



Connected Vehicle Architecture Workshop

Architecture Integration

June 16, 2016

Workshop Agenda

- Introduction 9:00 AM
- CVRIA Overview 9:20 AM
- CVRIA Website Tour 9:50 AM
- National ITS Architecture / CVRIA Integration 10:20 AM
- Break 10:35 AM
- Attendee Feedback on CVRIA 10:50 AM
- SET-IT Software Tour 11:20 AM
- SET-IT Use Example 11:50 AM
- Wrap-up 12:20 PM
- Adjourn 12:30 PM

Architecture Integration

- Differences exist between National ITS Architecture and CVRIA
 - Structure / Schema
 - Content Detail
 - Primary Application
 - National ITS Architecture – Planning
 - CVRIA – Project Development / Systems Engineering Process
- Similarities
 - CVRIA ITS objects from National ITS Architecture

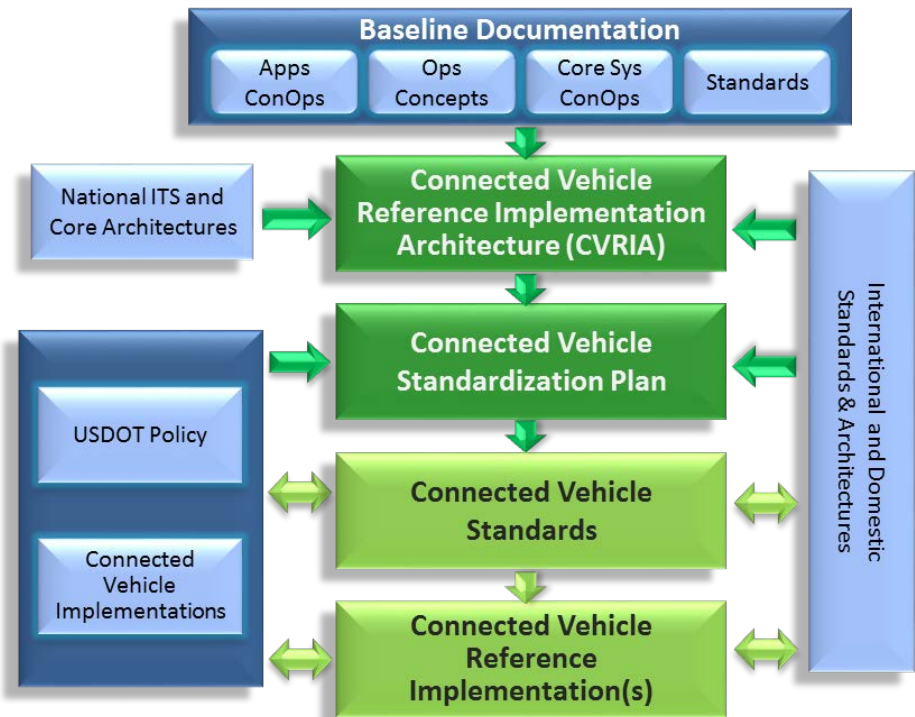
Why Integrate?

- Connected Vehicle is no longer just a research initiative – it's being deployed
- Integrating ITS and Connected Vehicle deployments and equipment is going to be a reality
- Integrating National ITS Architecture and CVRIA
 - Facilitates the development and evolution of regional ITS architectures to accommodate Connected Vehicle and support the transportation planning process
 - Enables the development of architectures for ITS and Connected Vehicle projects supporting the systems engineering process



CVRIA

- Connected Vehicle Reference Implementation Architecture (CVRIA) development
 - Followed ISO/IEC/IEEE 42010-2011 Systems and Software Engineering – Architecture Description
 - Collected needs and requirements from connected vehicle research work (Applications) and other sources
 - Developed a multi-faceted architecture



Integration Approach

- Use the schema/structure of the CVRIA
 - Following ISO/IEC/IEEE 42010-2011 Systems and Software Engineering – Architecture Description
- Adapt ITS entities to CVRIA level of detail for physical view including flow characteristics
 - Approximately 50% of ITS entities already adapted as part of CVRIA
- Consolidate ITS services and CV applications
- Develop enterprise and communications views for ITS



Products of Integration

- Single ITS/CV Reference Architecture
- Software Toolset
 - Regional ITS architecture support
 - Project architecture support with outputs for systems engineering process
- Updated Training materials
- Updated Workshop materials
- Revised Support Materials

Schedule

- End of 2016
 - Integrated ITS/CV Architecture
 - Databases
 - Website
 - Software Toolset
- First Quarter 2017
 - Training
 - Workshops
 - Support Materials