# REQUEST FOR QUALIFICATIONS

ITS Standards Training Year Five Module Development

Response Deadline- October 5, 2018, 3:00 PM Eastern

In an effort to support the ITS JPO initiative to provide the ITS systems deployment personnel with the skills required to utilize the ITS standards effectively in the areas of procurement, installation, testing, and operation of ITS technologies, the Institute of Transportation Engineers conducted the development of the ITS Standards and Transit training and education modules as part of the USDOT ITS Standards Professional Capacity Building program during the past several years.

A total of 56 ITS Standards modules and 21 ITS Transit modules have been completed, and are currently available on the USDOT/ RITA/ JPO website: <u>http://www.pcb.its.dot.gov/stds\_training.aspx</u>.

Below are the new courses proposed for development, and the existing courses proposed for updates.

	NEW COURSES					
ITS Standard Training Proposed Module Title						
1	Introduction to Security Management System (SCMS 2.0)					
2	Cybersecurity for Transportation Agencies (ITE, AASHTO/ APTA Professionals)					
3	The Harmonized Architecture Reference for Technical Standards (HARTS)					
4	Roadside Equipment (RSE) Requirements					
5	Introduction to SPAT/ MAP Messages					
6	Introduction to IEEE 1609 Family of Standards					
ITS Transit Training Proposed Module Title						
7	Mobile Fare Ticketing / Payment					
8	Harnessing Social Media and Big Data Technologies for Transit Business Intelligence					
9	Leveraging Communications Technologies for Transit Onboard Integration					

EXISTING COURSES TO BE UPDATED					
I261	Vehicle-To-Vehicle (V2I) ITS Standards for Project Managers				
1262	Vehicle-To-Vehicle (V2V) Its Standards for Project Managers				
A315A	<u>Understanding User Needs for Actuated Traffic Signal Controllers (ASC) Based on NTCIP</u> <u>1202 Standard</u>				
A315B, part 1	Understanding Requirements for ASC Based on NTCIP 1202 Standard Part 1 of 2				
A315B, part 2	Understanding Requirements for ASC Based on NTCIP 1202 Standard, Part 2 of 2				
T315	Applying Test Plan to the NTCIP 1202 ASC Standard				
Transit Mod. 11	Transit and the Connected Vehicle Environment / Emerging Technologies, Applications, and Future Platforms				

We are looking for qualified participants to fulfill the following roles:

- Course Developer (lump sum contract)
- Course Reviewer (honoraria or voluntary)
- > Technical Advisory Committee (TAC) member (voluntary)

Please note that your participation as a Course Developer does not preclude you from participation as a TAC member or a Course Reviewer of the other modules.

# **COURSE DEVELOPER**

# <u>GOAL</u>

The course developer will possess the required subject matter expertise to develop interactive course content and materials to engage students in an online format. The time commitment for each course module development is approximately six (6 months).

- 1. Develop or update course content and materials using MS PowerPoint based on the approved module guide.
- 2. Identify, review, and assess reference materials for developing or updating course module(s)
- 3. Conduct web pilot and revise training materials in accordance with the post-pilot evaluations.
- 4. Conduct a recorded web pilot of the final approved training.

# <u>SKILLS</u>

A course developer must have an expert knowledge of the ITS Standards domains identified in the course titles as well as the specific domain expertise in communications, standards, systems engineering, connected vehicle, cybersecurity, transit standards in order to fulfill the module development and instructional roles required for this program. Your assistance in helping to shape the program by being a member of the TAC will not preclude you from being considered as a Course Developer.

#### <u>REQUIREMENTS</u>

- Experience in professional education, curriculum development, educational methods and research implementation, or knowledge management;
- A thorough understanding of adult learning methods and professional education practices; and;
- Experience teaching undergraduate, graduate, and/or at the adult or post-graduate level.

# **COURSE REVIEWER**

# <u>GOAL</u>

- 1. Contribute both orally and in writing in terms of the review and comment of the during module development
- 2. Provide <u>technical</u> review based on subject matter/domain expertise.
- 3. The reviewer will comment on all modules for which they have volunteered to participate, and as many additional modules as feasible.
- 4. The reviewers are to participate in pilot webinars for each or select modules as they are developed and offer their comments to the management team.

# <u>SKILLS</u>

A course reviewer must have an expert knowledge of the ITS Standards domains identified in the course titles as well as the specific domain expertise in communications, standards, systems engineering, connected vehicle, cybersecurity, transit standards in order to fulfill the module review roles required for this program. Your assistance in helping to shape the program by being a course reviewer will not preclude you from being considered as a Course Developer or TAC.

#### <u>REQUIREMENTS</u>

The course reviewer is a subject matter expert in communications, standards, systems engineering, and connected vehicle standards, cybersecurity who will be required to assist the course developers in providing content that meets the goal and objective of the modules. The time commitment for each course module development is approximately six (6 months).

# **TECHNICAL ADVISORY COMMITTEE MEMBER (TAC)**

#### <u>GOAL</u>

The goal of the TAC is to provide advisory guidance and input to the ITS Standard Training development program. The TAC will participate in the overall review of the program and will help establish learning objectives and key elements for each of the training modules.

- Develop a Module Guide (MG) that will have the following components for each of the modules: curriculum path, course description and summary, key terminology, learning objectives, pre-requisites, target audience.
- The TAC member will comment on all modules for which they have volunteered to participate, and as many additional modules as feasible.
- The TAC members are welcome to participate in pilot webinars for each or select modules as they are developed and offer their comments to the management team.

#### <u>SKILLS</u>

TAC should have expert knowledge of the ITS Standards domains as identified in the course titles listed. In addition to ITS Standards domain knowledge, the selected individuals should have expertise in all phases of the deployment of the standard, as applicable, including procurement, installation, testing, and operations.

#### <u>REQUIREMENTS</u>

TAC should provide level of comments at the "30,000-foot" or programmatic level as opposed to minutiae.

Level of Effort by Stage				
Module Guide Development Provide input/assist in the development of the Module Guide for the specific course module.	Developer TAC			
<b>Storyboard</b> An expanded outline including learning objectives, topics and subtopics, key messages and notes.	Developer Reviewer TAC			
Module Materials Development This phase of the project will be the development of PowerPoint <sup>™</sup> slides between 90 and 120 minutes, inclusive of questions and answers. (at least two drafts) along with a participant workbook.	Developer Reviewer			
<b>Pilot</b> A web pilot of the course materials will be presented to the professional ITS community. After the post-pilot debriefing, the module developer will revise the course materials and incorporate suggested revisions based on participant evaluation.	Developer Reviewer TAC			
<b>Final Recording</b> A final recording without the user community will take place based on the revised module materials and will be used as the 24/7 archived webinar.	Developer			

# RESPONSE TO REQUEST FOR QUALIFICATIONS ITS Standards Training Year Five Module Development

Submit to: Nicola Tavares at <u>NTavares@ite.org</u>

# NO LATER THAN October 5, 2018, 3:00 PM EST

Name:	
Job Title:	
Organization:	
Email:	
Phone:	

Please attach recent resume (CV) with relevant qualifications.

	Your Role (select any applicable)		
New ITS Standard Modules	Developer	Reviewer	TAC
Introduction to Security Management System (SCMS 2.0)			
Cybersecurity for Transportation Agencies (ITE, AASHTO/ APTA Professionals)			
The Harmonized Architecture Reference for Technical Standards (HARTS)			
Roadside Equipment (RSE) Requirements			
Introduction to SPAT/ MAP Messages			
Introduction to IEEE 1609 Family of Standards			
New ITS Transit Modules			
Mobile Fare Ticketing / Payment			
Harnessing Social Media and Big Data Technologies for Transit Business Intelligence			
Leveraging Communications Technologies for Transit Onboard Integration			
Existing Courses to be Updated			
I261: Vehicle-To-Vehicle (V2I) ITS Standards for Project Managers			
1262: Vehicle-To-Vehicle (V2V) Its Standards for Project Managers			
A315A, p.1: Understanding User Needs for ASC based on NTCIP 1202 Standard			
A315B, p1: Understanding Requirements for ASC Based on NTCIP 1202 Standard Part 1 of 2			
A315B, p 2: Understanding Requirements for ASC Based on NTCIP 1202 Standard, Part 2 of 2			
T315: Applying Test Plan to the NTCIP 1202 ASC Standard			
Mod. 11: Transit and the Connected Vehicle Environment / Emerging Technologies, Applications, and Future Platforms			