

WEB-BASED TRAINING (WBT) DEVELOPMENT

Statement of Work

CONVERTING THE EXISTING MATERIALS INTO 20 HRS OF WBT

Request for Quotation (RFQ), being issued by the (INSERT GOVT ENTITY)., with the intent to procure development of 20 hours of web-based training:

Location: (INSERT GOVT ENTITY ADDRESS)

History

In an effort to provide a greater value to our customers and reach a larger audience base at reduced costs, and provide greater flexibility for formal learning activities, the Transportation Curriculum Coordination Council (TCCC) is attempting to provide training content in distance learning formats via its existing systems. Based upon our experience thus far, the development of training varies in duration depending upon the level of availability of Subject Matter Experts (SME), the condition of the resource materials and inputs into the training and the desired course outcomes. The contractor shall take these factors into account in providing the work plan for various projects.

Objective

The objective of this Statement of Work is to have the contractor provide services to develop 20 hours of WBT instruction. This would include all related services in developing training content in multiple formats or converting existing instructor-led training (ILT) or workshop materials for delivery via the NHI Web site through web-based training (WBT).

The four training areas for development under this Statement of Work include

- Earthwork Series: Excavation (attachment 1)
- Earthwork Series: Fill Placement(attachment 1)
- Rock Stabilization(attachment 2)
- Asset Management(attachment 3)

Note: Existing course training and workshop content consisting of:

- PowerPoint Files
- Word Files
- Excel Files
- Illustration and Photo Files

TCCC Furnished Materials (attachment 4 has been removed from sample SOW)
The following are the TCCC furnished materials needed for contract completion.

- TCCC Training Development Request Form
- TCCC Style Guide
- TCCC Web-Based Training (WBT) Standards Guide
- TCCC Detailed-level Design Plan (DDP) Template
- TCCC PowerPoint Template
- TCCC/NHI Certificate Template

Delineation of Contractor Tasks

The following tasks will be performed for each training area.

Task 1: Kick off Meeting

Attend a web-based Project kick off meeting with the TCCC Technical Representative within 30 days of the award. The contractor instructional systems designer and account manager shall attend this meeting via web conference.

Within 10 days following the meeting, the contractor shall provide the TCCC Technical Representative a meeting typical project work plan outlining milestone dates for each project approach showing the timely completion of training developments.

Task 2: Project Kick-off Meeting/Detailed Work Plan

Based upon the project work plan submitted and mutually agreed to by the contractor and the TCCC Technical Representative, the contractor shall coordinate the preparations and host a web conference meeting for each training area to be developed.

The purpose of the meeting is to rationalize the approach that will be utilized to meet the objectives, discuss the project approach, course format, introduce the key resources, provide background information, clarify issues or concerns, define the roles and responsibilities, establish timelines, identify format of bi-weekly progress reports, and to respond to questions.

The contractor shall prepare a summary of the project kick-off meeting and submit it to the TCCC Technical Representative / TCCC Project Manager within 1 week of the project meeting. Within 1 week of receiving comments from the TCCC Technical Representative / TCCC, Project Manager and the contractor shall implement the comments into the summary and deliver a final project plan.

Task 3: Training Development Request Form

To determine the most advantageous approach for conversion to WBT, the TCCC will complete the Training Development Request form and submit it to the Contractor for review.

The purpose of the form is to assess and inventory potential trainings to determine the amount and work needed for the project development. This form allows the Contractor to make production path decisions for the potential training, and reviews a variety of criteria such as, whether a Detailed-level Design Plan (DDP) is needed, a review of electronic files is warranted, and whether graphics and content inventory needs to be conducted, and it reviews other important development information.

Following the review of these initial areas, the Contractor will consult with the TCCC team to review development recommendations and make next step decisions.

The Contractor's team will work with the TCCC team to **develop a project timeline**. The project timeline will take into account the priority level of each training conversion, SMEs availability, training length, revision schedules, and other mitigating factors.

The TCCC shall prepare a completed training development request form and submit them to the Contractor within 1 week of the project kick-off meeting.

Task 4: Propose a Detailed-level Design Plan (DDP)

If the Training Development Request form identifies that a DDP is needed, then it will be developed by the contractor to communicate the approach for developing the WBT.

The Contractor's team will work with the SME to complete a DDP. The Contractor will review the DDP, and will outline more specific details for the development of the WBT.

The DDP will convey how the training will be delivered, the learner experience, and how course goals will be achieved. The DDP will include the following:

- Course goal(s)
- Course learning outcomes (terminal learning objectives)
- Module titles
- Module objectives
- Content mapped to each objective (in bulleted or outline format)
- Module exams or other checkpoints
- Revised course duration by module
- Suggested graphical treatment of content
- Suggested use of audio, video, animations, or other multi-media
- Suggested related learning approaches
- Description of other independent learning activities that may accompany the course content
- Description of any prework and homework assignments
- Course duration, by module (revised estimate)

- Modified DDP based upon TCCC feedback •

Finalized DDP submission

Contractor's team members will address any outstanding concerns or questions derived from design meetings, conduct follow up web-based meetings or other information gathering discussions, update the DDP with meeting comments, within 10 days after the meetings and submit the DDP to the predetermined TCCC Project Team members for feedback and comments.

The Contractor will gather TCCC feedback and comments and updated the DDP. The Contractor will address any outstanding concerns or questions from TCCC review cycle, update the DDP with feedback and comments, and submit the updated DDP for final approval.

Task 5: Facilitate Detailed Level Review Meeting

When the DDP is completed, then the Contractor will conduct a Design Review Meeting within 5 business days of approval of the DDP, and will include the TCCC team members.

The Contractor will provide a comprehensive meeting agenda supplied in advance to include the proposed training design, recommended interactivity, and delivery details. The contractor will conduct follow up meetings or other information gathering discussions as determined by the team. Upon completion of the meeting, the Contractor will address any outstanding concerns or questions derived from the Review Meeting, update the DDP with meeting comments, and submit the updated DDP for final approval.

The contractor shall schedule a detailed level review meeting within 1 week of the submission of the DDP.

Task 6: Develop Module Prototype

The Contractor's team will develop the module prototype in accordance with TCCC training standards, the TCCC Style Guide, and following TCCC's approach for addressing requirements for Section 504 and 508. All electronic and information technology procured and/or developed for this task (if any) must meet applicable accessibility standards as specified in 36 CFR 1194. 36 CFR 1194 implements Section 508 of the Rehabilitation Act of 1973, as amended, which is viewable at: <http://www.accessboard.gov/sec508/508standards.html>.

The training prototype will consist of approximately 20 slides per hour of instruction. The project team will create engaging and interactive training content. Upon completion of the training prototype, the contractor will address any outstanding concerns or questions derived from the training design and development meetings, conduct follow up meetings or other information gathering discussions, update the training prototype with meeting comments, and submit the training prototype to predetermined TCCC Project Team members for review. The Contractor will gather TCCC feedback and comments and update the training prototype. The Contractor will address any outstanding concerns or questions from TCCC review cycle, update the prototype with feedback and comments, and submit the updated Adobe Presenter training prototype and updated DDP MS Word document to the TCCC Project Manager via email.

The contractor shall prepare a prototype and submit them to the TCCC Technical Representative within 2 weeks of the approval of the DDP.

Task 7: Develop Training Materials

The Contractor's team will build the training materials following TCCC training standards, the TCCC Style and Standards Guides, and requirements for Section 504 and 508.

The Contractor's team will build draft and pilot-ready training materials to include participant interactions, knowledge checks, and other training development needs, such as video and audio. The following are the tasks that may be involved in the training development phase:

- Build initial training materials in accordance with the TCCC WBT Standards and Style Guide
- Create a draft PowerPoint storyboard for each segment of the training
- Build and include participant interactions
- Write and insert slides transitions for interactions
- Build and include knowledge checks
- Build and include knowledge check debriefs
- Create a narration script that corresponds to each knowledge check in notes
- Create and build Flash objects, as needed
- Develop materials to comply to 504 and 508 accessibility
- Insert videos as needed
- Insert transcripts for videos
- Create a narration script that corresponds to each slide in notes
- Record narration script
- Create pilot-ready training materials
- Publish training materials to the Adobe Connect Server for review and testing
- Provide URLs for review to the TCCC team members and the FHWA SME for technical review via email
- Provide Training Review form to the TCCC team members and the FHWA SME for technical review via email
- Make corrections based upon the recommendations and comments of the SMEs and TCCC team
- Continue reviews cycles as identified for each trainings
- Complete a final set of trainings materials

The Contractor's team will address any ongoing outstanding concerns or questions derived from the training design and development meetings; conduct follow up to all meetings or other information gathering discussions during the develop phase; submit the draft and pilot-ready

training materials to the TCCC team members and SMEs for technical review via a URL sent by email.

Upon technical review completion, the Contractor's team will gather TCCC feedback and comments and update the draft and pilot-ready training materials; address any outstanding concerns or questions from the TCCC technical review cycle; and submit the final draft and pilot-ready training materials to the TCCC team members and FHWA SMEs via a URL sent by email.

The contractor shall prepare the draft training materials and submit them to the TCCC Technical Representative as agreed upon during in the final DDP.

Task 8: Final Course Delivery and Interface with Adobe Connect Server

The Contractor shall incorporate any final corrections/changes/updates identified by TCCC subject matter experts following review of the draft versions. The final Web-based training course shall be provided to the TCCC Technical Representative, TCCC Project Manager and any other identified SME's for final review and shall include at a minimum the following:

- Recorded script throughout course
- Interactive slides throughout the course sufficient to enhance the learning experience
- Knowledge checks that will ensure participant understanding of course material

Once the course content has been received after final approval from the TCCC, the contractor shall work with assigned team members to upload content to the Adobe Connect Server with the understanding that there may be interfacing issues that will need to be corrected by the contractor to match the Adobe Connect Server platform requirements and specifications.

The contractor shall provide final course materials via the Adobe Connect Server and submit them for approval to the TCCC Technical Representative within 1 week of the approval of the training materials.

Task 9: Final Deliverables Filing

The contractor shall, within 15 business days of finalizing project deliverables, provide electronic source and SCORM files to TCCC and NHI electronic library (shared drive) or agreed upon alternative. In addition, prepare printing samples and instructions as needed to reproduce any course materials delivered.

Task 10: Weekly Project Status

The contractor (account manager) shall meet with the TCCC Technical Representative weekly via telephone for no more than 30 minutes to provide updated status on progress related to the work plan and projects underway. The status meetings shall occur at 9 a.m. Pacific Standard time each Thursday unless rescheduled to a mutually acceptable time.

Delivery Schedule

There are deliverables for each task in this SOW. All printed materials shall be in Microsoft Word format. All visual aids shall be in PowerPoint. All deliverables shall meet the applicable Section 508-compliance requirements as described below.

The Tasks must be completed according to the following schedule:

Task 1	30 Days after Award;
Task 2	7 Days after Completion of Task #1;
Task 3	7 Days after Completion of Task #2
Task 4	14 Days after Completion of Task #3
Task 5	7 Days after Completion of Task #4
Task 6	14 Days after Completion of Task #5
Task 7	To be determined in Task #6
Task 8	7 Days after Completion of Task #7
Task 9	15 Days after Completion of Task #8
Task 10	Weekly throughout duration of task order

Location for Performing Work

The contractor shall provide their own facilities, software, computers and equipment to complete the requirements of this contract. The contractor shall be available between 09:00 am to 4:00 pm. Pacific Standard Time Monday to Friday exclusive of Federal holidays.

Post-Award Requirements (these requirements are not additional, they're directly from the SOW)

- *All courses to be developed using Microsoft PowerPoint and Adobe Presenter*
- *Contractor's team must be trained in the ADDIE ISD (Analysis, Design, Development, Implement, and Evaluate) methodology and will follow this approach in executing each training development*
- *Provide a list of key personnel and their experience. i.e. instructional systems designer, account manager*
- *Provide a work plan for each of the four training areas listed above*
- *Provide typical work plan outlining milestone dates*
- *Coordinate and prepare meetings and web-base conference meetings*
- *Prepare a summary of meeting along with a draft project plan*
- *Develop a project timeline*
- *Review development recommendations and make recommendations*
- *Contractor shall prepare a prototype*
- *Review source files and make recommendations*

Period of Performance

Completed project Twelve months from the date of Award.

Questions relating the RFQ or material must be in writing:
(INSERT GOVT ENTITY)

Rights in Data clauses are applicable and will be included in the award.

52.227-14 Rights in Data—General. In addition to that FAR clause, the contract will also contain a clause that states: “Pursuant to FAR Clause 52.227-14 Rights in Data—General, subparagraph (d)(2), the Contractor shall have no right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract. ”

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Evaluation criteria

FAR 52.212-2 -Quotes will be carefully evaluated on the following factors; based on the demonstrated capabilities of the prospective contractor in relation to the needs of the SOW set above. Each quote must document the feasibility of its plan to successfully achieve the objectives of the Task. Offerors must submit information sufficient to permit a comprehensive evaluation of their quote based on the detailed criteria listed below.

FACTORS

1. Technical Approach

- a. Clearly describe the task objectives, needs, and the manner in which they will be addressed. Does not replicate the task language but rather demonstrates a clear understanding of what is expected.
- b. Demonstrates a solid grasp of the subject area; familiarity with regulatory or programmatic issues that affect the TCCC training and Constituency (State Departments of Transportation, Local Public Works Agencies, and Highway Industry Members).
- c. Provision of a sound, feasible, and achievable technical approach, which includes application of appropriate adult learning, instructional systems design, and online learning principles and practices.

2. Staffing

Assigned individuals (below) are designated as key personnel, and are considered essential for its successful performance. In the event if any of the key personnel were unable to perform as proposed for any reason during the performance of the Tasks, the contractor shall immediately notify the COR and Contracting Officer in writing. Such notice will include an explanation of the problem, a proposed replacement by someone of equal or better qualifications and experience, and shall explain the impact on performance. All replacements are subject to the prior approval of the Contracting Officer. However, the Government reserves the right to approve such replacements retroactively when circumstances prevent advance approval.

a. The academic credentials, professional experience, subject matter expertise and technical competence to effectively edit and produce training materials for the TCCC target audience. In evaluating credentials of proposed team members, the following requirements will be considered.

Account Manager Level shall demonstrate the following:

- 5 to 10 years experience in distance learning WBTs
- Demonstrated project management skills for WBT course development efforts that are expedited (less than 5 months)
- Understanding of the current version of Adobe Presenter and Adobe Connect
- Demonstrated understanding of electronic source files for existing Instructor-Led training courses
- Ability to coordinate all aspects of training with several team members
- Ability to provide guidance regarding how other best practice Web-based training is being managed
- Ability to do thorough technology troubleshooting
- Experience developing adult learning content and understanding of the ADDIE process for course development
- Documented understanding of management of online and electronic content best practices

Instructional Systems Designer Level shall demonstrate the following:

- 5 to 10 years experience in instructional system designs
- High level of customer service
- Attention to detail
- Expert knowledge in current versions of both Adobe Presenter and Adobe Captivate
- 508 compliance experience
- Instructional Systems Design education or equivalent experience
- Experience with adult learning and course development for adult learners
- Solid writing/editing skills
- Thorough technology troubleshooting ability

b. Contingency plans in place to replace key personnel over the life of the Task without any adverse impact on the performance.

3. Past Performance

- a. Recent successful online training development experience in the Highway Transportation Industry. Provide 3 references
- b. Demonstrated recent successful experience developing training targeted toward adult learners in the transportation industry. Provide 3 examples
- c. Acceptable degree of successful performance in prior contracts. The Government will evaluate the merits of each offeror's past performance based on its reputation with its former customers. Evidence can include references, samples of correspondence from satisfied clients, letters of recommendation, etc. Provide 5 references
- d. Familiarity with the Transportation Curriculum Coordination Council mission, composition, target audience, and products and services. <http://www.tccc.gov/>

EARTHWORK IV & V SCOPE MATRIX

IV Excavation	
a.	Excavation Equipment & Techniques
b.	Mass Excavation
i.	Excavation Requirements and Specifications
ii.	Verification & Documentation (including quantity calculations for payment purposes)
1.	Provide concise and detailed guidance
2.	Stress objectivity
iii.	Necessary Communications (including project management, superintendents, operators, etc.)
iv.	Common Problems & Claim Threats
1.	Material Variation (borrow)
2.	Water Content Variation (borrow)
3.	Difficult Excavation
4.	Ill-defined material differentiation
5.	Hauling & Bulking/Loss (shrink/swell)
6.	Dewatering/Seepage Control
7.	Others
v.	Best Practices
c.	Trench Excavations (Footings, Culverts, Cut-offs, Keys, Utilities, etc.)
i.	Excavation Requirements and Specifications
ii.	Verification & Documentation
iii.	Necessary Communications
iv.	Common Problems & Claim Threats
1.	Changed Conditions
2.	Difficult Excavation (e.g. trenches @ specific elevations and grades)
3.	Trench bottom deterioration/softening
4.	Trench access
5.	Dewatering/Seepage Control
6.	Others
v.	Best Practices (including time and exposure limits for lengths left open)
d.	Permanent Cut-slopes
i.	Soil
1.	Requirements & Specifications
ii.	Rock
1.	Requirements & Specifications
iii.	Verification & Documentation
iv.	Necessary Communication and Coordination
v.	Common Problems & Claim Threats
1.	Differing Conditions
2.	Groundwater
3.	Local to major instabilities and rockfall
vi.	Best Practices

V	Fill Placement
a. Engineered Fill – Fundamental Concepts	
i. Fill Materials	
1. Soil Fill - relate to AASHTO classification system	
2. Manufactured Aggregate	
3. Rock Fill	
4. Special Materials (including limitations)	
a. Chemically stabilized soils	
b. Recycled/Waste Materials	
c. Light-weight materials	
d. Reinforced Materials (including geosynthetic and metallic)	
ii. Practical Implications of Density on Engineering Properties of Earth Materials	
iii. Mass-Volume Relationships	
iv. Moisture-Density Relationships	
v. Mechanical Compaction	
vi. Special considerations for specific materials	
b. Fill Placement & Compaction (General)	
i. Subgrade Preparation	
1. Clearing, Stripping & Grubbing	
a. Caveats	
i. Root-mat support	
ii. Displacement/mud-waving	
2. Subgrade grading, benching, keys, groundwater control systems	
3. Surface drainage and erosion controls	
4. Subgrade evaluation (proof-rolling, test-pits, probing)	
5. Subgrade stabilization (including drainage-systems) and ground improvements	
6. Differentiate between subgrade stabilization requirements and fill placement requirements	
ii. Equipment (including traditional and intelligent systems)	
iii. Scarifying, spreading, moisture adjustments, lift thicknesses, rolling patterns/passes	
iv. Density and Moisture Testing	
1. Overview of common AASHTO and ASTM standardized methods	
v. Requirements for specific materials	
vi. Documentation (General)	
vii. Necessary Communication and Coordination	
c. Embankments, Approaches, Structural Fill	
i. Requirements & Specifications	
ii. Verification & Documentation	
iii. Finish Grading, Permanent Ground-Cover, surface water control, details	
iv. Common Problems (including instability; improper side-slope compaction techniques; etc.)	
v. Best Practices	

Attachment 1

d. Wall backfill (for common wall types – MSE, Concrete CIP, restrained, unrestrained, etc.)	
i. Requirements & Specifications	
ii. Verification & Documentation	
iii. Common Problems (including overstressing during construction)	
iv. Best Practices (including smaller equipment near wall, smaller lifts, select fill, drainage, etc.)	

Rock Slope Stabilization Course Outline

BASIC MODULE OUTLINE

Title Page – this will include information about target audience and why training was developed

Module Learning Objectives – the main module learning outcomes

Module Lessons – example includes two lessons and what is suggested for content (you can have more lessons)

- Lesson One Learning Objectives
- Interactivity Every Five Slides
- Knowledge Check
- Lesson One Summary

- Lesson Two Learning Objectives
- Interactivity Every Five Slides
- Knowledge Check
- Lesson Two Summary

Module Summary – repeat the module learning outcomes

ROCK SLOPE STABILIZATION MEASURES

Title Page/Objectives

- Training Purpose/Background
- Training Objectives
- Resources

Add Knowledge Checks

Lesson – Introduction, Terms, and Processes

- Rockfall Treatment Measures
 - Avoidance
 - Protection
 - Stabilization Measures
- Scaling/Removal Techniques
 - Scaling
 - Blast Scaling
 - Trim Blasting
 - Re-sloping
- Reinforcement
 - Rock Bolts
 - Dowels
 - Shear Pins
 - Shotcrete

Add Knowledge Checks

Lesson – Scaling

- Blast Scaling
 - Explanation
 - Video
- Mechanical Scaling

- Explanation
- Video
- Cable Scaling
 - Explanation
 - Video
- Hand Scaling
 - Explanation
 - Video
- Other Scaling Tools – Hydraulic Jack
 - Explanation
 - Provide Photo Examples
- Scaling from Lifts and Video
 - Explanation
 - Video

Add Knowledge Checks

Lesson – Rock Bolting

- Rock Bolt Drilling
 - General Explanation
 - Video
- Rocking Bolt Drilling Steps
 - Inserting Resin Cartridges and Video
 - Inserting Rock Bolt and Video
 - Tensioning Rock Bolt and Video
 - Bolt Creep Check and Video
 - Locking Off Tension Load and Video
- Rock Bolt Site Examples – NEED SOME HELP HERE
 - 200-Foot Tall Crane with Cover Basket for Rock Bolt Drilling
 - Covered Drilling Basket
 - Crane with Extension Boom (140-Ft. Reach)
 - Safety and Ropes
 - 150-Foot Crane with Small Drill Basket
 - When Working from a Crane Room for Outriggers Is a Consideration
 - Drilling From Crane-Suspended Basket and Video
 - Drilling From Suspended Basket and Video
 - Anchor Pins / Tie Off Points Are Used To Hold Basket Up To The Rock Face For Drilling.
 - Rock Bolt Drilling With a Down-Hole Hammer Mounted On Spider Hoe
 - Hand Drilling From a Lift and Video
 - Drilling By Hand from Rope and Video
- Rock Bolt Drilling Tools and Equipment
 - Hand-Held Percussion Drill
 - Percussion Drill with Jack Leg
 - Drill Bits (Button and Star)
 - Tensioning Rock Bolt with Torque Wrench
 - Tension with Jack Hydraulic Jack
 - Typical Pump and Jack Diagram
- Grouting
 - Grout Hand Pump
 - Grout Plant
 - Final Grouting Of Two-Stage Process
 - Typical Detail of a Hollow-Core Rock Bolt
 - Grouting Of Hollow-Core Rock Bolt
 - Grout Cube Samples

Add Knowledge Checks

Lesson – Shotcrete

- Shotcrete Slope Stabilization
- Practical Application Examples
 - Shotcreting an Erodible Band
 - Shotcrete Slope Treatment Example
 - Sculpted Shotcrete – Test Section
- Play Applying Shotcrete Video
- Wet-Mix Shotcrete
- Applying Wet-Mix Shotcrete
 - Wet-Mix Nozzle
 - Dry Mix Sacks
 - Pre-Mixed Polypropylene Fibers
 - Dry Mix Nozzle
 - Continuous Feed Dry-Mix
- Sculpted Shotcrete

Add Knowledge Checks

Project Example

- Project Setup and Objectives
- Steps
 - Concern of Planar Failures (Sliding Blocks)
 - Significant Blast and Hand Scaling Is Needed
 - Scaled Rock
 - Crane Mounted Rock Drill with Extension Boom for a 140-Ft. Reach
 - Drilling From the Crane
 - Rock Bolt Tensioning
- Summary

Add Knowledge Checks

Module Summary

Transportation Asset Management Web Based Course
Draft Development Scope

1. What is Transportation Asset Management (TAM)?
 - a. Planning System
 - b. Strategic Management System
 - c. Performance Management System
 - d. Work Order System
 - e. Asset Inventory System
 - f. Budgeting System

2. TAM covers wide portfolio of assets
 - Pavements
 - Bridges
 - Tunnels
 - Other structures such as retaining walls, culverts, sign structures, etc
 - Curbs, channels, dams, and drainage facilities
 - Barriers, railings, and medians
 - Road signs
 - Pavement markings
 - Traffic signals and control equipment
 - Intelligent transportation systems (ITS)
 - Street lighting
 - Sidewalks
 - Bicycle lanes and paths on the right of way
 - Parking facilities such as pay and display machines, parking meters
 - Rest areas
 - Maintenance buildings and equipment
 - Landscaping

3. Importance of Infrastructure

4. TAM principles intended to stimulate strategic thinking about transportation infrastructure

5. TAM Business Model – Five Core Questions
 - a. What is the current state of my assets
 - b. What are my required levels of service and performance delivery

Attachment 3

- c. Which assets are critical to sustained performance delivery
- d. What are my best investment strategies for operations, maintenance, replacements and improvement
- e. Which is my best long-term funding strategy

6. Evolution of TAM in the US

7. Today's Challenges

- a. Aging infrastructure
- b. Increasing use of technology to solve problems
- c. Growing travel volume and congestion
- d. Growing pressure nationally and locally for performance and accountability

8. How TAM will assist agencies meet the challenges

9. The Surface Transportation Authorization Act

- a. What performance measures will be in the bill
- b. Solution to how we measure, what we measure, etc. could be to use the principles of TAM
- c. Resource for responding

10. TAM shows how to realize the benefits

- a. TAM enables better use of existing funds
- b. TAM improves agency competitiveness for limited funds
- c. TAM helps build constructive political relationships

11. TAM Resources

- a. AASHTO Asset Management Guide – Volumes 1 and 2
- b. Other case studies