The Advanced Transportation Controller (ATC) family of standards provides an open architecture hardware and software platform that can support a wide variety of Intelligent Transportation Systems (ITS) field applications. Under USDOT funding, a software reference implementation of the ATC 5401 Application Programming Interface (API) Standard has been developed called the called the APIRI software. The APIRI software is designed to be incorporated into all ATC units going forward and provides modern computing capabilities for ITS field applications for today and the future. This ITS milestone will impact how agency and private practitioners procure, design, build and deploy ITS solutions. (6 PDHs offered)

Benefits of the APIRI Software include:

- Provides for multiple concurrent application programs to share the resources of the ATC unit and the field cabinet system;
- Facilitates portability and interchangeability of application programs which creates a competitive environment for hardware and software;
- Provides a software platform in which to implement emerging federal initiatives such as the Connected Vehicle program;
- Compatible with all of the existing major transportation field cabinet systems including NEMA TS 1, NEMA TS 2, 332-type, and ITS cabinets;
- Promotes innovation and third party solutions for ITS issues; and
- Maintained as open source software and available to everyone.

Workshop Learning Objectives / Topics:

- API Reference Implementation (APIRI) and API Validation Suite (APIVS) Software – What do they do for you?
- Demonstration of the ATC Standards Working Together
- Demonstration and Training for the APIRI Software from an End User’s Point of View
- Demonstration and Training for the APIVS Software from a Tester’s Point of View
- Using the APIRI and APIVS software from a Software Developer’s Point of View
- Q&A

A new generation of transportation field devices is here!