

Attachment A

Request for Proposal Number R69-16

Bidders are required to complete all forms provided in this attachment.

**Forms A.1-A.3 are to be included as part of the Technical Proposal.
Form A.4 is to be submitted as the Cost Proposal.**

Form A.1: Technical Specifications

Form A.2: Technical Requirements Traceability Matrix (TRTM)

Form A.3: NDOR Equipment - The RFP response must include all hardware, software, tools, equipment, and licenses that the State would be required to have to support the proposed MDSS/AVL System. ALL software licenses, both one-time and on-going, must be included on this sheet.

Form A.4: Cost Proposal Bid Sheet

Form A.5 and A.6 will not be scored.

Form A.5: Fixed Hourly Rates - After solution implementation, fixed hourly rates for any additional work will be handled under the CHANGE MANAGEMENT process outlined in Section V.B.2. Every job title identified in RFP Section V.A.2.i. SUMMARY OF BIDDER'S PROPOSED PERSONNEL/MANAGEMENT APPROACH and fixed, all-inclusive hourly rates assigned must be listed.

Form A.6: Contractor Host Facility Form.

Form A.1
Technical Specifications
Request for Proposal Number R69-16

BIDDER INSTRUCTIONS

Bidder must respond to each of the following statements. Specifications listed are minimum conditions that must be met in order for a Bidder to qualify for the award.

“YES” response means the Bidder guarantees they can meet this condition.

“NO” response means the Bidder cannot meet this condition and will not be considered.

“NO & PROVIDE ALTERNATIVE” responses should be used only with a narrative response in the NOTES/COMMENTS section explaining in detail any deviation from the Bidder’s ability to meet the condition, and an explanation of how this would be determined to be an acceptable alternative to meeting the condition. Alternatives must be detailed in such a way that allows such deviations to be fully evaluated. The State of Nebraska shall determine at its sole discretion whether or not the Bidder’s alternative is an acceptable alternative.

Solution Hosting		Yes	No	No & Provide Alternative
IV.C	NDOR will be accepting proposals for Contractor hosted solutions for which the proposed solution’s application hardware and infrastructure would be owned and maintained by the Contractor.			
Notes/Comments:				
Equipment Requirements		Yes	No	No & Provide Alternative
IV.H.1.5	Equipment and accessories bid shall be of the latest manufacture in production as of the date of the RFP and be of proven performance and under standard design, complete as regularly advertised and marketed. All necessary materials for satisfactory performance of the video traffic data equipment shall be incorporated whether or not they may be specifically mentioned below. Complete specifications, manufacturer’s descriptive literature and/or advertising data sheets with cuts or photographs may be required prior to an award and should be included with the bid on the IDENTICAL items proposed. Literature should be complete and the latest published. Any information necessary to show compliance with these specifications not given on the manufacturer’s descriptive literature and/or advertising data sheets should be supplied in writing on or attached to the bid document. If manufacturer’s specifications sheets, descriptive literature,			

	advertising data sheets or information necessary to show compliance with these specifications is not supplied in writing on or attached to the bid document, the bidder will be required to submit requested information within three (3) business days of a written request. Failure to submit requested descriptive literature or advertising data sheets may be grounds to reject the bid.			
Notes/Comments:				
Gray Market Product Prohibition		Yes	No	No & Provide Alternative
IV.H.1.6	The NDOR will not accept Gray Market Products for this solicitation. Gray Market is defined as the trade of a commodity through distribution channels which, while legal, are unofficial, unauthorized, or unintended by the original manufacturer. Gray Market items are not designed to be sold in a particular market and cannot be supported by the authorized importer because of various reasons. <i>Industries Regulation Act, Chapter 60, Article 14.</i>			
Notes/Comments:				
Substitutions		Yes	No	No & Provide Alternative
IV.H.1.7	Contractor will not substitute any item that has been awarded without prior written approval of the NDOR.			
Notes/Comments:				
Contract Requirements		Yes	No	No & Provide Alternative
IV.R.1	<i>Project Acceptance</i> <ul style="list-style-type: none"> • NDOR accepts all contract deliverables. • Project Acceptance will occur when all MDSS and AVL systems and components are fully operational with no outstanding service needs or request 			
Notes/Comments:				
IV.R.2	<i>Post Implementation Report</i> <ul style="list-style-type: none"> • Contractor shall participate in a post-project survey, and provide lessons learned and success stories as part of a closeout meeting, led by NDOR's project manager, to develop the post-implementation report. 			

	<ul style="list-style-type: none"> • NDOR’s project manager will be responsible for the final report contents. • Contractor shall respond to the survey sent out by the NDOR project manager. • Remote participation is acceptable. • Contractor will complete this deliverable by the date noted in NDOR’s approved baseline project schedule that will be part of the Project Management Plan deliverable. 			
Notes/Comments:				
Delivery Requirements		Yes	No	No & Provide Alternative
IV.S	Contractor will be responsible for delivery of all items necessary for installation to the installation locations at the time of installation. NDOR will not be responsible for hardware or other items delivered ahead of the installation, or left remaining after installation is complete.			
Notes/Comments:				

Form A.2

Technical Requirements Traceability Matrix (TRTM)

Request for Proposal Number R69-16

Bidders are instructed to complete a Technical Requirements Traceability Matrix for the Maintenance Decision Support System (MDSS) & Automated Vehicle Locator (AVL) System & Services. Bidders are required to describe in detail how their proposed solution meets the conformance specification outlined within each Technical Requirement.

The TRTM is used to document and track the project requirements from the proposal through testing to verify that the requirement has been completely fulfilled. The Contractor will be responsible for maintaining the contract set of Baseline Requirements. The TRTM will form one of the key artifacts required for testing and validation that each requirement has been complied with (i.e., 100% fulfilled).

The TRTM must indicate how the bidder intends to comply with the requirement and the effort required to achieve that compliance. It is not sufficient for the bidder to simply state that it intends to meet the requirements of the RFP. NDOR will consider any such response to the requirements in this RFP to be non-responsive. The narrative should provide NDOR with sufficient information to differentiate the bidder's technical solution from other bidders' solutions.

The bidder must ensure that the original requirement identifier and requirement description are maintained in the TRTM as provided by NDOR. Failure to maintain these elements may be grounds for disqualification.

How to complete the TRTM:

TRTM Column Description	Bidder Responsibility
TRTM #	The unique identifier for the requirement as assigned by NDOR. This column is dictated by this RFP and must not be modified by the bidder.
Requirement Description	The statement of the requirement to which the bidder must respond. This column is dictated by the RFP and must not be modified by the bidder.
Compliant	Bidder to indicate "Y" (Yes) or "N" (No) whether their solution is compliant with the requirement. If "N", the bidder must address the gap in Response section. The bidder must also address the following: <ul style="list-style-type: none">• Capability does not currently exist in the proposed Pharmacy Health Record System as indicated by an Availability of "B", "C", or "D" as defined below• Capability not available, is not planned, or requires extensive source-code design and customization to be considered part of the bidder's standard capability as indicated by Availability of "N/A"• Requires an extensive integration effort of more than 500 hours

TRTM Column Description	Bidder Responsibility
Availability	Bidder to indicate one of the following: <ul style="list-style-type: none"> • A = Capability Operating in Bidder's Solution • B = Capability Available in the Bidder's Solution Next Scheduled Release and proposed for the Solution. • C = Capability Under Development: New Release / Upgrade Version (Resources Committed) Provide Availability Date Published to Bidder's Solution • D = Capability Defined and Committed to Availability in 12 Months in the Bidder's Solution • N/A = Not Available, Not Planned, or Requires Extensive Effort to be Made Part of Baseline Capability
Availability Date	Provide date capability will be available as published / release to Bidder Baseline Capability (e.g., available to Installed Customer Base). Note: For Availability value of "A", use date of proposal submission.
Contractor or Subcontractor	Indicate whether the hardware, software or service is provided by the Contractor (C) or Subcontractor (S).
Bidder Comments	Bidder Responsibility Provide a short description for each requirement that is Compliant = "Y": <ol style="list-style-type: none"> 1. Describe briefly how compliance will be established, highlighting the following: <ol style="list-style-type: none"> a. Is compliance established through rules-based modifications to the product/system (e.g., table changes, workflow updates)? b. Is compliance established through a combination of system automation and manual processes/procedures? 2. Provide an estimate of the effort needed during integration to achieve compliance using the final criteria: <ol style="list-style-type: none"> a. Minor = less than 10 man hours. b. Moderate = less than 100 man hours. c. Extensive = more than 100, less than 500 man hours. d. Significant = more than 500 man hours. <p>A restatement of the requirement is not considered a substantive response.</p>

Form A.2
Technical Requirements Traceability Matrix (TRTM)
Request for Proposal Number R69-16

FIRM: _____

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
TRTM 1 Solution Type					
IV.B	Bidder shall list the solution type bid. 1) Existing System built for another client that can be transferred and modified to support the primary objectives; or 2) Commercial Off-The-Shelf Solutions that can be configured, modified, or enhanced to support the primary objectives.				
Comment/Response:					
TRTM 2 Installation					
IV.G	<i>It is the expectation of the NDOR that full implementation/installation of the MDSS and AVL Systems shall be complete by October 15, 2016.</i> 1. NDOR is composed of eight (8) districts. Exhibit A lists all locations, contacts, and equipment that will have AVL's and cameras installed. Installation locations are split into Superintendent areas; however, if needed, additional installation locations may be chosen by mutual agreement by NDOR and the Contractor.				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
	<p>Contractor shall be responsible for and provide as part of their bid price, the following, at no additional cost to the Nebraska Department of Roads:</p> <ol style="list-style-type: none"> a. Labor and miscellaneous materials required to install AVL systems and cameras in compliance with the standard installation procedure; b. Tools, instruments, and necessary equipment required to perform the installation; c. Travel to and from the installation locations, to include lodging if needed; d. Completed checklist and certification of installation according to standard procedures; and e. Prompt rework of any noncompliance with the standard procedure. <p>2. Contractor shall be responsible for and provide as part of their bid price, the following, at no additional cost to the Nebraska Department of Roads:</p> <ol style="list-style-type: none"> a. Labor and miscellaneous materials required to install AVL systems and cameras in compliance with the standard installation procedure; b. Tools, instruments, and necessary equipment required to perform the installation; c. Travel to and from the installation locations, to include lodging if needed; d. Completed checklist and certification of installation according to standard procedures; and e. Prompt rework of any noncompliance with the standard procedure. 				
Comment/Response:					
TRTM 3	MDSS System Requirements				
<i>Vehicle System Components & Interfaces (1.0)</i>					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.1	<p>Contractor shall provide a fully functioning AVL system, to include, but not limited to: hardware, firmware, software, data collection, storage, transfer, manipulation, display and any other items relevant to the functionality of the system.</p> <p>All necessary materials for satisfactory performance of the AVL system shall be incorporated, including regularly advertised equipment/accessories as part of the equipment bid, whether or not they may be specifically mentioned.</p> <p>Contractor shall furnish and install vehicle system components and interfaces in approximately 650 NDOR winter maintenance vehicles according to the requirements in the RFP.</p> <p>The vehicle hardware on NDOR winter maintenance vehicles must interface with other existing and planned on-board equipment to enable the successful operation of the MDSS applications described in the RFP.</p>				
Comment/Response:					
<i>Automatic Vehicle Location (AVL) System (1.1)</i>					
IV.H.1.1	<p>The AVL system shall allow district maintenance dispatchers the ability to locate the real-time position of AVL equipped winter maintenance vehicles in the field.</p>				
Comment/Response:					
<i>Hardware (1.2)</i>					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.1.2.1	Contractor shall include all necessary hardware and system requirements necessary to optimally affect the proposed solution.				
Comment/Response:					
IV.H.1.2.2	Hardware shall include GPS technology and other integrated functions (i.e. cellular modem) to support vehicle location and other data reporting. a. GPS b. Communications c. Data Interface d. Touchscreen Display				
Comment/Response:					
Software (1.3)					
IV.H.1.3.1	Contractor shall include any and all software required to properly operate the equipment and transfer the video from the device to a secure web location using an internet connected computer.				
Comment/Response:					
IV.H.1.3.2	The Contractor shall maintain any and all software used in the functionality of the AVL system, at no additional cost to the NDOR.				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.1.3.3	Software versions and/or updates shall not prevent NDOR from using any functions, in whole or in part, or cause deficiencies or defects in the software within the system.				
Comment/Response:					
<i>Vehicle Cameras (1.4)</i>					
IV.H.1.4.1	Vehicle cameras shall be forward facing cameras installed inside NDOR winter maintenance vehicles which would provide a snapshot image and live video feed of road and weather conditions as they appear to drivers.				
Comment/Response:					
IV.H.1.4.2	Cameras must be capable of producing clear, well defined images captured in daylight, as well as night conditions illuminated by vehicle headlights.				
Comment/Response:					
IV.H.1.4.3	NDOR will require camera images from trucks to be sent to an existing FTP site where existing fixed CCTV cameras currently send their images.				
Comment/Response:					
IV.H.1.4.4	Images could be made available by NDOR on a webpage, or integrated into an existing webpage such as the NDOR511 page.				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
Comment/Response:					
IV.H.1.4.5	The general public would be able to access the images through an internet connection.				
Comment/Response:					
IV.H.1.4.6	<p>Integration with AVL Equipment:</p> <ul style="list-style-type: none"> a. Vehicle cameras shall take snapshot images as instructed by the vehicle hardware. b. Vehicle cameras shall integrate with vehicle hardware for the purpose of sending images through vehicle hardware to a central database or other NDOR websites. c. Vehicle cameras shall be able to send camera images taken at least once every minute via connection to vehicle hardware. d. Vehicle cameras shall be configurable to send images less often as desired by NDOR staff. e. Vehicle cameras shall be capable of streaming video. 				
Comment/Response:					
IV.H.1.4.7	<p>Camera Functional Requirements:</p> <ul style="list-style-type: none"> a. Cameras shall be forward facing cameras, mounted to capture a forward looking image from the vehicle with no sight of the exterior vehicle hood or the top roof of the vehicle in the images captured. <u>Cameras shall be mounted in a manner as to not interfere with driver visibility.</u> b. Cameras shall have a minimum 2 megapixel resolution. c. Camera shall take snapshot images that have a minimum resolution of 640x480 pixels per file image. d. Vehicle cameras shall capture images of roadway 				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
	<p>conditions in both daytime (light) and nighttime (dark) conditions.</p> <ul style="list-style-type: none"> • Low light capability shall be minimum: 0.05 lux Color; 0.005 lux B&W. • May switch to B&W in low light to meet performance criteria. <p>e. Must be capable of capturing still view of roadway sufficiently clear to read a standard STOP sign at 250' by day and 150' at night lit by truck headlights only.</p> <p>f. Cameras shall integrate with GPS in vehicle hardware and indicate the location of the image in the transmitted metadata.</p> <p>g. Camera must be capable of streaming live video; streaming at not less than 1024x768 resolution.</p>				
Comment/Response:					
TRTM 4 Vehicle Sub-System Component Requirements (2.0)					
Vehicle Hardware (2.1)					
IV.H.2.1.1	Vehicle hardware shall include a GPS receiver that is accurate to within 2 meters for the purposes of vehicle location tracking.				
Comment/Response:					
IV.H.2.1.2	Vehicle hardware shall include a cellular modem for communication of all data received by vehicle hardware inside the vehicle to MDSS/AVL Server.				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.2.1.3	Vehicle hardware shall be capable of storing 12 hours or 1 GB, whichever is greater, of information.				
Comment/Response:					
IV.H.2.1.4	Vehicle hardware shall store data collected, including camera images, on the vehicle hardware while the vehicle is traveling out of communications coverage to MDSS/AVL Server and automatically forward stored information when back in coverage.				
Comment/Response:					
IV.H.2.1.5	Vehicle hardware shall receive all data from, and communicate all data to, a MDSS/AVL Server.				
Comment/Response:					
IV.H.2.1.6	GPS output interval on vehicle hardware shall be configurable to at least once every second.				
Comment/Response:					
IV.H.2.1.7	GPS output interval shall be remotely configurable by NDOR staff.				
Comment/Response:					
IV.H.2.1.8	Vehicle hardware shall begin receiving position and sensor data upon vehicle ignition and require no operator interface to begin this process.				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
Comment/Response:					
IV.H.2.1.9	Vehicle hardware shall have sufficient processor speed to handle all functions without noticeable delay.				
Comment/Response:					
<i>AVL On-Board Integration (2.2)</i>					
IV.H.2.2.1	Vehicle hardware shall be able to interface with at least eight (8) digital sensor inputs, four (4) analog inputs, four (4) dedicated outputs, two (2) RS-232 communication Ports, two (2) USB Ports (2.0 or greater), and an Ethernet port.				
Comment/Response:					
IV.H.2.2.2	Vehicle hardware shall be capable of integration with on-board vehicle diagnostic equipment.				
Comment/Response:					
IV.H.2.2.3	Vehicle hardware shall have a hard-wired or wireless connection to the vehicle cameras.				
Comment/Response:					
IV.H.2.2.4	Vehicle hardware shall have logic capable of instructing the vehicle cameras to capture an image at least once a minute.				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
Comment/Response:					
IV.H.2.2.5	Vehicle hardware shall instruct vehicle cameras to begin operating and capturing images upon vehicle ignition and require no operator interface to begin this process.				
Comment/Response:					
IV.H.2.2.6	Vehicle hardware shall be integrated with on-board environmental sensors.				
Comment/Response:					
IV.H.2.2.7	Vehicle hardware shall be integrated with vehicle spreader controllers.				
Comment/Response:					
IV.H.2.2.8	Vehicle hardware shall be capable of integrating with the vehicle CAN bus.				
Comment/Response:					
IV.H.2.2.9	Vehicle hardware shall be capable of processing material application information received from the vehicle CAN bus.				
Comment/Response:					
<i>Equipment Reliability (2.3)</i>					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.2.3.1	Vehicle hardware shall maintain at least a 99% measure of operational uptime.				
Comment/Response:					
IV.H.2.3.2	Vehicle hardware shall meet SAE J1455 environmental specifications and provide +/- 25 g shock rating.				
Comment/Response:					
IV.H.2.3.3	Vehicle hardware shall operate within a temperature range from -40 F to 140 F and operating humidity up to 95%.				
Comment/Response:					
IV.H.2.3.4	Vehicle hardware shall be solid state with no moving parts such as fans and all communication hardware shall be fully integrated into the housing with no openings.				
Comment/Response:					
IV.H.2.3.5	Vehicle hardware shall be enclosed by a ruggedized case.				
Comment/Response:					
IV.H.2.3.6	Vehicle hardware shall run on the vehicle's power system; typically 12VDC.				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.2.3.7	Vehicle hardware must be protected from voltage spikes and accommodate momentary drop in voltage during engine start without restarting or losing data.				
Comment/Response:					
IV.H.2.3.8	Vehicle hardware shall include a power management feature or "sleep mode" and/or "charge guard" to ensure that vehicle battery is not discharged after the vehicle is turned off.				
Comment/Response:					
IV.H.2.3.9	Vehicle hardware shall automatically report to the system upon vehicle ignition, without need for operator interface.				
Comment/Response:					
IV.H.2.3.10	Vehicle hardware shall receive firmware/software updates via cellular communications equipment as "over-the-air" updates.				
Comment/Response:					
IV.H.2.3.11	Vehicle hardware shall not produce RFI (Radio Frequency Interference) that negatively impacts the vehicle electronics including two-way radio communications.				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.2.3.12	Vehicle hardware shall not be negatively affected by RFI generated by the vehicle electronics including two-way radio communications.				
Comment/Response:					
<i>Vehicle-To-Server Communications (2.4)</i>					
IV.H.2.4.1	Vehicle hardware shall communicate information to MDSS/AVL Server on vehicle locations, direction of travel, and speed at least once every 30 seconds.				
Comment/Response:					
IV.H.2.4.2	Vehicle hardware reporting intervals shall be configurable to be more or less often as desired by NDOR staff.				
Comment/Response:					
IV.H.2.4.3	Vehicle hardware shall include cellular communications technology that is dual mode – functional on 802.11 b/g and the latest LTE commercial protocols (must be backwards compatible to use 3G cellular services) -- and must include all necessary hardware items, processors, antennas, etc. (This provides the flexibility to use either 802.11 b/g wireless or GPRS to do automatic data downloads if necessary).				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.2.4.4	NDOR will specify the appropriate cellular provider for each NDOR vehicle.				
Comment/Response:					
IV.H.2.4.5	Vehicle hardware shall communicate information to MDSS/AVL Server on material application rates at least once a minute and any time the rate of application changes.				
Comment/Response:					
IV.H.2.4.6	Vehicle hardware shall communicate sensor data information to MDSS/AVL Server at least once every minute.				
Comment/Response:					
IV.H.2.4.7	Vehicle hardware shall instruct vehicle cameras to transmit an image when the vehicle is moving or stationary, as measured by configurable vehicle speeds.				
Comment/Response:					
IV.H.2.4.8	Vehicle AVL hardware shall transmit camera images via cellular connection at least once every minute to a central database.				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
<i>Touchscreen Display (2.5)</i>					
IV.H.2.5.1	A display shall be available for presenting information on AVL and MDSS system operations to drivers within the cab of NDOR winter maintenance vehicles.				
Comment/Response:					
IV.H.2.5.2	Display shall utilize a touch screen function for winter maintenance vehicle operator input of information.				
Comment/Response:					
IV.H.2.5.3	Display shall be customizable with administrative credentials so that only relevant information is presented to winter maintenance vehicle operators, who would not be able to use the display for other purposes (i.e. social media, internet, etc.).				
Comment/Response:					
IV.H.2.5.4	Display shall be sufficiently rugged to operate reliably in the cab of a winter maintenance vehicle.				
Comment/Response:					
IV.H.2.5.5	Display screen shall be a minimum of six (6) inches tall by eight (8) inches wide. Overall size including enclosure shall be a maximum of eight (8) inches tall by ten (10) inches wide.				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
Comment/Response:					
IV.H.2.5.6	Operator controls presented by display screen shall only be allowed to function when the vehicle is stopped or traveling less than three (3) mph.				
Comment/Response:					
IV.H.2.5.7	Information updates shall be communicated through the display at least once every five (5) minutes via cellular communications equipment installed as part of the AVL system.				
Comment/Response:					
IV.H.2.5.8	Treatment recommendations shall be clearly visible to winter maintenance vehicle operators on the display during snowplowing operations for Districts who implement this application.				
Comment/Response:					
IV.H.2.5.9	Display shall provide updates on an automated basis without the need for user intervention to retrieve updates.				
Comment/Response:					
IV.H.2.5.10	Updates to information on the display, such as treatment recommendations, shall be provided with an audible tone to alert the driver that updated information has been displayed on the display.				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
Comment/Response:					
IV.H.2.5.11	Display shall be configurable with system administrative privileges to either enable or disable audible tone for drivers.				
Comment/Response:					
IV.H.2.5.12	Display shall present short term forecast at all times when enabled.				
Comment/Response:					
<i>Vehicle Equipment Data Transfer (2.6)</i>					
IV.H.2.6.1	AVL hardware shall integrate either the vehicle CAN bus or with an external interface on-board the vehicle.				
Comment/Response:					
IV.H.2.6.2	AVL hardware shall provide an indication of when the spreader controller is not working or material is not being spread. The indication shall be visible on the MDSS GUI, and shall be stored for display in historical reports.				
Comment/Response:					
<i>Fleet Management Reporting (Optional) (2.7)</i> <i>*The following is not a base RFP requirement; if NDOR decides to implement Fleet Management Reporting, the following requirements shall apply.</i>					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.2.7.1	AVL hardware shall collect engine data, available via OBD-II and the SAE standard J1708/1587, CANbus, and J1939 networks. Such information may include, but not be limited to: <ul style="list-style-type: none"> • Engine Hours • Odometer • Speedometer • RPM • Coolant Temperature • Transmission temperature • Fuel Level • Trip Fuel • Oil Pressure • Battery Voltage • DTC – Trouble Codes • Idle Time • Plow up/plow down 				
Comment/Response:					
IV.H.2.7.2	The collected data shall be transmitted to a server and stored on a secure database.				
Comment/Response:					
IV.H.2.7.3	NDOR shall access the data through a web interface or client application using a secure log-in.				
Comment/Response:					
IV.H.2.7.4	Industry standard and customizable reports shall be available.				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.2.7.5	Data shall be downloadable by NDOR for use in other applications.				
Comment/Response:					
TRTM 5 Contractor Components & Interfaces (3.0)					
IV.H.3	Contractor shall furnish and install system software as described in the RFP.				
Comment/Response:					
MDSS/AVL Server(s) (3.1)					
IV.H.3.1.1	MDSS/AVL Server(s) shall be designed, owned and operated by the Contractor at a location of their choosing. Alternatively, the Contractor may use servers owned and operated by a disclosed Subcontractor.				
Comment/Response:					
IV.H.3.1.2	All data stored on MDSS/AVL Server(s) shall be the property of the NDOR.				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.3.1.3	MDSS/AVL Server(s) shall be accessible to NDOR via the internet, using a standard web-browser using secure (i.e https) protocols.				
Comment/Response:					
IV.H.3.1.4	MDSS/AVL Server(s) shall be accessible to NDOR users via an internet connection with a username and password allowing access to all information reported from vehicles.				
Comment/Response:					
IV.H.3.1.5	MDSS/AVL Server(s) shall be able to provide access to the system for, and sustain, an estimated 1000 users.				
Comment/Response:					
IV.H.3.1.6	Total concurrent users will be approximately 200.				
Comment/Response:					
IV.H.3.1.7	MDSS/AVL Server(s) access shall be configurable to allow for diverse access, set by Administrative Users, according to level of staff responsibility.				
Comment/Response:					
IV.H.3.1.8	MDSS/AVL Server(s) shall be in continuous operation 24 hours per day, 365 days per year.				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
Comment/Response:					
IV.H.3.1.9	MDSS/AVL Server(s) shall receive weather information reported from vehicle sensors on air and road temperatures.				
Comment/Response:					
IV.H.3.1.10	MDSS/AVL Server(s) shall have a high degree of reliability with not less than 99.9% monthly uptime.				
Comment/Response:					
<i>Data Archival Requirements (3.2)</i>					
IV.H.3.2.1	MDSS/AVL Server shall include the capability to selectively archive datasets and display archived data and products through GUI/WUI.				
Comment/Response:					
IV.H.3.2.2	MDSS/AVL Server(s) shall allow for a means of automatic data archival and backup without system interruption.				
Comment/Response:					
IV.H.3.2.3	All data within MDSS/AVL Server(s) shall be capable of being accessed, stored and archived by NDOR in a relational database.				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
Comment/Response:					
IV.H.3.2.4	MDSS/AVL Server(s) shall include a web services Application Programming Interface (API) to allow read only secured access for raw data retrieval for use in other relational database applications.				
Comment/Response:					
IV.H.3.2.5	MDSS/AVL Server(s) shall store material application rate information by vehicle operator as historical information that can be reviewed by authorized software users.				
Comment/Response:					
IV.H.3.2.6	MDSS/AVL Server(s) shall store the amount of material applied by vehicle operator as historical information that can be reviewed by authorized software users.				
Comment/Response:					
IV.H.3.2.7	MDSS/AVL Server(s) shall store treatment recommendations provided to vehicle operators and authorized users as historical information that can be reviewed by authorized software users.				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.3.2.8	<p>MDSS/AVL Server(s) shall include a short and long-term data storage capability, in which the process of saving data shall not interfere with the normal operation of the system.</p> <p>a. Short-term archive shall consist of the latest fourteen (14) days of data.</p> <p>b. Short-term archive shall be viewable by selecting the date and time of interest from the display interface.</p> <p>c. The oldest stored data in short-term archive shall be overwritten by new incoming data, such that the integrity of incoming data is preserved.</p> <p>d. Long-term archive shall consist of all system data to be archived for two (2) years by Contractor.</p> <p>e. All data in long-term archive shall be accessible to NDOR staff through GUI for a period of up to two (2) years from date of collection.</p> <p>f. Data beyond the two (2) year period shall be deleted on a quarterly basis.</p>				
Comment/Response:					
Graphical User Interface (GUI) (3.3)					
IV.H.3.3.1	<p>GUI shall be designed to ensure that it can run on commercial-off-the-shelf hardware commonly available; that is, no special hardware development will be necessary.</p>				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.3.3.2	<p>MDSS/AVL Server shall present the locations of winter maintenance vehicles through a Graphical User Interface (GUI).</p> <p>a. GUI shall include a base map that identifies all Nebraska roads and highways on which winter maintenance vehicles are traveling.</p> <p>b. Base map shall use NDOR GIS map for an overlay to include viewable data provided by NDOR such as reference post data, district boundaries, superintendent areas, etc.</p> <p>c. GUI shall be configurable to allow users to zoom to the appropriate region (e.g., state, city, county, etc.) that has input data necessary to support its operations.</p> <p>d. GUI shall allow supervisors to click on winter maintenance vehicles identified in the GUI and gather information on the vehicle, including but not limited to:</p> <ul style="list-style-type: none"> • Date / timestamps of locations reported • Direction of travel • Status of vehicle (moving or stationary) • Plow position (up / down) • Material application rate • Recommended application rate <p>e. Supervisors shall be able to select winter maintenance vehicles identified in GUI and send text message information to one or multiple vehicles to be presented on the vehicle DISPLAY that is displayed only when the vehicle has stopped.</p> <p>f. GUI shall provide the following functions to users through desktop / laptop computers:</p> <ul style="list-style-type: none"> • Ability to view plan-view graphics. • Animation of forecasts and weather information. • Time selection whereby the user can select the time period for data viewing. • Print function. 				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
	<ul style="list-style-type: none"> • Help function. • Alert function. • Ability to review historical data. • Ability to select viewing area. • Ability to toggle features, including but not limited to: <ul style="list-style-type: none"> ○ RWIS ○ CCTV cameras ○ AWOS ○ Weather backgrounds ○ Routes ○ Trucks (AVL) ○ Historical breadcrumb trail for trucks ○ Weather alerts ○ Pavement alerts • Ability to view time-series information, including but not limited to: <ul style="list-style-type: none"> ○ Weather conditions ○ Pavement conditions ○ Maintenance actions ○ Maintenance recommendations • Ability to combine data on time series plots. • Ability to configure data ranges (scale) for each time series plot. • Ability to overlay and combine graphical outputs from forecasts and observations. 				
Comment/Response:					
IV.H.3.3.3	GUI shall include the capability to playback historical data between a configurable start and end date.				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.3.3.4	GUI shall present material application rate information between a configurable start and end date set by an authorized user of the MDSS/AVL Server for analysis purposes.				
Comment/Response:					
IV.H.3.3.5	GUI shall present the amount of material applied by drivers between a configurable start and end date set by an authorized user of the MDSS/AVL Server for analysis purposes.				
Comment/Response:					
IV.H.3.3.6	GUI shall present treatment recommendations provided to vehicle operators and authorized users between a configurable start and end date set by an authorized user of the MDSS/AVL GUI for analysis purposes.				
Comment/Response:					
IV.H.3.3.7	All functionality shall be available on the GUI and/or the Web User Interface (WUI).				
Comment/Response:					
IV.H.3.3.8	WUI shall be accessible via an Internet connection using the following versions of web browsers: a. Internet Explorer Version 9 or Newer b. Google Chrome Version 24 or newer c. Firefox Version 18 or newer				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
Comment/Response:					
Mobile Application (3.4)					
IV.H.3.4.1	<p>MDSS/AVL Server shall make data on winter operations available to NDOR users through a mobile application.</p> <p>a. Mobile application shall be operable on the following platforms:</p> <ul style="list-style-type: none"> • Android version 4.2.x or newer • iOS version 5.1.1 or newer <p>b. Mobile application shall allow supervisors to access vehicle locations presented on a map viewable on smartphone and tablet devices.</p> <p>c. Mobile application shall be capable of displaying all AVL data, including but not limited to:</p> <ul style="list-style-type: none"> • Date / timestamps of locations reported • Direction of travel • Status of vehicle (moving or stationary) • Plow position (up / down) • Material application rate <p>d. Route Treatment Recommendations</p> <p>e. Current, past and future weather conditions</p> <ul style="list-style-type: none"> • At least 24 hours previous and 24 hours future. <p>f. Additional mobile application features:</p> <ul style="list-style-type: none"> • Map view • Text forecast • Alerts • Routes • RWIS • AWOS • Camera images <p>g. User configurable dashboard</p>				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
Weather Forecasting Requirements (3.5)					
Comment/Response:					
IV.H.3.5.1	MDSS/AVL Server shall generate weather forecasts that are based on the following sources, including, but not limited to: a. National Weather Service (NWS) b. National Oceanic and Atmospheric Administration (NOAA) c. Road/Weather Information Systems (RWIS) d. Automated Weather Observation Stations (AWOS) e. Vehicle Sensors on-board NDOR winter maintenance vehicles				
Comment/Response:					
IV.H.3.5.2	MDSS/AVL Server shall generate weather forecasts for zones or regions around the State as identified by the user (e.g., forecast zones, maintenance zones, etc.).				
Comment/Response:					
IV.H.3.5.3	Weather forecasts shall take into account data reported from fixed Road/Weather Information Systems (RWIS) Stations and Automated Weather Observation Stations (AWOS), including but not limited to, air temperatures, precipitation rates and wind speeds.				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.3.5.4	Weather forecasts shall take into account data reported from mobile NDOR winter maintenance vehicle equipment, including but not limited to, air temperatures, and pavement temperatures.				
Comment/Response:					
IV.H.3.5.5	Route weather forecasts shall be provided out to at least 24 hours.				
Comment/Response:					
IV.H.3.5.6	Weather forecasts shall have a minimum resolution of at least one (1) hour.				
Comment/Response:					
IV.H.3.5.7	Weather forecasts shall be updated no less than every three (3) hours, in which a new 24-hour forecast shall be provided every three (3) hours.				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.3.5.8	<p>Weather forecasts shall be provided two (2) meters above ground level (AGL), unless otherwise noted with the following information:</p> <ul style="list-style-type: none"> a. Surface air temperature in degrees Fahrenheit with time series information. b. Surface dew point in degrees Fahrenheit with time series information: <ul style="list-style-type: none"> • Surface relative humidity • Surface wind speed in miles per hour • Surface wind direction in degrees with respect to true north • Surface wind gust in miles per hour with time series information c. Precipitation type as Rain, Snow, Ice, or Mixed with time series information. d. Precipitation rate in inches per hour to a precision of a tenth of an inch with time series information. e. Snowfall accumulation in inches per hour to a precision of a tenth of an inch with time series information. 				
Comment/Response:					
IV.H.3.5.9	Ten (10) day forecast for the weather shall be provided.				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.3.5.10	Weather forecasts shall also provide the following NWS watches, warnings and advisories, including, but not limited to: a. Winter storm watches and warnings b. Flood watches and warnings c. Flash flood watches and warnings d. Severe thunderstorm watches and warnings e. Tornado watches and warnings f. High wind watches and warnings g. Special weather statements h. Freeze watches and warnings i. Winter weather advisories j. Dense fog advisories k. Snow advisories				
Comment/Response:					
<i>Weather Alerts (3.6)</i>					
IV.H.3.6.1	Weather alerts will be required for all eight (8) districts; weather alerts will be for each Superintendent area as requested by NDOR.				
Comment/Response:					
IV.H.3.6.2	Contractor shall provide an alert callout, two (2) hours in advance when weather conditions will cause a negative impact on the pavement; i.e., ice, snow or icing of roadway because of falling temperatures when wet pavements are present.				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.3.6.3	Weather alerts shall be provided to users via e-mail, SMS, and phone call; with the option for users to select which method(s) in which alerts will be received.				
Comment/Response:					
<i>Weather Observation Requirements (3.7)</i>					
IV.H.3.7.1	MDSS/AVL Server shall provide weather observations that are based on the following sources: a. National Weather Service (NWS) b. National Oceanic and Atmospheric Administration (NOAA) c. Road/Weather Information Systems (RWIS) d. Automated Weather Observation Stations (AWOS) e. Manually entered reports by human observation f. Vehicle Sensors on-board NDOR winter maintenance vehicles				
Comment/Response:					
IV.H.3.7.2	MDSS/AVL Server shall provide weather observations for zones or regions around the State as identified by the user (e.g., forecast zones, maintenance zones, etc.).				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.3.7.3	Weather observations shall include the following parameters, where available: a. Air temperature in degrees Fahrenheit b. Relative humidity in percent c. Dew point in degrees Fahrenheit d. Wind speed in miles per hour e. Wind direction in degrees with respect to true North				
Comment/Response:					
IV.H.3.7.4	Weather observations shall update as new data arrives.				
Comment/Response:					
IV.H.3.7.5	Weather observations shall have the following characteristics: a. Observation data shall expire off the screen after a configurable number of minutes. b. Expiration time shall be independently configurable for each observation. c. Time series (text and graphical formats) shall be provided.				
Comment/Response:					
<i>Route Configuration (3.8)</i>					
IV.H.3.8.1	Routes shall be configurable to fixed end points as specified by the NDOR.				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.3.8.2	Routes shall be configurable to match the physical properties of the highway segment(s) necessary to provide accurate pavement condition forecasts and current conditions.				
Comment/Response:					
IV.H.3.8.3	Routes shall be configurable to match the available maintenance practices.				
Comment/Response:					
IV.H.3.8.4	Routes shall be configurable to account for traffic volume on the highway segment(s).				
Comment/Response:					
IV.H.3.8.5	Routes shall be configurable to account for the level of service on the highway segment(s).				
Comment/Response:					
<i>Pavement Condition Forecasting Requirements (3.9)</i>					
IV.H.3.9.1	MDSS/AVL Server shall generate road condition forecasts that are based on the following sources, including, but not limited to: a. Weather forecast data b. Road/Weather Information Systems (RWIS) c. Vehicle Sensors on-board NDOR winter maintenance vehicles.				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
Comment/Response:					
IV.H.3.9.2	MDSS/AVL Server shall generate pavement condition forecasts for routes, zones or regions around the state as identified by the user (e.g. forecast zones, maintenance zones, etc.).				
Comment/Response:					
IV.H.3.9.3	Pavement condition forecasts shall take into account data reported from mobile NDOR winter maintenance vehicle equipment, including, but not limited to, maintenance actions, air temperatures, and pavement temperatures.				
Comment/Response:					
IV.H.3.9.4	Pavement condition forecasts shall be provided out to at least 24 hours.				
Comment/Response:					
IV.H.3.9.5	Pavement condition forecasts shall have a minimum resolution of at least one (1) hour.				
Comment/Response:					
IV.H.3.9.6	Pavement condition forecasts shall be updated no less than every one (1) hour, in which a new 24-hour forecast shall be provided every one (1) hour.				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
Comment/Response:					
IV.H.3.9.7	Pavement condition forecasts shall be presented graphically at each forecast location within configurable maintenance routes, and include the following parameters, where available: a. Pavement temperature in degrees Fahrenheit. b. Snow depth on pavement in inches (to a tenth of an inch). c. Blowing snow potential (likelihood reported as low, medium, high or as a percentage) at hourly increments. d. Pavement frost potential (likelihood reported as low, medium, high or as a percentage) at hourly increments. e. Chemical concentration on pavement (percent by weight). f. Pavement condition as: Wet, Dry, Chemically Wet, Percent Coverage of Snow, and Snow / Frost / Ice Depth in inches.				
Comment/Response:					
IV.H.3.9.8	Snow depth forecast shall be based on the amount of snow forecasted to accumulate on a road surface without traffic.				
Comment/Response:					
IV.H.3.9.9	Snow depth forecast shall be based on the forecasted precipitation type and rate, and forecasted pavement temperature to estimate the amount of snow that will accumulate on the road surface.				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.3.9.10	Snow depth forecast shall be based on treatment options including the amount of snow expected to accumulate on the pavement when: a. No treatment is performed b. The recommended treatment is performed c. A user-defined treatment is performed				
Comment/Response:					
IV.H.3.9.11	Blowing snow potential forecast shall be based on these minimum characteristics: a. Recent snowfall characteristics b. Forecasted precipitation type and rate c. Predicted wind speed d. Local topography e. Predicted air temperature				
Comment/Response:					
IV.H.3.9.12	Pavement frost potential forecast shall be based on these minimum characteristics: a. Forecasted pavement temperature b. Forecasted precipitation type and rate c. Forecasted wind speed d. Forecasted relative humidity (based on dew point / frost point) e. Predicted air temperature				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.3.9.13	Pavement condition forecast shall be based on pavement conditions on the road when: a. No treatment is performed b. The recommended treatment is performed c. A user-defined treatment is performed				
Comment/Response:					
<i>Pavement Condition Observation Requirements (3.10)</i>					
IV.H.3.10.1	MDSS/AVL Server shall provide pavement condition observations that are based on the following sources: a. Road/Weather Information Systems (RWIS) b. Manually entered reports from human observation. c. Vehicle Sensors on-board NDOR winter maintenance vehicles.				
IV.H.3.10.2	MDSS/AVL Server shall provide pavement condition observations for zones or regions around the State as identified by the user (e.g., forecast zones, maintenance zones, etc.).				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.3.10.3	Pavement condition observations shall include the following parameters, where available: a. Pavement temperature in degrees Fahrenheit b. Subsurface temperature in degrees Fahrenheit c. Chemical concentration on pavement (percent by weight) d. Freeze point temperature in degrees Fahrenheit e. Pavement condition as: Wet, Dry, or Chemically Wet f. Snow, frost, and ice depth in inches g. Blowing snow (reported as yes/no) h. Visibility in miles or fractions of miles i. Friction or grip				
Comment/Response:					
IV.H.3.10.4	Pavement condition observations shall update as new data arrives.				
Comment/Response:					
IV.H.3.10.5	Pavement condition observations shall have the following characteristics: a. Surface observation data shall expire off the screen after a configurable number of minutes. b. Expiration time shall be independently configurable for each observation. c. Viewing of the observations shall be user selectable. d. Time series (text or graphical formats) shall be provided.				
Comment/Response:					

Treatment Recommendation Requirements (3.11)

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.3.11	<p>Treatment recommendations shall be configured based on route segments provided by NDOR. NDOR will only be implementing Treatment Recommendations initially for Districts 2, 6, and 7 with an estimated 150 routes within Districts 2, 6 & 7. The overall solution shall allow for future expansion to include an estimated 250 additional routes that may be added in subsequent years within the remaining districts.</p> <p>Estimated quantities are not to be construed as either a minimum or maximum purchase quantity. Contractor shall not impose minimum order requirements.</p> <p>NDOR staff must be able to view the recommendations from the MDSS GUI, Web UI and apps. The recommendations must account for past and future events that affect the treatment needed to achieve the specified level of service. The recommendations are to be based on current and forecasted conditions and the specified level of service for the route.</p> <p>Treatment recommendations will specify the optimal application rate to achieve the specified level of service for the route at the lowest overall cost.</p>				
Comment/Response:					
<i>For each route where treatment recommendations are required, the following shall apply:</i>					
IV.H.3.11.1	<p>Winter maintenance rules of practice shall be based on the Manual of Practice for Effective Anti-Icing Program and NCHRP Report #526 - Snow & Ice Control: Guidelines for Materials and Methods, and be configurable, as necessary, to reflect local DOT practices.</p>				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.3.11.2	MDSS/AVL Server shall provide treatment recommendations via the following configurations: a. Ability to view plan-view graphics b. Ability to view route-specific treatment recommendations. c. Ability to view route-specific weather and pavement forecast.				
Comment/Response:					
IV.H.3.11.3	MDSS/AVL Server shall analyze roadway level-of-service information provided by NDOR staff in providing treatment recommendations to operators and authorized users of the MDSS/AVL Server.				
Comment/Response:					
IV.H.3.11.4	MDSS/AVL Server shall generate summary reports that indicate amounts of material spread by one (1) or multiple vehicles that can be selected by supervisors with access to the MDSS/AVL Server.				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.3.11.5	Treatment recommendations shall include the following: a. Recommended initial treatment start time. b. Recommended subsequent treatment start time. c. Recommended treatment type (e.g., chemical, abrasives, plow). d. Recommended chemical type based on available chemicals as identified by the Department. e. Recommended material rate (e.g., amount per lane mile). f. Recommended pre-treatment type (solid or liquid), where applicable.				
Comment/Response:					
IV.H.3.11.6	MDSS/AVL Server shall have a capability to incorporate constraints (configurable) for each route so that irrelevant treatment recommendations are not provided. For example, the use of NaCl should not be recommended if the user does not use that chemical. Constraints may include: a. Available materials (e.g., NaCl, MgCl ₂ , CaCl ₂ , abrasives etc.). b. Application rate limits (based on truck spreading limits). c. Route cycle limits (minimum turnaround time to repeat treatments).				
Comment/Response:					
IV.H.3.11.7	Treatment recommendations shall be calculated, to the greatest extent possible, using a combination of current observational data on the state of the roadway and predicted weather and road conditions.				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
IV.H.3.11.8	Treatment recommendation calculations should consider, to the greatest extent possible, factors that impact treatment effectiveness (e.g., chemical scatter, splatter, traffic impacts, spreader characteristics, etc.).				
Comment/Response:					
<i>Management Reports (3.12)</i>					
IV.H.3.12.1	Management report capabilities shall be provided, which can be accessed and generated, as desired, by NDOR on the GUI/Web UI, used to study or evaluate the maintenance response to weather.				
Comment/Response:					
IV.H.3.12.2	Provide access to archived weather, pavement condition, and maintenance data, and AVL reports.				
Comment/Response:					
IV.H.3.12.3	Shall be scalable to single storm events, up to entire winter seasons.				
Comment/Response:					
IV.H.3.12.4	Reports shall be viewable in multiple formats such as tabular form and displayed graphically on a map as selected by the user.				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
Comment/Response:					
IV.H.3.12.5	Reports shall be user configurable to allow users to select combinations of data and display the relationships between them.				
Comment/Response:					
IV.H.3.12.6	Ability to enter NDOR winter severity index data and view winter severity index in tables, graphs, and maps.				
Comment/Response:					
IV.H.3.12.7	Data shall include all captured winter weather data, forecasts, observations, and recommended and actual maintenance actions.				
Comment/Response:					
TRTM 6 Application Rate (4.0)					
<i>Spreader Controllers (4.1)</i>					
IV.I.1.4.1	Contractor shall supply all necessary software and hardware required to connect to NDOR's spreader controllers. Application rates and material type (if available) will be transmitted to the AVL hardware and viewable on the GUI/WUI/Mobile App.				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
TRTM 7 Cellular Communications (5.0)					
IV.J	<p>Contractor shall provide all cellular hardware for communication of data from vehicle system components to the MDSS/AVL Server.</p> <p>The communications technology for transmitted collected data shall be 4G LTE, where available, with fallback to 3G technology.</p> <p>Due to coverage limitations across the state, NDOR typically utilizes a data plans from Verizon, US Cellular and Viaero, depending on which carrier has the best coverage in a particular area. Cellular data plans will be provided by the NDOR prior to installation and cellular hardware must be compatible with the data plans supplied by NDOR.</p>				
Comment/Response:					
TRTM 8 Hosting (6.0)					
IV.K	<p>Contractor shall host all MDSS/AVL system components required to analyze data communicated from vehicle system components and present information via Graphical User Interface (GUI) that will be accessed by NDOR staff through web-based internet connections.</p> <p>GUI shall be a consistent interface for all NDOR users throughout the State that presents information communicated from vehicles to the MDSS/AVL system components.</p> <p>The Contractor shall be responsible for all contract requirements and activities related to hosting the proposed</p>				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
	systems and ensure that any updates or transitions occur smoothly without disruption to the State.				
Comment/Response:					
TRTM 9 Storage (7.0)					
IV.L	All data collected via the MDSS/AVL system by the Contractor on behalf of NDOR shall be stored by the Contractor for the entire life of the contract and must be readily accessible on website within two (2) business days of a request. All data collected is the property of NDOR and shall be turned over to NDOR at the end of the contract.				
Comment/Response:					
TRTM 10 Warranty (8.0)					
IV.M	Systems shall be warranted for a two (2) year period following installation and final acceptance of vehicle and MDSS/AVL system components as defined in the RFP. Warranty to include all parts and services associated with the overall system, but may not require onsite service unless deemed necessary by both parties.				
Comment/Response:					
TRTM 11 Testing (9.0)					
IV.N	The Contractor shall define and document test requirements and a schedule for testing Vehicle hardware, firmware, and all software. Testing requirements shall include any compliance				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
	<p>testing with the industry standards and regulations. The Contractor shall be responsible for carrying out unit, system, and integration testing for all programs, modules, and sub-systems throughout the development and management life cycles. The Contractor is responsible for successfully completing system and user acceptance testing prior to implementation.</p> <p>The Contractor is responsible for certifying that each program, module, and sub-system meets or exceeds all of the functional, technical, and performance requirements prior to implementation. The Contractor shall be responsible for working with NDOR in structuring testing environments that mirror the production environment.</p> <p>The Contractor is also responsible for the initial development of user test scenarios, establishing testing procedures and protocols, etc. Acceptance testing will include testing by users of all system functions, including, but not limited to, proper functioning of software, hardware and network components, as well as both data content, output, and connectivity components. It will offer the opportunity to test documentation, procedures, and business processes.</p>				
Comment/Response:					
TRTM 12 Operations & Maintenance (10.0)					
IV.O.10.1	<p>Operations & Maintenance (O&M) activities include, but are not limited to, the following:</p> <p>a. Perform system maintenance, including testing, documentation, etc. Note: Maintenance shall be conducted as mutually agreed upon by both the NDOR and Contractor.</p> <p>b. Record, track, and resolve system defects at no additional</p>				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
	<p>cost to the State.</p> <p>c. Conduct necessary software/firmware updates.</p> <p>d. Conduct maintenance of interfaces.</p> <p>e. Provide technical support with predefined technical support prioritization levels.</p> <p>f. Provide security management.</p> <p>g. Support policy and process changes.</p> <p>h. Keep GUI/WUI up to date.</p> <p>i. Keep all written material, including all system documentation and scripts, up to date as changes occur</p>				
Comment/Response:					
<i>Operations Procedures Guide (10.1)</i>					
IV.O.2.10.1	The Contractor shall develop and maintain documentation on operating procedures to assist technical staff in operation and maintenance of the MDSS/AVL Systems. These procedures help define and provide understanding of system operations and performance. The operations procedures will address all facets of the technical operation of both systems. The Operating Procedure Guide must be continuously updated to reflect the latest changes.				
Comment/Response:					
<i>Extended Services Warranty (10.2)</i>					
IV.O.3.10.2	Contractor shall provide cost information to allow NDOR the option to purchase up to three (3) one (1) year period warranty extensions beyond two (2) year base warranty period.				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
Comment/Response:					
<i>On-Going Technical Support Services (10.3)</i>					
IV.O.4.10.3	<p>Contractor shall provide phone and/or online technical support at no additional cost to the Nebraska Department of Roads (NDOR) during the normal business hours of Monday through Friday, 8:00 a.m. to 5:00 p.m. CST for the duration of the contract or warranty period; whichever is later. The Contractor shall respond to calls/emails for assistance within one (1) hour or less. Technical support shall be defined as any equipment or technical issues for the entire system which may arise during the contract period to include, but not limited to:</p> <ul style="list-style-type: none"> a. Equipment operation; b. Interpretation of data represented on GUI's; c. Reporting issues; d. Formatting issues; e. Creating AVL and/or MDSS custom reports documenting maintenance operations; f. Resolution of problems reported in production; g. Modifications in design of application; These changes will be through the Change Management Process as defined in V.B.2; h. Modification of components, vehicle hardware, design changes, and deployment of changes; These changes will be through the Change Management Process as defined in V.B.2; i. The Contractor must commit to responsive communication with the NDOR District Managers or other staff responsible, assisting NDOR staff with individual support, mentoring and coaching capacity and providing status reports on the application; j. Ongoing development services as defined in Change 				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
	Management V.B.2; k. Ongoing system maintenance; l. Planning of system upgrades and enhancements as defined in Change Management V.B.2				
Comment/Response:					
<i>On-Call On-Site Support Services (10.4)</i>					
IV.O.5.10.4	During the warranty period, Contractor shall provide on-call on-site support services to NDOR maintenance facilities to repair and/or replace faulty hardware devices installed in the vehicles at no additional cost to the State. Support services shall be available during normal business hours Monday through Friday, 8:00 A.M – 5:00 P.M. Contractor shall be on-site within 48 hours maximum after the initial call for service. After the warranty period, on-call on-site support services will be provided at the hourly price listed on the Cost Proposal Bid Sheet.				
Comment/Response:					
<i>Emergency On-Call Support Services (10.5)</i>					
IV.O.6.10.5	On an as-needed basis during the warranty period, Contractor shall provide a certified technician for on-call emergency repair services after-hours, weekends and holidays at no additional cost to the State. Contractor's technician shall be on-site within 48 hours maximum after the initial call for service. Emergency remote support shall also be provided by the Contractor via telephone and email for maintenance problems regarding the server software after hours and on weekends. Contractor must provide remote assistance within one (1) hour				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
	after notification. After the warranty period, emergency services will be provided at the hourly price listed on the Cost Proposal Bid Sheet.				
Comment/Response:					
<i>Problem Resolution Plan (10.6)</i>					
IV.O.7.10.6	<p>The Contractor shall establish procedures for receiving, recording, and tracking problem reports and modification requests from users, and providing feedback to users. Whenever problems are encountered, the problems shall be recorded and entered into the problem resolution process. The Contractor shall implement (or establish organizational interfaces with) the configuration management process for managing resolutions to the existing system.</p> <p>The Contractor and NDOR will develop a mutually agreeable Problem Analysis and Resolution Plan prior to completion of the system implementation.</p> <p>The Contractor shall provide a toll-free number and an email address for users to report system problems.</p>				
Comment/Response:					
<i>Replacement Units (10.7)</i>					
IV.O.8.10.7	Contractor shall replace defective units within two (2) business days of being notified. During the warranty period, replacement units and installation services shall be provided at no additional cost to the NDOR. After the warranty period, replacement units will be provided at the unit price and hourly rate listed on the Cost Proposal Bid Sheet.				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
Comment/Response:					
TRTM 13 Training (11.0)					
<i>AVL Technician Training (11.1)</i>					
IV.P.1.11.1	<p>Contractor shall provide, at no additional cost to the State, on-site in-person hands-on training sessions for NDOR technical personnel in each NDOR district as follows:</p> <ol style="list-style-type: none"> a. Contractor shall submit training materials to NDOR project manager for approval at least two (2) weeks in advance of first session. b. Contractor shall provide training sessions for NDOR technical personnel offering a complete overview of the hardware and software for the AVL, and detailed procedures for troubleshooting problems. c. Contractor shall provide training at the following eight (8) district locations: <ul style="list-style-type: none"> • Lincoln (District 1) • Omaha (District 2) • Norfolk (District 3) • Grand Island (District 4) • Gering (District 5) • North Platte (District 6) • McCook (District 7) • Ainsworth (District 8) d. Training shall be provided at each location after at least 25%, but not more than 75%, of AVL units for that corresponding district have been installed. e. Training shall be provided for approximately three (3) to six (6) technicians per class. f. Each training session shall be 6-8 hours in duration, including hands-on troubleshooting. g. Training shall include hands-on work with the AVL 				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
	<p>hardware.</p> <p>h. Contractor shall provide, at no additional cost to the State, six (6) operational service manuals for each class.</p> <p>i. Contractor provided training shall include review of the operational service manual information.</p> <p>j. Training shall include access to MDSS GUI with demonstrations of fully functioning AVL displaying data, and any applicable troubleshooting procedures.</p> <p>k. Detailed instructions for obtaining technical support and warranty service will be provided at each session.</p> <p>l. Training materials shall be given as hard copy and available electronically.</p> <p>m. Contractor shall have all attendees sign in on a roster. A copy of the roster will be provided to the NDOR Project Manager within one (1) week of each training session.</p>				
Comment/Response:					
<i>AVL Touchscreen Training (11.2)</i>					
IV.P.2.11.2	<p>Contractor shall provide, at no additional cost to the State, on-site in-person hands-on training sessions for NDOR personnel as follows:</p> <p>a. Contractor shall submit training materials to NDOR project manager for approval at least two (2) weeks in advance of first session.</p> <p>b. Contractor shall provide training to NDOR personnel on the proper use of the touchscreen interface. This will be a train-the-trainer format.</p> <p>c. Training shall be approximately one (1) hour in length and shall be provided at least once in each NDOR district where ten (10) or more touchscreen interfaces have been installed.</p> <p>d. Training may be provided on the same day (before or after) MDSS user training.</p>				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
	<p>e. Contractor shall have all attendees sign in on a roster. A copy of the roster will be provided to the NDOR Project Manager within one (1) week of each training session.</p> <p>f. A video demonstrating and explaining the proper use of the touchscreen shall be provided.</p> <ul style="list-style-type: none"> • The video will be no more than twenty minutes in length. • The video will be approved by the NDOR Project Manager. • The video will be available within 90 days of the tenth (10th) touchscreen installation. • Twelve (12) copies on DVD will be provided. <p>g. NDOR will be allowed to make unlimited copies and post on video websites such as YouTube or Vimeo for our own use.</p>				
Comment/Response:					
<i>MDSS/AVL Basic User Training (11.3)</i>					
IV.P.3.11.3	<p>Contractor shall provide, at no additional cost to the State, on-site in-person hands-on training sessions for NDOR personnel in each NDOR district as follows:</p> <p>a. Contractor shall submit training materials to NDOR project manager for approval at least two (2) weeks in advance of first session.</p> <p>b. GUI/WUI training for NDOR personnel will be provided during the month of October.</p> <p>c. Contractor shall provide training sessions in the following eight (8) locations:</p> <ul style="list-style-type: none"> • Lincoln (<i>District 1</i>) • Omaha (<i>District 2</i>) • Norfolk (<i>District 3</i>) • Grand Island (<i>District 4</i>) 				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
	<ul style="list-style-type: none"> • Gering (<i>District 5</i>) • North Platte (<i>District 6</i>) • McCook (<i>District 7</i>) • Ainsworth (<i>District 8</i>) <p>d. Classes will be limited to 25 participants or less.</p> <p>e. Up to four (4) sessions will be required at each location.</p> <p>f. Training will be approximately two (2) hours in length including a ten (10) minute break near the midpoint.</p> <p>g. A User Guide will be provided and referenced throughout the training.</p> <p>h. Training will cover:</p> <ul style="list-style-type: none"> • The principles of MDSS • Weather forecasting basics • Pavement condition forecasting and modeling • Factors affecting pavement condition • AVL and camera image viewing • How to use menus and tools to view MDSS data <p>i. Contractor shall have all attendees sign in on a roster.</p> <p>j. A copy of the roster will be provided to the NDOR Project Manager within one (1) week of each training session.</p>				
Comment/Response:					
<i>MDSS/AVL Supervisor Training (11.4)</i>					
IV.P.4.11.4	<p>Contractor shall provide, at no additional cost to the State, on-site in-person hands-on training sessions for NDOR Supervisors in each NDOR district as follows:</p> <p>a. Contractor shall submit training materials to NDOR project manager for approval at least two (2) weeks in advance of first session.</p> <p>b. GUI/WUI training for NDOR supervisory personnel will be provided during the month of November.</p> <p>c. Contractor shall provide training in the five (5) following</p>				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
	locations: <ul style="list-style-type: none"> • Lincoln (District 1) • Norfolk (District 3) • Grand Island (District 4) • Gering (District 5) • Ainsworth (District 8) d. Classes will be limited to 15 participants or less. e. Up to three (3) sessions will be required at each location. f. An Advanced User Guide will be provided and referenced throughout the training. g. Training will cover: <ul style="list-style-type: none"> • Review MDSS principles, weather forecasting and pavement condition modeling and forecasting • Factors affecting pavement condition • AVL and camera image viewing • How to use menus and tools to view MDSS data • How to generate, customize and view reports. • How to customize the GUI/WUI for preferred viewing • Using MDSS on Mobile Devices h. Online reference materials, presentations and videos shall be available to all users. i. Contractor shall have all attendees sign in on a roster. A copy of the roster will be provided to the NDOR Project Manager within one (1) week of each training session.				
Comment/Response:					
<i>MDSS/AVL Supervisor Advanced Training (11.5)</i>					
IV.P.5.11.5	Contractor shall provide, at no additional cost to the State, on-site in-person hands-on training sessions for NDOR Supervisors in each NDOR district as follows: <ul style="list-style-type: none"> a. Contractor shall submit training materials to NDOR project 				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
	<p>manager for approval at least two (2) weeks in advance of first session.</p> <p>b. GUI/WUI training for NDOR personnel will be provided during the month of November.</p> <p>c. Contractor shall provide training in the three (3) following locations:</p> <ul style="list-style-type: none"> • Omaha (<i>District 2</i>) • North Platte (<i>District 6</i>) • McCook (<i>District 7</i>) <p>d. Classes will be limited to 15 participants or less.</p> <p>e. Up to three (3) sessions will be required at each location.</p> <p>f. An Advanced User Guide will be provided and referenced throughout the training.</p> <p>g. Training will cover:</p> <ul style="list-style-type: none"> • Review MDSS principles, weather forecasting and pavement condition modeling and forecasting • Factors affecting pavement condition • AVL and camera image viewing • Using menus and tools to view MDSS data • Generate, customize and view reports • Customize the GUI/WUI for preferred viewing • Play back historical events • Interpret maintenance recommendations • Revise maintenance recommendations to fit local conditions • Compare recommended maintenance actions with reported maintenance actions • Using MDSS on mobile devices <p>h. Online reference materials, presentations and videos shall be available to all users.</p> <p>i. Contractor shall have all attendees sign in on a roster. A copy of the roster will be provided to the NDOR Project Manager within one (1) week of each training session.</p>				
Comment/Response:					

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
MDSS/AVL Annual Supervisor Training (11.6)					
IV.P.6.11.6	<p>Contractor shall provide, at no additional cost to the State, at least one (1) annual on-site in-person hands-on training session in each district for NDOR Supervisors as follows:</p> <ol style="list-style-type: none"> a. Contractor shall submit training materials to NDOR project manager for approval at least two (2) weeks in advance of first session. b. GUI/WUI training for NDOR personnel will be provided. c. Contractor shall provide training sessions in the following eight (8) locations: <ul style="list-style-type: none"> • Lincoln (District 1) • Omaha (District 2) • Norfolk (District 3) • Grand Island (District 4) • Gering (District 5) • North Platte (District 6) • McCook (District 7) • Ainsworth (District 8) d. Classes shall be up to 25 participants. e. One (1) session will be required at each location. f. Training will be approximately two (2) hours in length including a ten (10) minute break near the midpoint. g. Training will cover: <ul style="list-style-type: none"> • All functionality that is made available to the NDOR through the Contractor's GUI. • Any updates to the systems h. Online reference materials, presentations and videos shall be available to all users. i. Contractor shall have all attendees sign in on a roster. A copy of the roster will be provided to the NDOR Project Manager within one (1) week of each training session. 				

Requirements Matrix					
TRTM #	Requirement Description	Compliant	Availability	Availability Date	Contractor or Subcontractor
Comment/Response:					
<i>On-Going Documentation (11.7)</i>					
IV.P.7.11.7	The Contractor shall provide documentation to the NDOR any time significant changes to the system, hardware or software occur. The documentation may be provided via web portal, CD, or other mutually agreeable delivery method and be provided to NDOR at no additional cost to the State.				
Comment/Response:					
TRTM 14 Project Management Phase (12.0)					
<i>Preliminary Project Management Plan (Due with Response) (12.1)</i>					
IV.Q.1.12.1	<p>Integral to the success of the project is a solid project plan and the management of that plan. The bidder shall prepare a Preliminary Project Management Plan to be submitted with the RFP response.</p> <p>The bidder shall develop a viable Preliminary Project Management Plan according to industry standards and best practices that meets contractual requirements and timelines within the schedule set forth in this RFP. The Preliminary Project Management Plan shall address the same activities as the Project Management Plan, but with less detail.</p>				
Comment/Response:					

Form A.3
Equipment
Request for Proposal Number R69-16

Hardware, software, tools, equipment, software licenses, etc., required for the proposed solution. Detailed specifications are required.

Qty	Item	Brand	Model Number	Version	Description//Purpose
AVL Hardware					
Camera					
Touchscreen Display					

Form A.4

Cost Proposal Bid Sheet

Request for Proposal Number R69-16

Cost Proposal Bid Sheet: Please indicate total fixed price for each deliverable category. If desired, the bidder may breakdown each category and assign a price to each deliverable. The deliverables will be paid as fixed payments upon completion and acceptance of tasks contained in the deliverable. All costs necessary to satisfy the requirements of this RPF, including labor as well as non-labor associated costs, must be included in the pricing listed on this form.

The payment schedule for the project is tied to fixed lump sum payments for the completion and acceptance of related deliverables, and subsequent annual payments after implementation of the AVL & MDSS System & Services. The bidder must propose a fixed cost per deliverable milestone in the Cost Proposal Bid Sheet. The bidder must also include the annual amount for post-implementation maintenance in the Cost Proposal Bid Sheet. No invoice will be approved unless the associated deliverables have been approved.

All items listed below are listed in the deliverables section within the RFP.

PRICING SUMMARY TABLE

ONE TIME COSTS					
	Description	Qty	UOM	Unit Price	Extended Price
	Project Management Plan	1	Each	\$	\$
	Vehicle AVL Hardware To include original equipment components, firmware, cellular hardware, software, warranty testing & technical assistance. <i>*This deliverable may be billed at 25%, 50%, 75%, and at 100% completion of the 650 approximate units)</i>	650	Each	\$	\$
	On-Board Camera Forward facing camera unit, in accordance with the specification requirement within the RFP. <i>*This deliverable may be billed at 25%, 50%, 75%, and at 100% completion of the 650 approximate units)</i>	650	Each	\$	\$
	AVL Spreader Controller Interface All Districts – Bidders are to provide a price per controller implementation regardless of spreader type as listed in Section IV.K.1 the RFP. <i>*This deliverable may be billed at 25%, 50%, 75%, and at 100% completion of the 650 approximate units)</i>	650	Each	\$	\$
	AVL Touchscreen Display Districts 2, 6 & 7	150	Each	\$	\$
	Per Unit Installation Cost Includes installation of AVL Hardware, On-Board Camera, AVL Spreader Controller Interface, AVL Touchscreen Display, Labor, Time & Travel.	650	Each	\$	\$
	MDSS/AVL Server Operational	1	Lump Sum	\$	\$
	Route Configuration		Each	\$	\$
	AVL Integration	1	Lump Sum	\$	\$
	Mobile Applications	1	Lump Sum	\$	\$
	Reports	1	Lump Sum	\$	\$
	MDSS Initial Software Licensing Fee	650	Each	\$	\$
	AVL Initial Software Licensing Fee	650	Each	\$	\$

ON-GOING SERVICES

Description	Qty	Contract Year 1	Contract Year 2	Contract Year 3	Contract Year 4	Contract Year 5
Weather Alerts Per Superintendent Area	11	\$	\$	\$	\$	\$
Annual Weather/Pavement Conditions & Forecast All Districts (Estimated 400 Routes)	400	\$	\$	\$	\$	\$
Annual Treatment Recommendations Districts 2, 6 & 7 (Estimated 150 Routes)	150	\$	\$	\$	\$	\$

ON-GOING LICENSING FEES

Description	Contract Year 1	Contract Year 2	Contract Year 3	Contract Year 4	Contract Year 5
On-Going AVL Annual Licensing Fees			\$	\$	\$
On-going MDSS Annual Licensing Fees			\$	\$	\$

POST WARRANTY – Operations & Maintenance

Description	Contract Year 1	Contract Year 2	Contract Year 3	Contract Year 4	Contract Year 5
On-Going Annual MDSS Software Maintenance On-going maintenance fee should include labor costs, technical assistance, system updates and other on-going costs, including mobile applications.			\$	\$	\$
On-Going Annual AVL System Software Maintenance On-going maintenance fee should include labor costs, technical assistance, system updates and other on-going costs.			\$	\$	\$

<p>Extended Hardware Services Warranty On-going maintenance fee shall include labor costs, technical assistance, on-call assistance, emergency assistance, firmware/software updates and other on-going costs.</p>			\$	\$	\$
<p>On-Call On-Site Hardware Support Services Support provided during regular business hours for the repair/replacement of faulty hardware.</p>			\$	\$	\$
<p>Emergency On-Call Hardware Support Services Support provided during after-hours and weekends for the repair/replacement of faulty hardware.</p>			\$	\$	\$

HOSTING COSTS

Description	Contract Year 1	Contract Year 2	Contract Year 3	Contract Year 4	Contract Year 5
<p>MDSS/AVL System Hosting Cost To include data services, archiving, storage, display, sharing, etc.</p>	\$	\$	\$	\$	\$

TRAINING SERVICES

Description	Qty	UOM	Unit Price	Extended Price
AVL Technician Training	8	Sessions	\$	\$
AVL Touchscreen Training	3	Sessions	\$	\$
MDSS Basic User Training	32	Sessions	\$	\$
MDSS Supervisor Training	15	Sessions	\$	\$
MDSS Advanced Supervisor Training	9	Sessions	\$	\$
Annual Supervisor Training	40	Sessions	\$	\$

	AVL Touchscreen Video	12	Each	\$	\$
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OPTIONAL ITEMS & SERVICES

Description	Quantity	Estimated UOM	Price Per	Extended Price
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Live Feed – On-board Video Camera	650	Each	\$	\$
Additional AVL Hardware Units To include original equipment components, firmware, cellular hardware, software, warranty testing & technical assistance.	10	Each	\$	\$
Additional Vehicle Touchscreen Displays	500	Each	\$	\$
Fleet Management Reports	1	Lump Sum	\$	\$
Additional AVL Hardware To include any additional hardware required to incorporate Fleet Management Reports	650	Each	\$	\$
Hourly Rate for Installations in Subsequent Contract Years Includes installation of AVL Hardware, On-Board Camera, AVL Spreader Controller Interface, AVL Touchscreen Display, Labor, Time & Travel.	1	Hourly	\$	\$

OPTIONAL ON-GOING SERVICES

Description	Contract Year 1	Contract Year 2	Contract Year 3	Contract Year 4	Contract Year 5
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Treatment Recommendations Districts 1, 3, 4, 5 & 8 (Estimated 250 Routes)	\$	\$	\$	\$	\$
Weather Alerts Per Superintendent Area	QTY 20	\$	\$	\$	\$

**Prices quoted on the Cost Proposal form shall remain fixed for the first year of the contract period. Any request for a price increase subsequent to the first year shall not exceed five percent (5%) of the previous Contract period and must be submitted in writing to the State Purchasing Bureau a minimum of 120 days prior to the end of the current contract period, and be accompanied by documentation justifying the price increase. Further documentation may be required by the State to justify the increase. The State reserves the right to deny any requested price increase. No price increases are to be billed to any State Agencies prior to written amendment of the contract by the parties.*

Form A.6

Contractor Host Facility Form

Request for Proposal Number R69-16

This Contractor Host Facility Form must be completed.

Bidder Name:			
Building Address		Mailing Address	
City		State/Zip	City
			State/Zip
Bidder Owned		Building Square Footage	
Building Age		Data Center Square Footage	
# of Floors		Number of Tenants	
Closest Airport			
Written Description of the Facility:			
Building Security Features			
Data Center Security Features			
Power Source/Back-up			