A person in a firefighter uniform

Description automatically generated

**Nebraska State Patrol**

**Request for Proposals**

**For**

**CAD and WDA/Mobile Systems**

****

**RESPONSE**



Table of Contents

[**Cover Letter** 3](#_Toc172021733)

[**1. Corporate Overview** 4](#_Toc172021734)

[a. Bidder Identification and Information 4](#_Toc172021735)

[b. Financial Statements 4](#_Toc172021736)

[c. Change of Ownership 5](#_Toc172021737)

[d. Office Location 5](#_Toc172021738)

[e. Relationships with the State 5](#_Toc172021739)

[f. Bidder’s Employee Relations to State 5](#_Toc172021740)

[g. Contract Performance 5](#_Toc172021741)

[h. Summary of Bidder’s Corporate Experience 5](#_Toc172021742)

[i. Similar Projects 5](#_Toc172021743)

[ii. Bidder and Subcontractor Experience 6](#_Toc172021744)

[iii. Subcontractor Share of Project 7](#_Toc172021745)

[i. Summary of Bidder’s Proposed Personnel/Management Approach 7](#_Toc172021746)

[j. Subcontractors 12](#_Toc172021747)

[**2. Technical Approach** 13](#_Toc172021748)

[a. Technical Approach 13](#_Toc172021749)

[i. Understanding of the Project Requirements 13](#_Toc172021750)

[ii. Proposed Development Approach 13](#_Toc172021751)

[iii. Technical Considerations 15](#_Toc172021752)

[iv. Architecture Solution 17](#_Toc172021753)

[v. Detailed Project Plan 20](#_Toc172021754)

[vi. Deliverables and Due Dates 21](#_Toc172021755)

[vii. Technical Matrix/Exhibit A 24](#_Toc172021756)

[**Computer Aided Dispatch (CAD) Overview** 24](#_Toc172021757)

[**Wireless Digital Assistant (WDA) Mobile CAD Overview** 30](#_Toc172021758)

[**Form A** Bidder Proposal Point of Contact 34](#_Toc172021759)

[**Form B**  Notification of Intent to Submit Proposal 36](#_Toc172021760)

[**REQUEST FOR PROPOSAL FOR CONTRACTUAL SERVICES FORM** 37](#_Toc172021761)

# **Cover Letter**

A police car with lights on

Description automatically generated

July 22, 2024

Jason Dean, Procurement Officer

Nebraska State Patrol

4600 Innovation Drive

Lincoln, NE 68521

RE: RFP #NSP7149 Z1

ProPhoenix is pleased to present the enclosed proposal in response to the RFP advertised by the Nebraska State Patrol. We have reviewed the project and with our fully integrated and scalable system, ProPhoenix is well-positioned to provide the solutions needed for the Nebraska State Patrol, now and in the future.

The ProPhoenix suite is a complete public safety software system including Computer Aided Dispatch (CAD), Wireless Digital Assistant (WDA) our mobile application for law enforcement, and the ProPhoenix Key Global Information Sharing™ (KGIS) data sharing network links all user agencies, providing incredible amounts of information regarding names, incidents, and mugshots for officer safety. The system modules and applications are innovative, intuitive, and fully integrated, which also eliminates the need for duplicate entries and will reduce countless hours and resources. The initial purchase is all the state patrol would need, as there is no fee for new releases or updates. Everything is included in the annual maintenance fee and saves on future capital investment.

We will show you just how user-friendly, dynamic, yet robust, and complete our software applications are in promoting officer safety and user efficiency. We believe a demonstration of the ProPhoenix suite of software products will be most beneficial in your review of the software applications we are proposing and cannot stress enough the importance of this activity to equip your Evaluation Committee with as much comparative information as possible.

All materials and enclosures required by this RFP Response have been submitted. Our Regional Sales Director Fred Johnston ([fred.johnston@prophoenix.com](mailto:fred.johnston@prophoenix.com) or (609) 953-6850) would be happy to answer any questions you have regarding our response to this Public Safety Software Request for Proposal. As Executive Vice President of ProPhoenix, I have the authority to submit the proposal offered and I will be the contact for all future contract negotiations.

Sincerely,

A close-up of a signature

Description automatically generated

Paul Hoppe

Executive Vice President

[Paul.hoppe@prophoenix.com](mailto:Paul.hoppe@prophoenix.com)

# **1. Corporate Overview**

## a. Bidder Identification and Information

Chenosa Systems DBA ProPhoenix Corporation

502 Pleasant Vally Avenue

Moorestown, New Jersey 08057

(609) 953-6850

Established 2004

## b. Financial Statements

ProPhoenix has not lost a law enforcement customer due to dissatisfaction since its inception and we think this is a significant statement that sets us apart from our competitors! We also believe that is a significant factor in demonstrating the financial stability of the company.

ProPhoenix is a privately owned corporation. We respectfully choose not to include financial information at this point in the Sales process. ProPhoenix would be more than happy to provide the required financial documents following a demonstration and pending selection as the choice vendor for this project.

We have included the following that may assist you in obtaining further information.

Federal ID: 20-5731095 Incorporation: 10-19-2006

DUNS: 031395279 Unique Entity ID (UEI): KPQNA98LF689

William J. Morgan CPA

Harrison, Mauro & Morgan, PA

703 White Horse Road, Suite 5

Voorhees, NJ 08043

(Phone) 856-782-9700

(Fax) 856-782-2233

**Scott Tourtellotte**

SVP - Senior Relationship Manager

Commercial Banking

**Bank of America Merrill Lynch**

22 W. Route 70, Cherry Hill, NJ 08002

Direct: 856-616-8728; E-Fax: 212-548-2057; Mobile: 609-238-5667

Email: [scott.tourtellotte@baml.com](mailto:scott.tourtellotte@baml.com); [Webpage](https://rm.bofaml.com/scott.tourtellotte/)

## c. Change of Ownership

ProPhoenix has never changed ownership in its 21 years of business. There is a legacy plan in place, ensuring that ProPhoenix will never be sold and will remain privately held.

## d. Office Location

ProPhoenix is headquartered in Moorestown, New Jersey.

## e. Relationships with the State

ProPhoenix does not have any state contract with the State of Nebraska

## f. Bidder’s Employee Relations to State

The ownership, nor any employee of ProPhoenix has ever been employed by the State of Nebraska. ProPhoenix utilizes only one subcontractor, AWS, and is unaware of any employees previously employed by the State of Nebraska.

## g. Contract Performance

One ProPhoenix contract was canceled in the last five years for a comm center that serviced many agencies. Several of the agencies did not have a voice in selection and after a discouraging lack of agency participation, the host agency decided to remain with their current vendor.

Macecom

502 W Cota Street

Shelton, WA 98584

Michael Evans, Executive Director

360-490-3050

The decision to terminate our contract included CAD, RMS, Mobile, and Fire RMS. There were issues with different factions within the organization about making changes from their Spillman software to ProPhoenix. This caused challenges in getting the project to stay on course. There were things that the Spillman system did that some people liked and Phoenix did not do. After months of meetings, it was mutually decided that it was best to terminate our agreement. The agency went back to the Spillman system. The Executive Director's comment was, “The troops did not want to make a change from Spillman albeit, he knew Phoenix was much better, however, pressure was to go back to Spillman.”

## h. Summary of Bidder’s Corporate Experience

### i. Similar Projects

**Gloucester County Emergency Services** -- Clayton, New Jersey (302k Population)

* Deputy Chief Jay Jones (W)856-307-7915, jjones@co.gloucester.nj.us
* Customer since 11/3/10 – Live since 10/15/12.
* CAD center serving all 41 fire departments, 6 ambulance squads, and 4 paramedics. All 24 police departments, the sheriff’s department, along with prosecutor's office, SWAT, and emergency response teams. Police and fire using ProPhoenix RMS.
* Calls for Service: 240,000
* ProPhoenix was the Primary Contractor. No Sub-Contractors.
* ProPhoenix responsibilities are as follows – Establish a Kick-off Meeting – Based On The Results Of The Meeting – Create A SOW/Project Plan – Assign Project Managers – Schedule Meetings – Create A Training Plan – Install Software – Implement – Do Data Conversion With Our Internal Team – Set Go-Live Date – Assign Phoenix Go-live Onsite Team – Go Live – Set-Follow-up Post Go Live And Assist Where Needed.

**Milwaukee County Sheriff’s Office** --Milwaukee, Wisconsin (948k Population)

* System Administrator Andrew Carrion (W) 414-278-2038, andrew.carrion@milwaukeecountywi.gov
* Customer since 10/28/05 – Live since 6/07 with RMS with gradual growth over the years.
* CAD serving law and jail
* Calls for Service:  220,000
* ProPhoenix was the Primary Contractor. No Sub-Contractors.
* ProPhoenix responsibilities are as follows – Establish a Kick-off Meeting – Based On The Results Of The Meeting – Create A SOW/Project Plan – Assign Project Managers – Schedule Meetings – Create A Training Plan – Install Software – Implement – Do Data Conversion With Our Internal Team – Set Go-Live Date – Assign Phoenix Go-live Onsite Team – Go Live – Set-Follow-up Post Go Live And Assist Where Needed

**Walworth County Sheriff’s Office** –Elk Horn, Wisconsin (104k Population)

* Captain Todd Neumann (W) 262-741-4621, tneumann@co.walworth.wi.us
* Customer since 5/6/09 – Live since 7/2010.
* CAD serving sheriff’s department, 22 police departments, and 18 fire departments using ProPhoenix RMS
* Calls for Service:  216,768
* ProPhoenix was the Primary Contractor. No Sub-Contractors
* ProPhoenix responsibilities are as follows – Establish a Kick-off Meeting – Based On The Results Of The Meeting – Create A SOW/Project Plan – Assign Project Managers – Schedule Meetings – Create A Training Plan – Install Software – Implement – Do Data Conversion With Our Internal Team – Set Go-Live Date – Assign Phoenix Go-live Onsite Team – Go Live – Set-Follow-up Post Go Live And Assist Where Needed

### ii. Bidder and Subcontractor Experience

ProPhoenix has over 803 customers in 27 states with successful deployments. It is not our practice to release customer lists prior to contract signings, however, we have supplied three references as requested.

### iii. Subcontractor Share of Project

AWS Cloud is the only subcontractor used by ProPhoenix to assist in Cloud deployments.

## i. Summary of Bidder’s Proposed Personnel/Management Approach

ProPhoenix has developed a project management methodology based on best practices and Project Management Institute (PMI) recommendations. All new projects are divided into the following six distinctive project phases:

A screenshot of a computer screen

Description automatically generated

**1.**  **Initiation:** Establish initial communication with the customer, set up internal systems, and initiate the planning stage.

**2.** **Planning:** Conduct site visit, finalize project plan, and prepare internal team.

**3.** **Implementation**: Install and configure software, conduct system administration training, and execute a sample data conversion.

**4.** **User Training**: Conduct train the trainer training, end-user training, and prepare to go live.

**5.** **Go-Live**: Go live, conduct post-go-live training, and perform data conversion.

**6.** **Closing:** Conduct final review and project close-out. At completion, transfer project management to technical support staff.

Each project phase includes a set of defined work products and documents that establish the expected level of management control. Most of these items are related to the primary phase deliverable, and the phases typically take their names from these items.

**Project Management – Resource Commitment**

There are bi-weekly project status meetings conducted by conference call. These meetings will involve members of the Nebraska State Patrol Project team at varying levels during the project. These meetings last approximately 60-90 minutes.

The Nebraska State Patrol Project team members will have various levels of contribution with the Project Manager having full-time involvement in the project from onset through Go Live and probably for several weeks following. It is critical for the project's success that the team members selected are enthusiastic about the change and dedicated to completing tasks required to meet deadlines and stay on pace with the project timeline.

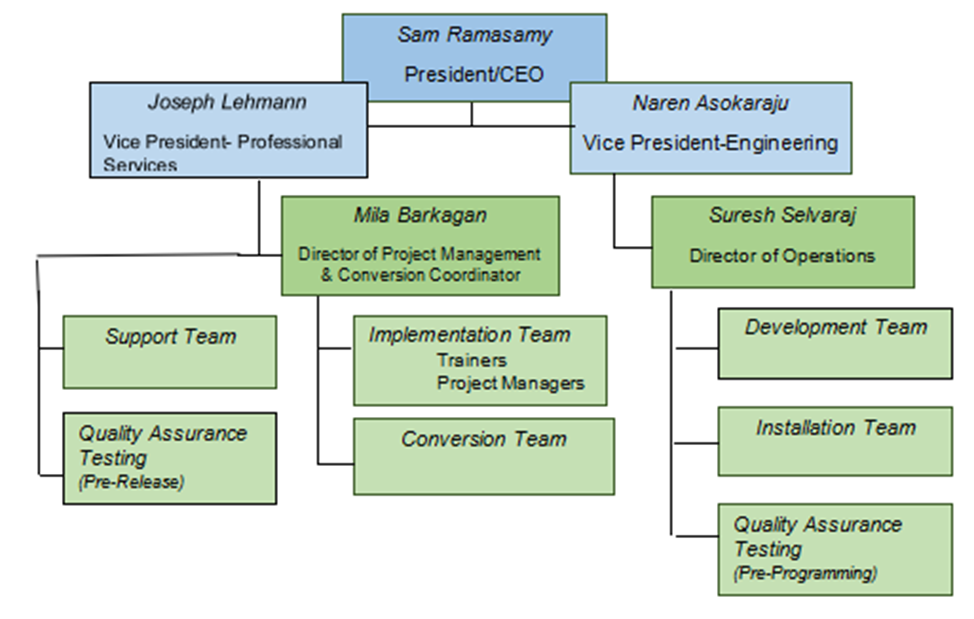
Agency Trainers should have ample practice time scheduled within their regular duties to prepare for End User Training. They will work with the Application Administrators to configure the system to match as closely as possible with the current business practices and work out any departmental policies that need to be altered to accommodate the new technology. The Project Manager and members of the Phoenix Implementation Team will be involved as much as needed during this time.

|  |  |  |
| --- | --- | --- |
| **ROLE** | **ESTIMATED TIME**  **COMMITMENT** | **COMMENTS** |
| System Administrator | 8-10 hours initially and  1-2 hours per week following | Backups can be automated |
| Application Administrator(s) | 130-150 hours per month, initially  5-10 per month following Go Live | This depends on how the tasks are delegated |
| Project Manager | Initially 80-100 hours per month and reducing to very few hours following Go Live |  |
| Trainers | 40 hours of train the trainer  40 hours assisting with set up and customization;  40 hours per class for end-user training | Determined by how many trainers are available to teach classes for end users |

**For Nebraska State Patrol:**

|  |  |  |
| --- | --- | --- |
| **Position** | | **Description** |
| **Project Manager**    **1 for overall project** | This person will be the primary contact for ProPhoenix. He/She will be responsible for ongoing communication with each of the Project agencies regarding project progress, issues and/or changes and will coordinate and manage activities of the appointed staff in fulfilling the responsibilities within the Statement of Work and the Agreement. | |
| **System Administrator**    **1-2 for overall project** | This role may change depending on the Installation plan accepted by the Nebraska State Patrol Project Team. The System Administrator will be responsible for ensuring the customer network, servers, and client (PC) environment is installed and maintained properly; provide operational support of the customer hardware and system software infrastructure; provide operational support for ProPhoenix Standard Software to Project member agency users; and perform routine software upgrades, backup, and recovery tasks for the Phoenix Software. | |
| **Application Administrator(s)**    **For 911 Center: 3-4** | The Application Administrator(s) will configure the software applications including user-defined coded tables, parameters, and settings that help the Project Team customize the system. This person will maintain personnel records and user security; and update GEO to enter new premises, streets, and intersections. This person will also assist in communicating new version changes to all Users. This position will demand more hours during implementation and then drastically reduce commitment following Go Live of all modules. | |

**Project Team Organizational Chart**



**Resumes of Key Personnel**

**Joseph Lehmann, Jr.**

**Relevant Experience**

**ProPhoenix Corporation** 2010 to present

*Vice President of Professional Services*

* Direct Project Management, Support Services, Training staff and Implementation Team members
* Subject Matter Expert participating in development, design and testing of all new applications and features
* Install and manage company’s US servers, create virtual servers, manage company active directory

**County of Burlington, NJ – Department of Information Technology** 2009-2010

*Senior Technician*

* Project Manager for Police Department data migration
* Daily system backups, disaster planning, continuity of operations
* Set up and configure workstations, perform security audits, analyze reported problems
* Assist Police Department with crime data and creating reports, create queries and troubleshoot

**Mount Laurel Police Department, NJ** 1986-2009

*Chief of Police* 2008-2009

*Lieutenant*, Commander Services Division 2000-2007

*Sergeant,* Communications/Records 1995-2000

*Police Officer*

**Fire and EMS Service (All Volunteer) County of Burlington, NJ** 1998-2011

*Chief Fire Coordinator*

*Deputy Fire Coordinator*

*Firefighter*

**State of NJ Division of Fire Safety** 2005-2011

*Deputy Regional State Fire Coordinator*

**Relevant Education**

Certified Public Manager, State of NJ Department of Personnel, 2003

West Point Command and Leadership Program 2001

Burlington County College 1999-2002

Certified Fire Officer 1

Certified Instructor: Firefighter Level 1 & 2, Incident Command Levels 1, 2 & 3, SCBA/Smokehouse Live Burn

Numerous personal and professional affiliations and awards

Ludmila Barkagan, MBA

**Relevant Professional Experience**

**ProPhoenix Corporation 2/2020 – present**

*Manager of Project Management and Conversion Services*

* Manage Project Management team and oversees all related responsibilities for active projects
* Manage conversion services between customer and ProPhoenix Conversion Team
* Directly involved in managing Business Process Improvement for Project Management Team

**Securus Technologies 4/2019 – 1/2020**

*Public Safety Engineering Program Manager/Scrum Master*

* Led cross functional team and provided project management leadership in the delivery of complex projects using the Engineering Team’s disciplined process to manager all aspects of major public safety projects include the establishment of the project charter through successful project execution and project acceptance.
* Managed Business Process Improvement through enhanced utilization of Agile Scrum Methodology throughout the organization to improve communications between Engineering, Product Management, and Business to provide more transparency across the departments.
* Assisted in defining and deploying new product development processes and in facilitating the continuous improvement of existing processes.

**NBME 1/2018 – 12/2018**

*IT PMO Project Manager*

**CIGNA 2/2017 – 12/2017**

*CBX ECC Program/Project Manager*

**Ditech Financial**

*Program/Project Manager*

**PHH Mortgage 11/2015 – 5-2016**

*EPMO Technical Program/Project Manager*

**JPMChase 2/12 – 11/2015**

*Program/Project Manager*

**Relevant Skills**

* SDLC (Requirements, Design, Development, QA Testing, UAT Testing and Implementation)
* Agile/Scrum, Waterfall, Prince2, COBIT methodologies
* Microsoft Office Suite
* Industry frameworks (e.g., CMMI, COBIT, ITIL, Six Sigma, Resource Project Management (RPM), IT project tool

**Relevant Education**

**Master of Science degree in Business Administration and Engineering,** University of Engineering, Odessa, UA

**Master of Science degree in Mathematics and Physics,** University of Education and Science, Moscow, Russia

**PMI Member** (New Jersey’s Chapter IT & T, SIG Risk Management (ID 668743)

Paula McClatchey

*RELEVANT EMPLOYMENT EXPERIENCE:*

**ProPhoenix Corporation** **2007-Present**

*Project Manager/Customer Liaison*

* Manage Public Safety system (Law Enforcement & Fire agencies) projects
* Maintain Project timeline and Project plan; coordinate software setup, training and go live with customer project team; maintain customer contacts, products, and project items in Customer Relationship Management (CRM) software
* Order customer 3rd party hardware
* Enter and Maintain customer proposals, work orders, invoicing in CRM
* On-Site Instructor for software administration, Train the Trainer and End User training sessions teaching all aspects of the system usage
* Handle all customer support calls through to resolution until account/project goes online “LIVE” with software
* Maintain CRM database by updating support case/help ticket items; work with Support and Development teams along with customer contacts for details, troubleshooting, and identifying issues that need remedial training or fixes
* Manage/support telephone helplines and online “Chat” support
* Perform in-house User Acceptance Testing (UAT) for Fire and CAD products whenever changes are made, including enhancements and upgrades as Subject Matter Expert (SME)

**ProPhoenix Corporation** **2005-2009**

*Product Manager*

* Fire software design and implementation for Fire software products
* Maintained product timeline and coordinated software production with Development team
* On-Site Instructor for software administration, Train the Trainer and End User training sessions teaching all aspects of the system usage
* Handled all incoming customer support calls, created help tickets, tracked calls until resolution achieved

**Archonix, LLC** **2004-2005**

*Project Manager*

* Maintained employee personnel records, time off tracking, reviews, and evaluations
* Coordinated and scheduled software installations
* Fire product management
* Fire products software trainer/instructor

**D.M. Data Corporation** **1991-2004**

*Support Services Representative*

* Handled all incoming customer support calls, created help tickets
* Fire software design and product management
* On-site Fire and Office Automation software trainer/instructor

\*\*Please refer to our references for feedback on our project management team and trainers.

## j. Subcontractors

AWS Cloud/Amazon Cloud

Rob Turner, Business Development Manager

Amazon Web Services, Justice and Public Safety/Corrections

rfturner@amazon.com

(571) 581-0878

Percentages based on contract.

# **2. Technical Approach**

## a. Technical Approach

### i. Understanding of the Project Requirements

ProPhoenix has read the RFP and technical requirements in their entirety and fully understands the project proposed by the Nevada State Patrol.

### ii. Proposed Development Approach

A green rectangle with white text

Description automatically generated

Each project phase normally includes a set of defined work products and documents that establish the expected level of management control. Most of these items are related to the primary phase deliverable, and the phases typically take their names from these items.

*For the Nebraska State Patrol, ProPhoenix proposes a five-phase methodology:*

1. Define the system

2. Design the system

3. Build the system

4. Deliver the system

5. Maintain the system

***Phase 1. Define the System***

The goal of this phase is to ensure that the operational intent defined in the proposal and contract, as written, are consistent. This phase begins with a review of the ProPhoenix proposal to the Nebraska State Patrol. The review establishes the conditions and extent of work to be performed and clarifies expectations about the system. All types of requirements (functional, operational, performance, application, data, and interface) are analyzed until understood by the project team (see *Requirements Validation*). This review will clarify any questions or wording in the proposal that will become the final statement of work (including software and hardware) for the project. Tasks and deliverables are itemized in the statement of work (SOW) and described below:

* ***Contract approved.*** This task signifies the completion and approval by all parties of the contract for the project. The contract describes the specifics of the terms and conditions for the project. Completion of this task defines the date for the official start of the project.
* ***Contract/SOW review.*** All parties review the signed contract to confirm that the contract:
  + Functions as the original statement of work reflected in the initial proposal and proposal addenda
  + Documents specifically the work to be performed
  + Establishes the conditions of work
  + Sets the expectations for the system
  + Is reviewed by the client and the ProPhoenix Implementation team to ensure that the integrated and joint project team understands the requirements
* ***Requirements review with client.*** Upon completion of the contract and/or SOW, the ProPhoenix Project Manager will meet with personnel from Nebraska State Patrol Project Team to clarify any outstanding issues. This process will result in a draft project baseline that enables subsequent phases to be completed with the mutual understanding of all parties.
* ***Project baseline established.*** This task represents an internal task of the Project Manager after the Nebraska State Patrol Project Team confirms that all required materials and services described in the SOW are accounted for, and activities are established to effect delivery to the client based on the project schedule.
* ***Project schedule finalized.*** The project schedule includes all major work activities associated with the system implementation and third-party hardware installation. All members of the project team mutually approve of the project schedule.
* ***Training plan creation.*** The training plan identifies the logistics of training, the methodologies and objectives, and a description of each training class for software and for associated third-party vendor hardware.

***Phase 2. Design the System***

During this phase, the integrated project team defines the system construction, configuration, interfaces, and third-party hardware configuration and installation requirements which become the blueprint for the *project.* Tasks and deliverables are described below*:*

* ***Acceptance test plan.*** The acceptance test plan defines the functional testing methodology for the project. The test plan originates with the development of requirements and culminates in the completion of the design.

***Phase 3. Build the System***

During this phase, the integrated ProPhoenix Project Manager performs the activities required to deliver system functionality as specified and develops specified interfaces, including system integration. Your activities before installation are also completed during this phase in system delivery readiness. Tasks and deliverables:

* ***Interfaces.*** This task represents the effort required to complete the development of the system interfaces that are specified by the contract/SOW.
* ***Pre-installation requirements.*** This task represents the activities required to be completed before starting delivery and installation of the hardware and system. ProPhoenix requires a “*Pre-Installation Workbook*” that answers questions regarding the Nebraska State Patrol network, firewall, server IP addresses, etc.

***Phase 4. Deliver the System***

During this phase, the third-party hardware components are coordinated, and the software system is delivered, configured, installed, and initially tested for correct operation. Interfaces are delivered and configured to operate with the existing systems and new systems as applicable. Data is loaded for site operations.

Tasks and deliverables:

* ***Install software systems.***

Identify the activities involved in the installation of and configuring the system for training. The installation also includes the ProPhoenix applications and databases for Production and Training that are available to the Nebraska State Patrol in perpetuity. The systems are checked for correct operation with client-supplied network settings and configuration.

* ***Deliverables:*** 
  + - * ProPhoenix applications
      * ProPhoenix databases for Production, Testing and Training
      * Interface software

***Phase 5. Maintain the System***

Maintaining your ProPhoenix systems, and providing a mechanism for expansion, are necessary to maximize the system’s productive life.

Project status meetings will be documented through meeting minutes that are shared with the customer. Microsoft Project is used to track deliverables, milestones, and outstanding/completed tasks by each party. The project plan will be reviewed during bi-weekly project status meetings. Daily communications are a combination of telephone calls and email messages.

### iii. Technical Considerations

**Hardware Recommendations**

Dell Products are used for comparison purposes only. Any brand is supported if it meets the minimum requirements. See section iv for additional technical information.

**SAN:**

Dell Storage with 12 or 16 TB

**Physical Server 1:** Dell R6 Series Server with 128 GB RAM

SQL Server VM (1st SQL in Cluster Configuration):

RAM: 48 GB

Allocate: 1 TB for Data, 1 TB for Log, 1 TB for File Storage (Adjust as required)

OS Disk: 200 GB RAID

CAD Server VM:

RAM: 16 GB

OS Disk: 200 GB

**NetMotion / Domain Controller Server VM**:

RAM: 4 GB

OS Disk: 200 GB

**Physical Server 2:** Dell R6 Series Server with 128 GB RAM

SQL Server VM (2nd SQL in Cluster Configuration):

RAM: 48 GB

Allocate: 1 TB for Data, 1 TB for Log, 1 TB for File Storage (Adjust as required)

OS Disk: 200 GB RAID

RMS Server / Report / Test Server VM:

RAM: 16 GB

OS Disk: 200 GB

**User Workstations (CAD / RMS / WDA)**

* PC with Intel Core i5 or higher processor with 3.2 GHz or higher with:
* RAM 6 GB (8 GB is recommended)
* Disk: 500 GB
* Windows 10 Ent / 8.1 or Windows 7 (migrate please)
* Microsoft .NET Framework 4.5.1
* IE 11.0 or higher
* Screen size and resolution: 21" or larger, 1920 x 1080 minimum
* MDT screen size and resolution: 13” or larger, 1024 x 768 minimum

**WDA App**

**Mobile App Device (Windows)**

* Tablet - Unsupported
* Phone - Unsupported

**Mobile App Device (Android)**

* Tablet - Screen size: 7", and 10"
* Phone - Screen size: 5 inch (1080X1920) and above
* Operating System: 5.0 or higher
* RAM: 2 GB or higher
* ROM: 32 GB / 64 GB hard drive
* Devices are available from Samsung, and Panasonic (ToughPad)

**Mobile App Device (Apple)**

* IPad, iPad Mini2 and above, iPad Air and above, and iPad Pro 9.7" & 12.9"
* Phone and iPhone SE and above
* Operating System: iOS 9 or higher
* ROM: 16 / 32 GB / 64 GB hard drive

**Printing from a Mobile Device**

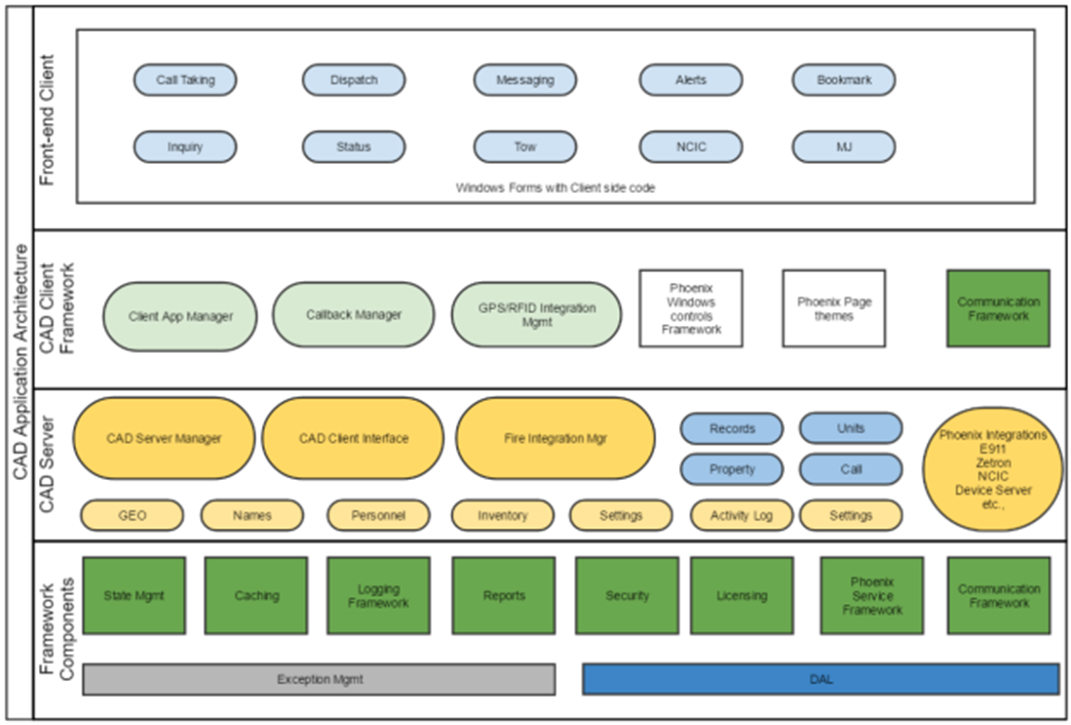
* To print an inspection certificate or violation notice in the field, wireless connection through a MiFi device or cellular connection is required. MiFi devices are available from Verizon (Jetpack) and AT&T.

* For Android/iPad Mobile Printing, the following devices are available: HP OfficeJet 100 Mobile Printer, Brother Pocket Jet Printer Bluetooth

|  |  |
| --- | --- |
|  | **A “PrinterShare” app is required to print to Bluetooth printers for Android and iPad.** |

* For Windows 8 Mobile Printing: Wi-Fi, USB, or Bluetooth printers can be used.

### iv. Architecture Solution



Phoenix software is architected to accommodate the functional and non-functional requirements needed for a large public safety agency and the application is designed from the ground up utilizing the latest technologies centered on the Microsoft .NET framework as the runtime.

1. All the modules are designed with a consistent look and feel to ensure no new processes are learned to navigate/perform similar functions in different areas of the product.
2. Designed with a single point of entry, user and department personnel will not waste time entering the same information multiple times.
3. Data entered in one module is easily accessible from another module. There is always a single source of data storage, and all systems will access the single source through a defined component to provide it to the user with a click of a button, using the lookup option, in all the products. (RMS and CMS)
4. All the code is written in the form of components for maximum reusability and to abstract the low-level policies in the high-level layers. Some of the system components are caching State Mgmt., Authentication, Crypto, Logging, Exception Mgmt., Web page framework, and Communication framework. Like system components, the application's use cases are packaged in the respective components in the hierarchy of BL, DB and used by front-end web or Windows layers consistently.
5. Microsoft C# is used as a programming language to develop the service side software and all the services.
6. Web front ends are developed using HTML, CSS, JQuery
7. Mobile apps use Xamarin & MVVM pattern to reuse the functionality in all the devices – Apple, Android & Win8/10.
8. Products are developed using Microsoft .NET languages, C#, ASP. Net and several third-party tools such as Google Maps, mugshot, scanner, barcode, ScenePD, etc. All the 3rd party tools are wrapped using Phoenix wrappers so that when the need comes for an upgrade or change in components, the 3rd party software will not be affected.
9. Scalability and high availability can be achieved using running multiple instances of CAD & RMS applications and all the servers are running behind a Windows load balancer to share the load by different servers.
10. High availability for the server services can be handled using Hyper-V or VMWare and SQL Failover clustering.

ProPhoenix Application Architecture contains the architecture of the components, their capability, relationships and how they collaborate to provide the system capabilities. It was designed to meet the requirements of the logical and deployment architectures. The ProPhoenix Solution Architecture and ability to deploy a cost-effective solution can be scaled from a minimal small-scale solution through to an enterprise-class manageable single or multi-juris deployment.

ProPhoenix Public Safety Software, by design, delivers the capability for customization and extension; this is provided via a series of ProPhoenix frameworks. The frameworks effectively provide an integrated development environment.

Technologies required to support the architecture, as well as supporting the above requirements, have a clear supported roadmap over time, enable compliance to relevant common standards, and can have development tools available that support enterprise-class and scaled development.

The following is a list of some of the key principles that have been applied to the ProPhoenix Application Architecture:

• Must follow layered principles

• User experience is loosely coupled with the other layers

• Architecture must be integrated and workflow-enabling

• Architecture must support prevailing standards (Public Safety Domain standards)

• Architecture must provide protection for evolving standards via isolation layers

• Architecture must provide 99.999% availability

• Must be simple, reliable, robust, and fast performing

• Must be capable of scaling up, scaling down, and scaling out

• Must be accepted universally as a secure architecture

• Data center deployable

The ProPhoenix design is based on a layered architecture to ensure that correct governance is applied to requests. The actual implementation of the architecture has the intelligence to only make use of the layers required to satisfy a request, reducing unnecessary processing and communications thus ensuring performance and efficient use of resources.

**Presentation layer:** Deployed as a web client from Microsoft IIS or a Rich Rendering client either installed on devices or delivered through thin-client technologies. These options provide support for a wide range of devices and device types.

**Business layer:** .NET framework running on Windows Server

**Database layer:** Microsoft SQL Server

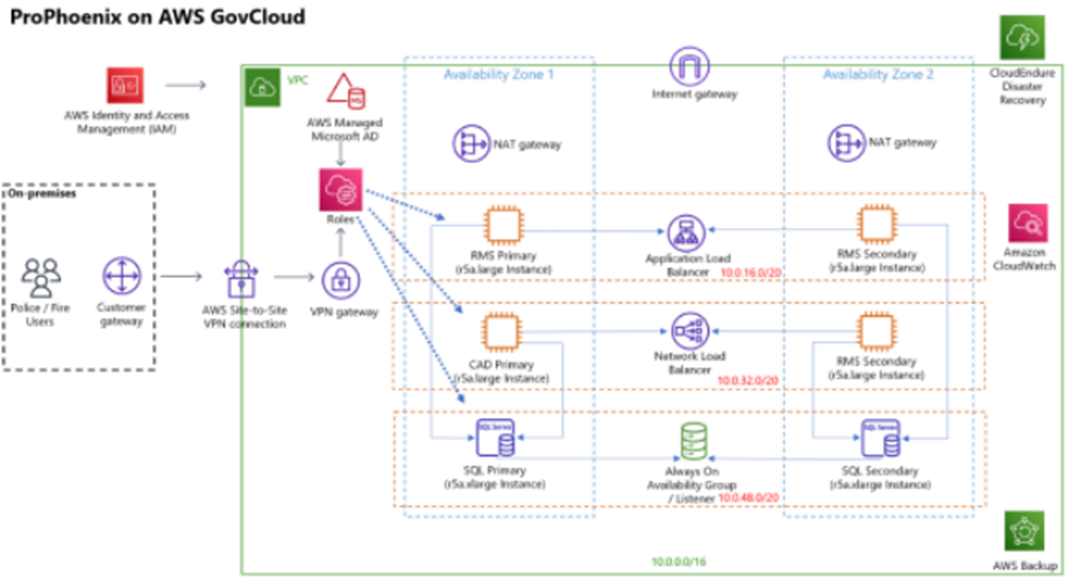
If you choose an on-premise installation, we have included our hardware recommendation guide for supported environments. We would be happy to discuss further options based on your needs. Applications run on Windows server virtual machines.

ProPhoenix is a Microsoft Gold Partner. Any Windows products or Windows-compatible products are supported.

Architecture Diagram – On-Premise



Architecture Diagram – Cloud



### v. Detailed Project Plan

This project will employ a work breakdown structure (WBS) to depict the scope. The WBS will be created by determining the project’s main phases and then using a hierarchical format to organize the rest. Deliverables are determined by analyzing the contract, SOW, and product release schedule. Related tasks, dependencies, and task order will be determined by collaborating with the ProPhoenix project team.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Implementation** | | | | | | | | |
| Project Initiation | Project Planning | Software Installation | Development | Data Conversion | Training | Testing | Go Live | Post Go Live |
|  |  |  |  |  |  |  |  |  |
| Kick Off Meeting | Collect Info | Review Requirements | Interfaces | Data from Client | Develop Agenda and Schedule | Interfaces | Prepare Production database | Post Go Live Training |
| Develop Schedule | Define Project Team | Network & Installation Prep | Contractual Enhancements | Analysis and Mapping | On-Site Training | Enhancements | Data and Interface | Final Review |
| Internal Preparation | Business Analysis | Install Software & Database | Configuration of Software | Configuration Conversion database | Administrator Training | System/ Functionality | OnSite Support | Project Closeout |
| Pre-Implementation Meeting | Finalize Project Plan |  | Geo File Import | Customer Review |  | Dual Practice Period |  | Transfer to Support |
|  |  |  |  | Final Conversion |  |  |  |  |

Prior to submission of each deliverable, the Nebraska State Patrol Project Team and the ProPhoenix Project Manager will jointly review, revise if necessary, and approve the acceptance criteria that will be used in evaluating each Deliverable in advance of the Deliverable Milestone date.

ProPhoenix will submit the required deliverables specified in the SOW to the Nebraska State Patrol Project Team for approval and acceptance. The Nebraska State Patrol Project team and their respective team members will review the work product for each of the Deliverables and evaluate whether each Deliverable has been met in all material aspects to the criteria established in this agreement.

Once reviewed and favorably evaluated, the deliverables will be deemed acceptable and billing for the achieved Milestone can be submitted for payment if associated with a payment due during contract negotiations.

### vi. Deliverables and Due Dates

The following table/sample project plan will address a proposed implementation time. All dates are tentative and are displayed to show a timeline with key dates and milestones. Actual dates and events will be inserted based on the customer schedule and finalized contract indicating exact interfaces to be performed and data to be converted. The below chart example has a January 1, 2025, start date and is for illustration purposes ONLY. Dates are not reflective of actual project events. Assumptions made include contract negotiations and execution will be completed by December 15, 2024. Functional requirements, necessary software updates, and interface development and conversion services can occur simultaneously.

ProPhoenix will work closely with the Nebraska State Patrol (NSP) Project team on all facets of the Project Plan to finalize a mutually agreeable timeline to meet the needs of both parties.

**SAMPLE of Deliverables & Schedule**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Task/Deliverable** | **Scope of Delivery** | **Assigned As Responsible** | **Estimated Completion** | **Dependency** |
| Statement of Work | Project Delivery | ProPhoenix-Lead  NSP- Project Team-Assist | 01/01/2025 | Agreement by Parties |
| Project Kick-Off | Meeting to Outline Project Expectations | ProPhoenix-Lead  NSP- Project Team-Assist | 01/03/2025 | Contract signed by Parties |
| Background Checks | All ProPhoenix employees working on-site will submit to fingerprint-based background investigation | ProPhoenix-Share  NSP-Share | 01/10/2025 |  |
| On-Site Analysis  CAD/911 Center | In-depth analysis of current workflow processes and SOPs | ProPhoenix-Lead  NSP-Assist | 01/15/2025 | Scheduling |
| Data Spreadsheet/Prep  Training | Online or On-site training for completion of set-up data | ProPhoenix-Share  App Admins - Share | 01/20/2025 |  |
| Install software | Confirm .net & IIS installed; database set up and configuration on server; configure Live, Training, & Test databases | ProPhoenix-Owner | 01/20/2025 |  |
| Set Up Data Imported | Insert spreadsheet data to prepare for Training | ProPhoenix-Owner  NSP-Assist; | 03/20/2025 | Return of necessary spreadsheets by Customer Project teams |
| Training Begins | Classroom sessions for TTT Users-2 days for CAD/Mobile | ProPhoenix-Lead  Agency Trainers-Assist | 04/15/2025 | Installation of software, completion of data insertion; training facility prepared; Scheduling |
| Advanced User training | Classroom style – 2 days CAD 1 day (IT Sys Admin) includes overview, system parameters, and coded table maintenance | ProPhoenix-Lead  NSP-Assist  App Admins-Assist | 05/30/2025 | Scheduling |
| Follow Up Advanced User training | Up to 2 additional days on-site | ProPhoenix-Lead  NSP-Assist | As needed | Identification of need by Project team and PM |
| Data Conversion | (a) Schedule meeting with System Admin for data mapping review  (b) needs analysis – analyze and determine data to be converted  (c) obtain back up of database  (d) work with customer to finalize code mapping  (e) perform test record conversion  (f) each agency to review test records  (g) adjustments to conversion programming if necessary  (h) Post Go Live final conversion | ProPhoenix-Lead Nebraska State Patrol IT-Assist | 02/15/2025 ongoing through Post Go Live | Identification of key agency personnel dedicated to conversion process |
| Hardware Setup    If using RMS | Order, Configuration and set up for additional hardware that may be purchased by NSP:   1. Booking cameras 2. WASP Printers 3. Barcode scanners 4. eSignature Pads | ProPhoenix-Lead  NSP-Assist | 06/15/2025 | Camera mounting to be completed by agency after receiving and prior to configuration. |
| Development | Development and programming of customized functions (if any) | ProPhoenix-Owner  Agency SMEs | 10/01/2025 | If required from contract negotiations |
| Testing | QA and UAT on-site at each agency and in ProPhoenix offices | ProPhoenix-Share  NSP–Share | 10/15/2025 | If required new functionality is developed |
| Interfaces | Configure, implement, and test all 3rd party interfacing for each of applications as outlined in contractual obligation. | ProPhoenix-Lead  NSP-Assist | 11/01/2025 | Specs for new interfaces to ProPhoenix as required; NSP as intermediary with other vendors and State of NE as necessary |
| End User Training | Classroom sessions for CAD end users and Mobile users | NSP Agency Trainers-Own | 11/01/2025 | Scheduling |
| End User Practice | End User practice | NSP – Owner | 11/15/2025 | Scheduling |
| Functional Acceptance Testing | Dual Software Practice | NSP–Owner | 12/15/2025 | Recommended minimum: 30 consecutive days |
| Go Live Preparation | Review all parameters, coded tables, roles, required items; mutually agreed plan for cutover on Go Live date; set Go Live date | ProPhoenix-Share  NSP-Share | 12/15/2025 | Completion of all agreed development items, training completed, interfaces ready in Live, completion of System Administrator tasks |
| Go Live | Stop use of current software and begin using Phoenix for all applications | ProPhoenix-Share  NSP-Share | 12/20/2025 | Reasonable readiness after Go Live preparation confirmation and Functional Acceptance Testing |
| Post Go Live Support | Up to 2 days of on-site Go Live support | ProPhoenix-Lead  NSP–Assist | As required | Based on User need and agency requirements |

**Risks**

* Availability of the Nebraska State Patrol IT staff and Nebraska State Patrol Project Team.
* Substantive changes in the scope of work or deliverables will alter the timeline and expected completion dates for all subsequent elements of the Project.
* Changes in personnel assignments in the User agency and primarily, Project Leads may alter the timeline and expected completion dates for all subsequent elements of the Project.

**Assumptions**

* Project team members and all resources will be identified and in place by January 1, 2025 (for example above).
* Any additional interfaces or conversion of data not quoted in the Proposal that require additional development will be managed as a separate project. The quoted interfaces and data conversion will be defined as part of the mutually agreed SOW and outlined in a separate section.
* The Nebraska State Patrol agrees to make available, without charge to ProPhoenix, office space and (other items such as office furniture, office equipment, phone, and photocopying) needed by the Contractor for the performance of its services agreed to within this Contract.

**Constraints**

* Scheduling of some remote access-related Deliverables will need to occur before 11:00 am Eastern Time whenever possible to allow for adequate completion during normal business hours.
* All work performed will be kept within the scope of the Project. Any additional work identified through the Project and deemed outside the scope will need additional proposals and agreement by the parties.

**Critical Success Factors**

* All risks are accurately identified, and strategies are developed to minimize negative effects on the successful completion of the Project.
* Agency commitment of time and resources to complete setup and configuration necessary for the project's success.
* Where differences occur in agency procedures and processes that all parties employ a realistic approach to problem-solving; keeping in mind that some existing processes may be altered to accommodate the application (ProPhoenix) and the goals, needs, and requirements of the Nebraska State Patrol.

### vii. Technical Matrix/Exhibit A

Please see attached Exhibit A.

# **Computer Aided Dispatch (CAD) Overview**

CAD supports Law Enforcement, Fire, EMS, and Office of Emergency Management operations seamlessly. Call taker, dispatch and unit status functions can be combined singly or can be separated into many different arrays. Multiple dispatch command line methods are available – Unit recommendation, keyboard, mouse, and "EZ-Dispatch" all using integrated AVL and Mapping. In addition, officers may initiate calls from Phoenix WDA (Mobile).

A CAD Status server license provides for an unlimited number of users for “view only” of the CAD Status screen, allowing a status screen to be displayed in any station, office, report writing, or muster room, as needed but with no dispatching ability in Nebraska State Patrol project approved locations.

**Included with a CAD Server Site License:**

* Single Juris / Multi Juris / Multi-Site / Multi PSAP / Multi-County
* Law Enforcement / Fire / EMS / OEM
* Automatic Unit Recommendations for the Sheriff’s Office units based on Location, Call for Service type, and Premise Type; Ability to upgrade alarm levels of response and recommend additional units based on pre-defined protocols.
* Mapping and AVL Capabilities are Standard Features including the ability to choose between Here Maps, Google Maps, and ESRI Mapping applications
* Customizable Command Codes, Call for Service Codes, and Disposition Codes
* Customizable UI (User Interface) for End Users and/or by Agency
* Supports Mouse, Command Line, Ribbon Menu for data entry
* Fully integrated with Wireless Digital Assistant (WDA) our CAD mobile software (see below)
* SOP, Address, Name, Premise History, and HazMat Flag Information immediately accessible
* CAD Status screens available in all Locations (Agency Commanders, Supervisors, Roll Call Rooms, Fire stations, etc.)
* Access to Complete Police RMS based on Role Permissions
* Ability to update all call information (Names, Call for Service Codes, Locations, Vehicles)
* All CAD entered information is available in Phoenix RMS or FRMS with no separate interface
* NCIC Interface returns are attached to Call data for retrieval in CAD or WDA
* Fully integrated with E911 and NG-911, Enhanced Rapid SOS and Text 2 Dispatch
* Email and Text notification features
* User Help available with F1 key; function keys, shortcuts and Hot Comments; User friendly
* Ability to interface with multiple other solutions such as (but not limited to): ProQA, I Am Responding, Toner notification software
* Agency-defined Tow rotations/schedules

**General CAD features**

Whether you have a single-juris, multi-juris, multi-PSAP, or multi-site Communication Center, ProPhoenix is scalable and configurable to accommodate exactly how you are currently doing business with any combination of police, sheriff, fire, EMS, emergency management, or ambulance service agencies. ProPhoenix will study your current configuration, considering any changes you wish to make with new technology, and assist your administrator(s) in configuring the system as you want to do business, not the other way around.

Color coding within the CAD screens is customizable by the end-user or for all users, however, we also provide icons and recognizable symbols for status alerts, units, and stations so any users with color blindness have visual prompts as well. User help is available on all screens by pressing the F1 key. Other shortcuts and keyboard functionality are built-in so a CAD user can utilize the mouse and/or keyboard to complete all screen functions.

Call for service codes are also built for CAD to generally describe the nature of the incident. Further defined management calls for service codes are selected by the personnel at the scene for the exact nature of their reporting responsibilities and as needed for state and federal reporting requirements. Call for service codes and call disposition codes can be customized to include whether a case is created in RMS as well as whether a report needs to be completed by the primary unit. It is possible for a unit finished at the scene to begin completing their report even though other units are not finished with evidence collection, traffic control, interviewing witnesses, or transporting subjects to jail or hospitals.

Standard Operating Procedures (SOPs) can be associated to call for service codes and customized to alert personnel in designated situations. They can be formatted as steps to be completed during the call taking, dispatching, or on-scene process. They can be in question/answer format to assist the call taker through the information-gathering process to assess the priority and determine the proper resources to recommend.

Agencies can set alert timers for command codes and call for service codes for any or all the status change options and responses due.

Alert flags appear for any situation desired including, but not limited to hazardous materials; name flags for known offenders, persons who have previously displayed suicidal tendencies or mental instability, or persons with warrants; location flags for places associated with previous dangerous situations or threats. These flags are available anywhere in the system the name, vehicle, or location is entered that is associated with an alert. A CAD alert can also include an image such as a mugshot associated with a known offender. Proximity flags can be shown for alerts within a certain distance from a location. This is particularly useful for multiple-family housing or business complex locations. Flags can be set to alert specific users such as call takers only or any combination along with associated priority levels.

Mapping is a critical feature for personnel in the Communication Center, in the station, and on the road. ProPhoenix integrates seamlessly with Google Maps, Here Maps, and ESRI mapping to provide all the necessary functionality to present a visual picture of the location of the incident as well as the physical location of the units responding. Map views and street views are available anywhere within the system where a map is displayed. Icons appear on the map associated with the incident location and the responding units. Dispatchers and any other CAD/mobile user can click on the icon to get details related to that incident.

For CAD workstations, we would propose the ESRI Arc-GIS mapping package for updating and displaying maps within your County. All mapping tools are available for use by the Application Administrator or end user based on security permissions. Map layers can be built for any criteria important to the agency. Some suggested map layers include hydrants, police beats, fire districts, political/jurisdictional boundaries, etc. All map layers can be “turned” on or off by the end user as necessary. Geo-fencing is available and can be created in real time.

Call location information available also includes contact/Keyholder information, documents/images such as floor plan diagrams, location latitude, and longitude coordinates, servicing agency and patrol area assigned or fire district, nearest cross streets, and common names associated with the location.

Possible duplicate calls within a certain area (that is customized by Agency) immediately alert Call Takers. Proximity flags are displayed on the map to assist in determining if it is a duplicate call but can also be displayed for known hazardous materials in the area or premises with flagged persons.

All CAD users, if permitted by your protocols and purchased, can access the full ProPhoenix RMS. Name inquiries can be done simultaneously with all returns from NCIC, and state-equivalent systems attached to the call for retrieval at any time thereby eliminating the need for duplicate data entry.

With Phoenix CAM integration, messaging is available for any combination of CAD, or mobile user on your system. Messages can be sent unit to unit, user to user, dispatch to unit, dispatch to groups of units, user to groups, etc. Distribution lists can be configured for use in CAD and WDA such as “all SWAT team members” or “all night shift patrol”. Messages can be tagged as shift notes and/or whiteboard items for publication in CAD/WDA.

Our Wireless Digital Assistant™ (WDA), which is the mobile equal to CAD is available on laptops, Toughbooks, tablets, and smartphones. Screen functionality and data available are the same in CAD and WDA for a cohesive User experience. Anything that a Dispatcher can do in the Communication Center is available for the personnel in the field and vice versa. Your protocols determine which resource changes the status of a unit or disposes of a call, for example. The ability to track all non-incident related activities and responsibilities such as parking lot checks, building checks, hallway monitoring, and alley or extra attention patrols can be logged with the Quick Activity log that also associates with the unit performing the task.

Each agency can define tow rotations and enter towed vehicle data in either CAD or WDA. All updates made by CAD and WDA users become part of the call history and are viewable by all. All tasks performed are date/time stamped along with the User credentials to easily identify when and by which resource an entry was completed.

With Notifications, your Call types are pre-defined with the personnel to be notified and by which method, text and/or email. When the call type is used in CAD, the system automatically sends the information as set up by the Administrator. The text contains the Juris, CFS (Call for Service), Location and call number along with the date and time of the incident.

**Unique to Call Taking**

When interfaced with E911, the caller’s location populates that field when the call is answered along with the caller's name and phone number. The call taker can accept this information or update it as necessary. All location addresses come from a table built with all your jurisdiction locations including places that do not have postal addresses such as (but not limited to): parking lots, beaches, parks, intersections, 100 blocks, railroad crossings, lakes, rivers, bridges, on-ramps, off-ramps and mile markers. These locations are built with servicing agency and patrol zone information as well as latitude and longitude to work seamlessly with mapping. Parameters can be set for duplicate call alerts based on an area surrounding the location as you wish to do business. If duplicate calls should be entered, they can be easily merged.

It is possible due to the critical nature of a call, or Call Taker/Dispatcher combined User on duty, to dispatch a call directly from the call taking screen. It is also possible to return to a call after it has been dispatched to add additional information from the initial caller or subsequent callers with pertinent information.

QA Forms can be created and associated with CAD calls for service that allow the Call Taker to not only ask certain questions but also to document the caller’s responses to those questions. The questionnaire and responses are then saved as a part of the call documentation.

We currently have a button in the Call Take screen to link to the Rapid SOS clearing house, and we have added it with a command code in the command line for easy launch. Rapid SOS has been added as a suggested interface in the Price Proposal. Rapid SOS returns all data held within apps on a smartphone, provided the phone owner has Notifications turned on. This will assist in locating the phone with exact coordinates (including altitude) instead of attempting to triangulate the cell towers.

The integration provides life-saving multimedia, health profiles, and real-time incident data from connected devices directly with 911 and first responders. RapidSOS works closely with mobile device manufacturers such as Apple and Android to get accurate location information along with emergency data when a 911 call is made. Data may also be gathered from connected IoT devices such as wearables, connected cars, and connected homes

.![A black text on a white background

Description automatically generated](data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAAMsAAAAzCAYAAAA5OvxHAAAACXBIWXMAAA7EAAAOxAGVKw4bAAAgAElEQVR4AQA1gsp9Af////4AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD/AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA/wAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAEAAAD/AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD/AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP//AAAAAP8AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD//wAA/f//APf9/wD6/P8A/gAAAAAAAAAAAAAAAAAAAAAAAAAAAP8ABQIAAAoEAgAEAQAAAQEBAAEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP//AAD2/P8Aw+j2ALLi9wDo9vwA/wAAAAAAAAAAAAAAAAAAAAAAAAAAAP8AFggDAEgdCgBFGgoACgQAAAAAAQABAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAPz//wCx4PUAktjyAAUA/wAXCQMAAgIBAAEBAAAAAAAAAAAAAAAAAAD+/wEA1/H7ANHw8QDx+f4AWSMMAAYDAAAAAAEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAOz3/ACl3fMACgIAAIIxEQAtEgYAAgIBAAEBAQAAAAAAAAAAAAAAAAD+/wAA1O75AILP8ACb2fMAQhkIAB0NBQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAOf1/QDm9/4AKw8EADIVBwAOBwMADQYDAAwFAgAMBQIADAUCAAwFAgAOBgIAMxUHADkWBwDv/P8A5/b8AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgAAAP8AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP0AAAD+AAAADgcDAAMCAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAEBAA0GBAAAAAEA/P8AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgAAAAEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAK82WpcAACAASURBVAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAD+/v4A////AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEBAQABAQEAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD///8A/v7+AAAAAAABAQEAAQEBAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP///wD+/v4AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQEBAAEBAQABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP///wD+/v4AAAAAAAEBAQABAQEAAQEBAAAAAAAAAAAAAAAAAAAAAAD+/v4A////AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAICAgABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA/f39APv7+wD7+/sA////AAMDAwAFBQUABAQEAAEBAQABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP7+/gD7+/sA+/v7AP7+/gABAQEABQUFAAQEBAADAwMAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD+/v4A/Pz8APr6+gD+/v4AAQEBAAYGBgAEBAQAAgICAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQAAAAEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAP8AAAAAAAAAAAAAAADs7OwA3t7eAP///wAAAAAAAAAAAAAAAAAAAAAABgYGAA4ODgAQEBAADg4OAAUFBQABAQEAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD39/cA1tbWAP39/QAoKCgADg4OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAPHx8QDa2toA/f39AAAAAAAAAAAAAAAAAAAAAAAEBAQADQ0NAA8PDwAPDw8ABwcHAAICAgABAQEAAAAAAAAAAAAAAAAAAAAAAPj4+ADX19cA/Pz8ACUlJQAQEBAAAAAAAAAAAAAAAAAAAAAAAP39/QDc3NwA7u7uAAAAAAAAAAAAAAAAAAAAAAACAgIACgoKAA0NDQALCwsADQ0NAAYGBgABAQEAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP39/QDv7+8A4eHhAOPj4wDs7OwA/f39AA0NDQAWFhYAHBwcABcXFwAODg4AAgICAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP///wD6+voA7+/vAOfn5wDl5eUA7OzsAPf39wAHBwcAFBQUABwcHAAYGBgAEhISAAYGBgABAQEAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA////APT09ADi4uIA5OTkAObm5gD4+PgACQkJABcXFwAYGBgAGxsbAA8PDwAGBgYAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAIAAAAHAwEACAMBAAEAAQAAAAEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAADHx8cAgYGBAPz8/AADAwMAAQEBAAAAAAAAAAAACgoKABkZGQAuLi4ANzc3AC8vLwAUFBQAAgICAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP///wDQ0NAAcnJyAPj4+ACIiIgARUVFAAICAgABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAANvb2wBra2sA+Pj4AAMDAwABAQEAAQEBAAAAAAAGBgYAFxcXACQkJAA2NjYAMTExAB4eHgAHBwcAAQEBAAAAAAAAAAAAAAAAAOvr6wB1dXUA8/PzAJKSkgA3NzcAAAAAAAAAAAAAAAAAAAAAAPn5+QCWlpYAvb29AAICAgADAwMAAQEBAAAAAAAEBAQAEBAQABgYGAAkJCQAMjIyACYmJgAbGxsACQkJAAEBAQABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA+/v7ANjY2ACzs7MAtLS0AOTk5AD6+voA////AAUFBQAJCQkAKSkpAENDQwBEREQAJSUlAAUFBQABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA/f39AOvr6wDNzc0AwcHBAMbGxgDl5eUA+fn5AP39/QACAgIABwcHABwcHAA0NDQARUVFADQ0NAATExMAAwMDAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD///8A5eXlALm5uQCtra0A2NjYAPb29gD///8AAwMDAAkJCQAbGxsAPz8/AD09PQA4ODgADQ0NAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABIIAwBCGwkALRIGAAEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAEAAAD/AAAAAAAAAADy8vIA1tbWAAQEBAAvLy8ABgYGAAEBAQD///8A9vb2AMrKygC1tbUAHh4eAFxcXABhYWEAGRkZAAAAAAABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAPn5+QC1tbUAy8vLAP7+/gCurq4APT09AAoKCgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAPj4+ADZ2dkA9PT0ADAwMAAPDw8AAQEBAAAAAAD7+/sA19fXAL+/vwCjo6MASEhIAGZmZgA3NzcABAQEAAEBAQAAAAAAAAAAAP39/QDe3t4A8PDwAPf39wAAAAAAAAAAAAAAAAAAAAAAAAAAAP7+/gDk5OQA1tbWABoaGgAkJCQAAQEBAAEBAQD5+fkA5+fnANbW1gCurq4AFRUVADk5OQBSUlIAPz8/ABMTEwAAAAAAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAA3NzcAISEhAC1tbUADw8PACoqKgAXFxcABwcHAPf39wDn5+cAzs7OAMPDwwDi4uIAe3t7ABEREQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD9/f0A39/fAKGhoQCoqKgA6enpABoaGgAqKioAERERAAcHBwD6+voA8PDwAN3d3QCdnZ0AtbW1AF9fXwBUVFQAJCQkAAMDAwABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAD29vYAnZ2dAJOTkwD8/PwAKSkpAB8fHwAKCgoA/Pz8AOzs7ADf398AjY2NALe3twCbm5sAMDAwAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACAOBQCAMBAABAAAAAMCAAABAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAABAQEAAAAAAB8fHwB+fn4AExMTAAEBAQD///8A8fHxANXV1QC7u7sAxMTEAI2NjQAICAgAZWVlAA4ODgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAOPj4wC7u7sABwcHAP///wDDw8MA4eHhACkpKQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAwMDAG1tbQAtLS0AAQEBAAAAAAD4+PgA3d3dAMHBwQDBwcEAqKioAOzs7ACRkZEAIyMjAAAAAAABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADs7OwBycnIAAwMDAAAAAAD39/cA7OzsAN7e3gDPz88A1NTUALW1tQDNzc0AY2NjAFhYWAAcHBwAAAAAAAEBAQAAAAAAAAAAAAAAAAD6+voApqamALKysgAWFhYAaGhoAElJSQAbGxsACAgIAPX19QDj4+MAwsLCAL6+vgAiIiIABwcHAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP7+/gDW1tYAmZmZAKWlpQAUFBQAUlJSAEdHRwAwMDAAFBQUAAgICAD5+fkA7u7uAM3NzQC7u7sAw8PDAI+PjwDi4uIAbm5uACgoKAADAwMAAQEBAAAAAAAAAAAAAAAAAP///wDS0tIAnp6eAPz8/ABTU1MAXFxcACgoKAALCwsA+/v7AOnp6QDR0dEAq6urAAgICAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA//8AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEBAQAIAwEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD/AP8A/f//APz+/wABAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEAAAABAQAAAQEBAAEAAAAAAAAAAP/////////+/////v////6jo6P+BwcH/jY2Nv7m5ub+/v7+/v////7////+/v7+/vz8/P7e3t7+Wlpa/gMDA/4gICD+xsbG/v7+/v7////+/////v////7////+/////v////7////+/f39/pubm/4LCwv+OTk5/jExMf4GBgb+nZ2d/v39/f7+/v7+/////f////3////+/////v////7////+/////sLCwv4NDQ3+BwcH/sbGxv7+/v7+/////v////7////+/v7+/vDw8P6Tk5P+GBgY/gQEBP6Kior++Pj4/v7+/v7////+/////t7e3v4gICD+EBAQ/r6+vv7+/v7+/////v////7////+/////vPz8/5SUlL+AQEB/mtra/76+vr+/v7+/v////7////+/v7+/vz8/P709PT+tbW1/lhYWP4ODg7+DAwM/nx8fP7t7e3+/v7+/v////7////+/////v////7n5+f+MjIy/gQEBP52dnb+9fX1/v7+/v7////+/////v////7////+/Pz8/uDg4P709PT+/v7+/v////7////+/////v////7////+/v7+/ujo6P5fX1/+CAgI/ioqKv6cnJz+7e3t/v39/f7+/v7+/////v////7////+/////v39/f7y8vL+m5ub/iQkJP4ICAj+Y2Nj/uLi4v79/f3+/v7+/v////7////+/////v39/f6BgYH+AgIC/kJCQv7h4eH+/f39/v7+/v7////+/////v////79/f3+5+fn/uXl5f79/f3+/v7+/v////7////+/////v////7////+/////v////7////+/////v////7////+/////v////7//v3+/vTz/v3s6v796ef+/Onn/vzp5/796ef+/enn/v7p5/7+6ef+/e3r/v35+P7+/v7+/////v////7////+/////v////7////+/////v////7////+/P3+/o3S8f4mrOP+mNTv/sTn9/7F6Pj+xuj4/sbo+P7G6Pj+xuj4/sbo+P7G6Pj+xuj4/tLs+P7u9/v+/f3+/v7+//7////+BAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQEBAAMDAwAgICAAZGRkAMHBwQDk5OQAzc3NADg4OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA8fHxALe3twD9/f0AVlZWAO3t7QDS0tIAwcHBAFRUVAANDQ0AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQEBAA8PDwBYWFgAwMDAAK2trQC/v78AX19fABUVFQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQEBAAMDAwALCwsARkZGACIiIgAHBwcAra2tAJ6engAoKCgAVVVVAAUFBQABAQEAAAAAAAAAAADv7+8A7+/vAAkJCQA3NzcACQkJAAEBAQAAAAAAAAAAAAAAAAAAAAAAAwMDAB8fHwAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA9/f3AK+vrwCxsbEAERERAG1tbQBWVlYADAwMAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAICAgANDQ0AWFhYAPLy8gCPj48AsLCwACwsLABmZmYACQkJAAAAAAAAAAAAAAAAAPz8/ADd3d0A////ACwsLAAXFxcAAQEBAAEBAQAAAAAAAAAAAAAAAAACAgIAGBgYAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP729QD+29YA/NbRAP7w8AAA/PwA/wAAAAABAAAB/v8AAQAAAAEAAAAAAAAAAAYHAAEfIgAEMzcAAhMWAAECAgAAAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD+/wAArOH2AL3o+gABAQAAAAAAAAAAAAAAAAAAAAABAAAA/wAAAAAAAAAAAA4FAAA1EwcARRwJAB4MBAACAAEABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAQEAKSkpACEhIQDm5uYA5OTkAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD///8A0NDQAMjIyAAfHx8AR0dHAO7u7gCYmJgAxcXFANfX1wA2NjYAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAUFBQAMDAwAK2trQDf398A8fHxABUVFQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAQEACcnJwB5eXkA7OzsALi4uACYmJgAPDw8AB4eHgAAAAAAAAAAAAAAAAABAQEAAQEBAPz8/ADk5OQA+fn5AAcHBwABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA1tbWAJeXlwD29vYAXFxcAFpaWgAMDAwAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADAwMAGBgYADn5+cAlJSUAJ6engA/Pz8ALy8vAAAAAAABAQEAAAAAAAAAAAACAgIA////AOvr6wDy8vIAFBQUAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA//z8APzGvwD5qJ8A/+voAAAVGQAAAgIAAQEAAAAAAAAAAQEAAAEBAAAAAAAAAAAAAPLwAP6x7AAFTlcAB1VfAAITFQABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAIQ0EABcKBAABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA/v//AOL1/QCg3fQA6Pb8AG4sDwAPBwMABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA9vb2APX19QAAAAAADg4OAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD4+PgAsbGxAOzs7ABOTk4AHx8fABcXFwAtLS0AxcXFALm5uQA0NDQAAgICAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD///8A/v7+AAAAAAAFBQUAAwMDAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEBAQAjIyMAXl5eAMXFxQDU1NQAzc3NABwcHAACAgIAAQEBAAAAAAATExMAISEhAODg4ACnp6cAISEhADU1NQATExMABAQEAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD///8At7e3ANra2gAfHx8AWFhYAA0NDQABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABEREQBbW1sAsrKyANzc3AC4uLgALCwsAAQEBAAAAAAAAAAAAAQEBAAvLy8ABwcHAMDAwACtra0ARkZGABoaGgAGBgYAAQEBAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA/u3rAPmnngD96OUABlRfAAUuMgABBAQAAAEAAAAAAAAAAQMAAAEBAAAAAAAA//8A/uvoAPirogD7rqQAAyYqAAVASAAAAgIAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADAgAAVSAKADYXCQABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA//8AAOL0+wCJ0vEAteX4AE0fCwAwBwMAAgAAAP8AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP///wD09PQAvb29AN/f3wAPDw8AKysrAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADi4uIAvLy8AA4ODgBJSUkAFLwQfAAAIABJREFUCAgIAA4ODgBFRUUA////ALe3twD39/cAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP///wDs7OwA1NTUAAAAAAAkJCQADw8PAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEBAQANjY2AB0dHQDz8/MAyMjIAPz8/AAAAAAAAAAAAAAAAAAREREAWVlZACEhIQDPz88Af39/AJWVlQC3t7cA29vbAPLy8gD9/f0A////AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD5+fkAxcXFAPj4+AA6OjoALCwsAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEBAQAkJCQANDQ0APf39wC9vb0A9/f3AAAAAAAAAAAAAAAAAAICAgBFRUUAOTk5AOzs7ACMjIwAi4uLAK6urgDU1NQA7+/vAPv7+wD///8AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA/uXiAP3d2QAEKS8AB1BYAAQyNwAELzQABC40AAQuNAAELTEABCwwAAQsMAAELTEABT5EAAZLUwD+9/gA/NXSAAD+/QAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAEACgQCAA4FAgAOBQIADgUCAA4FAgAOBQIADgUCAA4FAgAOBQIADwYCACsRBwAvEgUA8Pv/AOT1/AAAAAAABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAPv7+wDu7u4AAwMDAAEBAQD+/v4A+fn5AOzs7ADNzc0AmJiYAPb29gBMTEwAMTExAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP///wDCwsIA4ODgADg4OAA1NTUAAQEBAAQEBABAQEAAGRkZANnZ2QDf398AKysrAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP7+/gD9/f0AAQEBAAAAAAD9/f0A+/v7AOfn5wCysrIAxMTEAAwMDABFRUUADQ0NAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAFBQUACMjIwDT09MA2traAPz8/AAGBgYAAAAAAAAAAAAEBAQAUFBQAPT09ACvr68A1NTUAJSUlAAcHBwANTU1ADMzMwApKSkAJycnABUVFQAFBQUAAQEBAAAAAAAAAAAAAAAAAAAAAADx8fEA3d3dAAAAAAAyMjIADAwMAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAKCgoAMDAwAKampgDY2NgA8PDwAA0NDQAAAAAAAAAAAAAAAAAnJycAcnJyAA4ODgDNzc0ApKSkALq6ugAyMjIANDQ0ACkpKQAoKCgAHR0dAAcHBwABAQEAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAPX1AAD5+AADGBkAAg0OAAEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQQFAAQaHQAABQUA//HvAAD+/wAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAIBAAAOBQIA/wAAAPj9/wAAAAAABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAOjo6ACenp4ACwsLAAEBAQD9/f0A8PDwAOLi4gDS0tIA7+/vADo6OgBqamoAGRkZAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAPPz8wC0tLQA+vr6AEdHRwAUFBQAAAAAAAAAAAAoKCgALi4uALm5uQDFxcUAKCgoAAICAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA/v7+AMzMzAD19fUAAQEBAP///wD19fUA6urqAM7OzgC3t7cA9fX1AEhISABISEgABQUFAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABwcHABcXFwAAAAAA8PDwAP///wAAAAAAAAAAAAAAAAAAAAAAExMTAGBgYAAuLi4Au7u7AMzMzADZ2dkAq6urALi4uAAiIiIAOjo6AEdHRwA3NzcACwsLAAEBAQAAAAAAAAAAAAAAAAD19fUA8vLyAAAAAAAVFRUAAgICAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACAgIAFxcXAAEBAQDq6uoA9fX1AAAAAAAAAAAAAAAAAAAAAAAEBAQARUVFABwcHAC9vb0AyMjIANXV1QC7u7sAv7+/ABoaGgA0NDQASUlJADg4OAAaGhoAAgICAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA/wAAAAAA/wABAgMAAAEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAgAAAAEAAP//AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAEAAAD/AAAAAAAAAAAAAAAAAAAAAO3t7QCxsbEABAQEAPn5+QDs7OwA+Pj4ABgYGAAgICAATU1NAE5OTgA7OzsABAQEAAEBAQAAAAAAAAAAAAAAAAAAAAAA/v7+ANHR0QDMzMwAGBgYAD4+PgAEBAQAAQEBAAAAAAAODg4AOjo6ALu7uwC4uLgAVFRUABQUFAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA/Pz8AJycnAANDQ0AAQEBAP///wD39/cA8PDwAPX19QAYGBgATU1NAF5eXgAdHR0AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQEBAAUFBQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA8PDwA/Pz8ALS0tANnZ2QDQ0NAA0NDQANLS0gDV1dUA0dHRAMrKygBnZ2cATExMAAwMDAABAQEAAAAAAAAAAAD///8A////AAAAAAADAwMAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAwMDAAAAAAD9/f0A////AAAAAAAAAAAAAAAAAAAAAAAAAAAACAgIADAwMAAlJSUASEhIAM/PzwDOzs4A1dXVANTU1ACnp6cAzMzMAEdHRwBoaGgAISEhAAAAAAABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD/AAAAAAAAAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABUVFQBZWVkADg4OAOrq6gChoaEA9PT0ADY2NgBmZmYALS0tABYWFgADAwMAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAA+vr6ALOzswDt7e0AUlJSACYmJgAAAAAAAAAAAAAAAAADAwMAOjo6ABYWFgDNzc0A2traABQUFAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAkJCQALCwsAAQEBAAAAAAAQEBAAKCgoABwcHAA0NDQAODg4ABsbGwADAwMAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA/f39APX19QAAAAAADQ0NAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACAgIAFBQUABMTEwAzMzMA6+vrANLS0gC/v78AtbW1AMXFxQDz8/MAERERAERERAADAwMAAQEBAAAAAAAJCQkACgoKAAAAAADx8fEA/v7+AAICAgABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD///8A8PDwAP///wAREREACAgIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEBAQAMDAwALCwsACcnJwBISEgA29vbAMPDwwC5ubkAxcXFAODg4AAHBwcAenp6AAkJCQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD//wAAAAAAAAAAAAAAAAAABAAAAP8AAAAAAAAAAAAAAAAAAAAAAAAAABcXFwBeXl4AFxcXAPT09AD6+voAmJiYAOzs7AAWFhYAGBgYAAEBAQABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA5ubmALy8vAAFBQUATExMAAoKCgD8/PwAAQEBAAAAAAAAAAAAJSUlADMzMwC1tbUAwcHBADg4OAABAQEAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAwMDAGRkZAAsLCwAAQEBAAAAAAADAwMADg4OABISEgAPDw8ABQUFAAEBAQABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA9fX1AOHh4QACAgIAIyMjAAMDAwAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEBAQAICAgAHR0dABkZGQAxMTEALS0tAImJiQDT09MApaWlADg4OAAPDw8AAAAAAAAAAAAPDw8AHBwcAOHh4QDV1dUA+Pj4AAoKCgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD6+voA1NTUAAAAAAAlJSUADw8PAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAUFBQAVFRUAExMTACkpKQA2NjYAh4eHAL+/vwCnp6cAXl5eACUlJQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAIBAP8AAQD//PoA//7+AAACAgABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAcCAAD///8A7/n+AP7/AAACAAAAAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAPz//wDu+v4AAQAAAAkDAAAAAAAABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQEBAANDQ0ADQ0NAA4ODgBmZmYAzs7OAMzMzACXl5cAfX19ABwcHAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD9/f0AxcXFANzc3AAFBQUA5OTkAKurqwABAQEAAAAAAAAAAAAAAAAA/f39AAEBAQD7+/sAvLy8AGhoaAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAwMDAC0tLQA4ODgAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD+/v4A3d3dANvb2wALCwsANjY2AAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQEBAAaGhoAV1dXANfX1wCLi4sAzMzMAO3t7QAPDw8AAAAAAAAAAAAKCgoANTU1AMrKygDExMQA3d3dAC0tLQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADk5OQAysrKAAYGBgA8PDwADAwMAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgICABEREQA/Pz8A7OzsANHR0QDl5eUA3NzcACUlJQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAARESAAIMDgD8394ABOThAAMZGwAAAQIA/wEAAAAAAAABAAEAAAAAAAAAAAAAAAAAAAAAAP///gAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgEBACMOBAAGAgAAvef4ABkKBAAVCQIAAQEBAAAAAQAAAAAAAAAAAAAAAAAAAAAA/f//AN7y+wDL7PoAGAgCAB8MBQAAAAAABAAAAAEAAAD/AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAlJSUAaWlpAHp6egCtra0AJycnAGlpaQAJCQkAAQEBAAAAAAAAAAAAAAAAAAAAAAD29vYAsbGxAPX19QAFBQUAnJycAAQEBAABAQEAAAAAAAAAAAAAAAAAAAAAAPDw8AAAAAAA09PTANTU1AA7OzsAAAAAAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD09PQAsrKyAOrq6gAkJCQAMjIyAAICAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACAgIADMzMwAEBAQA9/f3APj4+AAAAAAAAAAAAAAAAAABAQEARUVFAKqqqgDY2NgAt7e3ACgoKAAFBQUAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAPn5+QC6uroA29vbABcXFwBHR0cABQUFAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACAgIALy8vABQUFADu7u4A9PT0AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAhoeAAQuMwD70cwA+aWaAAUnKwABBQYAAQAAAAAAAAAAAQEAAAAAAAAAAAAAAAAAAAAAAP7m5AAA/PwAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQEAAC4SBgA9FgcAxev5AO35/QAVCAMAAQEBAAEAAAAAAAAAAAAAAAAAAAAAAAAA/P8AAOD0/ADq9/0AVB8JACANBQAAAAAABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAGBgYASUlJAN3d3QCNjY0AnZ2dAB4eHgBPT08ABQUFAAEBAQAAAAAAAAAAAAAAAADj4+MAw8PDAA4ODgBISEgADAwMAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAP39/QDBwcEA4eHhALi4uAA1NTUABwcHAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAPLy8gCtra0AqqqqAAcHBwBXV1cAHh4eAAEBAQABAQEAAAAAAAAAAAD+/v4A+vr6AAYGBgABAQEAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAPj4+AD///8ACgoKAAoKCgAAAAAAAAAAAAAAAAAAAAAANTU1AFFRUQCbm5sApaWlADU1NQA+Pj4AAwMDAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA/f39AMDAwACgoKAA+/v7AEpKSgAxMTEAAQEBAAEBAQAAAAAAAAAAAAAAAAD4+PgABAQEAAMDAwABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA+fn5APv7+wADAwMAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQ4PAAZWXwAABgcA/tXSAPrY0wACAgIAAQABAAAAAAAAAQAAAAAAAAAAAAAAAAAAAAAAAP/19gAA/PsAAP3+AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABYJAwBmKA4AG+T3AN/z+wDr+P4AAAAAAAEAAAAAAAAAAAAAAAAAAAAAAQAAAAEAABoKAgBMHAkARxwJAAsFAgAAAAEABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAERERAFxcXADT09MAsbGxAJSUlAAqKioAKSkpAAAAAAABAQEAAAAAAP39/QDLy8sA7OzsAEBAQAB2dnYADw8PAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAP39/QAJCQkAl5eXAMDAwABpaWkAGxsbAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD+/v4A4+PjALS0tACbm5sA4eHhAEpKSgBYWFgACAgIAAAAAAAAAAAAAAAAAAAAAADZ2dkAzc3NAEFBQQAZGRkAAAAAAAEBAQAAAAAAAAAAAAAAAAAAAAAA+fn5AMbGxgD+/v4AJSUlABAQEAAAAAAAAAAAAAAAAAAAAAAAExMTAGNjYwDFxcUA09PTAJKSkgAQEBAALi4uAAMDAwABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAD+/v4A1NTUAI6OjgDQ0NAALy8vAF9fXwAREREAAAAAAAAAAAAAAAAAAAAAAO/v7wC5ubkAJycnAC0tLQADAwMAAQEBAAAAAAAAAAAAAAAAAAAAAAD+/v4AycnJAOvr6wAPDw8AHh4eAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQICAAQyNwACEhQA/dfTAP7t6gAA//8AAP8AAAAAAAABAQAAAAAAAAAAAAAAAAAAAP8AAP3i3wAA5+QAAAD/AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQCAQAtEgcAGQoEAOf3/QD3+/4AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQAAAQEAAA4FAQAbCgQACwUCAAEBAQABAAAABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD///8AAAAAAAAAAAAAAAAAAAAAAB0dHQBtbW0A5OTkAM3NzQCPj48Aenp6ACEhIQAAAAAAAAAAAO7u7gCzs7MABwcHAFNTUwArKysABQUFAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAP7+/gBKSkoAqqqqANra2gDOzs4AGhoaAAAAAAABAQEAAAAAAAAAAAAAAAAAAAANAVEsAAAgAElEQVQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAPf39wDr6+sAAgICAAAAAAD29vYA8/PzAOXl5QDe3t4AwsLCAM/PzwDy8vIAUVFRAGxsbAAgICAAAQEBAAEBAQAAAAAAAAAAAPPz8wCWlpYAv7+/AMTExABUVFQALCwsAA0NDQAEBAQAAQEBAPn5+QDo6OgAtbW1ALi4uAAbGxsAVlZWAAwMDAAAAAAAAAAAAAAAAAAAAAAAAgICACoqKgB6enoAk5OTAMPDwwB9fX0AUlJSADg4OAAZGRkACQkJAAICAgD///8A9/f3AOjo6ADJyckAra2tAMnJyQAvLy8Ad3d3AC8vLwACAgIAAQEBAAAAAAAAAAAA+/v7AK2trQCWlpYAGhoaAFlZWQA6OjoAExMTAAcHBwABAQEA/f39AO7u7gDMzMwAnJycAPn5+QBUVFQAGxsbAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEFBgADIycAAhwfAP/5+AAAAAAAAP8AAAAAAAAAAQAAAAAAAAAAAAAAAAAAAP8AAALU0AD5wLkAAAAAAAAA/wAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAQAAFQkDABMIAwD///8AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEAAAEAAAABAQEAAQAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAD///8AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQEBAA3NzcAcHBwAHt7ewCsrKwAFBQUAHh4eAAPDw8AAAAAAMrKygDHx8cAHx8fAEFBQQAFBQUAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAICAgAwMDAALCwsAMLCwgC3t7cAQ0NDAAoKCgAAAAAAAAAAAAAAAAAAAAAAAAAAAP///wAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA////AP///wAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD///8AAAAAAMfHxwB7e3sAAQEBAP7+/gD29vYA8/PzAOrq6gDt7e0A+Pj4ACgoKABkZGQASUlJACkpKQAEBAQAAQEBAAAAAAAAAAAAAAAAAAQEBAAkJCQAw8PDAKurqwDR0dEAKysrACEhIQAODg4AAAAAAOrq6gDY2NgAysrKAAAAAABsbGwAR0dHAAQEBAABAQEAAAAAAAAAAAAAAAAAAAAAAAcHBwBMTEwAEhISAJqamgC/v78A2traACkpKQAhISEAHh4eAAcHBwD5+fkA4uLiAOHh4QDX19cA8vLyAE9PTwBWVlYAQUFBAAkJCQABAQEAAAAAAAAAAAAAAAAAAgICAB4eHgAdHR0Aw8PDAN7e3gAvLy8AIiIiABcXFwACAgIA9PT0ANfX1wDT09MA4uLiAEpKSgBra2sACwsLAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgIAAQkKAAEJCgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP4QEgAAAgMAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD//gAA/v8AAAIBAAIBAQAAAQEAAAAAAAAAAAAAAAAAAAAAAAD/AAAAAAAAAAEAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAAGBgYAFxcXABEREQACAgIAAAAAAAAAAAAAAAAAAAAAAAAAAAAGBgYARkZGAOHh4QCWlpYAvr6+AD09PQBISEgA////AMTExAAHBwcAR0dHAB4eHgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAUFBQAQ0NDANnZ2QDa2toA6+vrAB8fHwAAAAAAAAAAAAUFBQAYGBgA+vr6AAUFBQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMDAwAWFhYABwcHAAUFBQAAAAAAAAAAAAAAAAAAAAAAAAAAAAEBAQAPDw8AGhoaAPT09ADCwsIAAQEBAP///wAAAAAABQUFAAoKCgA5OTkAOTk5ADAwMAAqKioAERERAAICAgABAQEAAAAAAAAAAAAAAAAAAAAAAAgICABaWloAHx8fALOzswDJyckAu7u7AAICAgABAQEAAAAAAAAAAAAAAAAAIyMjAFVVVQBRUVEAEhISAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAJCQkAPT09ABQUFAA0NDQAvLy8ANfX1wDR0dEAAwMDAP///wAAAAAA/f39AAcHBwAcHBwAZmZmAEhISAAjIyMABwcHAAEBAQAAAAAAAAAAAAAAAAAAAAAAAwMDAD4+PgAREREAsLCwAL6+vgDHx8cAx8fHAAICAgAAAAAAAAAAAP///wATExMAampqAE1NTQArKysAAQEBAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP/+AP3a1gD+19MAAjlAAAIWGAABAQAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAP8AAAAAAAAAAAAAAAAzMzMAh4eHABAQEAAMDAwAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADw8PAFpaWgAgICAA+/v7ABgYGAD///8AAQEBAERERAAuLi4AKysrAAgICAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAFBQUAVFRUACAgIAAHBwcADAwMAAAAAAAAAAAAAAAAACIiIgCEhIQA/f39AB8fHwAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABEREQB5eXkA+vr6ACMjIwAAAAAAAAAAAAAAAAAAAAAAAAAAAAYGBgBfX18AREREAAAAAAAAAAAAAAAAAAAAAAADAwMACgoKAA4ODgAXFxcAGBgYAAwMDAAEBAQAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEBAQAVFRUASEhIACsrKwDc3NwA5OTkAOrq6gDu7u4AAAAAABYWFgAdHR0AIyMjACYmJgAPDw8AAQEBAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABgYGAC0tLQAcHBwAQUFBAODg4ADk5OQA6urqAPf39wAHBwcAFxcXAB0dHQAdHR0AJCQkABAQEAACAgIAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgICAAyMjIAGxsbAEdHRwDg4OAA6OjoAO3t7QD7+/sADQ0NAB8fHwAfHx8AKioqABQUFAAEBAQAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA//7+APzMyAD6rqQABh0hAAYWGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAf////4AAAAAAAAAAAAAAAD8/PwA+/v7AAEBAQAGBgYAAQEBAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAP///wD5+fkA////AAAAAAAHBwcAAQEBAPn5+QD///8ABAQEAAQEBAABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA/f39//v7+wD///8BBQUFAAMDAwABAQEAAAAAAP7+/gD5+fkAAAAAAAYGBgACAgIAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP7+/gD6+voA////AAUFBQADAwMAAQEBAAAAAAAAAAAAAAAAAP///wD6+voA/v7+AAAAAAAAAAAAAAAAAAAAAAAAAAAAAwMDAAQEBAABAQEAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD8/PwA+Pj4APf39wD6+voAAAAAAAcHBwAKCgoACAgIAAEBAQABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA////APr6+gD29vYA+fn5AP39/QABAQEACAgIAAoKCgAGBgYAAQEBAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP39/QD5+fkA9/f3APr6+gD+/v4ABAQEAAoKCgAJCQkAAwMDAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAPzT0ADzbl4ABT5EAAp6hwABBgYAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAA//z8APmakAD3pZoACYqZAAc6QAABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAAEBAQABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEBAQAICAgAAAAAAAAAAAAAAAAAAAAAAAgICAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAwMDAAMDAwAAAAAAAAAAAAAAAAAAAAAAAAAAAAICAgAJCQkAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAICAgAICAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEBAQAHBwcAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEBAQADAwMAAwMDAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQEBAAcHBwAHBwcAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMDAwAKCgoACgoKAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQAAAQEAAAABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgAAAAEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgAAAP8AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACAgAAAAAAAPv7AAD//gAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP/+AAD8+gAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEQEQACDA0A/d3ZAPzi4AAA/f0AAP//AAAAAAAAAAAAAAAAAAAAAAAA//8A/eThAPzV0QAABQUAAxIUAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAEAAAD/AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAJvVkeQAACAASURBVAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAIUFgAFPUIA+rWtAPiLfAD9JSkAAQkMAAABAQAAAAAAAAAAAAAAAAAA+/oA/NrUAPzZ1QAGOD4AAhscAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAcIfPeAB/////wAAAP8AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD/AAAAAAAAAAEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP//AP3h3gD7r6YA/MW/AP739AAAAAAAAAEBAAAAAAAAAAAAAAAAAAAAAAD/BQgABDM2AAZWYgADIyYAAQICAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAB/////gAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD/AAAAAAAAAAEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP/9/QD/8O4A/eDcAP/t7AAA/f0AAAAAAAAAAAAAAAAAAAAAAAABAQAAERIAAh4hAAIUFwABBAQAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAB/////gAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD/AAAAAAAAAAEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD///8AAPz8AAD+/QAA/wAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgIAAAMDAAACAgABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAB/////wAAAP8AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD/AAAAAAAAAAEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACAAAA/wAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACAAAAAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAmZg3aAAAAgdJREFUAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADuqls0I3humgAAAABJRU5ErkJggg==)

* Automatically shows RapidSOS data in a browser when a 911 call is received
* Retrieves current device coordinates (Latitude and Longitude) from RapidSOS using web services.
* Plots the incident location on the map in CAD and WDA using the coordinates
* Sets up an automatic rebid process with CAD to continuously update the location on the map (example: caller while riding with Uber)
* Retrieve all available life-saving data, show it in CAD, and add it as part of the call record (available with the Enhanced version only).

We have been advised that with this interface, RapidSOS extends its service at **no cost** to any PSAP.

A computer screen shot of a computer

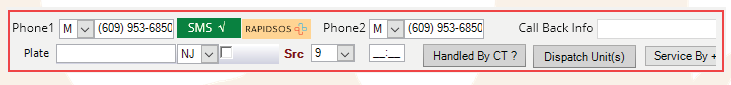
Description automatically generated

*CAD/Rapid SOS result*s

Also included in this proposal is our **Text2Dispatch Interface**

Each of the PSAPs will need to purchase a phone number from Twilio and set up an account. Each CAD Center gets its own phone number. You can also port your own local number into Twilio for free. We will then configure the interface to work with CAD and Mobile (WDA).

* The agency can set up canned messages to send while receiving a call
* Includes the option to disable auto text for certain Calls for Service
* Can send a text while the call is in progress
* Option to send text to other emergency contacts found at the caller’s address
* Can continue to receive texts for a set number of hours after the call is closed
* Option to receive a call via text message similar to an E911 call
* Fully integrated with CAD and WDA
* Each agency phone number costs $1.00 per month.
* Each text message costs $0.0075 per message
* Example: 200 messages/day will cost $45.00 plus the $1.00/phone line for $46.00/month
* (Current price info: <https://twilio/com/pricing>)



**Unique to Dispatching**

Unit recommendations are pre-defined (if desired) by configuring the applicable patrol zone or fire district, the nature of the incident, the type of resources that departments want to be dispatched, and any unique physical characteristics of the location. Whether the location has available hydrants or not is also a critical factor when configuring these unit recommendations. When using unit recommendations, accommodations are made if a particular unit is out of service or out on another call by setting your next available units accordingly. In configuring for volunteer fire departments, stations are designated and the units responding are added to the call as they go into service. Unit recommendations can be set to select available units based on their location and to determine the shortest path to the incident from the unit’s location. Units can be viewed on the map with GPS route and estimated time of arrival to the incident.

Silent dispatching is available for agencies that prefer that method. Dispatchers can accept the unit recommendations presented by the system or dispatch manually based on unit location or preference. Alert timers can be predefined for call status (en route, acknowledge, etc.) and/or minutes from the last communication. These timers can be set at any time and overridden by the Dispatcher, if appropriate.

**Phoenix LiveStream to Dispatch**

Co-responder collaboration is the new reality for the future of policing. ProPhoenix has developed new technology to improve the collaboration between Law Enforcement, Health and Human Services, Mental Health Professionals, and Chemical Dependency partners. LiveStream to Dispatch allows a mobile caller to stream live video to Dispatch. Dispatch can then add WDA users and other participants, such as language translators and medical professionals, to a live video chat with the 911 caller.

**Especially for Supervisors**

The fully integrated Automatic Vehicle Locator (AVL) functionality can replay the location history of a unit or group of units using interactive mapping. This data can be used to analyze where the unit was located at any point in time. Results show the speed, route, and an option to show the street view.

A screenshot of a map

Description automatically generated

*AVL Playback*

CAD status screens are included with the **site licensing** model for an unlimited number of computers that need access to view stacked calls and calls in progress but that do not dispatch resources. These CAD status screens are particularly efficient in sub-stations, supervisors’ offices, roll call, and report writing rooms displayed on a large monitor or screen thereby eliminating the frequent calls to dispatch seeking information.

With a User-defined polygon map layer, the agency can add the ability to send an alert when a unit enters or exits a defined geographical area. You can also create statistical reports for these Geo-Fence alerts.

Quick activity logs (included with a purchase of Phoenix RMS) provide the supervisor with date/time stamped tracking of all non-incident related duties by personnel. There is a variety of reports that can be produced by officer, unit, division, by date(s), days of week, etc. to analyze total patrol activity that encompasses both incident-related and non-incident-related work productivity.

\*All CAD transactions are logged with User ID, date, time, and action performed. They are available in an Audit Trail.

# 

# **Wireless Digital Assistant (WDA) Mobile CAD Overview**

A screenshot of a phone

Description automatically generated

*Law Mobile sign-on screen*

The ProPhoenix Wireless Digital Assistant™ or WDA (mobile product) is a fully integrated Windows® based product designed for today’s professionals. This application is priced as a **site license** for use by an unlimited number of mobile devices dispatched by any of the participating agencies named within this project. In addition to standard queries and incident details,WDA also brings **the full power of RMS** to the mobile officer for field report writing as needed. ProPhoenix encourages the Nebraska State Patrol to take advantage of the fully integrated power of Phoenix systems by also purchasing Phoenix RMS.

**Included with a WDA Site License:**

* Fully Integrated with CAD
* Police / Fire / EMS / OEM / Marine
* NCIC (for Law Enforcement agencies)
  + NCIC Responses populate Entry Screens
* Full Messaging Capabilities
* Mapping
* GPS (all NMEA off-the-shelf devices)
* Ability to update Call Details including:
  + Names
  + Location
  + Vehicles
  + Call for Service Codes
  + Notes/Short Summary
  + Ability to update/upgrade Unit status
* Access to **Complete** Law Enforcement RMS (if purchased) from the mobile device including but not limited to premise history, reports on file, attachments to reports, local Warrant information, TRO/Injunction paperwork attached, mugshots, name associations, vehicles, SOPs, documents, business contacts, keyholders, pre-plans and hazardous material alerts
* Direct, interactive access to NIOSH, DOT, and NOAA Cameo Chemical HazMat Guides
* One touch (button) Traffic Stop and Officer Initiated call screens
* Ability to see other Units on the map
* Ability to query Name and Vehicle information from the local database, NCIC, and all other ProPhoenix customers through KGIS™
* All entries made in Call Details are also available in RMS and FRMS during report writing, no duplicate entries. (must purchase RMS and FRMS)
* Ability to access driving directions to call location
* Quick Activity log capability to track all non-incident related patrol activities such as business checks, park patrol, community education, funeral escorts, paper conveyances, prisoner conveyances, etc. Activity types are customizable.
* Complete field interview data with name, vehicle, clothing description, physical descriptors, reason for the stop, or any combination
* Driver License scanner integration
* WDA App available for tablets and smartphones (Apple, and Android)
* Ability to complete Field Report Writing offline and upload when WIFI is available (if RMS is purchased)

Mapping is a critical part of all incident responses and while ESRI maps are recommended for CAD workstations, we have also included Google mapping for mobile devices (and RMS workstations). Large, interactive buttons appear across the bottom of the screen for easy access to the mobile unit.

The design of the mobile product allows for automatic sizing of screens depending on the device utilized with large touch buttons and day/night mode for screen lighting options. Status buttons change dynamically as the call progresses. For law enforcement users, NCIC query screens are available with the touch of a button.

There is no need to leave WDA to access another interfaced program to perform local, state, and federal database searches. These searches can be performed simultaneously to eliminate the need for duplicate entries. The returns from various state and federal databases can be attached to the call for use at a later time or used to populate eCitation and eCrash screens eliminating the need to print or re-query the name or vehicle multiple times.

For less frequent or non-incident-related features, the “More” button opens a second screen of functionality that can be captured or accessed from WDA.

ProPhoenix is CJIS-compliant for dual-factor authentication requirements based on our CAD/WDA product design with security in mind. The 2FA – Two Factor Authentication solution provides additional security for logging into WDA. 2FA is particularly critical for tablets and smartphones not secured within a law enforcement unit. Using our 2FA can save or reduce the cost of owning another product for 3rd party authentication.

The full RMS is available on mobile units with a VPN connection. Every module, screen, and function of the desktop RMS or FRMS is available for the officer with the same security. This eliminates the need for separate training. This is only available if you purchase Phoenix RMS.

The activity log that documents all non-CFS related duties such as park patrol, parking enforcement, extra attention, vacation checks, etc. is available in the law enforcement mobile units with a click of a button for “quick activity” logging. The activity log types are customizable with categories and sub-categories so that in a few clicks, the date/time, officer, and the activity are saved and available as documentation, for officer activity reports and resource planning.

Messaging is available for any active user regardless of if they are logged into a device or not. If members are off duty, the message will be stored and available when they do sign in. Messaging also incorporates the ability to send BOLO announcements. Messages can be sent to one or more users, one or more pre-defined groups, Mobile to Mobile, Mobile to CAD, CAD to CAD, or any combination of users. A parameter determines the length of time the message remains available after the user has read it. Authorized access allows Administrators to view any archived message.

Incident Data can easily be updated with Bookmarking. These bookmark time stamps can be a great time saver for a patrol officer busy with an active incident. The buttons are customizable to match your type of law enforcement activities.



**Mobile App for Smartphones and Tablets**

ProPhoenix is also proposing the WDA App for tablets and smartphones. Device specifications are included in the hardware recommendations section of this response.

\*All Mobile transactions are logged with User ID, date, time, and action performed. They are available in an Audit Trail.



# **Form A** Bidder Proposal Point of Contact

Request for Proposal Number NSP7149 Z1

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: | ProPhoenix Corporation |
| Bidder Address: | 502 Pleasant Valley Ave.  Moorestown, NJ 08057 |
| Contact Person & Title: | Fred Johnston, Regional Sales Director |
| E-mail Address: | fred.johnston@prophoenix.com |
| Telephone Number (Office): | (609) 953-6850 |
| Telephone Number (Cellular): | (970) 819-5925 |
| Fax Number: | N/A |

Each bidder should 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: | ProPhoenix Corporation |
| Bidder Address: | 502 Pleasant Valley Ave.  Moorestown, NJ 08057 |
| Contact Person & Title: | Fred Johnston, Regional Sales Manager |
| E-mail Address: | fred.johnston@prophoenix.com |
| Telephone Number (Office): | (609) 953-6850 |
| Telephone Number (Cellular): | (970) 819-5925 |
| Fax Number: | N/A |

# **Form B** Notification of Intent to Submit Proposal

Request for Proposal Number NSP7149 Z1

|  |  |
| --- | --- |
| Bidder Name: | ProPhoenix Corporation |
| Bidder Address: | 502 Pleasant Valley Ave.  Moorestown, NJ 08057 |
| Contact Person: | Fred Johnston |
| E-mail Address: | Fred.Johnston@prophoenix.com |
| Telephone Number: | (970) 819-5925 |
| Fax Number: | N/A |

The “Notification of Intent to Submit Proposal” form should be uploaded using the ShareFile link provided in the RFP Schedule of Events, Section I.C.

# **REQUEST FOR PROPOSAL FOR CONTRACTUAL SERVICES FORM**

|  |
| --- |
| BIDDER MUST COMPLETE THE FOLLOWING |

By signing this Request for Proposal for Contractual Services form, the bidder guarantees compliance with the procedures stated in this Request for Proposal and agrees to the terms and conditions unless otherwise indicated in writing, certifies that contractor maintains a drug free workplace, and certifies that bidder is not owned by the Chinese Communist Party.

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 Solicitation.

\_\_\_\_\_ 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.

**NA**

**NA**

\_**NA**\_\_ I hereby certify that I am a blind person licensed by the Commission for the Blind & Visually Impaired in accordance with Neb. Rev. Stat. § 71-8611 and wish to have preference considered in the award of this contract.

**FORM MUST BE SIGNED MANUALLY IN INK OR BY DOCUSIGN**

|  |  |
| --- | --- |
| BIDDER: | ProPhoenix Corporation |
| COMPLETE ADDRESS: | 502 Pleasant Valley Ave.  Moorestown, NJ 08057 |
| TELEPHONE NUMBER: | (609)953-6850 |
| FAX NUMBER: | N/A |
| DATE: | 07/22/2024 |
| SIGNATURE: |  |
| TYPED NAME & TITLE OF SIGNER: | Paul Hoppe, Executive Vice President |