solution Group	2419	HOOD CANAL TEL CO	Active
Illuminet	700	The Billing Solution Group	0300	HOPPER TELECOMM CO	Active
Illuminet	700	The Billing Solution Group	2322	HORNITOS TEL CO	Active
Illuminet	700	The Billing Solution Group	0528	HORRY TEL COOP INC	Active
Illuminet	700	The Billing Solution Group	2241	HOT SPRINGS TEL CO	Active
Illuminet	700	The Billing Solution Group	0011	HRTLD & ST ALBNS TEL	Active
Illuminet	700	The Billing Solution Group	8960	HTC COMM INC	Active
Illuminet	700	The Billing Solution Group	1203	HUBBARD COOP TEL A	Active
Illuminet	700	The Billing Solution Group	0566	HUMPHREYS COUNTY TEL	Active
Illuminet	700	The Billing Solution Group	1209	INTERSTATE 35 TEL CO	Active
Illuminet	700	The Billing Solution Group	0007	ISLAND TEL	Active
Illuminet	700	The Billing Solution Group	0677	ISLAND TEL CO	Active
Illuminet	700	The Billing Solution Group	0331	ITS TELECOM SYSTEMS INC.	Active
Illuminet	700	The Billing Solution Group	1213	JORDAN SOLDIER VAL	Active
Illuminet	700	The Billing Solution Group	1413	K M P TEL CO	Active
Illuminet	700	The Billing Solution Group	0625	KALIDA TEL CO INC	Active
Illuminet	700	The Billing Solution Group	1214	KALONA COOP TEL CO	Active
Illuminet	700	The Billing Solution Group	0432	KAPLAN TEL CO	Active
Illuminet	700	The Billing Solution Group	1412	KASSON & MANTORVILLE TELEPHONE	Active
Illuminet	700	The Billing Solution Group	5566	KASSON & MANTORVILLE TELEPHONE	Active
Illuminet	700	The Billing Solution Group	0045	KEARSARGE TEL CO	Active
Illuminet	700	The Billing Solution Group	1668	KENNEBEC TEL COMPANY	Active
Illuminet	700	The Billing Solution Group	1041	KINSMAN MUT TEL CO	Active
Illuminet	700	The Billing Solution Group	1791	LA HARPE TEL CO INC	Active
Illuminet	700	The Billing Solution Group	1222	LA MOTTE TEL CO INC	Active
Illuminet	700	The Billing Solution Group	2104	LAKE LIVINGSTON TEL	Active
Illuminet	700	The Billing Solution Group	0457	LAKESIDE TEL CO INC	Active
Illuminet	700	The Billing Solution Group	0531	LANCASTER TEL CO	Active
Illuminet	700	The Billing Solution Group	4115	LAURENS MUN COMM UTI	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Illuminet	700	The Billing Solution Group	645C	LBH, LLC	Active
Illuminet	700	The Billing Solution Group	1908	LE-RU TELEPHONE CO	Active
Illuminet	700	The Billing Solution Group	1045	LEAF RIV VLY TEL CO	Active
Illuminet	700	The Billing Solution Group	1225	LEHIGH VLY COP TEL A	Active
Illuminet	700	The Billing Solution Group	0411	LESLIE COUNTY TEL CO	Active
Illuminet	700	The Billing Solution Group	2427	LEWIS RIVER TEL CO	Active
Illuminet	700	The Billing Solution Group	0412	LEWISPORT TEL CO INC	Active
Illuminet	700	The Billing Solution Group	0613	LITTLE MIAMI COMM	Active
Illuminet	700	The Billing Solution Group	5781	LOCAL ACC PRIME - WA	Active
Illuminet	700	The Billing Solution Group	0532	LOCKHART TEL CO INC	Active
Illuminet	700	The Billing Solution Group	7010	LONG LINES METRO LLC	Active
Illuminet	700	The Billing Solution Group	1422	LONSDALE TEL CO INC	Active
Illuminet	700	The Billing Solution Group	8278	LOST NAT-ELWOOD TEL	Active
Illuminet	700	The Billing Solution Group	1229	LOST NATION-ELWD TEL	Active
Illuminet	700	The Billing Solution Group	4650	LOUISA COMMUNICATION	Active
Illuminet	700	The Billing Solution Group	4930	LOUISIANA COMPET TEL	Active
Illuminet	700	The Billing Solution Group	4138	LOUISIANA COMPETITVE	Active
Illuminet	700	The Billing Solution Group	0058	LUDLOW TEL CO	Active
Illuminet	700	The Billing Solution Group	1232	LYNNVILLE COMM TELCO	Active
Illuminet	700	The Billing Solution Group	0183	MAHANNOY & MAHANTANGO	Active
Illuminet	700	The Billing Solution Group	3057	MANNING MUNPL COMM	Active
Illuminet	700	The Billing Solution Group	2282	MANTI TEL CO	Active
Illuminet	700	The Billing Solution Group	130A	MAPLETON COMMUNICATIONS	Active
Illuminet	700	The Billing Solution Group	8953	MARK TWAIN COMM CO	Active
Illuminet	700	The Billing Solution Group	1914	MARK TWAIN RURAL TEL	Active
Illuminet	700	The Billing Solution Group	1238	MARTELLE COOP TEL A	Active
Illuminet	700	The Billing Solution Group	2431	MASHELL TELECOM INC	Active
Illuminet	700	The Billing Solution Group	0533	MCCLELLANVL TEL CO	Active
Illuminet	700	The Billing Solution Group	2430	MCDANIEL TEL CO INC	Active
Illuminet	700	The Billing Solution Group	1048	MCNABB TEL CO	Active
Illuminet	700	The Billing Solution Group	0485	MEBTEL INC	Active
Illuminet	700	The Billing Solution Group	1241	MECHANICSVILLE TELCO	Active
Illuminet	700	The Billing Solution Group	0788	MERCHNTS & FRMRS TEL	Active
Illuminet	700	The Billing Solution Group	0047	MERRIMACK CNTY TELCO	Active
Illuminet	700	The Billing Solution Group	1231	MESCALERO APACHE NM	Active
Illuminet	700	The Billing Solution Group	2010	MID-AMERICA TEL INC	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Illuminet	700	The Billing Solution Group	0881	MID-PLAINS TEL INC	Active
Illuminet	700	The Billing Solution Group	1433	MID-STATE TEL CO	Active
Illuminet	700	The Billing Solution Group	7076	MIDCO COMMUNICATIONS	Active
Illuminet	700	The Billing Solution Group	3064	MIDCONTINENT COMM	Active
Illuminet	700	The Billing Solution Group	3065	MIDCONTINENT COMM ND	Active
Illuminet	700	The Billing Solution Group	429A	MIDCONTINENT COMMS MN	Active
Illuminet	700	The Billing Solution Group	0633	MIDDLE PT HOME TEL	Active
Illuminet	700	The Billing Solution Group	0711	MIDWAY TEL CO - MI	Active
Illuminet	700	The Billing Solution Group	0909	MIDWAY TEL CO - WI	Active
Illuminet	700	The Billing Solution Group	1242	MILES COOP TEL ASSN	Active
Illuminet	700	The Billing Solution Group	0571	MILLINGTON TEL CO	Active
Illuminet	700	The Billing Solution Group	0634	MINFORD TEL CO INC	Active
Illuminet	700	The Billing Solution Group	1058	MONTROSE MUT TEL CO	Active
Illuminet	700	The Billing Solution Group	1622	MOORE & LIBERTY TEL	Active
Illuminet	700	The Billing Solution Group	0915	MOSINEE TEL CO	Active
Illuminet	700	The Billing Solution Group	0917	MOUNT VERNON TEL CO	Active
Illuminet	700	The Billing Solution Group	2386	MT ANGEL TEL CO	Active
Illuminet	700	The Billing Solution Group	2227	MUDLAKE TEL COOP	Active
Illuminet	700	The Billing Solution Group	2116	MUENSTER TEL COR TX	Active
Illuminet	700	The Billing Solution Group	0792	MULBERRY COOP TEL	Active
Illuminet	700	The Billing Solution Group	1809	MUTUAL TEL CO	Active
Illuminet	700	The Billing Solution Group	1252	MUTUAL TELEPHONE CO	Active
Illuminet	700	The Billing Solution Group	0449	MYRTLE TEL CO	Active
Illuminet	700	The Billing Solution Group	0193	N PITTSBURGH TEL CO	Active
Illuminet	700	The Billing Solution Group	0375	NELSON BALL GROUND	Active
Illuminet	700	The Billing Solution Group	995A	NEVADA TEL - NV	Active
Illuminet	700	The Billing Solution Group	8367	NEVADA TELEPHONE INC	Active
Illuminet	700	The Billing Solution Group	0239	NEW HOPE TEL CO	Active
Illuminet	700	The Billing Solution Group	0639	NEW KNOXVILLE TEL CO	Active
Illuminet	700	The Billing Solution Group	3029	NEWCASTLE TEL CO	Active
Illuminet	700	The Billing Solution Group	0107	NEWPORT TEL CO INC	Active
Illuminet	700	The Billing Solution Group	0108	NICHOLVILLE TEL CO	Active
Illuminet	700	The Billing Solution Group	2043	NO TEXAS TEL COMPANY	Active
Illuminet	700	The Billing Solution Group	3026	NORTH COUNTRY TEL CO	Active
Illuminet	700	The Billing Solution Group	1447	NORTH DAKOTA TEL CO	Active
Illuminet	700	The Billing Solution Group	1230	NORTHEAST IA TEL CO	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Illuminet	700	The Billing Solution Group	0938	NORTHEAST TEL CO	Active
Illuminet	700	The Billing Solution Group	1259	NORTHERN IA TEL CO	Active
Illuminet	700	The Billing Solution Group	0061	NORTHFIELD TEL CO	Active
Illuminet	700	The Billing Solution Group	1260	NORTHWEST IA TEL CO	Active
Illuminet	700	The Billing Solution Group	1261	NORTHWEST TEL COOP A	Active
Illuminet	700	The Billing Solution Group	0535	NORWAY TEL CO INC	Active
Illuminet	700	The Billing Solution Group	0461	NOXAPATER TEL CO INC	Active
Illuminet	700	The Billing Solution Group	2193	NUCLA-NATURITA TEL	Active
Illuminet	700	The Billing Solution Group	2194	NUNN TEL CO	Active
Illuminet	700	The Billing Solution Group	0311	OAKMAN TEL CO INC	Active
Illuminet	700	The Billing Solution Group	0645	OAKWOOD MUTUAL TEL	Active
Illuminet	700	The Billing Solution Group	2014	OKLA WESTERN TEL	Active
Illuminet	700	The Billing Solution Group	1984	OKLAHOMA COMM SYS	Active
Illuminet	700	The Billing Solution Group	2013	OKLAHOMA TEL&TEL	Active
Illuminet	700	The Billing Solution Group	1264	OLIN TEL CO INC	Active
Illuminet	700	The Billing Solution Group	3620	OMNITEL COMM - IA	Active
Illuminet	700	The Billing Solution Group	1066	ONEIDA TEL EXCHANGE	Active
Illuminet	700	The Billing Solution Group	0112	ONTARIO TEL CO	Active
Illuminet	700	The Billing Solution Group	0717	ONTONAGON CNTY TELCO	Active
Illuminet	700	The Billing Solution Group	3149	OPENBAND OF VIRGINIA	Active
Illuminet	700	The Billing Solution Group	1266	ORAN MUTUAL TEL CO	Active
Illuminet	700	The Billing Solution Group	9769	ORANGE CITY COMM IA	Active
Illuminet	700	The Billing Solution Group	1935	OREGON FARM MUTUAL	Active
Illuminet	700	The Billing Solution Group	2390	OREGON IDAHO UTILIT	Active
Illuminet	700	The Billing Solution Group	3304	OREGON-IDAHO UTILITIES	Active
Illuminet	700	The Billing Solution Group	0114	ORISKANY FALL TEL	Active
Illuminet	700	The Billing Solution Group	7857	ORLANDO TEL CO/SYS	Active
Illuminet	700	The Billing Solution Group	0312	OTELCO TELEPHONE LLC	Active
Illuminet	700	The Billing Solution Group	8606	OTTER TAIL TELCOM	Active
Illuminet	700	The Billing Solution Group	1866	OZARK TELEPHONE CO	Active
Illuminet	700	The Billing Solution Group	0196	PALMERTON TEL CO	Active
Illuminet	700	The Billing Solution Group	1269	PALO COOP TEL ASSN	Active
Illuminet	700	The Billing Solution Group	1450	PARK REGION MUT TEL	Active
Illuminet	700	The Billing Solution Group	0651	PATTERSONVILLE TEL	Active
Illuminet	700	The Billing Solution Group	1936	PEACE VALLEY TEL CO	Active
Illuminet	700	The Billing Solution Group	2196	PEETZ COOP TEL CO	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Illuminet	700	The Billing Solution Group	2418	PEND OREILLE TEL CO	Active
Illuminet	700	The Billing Solution Group	0314	PEOPLES TELCO INC	Active
Illuminet	700	The Billing Solution Group	0062	PERKINSVILLE SVC COR	Active
Illuminet	700	The Billing Solution Group	0497	PIEDMONT TEL MEM CO	Active
Illuminet	700	The Billing Solution Group	0721	PIGEON TEL CO	Active
Illuminet	700	The Billing Solution Group	2198	PINE DRIVE TEL CO	Active
Illuminet	700	The Billing Solution Group	2392	PINE TELEPHONE SYS	Active
Illuminet	700	The Billing Solution Group	0494	PINEVILLE TEL CO	Active
Illuminet	700	The Billing Solution Group	1817	PIONEER TEL ASSN INC	Active
Illuminet	700	The Billing Solution Group	0379	PLANT TEL CO	Active
Illuminet	700	The Billing Solution Group	0118	PORT BYRON TEL CO	Active
Illuminet	700	The Billing Solution Group	1274	POSTVILLE DBA PTI CM	Active
Illuminet	700	The Billing Solution Group	2230	POTLATCH TEL CO	Active
Illuminet	700	The Billing Solution Group	2020	POTTAWATOMIE TEL CO	Active
Illuminet	700	The Billing Solution Group	1344	PRAIRIE TEL CO INC	Active
Illuminet	700	The Billing Solution Group	1275	PRAIRIEBURG TEL CO	Active
Illuminet	700	The Billing Solution Group	6112	PRIMELINK, INC.	Active
Illuminet	700	The Billing Solution Group	0065	PRIMELINK, INC. - NY	Active
Illuminet	700	The Billing Solution Group	2231	PROJECT MUTUAL TEL	Active
Illuminet	700	The Billing Solution Group	0381	PUBLIC SERVICE TEL	Active
Illuminet	700	The Billing Solution Group	3201	PUERTO RICO TEL CO	Active
Illuminet	700	The Billing Solution Group	0338	QUINCY TEL CO	Active
Illuminet	700	The Billing Solution Group	7720	RAINIER CABLE, INC.	Active
Illuminet	700	The Billing Solution Group	2251	RANGE TEL COOP INC	Active
Illuminet	700	The Billing Solution Group	8140	RANGE TEL COOP MT	Active
Illuminet	700	The Billing Solution Group	1278	READLYN TEL CO	Active
Illuminet	700	The Billing Solution Group	739D	REASNOR TELCO, LLC	Active
Illuminet	700	The Billing Solution Group	4300	RED RIV RURL TEL MN	Active
Illuminet	700	The Billing Solution Group	1631	RED RIV RURL TEL ND	Active
Illuminet	700	The Billing Solution Group	9129	REINBECK MUN TEL UT	Active
Illuminet	700	The Billing Solution Group	0438	RESERVE TEL CO	Active
Illuminet	700	The Billing Solution Group	3610	RESERVE TELECOM LA	Active
Illuminet	700	The Billing Solution Group	8298	RESERVE TELECOMM	Active
Illuminet	700	The Billing Solution Group	1075	REYNOLDS TEL CO	Active
Illuminet	700	The Billing Solution Group	0654	RIDGEVILLE TEL CO	Active
Illuminet	700	The Billing Solution Group	0541	RIDGEWAY TEL CO	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Illuminet	700	The Billing Solution Group	2356	RIO VIRGIN TEL CO	Active
Illuminet	700	The Billing Solution Group	0943	RIVERSIDE TELECOM	Active
Illuminet	700	The Billing Solution Group	0542	ROCK HILL TEL CO	Active
Illuminet	700	The Billing Solution Group	1282	ROCKWELL COOP TEL	Active
Illuminet	700	The Billing Solution Group	2252	RONAN TEL CO	Active
Illuminet	700	The Billing Solution Group	2334	ROSEVILLE TEL CO	Active
Illuminet	700	The Billing Solution Group	1474	ROTHSAY TEL CO	Active
Illuminet	700	The Billing Solution Group	2233	RURAL TEL CO	Active
Illuminet	700	The Billing Solution Group	5910	S & T COMM - KS	Active
Illuminet	700	The Billing Solution Group	1827	S & T TEL COOP ASSN	Active
Illuminet	700	The Billing Solution Group	1298	S SLOPE COOP TEL INC	Active
Illuminet	700	The Billing Solution Group	0816	S&W TEL CO INC	Active
Illuminet	700	The Billing Solution Group	1285	SAC COUNTY MUT TEL	Active
Illuminet	700	The Billing Solution Group	7991	SADDLEBACK COMM CO	Active
Illuminet	700	The Billing Solution Group	0417	SALEM TEL CO	Active
Illuminet	700	The Billing Solution Group	0498	SALUDA MOUNTAIN TEL	Active
Illuminet	700	The Billing Solution Group	3021	SANDWICH ISLES COMM	Active
Illuminet	700	The Billing Solution Group	0945	SCANDINAVIA TEL CO	Active
Illuminet	700	The Billing Solution Group	1291	SCHALLER TEL CO	Active
Illuminet	700	The Billing Solution Group	2397	SCIO MUTUAL TEL CO	Active
Illuminet	700	The Billing Solution Group	3031	SCOTT COUNTY TEL CO	Active
Illuminet	700	The Billing Solution Group	1479	SCOTT RICE TEL CO	Active
Illuminet	700	The Billing Solution Group	0819	SE IND RURAL TEL	Active
Illuminet	700	The Billing Solution Group	1292	SEARSBORO TEL CO INC	Active
Illuminet	700	The Billing Solution Group	4704	SEI DATA, INC.	Active
Illuminet	700	The Billing Solution Group	1945	SENECA TEL CO	Active
Illuminet	700	The Billing Solution Group	0500	SERVICE TEL CO	Active
Illuminet	700	The Billing Solution Group	0656	SHERWOOD MUTUAL TEL	Active
Illuminet	700	The Billing Solution Group	0726	SHIAWASSEE TEL CO	Active
Illuminet	700	The Billing Solution Group	4111	SIGECOM, LLC	Active
Illuminet	700	The Billing Solution Group	667E	SIGECOM, LLC - IL	Active
Illuminet	700	The Billing Solution Group	668E	SIGECOM, LLC - MI	Active
Illuminet	700	The Billing Solution Group	735E	SIGECOM, LLC - OH	Active
Illuminet	700	The Billing Solution Group	2283	SKYLINE TELECOM	Active
Illuminet	700	The Billing Solution Group	0466	SLEDGE TEL CO	Active
Illuminet	700	The Billing Solution Group	1483	SLEEPY EYE TEL CO	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Illuminet	700	The Billing Solution Group	0467	SMITHVILLE TELCO	Active
Illuminet	700	The Billing Solution Group	1590	SODTOWN TELEPHONE CO	Active
Illuminet	700	The Billing Solution Group	0024	SOMERSET TEL CO	Active
Illuminet	700	The Billing Solution Group	2286	SOUTH CENTRAL UTAH TEL	Active
Illuminet	700	The Billing Solution Group	2143	SOUTH PLAINS TELEPHONE COOP	Active
Illuminet	700	The Billing Solution Group	562E	South Slope	Active
Illuminet	700	The Billing Solution Group	3301	SOUTHEAST MS TEL CO	Active
Illuminet	700	The Billing Solution Group	0952	SOUTHEAST TEL CO WI	Active
Illuminet	700	The Billing Solution Group	1301	SOUTHWEST TEL EXCH	Active
Illuminet	700	The Billing Solution Group	2174	SOUTHWESTERN TEL CO	Active
Illuminet	700	The Billing Solution Group	1151	SPECTRA COMM GROUP	Active
Illuminet	700	The Billing Solution Group	0728	SPRINGPORT TEL CO	Active
Illuminet	700	The Billing Solution Group	1302	SPRINGVILLE COOP TEL	Active
Illuminet	700	The Billing Solution Group	0257	SPRUCE KB SENECA RK	Active
Illuminet	700	The Billing Solution Group	0544	ST STEPHEN TEL CO	Active
Illuminet	700	The Billing Solution Group	0441	STAR TELEPHONE CO	Active
Illuminet	700	The Billing Solution Group	0955	STATE LONG DIS TELCO	Active
Illuminet	700	The Billing Solution Group	0125	STATE TEL CO	Active
Illuminet	700	The Billing Solution Group	1949	STEELVILLE TEL EXCH	Active
Illuminet	700	The Billing Solution Group	1092	STELLE TEL CO	Active
Illuminet	700	The Billing Solution Group	0954	STOCKB & SHER TEL CO	Active
Illuminet	700	The Billing Solution Group	2207	STRASBURG TEL CO	Active
Illuminet	700	The Billing Solution Group	0206	SUGAR VALLEY TEL	Active
Illuminet	700	The Billing Solution Group	1306	SULLY TEL ASSOC	Active
Illuminet	700	The Billing Solution Group	0825	SUNMAN TEL CO INC	Active
Illuminet	700	The Billing Solution Group	4931	SUREWEST BRDB - CA	Active
Illuminet	700	The Billing Solution Group	812D	SUREWEST BROADBAND	Active
Illuminet	700	The Billing Solution Group	3964	SUREWEST BROADBD CA	Active
Illuminet	700	The Billing Solution Group	0503	SURRY TEL MEMB CORP	Active
Illuminet	700	The Billing Solution Group	0826	SWAYZEE TEL CO INC	Active
Illuminet	700	The Billing Solution Group	0827	SWEETSER RURAL TEL	Active
Illuminet	700	The Billing Solution Group	1650	SWIFTEL COMMUNICATIONS	Active
Illuminet	700	The Billing Solution Group	657C	T C TEL LLC - CA	Active
Illuminet	700	The Billing Solution Group	7804	TDS METROCOM INC.WI	Active
Illuminet	700	The Billing Solution Group	5353	TDS METROCOM, INC MI	Active
Illuminet	700	The Billing Solution Group	2320	TDS METROCOM-IL	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Illuminet	700	The Billing Solution Group	3030	TEL UT OF NORTHLAND	Active
Illuminet	700	The Billing Solution Group	3022	TEL UTIL OF ALASKA	Active
Illuminet	700	The Billing Solution Group	7521	TELECOMMUNICATIONS OF NV	Active
Illuminet	700	The Billing Solution Group	4652	Telepacific Communications	Active
Illuminet	700	The Billing Solution Group	7453	Telepacific Communications	Active
Illuminet	700	The Billing Solution Group	1155	TELEPHONE USA OF WI	Active
Illuminet	700	The Billing Solution Group	0578	TELLICO TEL CO	Active
Illuminet	700	The Billing Solution Group	1308	TEMPLETON TEL CO	Active
Illuminet	700	The Billing Solution Group	0575	TENNESSEE TEL CO	Active
Illuminet	700	The Billing Solution Group	0958	TENNEY TEL CO	Active
Illuminet	700	The Billing Solution Group	2029	TERRAL TELE CO	Active
Illuminet	700	The Billing Solution Group	0419	THACKER-GRIGSBY TEL	Active
Illuminet	700	The Billing Solution Group	0606	THE CONNEAUT TEL CO	Active
Illuminet	700	The Billing Solution Group	1808	THE MOUNDRIDGE TEL CO	Active
Illuminet	700	The Billing Solution Group	0644	THE NOVA TEL CO	Active
Illuminet	700	The Billing Solution Group	0650	THE OTTOVILLE MUTUAL TEL	Active
Illuminet	700	The Billing Solution Group	1525	THREE RIVER TELCO	Active
Illuminet	700	The Billing Solution Group	469A	TIER 3 COMMS - FL	Active
Illuminet	700	The Billing Solution Group	846B	TIM RON ENTERPRISES	Active
Illuminet	700	The Billing Solution Group	847B	TIM RON ENTERPRISES	Active
Illuminet	700	The Billing Solution Group	0829	TIPTON TEL CO INC	Active
Illuminet	700	The Billing Solution Group	1310	TITONKA TELEPHONE CO	Active
Illuminet	700	The Billing Solution Group	2173	TOHONO O ODHAM UT AU	Active
Illuminet	700	The Billing Solution Group	2030	TOTAH TEL CO INC	Active
Illuminet	700	The Billing Solution Group	0129	TOWNSHIP TEL CO INC	Active
Illuminet	700	The Billing Solution Group	2378	TRANS-CASCADES TELCO	Active
Illuminet	700	The Billing Solution Group	1839	TRI-COUNTY TEL ASSN	Active
Illuminet	700	The Billing Solution Group	0830	TRI-COUNTY TEL CO	Active
Illuminet	700	The Billing Solution Group	3726	TRINITY VLY SVCS -TX	Active
Illuminet	700	The Billing Solution Group	0131	TRUMANSBURG TEL	Active
Illuminet	700	The Billing Solution Group	2265	TULAROSA BASIN TELCO	Active
Illuminet	700	The Billing Solution Group	1678	TURTLE MTN COMM	Active
Illuminet	700	The Billing Solution Group	1840	TWIN VALLEY TEL INC	Active
Illuminet	700	The Billing Solution Group	7036	U.S. LINK, INC.	Active
Illuminet	700	The Billing Solution Group	0322	UNION SPRINGS TEL CO	Active
Illuminet	700	The Billing Solution Group	0049	UNION TEL CO - NH	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Illuminet	700	The Billing Solution Group	0962	UNION TEL CO - WI	Active
Illuminet	700	The Billing Solution Group	1636	UNTD TEL MUTUAL AID	Active
Illuminet	700	The Billing Solution Group	0893	US LEC COMM - LA	Active
Illuminet	700	The Billing Solution Group	0963	UTELCO INC	Active
Illuminet	700	The Billing Solution Group	9262	UTILITY TEL. INC CA	Active
Illuminet	700	The Billing Solution Group	1495	VALLEY TEL CO	Active
Illuminet	700	The Billing Solution Group	2159	VALLEY TEL CO-OP INC	Active
Illuminet	700	The Billing Solution Group	1320	VAN HORNE COOP TEL	Active
Illuminet	700	The Billing Solution Group	0662	VANLUE TEL CO	Active
Illuminet	700	The Billing Solution Group	0133	VERNON TEL CO INC	Active
Illuminet	700	The Billing Solution Group	1087	VIOLA HOME TEL CO	Active
Illuminet	700	The Billing Solution Group	0253	VIRGINIA HOT SPRINGS TEL CO.	Active
Illuminet	700	The Billing Solution Group	0034	W PENOBSCOT TEL&TEL	Active
Illuminet	700	The Billing Solution Group	2166	W TEXAS RURAL TEL	Active
Illuminet	700	The Billing Solution Group	7809	W. T. SERVICES INC.	Active
Illuminet	700	The Billing Solution Group	669D	WABASH MUTUAL - OH	Active
Illuminet	700	The Billing Solution Group	0031	WARREN TEL CO	Active
Illuminet	700	The Billing Solution Group	0135	WARWICK VAL TEL CO	Active
Illuminet	700	The Billing Solution Group	4140	WARWICK VLY TEL - NY	Active
Illuminet	700	The Billing Solution Group	4959	WARWICK VLY TEL NJ	Active
Illuminet	700	The Billing Solution Group	0664	WASBASH MUTUAL TEL	Active
Illuminet	700	The Billing Solution Group	0968	WAUNAKEE TEL CO	Active
Illuminet	700	The Billing Solution Group	2985	WEB FIRE COMM - TX	Active
Illuminet	700	The Billing Solution Group	1327	WEBB-DICKENS TEL COR	Active
Illuminet	700	The Billing Solution Group	1328	WEBS-CALH COOP TEL A	Active
Illuminet	700	The Billing Solution Group	0421	WEST KY RL TEL CORP	Active
Illuminet	700	The Billing Solution Group	2268	WEST NM TEL CO INC	Active
Illuminet	700	The Billing Solution Group	0480	WEST PLAINS TELECOMM	Active
Illuminet	700	The Billing Solution Group	0837	WEST POINT TEL CO	Active
Illuminet	700	The Billing Solution Group	1227	WESTELCOM NTWK - NY	Active
Illuminet	700	The Billing Solution Group	0735	WESTPHALIA TEL CO	Active
Illuminet	700	The Billing Solution Group	1335	WESTSIDE INDP TEL CO	Active
Illuminet	700	The Billing Solution Group	1505	WIKSTROM TEL CO INC	Active
Illuminet	700	The Billing Solution Group	2210	WILLARD TEL CO	Active
Illuminet	700	The Billing Solution Group	0551	WILLISTON TELE CO	Active
Illuminet	700	The Billing Solution Group	0050	WILTON TEL CO	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Illuminet	700	The Billing Solution Group	1336	WILTON TELEPHONE CO	Active
Illuminet	700	The Billing Solution Group	1507	WINSTED TEL CO	Active
Illuminet	700	The Billing Solution Group	2323	WINTERHAVEN TEL CO	Active
Illuminet	700	The Billing Solution Group	0973	WITTENBERG TEL CO	Active
Illuminet	700	The Billing Solution Group	0738	WOLVERINE TEL CO	Active
Illuminet	700	The Billing Solution Group	0974	WOOD COUNTY TEL CO	Active
Illuminet	700	The Billing Solution Group	1091	WOODHULL COMTY TELCO	Active
Illuminet	700	The Billing Solution Group	1510	WOODSTOCK TEL CO	Active
Illuminet	700	The Billing Solution Group	1342	WOOLSTOCK MUT TEL	Active
Illuminet	700	The Billing Solution Group	5247	WORLDNET, L.L.C.	Active
Illuminet	700	The Billing Solution Group	2034	WYANDOTTE TEL CO	Active
Illuminet	700	The Billing Solution Group	1343	WYOMING MUT TEL CO	Active
Illuminet	700	The Billing Solution Group	7056	XO ILLINOIS, INC.	Active
Illuminet	700	The Billing Solution Group	4793	XO ARIZONA, INC.	Active
Illuminet	700	The Billing Solution Group	7262	XO CALIFORNIA, INC.	Active
Illuminet	700	The Billing Solution Group	8980	XO COLORADO, LLC	Active
Illuminet	700	The Billing Solution Group	8964	XO D.C., INC.	Active
Illuminet	700	The Billing Solution Group	4124	XO DELAWARE, INC.	Active
Illuminet	700	The Billing Solution Group	6100	XO FLORIDA, INC.	Active
Illuminet	700	The Billing Solution Group	8758	XO GEORGIA, INC.	Active
Illuminet	700	The Billing Solution Group	3052	XO IDAHO, INC.	Active
Illuminet	700	The Billing Solution Group	4773	XO MARYLAND, LLC	Active
Illuminet	700	The Billing Solution Group	4536	XO MASSACHUSETTS	Active
Illuminet	700	The Billing Solution Group	4125	XO MICHIGAN, INC.	Active
Illuminet	700	The Billing Solution Group	2557	XO MINNESOTA, LLC	Active
Illuminet	700	The Billing Solution Group	2749	XO MISSISSIPPI, INC.	Active
Illuminet	700	The Billing Solution Group	4774	XO MISSOURI, INC.	Active
Illuminet	700	The Billing Solution Group	4123	XO NEW JERSEY, INC.	Active
Illuminet	700	The Billing Solution Group	8340	XO NEW YORK, INC.	Active
Illuminet	700	The Billing Solution Group	4792	XO NORTH CAROLINA	Active
Illuminet	700	The Billing Solution Group	7520	XO OHIO, INC.	Active
Illuminet	700	The Billing Solution Group	4980	XO OREGON, INC.	Active
Illuminet	700	The Billing Solution Group	7341	XO PENNSYLVANIA	Active
Illuminet	700	The Billing Solution Group	7344	XO TENNESSEE, INC.	Active
Illuminet	700	The Billing Solution Group	8958	XO TEXAS, INC.	Active
Illuminet	700	The Billing Solution Group	7541	XO UTAH, INC.	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Illuminet	700	The Billing Solution Group	4772	XO VIRGINIA, LLC	Active
Illuminet	700	The Billing Solution Group	7340	XO WASHINGTON, INC.	Active
Century Link	200	United Florida	0340	CENTRAL TEL CO FL	Active
Century Link	200	United Florida	0341	SPRINT UNITED TEL FL	Active
Century Link	260	United Midwest	2114	CENTRAL TEL CO TX	Active
Century Link	260	United Midwest	4520	UNITED TEL - NW - OR	Active
Century Link	260	United Midwest	4521	UNITED TEL - NW - WA	Active
Century Link	260	United Midwest	1317	UNITED TEL CO OF IA	Active
Century Link	260	United Midwest	1810	UNITED TEL CO OF KS	Active
Century Link	260	United Midwest	1456	UNITED TEL CO OF MN	Active
Century Link	260	United Midwest	1957	UNITED TEL CO OF MO	Active
Century Link	260	United Midwest	2400	UNITED TEL CO OF NW	Active
Century Link	260	United Midwest	2084	UNITED TEL CO OF TX	Active
Century Link	260	United Midwest	4530	UNITED TEL-WEST- NE	Active
Century Link	260	United Midwest	4531	UNITED TEL-WEST- WY	Active
Century Link	260	United Midwest	1595	UNITED TELCO WEST	Active
Century Link	260	United Midwest	1811	UNITED TELCO MO - MO	Active
Century Link	260	United Midwest	1842	UNITED TELCO OF KS	Active
Windstream	060	Valor	1163	Windstream LP#1	Active
Windstream	060	Valor	2097	WINDSTREAM TEL CO	Active
Windstream	060	Valor	1165	WINDSTREAM TELECOMM - OK	Active
Windstream	060	Valor	1181	WINDSTREAM TELECOMM LP#2	Active
Windstream	060	Valor	1164	WINDSTREAM TELECOMM NM #1	Active
Windstream	060	Valor	1193	WINDSTREAM TELECOMM NM #2	Active
BillToMobile	955	Verizon Mobile	ZZ01	Bill to Mobile Verizon	Active
Verizon North (NYNEX)	002	Verizon North - New England	9102	BELL ATLANTIC N - NE	Active
Verizon North (NYNEX)	002	Verizon North - New England	5114	VERIZON - RI	Active
Verizon North (NYNEX)	002	Verizon North - New England	5112	VERIZON MASS - MA	Active
Verizon North (NYNEX)	002	Verizon North - New England	5131	VERIZON NEW YORK-CT	Active
Verizon North (NYNEX)	004	Verizon North - New York	9104	BELL ATLANTIC N - NY	Active
Verizon North (NYNEX)	004	Verizon North - New York	5130	VERIZON NEW YORK-NY	Active
Verizon East	011	Verizon South - DC	9211	BELL ATLANTIC DC INC	Active
Verizon East	011	Verizon South - DC	5020	VERIZON WASH - DC	Active
Verizon East	010	Verizon South - DE	9210	BELL ATLANTIC DE INC	Active
Verizon East	010	Verizon South - DE	5010	VERIZON DELAWARE DE	Active
Verizon East	012	Verizon South - MD	9212	BELL ATLANTIC MD INC	Active

Bill Co Group Description	LEC	LEC Name	OCN	OCN Name	Status
Verizon East	012	Verizon South - MD	5030	VERIZON MARYLAND MD	Active
Verizon East	006	Verizon South - NJ	9206	BELL ATLANTIC NJ INC	Active
Verizon East	006	Verizon South - NJ	5120	VERIZON NEW JERSEY	Active
Verizon East	008	Verizon South - PA	9208	BELL ATLANTIC PA INC	Active
Verizon East	008	Verizon South - PA	0169	VERIZON NORTH-PA/GTE	Active
Verizon East	008	Verizon South - PA	0170	VERIZON NORTH-PA/GTE	Active
Verizon East	008	Verizon South - PA	0201	VERIZON NORTH-PA/GTE	Active
Verizon East	013	Verizon South - VA	9213	BELL ATLANTIC VA INC	Active
Verizon East	013	Verizon South - VA	5040	VERIZON VIRGINIA VA	Active
Verizon East	913	Verizon South - VA (old GTE)	4337	VERIZON SOUTH-VA/GTE	Active
Verizon East	813	Verizon South VA (GTE/Contel)	0233	VERIZON SOUTH-VA/GTE	Active

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