COMMONWEALTH'S MASTER INFORMATION TECHNOLOGY (IT) SERVICES INVITATION TO QUALIFY (ITQ) CONTRACT, 4400004480

REQUEST FOR QUOTATIONS FOR

MODERNIZED VEHICLE AND DRIVERS LICENSE SYSTEM (MVDLS)

ISSUING OFFICE

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION BUREAU OF OFFICE SERVICES COMMONWEALTH KEYSTONE BUILDING 400 NORTH STREET, 5th FLOOR HARRISBURG, PENNSYLVANIA 17120-0041

RFQ NUMBER

6100041671

DATE OF ISSUANCE

MAY 12, 2017

Revised June 28, 2017

This is a restricted solicitation under the Commonwealth's Master Information Technology (IT) Services Invitation to Qualify (ITQ) Contract, <u>4400004480</u>. Only those Contractors qualified in the following service category(s) under Contract #4400004480 may submit a proposal in response to this RFQ.

Software Development Services

Organizations interested in doing business with the Commonwealth through this contract must begin by registering with the Commonwealth as a Procurement Supplier. For more information about registration, please view the Registration Guide.

Once an organization is registered with the Commonwealth, they must develop and submit a bid through the <u>PASupplierPortal Website</u> in order to qualify for one, all, or any combination of the service categories associated with this contract. The Commonwealth will evaluate the bid along with all supporting documentation to determine whether the organization meets the minimum eligibility requirements.

For more information about the Commonwealth's Invitation to Qualify contracts and their policies, please visit the <u>ITQ Website</u>.

REQUEST FOR QUOTATIONS

FOR

${\bf MODERNIZED\ VEHICLE\ AND\ DRIVERS\ LICENSE\ SYSTEM\ (MVDLS)}$

TABLE OF CONTENTS

CALENDAR OF EVENTS	vi
Part I – GENERAL INFORMATION – Revised Addendum 9 dated 6.28.17	1
Part II – CRITERIA FOR SELECTION - Revised Addendum 9 dated 6.28.17	19
Part III – TECHNICAL SUBMITTAL	24
Part IV – COST SUBMITTAL	63
Part V – CONTRACT TERMS AND CONDITIONS – Deleted Addendum 3 dated 5.22.17	65
Part V – DIVERSE BUSINESS, SMALL DRIVERSE BUSINESS, AND SMALL BUSINESS PARTICIPATION – Added via Addendum 9 dated 6.28.17	64

APPENDICES

APPENDIX A	PROPOSAL COVER SHEET
APPENDIX B	DOMESTIC WORKFORCE UTILIZATION CERTIFICATION
APPENDIX C	IRAN FREE PROCUREMENT CERTIFICATION
APPENDIX D	TRADE SECRET CONFIDENTIAL PROPRIETARY
	INFORMATION NOTICE FORM
APPENDIX E	COST SUBMITTAL – REVISED - Revised via Addendum 9 dated
	6.28.17
APPENDIX F	BLUEPRINT REPORT
APPENDIX G	ENTERPRISE IT STANDARDS 3-23-17 – Revised via Addendum 1
	dated 5.16.17
APPENDIX H	IT PROJECT MANAGEMENT HANDBOOK
APPENDIX I	STANDARD IT PROJECT GOVERNANCE
APPENDIX J	MVDLS INTERFACES
APPENDIX K	MDVLS PRODUCTS
APPENDIX L	MVDLS REPORTS
APPENDIX M	MVDLS CORRESPONDENCE
APPENDIX N	MVDLS PROGRAMS
APPENDIX O	CONTRACTOR ROLES, RESPONSIBILITIES AND MINIMUM
	QUALIFICATIONS
APPENDIX P	PENNDOT RESOURCE COMMITMENT
APPENDIX Q	SERVICE LEVEL AGREEMENTS
APPENDIX R	DELIVERABLE REVIEW STANDARDS AND APPROVAL
	PROCESS
APPENDIX S	DATA MIGRATION RACI
APPENDIX T	PROJECT TIMELINE AND PHASES – REVISED - Replaced via
	Addendum 9 dated 6.28.17
APPENDIX U	GUI STANDARDS FOR WEB APPLICATIONS
APPENDIX V	GLOSSARY OF TERMS AND ABBREVIATIONS
APPENDIX W	DIVERSE BUSINESS PARTICIPATION FOR NON-FEDERALLY
	FUNDED PROJECTS – REVISED 6-16-17 – Replaced via Addendum 9
	dated 6.28.17
APPENDIX X	CHANGE MANAGEMENT PROCESS DOCUMENT
APPENDIX Y	INITIAL WORK PACKAGE DELIVERABLES - REVISED –
	Replaced via Addendum 9 dated 6.28.17
APPENDIX Z	HISTORIC REQUIREMENTS DOCUMENTATION INDEX
APPENDIX AA	TECHNOLOGY LIST
APPENDIX BB	CARATS METADATA
APPENDIX CC	NON-DISCLOSURE AUTHORIZATION
APPENDIX DD	MOTOR VEHICLE TRANSACTION VOLUME ESTIMATES BY
	USER GROUP
APPENDIX EE	REMOVED
APPENDIX FF	SAMPLE WORK ORDER AUTHORIZATION PAGE
APPENDIX GG	WORK ORDER REQUIREMENTS
APPENDIX HH	ENHANCED MINIMUM WAGE - Added via Addendum 9 dated 6.28.17

APPENDIX II SMALL DIVERSE BUSINESS AND SMALL BUSINESS

PARTICIPATION SUBMITTAL FORM – Added via Addendum 9 dated

6.28.17

APPENDIX JJ SMALL DIVERSE AND SMALL BUSINESS LETTER OF INTENT -

Added via Addendum 9 dated 6.28.17

APPENDIX KK MODEL FORM OF SMALL DIVERSE BUSINESS AND SMALL

BUSINESS SUBCONTRACT AGREEMENT – Added via Addendum

9 dated 6.28.17

APPENDIX LL PRE-PROPOSAL CONFERENCE GUIDE AND PRESENTATIONS

APPENDIX MM QUESTIONS AND ANSWERS RECEIVED AS OF 6.27.17

CALENDAR OF EVENTS

The Commonwealth will make every effort to adhere to the following schedule:

Activity	Responsibility	Date
Deadline to submit Questions via email to PDRFPQuestions@pa.gov .	Potential Contractors	Friday May 26, 2017 See Addendum 9
Pre-proposal Conference Location – Mandatory Pennsylvania Department of Transportation Keystone Building 400 North Street, 5 th Floor, Bid Room Harrisburg, PA 17120-0041	Issuing Office/Potential Contractors	Monday June 12, 2017 at 10:30 am See Addendum 8
Answers to Potential Contractor questions posted to the DGS website at http://www.emarketplace.state.pa.us/Search.aspx no later than this date.	Issuing Office	Tuesday June 20, 2017 See Addendum 9
Please monitor website for all communications regarding the RFQ.	Potential Contractors	On-going
Pennsylvania Department of Transportation Bureau of Office Services ATTN: Holly Zeiders, Issuing Officer Keystone Building 400 North Street, 5 th Floor Harrisburg, PA 17120-0041	Contractors	Wednesday July 12, 2017 by 12:00 pm See Addendum 5

^{*}Note: Due to increased security requirements in the Commonwealth's mail processing operations, all incoming mail to the Keystone Building is routed, scanned and sorted at an off-site location prior to delivery. This includes overnight deliveries. Be aware when submitting bid documents via overnight delivery services, there is no guarantee that the bid documents will be received in the Issuing office when required. Bids which are received late will be rejected regardless of the reason for late arrival. Bidders are advised to allow extra time to ensure timely delivery.

PART I

GENERAL INFORMATION

- **I-1. Purpose.** This request for quotations (RFQ) provides to those interested in submitting proposals for the subject procurement ("Contractors") sufficient information to enable them to prepare and submit proposals for the Pennsylvania Department of Transportation's ("PennDOT") consideration on behalf of the Commonwealth of Pennsylvania ("Commonwealth") to satisfy a need for Modernized Vehicle and Drivers License System (MVDLS) ("MVDLS Project") that PennDOT staff intends to maintain and enhance at the end of the project. This RFQ contains instructions governing the requested proposals, including the requirements for the information and material to be included; a description of the service to be provided; requirements which Contractors must meet to be eligible for consideration; general evaluation criteria; and other requirements specific to this RFQ.
- I-2. Issuing Office. The Department of Transportation ("Issuing Office") has issued this RFQ on behalf of the Commonwealth. The sole point of contact in the Commonwealth for this RFQ shall be Holly Zeiders, 400 North Street, 5th Floor, Harrisburg, PA 17120-0041; PDRFPQuestions@pa.gov, the Issuing Officer for this RFQ. Please refer all inquiries to the Issuing Officer.
- I-3. Overview of Project. The PennDOT Driver and Vehicle Services (DVS) deputate administers vehicle and driver licensing services for the Commonwealth. The Commonwealth has over 9.5 million licensed drivers/photo identification holders and 11.9 million registered vehicles. Approximately fifty (50) million transactions occur each year with fees totaling approximately \$2.8 billion collected annually. With a complement of 1,100 employees, as well as contracted staff, PennDOT operates one full-service Driver and Vehicle Service Center, 71 Driver License Centers, 97 Photo License Centers, and a centralized mail processing and support operation at the Riverfront Office Center (ROC) in Harrisburg. PennDOT partners with several hundred private entities to provide additional service options for its customers, and oversight to several thousand auto dealers, inspection stations, and inspection mechanics. PennDOT also offers its customers the opportunity to complete certain transactions via its Driver and Vehicle Service website (www.dmv.pa.gov). Approximately, 7 million transactions were completed via the Website in fiscal year 2015-2016, accounting for more than \$216 million in revenues.

The technologies and methods used to build the current PennDOT systems are outdated. PennDOT's major systems—the Commonwealth Automated Registration and Titling System (CARATS), Financial Responsibility System (FR), and the Driver License and Control System (DL&C)—have been in production since 1987 and 1990. Since they were built primarily on outdated IMS and COBOL technologies, the support resources are becoming increasingly scarce. PennDOT anticipates that they will continue to diminish as the baby-boomer generation retires in greater numbers. These systems, along with many of PennDOT's other vehicle and driver licensing systems, were built in stove-piped environments, where sharing and using of components originally employed in other business areas were minimal; applications were not flexible to business changes; and data

was stored in rigid hierarchical databases with minimal attention to business information needs and prevention of data duplication.

As a consequence of the way the systems were built, PennDOT has been unable to easily adapt to state and federal legislative mandates, changing business needs, or modern business models. PennDOT believes that a modernized system can help achieve more cost-effective government operations by reducing the expenses of conducting core business and simultaneously making significant process improvements.

Background

PennDOT's portfolio of active IT projects has grown significantly from seven (7) active projects in 2008 to approximately one hundred (100) active projects in 2015. As a result of the trends in IT such as mobile, digital government, business intelligence and data analytics, cloud, consolidation and legacy modernization, demand for IT services and solutions has grown rapidly. Business areas are seeking to transform themselves and increase efficiency through the innovative use of technology.

The traditional waterfall methods used in many large complex IT projects are risky and prone to failure. To meet growing demand and deliver solutions quicker and with higher quality, PennDOT has adopted iterative and agile project development methods.

Iterative methods improve upon waterfall methods by unbundling large projects into iterations; thereby reducing the risk of the project. Schedule and budget risks remain because of the fixed scope of each iteration. Agile methods reduce risk further by releasing working software at the end of short multi-week sprints. The team can adjust the scope of a given sprint to meet business needs and priorities. The customer sees product quicker and can provide feedback, resulting in a higher quality product, delivered faster and with high customer satisfaction.

Within the current portfolio of IT projects, the MVDLS Project constitutes a significant undertaking for PennDOT, with a sizeable investment in resources. PennDOT has methodically planned for this project and has identified the relevant business and IT resources needed to support this project. Descriptions of the core PennDOT areas to be closely involved in the implementation of the MVDLS Project and their anticipated roles in this project are included below:

Bureau of Information Technology Project Development and Delivery

The Bureau of IT Project Development and Delivery (ITPDD) provides customeroriented, cost-effective IT project planning, development and delivery services supporting PennDOT's strategic goals and objectives which include, but are not limited to:

- 1. Develops and manages PennDOT's IT policies.
- 2. Directs the development, review, evaluation and administration of the Deputates' and the Enterprise IT portfolio and initiatives.
- 3. Develops PennDOT's IT Strategic Plan and IT Portfolio of projects.
- 4. Manages PennDOT's IT budget.

- 5. Provides direction, support and management of the procurement of IT products and services.
- 6. Provides business analysis and process improvement services for business areas throughout PennDOT.
- 7. Provides project management services to lead interdisciplinary teams for all active projects on PennDOT's IT Portfolio.

Within the Bureau of ITPDD, PennDOT operates a Project Management Office (PMO) that supports its efforts to successfully complete the numerous projects in its IT portfolio. The PennDOT PMO also promotes consistency, uniformity and continual improvement in project management within PennDOT; supports communication to stakeholders; and assists with issue/change/risk management and capacity planning for PennDOT resources.

For this project, in addition to the selected Contractor's committed Program Management Lead and Project Managers, PennDOT will assign a full- time Program Manager and multiple PMO Project Managers to provide oversight, monitoring, and verification of all project activities and coordination of PennDOT's activities and staff.

PennDOT will also assign a full-time Business Analyst lead from the Business Analysis and Process Improvement Division to provide oversight of business analysis deliverables and work closely with the selected Contractor's committed Requirements Management Lead and Business Analyst Lead.

Bureau of Business Solutions and Services (BBSS)

BBSS provides business application development and support services for existing and planned applications. Currently, there are fourteen (14) IT resources supporting CARATS and Financial Responsibility (FR) applications and fourteen (14) IT resources supporting DL&C application. In addition, BBSS provides extended services in the areas of Data Administration, Quality Assurance Strategy/Processes, End-to-End Tracking, Enterprise Architecture and Systems Integration. The Bureau provides specialized services that support all application development teams, including Data Administration, Business Reporting Solutions, Quality Assurance, Enterprise Architecture, Framework Support and Imaging and Workflow.

For this project, BBSS will provide a full-time Application Lead and a full-time Data Lead to work closely with the selected Contractor on all developmental tasks, provide data conversion support, and otherwise engage with the selected Contractor to enable PennDOT maintenance of the MVDLS Solution going forward.

Bureau of Infrastructure and Operations (BIO)

The mission of the BIO is to provide operational support for the infrastructure and network components of IT services needed to support the business requirements of PennDOT. The BIO upholds Commonwealth policies and delivers Enterprise Architecture and infrastructure services based on the IT Infrastructure Library (ITIL v3) and other industry-related best practices.

The main responsibilities of BIO are to:

- 1. Facilitate all interaction between PennDOT's multiple data centers and PennDOT's IT teams.
- 2. Provide direction, support, and management of all PennDOT infrastructure including server hardware and software; voice and video equipment and networking devices such as routers and switches; and PCs, laptops, printers and mobile devices.
- 3. Manage the enterprise server (Mainframe) operations provided through the Office of Administration's contract with the Pennsylvania Compute Services (PACS), as well as the high speed high volume production data print center located at the Riverfront Office Center (ROC) in Harrisburg.
- 4. Coordinate customer service activities including help desk calls, incident and problem management, service requests, change management, and asset management.

For this project, BIO will provide technical oversight and manage the systems supporting the MDVLS Solution. A full-time Infrastructure lead will work with the selected Contractor in managing the customer service activities as outlined above.

Driver and Vehicle Services Deputate

PennDOT's Driver and Vehicle Services (DVS) Deputate administers vehicle and driver licensing services for the Commonwealth. The Commonwealth has over 9.5 million licensed drivers/photo identification holders and 11.9 million registered vehicles. Approximately fifty (50) million transactions occur each year with fees totaling approximately \$2.8 billion collected annually. With a complement of one thousand one hundred (1,100) employees, as well as contracted staff, PennDOT operates one (1) full-service Driver and Vehicle Service Center, seventy-one (71) Driver License Centers, ninety-seven (97) Photo License Centers and a centralized mail processing and support operation at the ROC in Harrisburg. PennDOT partners with several hundred private entities to provide additional service options for its customers, and provides oversight to several thousand auto dealers, inspection stations, and inspection mechanics. PennDOT also provides its customers with the opportunity to complete certain transactions via its Driver and Vehicle Service web site (www.dmv.pa.gov). Roughly seven (7) million transactions were completed via the Website in fiscal year 2015-2016 accounting for more than two hundred sixteen (216) million dollars in revenues.

For this project, the DVS Deputate will provide Business Leads as denoted in Appendix P – PennDOT Resource Commitment plus three (3) full-time Business Subject Matter Experts, who will work closely with the selected Contractor on all business requirement validation, system design and testing tasks, provide data conversion support and otherwise engage with the selected Contractor to enable delivery of a MVDLS Solution that meets the operational business area needs.

I-4. Objectives.

A. General.

PennDOT has determined that it must replace its existing systems. To this end, it is issuing an RFQ, through the Office of Administration, Office of Information Technology (OAOIT), to request proposals from Contractors for services and implementation of an MVDLS. PennDOT's vision is to create a business and technical system for providing vehicle and driver services to the citizens of the Commonwealth.

PennDOT has defined the following six (6) Guiding Principles to establish priorities for the MVDLS Project:

- A. **Strong Foundation** Build a robust technical foundation to enable delivery of the PennDOT Vision for Driver and Vehicle Services.
- B. **System Agility** Our technology must enable flexibility and scalability, resulting in quick and efficient response to new and emerging business needs, including legislative mandates. PennDOT seeks to implement a highly-modularized system built with a robust API framework to ensure maintainability in the future.
- C. **Systematic, Iterative Change** Change will be guided by systematic iterative road maps and agile project management strategies avoiding high risk "big bang" waterfall projects.
- D. **Skills Availability** The skills necessary to maintain and enhance our systems must be available currently and extend at least fifteen (15) years into the future.
- E. **Security** Data is protected from internal and external unauthorized access or disclosure.
- F. Department of Conservation and Natural Resources (DCNR) & Fish and Boat Commission (FBC) Integrate the titling and registration of snowmobiles, all terrain vehicles (ATVs) and boats into the MVDLS system to improve program effectiveness and operational efficiency.

The MVDLS Solution shall provide timely access to accurate, complete, customer information and issuance of quality vehicle and driver license products. This is critical to PennDOT's ability to fulfill its public responsibilities. The MVDLS Solution shall also **enable** PennDOT's modernization vision which embraces and includes these key themes:

- 1. Embrace Virtual Products and Services
 - a. Establish a virtual service channel for query and data entry for use by customers and partners.
 - b. Enable the transition to electronic products (including, but not limited to, registrations, titles and records).
 - c. Support electronic verification for Law Enforcement and other Commonwealth agencies.
- 2. Enhance Services
 - a. Collaborate across agencies to leverage a single platform for similar services.
 - b. Provide a platform to enable Enhanced Safety Programs by driver demographic and by technical advances (i.e. self-driving vehicles).
- 3. Improve Tools & Data
 - a. Facilitate proactive implementation of strategic technology improvements.

- b. Implement real-time automated fraud monitoring and detection.
- c. Become a trusted authenticator of identities and system of record information.

4. Evolve User Skillsets

- a. Support the evolution of our workforce as they learn to be more efficient on a virtual platform.
- b. Improve our Partner Management by providing training and guidance to remove and/or prevent barriers to adoption of services and procedures.

PennDOT's need for Modernized Driver and Vehicle solutions shall *not* be interpreted as a need for a single, integrated customer management solution that combines driver, ID holder, vehicle owner and other customer data into a single repository with integrated business and data management processes. PennDOT is not convinced that establishing a single customer management solution would yield sufficient benefits in terms of efficiencies of operations to justify the significant upfront costs, time, risk, and ongoing maintenance effort associated with such an approach. For customer-facing transactions, other approaches (e.g. business intelligence or loosely coupled systems) are available to be leveraged to provide a single view of the customer.

B. Specific.

The MVDLS Project's objective is to modernize core legacy vehicle and driver systems' functionality and technology (as described in the requirements) in an iterative, risk managed approach. PennDOT intends to award to a single Prime Contractor, who meets all the required qualifications to deliver all the services, technology, and functionality described in this RFQ, the contract to replace CARATS functionality and work to complete "To-Be" Requirements for Financial Responsibility within the initial thirty-six (36) month term.

PennDOT's goal is to obtain proposals from qualified Contractors who bring the maximum skills, knowledge, and relevant experience to deliver a solution that leverages the required toolsets and technologies described in this RFQ.

PennDOT seeks to implement a custom, highly modularized system built with a robust API framework to ensure PennDOT's ability to maintain the system in the future. PennDOT believes that the business needs for a project of the scope and complexity of MVDLS cannot be met with a Commercial-Off-The-Shelf (COTS) solution. The solution must be custom-developed to meet the specific business needs of the MVDLS Project, enabling PennDOT to enhance and maintain the system after the engagement.

The list below identifies the tasks required for the MVDLS Project. Tasks identify required elements of the software development lifecycle (SDLC) that will be utilized within multiple iterations across the multiple releases to deliver the full functionality in scope for this project. Tasks can be combined and executed in parallel, as needed, to align with the Contractor's proposed iterative approach.

- Task A: Project Management
- Task B: Requirements Validation
- Task C: Process Definition
- Task D: Detailed Design
- Task E: Solution Installation, Configuration & Development
- Task F: Data Migration
- Task G: Testing Validation
- Task H: Release Planning
- Task I: Training
- Task J: Implementation & Rollout
- Task K: Capacity, Disaster Recovery & Business Continuity Plans
- Task L: Maintenance, Support & Warranty
- Task M: Transition & Phase Close-Out
- Task N: Additional Work

The tasks and deliverables are outlined in Section III-6.

C. MVDLS Blueprint and Detailed Appendices

The Blueprint Conceptual Scope

PennDOT created the Blueprint in Appendix F – Blueprint Report to reflect the expected function / subsystem scope for the MVDLS Project. The MVDLS Solution must meet all requirements / mandatory items in this RFQ and must be delivered by the selected Contractor that meets all stated qualifications and provides all deliverables. The Blueprint does not include functions and systems that PennDOT has already modernized or is in the process of modernizing, as outlined below. While those functions are currently considered out of scope for the MVDLS Project, the MVDLS Solution must integrate with those functions or systems per the requirements. PennDOT reserves the right to work with the selected Contractor to add these and other functions to the scope:

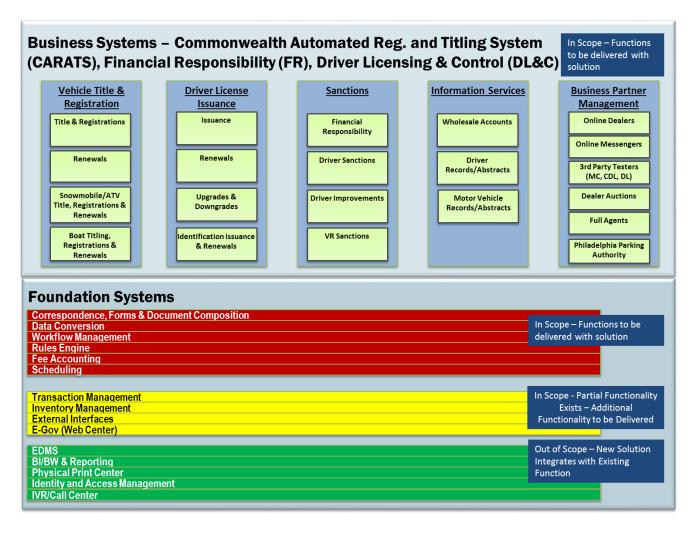
- Meds Completed
- Apportioned Registration Program (ARP) Completed
- Fleets Completed
- Card Production System Completed
- Placards Completed
- Inspections In Process
- Dealers In Process

Note: All the Business Layer Subsystems depicted in the Blueprint diagram in Appendix F are in scope for the MVDLS Project. Foundation Subsystems are color-coded to express the status and scope of the subsystem:

- Red This function/subsystem is in scope for the MVDLS Project and is not meeting the defined requirements today.
- Yellow This function/subsystem is in scope for the MVDLS Project and is partially meeting the defined requirements today. PennDOT may prioritize or de-

- prioritize efforts for Yellow subsystems for the term of the contract based on the Initial Work Package effort.
- **Green** This function/subsystem is meeting the defined requirements today and the new MVDLS System will need to interface and/or integrate with these existing subsystems. PennDOT reserves the right to work with the selected Contractor to include Green Foundation elements in scope.

Further scope and detailed requirements are separately documented in the RFQ Appendices and include business and technical requirements as well as listings of in-scope interfaces, products, reports, correspondence, and programs. See below for the Blueprint diagram and Appendix F – Blueprint Report for associated descriptions.



I-5. Term/Notice to Proceed/Purchase Order. The selected Contractor will be issued a purchase order with reference to Commonwealth's Information Technology (IT) Services Invitation to Qualify (ITQ) Contract, 4400004480. The term of the purchase order will commence on the Effective Date and will extend for an initial contract period of thirty-six (36) months. Work Orders will be created for specific scopes of work within each Purchase Order. Within the initial contract period, the selected Contractor must complete the Project

Initiation Work Package and deploy at least five (5) Releases. By mutual consent, contract renewals may be issued incrementally up to a- total of eighty-four (84) months. The specific scope, schedule and costs for each renewal will be negotiated as part of the renewal.

After the initial thirty-six (36) months of the Contract, Contractor may propose rate increases or decreases in line with cost of living for subsequent Contract renewals. The Commonwealth may, in its sole discretion, increase the final negotiated labor rates based upon Contractor's proposed rate(s). Cost adjustments will occur on the Effective Date of the revised Contract.

The Contractor selected for Award will be provided with a fully-executed Purchase Order as the Notice to Proceed. The Issuing Office reserves the right to issue one (1) or more fully executed Purchase Orders as a result of this RFQ.

Each Purchase Order will establish an Effective Date, Validity Start Date (which may not be the same date as the Effective Date) and Validity End Date.

No work may begin until a fully executed purchase order has been issued to the Contractor selected for award. The selected Contractor will be paid after submitting invoices, provided that these documents are in accordance with the work plan and approved by the Commonwealth Project Manager. Final payment will not be made until all Project work has been successfully completed.

Fully executed purchase orders will incorporate by reference the terms and conditions of **IT ITQ Parent Contract #4400004480** and the succeeding contract number for the contractor selected for award.

- **I-6. Rejection of Proposals.** The Issuing Office reserves the right, in its sole and complete discretion, to reject any proposal received in response to this RFQ, or to negotiate separately with competing Contractors.
- **I-7. Incurring Costs.** The Issuing Office is not liable for any costs the Contractor incurs in preparation and submission of its proposal, in participating in the RFQ process or in anticipation of receipt of the purchase order.
- I-8. Pre-proposal Conference-Mandatory. The Issuing Office will hold a Pre-proposal Conference as specified in the Calendar of Events. The purpose of this conference is to provide opportunity for clarification of the RFQ. Contractors should forward all questions to the Issuing Office in accordance with Part 1, Section I-9 to ensure adequate time for analysis before the Issuing Office provides an answer. Contractors may also ask questions at the conference. Contractors are not limited to the number of individuals for representation at the Pre-proposal Conference. The Pre-proposal Conference is for information only. Any answers furnished during the conference will not be official until they have been verified, in writing, by the Issuing Office. All questions and written answers will be posted on the Department of General Services' (DGS) website as an

addendum to, and shall become part of, this RFQ. Attendance at the Pre-proposal Conference is **mandatory**. Failure to attend the Pre-proposal Conference shall disqualify a Contractor from consideration for selection for this RFQ, and its proposal will be returned unopened.

I-9. Questions & Answers.

If a Contractor has any questions regarding this RFQ, the Contractor must submit the questions by email (with the subject line "RFQ 6100041671 Question") to the Issuing Officer. If the Contractor has questions, they must be submitted via email no later than the date indicated on the Calendar of Events. The Contractor shall not attempt to contact the Issuing Officer by any other means. The Issuing Officer shall post the answers to the DGS website by the date stated on the Calendar of Events. A Contractor who submits a question after the deadline date for receipt of questions indicated on the Calendar of Events assumes the risk that its proposal will not be responsive or competitive because the Commonwealth is not able to respond before the proposal receipt date or in sufficient time for the Contractor to prepare a responsive or competitive proposal. When submitted after the deadline date for receipt of questions indicated on the Calendar of Events, the Issuing Officer may respond to questions of an administrative nature by directing the questioning Contractor to specific provisions in the RFQ. To the extent that the Issuing Office decides to respond to a non-administrative question after the deadline date for receipt of questions indicated on the Calendar of Events, the answer must be provided to all Contractors through an addendum.

All questions and responses as posted on the DGS website are considered as an addendum to, and part of, this RFQ in accordance with RFQ **Part I**, **Section I-10**. Each Contractor shall be responsible to monitor the DGS website for new or revised RFQ information. The Issuing Office shall not be bound by any verbal information nor shall it be bound by any written information that is not either contained within the RFQ or formally issued as an addendum by the Issuing Office. The Issuing Office does not consider questions to be a protest of the specifications or of the solicitation. The required protest process for Commonwealth procurements is as described in **Part I**, **Section I-26**.

- **I-10. Addenda to the RFQ.** If the Issuing Office deems it necessary to revise any part of this RFQ before the proposal response date, the Issuing Office will post an addendum to the DGS website http://www.emarketplace.state.pa.us/. It is the Contractor's responsibility to periodically check the website for any new information or addenda to the RFQ. Answers to the questions asked during the Questions & Answers period also will be posted to the DGS website as an addendum to the RFQ.
- **I-11. Response Date.** To be considered for selections, hard copies of proposals must arrive at the Issuing Office on or before the time and date specified in the RFQ Calendar of Events. The Issuing Office will **not** accept proposals via email or facsimile transmission. Contractors who send proposals by or other delivery services should allow sufficient delivery time to ensure timely receipt of their proposals. If, due to inclement weather, natural disaster, or any other cause, the Commonwealth Issuing office location to which proposals are to be returned is closed on the proposal response date, the deadline for

submission will be automatically extended until the next Commonwealth business day on which the office is open, unless the Issuing Office otherwise notifies Contractors. The hour for submission of proposals shall remain the same. The Issuing Office will reject any opened or late proposals.

I-12. Proposal Requirements.

A. Proposal Submission: To be considered, Contractors should submit a complete proposal to this RFQ to the Issuing Office, using the format provided in Part II, providing twelve (12) paper copies of the Technical Submittal and two (2) paper copies of the Cost Submittal. For each submittal type, (i.e. Technical and Cost), Contractors must submit at least one (1) copy bearing an original ink signature. In addition to the paper copies of the proposal, Contractors shall submit two (2) complete and exact electronic copies of the proposal components on separate flash drives in Microsoft Office or Microsoft Office-compatible format. The electronic copies must be a mirror image of the paper copies and any spreadsheets must be in Microsoft Excel. The Contractors may not lock or protect any cells or tabs. Contractors should ensure that there is no costing information in the Technical Submittal. Contractors should not reiterate technical information in the Cost Submittal. The flash drives should clearly identify the Contractor and include the name and version number of the virus scanning software that was used to scan the flash drives before it was submitted. The Contractor shall make no other distribution of its proposal to any other Contractor or Commonwealth official or Commonwealth consultant. Each proposal page should be numbered for ease of reference. An official authorized to bind the Contractor to its provisions must sign the proposal. If the official signs the Proposal Cover Sheet (Appendix A to this RFQ) and the Proposal Cover Sheet is attached to the Contractor's proposal, the requirement will be met. For this RFQ, the proposal must remain valid for one hundred and twenty (120) days or until a purchase order is fully executed. If the Issuing Office selects the Contractor's proposal, the contents of the selected Contractor's proposal will become, except to the extent the contents are changed through Best and Final Offers or negotiations, contractual obligations.

Each Contractor submitting a proposal specifically waives any right to withdraw or modify it, except that the Contractor may withdraw its proposal by written notice received at the Issuing Office's address for proposal delivery prior to the exact hour and date specified for proposal receipt. A Contractor or its authorized representative may withdraw its proposal in person prior to the exact hour and date set for proposal receipt, provided the withdrawing person provides appropriate identification and signs a receipt for the proposal. A Contractor may modify its submitted proposal prior to the exact hour and date set for proposal receipt only by submitting a new sealed proposal or sealed modification which complies with the RFQ requirements.

B. Proposal Format: Contractors must submit their proposals in the format, including heading descriptions, outlined below. To be considered, the proposal must respond to all requirements in this part of the RFQ. Contractors should provide any other information thought to be relevant, but not applicable to the enumerated categories, as

an appendix to the Proposal. All cost data relating to this proposal should be kept separate from and not included in the Technical Submittal. Each Proposal shall consist of the following **three (3)** separately sealed submittals

- 1. Technical Submittal, which shall be a response to this RFQ in accordance with **Part II**, **Sections II-1** through **II-9**;
- 2. Cost Submittal, in response to RFQ in accordance with **Part IV**.
- 3. SDB/SB Participation Submittal, in response to RFQ **Part V**, which must include the following:
 - i. Appendix II SDB/SB Participation Submittal Form; and
 - ii. Appendix JJ SDB/SB Letter of Intent. Offeror must provide a Letter of Intent for each SDB and SB listed on the SDB/SB Participation Submittal Form.
- **C.** The Issuing Office reserves the right to request additional information which, in the Issuing Office's opinion, is necessary to assure that the Contractor's competence, number of qualified employees, business organization, and financial resources are adequate to perform according to the RFQ.
- **D.** The Issuing Office may make investigations deemed necessary to determine the ability of the Contractor to perform the Project, and the Contractor shall furnish to the Issuing Office all requested information and data. The Issuing Office reserves the right to reject any proposal if the evidence submitted by, or investigation of, such Contractor fails to satisfy the Issuing Office that such Contractor is properly qualified to carry out the obligations of the RFQ and to complete the Project as specified.
- **E.** Within seven (7) days after the selection is published, the apparent successful offeror is required to demonstrate compliance with the Pennsylvania Department of Transportation's Act 89 of 2013 Diverse Business Participation Program. See Part I-29 (2) and Part V-I.
- **I-13. Economy of Preparation.** Contractors should prepare proposals simply and economically, providing a straightforward, concise description of the Contractor's ability to meet the requirements of the RFQ. The Issuing Office does not have a specified page limit for the proposals. Duplex printing is acceptable and suggested.
- **I-14. Alternate Proposals.** The Issuing Office has identified the basic approach to meeting its requirements, allowing Contractors to be creative and propose their best solution to meeting these requirements. The Issuing Office will not accept alternate proposals under any circumstances.

- **I-15. Discussions for Clarification.** Contractors may be required to make an oral or written clarification of their proposals to the Issuing Office to ensure thorough mutual understanding and Contractor responsiveness to the RFQ requirements. The Issuing Office will initiate requests for clarification. Clarifications may occur at any stage of the evaluation and selection process prior to execution of the purchase order.
- **I-16. Oral Presentations.** Contractors may be required to make oral presentations to the Issuing Office. The Issuing Office reserves the right to request oral presentations, establish the agenda for such presentations, and to coordinate such presentations on-site at Commonwealth offices.
- **I-17. Prime Contractor Responsibilities.** The selected Contractor will be required to assume responsibility for all services offered in the proposal whether it produces them itself or by subcontract. The Issuing Office and Project Manager will consider the selected Contractor to be the sole point of contact concerning contractual and purchase order matters.

I-18. Proposal Contents.

- **A.** Confidential Information. The Commonwealth is not requesting, and does not require, confidential proprietary information or trade secrets to be included as part of Contractor submissions in order to evaluate proposals submitted in response to this RFQ. Accordingly, except as provided herein, Contractors should not label proposal submissions as confidential or proprietary or trade secret protected. Any Contractor who determines that it must divulge such information as part of its proposal must submit the signed written statement described in subsection c. below and must additionally provide a redacted version of its proposal, which removes only the confidential proprietary information and trade secrets, for required public disclosure purposes.
- **B.** Commonwealth Use. All material submitted with the proposal shall be considered the property of the Commonwealth of Pennsylvania and may be returned only at the Issuing Office's option. The Commonwealth has the right to use any or all ideas not protected as a trade secret or intellectual property right that are presented in any proposal regardless of whether the proposal becomes part of a contract. Notwithstanding any Contractor copyright designations contained on proposals, the Commonwealth shall have the right to make copies and distribute proposals internally and to comply with public record or other disclosure requirements under the provisions of any Commonwealth or United States statute or regulation, or rule or order of any court of competent jurisdiction.
- C. <u>Public Disclosure</u>. After the issuance of a purchase order pursuant to this RFQ, all proposal submissions are subject to disclosure in response to a request for public records made under the Pennsylvania Right-to-Know-Law, 65 P.S. § 67.101, et seq. If a proposal submission contains confidential proprietary information or trade secrets, a signed written statement to this effect must be provided with the submission in accordance with 65 P.S. § 67.707(b) for the information to be considered exempt under

65 P.S. § 67.708(b)(11) from public records requests. Refer to Appendix D - Trade Secret Confidential Proprietary Information Notice Form that may be utilized as the signed written statement, if applicable. If financial capability information is submitted in response to **Part II** of this RFQ such financial capability information is exempt from public records disclosure under 65 P.S. § 67.708(b)(26).

I-19. Best and Final Offers.

- A. While not required, the Issuing Office reserves the right to conduct discussions with Contractors for purposes of obtaining "Best and Final Offers." To obtain Best and Final Offers from Contractors, the Issuing Office may do one or more of the following, in combination and in any order:
 - 1. Schedule oral presentations;
 - 2. Request revised proposals;
 - 3. Conduct a reverse online auction; and
 - 4. Enter into pre-selection negotiations.
- B. The following Contractors will **not** be invited by the Issuing Office to submit a Best and Final Offer:
 - 1. Those Contractors which the Issuing Office has determined to be not responsible or whose proposals the Issuing Office has determined to be not responsive.
 - 2. Those Contractors, which the Issuing Office has determined in accordance with **Part III, Section III-5**, from the submitted and gathered financial and other information, do not possess the financial capability, experience or qualifications to assure good faith performance of the Project.
 - 3. Those Contractors whose score for their technical submittal of the proposal is less than 75% of the total amount of technical points allotted to the technical criterion.

The Issuing Office may further limit participation in the Best and Final Offers process to those remaining responsible Contractors which the Issuing Office has, within its discretion, determined to be within the top competitive range of responsive proposals.

- C. Evaluation Criteria found in **Part II**, **Section II-4**, shall also be used to evaluate the Best and Final Offers.
- D. Price reductions offered through any reverse online auction shall have no effect upon the Contractor's Technical Submittal.

- E. Any reduction to commitments to Small Diverse Businesses and Small Businesses must be proportional to the reduction in the total price offered through any BAFO process or contract negotiations unless approved by BDISBO.
- **I-20. News Releases.** Contractors shall not issue news releases, internet postings, advertisements or any other public communications pertaining to this Project without prior written approval of the Issuing Office, and then only in coordination with the Issuing Office.
- **I-21. Restriction of Contact.** From the issue date of this RFQ until the Issuing Office selects a proposal, the Issuing Officer is the sole point of contact concerning this RFQ. Any violation of this condition may be cause for the Issuing Office to reject the offending Contractor's proposal. If the Issuing Office later discovers that the Contractor has engaged in any violations of this condition, the Issuing Office may reject the offending Contractor's proposal or rescind its purchase order. Contractors must agree not to distribute any part of their proposals beyond the Issuing Office. A Contractor who shares information contained in its proposal with other Commonwealth personnel and/or competing Contractor personnel may be disqualified.
- **I-22. Issuing Office Participation.** Contractors shall provide all services, supplies, facilities, and other support necessary to complete the identified work, except as otherwise provided in this **Section I-22**. Workspace for all key Contractor resources as identified in Appendix O Contractor Roles, Responsibilities and Minimum Qualifications will be provided, including personal computers (PCs), telephones, and any software listed in Appendix G PennDOT Enterprise IT Standards of this RFQ. PennDOT will also provide off-site access to approved Contractor personnel for access to Commonwealth systems as required.

Working hours for the MVDLS Project will accommodate the following: The normal office hours for PennDOT are Monday – Friday, 8:00AM – 4:30PM, however, PennDOT has some areas that begin work as early as 6:00AM.

PennDOT will commit the resources for the effort identified in Appendix P – PennDOT Resource Commitment. PennDOT reserves the right to replace named resources during the project.

To support PennDOT's iterative development approach, PennDOT believes that face-to-face collaboration between Contractor team resources and PennDOT team resources will facilitate project success. To accommodate this, Contractors must identify work locations, which should be within fifty (50) miles of the Pennsylvania State Capitol Building in Harrisburg, or explain how alternate work locations will meet PennDOT's face-to-face collaboration goal. On-site work may be located at Commonwealth of Pennsylvania office locations throughout Dauphin County, including the Commonwealth Keystone Building, the Riverfront Office Center, the PennDOT Server Farm and the Commonwealth Technology Center (CTC). Contractors may propose off-site locations, including reasons for location selection and costs.

- **I-23. Contractor's Representations and Authorizations.** By submitting its proposal, each Contractor understands, represents, and acknowledges that:
 - A. All of the Contractor's information and representations in the proposal are material and important, and the Issuing Office may rely upon the contents of the proposal in making a selection. The Commonwealth shall treat any misstatement, omission or misrepresentation as fraudulent concealment of the true facts relating to the proposal submission, punishable pursuant to 18 Pa. C.S. § 4904.
 - **B.** The Contractor has arrived at the price(s) and amounts in its proposal independently and without consultation, communication, or agreement with any other Contractor or potential Contractor.
 - C. The Contractor has not disclosed the price(s), the amount of the proposal, nor the approximate price(s) or amount(s) of its proposal to any other firm or person who is a Contractor or potential Contractor for this RFQ, and the Contractor shall not disclose any of these items on or before the proposal submission deadline specified in the Calendar of Events of this RFQ.
 - **D.** The Contractor has not attempted, nor will it attempt, to induce any firm or person to refrain from submitting a proposal on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal or other form of complementary proposal.
 - **E.** The Contractor makes its proposal in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive proposal.
 - F. To the best knowledge of the person signing the proposal for the Contractor, the Contractor, its affiliates, subsidiaries, officers, directors, and employees are not currently under investigation by any governmental agency and have not in the last four (4) years been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding or proposing on any public contract, except as the Contractor has disclosed in its proposal.
 - G. To the best of the knowledge of the person signing the proposal for the Contractor and except as the Contractor has otherwise disclosed in its proposal, the Contractor has no outstanding, delinquent obligations to the Commonwealth including, but not limited to, any state tax liability not being contested on appeal or other obligation of the Contractor that is owed to the Commonwealth.
 - **H.** The Contractor is not currently under suspension or debarment by the Commonwealth, any other state or the federal government, and if the Contractor cannot so certify, then it shall submit along with its proposal a written explanation of why it cannot make such certification.

- I. The Contractor has not made, under separate contract with the Issuing Office, any recommendations to the Issuing Office concerning the need for the services described in its proposal or the specifications for the services described in the proposal.
- J. Each Contractor, by submitting its proposal, authorizes Commonwealth agencies to release to the Commonwealth information concerning the Contractor's Pennsylvania taxes, unemployment compensation and workers' compensation liabilities.
- **K.** Until the selected Contractor receives a fully executed purchase order from the Issuing Office, there is no legal and valid contract, in law or in equity, and the Contractor shall not begin to perform work, for the Project.

I-24. Notification of Selection.

- A. **Negotiations**. The Issuing Office will notify the selected Contractor in writing of its selection after the Issuing Office has determined, taking into consideration all of the evaluation factors, the proposal that is the most advantageous to the Issuing Office.
- B. **Award.** Contractors whose proposals are not selected will be notified when contract negotiations have been successfully completed and the final negotiated purchase order has been sent to the selected Contractor.
- **I-25. Debriefing Conferences.** Upon notification of award, Contractors whose proposals are not selected will be given the opportunity to be debriefed. The Issuing Office will schedule the debriefing at a mutually agreeable time. The debriefing will not compare the Contractor with other Contractors, other than the position of the Contractor's proposal in relation to all other Contractor proposals.
- **I-27. Use of Electronic Versions of this RFQ.** This RFQ is being made available by electronic means. The Contractor acknowledges and accepts full responsibility to ensure that no changes are made to the RFQ. In the event of a conflict between a version of the RFQ in

the Contractor's possession and the Issuing Office's version of the RFQ, the Issuing Office's version shall govern.

I-28. Information Technology Policies. This RFQ is subject to the Information Technology Policies (ITP's) {formerly known as Information Technology Bulletins} issued by the Office of Administration, Office for Information Technology (OA-OIT). ITP's may be found at http://www.oa.pa.gov/Policies/Pages/itp.aspx

All proposals must be submitted on the basis that all ITPs are applicable to this procurement. It is the responsibility of the Contractor to read and become familiar with the ITP's. Notwithstanding the foregoing, if the Contractor believes that any ITP is not applicable to this procurement, it must list all such ITPs in its technical response, and explain why it believes the ITP is not applicable. The Issuing Office may, in its sole discretion, accept or reject any request that an ITP not be considered to be applicable to the procurement. The Contractor's failure to list an ITP will result in its waiving its right to do so later, unless the Issuing Office, in its sole discretion, determines that it would be in the best interest of the Commonwealth to waive the pertinent ITPs.

- **I-29. Diverse Businesses, Small Diverse Businesses, and Small Businesses Participation Program**. In an effort to maximize participation by Diverse Businesses, Small Diverse Businesses, and Small Businesses in this RFQ, both of the following programs will be utilized as part of this procurement, the first as part of selection and the second with documentation after selection:
 - 1) The Commonwealth's Small Diverse Business and Small Business Program This program administered by the Pennsylvania Department of General Services' (DGS), Bureau of Diversity, Inclusion and Small Business Opportunities (BDISBO) (SDB/SB participation program) encourages the use of Small Diverse Businesses and Small Businesses as outlined in Section V-11 of this RFQ. The program includes commitments to utilization of SDBs or SBs as an evaluation factor, and these commitments which are credited by BDISBO during the RFQ evaluation process become contractual obligations of the selected Offeror, and;
 - 2) The Pennsylvania Department of Transportation's Act 89 of 2013 Diverse Business Participation Program. This program, established under Section 303 of Title 74 of the Pennsylvania Consolidated Statutes, 74 Pa.C.S. § 303 (Act 89 DB Participation Program), requires offerors to make good faith efforts to utilize Diverse Businesses. Documentation of good faith efforts to solicit subcontractors that are diverse businesses (DBs) as required by Act 89 shall be made by the apparent selected Offeror and be subject to review and approval of the Department. A list of the requirements constituting good faith efforts and additional information concerning DB participation in this contract is contained in Appendix W Diverse Business Participation for Non-Federally Funded Projects.

PART II

CRITERIA FOR SELECTION

- **II-1. Mandatory Responsiveness Requirements.** To be eligible for selection, a proposal must:
 - A. Be timely received from a Contractor (see Part I, Section I-11); and
 - **B.** Be properly signed by the Contractor (see Part I, Section I-12A).
- **II-2. Technical Nonconforming Proposals.** The two (2) Mandatory Responsiveness Requirements set forth in **Section II-1** above (A-B) are the only RFQ requirements that the Commonwealth will consider to be *non-waivable*. The Issuing Office reserves the right, in its sole discretion, to (1) waive any other technical or immaterial nonconformities in a Contractor's proposal, (2) allow the Contractor to cure the nonconformity, or (3) consider the nonconformity in the scoring of the Contractor's proposal.
- **II-3. Evaluation.** The Issuing Office has selected a committee of qualified personnel to review and evaluate timely submitted proposals. The Issuing Office will notify in writing of its selection for negotiation the responsible Contractor whose proposal is determined to be the most advantageous to the Commonwealth as determined by the Issuing Office after taking into consideration all of the evaluation factors.
- **II-4.** Evaluation Criteria. The following criteria will be used in evaluating each proposal:
 - **A. Technical:** The Issuing Office has established the weight for the Technical criterion for this RFQ as **50**% of the total points. Evaluation will be based upon the following in order of importance:
 - 1. Soundness of Approach Emphasis here is on the techniques for understanding requirements, designing and developing the MVDLS in an iterative approach that meets the business needs of PennDOT, evaluating and migrating data, sequence and relationship of major steps, and methods for managing the project.
 - 2. Personnel Qualifications This refers to the competence of professional personnel who would be assigned to the project by the Contractor. Qualifications of professional personnel will be measured by experience and education, with particular reference to experience on services similar to that described in the RFQ, as outlined in Appendix O Contractor Roles, Responsibilities and Minimum Qualifications. Particular emphasis is placed on the qualifications of the Contractor's Key Personnel.
 - **3.** Contractor Qualifications This refers to the ability of the Contractor to meet the terms of the RFQ, especially the time constraints and quality,

relevancy, and recency of projects of similar scope and size completed by the Contractor. This also includes the Contractor's financial ability to undertake a project of this size.

4. Understanding the Problem – This refers to the Contractor's understanding of PennDOT's needs that generated the RFQ, of PennDOT's objectives in asking for the services, and the nature and scope of the work involved.

The final Technical scores are determined by giving the maximum number of technical points available to the proposal with the highest raw technical score. The remaining proposals are rated by applying the Technical Scoring Formula set forth at the following webpage:

http://www.dgs.pa.gov/Businesses/Materials%20and%20Services%20Procurement/Procurement-Resources/Pages/default.aspx.

- **B.** Cost: The Issuing Office has established the weight for the Cost criterion for this RFQ as 30% of the total points. The cost criterion is rated by giving the proposal with the lowest total cost the maximum number of Cost points available. The remaining proposals are rated by applying the Cost Formula set forth at the following webpage: http://www.dgs.pa.gov/Businesses/Materials%20and%20Services%20Procurement/Procurement-Resources/Pages/default.aspx.
- **C.** Small Diverse Business and Small Business Participation: BDISBO has established the minimum evaluation weight for the Small Diverse Business and Small Business Participation criterion for this RFQ as **20%** of the total points.
 - 1. The Small Diverse and Small Business point allocation is based entirely on the percentage of the contract cost committed to Small Diverse Business and Small Business participation. If the proposer is a Small Diverse Business, 100% of the contract cost is allocated to Small Diverse Business participation. If the proposer is a Small Business, 100% of the contract cost is allocated to Small Business participation.
 - 2. A total combined SDB/SB commitment less than one percent (1%) of the total contract cost is considered de minimis and will receive no Small Diverse Business or Small Business points.
 - **3.** Based on a maximum total of 200 available points for the Small Diverse Business and Small Business Participation Submittal, the scoring mechanism is as follows:

Small Diverse Business and Small Business Raw Score =

200 (SDB% + (1/3 * SB %))

- **4.** The Small Diverse Business and Small Business Raw Score is capped at 200.
- 5. The Offeror with the highest raw score will receive 200 points. Each Offeror's raw score will be pro-rated against the Highest Offeror's raw score by applying the formula set forth on the following webpage: http://www.dgs.pa.gov/Businesses/Materials%20and%20Services%20Procurement/Procurement-Resources/Pages/RFP_SCORING_FORMULA.aspx.
- 6. The Offeror's prior performance in meeting its contractual obligations to Small Diverse Businesses and Small Businesses will be considered by BDISBO during the scoring process. To the extent the Offeror has failed to meet prior contractual commitments, BDISBO may recommend to the Issuing Office that the Offeror be determined non-responsible for the limited purpose of eligibility to receive Small Diverse Business and Small Business points.
- **D. Domestic Workforce Utilization:** Any points received for the Domestic Workforce Utilization criterion are bonus points in addition to the total points for this RFQ. The maximum amount of bonus points available for this criterion is three percent (3%) of the total points for this RFQ.

To the extent permitted by the laws and treaties of the United States, each proposal will be scored for its commitment to use domestic workforce in the fulfillment of the contract. Maximum consideration will be given to those Contractors who will perform the contracted direct labor exclusively within the geographical boundaries of the United States or within the geographical boundaries of a country that is a party to the World Trade Organization Government Procurement Agreement. Those who propose to perform a portion of the direct labor outside of the United States and not within the geographical boundaries of a party to the World Trade Organization Government Procurement Agreement will receive a correspondingly smaller score for this criterion. See the following webpage for the Domestic Workforce Utilization Formula:

http://www.dgs.pa.gov/Businesses/Materials%20and%20Services%20Procurement/Procurement-Resources/Pages/default.aspx.

Contractors who seek consideration for this criterion must submit in hardcopy the signed Domestic Workforce Utilization Certification Form in the same sealed envelope with the Technical Submittal. The certification will be included as a contractual obligation when the Purchase Order is executed.

E. Iran Free Procurement Certification and Disclosure. Prior to entering a contract worth at least \$1,000,000 or more with a Commonwealth entity, a Contractor must: a) certify it is not on the current list of persons engaged in investment activities in Iran created by the Pennsylvania Department of General Services ("DGS") pursuant to Section 3503 of the Procurement Code and is eligible to contract with the Commonwealth under Sections 3501-3506 of the Procurement Code; or b) demonstrate it has received an exception from the certification requirement for that solicitation or

contract pursuant to Section 3503(e). All Contractors must complete and return the Iran Free Procurement Certification form, (Appendix C, Iran Free Procurement Certification), which is attached hereto and made part of this RFQ. The completed and signed Iran Free Procurement Certification form must be submitted as part of the Technical Submittal.

See the following web page for current Iran Free Procurement list:

 $\frac{http://www.dgs.pa.gov/businesses/materials\%20 and \%20 services\%20 procurement/procurement-resources/pages/default.aspx\#.$

II-5. Contractor Responsibility. To be responsible, a Contractor must submit a responsive proposal and possess the capability to fully perform the contract requirements in all respects and the integrity and reliability to assure good faith performance of the contract.

In order for a Contractor to be considered responsible for this RFQ and therefore eligible for selection for best and final offers or selection for contract negotiations the Contractor's submission must meet the following requirements:

- **A.** The total score for the technical submittal of the Contractor's proposal must be greater than or equal to seventy percent (75%) of the **available technical points**; and
- **B.** The Contractor's financial information must demonstrate that the Contractor possesses the financial capability to assure good faith performance of the project. The Issuing Office will review the Contractor's previous three (3) financial statements, any additional information received from the Contractor, and any other publicly-available financial information concerning the Contractor, and assess each Contractor's financial capacity based on calculating and analyzing various financial ratios, and comparison with industry standards and trends.

A Contractor that fails to demonstrate sufficient financial capability to assure good faith performance of the project as specified herein may be considered by the Issuing Office, in its sole discretion, for Best and Final Offers or project negotiation contingent upon such Contractor providing project performance security for the first project year cost proposed by the Contractor in a form acceptable to the Issuing Office. Based on the financial condition of the Contractor, the Issuing Office may require a certified or bank (cashier's) check, letter of credit, or a performance bond conditioned upon the faithful performance of the project by the Contractor. The required performance security must be issued or executed by a bank or surety company authorized to conduct business in the Commonwealth. The cost of the required performance security will be the sole responsibility of the Contractor and shall not increase the Contractor's cost proposal or the project cost to the Commonwealth.

Further, the Issuing Office shall award a project only to a Contractor determined to be responsible in accordance with the most current version of Commonwealth Management Directive 215.9, Contractor Responsibility Program.

II-6. Final Ranking and Award.

- **A.** After any best and final offer process is conducted, the Issuing Office will combine the evaluation committee's final technical scores, and the final cost scores, and (when applicable) the domestic workforce utilization scores, in accordance with the relative weights assigned to these areas as set forth in this Part.
- **B.** The Issuing Office will rank responsible contractors according to the total overall score assigned to each, in descending order.
- **C.** The Issuing Office must select for contract negotiations the contractor with the highest overall score.
- **D.** The Issuing Office has the discretion to reject all proposals or cancel the request for proposals, at any time prior to the time a contract is fully executed, when it is in the best interests of the Commonwealth. The reasons for the rejection or cancellation shall be made part of the contract file.

PART III

TECHNICAL SUBMITTAL

III-1. Requirements.

A. Custom Solution

PennDOT believes that the business needs for a project of the scope and complexity of MVDLS cannot be met with a COTS solution. The proposed solution must be custom-developed to meet the specific business needs of PennDOT, enabling PennDOT to enhance and maintain the system after the engagement. Contractors are free to propose COTS products to provide some business-facing vertical or cross-cutting functionality as part of the larger MVDLS solution. In their proposals, Contractors must indicate any COTS products being proposed and provide an explanation of how the COTS products will be utilized and best meet PennDOT's needs. When considering the use of COTS products, Contractors shall keep in mind the Technical Architecture Guidelines pertaining to COTS in the PennDOT Enterprise IT Standards in Appendix G.

B. Functional Equivalence

At a minimum, the MVDLS Solution shall provide functional equivalence (all of the functionality currently leveraged by PennDOT in existing legacy systems).

C. Alignment with PennDOT Enterprise IT Standards

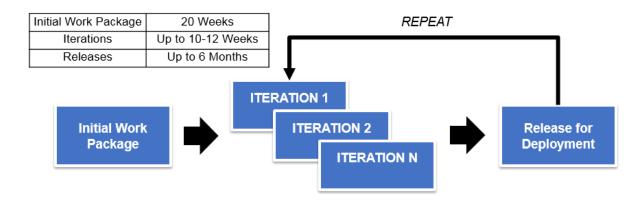
As with any IT solution that is developed by or for PennDOT, the solution shall align with PennDOT's Enterprise IT Standards included in Appendix G to the greatest extent practicable. Contractors are free to propose solutions that will best meet PennDOT's needs, as defined in the Blueprint diagram and Appendix F – Blueprint Report, even if those solutions do not completely align with the PennDOT Enterprise IT Standards. In their proposals, Contractors shall identify all required software and hardware via Appendix AA –Technology List, indicate any areas of non-alignment with PennDOT's Enterprise IT Standards and explain how the non-aligning elements will better meet PennDOT's needs. PennDOT shall review all items that do not align with PennDOT Enterprise IT Standards and decide on a case by case basis on whether they will meet PennDOT's needs. PennDOT maintains responsibility for all software, hardware and infrastructure purchases. For this solution, the following additional requirements are identified to augment, amend, emphasize or provide additional clarity to PennDOT's Enterprise IT Standards:

- 1. The solution shall be hosted on-premises at PennDOT and/or Commonwealth hosting facilities, and/or via a third-party cloud hosting service provider (in the case of a third-party cloud hosting service provider, PennDOT reserves the right to evaluate, validate and approve).
- 2. Custom-coded elements of the solution shall be developed primarily in Java EE or Microsoft C#.NET.
- 3. The solution may optionally use PennDOT's Java EE application framework (PDJF).

- 4. The solution shall store structured data in either Oracle or Microsoft SQL Server relational database management systems.
- 5. The solution shall leverage PennDOT's Electronic Document Management System (EDMS) and/or the newer Enterprise Content Services (ECS) and related services to provide all content management functionality. All system-related photos, document images and signatures will continue to reside in EDMS or ECS, and the Contractor solution must integrate with EDMS or ECS as necessary to access this content.
- 6. The solution shall leverage the PennDOT Data Integration Facility (PDIF) Data Warehouse and related services to provide data warehouse and data integration functionality.
- 7. The solution shall use Progress Software Corticon as the business Rules Engine.
- 8. The solution shall use PennDOT Enterprise Application Security Solution (ESEC) to provide Identity and Access Management services.
- 9. The solution shall incorporate a Service Oriented Architecture (SOA) and Application Programming Interfaces (API's) to promote standards-based and flexible integration between vertical components and horizontal layers of the solution and with other PennDOT systems.
- 10. The selected Contractor shall utilize the PennDOT-specified ITSM tool for Incident and Problem Management, Environment Change Management, and IT Asset Management.
- 11. PennDOT maintains the responsibility of ensuring that PennDOT staff have appropriate baseline knowledge for all denoted Enterprise IT Standard Technologies.

D. Project Phasing and Release Approach

The MVDLS Project shall be executed in an iterative fashion as described below. General requirements are included under the diagram. The selected Contractor shall complete an Initial Work Package within twenty (20) weeks of the start of the project. Efforts and deliverables are described in task descriptions in the Project Delivery section. Tasks and deliverables may be consolidated and executed in parallel during iterations based on agreed-upon Work Order definition. Timeline and delivery prioritization is included in Appendix T – Project Timeline and Phases:



E. General Requirements for all Releases

- 1. The selected Contractor shall provide all the required management and oversight of project work, tasks and deliverables to execute the agreed-upon schedule and produce quality deliverables that meet the agreed-upon Deliverable Acceptance criteria.
- 2. An Iteration shall be completed within a timeframe of up to ten to twelve (10-12) weeks (and no longer) and delivered to the PennDOT environment. Each Iteration shall undergo a two (2) week testing period. In addition, each Iteration shall have a user walkthrough after the Iteration timeframe which may overlap with the start of the next Iteration. Detailed Iteration and Release timing shall be defined in the Initial Work Package, and parallel Iterations and Releases are anticipated. Work Orders shall define the scope of each Iteration, including prioritization and re-prioritization of requirements.
- 3. Tasks and deliverables may be consolidated during Iterations based on agreed-upon Work Order definition.
- 4. The selected Contractor shall deliver the Iteration a minimum of ten (10) business days prior to the end of the iteration for testing and other readiness activities.
- 5. The selected Contractor shall prepare for deployment a Release within a timeframe of up to six (6) months each, starting after the Initial Work Package. Each Release shall be comprised of several Iteration outputs. Technologies needed to support the functions in the Release shall be deployable with that Release. Code Migration shall be release-based and propagate through the following sequential environments: Development, System Test, User Acceptance Test and Production (DEV, SYST, UAT, PROD, respectively). PennDOT reserves the right to add other dedicated environments as needed (e.g., Training, Sandbox, etc.) In some cases, PennDOT may seek to manage operational impact of a Release. In those cases, Contractor will propagate the Release through all sequential environments, working with PennDOT to define timing and activities for final propagation to the Production environment.
- 6. Each Release shall have a detailed, documented Release Plan based on the Release Plan defined during the Initial Work Package.
- 7. At the beginning of each phase of effort (Initial Work Plan, Foundation Subsystems, Iterations and Releases), PennDOT and the selected Contractor shall review and jointly define the scope, plan, technology, deliverables, schedule, work breakdown structure, deliverable acceptance criteria and payment schedule for that specific phase.
- 8. Contractors shall propose using the phases presented in Appendix T Project Timeline and Phases; however, Contractors may present additional alternate approach(es) that include detailed justifications and explanations.
- 9. Detailed requirements for Iterations and Releases are presented in the Task Section.
- 10. The selected Contractor shall ensure that the Release Strategy, Releases and Release Cycles align with the following:

- a. PennDOT release constraints including but not limited to release blackout periods (e.g., heavy Renewals cycles).
- b. PennDOT standards, integration strategy and design principles to ensure that the following minimum PennDOT goals are met:

Self-contained functionality.

Limited number of interfaces to start.

- 11. The selected Contractor shall ensure that the Release Strategy demonstrates the following:
 - a. An understanding of component dependencies for each release.
 - b. A strategy for system integration with applicable systems for each defined transition.
- 12. The selected Contractor shall replace CARATS within the initial, base contract thirty-six (36) month term.
- 13. The selected Contractor shall also complete To-Be Requirements for Financial Responsibility within the base thirty-six (36) month contract timeframe.
- 14. PennDOT may accelerate or add work within the base contract thirty-six (36) month timeframe upon mutual agreement.
- 15. PennDOT may engage an independent third party for validation and verification of the MVDLS Project. The selected Contractor shall work with any such assigned third party to enable thorough analysis.

F. Infrastructure and Operations Requirements

PennDOT will provide all infrastructure installation, configuration and administration. The selected Contractor shall complete the Application Profile Questionnaire (APQ) request to document configuration and parameters and shall verify the settings once PennDOT reviews the request. The selected Contractor shall determine the proper configurations and parameters needed for all infrastructure components to meet the performance and sizing required for their proposed solution.

In the event that system(s) need to be recovered, the selected Contractor shall support application recovery as necessary and as directed by PennDOT.

The selected Contractor shall define the environments necessary to deliver the solution and deliverables per the schedule and release plans. The selected Contractor shall define a minimum of four (4) types of environments and the number of each type of environment needed to meet the solution, schedule and release plans:

- 1. Development Environment(s)
- 2. Integration/System Test Environment(s)
- 3. UAT/Training Environment(s)
- 4. Production Environment(s)

PennDOT reserves the right to add other dedicated environments as needed (e.g., Training, Sandbox, etc.)

G. PennDOT IT Environment Policies, Procedures, and Standards.

Prior to and during the execution of any design, development, deployment or implementation tasks involving PennDOT's existing system environments, the selected Contractor's team must understand PennDOT processes and cooperate with PennDOT teams to ensure smooth deployment as outlined in, but not limited to Appendix X – Change Management Process Document.

H. Information Technology Policies

This RFQ is subject to the Information Technology Policies (ITPs) {formerly known as Information Technology Bulletins} issued by the Office of Administration, Office for Information Technology (OA-OIT). ITP's may be found at http://www.oa.pa.gov/Policies/Pages/itp.aspx.

All proposals must be submitted on the basis that all ITPs are applicable to this procurement. It is the responsibility of Contractors to read and be familiar with the ITPs. Notwithstanding the foregoing, if a Contractor believes that any ITP is not applicable to this procurement, it must list all such ITP's in its technical response, and explain why it believes the ITP is not applicable. The Issuing Office may, in its sole discretion, accept or reject any request that an ITP not be considered to be applicable to the procurement. Contractor's failure to list an ITP shall result in its waiving its right to do so later, unless the Issuing Office, in its sole discretion, determines that it would be in the best interest of the Commonwealth to waive the pertinent ITPs.

I. Solution Scalability

The solution shall be scalable to accommodate increasing demand. Initially, the system shall have sufficient capacity to accommodate PennDOT data and to process PennDOT transactions as outlined in Appendix DD – Motor Vehicle Transaction Volume Estimates by User Group. Future scalability shall accommodate expected and reasonable user population growth, increasing numbers of transactions, increased throughout, and potential increase in geographic distribution.

PennDOT maintains ten (10) MB circuits at each field location.

J. Industry Best Practices

The Contractor shall utilize industry best practices for software development and delivery. Recognized industry best practices shall be identified and incorporated into all areas of the Software Development Lifecycle ("SDLC), including but not limited to: Software Configuration Management, Continuous Delivery, DevOps, Requirements Management, Backlog Management, Release Management, Quality Assurance, Defect Management, Performance Testing, Deployment and Implementation Planning.

Contractor Response

K. Emergency Preparedness.

Describe your emergency response "Continuity of Operations Plan". Attach a copy of your plan, or at a minimum, summarize how your plan addresses the following aspects of pandemic preparedness:

- 1. Employee training (describe your organization's training plan, and how frequently your plan will be shared with employees).
- 2. Identified essential business functions and key employees (within your organization) necessary to carry them out.
- 3. Contingency plans for:
 - a. How your organization will handle staffing issues when a portion of key employees are incapacitated due to illness.
 - b. How your employees will carry out the essential functions if contagion control measures prevent them from coming to the primary workplace.
- 4. How your organization will communicate with staff and suppliers when primary communications systems are overloaded or otherwise fail, including, but is not limited to, key contacts, chain of communications (including suppliers).
- 5. How and when your emergency plan will be tested, and if the plan will be tested by a third-party.

Contractor Response

III-2. Statement of the Project. State in succinct terms your understanding of the problem presented or the service required by this RFQ.

Contractor Response

III-3. Qualifications.

A. Company Overview.

Contractor Response

- B. **Prior Experience.** Include experience in the following:
 - 1. Demonstrated experience in legacy system modernization developing, implementing, and supporting two (2) or more systems of similar size, complexity, and scope, one of which is within the last five (5) years. This experience is mandatory.

a. Contractors must describe how demonstrated experience is of similar size, complexity, and scope.

Experience shown should be work done by your company. Studies or projects referred to must be identified and the name of the customer shown, including the name, address, and telephone number of the appropriate official of the customer, company, or agency who may be contacted.

Contractor Response

C. **Personnel.** Appendix O – Contractor Roles, Responsibilities and Minimum Qualifications contains key team members, roles, responsibilities and qualifications. Using Appendix O, describe your proposed project team and all those who will be engaged in the work. Show where these personnel will be physically located during the time they are engaged in the Project. Include each employee's name and, through a resume or similar document, the employee's education and experience as required in Appendix O. Indicate the responsibilities each individual will have in this Project and how long each has been with your company. Identify by name, any subcontractors you intend to use and the services they will perform.

Resumes should not include personal information that will, or will be likely to, require redaction prior to release of the proposal under the Right-to-Know Law. This includes, but is not limited to, home addresses and phone numbers, Social Security Numbers, Driver License numbers or numbers from state ID cards issued in lieu of a Driver's License, financial account numbers. If the Commonwealth requires any of this information for security verification or other purposes, the information will be requested separately and as necessary.

Provide a separate project organizational chart depicting all Key Personnel, including team leads, management personnel and numbers of proposed staff that will be required to implement your proposed approach. Provide resumes for all Key Personnel. Describe key roles and responsibilities for all Key Personnel and for lead or management personnel for essential functions. Key Personnel positions shall remain identified as such until written approval from the PennDOT MVDLS Program Manager provides approval to alter.

The selected Contractor will staff the project with individuals who possess a significant depth of experience within their functional area of expertise and who have worked on projects of similar size and scope as PennDOT's MVDLS implementation. Proposed personnel should have experience in MVDLS technical areas and/or project management areas to which they are assigned.

Additionally, the selected Contractor must submit a Letter of Commitment for all Key Personnel signed by the individual stating his/her intention to work on the MVDLS Project (if the contract is awarded to the Contractor). The selected

Contractor shall define its proposed project organization in standard organization chart format showing, at a minimum, Key Management and lead positions.

PennDOT seeks to reduce the impact of key personnel turnover during the MVDLS Project. To this end, Contractors shall not make changes to Key Personnel without receiving express written approval from PennDOT's MVDLS Program Manager. Staffing changes will come under the heading of a "substitution" or a "replacement". A "substitution" is defined as an individual temporarily filling-in for a permanent resource. A "replacement" is defined as an individual permanently replacing an already assigned resource. The Contractor must provide resumes for alternate resources that conform to Appendix O - Contractor Roles, Responsibilities and Minimum Qualifications and receive PennDOT's express written approval prior to substitution or replacement. Any substitute or replacement staff for Key Personnel positions must have qualified background and qualified experience. PennDOT reserves the right to evaluate and accept or deny potential replacements of key personnel prior to their being assigned to the MVDLS project. To the fullest extent possible, the replacement of Key Personnel shall be limited to personnel performance issues or circumstances beyond the Contractor's control including but not limited to death, long-term sickness, subcontract default or retirement. Any substitutions or replacements of Key Personnel for either Contractor or Subcontractor must be submitted to the Commonwealth MVDLS Program Manager for approval ten (10) business days prior to new Key Personnel joining the MVDLS project.

Substitutions of Key Personnel for either Contractor or Subcontractor must be submitted immediately to the Commonwealth MVDLS Program Manager for approval when the Key Personnel position is suddenly vacated. All Key Personnel positions that are suddenly vacated must be filled with a substitute **immediately**. All Key Personnel positions are required to be filled with a replacement within eight (8) weeks.

Contractor will conduct knowledge transfer sessions to bring replacement personnel up to speed. PennDOT reserves the right to jointly define knowledge transfer sessions and topics and conduct evaluation of the fitness of replacement personnel after knowledge transfer sessions. PennDOT reserves the right to accept or deny Contractor-presented replacements for key personnel.

D. **Subcontractors:** Provide a subcontracting plan for all subcontractors, who will be assigned to the Project. The selected Contractor is prohibited from subcontracting or outsourcing any part of this Project without the express written approval from the Commonwealth. Upon award of the contract resulting from this RFQ, subcontractors included in the proposal submission are deemed approved. For each position included in your subcontracting plan provide:

1. Name of subcontractor;

- 2. Address of subcontractor;
- **3.** Number of years worked with the subcontractor;
- **4.** Number of employees by job category to work on this project;
- **5.** Description of services to be performed;
- **6.** What percentage of time the staff will be dedicated to this project;
- 7. Geographical location of staff; and
- **8.** Resumes (if appropriate and available).

The Contractor's subcontractor information shall include (through a resume or a similar document) the employees' names, education and experience in the services outlined in this RFQ. Information provided shall also indicate the responsibilities each individual will have in this Project and how long each has been with subcontractor's company.

Contractor Response

III-4. Training. Indicate recommended training of agency personnel and business partners. Include the personnel to be trained, the number to be trained, duration of the program, place of training, curricula, training materials to be used, number and frequency of sessions, and number and level of instructors.

Contractor Response

III-5. Financial Capability. Describe your company's financial stability and economic capability to perform the Project requirements. Provide your company's financial statements (audited, if available) for the past three fiscal years. Financial statements must include the company's Balance Sheet and Income Statement or Profit/Loss Statements. Also include a Dun & Bradstreet comprehensive report, if available. If your company is a publicly traded company, please provide a link to your financial records on your company website in lieu of providing hardcopies. The Commonwealth reserves the right to request additional information it deems necessary to evaluate a Contractor's financial capability.

Contractor Response

III-6. Work Plan. Describe in narrative form your technical plan for accomplishing the work. Use the task descriptions in Part IV as well as the information provided in Appendix T – Project Timeline and Phases of this RFQ as your reference point.

- A. Contractors must propose an approach that conforms to the prioritization and deadlines of phases for the base contract period of thirty-six (36) months as shown in Appendix T Project Timeline and Phases.
- B. Contractors may propose an alternative approach in addition to the approach conforming to Appendix T Project Timeline and Phases, and must include explanations regarding why the alternative approach is preferred by the Contractor and why it would provide increased value to PennDOT.
- C. Contractor's proposal must respond to task descriptions as defined in Part III of this RFQ.
- D. Alternative modifications of the task descriptions are permitted; however, reasons for changes should be fully explained, including why the task is preferred by the Contractor and why it would provide increased value to PennDOT.
- E. Indicate the number of person hours allocated to each task for the base contract period of thirty-six (36) months.
- F. Indicate the number of total hours allocated by task for each phase for the base contract period of thirty-six (36) months outlined in Appendix T Project Timeline and Phases.
- G. Indicate the number of key resources assigned to each task for each phase for the base contract period of thirty-six (36) months outlined in Appendix T Project Timeline and Phases.
- H. Include a Program Evaluation and Review Technique (PERT) or similar type display, time related, showing each event for the base contract period of thirty-six (36) months.
- I. Document all assumptions made in the development of your proposal.
- J. PennDOT reserves the right to accelerate or add work within the initial contract period of thirty-six (36) months upon mutual agreement with selected Contractor.

Contractor Response

Introduction

This section of the Statement of Work describes the tasks and deliverables that the selected Contractor shall complete. Tasks identify required elements of the (SDLC) that will be utilized within multiple iterations across the multiple releases to deliver the full functionality in scope for this project. Tasks can be combined and executed in parallel, as needed, to align with the Contractor proposed iterative approach.

All tasks are components of the Initial Work Package, Foundation Subsystems, Iterations and Releases of the MVDLS Solution. The list below identifies the tasks that contain deliverables for this project:

- Task A: Project Management
- Task B: Requirements Validation
- Task C: Process Definition
- Task D: Detailed Design
- Task E: Solution Installation, Configuration & Development
- Task F: Data Migration
- Task G: Testing Validation
- Task H: Release Planning
- Task I: Training
- Task J: Implementation & Rollout
- Task K: Capacity, Disaster Recovery & Business Continuity Plans
- Task L: Maintenance, Support & Warranty
- Task M: Transition & Phase Close-Out
- Task N: Additional Work

Task A: Project Management

In performing the project management work, the selected Contractor shall follow the project management standards, policies, processes and approaches documented in the PennDOT IT Project Management Handbook and other related project management documents described in Appendix H. The selected Contractor shall use the agreed-upon Project Management plans, processes and templates to manage the project work and deliverables creation.

The selected Contractor shall update the work plan as changes occur to the Project Work Plan activities to reflect project progress, to manage schedule and resource variances, and to take appropriate corrective action. Tasks, sub-tasks, activities or sub-activities should be measured in person-hours of effort and shall be tracked through the PennDOT standard scheduling tool. Schedule updates shall include reviews of internal schedules and other inter-dependent schedules, estimates and deliverables, ensuring the schedules are achievable and fully integrated and that they meet the MVDLS scope objectives. Any deviations from the baseline schedule shall be managed and mutually agreed-upon through the agreed-upon Change Management Process.

The selected Contractor shall prepare a complete Critical Path Method (CPM) Schedule that adheres to and incorporates all contract requirements; shows work being completed on or before the Completion Dates; and meets any specified Milestone Date(s). The selected Contractor shall incorporate into the schedule any required coordination with all entities (including, but not limited to, subcontractors) and contracts that could impact the project schedule.

The selected Contractor shall raise any potential risk, issues, changes, escalations and mitigation strategies to PennDOT's Project Manager for resolution using the agreed-upon processes.

The selected Contractor shall ensure that all documents and files follow the agreed-upon Documentation Management plan and standards including those outlined in Appendix H – IT Project Management Handbook.

The selected Contractor shall implement and comply with the governance structure and processes, escalation process and change management process that are developed as part of the Initial Work Package in accordance with Appendix I – Standard IT Project Governance. This shall include implementing, leading and/or participating in governance-related activities including Project Status Reporting, Technical Control Boards (e.g., EASM) including Architecture and all foundation technologies, Roles and Responsibilities, Risk Management, Issues Management, Communications Management, Change Management, Escalation Processes, Lessons Learned and Third Party Assessments and Audit Reviews.

The selected Contractor shall provide, and be responsible for, project management life cycle activities (initiate, plan, execute, monitor, control, close-out) for all tasks, components and releases from the Effective Date of the contract until the MVDLS Solution is fully deployed and all deliverables are accepted by PennDOT, including, but not limited to, the following:

<u>Task A-1: Initiate Project:</u> Initiate the project, confirming selected Contractor resources (the project team that was proposed is ready and available to start), on-site resources are ready to start on-site, off-site resources ready to start off-site, and roles and responsibilities of the selected Contractor's team. Conduct a formal Project Kickoff for Core Team (PennDOT and the selected Contractor) and complete on-boarding of selected Contractor staff including, but not limited to, security clearances, building access protocols, systems security and access procedures. The selected Contractor and PennDOT shall jointly review the RFQ and the selected Contractor's Proposal to ensure joint understanding of scope, approach, deliverables and timeline.

<u>Task A-2: Establish Project Schedule and Project Management Plan</u>: Set up and maintain throughout the MVDLS Project, a detailed Project Schedule (which includes resources for both PennDOT and the selected Contractor). Establish the overall project approach, processes, and templates for the following:

- a) Risk Management
- **b)** Issue Management
- c) Change Management
- **d)** Quality Management
- e) Meeting Management
- f) Documentation Standards
- **g**) Communication Management
- h) Configuration Management
- i) Requirements Management
- i) Stakeholder Management
- k) Procurement Management

<u>Task A-3: Establish Project Repository and Glossary:</u> Create and populate the Project Repository using PennDOT's SharePoint environment, site templates for folders and Risk, Action Item, Issue, and Decision (RAID) tracker. Create and maintain a Glossary of Project Terms. PennDOT will provide administrative support for initial site setup.

<u>Task A-4: Establish Governance Process:</u> Within the existing PennDOT Governance Structure and protocols, establish an MVDLS Project Governance process for all project and technical governance; including organizational charts and named personnel for all roles. Define a completed and mutually agreed-upon project escalation process (internal to the selected Contractor and aligned with PennDOT). The selected Contractor's internal escalation path shall contain respective roles/names related to the escalation.

<u>Task A-5: Define Deliverable Acceptance Criteria and Process:</u> Create a mutually agreed-upon Deliverable Acceptance Criteria and Process to be used as a baseline for all deliverables created during the MVDLS Project. Continually edit the Deliverable Acceptance Criteria to be specific to the Initial Work Package and each Foundation Subsystem, Iteration, and Release.

<u>Task A-6: Ongoing Project Management:</u> Manage the project by providing day-to-day project coordination, planning, management, and control, as part of the Release and Iteration deliverables, including:

- a) Weekly Schedule updates with actuals reflected against baseline
- **b)** Weekly Project Execution Management Team (PEMT) Status Meetings and Updates
- c) Weekly review and assessment of Project Risks
- **d)** Weekly project status reports including executive dashboards
- e) Monthly Project Governance Committee (PGC) Project Update Presentations and Reports
- f) Action item tracking
- g) Successful conclusion for risks, issues and changes
- **h)** Maintenance/updating of Project Management plans, documents, reports and processes
- i) Participation in After Action Reviews (AAR)

<u>Task A-7: Release and Project Closeout:</u> Complete project closeout activities to document lessons learned and provide closure reports and transition for Releases and the overall MVDLS Project. Document lessons learned after each Release deployment. Complete Closure activities once all the MVDLS Deliverables are accepted. Closure activities and deliverables are outlined in Appendix H – IT Project Management Handbook.

Task A Deliverable Summary			
	Subtasks	Deliverables	
	Task A-1: Initiate Project		
	Task A-2: Establish Project Schedule and Project		
	Management Plan	Project Schedule	
Task A	Task A-3: Establish Project Repository and	Project Management	
	Glossary	Plan	
	Task A-4: Establish Governance Process		
	Task A-5: Define Deliverable Acceptance Criteria		
	and Process		
	Task A-6: Ongoing Project Management		
	Task A-7: Release and Project Closeout		

Task B: Requirements Validation

The selected Contractor shall produce an updated and validated Requirements Document for the new solution based on the requirements identified via Appendix Z – Historic Requirements Documentation Index. All Federal and Commonwealth requirements shall be included, whether or not they exist within PennDOT requirements documentation.

Historic documents shall be used for understanding and defining scope, and as a starting point for requirements analysis. Historic requirements shall be considered a starting point for understanding business operational requirements. Since they are not recent, they should not be used to imply firm requirements for a completely unified system. Ultimately, PennDOT plans to execute an incremental approach. The requirements should be considered to be mostly correct and it is PennDOT's directive that requirements analysis shall not begin from scratch.

When reviewing historic requirements, note that PennDOT's approach has changed from a waterfall approach to a modular incremental design and delivery approach using an iterative methodology. An iterative methodology necessarily addresses requirements at the beginning of each module of incremental design and delivery. As a result, PennDOT expects that the selected Contractor shall provide consistent and continuous business analysis staffing throughout the project.

In addition to Appendix Z – Historic Requirements Documentation Index and all related documents associated with that index, PennDOT will make available CARATS and Financial Responsibility systems legacy source code for Contractor review. All such documents will be available upon Contractor execution, and PennDOT receipt, of a signed Appendix CC – Non-Disclosure Authorization. In providing these materials, PennDOT expects that Contractors will have a firm understanding and expectation of requirements scope when submitting their proposals.

To complete the Requirements Validation task, the selected Contractor shall perform the following subtasks:

<u>Task B-1: Review Requirements:</u> Review the existing requirements documentation set forth and referenced in Appendix Z – Historic Requirements Documentation Index. Review any other applicable requirements documentation, as deemed relevant by PennDOT.

<u>Task B-2: Document Requirements:</u> Consolidate all requirements and incorporate any additional requirements identified into an updated Requirements Document.

<u>Task B-3: Validate Requirements:</u> Conduct requirements validation sessions with PennDOT project staff to confirm the requirements and the selected Contractor's understanding of the requirements; prioritize and re-prioritize the requirements as necessary. Provide and execute a plan to analyze and understand the legacy code, business logic and data base to ensure the new system, at a minimum, has the functionality and level of automation of the legacy system. Identify all tools to be used for this analysis. Delineate the methods to be used to observe how current systems function and all workflows currently in place.

<u>Task B-4: Create Fit Gap Analysis:</u> Define fit and gap analysis of requirements against proposed solution. Define remedial activities to close gaps in a Gap Analysis Report for all requirements and technical documents, and identify agreed-upon mitigation plans.

<u>Task B-5: Prepare Requirements Document:</u> Prepare the final To-Be Requirements Document for the MVDLS solution. Confirm inclusion of all requirements including functional, non-functional, interfaces (batch and on-line), batch, correspondence, products, and reports.

<u>Task B-6: Update Documentation:</u> On an ongoing basis, maintain documentation as necessary to ensure that it is current throughout the MVDLS Project.

Upon completion of the above subtasks, the selected Contractor shall prepare the To-Be Requirements Document for the new solution. The Requirements Document shall include, at a minimum, the following:

- 1. Detailed business requirements;
- 2. System requirements;
- 3. Use cases / user stories; and
- 4. Conceptual data models.

Task B Deliverable Summary		
	Subtasks	Deliverables
	Task B-1: Review Requirements	
	Task B-2: Document Requirements	
Task B	Task B-3: Validate Requirements	To-Be Requirements
	Task B-4: Create Fit Gap Analysis	Document
	Task B-5: Prepare Requirements Document	
	Task B-6: Update Documentation	

Task C: Process Definition

The selected Contractor shall deliver detailed To-Be Process documentation defining how key processes shall work with the new solution. To accomplish this task, the selected Contractor shall perform the following subtasks:

<u>Task C-1: Conduct Process Definition Sessions:</u> Conduct sessions with PennDOT's business and technical teams to define and document processes.

<u>Task C-2: Review Processes:</u> Review existing processes, documents and procedures for incorporation into the process documentation.

<u>Task C-3: Identify Process Improvements:</u> Identify and document improvements and automations to processes that can be realized with the new solution.

<u>Task C-4: Prepare Process Document:</u> Incorporate all the information above into the MVDLS To-Be Process Document.

<u>Task C-5: Update Documentation:</u> Maintain documentation (on an on-going basis) as necessary to ensure that it is current throughout the MVDLS Project.

Upon completion of the above subtasks, the selected Contractor shall submit documentation of the new processes in a To-Be Process Document. The document shall define the actors, processes, process flows, documents and outcomes for the processes. Process categories to be detailed out and documented for the entire MVDLS solution include, at a minimum, the following:

1. Vehicle Title & Registration

- a. Initial Title & Registrations
- b. Renewals
- c. Snowmobile / ATV Title, Registration & Renewals
- d. Boat Titling, Registration & Renewals
- 2. Driver License Issuance
 - a. Initial Issuance
 - b. Renewals
 - c. Upgrades & Downgrades
 - d. Identification Issuance & Renewals

3. Sanctions

- a. Financial Responsibility
- b. Driver Sanctions
- c. Driver Improvements
- d. Vehicle Registration Sanctions

4. Information Services

- a. Wholesale Accounts
- b. Driver Records / Abstracts
- c. Motor Vehicle Records / Abstracts
- 5. Business Partner Management

- a. Online Dealers
- **b.** Online Messengers
- c. 3rd Party Testers
- d. Dealer Auctions
- e. Full Agents
- f. Philadelphia Parking Authority

While all process categories in the list above are in scope for the full MVDLS solution, only those set forth in boldface are in scope for the initial thirty-six (36) month term of the contract. PennDOT reserves the right to accelerate or add work within the base contract period of thirty-six (36) months subject to mutual agreement between PennDOT and the selected Contractor.

Task C Deliverable Summary		
	Subtasks	Deliverables
	Task C-1: Conduct Process Definition Sessions	
	Task C-2: Review Processes	To-Be Process
Task C	Task C-3: Identify Process Improvements	Document
	Task C-4: Prepare Process Document	
	Task C-5: Update Documentation	

Task D: Detailed Design

The selected Contractor shall provide a solution design based on the stated requirements. This will serve as the foundation for all build and implementation work henceforth within the Contract. The design shall ensure that the MVDLS solution is extensible and flexible to meet future PennDOT requirements, minimizes customization of proprietary components, and complies, at a minimum, with PennDOT's technology standards as outlined in Appendix G – PennDOT Enterprise IT Standards, and Appendix U – GUI Standards for Web Applications.

The Detailed Design task transforms the detailed solution requirements into a complete, detailed solution design and focuses on how the desired solution functionality is to be delivered. To complete this task, the selected Contractor shall perform the following subtasks:

Task D-1: Create Detailed Solution Architecture: Create a solution architecture for the new solution that identifies and defines the uses for all solution components, including, but not limited to technologies, systems, interfaces, infrastructure and how they will connect and work together. This shall include Logical Application Deployment Model (master view, security view), Logical Application Design Model (overview, component model, design mechanisms), SOA Application Service Model (service contracts, integration tier design, integration mechanisms, service mapping) and API frameworks. It shall also include the identification of proposed customizations of approved products.

<u>Task D-2: Design Screens:</u> Design all significant user screens needed to address the use cases / user stories and identify data elements, element labels, command buttons, navigation and general look and feel.

<u>Task D-3: Design Workflows and Processes:</u> Document detailed workflow, process flow, and screen flow for all use cases / user stories.

<u>Task D-4: Design Reports and Layouts:</u> Design end-user transactional, operational and analytical reporting functionality, including, but not limited to, identifying data elements, sorting, filter criteria, frequency, delivery formats, measures, facts, dimensions, visualizations, dashboards, and the like.

<u>Task D-5: Create Database Design and Data Management:</u> The selected Contractor shall prepare detailed, normalized (2NF or 3NF) logical data models that identify entities, primary and foreign keys and other database constraints. Prepare solution design for archiving, purging, data masking, data quality and data security.

<u>Task D-6: Create Interface, Service and API Designs:</u> Design each system interface, service and API, including but not limited to: cataloging and naming, integration and messaging pattern, technology/middleware selection, transport and data protocols and conventions, message persistence, exception handling and fault tolerance, request and reply contracts, scheduling/frequency, data transformation, and data mapping.

<u>Task D-7: Create Infrastructure Architecture Design:</u> The selected Contractor shall prepare an Infrastructure Architecture Design (IAD) document that depicts the physical infrastructure components of the solution, including, but not limited to, web, application and database servers, storage, directories, network connections.

<u>Task D-8: Prepare Solution Design Document:</u> Consolidate all solution design artifacts and prepare the final Solution Design Document.

<u>Task D-9: Update Documentation:</u> Maintain documentation (on an on-going basis) as necessary to ensure that it is current throughout the MVDLS Project.

Upon completion of the above subtasks, the selected Contractor shall deliver a Solution Design Document that provides sufficient detail to guide the development of the new solution and its infrastructure. The Solution Design Document shall include, at a minimum:

- 1. Solution Architecture;
- 2. Screen Design;
- 3. Workflow and Process Design;
- 4. Report Layout and Design;
- 5. Application Design;
- 6. Database Design,
- 7. Interface, Service and API Design, and

8. Infrastructure Architecture Design.

Task D Deliverable Summary			
	Subtasks	Deliverables	
	Task D-1: Create Detailed Solution Architecture		
	Task D-2: Design Screens		
	Task D-3: Design Workflows and Processes		
	Task D-4: Design Reports and Layouts		
Task D	Task D-5: Create Database Design and Data	Solution Design	
	Management	Document	
	Task D-6: Create Interface, Service and API		
	Designs		
	Task D-7: Create Infrastructure Architecture Design		
	Task D-8: Prepare Solution Design Document		
	Task D-9: Update Documentation		

Task E: Solution Installation, Configuration & Development

The selected Contractor shall install, develop, and configure the new solution. The Solution Installation, Configuration and Development Task translates the Solution Design into a fully-functioning solution. The Contractor shall identify all tools, and related procurement specifications if the tools are not listed in Appendix G – PennDOT Enterprise IT Standards, to be used for solution installation, configuration or development tasks. The Contractor shall be responsible for implementation, support and transition to PennDOT of all tools not included in Appendix G – PennDOT Enterprise IT Standards. To complete this task, the selected Contractor shall perform the following subtasks:

Task E-1: Solution Installation, Environment(s): Define infrastructure requirements, including pre-requisite requirements and project dependencies, and develop infrastructure deployment timelines that must be met to align with selected Contractor's project schedule. Work with PennDOT's infrastructure and applications teams to install the necessary hardware, infrastructure, and software components for the solution in the needed environment(s).

<u>Task E-2: Solution Configuration, Development Environment:</u> Work with PennDOT's infrastructure and applications teams to configure the hardware, infrastructure, and software components for the solution in the needed environment(s) and verify that all system components are working together as intended.

PennDOT will maintain responsibility for all changes to the legacy CARATS system.

<u>Task E-3: Software Configuration and Quality Management:</u> Identify and incorporate software development and deliver best practices into all areas of the SDLC. Manage software quality, including: defining measures and acceptable standards for quality, style, in-line documentation, cyclomatic complexity, maintainability and performance. Evaluate all software development artifacts against those quality measures and standards, and addressing software quality issues early in the SDLC.

Manage all Software Configuration Management (SCM) content (including, but not limited to, backlogs, enhancements, bugs, work items, release plans, documentation, source code, configuration data) with technologies and processes that ensure transparency, change control, auditing, security, versioning, concurrency, collaboration, and the optimal management of the software development process.

<u>Task E-4: Develop Web Applications:</u> Develop web applications and web services necessary to support the solution.

<u>Task E-5: Develop Reports:</u> Develop any end-user transactional, operational and analytical reports needed for the solution.

<u>Task E-6: Develop Databases & Data Management:</u> Develop all relational databases needed for the solution, including, but not limited to, databases and management processes, schemas, tables, views, stored procedures, and ETL processes.

Integration with external systems will be part of Functional Iterations.

Develop, document, test and implement all data management processes including archiving, purging, data masking, data quality and data security.

PennDOT will maintain responsibility for all changes to the legacy CARATS system.

A Data Management RACI Chart is included in Appendix S (and Task F) that outlines roles and responsibilities for Data Management deliverables.

Task E-7: Develop Interfaces, Services and API's: Develop, catalog and document all temporary and durable system interfaces, services and API's using PennDOT standard middleware and technologies, including Informatica PowerCenter, IBM DataPower, IBM Integration Bus (IIB), GlobalScape MFT and/or custom-develop services and API's in Java EE or C#.NET. Integration with external systems will be part of Functional Iterations.

PennDOT will maintain responsibility for all changes to the legacy CARATS system.

<u>Task E-8: Develop Directories:</u> Develop any Microsoft Active Directory (AD) objects needed for the solution, including modifications to existing AD structures and/or creation of all new AD structures.

<u>Task E-9: Deploy to Development/Other Environment(s):</u> Deploy the solution code and configuration in whole or in part to development/other needed environments as often as needed throughout the development phase to support an iterative development methodology.

<u>Task E-10: Development/Other Environment(s) Checkout:</u> Validate that the development/other needed environment(s) have all code and configuration for the

solution in a consistent and fully-functioning state prior to a release being moved to subsequent test or production environments.

<u>Task E-11: Create Technical Documentation:</u> Gather, consolidate, create, enhance and update all technical documentation for the solution, including but not limited to, Infrastructure Architecture Diagrams, data models, service desk documentation, application and technology inventory data entry and maintenance, and publish this documentation in locations(s) established by PennDOT.

<u>Task E-12: Conduct Proof of Concept:</u> For all MVDLS Solution subsystems and components, conduct demonstration(s) to PennDOT as proof of working solution via use cases / user stories developed jointly with PennDOT. Proofs of Concept must demonstrate use cases / user stories that are applicable to PennDOT's operational activities.

<u>Task E-13: Update Documentation:</u> Maintain documentation (on an on-going basis) as necessary to ensure that it is current throughout the MVDLS Project.

Deliverables associated with the Solution Development task shall include:

1. Solution Development Complete: The selected Contractor shall install, configure and/or develop and deliver a fully-functioning Solution and all Technical Documentation and deploy the solution to PennDOT's preproduction infrastructure environments. This deliverable shall be considered completed when all functionality has been successfully developed, unit tested, demonstrated and deployed to PennDOT's UAT/Training Environment.

Task E Deliverable Summary		
	Subtasks	Deliverables
	Task E-1: Solution Installation, Environment(s)	
	Task E-2 Solution Configuration Development	
	Environment	
	Task E-3: Software Configuration and Quality	
	Management	
	Task E-4: Develop Web Applications	
Task E	Task E-5: Develop Reports	Solution Development
	Task E-6: Develop Databases & Data Management	Components
	Task E-7: Develop Interfaces, Services and API's	
	Task E-8: Develop Directories	
	Task E-9: Deploy to Development/Other	
	Environment(s)	
	Task E-10: Development/Other Environment(s)	
	Checkout	
	Task E-11: Create Technical Documentation	
	Task E-12: Conduct Proof of Concept	
	Task E-13: Update Documentation	

Task F: Data Migration

This task includes subtasks and deliverables necessary to identify the legacy data to be migrated, assess data quality, cleanse data and migrate data to the new system. The selected Contractor shall provide analysis, quality improvement, and migration services for the new solution. The selected Contractor shall be responsible for data migration tasks and deliverables and PennDOT will support as necessary. The selected Contractor shall be responsible for automated data transformation (with approval from the business) for data issues that can be resolved by that means. PennDOT will be responsible for manual data intervention / edits. The selected Contractor shall be responsible for maintaining interfaces that are created during the MVDLS Project for the duration of the MVDLS Project and ensuring that data exchanged via those interfaces is kept current. PennDOT will maintain responsibility for all changes to the legacy CARATS system. A Data Management RACI Chart is included in Appendix S (and included below) that outlines roles and responsibilities for Data Management deliverables.

To complete this task, the selected Contractor shall perform the following subtasks:

Task F-1: Develop Legacy Data Quality Assessment: Leveraging the PennDOT-provided Legacy Data Dictionary and Interface Inventory to help identify in-scope data for the assessment, prepare a Legacy Data Quality Assessment to identify the most common and critical data quality issues with the legacy data upfront. The Legacy Data Quality Assessment shall be a report, produced by performing automated and manual profiling and assessment of all legacy data to identify critical data quality issues, including but not limited to: invalid data types, invalid dates, missing key data, widowed and orphaned data, duplicate data, inconsistencies with technical and business constraints, as well as recommendations for remediation.

Task F-2: Define Data Governance, Data Migration Strategy & Roadmap: Leveraging PennDOT-defined data stewards and stakeholders, develop a Data Governance Plan that outlines the people and process for making decisions and resolving issues related to the data migration process. Develop a Data Migration Strategy that defines the business strategy, goals and objectives and success criteria for the data migration effort. Prepare a Data Migration Roadmap to illustrate the activities, tasks, work products, dependencies, duration, and resources necessary to acquire, assess, cleanse, and migrate legacy data. Develop the Data Governance Plan to work in concert with PennDOT Appendix I – Standard IT Project Governance, to outline roles, responsibilities, artifacts and processes for evaluating and assessing data migration decisions.

Task F-3: Develop Data Migration Architecture & Design: Define, develop and document Conceptual and Logical Data Models for all data to be migrated and map at the data element level to the new solution data model. Data to be migrated shall include IMS segments, DB/2 tables and other related and semi/un-structured data sources (SQL, Oracle, Access, Excel, etc.). Create a Data Quality Gap Assessment that identifies data quality issues and suggested mitigation steps. Define, develop and document Data Cleansing Processes to delineate the manual and automated steps, roles,

tools and other resources required to prepare data for migration. Develop data archiving and purging designs related to the data migration. Develop and document temporary/bridge Interface Designs and Specifications needed to support a multiphased data migration. Develop the Legacy Data Migration Architecture to identify migration requirements and efforts required to present data in a format that meets the requirements and constraints of the new solution.

<u>Task F-4: Perform Data Migration:</u> Define, develop and document automated and semi-automated Data Cleansing Processes, Data Migration Processes and Data Synchronization Processes.

Identify and document the need for manual Data Cleansing Processes and develop processes and technical solutions to aid PennDOT business users as they perform the manual data cleansing. Provide review and insight to PennDOT's resources as they develop Legacy-Side Data Migration Processes and Legacy-Side Data Synchronization Processes.

Manage the execution of all Data Cleansing and Legacy Data Migration processes into the new system production data environments and document their successful completion. Confirm with auditable processes and documentation that all legacy data has been acquired, cleansed, transformed, and migrated into the production data environments of the new system.

<u>Task F-5: Update Documentation:</u> Maintain documentation (on an on-going basis) as necessary to ensure that it is current throughout the MVDLS Project.

	Task F Deliverable Summary		
	Subtasks	Deliverables	
	Task F-1: Develop Legacy Data Quality	Legacy Data Quality Assessment	
	Assessment		
	Task F-2: Define Data Governance, Data	Data Governance Plan	
	Migration Strategy and Roadmap	Legacy Data Migration Strategy	
		Legacy Data Migration Roadmap	
Task F	Task F-3: Develop Data Migration Architecture &	Conceptual & Logical Data Models	
	Design	Interface Designs and Specifications	
		Data Quality Gap Assessment	
		Legacy Data Migration Architecture	
	Task F-4: Perform Data Migration	Data Cleansing Processes	
		Data Migration Processes	
		Data Synchronization Processes	
		Data Interfaces	
		Legacy Data Migration	
	Task F-5: Update Documentation	Updated Documentation	

Data Migration RACI

The RACI Matrix is a powerful tool to assist in the identification of roles and assigning of cross-functional responsibilities to a project deliverable or activity. RACI represents:

- R Responsible (person or role responsible for actually doing or completing the task)
- A Accountable (person or role responsible for ensuring that the task is completed)
- C Consulted (person or role whose subject matter expertise is required to complete the task)
- I Informed (person or role that needs to be kept informed of the status of task completion)

Appendix S - RACI Matrix for MVDLS Data Management			
Role Tasks	PennDOT	Contractor	
Task E-6: Develop Databases & Data Management			
Database Development and Management	C,I	R,A	
ask E-7: Develop Interfaces, Services and APIs			
Develop Temporary and Durable System Interfaces	C,I	R,A	
Develop Temporary and Durable Legacy-Side Interfaces	R,A	C,I	
ask F-1: Develop Legacy Data Quality Assessment			
Develop Legacy Data Dictionary	R,A	C,I	
Develop Legacy Interface Inventory	R,A	C,I	
Prepare Legacy Data Quality Assessment	C,I	R,A	
ask F-2: Define Data Governance, Data Migration Strategy & Roadmap			
Identify Data Stewards and Stakeholders	R,A	C,I	
Prepare Data Governance Plan	C,I	R,A	
Identify Business Goals & Objectives for Data Migration	R,A	C,I	
Prepare Legacy Data Migration Strategy	C,I	R,A	
Prepare Legacy Data Migration Roadmap	C,I	R,A	
ask F-3: Develop Data Architecture & Design			
Develop Conceptual & Logical Data Models	C,I	R,A	
Develop Interface Designs and Specifications	C,I	R,A	
Prepare Data Quality Gap Assessment	C,I	R,A	
Develop Legacy Data Migration Architecture	C,I	R,A	
ask F-4: Perform Data Migration			
Develop Data Cleansing Processes	C,I	R,A	
Perform Manual and Semi-Automated Data Cleansing	R,A	C,I	
Develop Legacy-Side Data Migration Processes	R,A	C,I	
Develop Data Migration Processes	C,I	R,A	
Develop Legacy-Side Data Synchronization Processes	R,A	C,I	
Develop Data Synchronization Processes	C,I	R,A	
Perform Legacy Data Migration	C,I	R,A	

Task G: Testing Validation

The selected Contractor shall thoroughly test the new solution to validate, to the satisfaction of PennDOT, that the solution:

- 1. Meets all solution requirements;
- 2. Provides functional equivalence (all functionality currently leveraged by PennDOT in existing legacy systems);

- 3. Produces the correct outputs and behavior, including outputs and behavior used to demonstrate functional equivalence (all functionality currently leveraged by PennDOT in existing legacy systems);
- 4. Transfers data via applicable interfaces;
- 5. Updates databases with correct data;
- 6. Meets security requirements; and
- 7. Performs at an acceptable level in terms of responsiveness, throughput and resource utilization.

Testing shall include each Iteration, testing of multiple Iterations planned for a Release, and regression testing with other Releases. Testing shall also include a two (2) week test period at the end of each Iteration for hands-on users, selected Contractor led walk-throughs and demonstrations.

The selected Contractor shall work in tandem with PennDOT teams to conduct a UAT Deployment Readiness test and shall conduct a Security Vulnerability test per PennDOT standards (including all relevant Information Technology Policies) for each release before it is deployed. All relevant Information Technology Policies can be found at: http://www.oa.pa.gov/Policies/Pages/itp.aspx for each release before it is deployed. The selected Contractor shall conduct solution training for the PennDOT team prior to this testing.

The Contractor shall identify any and all tools, and related procurement specifications if the tools are not listed in Appendix G – PennDOT Enterprise IT Standards, to be used for manual and automated testing tasks. The Contractor shall be responsible for implementation, support and transition to PennDOT of all testing tools not included in Appendix G – PennDOT Enterprise IT Standards.

To complete this task, the selected Contractor shall perform the following subtasks:

<u>Task G-1: Install Solution, Test Environments:</u> Work with PennDOT's infrastructure and applications teams to install the necessary infrastructure and software components for the solution in a minimum of two (2) test environments or the number of environments required to meet the agreed-upon release plan and schedule. Install all necessary testing tools, if tools deviate from those listed in Appendix G – PennDOT Enterprise IT Standards.

<u>Task G-2: Configure Solution, Test Environments:</u> Work with PennDOT infrastructure and applications teams to configure the infrastructure and software components for the solution in a minimum of two (2) test environments or the number of environments required to meet the agreed-upon release plan and schedule and verify that all system components are working together as intended. Configure all necessary testing tools, if tools deviate from those listed in Appendix G – PennDOT Enterprise IT Standards.

- <u>Task G-3: Deploy to Test Environments:</u> Deploy the solution code and configuration in whole or in part to a minimum of two (2) test environments or the number of environments required to meet the agreed-upon Release Plan and Schedule as often as needed throughout the testing phase.
- <u>Task G-4: Checkout Test Environments:</u> Validate that the test environments have all code and configuration for the solution in a consistent and fully-functioning state prior to any formal testing activities and prior to any solution release being moved to subsequent test or production environments.
- <u>Task G-5: Develop Test Material:</u> Define, develop and document test strategies and plans including test cases, scripts, scenarios and/or similar agreed-upon material to support System Integration, Functional, Performance, Regression, Security Vulnerability and User Acceptance testing. Additionally, materials shall be prepared for the purpose of replication of any PennDOT-developed tests that test processes in current legacy systems.
- <u>Task G-6: Prepare Test Data:</u> Create and/or identify test data to support manual and automated testing in relational databases, Active Directory and other data stores and develop processes to load the test data and to set the data stores to a consistent state before and after testing activities. Prepare test data for replication of any PennDOT-developed tests that test processes in current legacy systems.
- <u>Task G-7: Execute Integration Testing:</u> Execute testing using manual and automated methods (as appropriate) to validate the proper functioning of all interfaces and other integration points between the solution, internal & legacy integration and interfaces and external systems and interfaces.
- <u>Task G-8: Execute Functional Testing:</u> Execute testing using manual and automated methods (as appropriate) to validate the complete and proper functioning of all solution functionality. Execute testing to demonstrate the replication of any PennDOT-developed tests that test processes in current legacy systems.
- <u>Task G-9: Execute Regression Testing:</u> Execute testing using manual and automated methods (as appropriate) to validate the complete and proper functionality of the most critical solution functionality for every release, even if the associated solution components have not been changed. Execute testing to demonstrate the replication of any PennDOT-developed tests that test processes in current legacy systems.
- <u>Task G-10: Execute Performance Testing:</u> Execute testing using manual and automated methods (as appropriate) to validate acceptable solution performance, including: response time, system responsiveness, throughput, and resource utilization. In addition, testing should validate solution scalability of application software, servers, interfaces, network and database management systems.

Task G-11: Execute System Integration Testing: Execute testing using manual and automated methods (as appropriate) to validate acceptable solution iteration(s) and release(s) integration. Scope will include testing to demonstrate the replication of any PennDOT-developed tests that test processes in current legacy systems. Selected Contractor shall test based on "day in the life", "cycle" (e.g., Registration Renewal, Drivers License Renewal cycles) or other period testing (e.g., month end, quarter end, etc.)

<u>Task G-12: Execute Vulnerability Testing:</u> Execute a series of manual and automated testing processes, including host scans, penetration testing, web/URL scans and static code analysis, for the solution and any web applications protected by it to verify that the solution and web applications protected by it are secure.

<u>Task G-13: Document Test Results:</u> Gather, document and manage all test results in a structured format, including, but not limited to test cases, tester, date tested, pass/fail results, output comments, comparison of test results of PennDOT-developed tests that test processes in current legacy systems.

<u>Task G-14: Resolve Issues and Defects:</u> Prioritize issues and defects identified during testing activities; research causes; schedule and conduct defect review meetings with programmer, tester and business resources to determine the appropriate resolution; make necessary system coding and/or configuration changes to resolve the issues, and prepare coding and configuration changes for re-deployment into the appropriate environments.

<u>Task G-15: Conduct User Reviews, Walk-throughs & Demonstrations:</u> At the end of each iteration, for a two (2) week period, users shall review the iteration with handson operation, as well as selected Contractor led walk-throughs and demonstrations of the functionality.

<u>Task G-16: Facilitate and Support UAT Testing:</u> Conduct solution training sessions for PennDOT teams and work directly with PennDOT staff as they execute test cases during User Acceptance Testing Deployment Readiness Validation Testing.

<u>Task G-17: Update Documentation:</u> Maintain documentation (on an on-going basis) as necessary to ensure that it is current throughout the MVDLS Project.

Upon completion of the above subtasks, the selected Contractor shall facilitate and support PennDOT staff as they conduct User Acceptance Testing (UAT). The selected Contractor shall document all test results, resolve defects and deliver fixes for retesting. Testing Validation shall continue until defects have been resolved to the satisfaction of PennDOT.

Task G Deliverable Summary		
	Subtasks	Deliverables
	Task G-1: Install Solution, Test Environments	
	Task G-2: Configure Solution, Test Environments	
	Task G-3: Deploy to Test Environments	
	Task G-4: Checkout Test Environments	
	Task G-5: Develop Test Materials	
	Task G-6: Prepare Test Data	
m 1 G	Task G-7: Execute Integration Testing	
Task G	Task G-8: Execute Functional Testing	Testing Validation
	Task G-9: Execute Regression Testing	Results
	Task G-10: Execute Performance Testing	
	Task G-11: Execute System Integration Testing	
	Task G-12: Execute Vulnerability Testing	
	Task G-13: Document Test Results	
	Task G-14: Resolve Issues and Defects	
	Task G-15: Conduct User Reviews, Walk-throughs	
	& Demonstrations	
	Task G-16: Facilitate and Support UAT Testing	
	Task G-17: Update Documentation	

Task H: Release Planning

Each Release shall be comprised of several Iterations. A Release shall be deployed within a timeframe of up to every six (6) months. Releases shall follow a defined Release Plan. To complete this task, the selected Contractor shall perform the following subtasks:

Task H-1: Develop Release Strategy: Define an overall MVDLS Project Release Strategy to include schedule of releases, delivery scope by release including all functionality and reports, and all applicable deliverables as identified in this RFQ and supporting appendices. The Release Strategy shall include, but not be limited to, strategies for implementation by release type (e.g., release to QA, pilot release, etc.), rollout, training (training of UAT team, users and technical training for IT staff), testing, organizational change management support (supporting PennDOT's OCM efforts with technical knowledge or system-specific knowledge as required), back out, maintenance, support and warranty.

Task H-2: Define Technical Release Requirements: Define technical environment needs and infrastructure deployment options for each release, and defined architecture and design deliverables for the transition architecture for each release, incorporating: Core Product Toolset as detailed in the appendices (ensuring a mutually agreed-upon amount of re-work), integration interfaces with existing systems as identified but not limited to those in the appendices, and integration interfaces with the components of the MVDLS Solution that remain on the existing legacy system or are separate systems.

<u>Task H-3: Manage Releases:</u> Define the project management approach to managing releases, including multiple releases or overlapping releases.

<u>Task H-4: Conduct End User Impact Analysis:</u> Define end-user impacts to ensure no duplication of business process for each release. Define impact and readiness of the Core Team for Core Team UAT.

<u>Task H-5: Define Individual Release Strategy and Plan:</u> For each specific release, update the Release Strategy as necessary, including all components defined in each of the preceding tasks, and develop a release-specific plan. Each Release Plan shall include, but not be limited to, activities and plans for implementation, rollout, training (training of UAT team, users and technical training for IT staff), testing, organizational change management support (supporting PennDOT's OCM efforts with technical knowledge or system-specific knowledge as required), back out, maintenance, support and warranty.

<u>Task H-6: Update Documentation:</u> Maintain documentation (on an on-going basis) as necessary to ensure that it is current throughout the MVDLS Project.

Task H Deliverable Summary			
	Subtasks	Deliverables	
	Task H-1: Develop Release Strategy		
	Task H-2: Define Technical Release Requirements		
Task H	Task H-3: Manage Releases	Individual Release Plan	
	Task H-4: Conduct End User Impact Analysis		
	Task H-5: Define Individual Release Strategy and		
	Plan		
	Task H-6: Update Documentation		

Task I: Training

The selected Contractor shall provide knowledge transfer and training for the MVDLS Solution. Optionally, the selected Contractor may be requested to provide knowledge transfer and training for all other software tools used by the selected Contractor to complete the project. This training will be to ensure that users have the knowledge, understanding, and depth of experience to use the system to successfully perform their work-related duties. This pertains to agency end-users as well as PennDOT business partners and other stakeholders. To complete this, the selected Contractor shall perform the following tasks:

<u>Task I-1: Assess User Training Needs:</u> Conduct a Training Needs Assessment to identify and document the required knowledge and experience users will need based on their job function or role, the number of users to be trained, at minimum eight hundred (800), potential training locations, and the most effective types of training to be offered (e.g. instructor-led, on-line, in-person, videos, etc.).

<u>Task I-2: Develop Training Materials:</u> Create all necessary end-user training materials (e.g. curricula, course outlines, course materials, student exercises, etc.) to meet the training needs identified in the User Training Needs Assessment, utilizing the

most effective media format, including, but not limited to videos, printed and electronic documents, presentations.

<u>Task I-3: Schedule Training Sessions:</u> Work with PennDOT staff to identify individuals who need training, determine their specific training sessions based on their role, and schedule them for training sessions.

<u>Task I-4: Conduct Training Sessions:</u> Conduct all planned training sessions and track users attendance and successful completion.

<u>Task I-5: Update Documentation:</u> Maintain documentation (on an on-going basis) as necessary to ensure that it is current throughout the MVDLS Project. Deliverables associated with the Training task include:

- 1. User Training Needs Assessment and Training Materials. The selected Contractor shall identify key training roles and the required knowledge and then develop and deliver training materials to meet that need. These training materials shall be accessible on-line and may include documents, presentations, videos, and other media or deliverables.
- 2. **User Training Sessions**. The selected Contractor shall conduct training as defined in the Initial Work Package. Training shall cover all MVDLS system functions, administration and reporting. Optionally, training may also cover all testing and development tools used by the Contractor to deliver the MVDLS system.

Task I Deliverable Summary		
	Subtasks	Deliverables
	Task I-1: Assess User Training Needs	User Training Needs
Task I	Task I-2: Develop Training Materials	Assessment
	Task I-3: Schedule Training Sessions	Training Materials
	Task I-4: Conduct Training Sessions	User Training Sessions
	Task I-5: Update Documentation	

Task J: Implementation & Rollout

The Production Implementation and Rollout task shall deliver the solution into a production environment. To complete this task, the selected Contractor shall perform the following subtasks:

<u>Task J-1: Plan Implementation:</u> Develop implementation plans, to the satisfaction of PennDOT, to coordinate the activities of each solution production release. Implementation planning should cover activities from production environment setup through post-implementation support, including stakeholder impact, support of PennDOT's Organizational Change Management efforts by providing technical knowledge or system-specific knowledge, go/no-go checkpoints, entrance and exit criteria, security vulnerability assessment and back-out/contingency plans.

- <u>Task J-2: Install Solution, Production Environment:</u> Work with PennDOT's infrastructure and applications teams to install the necessary infrastructure and software components for the solution into the production environment as needed for each solution release.
- <u>Task J-3: Configure Solution, Production Environment:</u> Work with PennDOT infrastructure and applications teams to configure the infrastructure and software components for the solution in the production environment for each solution release and verify that all system components are working together as intended.
- <u>Task J-4: Deploy to Production Environment:</u> Work with PennDOT infrastructure and applications teams to deploy the solution code and configuration, in whole or in part, to the production environment for each solution release.
- <u>Task J-5: Checkout Production Environment:</u> Validate that the production environment has all code and configuration for the solution in a consistent and fully-functioning state prior to go-live for each solution release.
- <u>Task J-6: Update Technical and User Documentation:</u> Update all Technical Documentation and User Training Materials for the solution to reflect Post-Release Lessons Learned and any changes and enhancements that were implemented as needed for each solution release. Update an Application Profile Questionnaire (APQ) as necessary.
- <u>Task J-7: Provide Post-Implementation Support:</u> Provide a period of post-implementation support of at least sixty (60) days after each Release to quickly identify and troubleshoot issues and implement fixes in a timely fashion. It shall be the selected Contractor's responsibility to ensure that the MVDLS Solution remains in operation. The selected Contractor shall establish a toll-free phone number and provide twenty-four (24) hours a day, seven (7) days a week, three hundred sixty five (365) days a year support for the system and provide service in accordance with Appendix Q Service Level Agreements during the Post-Implementation Support period. Post-Implementation Support shall be provided by the selected Contractor according to standard PennDOT service desk processes.
- <u>Task J-8: Update Documentation:</u> Maintain documentation on an on-going basis as necessary to ensure that it is current throughout the MVDLS Project.

Deliverables associated with the Production Implementation and Rollout task include:

1. **Solution Production Implementation.** For each production release of the solution, the selected Contractor shall plan and schedule the system implementation, support PennDOT's Organizational Change Management efforts by providing technical knowledge or system-specific knowledge, deliver the fully-functioning Solution, update all solution Technical

Documentation and User Training Materials, deploy the solution to PennDOT's production infrastructure environment, and provide a period of post-implementation support to resolve any issues.

- 2. **Post-Implementation Support.** The selected Contractor shall provide post-implementation support services for a minimum of sixty (60) days after the production implementation of a Solution Release. Post-Implementation Support services shall include, but not be limited to, the following:
 - a. Providing Tier-2 end-user support;
 - b. Addressing service failures;
 - c. Implementing urgent bug fixes;
 - d. Generating urgent reports or data extracts;
 - e. Answering business and technical questions; and
 - f. Providing system administration support.

Task J Deliverable Summary		
	Subtasks	Deliverables
	Task J-1: Plan Implementation	
	Task J-2: Install Solution, Production	
	Environment	
	Task J-3: Configure Solution, Production	Solution Release
Task J	Environment	Production
	Task J-4: Deploy to Production Environment	Implementation
	Task J-5: Checkout Production Environment	
	Task J-6: Update Technical and User	
	Documentation	
	Task J-7: Provide Post-Implementation Support	Post-Implementation
	Task J-8: Update Documentation	Support

Task K: Capacity, Disaster Recovery & Business Continuity Plans

For each release, the selected Contractor shall create a Capacity Plan to determine the ability of the MVDLS Solution to meet project processing needs. In addition, the selected Contractor shall define and update a Disaster Recovery Plan and Business Continuity Plan. Please note that the deliverables under this task are required for all technical environments for the MVDLS Solution. To complete this task, the selected Contractor shall perform the following subtasks:

<u>Task K-1: Create Capacity Plan:</u> Define and create agreed-upon Capacity Plan for the release that projects the ability of the MVDLS Solution to meet projected processing needs. Create the Capacity Plan that includes an assessment of the full MVDLS Solution as it operates from an end-user perspective – i.e., hardware, software, and infrastructure components seamlessly working together to provide an end user solution to meet business needs.

<u>Task K-2: Create Disaster Recovery Plan:</u> Define all technical requirements for disaster recovery including all hardware, software and infrastructure components

needed. Include the standard elements of a Disaster Recovery Plan including but not limited to, Recovery Time Objectives (RTO), Recovery Point Objectives (RPO) and resources necessary to meet both. For legacy systems, PennDOT maintains goals of seventy-two (72) hour RTO and twenty-four (24) hour RPO.

<u>Task K-3: Create Business Continuity Plan:</u> Define a plan for PennDOT's continuity of operations in the event of an interruption of service of the MDVLS Solution or operating facilities.

<u>Task K-4: Update Documentation:</u> Maintain documentation on an on-going basis as necessary to ensure that it is current throughout the MVDLS Project.

Task K Deliverable Summary			
	Subtasks	Deliverables	
	Task K-1: Create Capacity Plan	Capacity Plan	
Task K	Task K-2: Create Disaster Recovery Plan	Disaster Recovery Plan	
	Task K-3: Create Business Continuity Plan	Business Continuity Plan	
	Task K-4: Update Documentation]	

Task L: Maintenance, Support & Warranty

Routine maintenance will address routine service requests as well as system issues that prevent the MVDLS Solution from functioning. Examples include, but are not limited to, the following:

- 1. Service failures;
- 2. Bug fixes;
- 3. Data fixes:
- 4. Screen element malfunctions;
- 5. Spelling mistake corrections;
- 6. Special reports and data extracts;
- 7. User and technical documentation updates;
- 8. Proactive identification and mediation of potential issues that may result from system changes due to required technology upgrades (e.g., patches, version upgrades, etc.);
- 9. Answering general questions about system functionality;
- 10. Providing system administration assistance to PennDOT for the software and associated equipment;
- 11. Assisting PennDOT in troubleshooting COTS and custom software issues including instances where the software issues may be related to the network and the field technology;
- 12. Coordinating emergency changes/releases with PennDOT project manager; and
- 13. Implementing emergency changes/releases

The selected Contractor shall adhere to Service Level Agreements (SLAs) as described in Appendix Q – Service Level Agreements. As part of the proposal, the selected Contractor

may propose alternative service level agreements and/or service credits; however, these shall be submitted on the basis of information included in Appendix Q – Service Level Agreements, and the proposal shall be submitted on the basis that the SLAs in Appendix Q – Service Level Agreements shall apply to this procurement.

The selected Contractor shall provide a Warranty for all Releases of the MVDLS Solution in accordance with Master Information Technology (IT) Services Invitation to Qualify (ITQ) Contract Terms and Conditions, Section 51, Warranties.

To complete this task, the selected Contractor shall perform the following subtasks:

Task L-1: Provide Routine Maintenance and Support: Starting at the end of the sixty (60) day post-implementation period (Task J-7) and continuing throughout the duration of the Purchase Order, or until PennDOT determines the routine maintenance services are no longer needed, whichever occurs first, provide the routine maintenance and support activities to support the MVDLS Solution, consistent with the requirements described under this task. Support the MVDLS application and associated software running on the workstations and servers. Unless a cloud solution is proposed, PennDOT's BIO is responsible for all aspects of the support and maintenance contributing to the network, hardware and operating system functionality of the PennDOT staging and production environments. The selected Contractor shall note that, depending upon the hosting approach, it shall not have physical access to the staging or production environments. Remote administration access is available and will be initiated by PennDOT network engineers based on the Contractor request.

<u>Task L-2: Perform Detailed System Troubleshooting:</u> As MVDLS system is closely tied with the networking infrastructure, detailed troubleshooting of the entire system is required by the selected Contractor as well. Ultimately, it shall be the selected Contractor's responsibility to ensure that the MVDLS Solution remains in operation. The selected Contractor shall establish a toll-free phone number and provide twenty-four (24) hours a day, seven (7) days a week, three hundred sixty five (365) days a year support for the system and provide service in accordance with Appendix Q – Service Level Agreements. Support shall be provided in accordance with standard PennDOT service desk processes.

<u>Task L-3: Resolve Service Failures:</u> At a minimum, PennDOT requires the selected Contractor to complete the following steps when resolving service failures:

- 1. Respond to all service failure events within SLA guidelines (refer to severity level matrix contained in Appendix Q Service Level Agreements).
- 2. Communicate periodic status updates during service failure response.
- 3. Maintain detailed service failure records.
- 4. Provide a quick assessment of criticality, impact to business, risks and options.
- 5. Restore application service.

- 6. At the request of PennDOT, provide a root cause analysis report within two (2) business days of service failure. The report shall include:
 - a. Chronology analysis in support of problem resolution
 - b. Documentation of all emergency changes
 - c. Description and schedule for any follow-up changes
 - d. Identification of the root cause of the service failure
- 7. At the request of PennDOT, document additional corrective action necessary within five (5) business days of service failure to prevent future reoccurrence of the problem.
- 8. At the request of PennDOT, implement and document changes in supporting environments within two (2) business days of the conclusion of corrective maintenance activities.
- 9. At the request of PennDOT, complete an After Action Review (AAR). Provide an After Action Report within ten (10) business days of the conclusion of corrective maintenance activities. The report should include:
 - a. Chronological analysis in support of problem resolution;
 - b. Documentation of all emergency changes;
 - c. Description and schedule for any follow-up changes; and
 - d. Identification of the root cause of the service failure.
- 10. The selected Contractor shall recommend and complete any additional steps required to successfully resolve service failures, based on industry standards, best practices, and selected Contractor experience.

<u>Task L-4: Create Monthly Performance Reports:</u> Provide monthly performance reports to demonstrate compliance with the SLA. PennDOT will work with the selected Contractor to identify the report format.

<u>Task L-5: Update Documentation:</u> Maintain documentation (on an on-going basis) as necessary to ensure that it is current throughout the MVDLS Project.

Task L Deliverable Summary			
	Subtasks	Deliverables	
	Task L-1: Provide Routine Maintenance and	Routine Maintenance and	
	Support	Support	
Task L	Task L-2: Perform Detailed System	System Troubleshooting	
	Troubleshooting	and Service Failure	
	Task L-3: Resolve Service Failures	Resolution	
	Task L-4: Create Monthly Performance Reports	Monthly Performance	
	Task L-5: Update Documentation	Reports	

Task M: Transition & Phase Close-Out

The Transition & Phase Close-Out task shall provide an orderly transition of maintenance and support responsibilities for the MVDLS Solution to PennDOT's resources and complete all necessary phase close-out and overall project close-out activities. To accomplish this task, the selected Contractor shall perform the following subtasks:

<u>Task M-1: Develop Transition Plan:</u> Develop a Transition Plan to guide all transition activities.

<u>Task M-2: Create Final System Documentation:</u> Update all project Technical Documentation and User Training Materials.

<u>Task M-3: Transition SECM:</u> Provide all Software Engineering and Configuration Management (SECM) content (e.g. backlog, enhancements, bugs, work items, release plans, documentation, source code, configuration data, etc.) and work with PennDOT on the orderly transition to PennDOT's internal SECM technologies and processes.

<u>Task M-4: Conduct Knowledge Transfer Sessions:</u> Plan, schedule and conduct Knowledge Transfer Sessions to transition MVDLS Solution knowledge to PennDOT resources, up to fifty (50). Plan, schedule and conduct Knowledge Transfer Sessions to transition solution knowledge to PennDOT resources for all other tools or software used for solution installation, configuration, development and testing software as applicable.

<u>Task M-5: Participate in After Action Reviews:</u> Participate in After-Action Review sessions to evaluate phase execution and identify successes and opportunities for improvement.

<u>Task M-6: Update Documentation:</u> Maintain documentation (on an on-going basis) as necessary to ensure that it is current throughout the MVDLS Project.

Deliverables associated with the Transition & Project Close-Out task include:

- 1. **Final System Documentation.** The selected Contractor shall provide final, up-to-date copies of all Technical Documentation and User Training Materials for the MVDLS Solution.
- 2. **Transition Plan.** The selected Contractor shall provide a Transition Plan that describes the orderly transition of maintenance and support to PennDOT resources. At a minimum, the Transition Plan shall include:
 - a. The deliverables, tasks, dates, durations, milestones, resources, and other relevant information for all transition activities; and
 - b. The number of resources needed to support and maintain the MVDLS Solution and their required skills.
- **3. Knowledge Transfer Sessions.** The selected Contractor shall plan, schedule and conduct a series of Knowledge Transfer Sessions to transition technical knowledge of the MVDLS Solution to PennDOT resources who will be assuming maintenance and support responsibilities for the solution. PennDOT maintains the responsibility of ensuring that PennDOT staff have appropriate baseline knowledge for all denoted Enterprise IT Standard Technologies.

Transition & Project Closeout deliverables shall be considered one (1) deliverable for the purpose of invoicing/payment. The selected Contractor may submit the deliverables separately to the PennDOT Project Manager.

The Transition & Project Closeout deliverables shall not be considered guaranteed work, and shall not commence until the selected Contractor receives notification from PennDOT. PennDOT reserves the right to extend delivery of the Transition & Project Closeout task to future Purchase Order renewals.

Task M Deliverable Summary			
	Subtasks	Deliverables	
	Task M-1: Develop Transition Plan		
	Task M-2: Create Final System Documentation		
	Task M-3: Transition SECM	Transition & Phase	
Task M	Task M-4: Conduct Knowledge Transfer Sessions	Closeout	
	Task M-5: Participate in After Action Reviews		
	Task M-6: Update Documentation		

Task N: Additional Work

PennDOT reserves the right to request additional work for this Project by use of negotiation of work orders as described in Appendix GG – Work Order Requirements and Appendix FF – Sample Work Order Authorization Page. Any additional work shall be within the scope of this RFQ and subsequent PO's.

In the event that additional work is identified, PennDOT's Project Manager shall provide the selected Contractor a list of tasks and deliverables needed so that the selected Contractor can provide a Scope of Work and cost breakdown in accordance with Appendix GG – Work Order Requirements. There is no guarantee that Task N will be used by PennDOT. Each work order will be a deliverable in accordance with Appendix GG.

Project Delivery

At the beginning of each phase of effort (Initial Work Plan, Foundation Subsystems, Iterations and Releases), PennDOT and the selected Contractor shall review and jointly define the scope, plan, technology, deliverables, schedule, work breakdown structure, deliverable acceptance criteria and deliverable payment schedule for that specific phase.

Initial Work Package

PennDOT firmly believes this RFQ contains the information needed for Contractors to size, scope and plan the work needed to deliver the MVDLS Solution that meets all the requirements and provides a fixed price proposal. However, PennDOT also understands that the selected Contractor may have further detailed questions once they arrive on-site. This Initial Work Package deliverable, due within twenty (20) weeks of the effective date of the Purchase Order, will include an opportunity for the selected Contractor to ask any further questions of PennDOT, perform a gap analysis, finalize

the requirements to address any gaps, develop a high-level design, and reconfirm the project schedule and cost submitted and evaluated through this RFQ process.

Since PennDOT undertook extensive measures to ensure clarity of scope and requirements through their substantive requirements gathering, PennDOT does not expect that the Initial Work Package exercise will result in any material impact on the selected Contractor's proposed plans or costs. However, if the project schedule and design are delivered and the selected Contractor indicates a material change is required to their project schedule and/or costs, or if the delivery of the Initial Work Package is late, PennDOT may exercise its right to terminate the Purchase Order with no liability to either party, and may select other qualified Contractors. The Initial Work Package shall be approved before any work begins on subsequent Releases/Iterations.

Due to the nature of the Initial Work Package, it is expected that a subset of tasks and deliverables outlined in Section III-6 shall apply. Deliverables that pertain to the Initial Work Package are identified in Appendix Y – Initial Work Package Deliverables. Contractors shall propose using the deliverables and sequencing defined in Appendix Y – Initial Work Package Deliverables; however, Contractors may present additional alternate deliverable sequence(s) that include detailed justifications and explanations.

Foundation Subsystems, Iterations & Releases

After completion of the Initial Work Package, the selected Contractor shall implement in an iterative fashion completing the implementation of functionality in iterations as outlined in Section III-1 Requirements and Section III-6 Tasks of this RFQ. Work Orders shall define the scope of each Iteration, including prioritization and reprioritization of requirements. Tasks and deliverables may be consolidated during Iterations based upon agreed-upon Work Order definition.

Contractor Response

III-7. Reports and Project Control.

A. Task Plan.

As noted in Task A-1, a work plan for each task that identifies the work elements of each task, the resources assigned to the task, and the time allotted to each element and the deliverable items to be produced shall be created by the selected Contractor. Where appropriate, a PERT or GANTT chart display should be used to show project, task, and time relationship.

Contractor Response

B. Status Report.

As noted in Task A-6, a periodic progress report covering activities, problems and recommendations shall be created by the selected Contractor. This report should be keyed to the work plan the selected Contractor developed in its proposal, as amended or approved by the Issuing Office.

Contractor Response

C. Problem Identification Report.

As noted in Task A-2 (Issue Management), an "as required" report, identifying problem areas shall be created by the selected Contractor. The report should describe the problem and its impact on the overall project and on each affected task. It should list possible courses of action with advantages and disadvantages of each, and include selected Contractor recommendations with supporting rationale.

Contractor Response

D. Final Report.

As noted in Task M: Transition & Phase Closeout, the selected Contractor shall create Final System Documentation including, but not limited to, Technical Documentation and User Training Materials.

Contractor Response

III-8. Objections and Additions to Standard Contract Terms and Conditions. The Contractor will identify which, if any, of the terms and conditions (contained in Part VI) it would like to negotiate and what additional terms and conditions the Contractor would like to add to the standard contract terms and conditions. The Contractor's failure to make a submission under this paragraph will result in its waiving its right to do so later, but the Issuing Office may consider late objections and requests for additions if to do so, in the Issuing Office may, in its sole discretion, accept or reject any requested changes to the standard contract terms and conditions. The Contractor shall not request changes to the other provisions of the RFQ, nor shall the Contractor request to completely substitute its own terms and conditions for Part VI. All terms and conditions must appear in one integrated contract. The Issuing Office will not accept references to the Contractor's, or any other, online guides or online terms and conditions contained in any proposal.

Regardless of any objections set out in its proposal, the Contractor must submit its proposal, including the cost proposal, on the basis of the terms and conditions set out in **Part VI**. The Issuing Office will reject any proposal that is conditioned on the negotiation of the terms and conditions set out in **Part VI** or to other provisions of the RFQ as specifically identified above.

Contractor Response

PART IV

COST SUBMITTAL

- IV-1. Cost Submittal. The information requested in this Section II-11 and Appendix E Cost Submittal shall constitute the Cost Submittal. The Cost Submittal shall be placed in a separate sealed envelope within the sealed proposal and kept separate from the technical submittal. The total cost you are proposing must be broken down into the components listed in Appendix E Cost Submittal.
 - **A.** Project Phases over the thirty-six (36) month base contract term as shown in Appendix T Project Timeline and Phases.
 - **B.** Section IV-4, Tasks A-M.

Contractors shall provide a lump sum Unit Cost for each Project Phase as shown in Appendix E – Cost Matrix and as defined Appendix T – Project Timeline and Phases. The Unit Cost shall be all inclusive (i.e., including, but not limited to, labor, materials, travel) to provide the services as described in Section IV-4, Tasks A through M.

Contractors shall also provide a cost breakdown by Section IV-4, Tasks A through M as shown in Appendix E – Cost Matrix.

Contractors should not include any assumptions in their cost submittals. If the Contractor includes assumptions in its cost submittal, the Issuing Office may reject the proposal. Contractors should direct in writing to the Issuing Office pursuant to Part I, Section I-6 of this RFQ, any questions about whether a cost or other component is included or applies. All Contractors will then have the benefit of the Issuing Office's written answer so that all proposals are submitted on the same basis.

The Issuing Office will reimburse the selected Contractor for work satisfactorily performed after execution of a written contract and the start of the contract term, in accordance with contract requirements, and only after the Issuing Office has issued a notice to proceed.

PART V

DIVERSE BUSINESS, SMALL DIVERSE BUSINESS, and SMALL BUSINESS PARTICIPATION

The Commonwealth is seeking to maximize participation by Diverse Businesses, Small Diverse Businesses, and Small Businesses in this procurement. To this end, the Commonwealth is utilizing two (2) separate programs in this procurement – PennDOT's Act 89 DB Participation Program; and the Commonwealth's SDB/SB participation program administered by BDISBO.

Both programs will be administered independently from the other. Offerors must meet the requirements of the Act 89 DB Participation Program contained in Appendix W, entitled Diverse Business Participation for Non-Federally Funded Projects. Offerors may also make commitments to and receive RFQ evaluation credit for the utilization of Small Diverse Businesses and Small Business as set forth in the Small Diverse Business and Small Business Participation section below.

Although these programs will be administered independently, certain elements of the programs may overlap. For example, a business may meet the definitions of both "diverse business" under the Act 89 DB Participation Program and "small diverse business" under the SDB/SB participation program. Offerors may receive credit for utilization of such a business under both the Act 89 DB Participation Program and the SDB/SB participation program if such utilization is consistent with each program's requirements. However, some business may qualify under one program and not another.

V-I. PennDOT's Diverse Business Participation Program. A list of the requirements constituting good faith efforts and additional information concerning Diverse Business participation in this contract is contained in **Appendix W**, entitled **Diverse Business Participation for Non-Federally Funded Projects**. A form (EO-387) entitled Confidential – Successful Offeror's Intent to Subcontract Statement to be completed by the selected offeror is contained in **Appendix W- Diverse Business Participation For Non-Federally Funded Projects**.

Questions regarding PennDOT's Diverse Business Participation program, including questions about qualifying as a Diverse Business for purposes of the program, can be directed to:

Department of Transportation Bureau of Equal Opportunity 5th Floor Commonwealth Keystone Building

Harrisburg, PA 17120

Phone: (717) 787-5891 or 1-800-468-4201

Email: pd-non-ecms-db@pa.gov

Website: http://www.penndot.gov/about-us/EqualEmployment/Pages/Diverse-Business-

Program.aspx

V-II. The Commonwealth's Small Diverse Business and Small Business program.

A. Small Diverse Business and Small Business General Information. The Issuing Office encourages participation by Small Diverse Businesses and Small Businesses as prime contractors, and encourages all prime contractors to make significant commitments to use Small Diverse Businesses and Small Businesses as subcontractors and suppliers.

A Small Business must meet each of the following requirements:

- The business must be a for-profit, United States business;
- The business must be independently owned;
- The business may not be dominant in its field of operation;
- The business may not employ more than 100 full-time or full-time equivalent employees;
- The business, by type, may not exceed the following three-year average gross sales:
 - o Procurement Goods and Services: \$20 million
 - o Construction: \$20 million
 - o Building Design Services: \$7 million
 - o Information Technology Goods and Services: \$25 million

For credit in the RFQ scoring process, a Small Business must complete the DGS/BDISBO self-certification process. Additional information on this process can be found at: http://www.dgs.pa.gov/Businesses/Small%20Business%20Contracting%20Program/Pages/default.aspx

A Small Diverse Business is a DGS-verified minority-owned small business, womanowned small business, veteran-owned small business, service-disabled veteran-owned small business, LGBT-owned small business, Disability-owned small business, or other small businesses as approved by DGS, that are owned and controlled by a majority of persons, not limited to members of minority groups, who have been deprived of the opportunity to develop and maintain a competitive position in the economy because of social disadvantages.

For credit in the RFQ scoring process, a Small Diverse Business must complete the DGS verification process. Additional information on this process can be found at: http://www.dgs.pa.gov/Businesses/Small%20Diverse%20Business%20Program/Pages/default.aspx.

An Offeror that qualifies as a Small Diverse Business or a Small Business and submits a proposal as a prime contractor is not prohibited from being included as a subcontractor in separate proposals submitted by other Offerors.

A Small Diverse Business or Small Business may be included as a subcontractor with as many prime contractors as it chooses in separate proposals.

The Department of General Services's directory of self-certified Small Businesses and DGS/BDISBO-verified Small Diverse Businesses can be accessed from: http://www.dgs.pa.gov/Businesses/Small%20Diverse%20Business%20Program/Small-Diverse-Businesses.aspx.

Questions regarding the Small Diverse Business and Small Business Programs, including questions about the self-certification and verification processes can be directed to:

Department of General Services
Bureau of Diversity, Inclusion and Small Business Opportunities (BDISBO)

Room 601, North Office Building Harrisburg, PA 17125

Phone: (717) 783-3119 Fax: (717) 787-7052

Email: RA-BDISBOVerification@pa.gov

Website: www.dgs.pa.gov

- **B.** Small Diverse Business and Small Business (SDB/SB) Participation Submittal. All Offerors are required to submit **two** (2) copies of the Small Diverse Business and Small Business Participation Submittal Form contained in (**Appendix II**) and related Letter(s) of Intent (**Appendix JJ**). The submittal must be sealed in its own envelope, separate from the remainder of the proposal, and must be provided on the Small Diverse Business and Small Business Participation Submittal form, with information as follows:
 - 1. Offerors must indicate their status as a Small Diverse Business <u>and</u> as a Small Business through selection of the appropriate checkboxes.
 - **2.** Offerors must include a numerical percentage which represents the total percentage of the total cost in the Cost Submittal that the Offeror commits to paying to Small Diverse Businesses and Small Businesses as subcontractors.
 - 3. Offerors must include a listing of and required information for each of the Small Diverse Businesses and/or Small Businesses with whom they will subcontract to achieve the participation percentages outlined on the Small Diverse Business and Small Business Participation Submittal.
 - 4. Offerors must include a Letter of Intent (attached as **Appendix JJ** is a Letter of Intent template which may be used to satisfy these requirements) signed by both the Offeror and the Small Diverse Business or Small Business for each of the Small Diverse Businesses and Small Businesses identified in the Small Diverse Business and Small Business Participation Submittal form. At minimum, the Letter of Intent must include the following:
 - i. The fixed numerical percentage commitment and associated estimated dollar value of the commitment made to the Small Diverse Business or Small Business; and

- ii. A description of the services or supplies the Small Diverse Business or Small Business will provide; and
- **iii.** The timeframe during the initial contract term and any extensions, options and renewals when the Small Diverse Business or Small Business will perform or provide the services and/or supplies; and
- iv. The name and telephone number of the Offeror's point of contact for Small Diverse Business and Small Business participation; and
- **v.** The name, address, and telephone number of the primary contact person for the Small Diverse Business or Small Business.
- **5.** Each Small Diverse Business and Small Business commitment which is credited by BDISBO along with the overall percentage of Small Diverse Business and Small Business commitments will become contractual obligations of the selected Offeror.

NOTE: Offerors will not receive credit under the SDB/SB participation program for any commitments for which information as above is not included in the Small Diverse Business and Small Business Participation Submittal. Offerors will not receive credit under the SDB/SB participation program for stating that after the contract is awarded they will find a Small Diverse or Small Business.

NOTE: Equal employment opportunity and contract compliance statements referring to company equal employment opportunity policies or past contract compliance practices do not constitute proof of Small Diverse Business and/or Small Business Status or entitle an Offeror to receive credit for Small Diverse Business or Small Business participation.

C. Contract Requirements—Small Diverse Business and Small Business Participation.

All contracts containing Small Diverse Business and Small Business Participation must contain the following contract provisions to be maintained through the initial contract term and any subsequent options or renewals:

- 1. Each Small Diverse Business and Small Business commitment which was credited by BDISBO and the total percentage of such Small Diverse Business and Small Business commitments made at the time of proposal submittal, BAFO or contract negotiations, as applicable, become contractual obligations of the selected Offeror upon execution of its contract with the Commonwealth.
- 2. All Small Diverse Business and Small Business subcontractors credited by BDISBO must perform at least 50% of the work subcontracted to them.

- **3.** The individual percentage commitments made to Small Diverse Businesses and Small Businesses cannot be altered without written approval from BDISBO.
- **4.** Small Diverse Business and Small Business commitments must be maintained in the event the contract is assigned to another prime contractor.
- 5. The selected Offeror and each Small Diverse Business and Small Business for which a commitment was credited by BDISBO must submit a final, definitive subcontract agreement signed by the selected Offeror and the Small Diverse Business and/or Small Business to BDISBO within 30 days of the final execution date of the Commonwealth contract. A Model Subcontract Agreement which may be used to satisfy this requirement is provided in **Appendix KK Model Form of Small Diverse and Small Business Subcontract Agreement**. The subcontract must contain:
 - i. The specific work, supplies or services the Small Diverse Business and/or Small Business will perform; location for work performed; how the work, supplies or services relate to the project; and the specific timeframe during the initial term and any extensions, options and renewals of the prime contract when the work, supplies or services will be provided or performed.
 - **ii.** The fixed percentage commitment and associated estimated dollar value that each Small Diverse Business and/or Small Business will receive based on the final negotiated cost for the initial term of the prime contract.
 - **iii.** Payment terms indicating that the Small Diverse Business and/or Small Business will be paid for work satisfactorily completed within 14 days of the selected Offeror's receipt of payment from the Commonwealth for such work.
 - iv. Commercially reasonable terms for the applicable business/industry that are no less favorable than the terms of the selected Offeror's contract with the Commonwealth and that do not place disproportionate risk on the Small Diverse Business and/or Small Business relative to the nature and level of the Small Diverse Business' and/or Small Business' participation in the project.
- **6.** If the selected Offeror and a Small Diverse Business or Small Business credited by BDISBO cannot agree upon a definitive subcontract within 30 days of the final execution date of the Commonwealth contract, the selected Offeror must notify BDISBO.
- 7. The Selected Offeror shall complete the Prime Contractor's Quarterly Utilization Report and submit it to the contracting officer of the Issuing Office and BDISBO within ten (10) business days at the end of each quarter of the contract term and any subsequent options or renewals. This information will be used to track and confirm the actual dollar amount paid to Small Diverse Business and Small Business subcontractors and suppliers and will serve as a record of fulfillment of the contractual commitment. If there was no activity during the quarter, the form must be completed by stating "No

activity in this quarter." A late fee of \$100.00 per day may be assessed against the Selected Offeror if the Utilization Report is not submitted in accordance with the schedule above.

- **8.** The Selected Offeror shall notify the Contracting Officer of the Issuing Office and BDISBO when circumstances arise that may negatively impact the selected Offeror's ability to comply with Small Diverse Business and/or Small Business commitments and to provide a corrective action plan. Disputes will be decided by the Issuing Office and DGS.
- 9. If the Selected Offeror fails to satisfy its Small Diverse Business and/or Small Business commitment(s), it may be subject to a range of sanctions BDISBO deems appropriate. Such sanctions include, but are not limited to, one or more of the following: a determination that the selected Offeror is not responsible under the Contractor Responsibility Program; withholding of payments; suspension or termination of the contract together with consequential damages; revocation of the selected Offeror's Small Diverse Business status and/or Small Business status; and/or suspension or debarment from future contracting opportunities with the Commonwealth.