EXECUTIVE SUMMARY

Intelligent Transportation Systems
Urban Area Strategic Deployment Plan

PREPARED FOR
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Expect More. Experience Better.
EXECUTIVE SUMMARY

The Intelligent Transportation Systems (ITS) Strategic Deployment Plan (SDP) for Tulare County creates a framework to support Regional ITS Architecture projects throughout the next 20 years. Through stakeholder engagement, this plan develops priority projects that implement technology to meet the transportation needs of the growing region. The stakeholders in Tulare County developed a vision statement to guide these future investments while still maintaining the integrity of the region.

The ITS SDP vision statement reads:

“Intelligent Transportation Systems will enhance mobility for all transportation users to improve the quality of life and the environment in Tulare County through the optimization, coordination, communication and integration of roadway and public transportation systems by investing in cost-effective technologies and solutions.”

The stakeholders developed a priority ranking system to ensure that the most important projects are implemented first over this 20-year period. While many needs were identified, each of the needs fell into these following eight categories:

1. Arterial Management
2. Freeway Management
3. Transit Management
4. Traveler Information
5. Road Weather
6. Data Management and Sharing
7. Emergency Management
8. Commercial Vehicle Operations

From these various categories the highest priority ITS User Needs were identified. The top five ITS User Needs fell into the Arterial Management and Transit Management categories:

1. Improve signal timing/coordination
2. Expand/enhance/upgraded automatic vehicle location (AVL) system
3. Expand security cameras on transit vehicles, at transit stations/stops and park-and-ride facilities
4. Provide real-time transit arrival/departure information at bus stops
5. Reduce recurring traffic congestion

Based on the identified ITS Service Areas for Tulare County, the stakeholders established the following goals:
#1: Reduce Traffic Congestion

#2 Reduce the Number, Severity and Duration of Accidents and Incidents

#3 Improve Transportation and Transit Planning and Operations

#4 Promote the Efficiency, Safety, Convenience and Use of Alternative Travel Modes

#5 Improve the Safety and Efficiency of Goods Movement and Reduce the Impacts of Commercial Vehicles on other Traffic and Roadways

#6 Minimize the Environmental Impacts of Transportation

The ITS SDP establishes roles and responsibilities for operating and maintaining the system. This sets clear guidelines for each stakeholder and ensures that expectations are consistent throughout the involved agencies. The roles and responsibilities are tied to eight ITS Services Areas: Traffic Management, Incident Management, Transit Management, Traveler Information, Maintenance and Construction Management, Data Management and Sharing, Emergency Management, and Commercial Vehicle Operations.

Tulare County Association of Governments (TCAG) will be responsible for maintaining the Tulare Regional ITS Architecture and identifying the involved stakeholders, along with their roles and responsibilities for operations. When functional requirements need to be extracted from the Tulare County Regional ITS Architecture, the information should be requested directly from TCAG. Any changes should be recorded through a change request form.

The document provides a project sequencing table that outlines future projects, showing which are feasible for short-term (0-5 years), medium term (5-10 years), and long-term (greater than 10 years). Projects that are categorized as long-term are typically rooted in areas that have yet to be developed on a larger national scale. In order for these initiatives to take place regionally, further research and implementation needs to occur in a national setting first.

The project sequencing is established based on the two primary criteria:

1. **Need for a particular ITS function** – As outlined in the Visions, Goals, and Objectives, priority projects are established based on regional needs. These take form in High, Medium, and Low priority and will happen with their corresponding timelines: short-term, medium-term and long-term.

2. **Logical ordering of projects** – to ensure that prerequisite projects or infrastructure is in place.

Twenty-three projects are identified the Tulare County ITS SDP sequencing list, and are described with their participating agencies, service package, and pertinent project details. These projects and corresponding priority category are intended to guide Tulare County to develop the ITS network while considering current and future needs.