

Appendix 4 – Training Requirements

1.	Training	2
2.	Knowledge Transfer	12
3.	Response to Training Requirements.....	14

See the RFP Section 1.2 and Task Order Section 1.2 for a complete list of all abbreviations and acronyms.

Training		
Appendix #:	4	
Subject:	Training Requirements	

1. Training

Training and other relevant knowledge transfer activities shall be conducted in a phased approach: first, in advance of any production implementation, second, on an as-needed ongoing basis for newly on-boarded MVA staff, and third, culminating with a final round of training during Transition Out activities.

The Contractor shall complete designing, developing, and delivering sufficient training so that the State can perform all training activities after the Warranty Period.

1.1 Objective

1. There is an operational need for MVA to have a well-considered approach to managing training for all: new staff, aids and courses for training refreshers, and roll out of incremental system updates. The State anticipates the Contractor will account for this operational need in its training capability.
2. The State is particularly interested in ensuring that MVA staff who receive training demonstrate they understand the material presented. This is partly to measure training efficacy, but also to assure that the MVA staff are prepared to execute the system once it is in production. In addition to any training environments for directed training (e.g., instructor-led instruction in a classroom environment, online), the State requires utilizing a training environment as a simulated environment to allow MVA staff an opportunity to perform post-training activity. The training environment is expected to be primarily a self-directed environment, with the purpose of:
 - a) allowing MVA staff to continue to become familiar with system, and
 - b) to help support system changes and/or new feature rollouts that may not yet be fully incorporated into all training materials. The State does not mandate that the environment for post-training activities be separate from the training environment used for directed training. If the environment used for post-training activities is not separate from the formal training environment, the Offeror shall:
 - a. Ensure those receiving directed training do not interfere with those performing post-training activities.
 - b. Ensure those performing post-training activities do not interfere with those receiving directed training.
 - c. Ensure students performing post-training activities have access to the training environment during the Business Day and their work remains available between intermittent sign-ins.

However, if the training environment(s) for students performing post-training activities is separate from the training environment of students receiving directed training:

Training		
Appendix #:	4	
Subject:	Training Requirements	

- a. The Offeror shall indicate that a separate post-training environment is required for students performing post-training activities, and include this on the Price List, HWSW tab.
- b. If the separate post-training environment is the Sandbox environment, this should be clearly stated.

1.2 Training Scope

The Contractor is responsible for all aspects of a training program that will educate the State staff in the new system including its design, maintenance, usage, operation and support. Training scope includes all DIWS 2 functions, sub-system functions, reports and interfaces as documented in the requirements.

1.3 Training Requirements

At a minimum, the Contractor shall:

1. Develop and update all training courses, supporting materials, recommended study approaches to meet DIWS 2 training needs for implementation, incremental rollouts of functionality, and ongoing operation of DIWS 2.
2. Develop, maintain, store, produce, update, and distribute all training materials. This includes materials for classroom training, online learning, and other learning aids.
3. Prepare and deliver live training (assumed to be classroom training for the purposes of these TO requirements) for MVA staff until the end of the Warranty Period.
4. Establish, as appropriate, a series of training courses (i.e., a curriculum) and tools for measuring comprehension that, once successfully completed, demonstrate competence in a particular aspect of DIWS 2 .
5. Using the State’s learning management system (LMS), manage training courses, curriculum, and course registrations for all MVA staff.
6. Manage training courses, any course registrations, and other training for non-MVA staff recipients (see Section 1.13 Attendance Tracking and Activity Reports).
7. Track the status and completion of all training.
8. Update and effectively communicate such updates to training materials and training courses, especially as defects and workarounds are identified, and incremental functionality is deployed.
9. Develop and implement a feedback process to improve training. All feedback shall be documented and provided to the State.

Training		
Appendix #:	4	
Subject:	Training Requirements	

10. Develop metrics and mechanisms for evaluating the effectiveness of the training classes and overall training process. Implement changes as a result of information gathered.
11. Develop and implement a process to ensure the MVA technical staff, including the Operations Support Group, are prepared to support the technical operation of DIWS 2.
12. Develop tools and mechanisms for populating and refreshing training data
13. Develop training mechanisms that allow for multiple concurrent sessions of the same training class/training session.
14. Keep updating training materials, training databases and logical environments in sync with the production environment as enhancements are built into the system and new releases are deployed.

1.4 Training Environments

The Contractor shall plan, establish, and manage training environments sufficient to support all types of training necessary for the entire DIWS 2. Support furnished by the Contractor for training environments shall include access management for users, training environment data refresh and system deployments.

At a minimum, the Contractor shall establish and manage:

1. Classroom training environment(s)
2. Sandbox training environment to support informal training on DIWS 2 after completing structured training.
3. The Sandbox environment shall:
 - a. Allow users to access training from office computers throughout the State.
 - b. Allow users to practice transactions
 - c. Have unique logins to support activity tracking (see Section 1.13 Attendance Tracking and Activity Reports)
 - d. Be “near-latest” version of system code to show any last minute design changes that may happen between classroom training and go-live.
 - e. The Contractor shall release practice exercise worksheets when the Sandbox Environment is updated. These worksheets shall reflect changes to the system from their classroom training so that users learn about functionality changes before go-live.
4. The Classroom training environment(s) shall:
 - a. be kept up to date with planned production releases
 - b. support at least two concurrent, in-person (classroom) classes/training sessions for the same course
5. Training data shall:
 - a. be sufficient to exercise all parts of the system
 - b. shall not include production data

Training		
Appendix #:	4	
Subject:	Training Requirements	

6. Training environments shall simulate data flow to and from other systems when needed to demonstrate a function during training without disturbing production data (e.g., to simulate External System).
7. The Contractor shall establish tools, data, refresh schedules, and anything else necessary to ensure that instructors and students are provided with fresh data as needed for examples, exercises, and other class activities for each new class/training session.
8. The Contractor shall furnish instructions and tools, and train the State on how to update and refresh the training environment/database. These instructions will be used by State trainers when preparing future classes.
9. The Contractor is responsible for providing the State with logon and access requirements associated with training.

1.5 Training Plan

The Contractor shall develop and document a recommended training program in the Training Plan and shall include at a minimum:

1. Types of training recommended (e.g., Instructor-led, Computer Based Training, webinar) for each user type/role.
2. Recommended hours of training for each user type.
3. Proposed training syllabus/curriculum outlines.
4. Recommended training materials (presentations, handouts).
5. The Contractor shall include as part of its training program recommendations regarding how MVA can incorporate train-the-trainer approach.
6. Assist the State in determining the number of classes, web-based training modules, and sessions necessary to successfully train State staff and management.
7. A training plan for supporting Third-party vendors for entering test scores, flags, or perform a small set of transactions.

1.6 Training Schedule

A detailed training schedule as part of the overall Master Project Schedule (as referenced in Appendix 2 Sections 4.2, 5.2, 5.3 and 8.2 shall be developed and maintained by the Contractor with support and input from the State and the State’s trainers. For more requirements of the Training Plan, see Section 1.5 Training Plan.

Training		
Appendix #:	4	
Subject:	Training Requirements	

1.7 User Training Roles

At a minimum, the Contractor shall develop all materials, planning, and processes to train the following types of users of DIWS 2. Unless noted otherwise, Contractor shall perform all training of the following roles through completion of the Warranty Period:

1. **MVA Management** (60 – see table below)
2. **Operations Support Staff** (60 – see table below) – The Contractor shall train the Operations Support Staff and Help Desk teams. Training program shall include tools to measure they are properly trained to support the system.
3. **Technical Staff** (120 – see table below) – The Contractor shall train the MVA technical staff regarding the tools and architectural information necessary for them to support and maintain the system.
4. **Train-the-Trainers** (8-10 State trainers) – The Contractor shall perform training and develop train-the-trainer materials so that State trainers and technical writers obtain a very high level of system competence. Materials shall include annotated trainer versions of the course materials and exercise books that describe the flow of the lecture and the corresponding online demonstrations. The Contractor shall include as part of its planning sufficient time, additional class days, and access to DIWS 2 for trainers (and technical writers) to become extremely proficient with DIWS 2. Train-the-trainer will be the model for any course that is delivered to end users.
5. **End Users (MVA Staff)** (400 at MVA headquarters, 1,200 in branch offices – see table below), currently envisioned as trained by the State’s trainers. Contractor-furnished training shall be priced an option in the financial proposal; the Contractor is fully responsible for developing training materials and documenting the training approach. Any end-user training provided by the Contractor shall be performed at the Glen Burnie Headquarters.
6. **Third-party Vendors** – interact with certain functions of DIWS 2 to enter test scores, flags, or perform a small set of transactions.
7. Additional user types/roles may be identified during the course of the implementation. The Offeror shall assume that some flexibility will be required to adjust the training plan and corresponding training materials as necessary to account for this. However, the total number of users requiring training should not significantly exceed the numbers defined in this section.

The estimated counts for the roles associated with the aforementioned types of users is provided in Table 1. Estimated Student Counts by Role.

Training		
Appendix #:	4	
Subject:	Training Requirements	

Table 1. Estimated Student Counts by Role

Roles	Estimated Student Count	Modules (to be recommended in proposal)
MVA Management		
Executive Management	5	
DIWS 2 Business Managers	5	
DIWS 2 Management Team	10	
Governance Boards	40	
Total	60	
Operations and Support Staff		
Operations Management	10	
Operations Support Staff	40	
Organizational Development Trainers	10	
Total	60	
Technical Staff		
Technical Support Management	20	
Technical Support Staff	50	
Programmer	30	
Database Analyst	10	
Web Master	10	
Total	120	
End Users – MVA Headquarters (Train via Train-the-Trainer Approach)		
Accounting	50	
Human Resources	35	
Procurement	25	
Driver Licensing	75	
Vehicle Title and Registration	60	
Driver Enforcement	60	
Business Licensing	50	
Financial Operation, Investigations and Audit	45	
Total	400	

Roles	Estimated Student Count	Modules (to be recommended in proposal)
End Users – MVA Branch Offices (Train via Train-the-Trainer Approach)		
Managers / Assistant Managers	75	Will be trained in all general functionality and retrieval of DIWS 2
Supervisors / Lead Workers	200	Will be trained in all general functionality and retrieval of DIWS 2
Customer Service Agents / Examiners	925	Will be trained in all general functionality and retrieval of DIWS 2
Total	1,200	

1.8 Training the Trainer

The Contractor shall obtain approval from the State for the Contractor’s trainers and the State has the right to request replacements. The Contractor shall supply trainers who have both DIWS 2 knowledge and training skills.

1. The Contractor shall hold separate train-the-trainer classes for 8-10 State trainers who will provide training to existing staff during rollout, provide new hire training after rollout, and audit the Contractor’s training classes. Train-the-trainer sessions shall be designed so that State trainers obtain a high level of system competence. This may be accomplished through more detailed instructions, more class days, or more hands-on time. The Contractor shall provide annotated trainer versions of the course materials and exercise books that describe the flow of the lecture and the corresponding online demonstrations.
2. Train-the-trainer shall be the model for any course that is delivered to end users. Annotated training materials shall be created to support the course and delivered to the State.

1.9 Support for UAT

The Contractor shall conduct sufficient training to support UAT and any integration testing support performed by MVA staff, any quality assurance vendor staff, or potentially limited points of contact external to the MVA organization.

Training		
Appendix #:	4	
Subject:	Training Requirements	

1. The Contractor shall train all UAT testers on functionality so they can effectively perform acceptance testing [as referenced in Appendix 1 Section 9 User Acceptance Test (UAT)].
2. The Contractor shall hold UAT training and provide UAT training support throughout all implementation cycles to support all new features introduced into UAT, and changes to existing functionality that must be re-tested.
3. The Contractor shall describe the level of training materials and details it deems appropriate to support UAT training. Training shall be appropriate to support new functionality and changes to previously tested functionality.

1.10 Training Resources

The following resources and constraints are known at this time:

1. For in-person training, the State will provide training facilities that are equipped with training rooms and workstations for each student.
2. The State will ensure that the classroom computers have appropriate network connectivity.
3. The State may elect to set up equipment to mimic a field office configuration.
4. The State will furnish LMS licenses to the Contractor and MVA staff.

1.11 Training Materials

Training materials format, acceptance criteria, and update schedules shall be documented via the deliverable acceptance criteria in TO Section 3.9.2 Deliverable Acceptance and DED and TO Section 3.9.4 Deliverable Descriptions / Acceptance Criteria.

1. Training materials shall include at a minimum: quick-start guides, user guides, how-to documentation, and FAQs, as appropriate.
2. All training materials shall be stored in the document repository, labeled with each production release.
3. Training materials accessible via the MVA web site, DIWS 2, or the State’s LMS.
4. Training materials and courses shall describe modifications, configurations, and procedures made for the State, and shall employ the State’s terminology. Any existing training shall be tailored with these DIWS 2 items.
5. Training materials shall be branded for the Maryland MVA.
6. The State will own and reserves the right to reproduce all training materials and content for training the varied DIWS 2 users, and to make such changes to those training materials as necessary to improve training outcomes.
7. The Contractor shall furnish the capability, including licenses for any specialized tools, for the State to update any training materials.

Training		
Appendix #:	4	
Subject:	Training Requirements	

8. Web-based courses shall be developed on standard tools to allow future handoff of material for the State to update (i.e., no custom training development toolset allowed).
9. The Contractor shall develop curricula, courses, and tools for measuring comprehension for certain types of users, profiles, subsystems, and business lines.
10. The Contractor shall develop training materials to address students who may not have any prior introduction to a particular topic, and shall also develop training suitable for skills refresh in addition to initial rollout.

1.12 Web Based Training

1. The Contractor shall develop web-based training for any training course with expected student volume of 20 or more.
2. Training materials associated with curricula and tools to measure skills and comprehension shall be delivered via the State LMS.
3. Web-based training shall include self-tests after each topic and shall include the option to print a certificate upon successful completion.
4. Web-based training courses shall determine whether the student has demonstrated proficiency in the material.
5. Training Materials delivered via the LMS shall be SCORM-compliant (Sharable Content Object Reference Model) and capable of being delivered via Cornerstone On-Demand (the State’s current LMS). Note: The State will consider an alternative LMS. Offeror shall describe in its proposal the benefits to the State and associated pricing.

1.13 Attendance Tracking and Activity Reports

The Contractor shall provide an automated method for recording course completion status and tracking attendance at all courses it delivers.

1. This should be satisfied by integrating with the State LMS or via a vendor provided training tracking tool.
2. The Contractor will configure its proposed e-learning tool to include the required tracking and reporting.
3. The Sandbox, Training Environment(s) and Test Environment shall be able to generate activity reports based on user logins.
4. Sandbox activity reports shall include (but not be limited to):
 - a. Number of times a user logged in
 - b. Duration of login session
 - c. Location and time stamp of login session
 - d. Number of transactions completed in a session
 - e. Type of transactions completed in a session

Training		
Appendix #:	4	
Subject:	Training Requirements	

- f. Number of transactions started but not completed in a session
- g. Number of errors generated in a session
- h. Type of transactions which generated errors
- i. Type of transactions started but not completed
- j. Individual and global reports that display the above activity

1.14 Proficiency Tests and Reports

The Contractor shall provide proficiency tests as part of both classroom-based and web-based training.

1. Users shall be required to complete the test before the course/module is marked complete. The State will determine the requirements for considering a course/module complete.
2. The Contractor shall provide tools to measure skills and comprehension of Operations and Support staff based on an agreed upon set of requirements with the State.

Training		
Appendix #:	4	
Subject:	Training Requirements	

2. Knowledge Transfer

2.1 Objectives

The Contractor shall ensure that DIWS 2 is able to be supported by MVA technical staff and functional support/help desk staff. Knowledge transfer is an ongoing process that goes beyond classroom training.

1. In addition to formal training, the Contractor shall develop an approach to include non-classroom knowledge transfer for the operations and support staff and the technical staff. Knowledge transfer will supplement formal training and allow MVA staff to exercise formally-learned information through participation on the project.
2. It is the State's intention and objective to assume responsibility for the operation, maintenance, support, and enhancement of the new system. This Transition Point will occur at the end of the Warranty Period.

2.2 Scope and Requirements

To achieve the aforementioned objectives, the Contractor shall provide knowledge transfer to the State staff, including formal and ad hoc training during the Contract.

1. The Contractor shall monitor the effectiveness of knowledge transfer to the State staff throughout the project.
2. The Contractor shall specify any prerequisites to knowledge transfer activities. The Contractor shall specify these pre-requisites as part of the initial Knowledge Transfer Plan so that the State has time to ensure staff has necessary skill sets. For example, if the Contractor solution uses Microsoft SQL 2012, then the Contractor may specify that an intermediate knowledge of Microsoft SQL 2008 or later is required for knowledge transfer in data related functions.
3. Knowledge transfer to the state shall specifically include:
 - a. A working knowledge of the current environment as well as the general business practices of the State
 - b. Review with the State the procedures and practices that support the business process and current environment
 - c. Working knowledge of all technical and functional matters associated with the System, its architecture, data file structure, interfaces, any batch programs, and any hardware or software tools utilized in the performance of this Contract
 - d. Documentation that lists and describes all hardware and software tools utilized in the performance of this Contract
 - e. A working knowledge of various utilities and corollary software products used in support and operation of the System

Training		
Appendix #:	4	
Subject:	Training Requirements	

2.3 Knowledge Transfer Plan

The Contractor shall prepare a plan that describes how knowledge will be transferred throughout the project to the State staff, including technical and support staff.

1. The Knowledge Transfer Plan shall support active participation and involvement of the State’s resources from project initiation through system turnover.
2. The Knowledge Transfer Plan shall support the development and execution of the Training Plan and the Turnover Plan (turnover of system for support by the State). The linkage between these three plans shall ensure that appropriate training is provided, and that State staff has the skills necessary to support the system.

3. Response to Training Requirements

The table below identifies the topics which the Offeror shall address in its Technical Proposal. Each topic in the response shall be identified with a heading corresponding to the table below. Responses should not be placed in the table.

Offeror shall refer to the referenced section of the Task Order to fully understand the State’s requirements and expectations when preparing the response. The Offeror shall address the topics/questions identified in the table but is expected to elaborate or add additional information as appropriate to fully understand the Offeror’s solution and approach.

The Offeror should provide a detailed description of the proposed solution but does not need to address every item or sentence in a particular section. The Offeror’s response shall be construed to be inclusive of all requirements referenced by the table and shall bind the Offeror to all such requirements unless the Offeror specifically addresses partial or non-compliance in its response. Offerors shall describe requirements that cannot be met or that can only partially be met as part of the final question of the response table.

The Offeror shall adhere to any page limit for the topic.

In some topics below, the State has requested a sample of work from a previous project or a draft version of an artifact for this project (e.g. include a draft Project Plan for this project). These items are identified below and shall be included in [TAB O] and not inserted into the narrative. Such items are not included in page limits. If requested items are not available, briefly describe.

Response Requirements			
Appendix 4 Training			
Appdx Ref	Topic Title	Response Requirements	Page Limit
1.2 through 1.11	Training Approach	<ul style="list-style-type: none"> a. Describe the methodology and general approach to training. Describe how this methodology will be integrated into the project plan to ensure all system users and support personnel are properly trained. b. Include a training plan for this project. c. Clearly indicate whether a separate post-training environment is required for students performing post-training activities, or if the Sandbox environment will be used for post-training activities. Update the Price Sheet accordingly. 	

Response Requirements			
Appendix 4 Training			
Appdx Ref	Topic Title	Response Requirements	Page Limit
1.4	Training Environments	Describe the types of training environments the Contractor will setup to support training delivery. Describe how training data is created, loaded, and refreshed in the training environments. Describe how the environments will be maintained and supported during the entire Contract period of performance.	
1.5, 1.6, and 1.7	Training Curriculum (Training Plan, Training Schedule, User Training Roles)	<ul style="list-style-type: none"> a. Describe the various types of curriculum and training materials created by the Contractor’s training team to support the DIWS 2. Describe how these materials support a blended learning approach and various user groups around the state. Refer to the list of participants in Section 1.7 User Training Roles b. Describe what tools the Contractor uses to develop training materials and web based training. Describe the format the Contractor will use to deliver electronically editable training materials to the State. c. Include a sample of a training manual 	
1.7	Direct Training of End Users (User Training Roles)	The State has an Organizational Development department prepared to receive train-the-trainer training and perform end-user training. However, should the State chose to have the Contractor handle some or all end-user training activities, describe how the training approach would change based on this model. Provide this as an option in the Price Sheet, Deliverables tab, Lines 28, 29 and 30.	
1.8	Training the Trainer	Describe the methodology used for a train-the-trainer approach. Explain how the Contractor’s training team will support the State trainers while they deliver end-user training in the field.	
1.9	Support for UAT	Describe the approach for training State UAT testers.	
1.12	Web Based Training	<ul style="list-style-type: none"> a. Describe the solution for web based training. b. Include a screenshot of the web training module 	

Training		
Appendix #:	4	
Subject:	Training Requirements	

Response Requirements Appendix 4 Training			
Appdx Ref	Topic Title	Response Requirements	Page Limit
1.13 and 1.14	Training Delivery (Attendance Tracking and Activity Reports, Proficiency Tests and Reports)	Describe the tools the Contractor will develop or use to support training administration. Specifically describe the following items: a. Scheduling b. Attendance Tracking and Reporting c. Proficiency Testing and Reporting	
2	Knowledge Transfer	Describe the approach for continuous knowledge transfer throughout the project lifecycle.	
	Requirements not Met	The State assumes that the Contractor will meet all requirement described in Appendix 4 of the TO. Identify any areas that cannot be met and describe why.	