REGIONAL ITS ARCHITECTURE

Background

According to the FHWA ITS Architecture Guidance document, a Regional ITS Architecture is a regional framework for ensuring institutional agreement and technical integration compatibility for implementing ITS projects. It describes a high-level process defining and illustrating connectivity of data and systems across an entire region to show dependencies and integration structure for all elements so that planning and deployment can take place in an organized and coordinated fashion.

Each region has unique needs, so every regional ITS architecture is customized to meet the specific needs required to effectively and efficiently manage and operate the transportation system as a whole. Regional integration allows for the sharing of information and coordination of activities among regional transportation system and requires the participation and cooperation of every agency within the region. The Regional ITS Architecture needs to reflect a consensus view of all agencies to demonstrate a solid framework for a regionally integrated network.

Smart Region Sacramento ITS Architecture

The original Sacramento Regional ITS Architecture was completed in 2005. Since that time, there have been major advancements in technology and changes in the National ITS Architecture. The most current version of the National ITS Architecture is version 8.0 and includes the Connected Vehicle Reference Implementation Architecture (CVRIA). Other changes since 2005 include terminology for consistency with the National ITS Architecture, and new service packages for security, parking technology, and express lanes. Updating the Sacramento Regional ITS Architecture is important for ensuring proper planning and integration of technology projects, such as the US 50 ICM. It is also essential to demonstrate ITS Architecture conformance for federal funding purposes.

Task 5.1 of the Smart Region Sacramento project will update the 2005 ITS Architecture to reflect the latest changes.