August 11<sup>th</sup>, 2005

# **ITS System Inventory** Deliverable A2-c1

Draft

# **Central Coast ITS Implementation Plan**

Association of Monterey Bay Area Governments

TRANSCORE.

# **CENTRAL COAST ITS IMPLEMENTATION PLAN**

**ITS System Inventory** 

**Deliverable A2-c1** 

Prepared for:

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PAGE #

# TABLE OF CONTENTS

1.	INTRODUCTION	
	1.1 Project Overview	
2.	CCITS SYSTEM INVENTORY	
AI	PPENDIX A - PROJECT ARCHITECTURE BY COUNTY	A-i
	PROJECT ARCHITECTURE: SANTA CRUZ COUNTY	A-1
	PROJECT ARCHITECTURE: SAN BENITO COUNTY	A-4
	PROJECT ARCHITECTURE: MONTEREY COUNTY	A-6
	PROJECT ARCHITECTURE: SAN LUIS OBISPO COUNTY	A-10
	PROJECT ARCHITECTURE: SANTA BARBARA COUNTY	A-19
	PROJECT ARCHITECTURE: AMBAG REGION	A-24
	PROJECT ARCHITECTURE: CENTRAL COAST REGIONAL ITS PROJECT	CTS A-32





# 1. INTRODUCTION

# **1.1 Project Overview**

The Central Coast Region has a long history of planning and designing Intelligent Transportation Systems (ITS). Beginning in 1998, Stakeholder Agencies from the 5-County Region (Santa Cruz, San Benito, Monterey, San Luis Obispo, Santa Barbara) came together to collaboratively begin the process to determine the Region's viability to apply ITS to the area's transportation issues. From 1998 through 2000, the Stakeholder Agencies, later identified as the Central Coast ITS Coordinating Group, worked in partnership with TransCore to develop the 2000 Central Coast ITS Strategic Deployment Plan (SDP).

The results of the 2000 SDP were highly encouraging. Not only did the CCITS Coordinating Group conclude that ITS technology had tremendous potential for improving Regional mobility, safety, and economic competitiveness, the effort also developed the Central Coast Regional ITS Architecture, ITS promotional publications (e.g., brochure, video tape, presentation materials, etc.), list of specific ITS Projects to implement over a phased timeframe, and solidified the Group's commitment to ITS in the Central Coast. Subsequent to the development of the 2000 SDP and fully committed to the on-going implementation of ITS in the Central Coast, the CCITS Coordinating Group continues to meet on a quarterly basis to guide ITS planning and deployment activities. The CCITS Coordinating Group has since become the body to advise the Central Coast Stakeholder Agencies on adherence/updates to the Regional ITS Architecture, advise and assist them in seeking discretionary funding for ITS Projects, and finally to coordinate and share information on planned or proposed ITS Projects in the Region.

Since the 2000 SDP was completed, many ITS Projects that were identified within its contents have been implemented, such as:

- Caltrans District 5 Transportation Management Center (TMC)
- Detection stations along US 101 (via Minor B project funds) and as part of a roadway rehabilitation project
- Changeable Message Signs (CMS) located at the US 101 @ SR 154 interchange (NB & SB)
- Ramp meter (NB) located at the US 101 @ Carillo Blvd. interchange
- Monterey-Salinas Transit (MST) Automated Vehicle Location (AVL) system
- Dynamic Speed/Curve Warning system along SR 17 (including microwave/laser detection system, CCTV, & CMS)

Not only are these project implementations cause for excitement as they make evident the Central Coast's commitment to ITS, but they also demonstrate the CCITS Coordinating Group's actual use of the 2000 SDP, indicating that it is indeed a plan/document that they really use and not just let sit on a shelf. Despite these ITS successes, the CCITS Coordinating Group wants to accomplish more. However, the recent funding climate in California and within the Central Coast has made it extremely difficult to obtain the necessary monies to implement more of the 2000 SDP's ITS Projects. The following list identifies some of these high priority ITS Projects in the Central Coast that have yet to be implemented due to funding constraints:



- Installation and hook-up/connection of various ITS field elements from around the Central Coast (e.g., detection stations, CCTV, CMS, etc.) to the Caltrans District 5 TMC
- Connection between the Caltrans District 4 and 5 TMCs for monitoring and control capabilities of the ITS elements along Pacific Coast Highway (SR 1) & SR 17 (in Santa Cruz)
- Connections between the Caltrans District 5, District 6 (Fresno), and District 7 (Los Angeles) TMCs for information sharing and control/coordination purposes
- Implementation of the ramp meter (SB) at the US 101 @ Carillo Blvd. interchange

As the Central Coast Agencies continued their deployment, operation, and management of ITS devices, the CCITS Coordinating Group foresaw the benefits of reaching out to multiple groups throughout the Region. The concept of formulating a more cohesive ITS education piece could assist with informing more Agencies and policy makers about the "state of ITS" within the Region. The ITS promotional publications prepared for the *2000 SDP* have been used extensively to educate and inform both Agency staff as well as the general public about the value/benefits of ITS deployment, and its ability to improve not only the safety of the transportation network but also its efficiency and effectiveness of moving people and goods. The CCITS Coordinating Group continues to educate, whenever possible, and its members are strong advocates for improving capacity through technological advances.

At this time, Caltrans has awarded a grant to the Region under the FHWA Partnership Planning Program on the promotion and deployment of ITS in the Central Coast. Funded by this grant, the Central Coast ITS Implementation Plan project is expected to provide a more expeditious, unified, and consistent integration of ITS into the State and Regional transportation planning and programming processes in the Central Coast. Further, the Central Coast ITS Implementation project will perform the following activities for the Region:

- Utilize the work undertaken over the last several years and maintain the momentum gained
- Update the Central Coast Regional ITS Architecture to the National ITS Architecture (Version 5) and Turbo Architecture (Version 3)
- Ensure compliance of the Region with the current USDOT FHWA Rule and Federal Transit Administration Policy for National ITS Architecture
- Provide a strategy for moving forward with ITS
- Establish and implement a CCITS Regional Architecture Implementation Plan and Maintenance Plan
- Work with the Regional Stakeholder Agencies and Caltrans to incorporate ITS into the Regional transportation planning and programming process
- Provide cooperative agreement templates
- Review/update promotional/informational ITS publications
- Provide assistance promoting ITS technology and knowledge in the Central Coast
- Provide an authoritative resource of ITS information to Caltrans, Regional, and Local Agencies
- Provide training in the use of the Turbo Architecture software



# 2. CCITS SYSTEM INVENTORY

An ITS System Inventory is the foundation for all subsequent ITS Architecture development activities. It is a listing of each ITS-related element, deployed or planned, for all of the Stakeholders in the Region.

Turbo Architecture, a software tool developed for the FHWA, was utilized to input and manage the CCITS System Inventory (and Architecture as a whole). Exhibit 2.1 is a sample Turbo Inventory screen. In this example, the SLORTA's planned "SLORTA Smart Card" ITS element has been created (or edited), assigned to the Transit Vehicle and Vehicle Subsystems, and mapped to the San Luis Obispo County and Central Coast Regional ITS Projects Project Architectures.

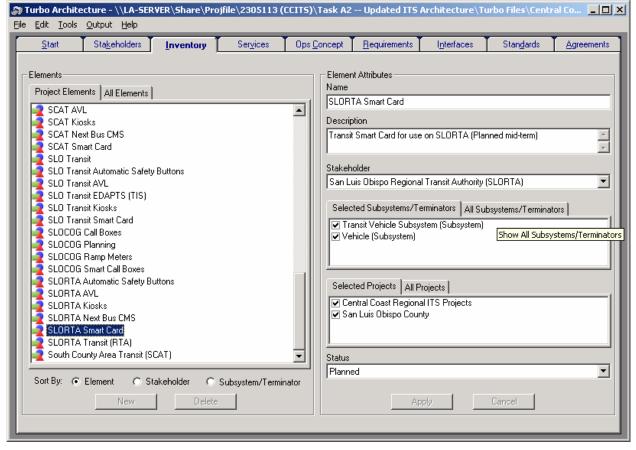


Exhibit 2.1 – Sample Turbo Inventory Screen

The Central Coast Region has been segregated into seven (7) project areas (Project Architectures in Turbo nomenclature): one for each of the five (5) Counties, one for AMBAG (made up mostly of inventory elements from the constituent County Project Architectures), and one for ITS elements of Regional significance (e.g., supporting/facilitating Regional collaboration, affecting multiple Counties, etc.).

Due to the structure of the CCITS Regional Architecture, it is quite possible that an inventory element is in multiple (non-County) Project Architectures. This can occur when the element is in an AMBAG member County or is of "Regional significance". For example, in Exhibit 2.1,



smart cards are projects that could/should span multiple Agencies and are therefore of interest beyond just SLO County. Individual ITS System Inventory elements for each of the Project Architectures have also been assigned as part of the Regional Inventory as a whole.

The 2000 CCITS SDP Architecture was used as the starting point and was updated (changes in status, new inventory elements, etc.) via Stakeholder input at CCITS meetings and other communications, and the previous Turbo database was updated to reflect this new information.

The System Inventory report shown in Appendix A presents the ITS System Inventory for each of the Project Architectures that comprise the CCITS Regional Architecture. The following information is provided for each ITS element:

- Element name
- Stakeholder/Owner
- A brief description
- Deployment status (existing or planned)
- National ITS Architecture subsystem(s) (pre-defined representations of real-world transportation system functionality) to which it is mapped

Please see the FHWA's National ITS Architecture CD or visit their website (at <u>http://itsarch.iteris.com/itsarch/index.htm</u>) to get a more in-depth description of the concepts introduced above.



# **APPENDIX A- CCITS SYSTEM INVENTORY**



# **APPENDIX A – CCITS SYSTEM INVENTORY**

# **PROJECT ARCHITECTURE: SANTA CRUZ COUNTY**

#### Caltrans D4 TMC

Description: Transportation Management Center for Caltrans District 4 located in the San Francisco Bay area; also backs up the District 5 TMC

Associated Stakeholder: Caltrans D4

#### Status: Existing

Mapped to Entity: Emergency Management Mapped to Entity: Traffic Management

#### **Caltrans D5 TMC**

Description: Transportation Management Center for Caltrans District 5; located in San Luis Obispo. Planned joint operations w/ CHP

Associated Stakeholder: Caltrans D5 Status: Existing Mapped to Entity: Emergency Management Mapped to Entity: Traffic Management

#### **Capitola Signal System**

*Description:* City of Capitola signal system with synchronized signals & smart corridor *Associated Stakeholder:* City of Capitola *Status:* Existing

Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

# CHP CAD

Description: Dispatch system for CHP in TMCs Associated Stakeholder: California Highway Patrol (CHP) Status: Existing Mapped to Entity: Emergency Management

### Santa Cruz (City) Advanced Crosswalks

Description: System(s) to increase driver awareness of potential pedestrian conflicts in Santa Cruz (City) Associated Stakeholder: City of Santa Cruz Status: Planned Mapped to Entity: Roadway Subsystem

### Santa Cruz (City) CCTV

Description: City of Santa Cruz CCTV cameras/system Associated Stakeholder: City of Santa Cruz Status: Existing Mapped to Entity: Roadway Subsystem

#### Santa Cruz (City) Signal System

Description: Synchronized signal system in the City of Santa Cruz Associated Stakeholder: City of Santa Cruz Status: Existing Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

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# Santa Cruz (City) TMC

Description: Traffic Management Center for the City of Santa Cruz Associated Stakeholder: City of Santa Cruz Status: Planned Mapped to Entity: Traffic Management

# Santa Cruz County CMS

Description: Changeable message signs in Santa Cruz County Associated Stakeholder: Santa Cruz County Status: Existing Mapped to Entity: Roadway Subsystem

# Santa Cruz County Emergency Medical Services

Description: Santa Cruz County EMT/ambulance system Associated Stakeholder: Santa Cruz County Local Agencies Status: Existing Mapped to Entity: Emergency Management Mapped to Entity: Emergency Vehicle Subsystem

# Santa Cruz County Freeway Service Patrol

Description: Freeway service patrol for Santa Cruz County-area highways Associated Stakeholder: Santa Cruz County Status: Existing Mapped to Entity: Emergency Management Mapped to Entity: Emergency Vehicle Subsystem Mapped to Entity: Roadway Subsystem

#### Santa Cruz County HAR

Description: Highway advisory radio in Santa Cruz County Associated Stakeholder: Santa Cruz County Status: Existing Mapped to Entity: Roadway Subsystem

#### Santa Cruz County HRI

Description: Highway/rail intersections in Santa Cruz County Associated Stakeholder: Santa Cruz County Local Agencies Status: Planned Mapped to Entity: Roadway Subsystem

### Santa Cruz County Signal System

Description: Synchronized signal system operated by Santa Cruz County Associated Stakeholder: Santa Cruz County Status: Existing Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### Santa Cruz County Website

Description: Informational website for Santa Cruz County (http://www.co.santa-cruz.ca.us/) Associated Stakeholder: Santa Cruz County Status: Existing

Mapped to Entity: Information Service Provider



# Santa Cruz Parking (City and Private)

Description: Parking lots/systems in the City of Santa Cruz Associated Stakeholder: Santa Cruz Parking (City & Private) Status: Planned Mapped to Entity: Parking Management

# SC Metro (Santa Cruz Metropolitan Transit District)

Description: Transit operations for Santa Cruz metro area Associated Stakeholder: Santa Cruz Metropolitan Transit District (SC Metro) Status: Existing

Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem Mapped to Entity: Vehicle

#### SC Metro Fare Management System

Description: Planned passenger and fare management system for SC Metro Associated Stakeholder: Santa Cruz Metropolitan Transit District (SC Metro) Status: Planned Mapped to Entity: Transit Management

Mapped to Entity: Transit Vehicle Subsystem

#### SC Metro Traveler Information System

Description: Planned Traveler Information System for SC Metro Associated Stakeholder: Santa Cruz Metropolitan Transit District (SC Metro) Status: Planned

Mapped to Entity: Information Service Provider Mapped to Entity: Personal Information Access Mapped to Entity: Remote Traveler Support

# SCCRTC Call Boxes

Description: Santa Cruz County-area highway call boxes Associated Stakeholder: Santa Cruz County Regional Transportation Commission (SCCRTC) Status: Existing

Mapped to Entity: Emergency Telecommunications System

### **SCCRTC Freeway Service Patrol**

Description: Freeway service patrol for Santa Cruz-area freeways Associated Stakeholder: Santa Cruz County Regional Transportation Commission (SCCRTC) Status: Existing

Mapped to Entity: Emergency Management

# SCCRTC Planning

Description: Transportation planning and data services for SCRTC Associated Stakeholder: Santa Cruz County Regional Transportation Commission (SCCRTC) Status: Existing

Mapped to Entity: Archived Data Management Subsystem

### SCCRTC Smart Call Boxes

Description: Santa Cruz County-area highway smart call boxes Associated Stakeholder: Santa Cruz County Regional Transportation Commission (SCCRTC) Status: Planned

Mapped to Entity: Emergency Telecommunications System Mapped to Entity: Remote Traveler Support Mapped to Entity: Roadway Subsystem





# **PROJECT ARCHITECTURE: SAN BENITO COUNTY**

# **Caltrans D5 TMC**

Description: Transportation Management Center for Caltrans District 5; located in San Luis Obispo. Planned joint operations w/ CHP

Associated Stakeholder: Caltrans D5

#### Status: Existing

Mapped to Entity: Emergency Management Mapped to Entity: Traffic Management

### CHP CAD

Description: Dispatch system for CHP in TMCs Associated Stakeholder: California Highway Patrol (CHP) Status: Existing Mapped to Entity: Emergency Management

### Hollister Advanced Crosswalks

Description: System(s) to increase driver awareness of potential pedestrian conflicts in Hollister Associated Stakeholder: City of Hollister Status: Planned

Mapped to Entity: Roadway Subsystem

#### **Hollister Signal System**

Description: Synchronized signal system in the City of Hollister Associated Stakeholder: City of Hollister Status: Existing Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

# San Benito County Emergency Medical Services

Description: San Benito County EMT/ambulance system Associated Stakeholder: San Benito County Local Agencies Status: Existing

Mapped to Entity: Emergency Management Mapped to Entity: Emergency Vehicle Subsystem

### San Benito County Express (SBCE)

Description: Transit service for San Benito County Associated Stakeholder: San Benito County Express (SBCE) Status: Existing Mapped to Entity: Transit Management

Mapped to Entity: Transit Vehicle Subsystem Mapped to Entity: Vehicle

### San Benito Parking (Local Agencies and Private)

Description: Parking lots/systems in San Benito Associated Stakeholder: San Benito Parking (Local Agencies & Private) Status: Planned Mapped to Entity: Parking Management





# SBtCOG Call Boxes

Description: San Benito County-area highway call boxes Associated Stakeholder: Council of San Benito County Governments (SBtCOG) Status: Existing Mapped to Entity: Emergency Telecommunications System

# SBtCOG Planning

Description: Transportation planning and data services for SBtCOG Associated Stakeholder: Council of San Benito County Governments (SBtCOG) Status: Existing Mapped to Entity: Archived Data Management Subsystem

# **SBtCOG Smart Call Boxes**

Description: San Benito County-area highway smart call boxes Associated Stakeholder: Council of San Benito County Governments (SBtCOG) Status: Planned

Mapped to Entity: Emergency Telecommunications System Mapped to Entity: Remote Traveler Support Mapped to Entity: Roadway Subsystem



# **PROJECT ARCHITECTURE: MONTEREY COUNTY**

# Caltrans D5 TMC

Description: Transportation Management Center for Caltrans District 5; located in San Luis Obispo. Planned joint operations w/ CHP

Associated Stakeholder: Caltrans D5

#### Status: Existing

Mapped to Entity: Emergency Management Mapped to Entity: Traffic Management

#### CHP CAD

Description: Dispatch system for CHP in TMCs Associated Stakeholder: California Highway Patrol (CHP) Status: Existing Mapped to Entity: Emergency Management

# **Greenfield Signal System**

Description: Synchronized signal system in the City of Greenfield Associated Stakeholder: City of Greenfield Status: Planned Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### **King City Signal System**

Description: Synchronized signal system in the City of King City Associated Stakeholder: City of King City Status: Planned Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### Marina Signal System

Description: Synchronized signal system in the City of Marina Associated Stakeholder: City of Marina Status: Existing Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

# Monterey (City) Advanced Crosswalks

Description: System(s) to increase driver awareness of potential pedestrian conflicts in Monterey (City) Associated Stakeholder: City of Monterey

Status: Existing

Mapped to Entity: Roadway Subsystem

#### Monterey (City) CMS

Description: Changeable message signs for the City of Monterey Associated Stakeholder: City of Monterey Status: Existing Mapped to Entity: Roadway Subsystem

#### Monterey (City) HAR

Description: Highway advisory radio system for the City of Monterey Associated Stakeholder: City of Monterey Status: Existing Manned to Entity: Roadway Subsystem

Mapped to Entity: Roadway Subsystem





# Monterey (City) Signal System

Description: Synchronized signal system in the City of Monterey Associated Stakeholder: City of Monterey Status: Existing Mapped to Entity: Roadway Subsystem

Mapped to Entity: Traffic Management

# Monterey (City) TMC

Description: Traffic Management Center for the City of Monterey Associated Stakeholder: City of Monterey Status: Planned Mapped to Entity: Traffic Management

#### **Monterey County Emergency Medical Services**

Description: Monterey County EMT/ambulance system Associated Stakeholder: Monterey County Local Agencies Status: Existing Mapped to Entity: Emergency Management Mapped to Entity: Emergency Vehicle Subsystem

#### Monterey County Freeway Service Patrol

Description: Freeway service patrol for Monterey County-area highways Associated Stakeholder: Monterey County Status: Existing Mapped to Entity: Emergency Management

#### **Monterey County HRI**

Description: Highway/rail intersections in Monterey County Associated Stakeholder: Monterey County Local Agencies Status: Planned Mapped to Entity: Roadway Subsystem

### **Monterey County Signal Pre-Emption**

Description: Emergency vehicle signal pre-emption system for Monterey County Associated Stakeholder: Monterey County Status: Existing Mapped to Entity: Roadway Subsystem

#### **Monterey County Traffic Counters**

Description: Motes traffic counters on various Regional roads in Monterey County (w/ TAMC) Associated Stakeholder: Monterey County Status: Planned Mapped to Entity: Roadway Subsystem

#### Monterey Parking (Monterey, Carmel, and Private)

Description: Various parking lots/systems in Monterey County Associated Stakeholder: Monterey County Local Agencies Status: Planned Mapped to Entity: Parking Management





# MST (Monterey-Salinas Transit)

Description: Transit service for the Monterey-Salinas metro area Associated Stakeholder: Monterey-Salinas Transit (MST) Status: Existing Mapped to Entity: Transit Management

Mapped to Entity: Transit Vehicle Subsystem Mapped to Entity: Vehicle

#### MST AVL

Description: Vehicle location system for MST transit fleet Associated Stakeholder: Monterey-Salinas Transit (MST) Status: Existing Mapped to Entity: Transit Management

Mapped to Entity: Transit Vehicle Subsystem

#### MST Integrated Maintenance Management Information System

Description: MST - Please provide info -Associated Stakeholder: Monterey-Salinas Transit (MST) Status: Planned Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem

#### **MST Signal Priority**

Description: Signal priority system for MST fleet Associated Stakeholder: Monterey-Salinas Transit (MST) Status: Planned Mapped to Entity: Roadway Subsystem

### **Pacific Grove Signal System**

Description: Synchronized signal system in the City of Pacific Grove Associated Stakeholder: City of Pacific Grove Status: Existing Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### Salinas Advanced Crosswalks

*Description:* System(s) to increase driver awareness of potential pedestrian conflicts in Salinas *Associated Stakeholder:* City of Salinas *Status:* Existing

Mapped to Entity: Roadway Subsystem

### Salinas CVO ATIS

Description: ATIS to inform CVO/truckers to location of near-by staging areas (rather than parking in residential or business areas) while waiting to get cargo

Associated Stakeholder: City of Salinas Status: Planned Mapped to Entity: Roadway Subsystem

### Salinas Signal System

Description: Synchronized signal system in the City of Salinas Associated Stakeholder: City of Salinas Status: Existing Mapped to Entity: Roadway Subsystem

Mapped to Entity: Traffic Management





#### Salinas TMC

Description: Traffic Management Center for the City of Salinas Associated Stakeholder: City of Salinas Status: Planned Mapped to Entity: Traffic Management

#### Seaside Signal System

Description: Synchronized signal system in the City of Seaside Associated Stakeholder: City of Seaside Status: Existing Mapped to Entity: Roadway Subsystem

Mapped to Entity: Traffic Management

#### Soledad Signal System

Description: Synchronized signal system in the City of Soledad Associated Stakeholder: City of Soledad Status: Planned Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

TAMC Call Boxes

Description: Monterey County-area highway call boxes Associated Stakeholder: Transportation Agency for Monterey County (TAMC) Status: Planned Mapped to Entity: Emergency Telecommunications System

### **TAMC Freeway Service Patrol**

Description: FSP services for Monterey County freeways Associated Stakeholder: Transportation Agency for Monterey County (TAMC) Status: Existing

Mapped to Entity: Emergency Management Mapped to Entity: Emergency Vehicle Subsystem Mapped to Entity: Roadway Subsystem

### **TAMC Planning**

Description: Transportation planning and data services for TAMC Associated Stakeholder: Transportation Agency for Monterey County (TAMC) Status: Existing

Mapped to Entity: Archived Data Management Subsystem

# TAMC Smart Call Boxes

Description: Monterey County-area highway smart call boxes Associated Stakeholder: Transportation Agency for Monterey County (TAMC) Status: Existing

Mapped to Entity: Emergency Telecommunications System Mapped to Entity: Remote Traveler Support Mapped to Entity: Roadway Subsystem



# PROJECT ARCHITECTURE: SAN LUIS OBISPO COUNTY

### Amtrak Next Train CMS

Description: Train arrival notification system at stations in Santa Barbara and San Luis Obispo Counties (Planned mid-term)

Associated Stakeholder: Amtrak Status: Planned Mapped to Entity: Roadway Subsystem

### Arroyo Grande (Portable) CMS

Description: Portable CMS devices for the City of Arroyo Grande and shared with other Cities & the County (Planned - short-term)

Associated Stakeholder: City of Arroyo Grande Status: Planned Mapped to Entity: Roadway Subsystem

### Arroyo Grande Advanced Crosswalks

*Description:* System(s) to increase driver awareness of potential pedestrian conflicts in Arroyo Grande (Planned short-term)

Associated Stakeholder: City of Arroyo Grande Status: Planned

Mapped to Entity: Roadway Subsystem

### Arroyo Grande Signal Pre-Emption

Description: Emergency vehicle signal pre-emption system for Arroyo Grande Associated Stakeholder: City of Arroyo Grande Status: Existing Mapped to Entity: Roadway Subsystem

### Arroyo Grande Signal System

*Description:* Signal system in the City of Arroyo Grande. Synchronization is planned mid-term (Grand, 101 I/Cs).

Associated Stakeholder: City of Arroyo Grande Status: Existing Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

### **Atascadero Advanced Crosswalks**

Description: System(s) to increase driver awareness of potential pedestrian conflicts in San Luis Obispo County (Planned - short-term)

Associated Stakeholder: City of Atascadero

Status: Planned

Mapped to Entity: Roadway Subsystem

#### **Atascadero Parking Management System**

Description: Parking management system for the City of Atascadero (Planned - mid-term) Associated Stakeholder: City of Atascadero

# Status: Planned

Mapped to Entity: Parking Management





# **Atascadero Signal Pre-Emption**

Description: Emergency vehicle signal pre-emption system for Atascadero Associated Stakeholder: City of Atascadero Status: Existing Mapped to Entity: Roadway Subsystem

#### Atascadero Signal System

Description: Synchronized signal system in the City of Atascadero Associated Stakeholder: City of Atascadero Status: Existing Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### **Atascadero Transit**

Description: Transit operations for the City of Atascadero Associated Stakeholder: City of Atascadero Status: Existing Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem Mapped to Entity: Vehicle

#### **Atascadero Transit Next Bus CMS**

Description: Bus arrival notification system at stations in Atascadero (Planned mid-term) Associated Stakeholder: Atascadero Transit Status: Planned

Mapped to Entity: Remote Traveler Support

#### **Atascadero Transit Smart Card**

Description: Transit Smart Card for use on Atascadero Transit (Planned long-term) Associated Stakeholder: Atascadero Transit Status: Planned Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem

#### **Atascadero Transit Smart Kiosk**

Description: Kiosks for Atascadero Transit (Planned mid-term) Associated Stakeholder: Atascadero Transit Status: Planned Mapped to Entity: Information Service Provider Mapped to Entity: Remote Traveler Support

#### **Caltrans D5 TMC**

Description: Transportation Management Center for Caltrans District 5; located in San Luis Obispo. Planned joint operations w/ CHP

Associated Stakeholder: Caltrans D5 Status: Existing Mapped to Entity: Emergency Management Mapped to Entity: Traffic Management

#### CHP CAD

Description: Dispatch system for CHP in TMCs Associated Stakeholder: California Highway Patrol (CHP) Status: Existing Mapped to Entity: Emergency Management



# Grover Beach Advanced Crosswalks

Description: System(s) to increase driver awareness of potential pedestrian conflicts in Grover Beach (Planned mid-term)

Associated Stakeholder: City of Grover Beach Status: Planned Mapped to Entity: Roadway Subsystem

### **Grover Beach Advanced Rail Crossings**

Description: Advanced RR crossings in Grover Beach (Planned - mid-term) Associated Stakeholder: City of Grover Beach Status: Planned Mapped to Entity: Roadway Subsystem

# **Grover Beach Signal Pre-Emption**

Description: Emergency vehicle signal pre-emption system for Grover Beach (Grand) Associated Stakeholder: City of Grover Beach Status: Existing Mapped to Entity: Roadway Subsystem

### **Grover Beach Signal System**

Description: Synchronized signal system in the City of Grover Beach (Grand) Associated Stakeholder: City of Grover Beach Status: Existing

Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### Paso Robles Advanced Crosswalks

Description: System(s) to increase driver awareness of potential pedestrian conflicts in the City of Paso Robles (Planned mid-term; 24th/Oak, Spring/34th)

Associated Stakeholder: City of Paso Robles

Status: Planned

Mapped to Entity: Roadway Subsystem

### **Paso Robles Advanced Rail Crossing**

Description: Advanced RR crossings in Paso Robles (Planned - mid-term; Grand)) Associated Stakeholder: City of Paso Robles Status: Planned Mapped to Entity: Roadway Subsystem

#### **Paso Robles Parking Management System**

Description: Parking management system for the City of Paso Robles (Planned - mid-term) Associated Stakeholder: City of Paso Robles Status: Planned Mapped to Entity: Parking Management

#### **Paso Robles Signal Pre-Emption**

Description: Emergency vehicle signal pre-emption system for Paso Robles Associated Stakeholder: City of Paso Robles Status: Existing Mapped to Entity: Roadway Subsystem





#### **Paso Robles Signal System**

Description: Signal system in the City of Paso Robles. Some synchronization (Spring, Niblick) to be implemented (short term)

Associated Stakeholder: City of Paso Robles

Status: Existing

Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

# **Pismo Beach Advanced Crosswalks**

Description: System(s) to increase driver awareness of potential pedestrian conflicts in the City of Pismo Beach

Associated Stakeholder: City of Pismo Beach

Status: Existing

Mapped to Entity: Roadway Subsystem

#### **Pismo Beach Parking Management System**

Description: Parking management system for the City of Pismo Beach (Planned - long-term) Associated Stakeholder: City of Pismo Beach Status: Planned Mapped to Entity: Parking Management

#### **Pismo Beach Signal Pre-Emption**

Description: Emergency vehicle signal pre-emption system for Pismo Beach Associated Stakeholder: City of Pismo Beach Status: Existing Mapped to Entity: Roadway Subsystem

### **Pismo Beach Signal System**

Description: Signal system in the City of Pismo Beach Associated Stakeholder: City of Pismo Beach Status: Existing Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

# PRCATS (Paso Robles City Area Transit Service)

Description: Transit system for the Paso Robles area Associated Stakeholder: Paso Robles City Area Transit Service (PRCATS) Status: Existing Mapped to Entity: Transit Management

Mapped to Entity: Transit Vehicle Subsystem Mapped to Entity: Vehicle

#### **PRCATS Smart Cards**

Description: Transit Smart Card for use on PRCATS (Planned long-term) Associated Stakeholder: Paso Robles City Area Transit Service (PRCATS) Status: Planned

Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem





# San Luis Obispo (City) Advanced Crosswalks

Description: System(s) to increase driver awareness of potential pedestrian conflicts in the City of San Luis Obispo

Associated Stakeholder: City of San Luis Obispo Status: Existing Mapped to Entity: Roadway Subsystem

# San Luis Obispo (City) Advanced Rail Crossing

Description: Advanced RR crossings in an Luis Obispo (Planned - mid-term; Foothill, Orcutt) Associated Stakeholder: City of San Luis Obispo Status: Planned Mapped to Entity: Roadway Subsystem

# San Luis Obispo (City) Parking Management System

Description: Parking management system for the City of San Luis Obispo (Planned - short-term) Associated Stakeholder: City of San Luis Obispo Status: Planned Mapped to Entity: Parking Management

### San Luis Obispo (City) Signal Pre-Emption

Description: Emergency vehicle signal pre-emption system for the city of San Luis Obispo Associated Stakeholder: City of San Luis Obispo Status: Existing Mapped to Entity: Roadway Subsystem

# San Luis Obispo (City) Signal System

Description: Synchronized signal system in the City of San Luis Obispo Associated Stakeholder: City of San Luis Obispo Status: Existing Mapped to Entity: Roadway Subsystem

Mapped to Entity: Traffic Management

#### San Luis Obispo (Citv) TMC

Description: Traffic Management Center for the City of San Luis Obispo (Planned long-term) Associated Stakeholder: City of San Luis Obispo Status: Planned

Mapped to Entity: Traffic Management

# San Luis Obispo County Advanced Crosswalks

Description: System(s) to increase driver awareness of potential pedestrian conflicts in San Luis Obispo County (Planned mid-term)

Associated Stakeholder: San Luis Obispo County

Status: Planned

Mapped to Entity: Roadway Subsystem

# San Luis Obispo County Advanced Rail Crossings

Description: Advanced RR crossings in an Luis Obispo (Planned - long-term; San Miguel) Associated Stakeholder: San Luis Obispo County Status: Planned

Mapped to Entity: Roadway Subsystem



#### San Luis Obispo County Emergency Medical Services

Description: San Luis Obispo County EMT/ambulance system Associated Stakeholder: San Luis Obispo County Local Agencies Status: Existing

Mapped to Entity: Emergency Management Mapped to Entity: Emergency Vehicle Subsystem

#### San Luis Obispo County HRI

Description: Highway/rail intersections in San Luis Obispo County - Hwy 58 (Planned long-term) Associated Stakeholder: San Luis Obispo County Status: Planned

Mapped to Entity: Roadway Subsystem

#### San Luis Obispo County Signal Pre-Emption

Description: Emergency vehicle signal pre-emption system for San Luis Obispo County Associated Stakeholder: San Luis Obispo County Status: Existing Mapped to Entity: Roadway Subsystem

#### San Luis Obispo County Signal System

Description: Synchronized signal system in San Luis Obispo County Associated Stakeholder: San Luis Obispo County Status: Existing Mapped to Entity: Roadway Subsystem

Mapped to Entity: Traffic Management

# San Luis Obispo Parking (City and Private)

Description: Parking lots/systems in SLO (City) Associated Stakeholder: San Luis Obispo Parking (City & Private) Status: Planned Mapped to Entity: Parking Management

#### SCAT (South County Area Transit)

Description: Transit operations for the Five Cities (South County) area of SLO County Associated Stakeholder: South County Area Transit (SCAT) Status: Existing Mapped to Entity: Transit Management

Mapped to Entity: Transit Vehicle Subsystem Mapped to Entity: Vehicle

# SCAT AVL

Description: Automatic Vehicle Location system for SCAT (Planned long-term) Associated Stakeholder: South County Area Transit (SCAT) Status: Planned Mapped to Entity: Transit Vehicle Subsystem

Mapped to Entity: Vehicle

#### **SCAT Kiosks**

Description: Kiosks for SCAT (Planned mid-term) Associated Stakeholder: South County Area Transit (SCAT) Status: Planned Mapped to Entity: Information Service Provider

Mapped to Entity: Remote Traveler Support





# SCAT Next Bus CMS

Description: Bus arrival notification system at SCAT stations (Planned long-term) Associated Stakeholder: South County Area Transit (SCAT) Status: Planned Mapped to Entity: Remote Traveler Support

# **SCAT Smart Card**

Description: Transit Smart Card for use on SCAT (Planned mid-term) Associated Stakeholder: South County Area Transit (SCAT) Status: Planned Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem

#### **SLO Transit**

Description: Transit operations for SLO (City) Associated Stakeholder: San Luis Obispo Transit (SLO Transit) Status: Existing Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem

Mapped to Entity: Vehicle

# **SLO Transit Automatic Safety Buttons**

Description: Bus driver mayday alert system for SLO Transit (Planned long-term) Associated Stakeholder: San Luis Obispo Transit (SLO Transit) Status: Planned

Mapped to Entity: Transit Vehicle Subsystem

#### SLO Transit AVL

Description: Automatic Vehicle Location system for SLO Transit (Planned mid-term) Associated Stakeholder: San Luis Obispo Transit (SLO Transit) Status: Planned Manned to Entity: Transit Vehicle Subsystem

Mapped to Entity: Transit Vehicle Subsystem Mapped to Entity: Vehicle

#### SLO Transit EDAPTS (TIS)

Description: Bus arrival notification system developed by Cal Poly Associated Stakeholder: San Luis Obispo Transit (SLO Transit) Status: Existing Mapped to Entity: Remote Traveler Support

Mapped to Entity: Roadway Subsystem

#### SLO Transit Kiosks

Description: Kiosks for SLO Transit (Planned mid-term) Associated Stakeholder: San Luis Obispo Transit (SLO Transit) Status: Planned Mapped to Entity: Information Service Provider Mapped to Entity: Remote Traveler Support

#### **SLO Transit Smart Card**

Description: Transit Smart Card for use on SLO Transit (Planned mid-term) Associated Stakeholder: San Luis Obispo Transit (SLO Transit) Status: Planned

Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem



# **SLOCOG Call Boxes**

Description: San Luis Obispo County-area highway call boxes Associated Stakeholder: San Luis Obispo Council of Governments (SLOCOG) Status: Existing

Mapped to Entity: Emergency Telecommunications System

# **SLOCOG Planning**

Description: Transportation planning and data services for SLOCOG Associated Stakeholder: San Luis Obispo Council of Governments (SLOCOG) Status: Existing

Mapped to Entity: Archived Data Management Subsystem

#### **SLOCOG Ramp Meters**

Description: Freeway ramp meters in SLO County (Planned long-term) Associated Stakeholder: San Luis Obispo Council of Governments (SLOCOG) Status: Planned

Mapped to Entity: Roadway Subsystem

### SLOCOG Smart Call Boxes

*Description:* San Luis Obispo County-area highway smart call boxes (Planned - long-term) *Associated Stakeholder:* San Luis Obispo Council of Governments (SLOCOG) *Status:* Planned

Mapped to Entity: Emergency Telecommunications System Mapped to Entity: Remote Traveler Support Mapped to Entity: Roadway Subsystem

#### **SLORTA Automatic Safety Buttons**

*Description:* Bus driver mayday alert system for SLORTA (Planned long-term) *Associated Stakeholder:* San Luis Obispo Regional Transit Authority (SLORTA) *Status:* Planned

Mapped to Entity: Transit Vehicle Subsystem

# **SLORTA AVL**

Description: Automatic Vehicle Location system for SLORTA (Planned long-term) Associated Stakeholder: San Luis Obispo Regional Transit Authority (SLORTA) Status: Planned

Mapped to Entity: Transit Vehicle Subsystem Mapped to Entity: Vehicle

# SLORTA Kiosks

Description: Kiosks for SLORTA (Planned mid-term) Associated Stakeholder: San Luis Obispo Regional Transit Authority (SLORTA) Status: Planned

Mapped to Entity: Information Service Provider Mapped to Entity: Transit Management

#### **SLORTA Next Bus CMS**

Description: Bus arrival notification system at SLORTA stations (Planned long-term) Associated Stakeholder: San Luis Obispo Regional Transit Authority (SLORTA) Status: Planned

Mapped to Entity: Remote Traveler Support



# SLORTA Smart Card

Description: Transit Smart Card for use on SLORTA (Planned mid-term) Associated Stakeholder: San Luis Obispo Regional Transit Authority (SLORTA) Status: Planned

Mapped to Entity: Transit Vehicle Subsystem Mapped to Entity: Vehicle

# SLORTA Transit (RTA)

Description: San Luis Obispo Countywide transit Associated Stakeholder: San Luis Obispo Regional Transit Authority (SLORTA) Status: Existing

Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem Mapped to Entity: Vehicle



# **PROJECT ARCHITECTURE: SANTA BARBARA COUNTY**

#### Amtrak Next Train CMS

Description: Train arrival notification system at stations in Santa Barbara and San Luis Obispo Counties (Planned mid-term)

Associated Stakeholder: Amtrak Status: Planned

Mapped to Entity: Roadway Subsystem

#### **Buellton Advanced Crosswalks**

Description: System(s) to increase driver awareness of potential pedestrian conflicts in Buellton Associated Stakeholder: City of Buellton Status: Existing

Mapped to Entity: Roadway Subsystem

#### **Buellton Signal System**

Description: City of Buellton signal system with synchronized signals & smart corridor Associated Stakeholder: City of Buellton Status: Existing Mapped to Entity: Roadway Subsystem

Mapped to Entity: Traffic Management

#### **Caltrans D5 TMC**

Description: Transportation Management Center for Caltrans District 5; located in San Luis Obispo. Planned joint operations w/ CHP

Associated Stakeholder: Caltrans D5 Status: Existing Mapped to Entity: Emergency Management Mapped to Entity: Traffic Management

# CHP CAD

Description: Dispatch system for CHP in TMCs Associated Stakeholder: California Highway Patrol (CHP) Status: Existing Mapped to Entity: Emergency Management

#### **Goleta Advanced Crosswalks**

Description: System(s) to increase driver awareness of potential pedestrian conflicts in Goleta (prior County projects)

Associated Stakeholder: City of Goleta

Status: Existing

Mapped to Entity: Roadway Subsystem

#### **Goleta Signal System**

Description: Synchronized signal system in the City of Goleta Associated Stakeholder: City of Goleta Status: Existing

Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management





#### Lompoc Signal System

Description: Lompoc traffic signal system, incl. synchronization Associated Stakeholder: City of Lompoc Status: Existing Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### Lompoc Transit

Description: Transit operations for the City of Lompoc Associated Stakeholder: Lompoc Transit Status: Existing Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem Mapped to Entity: Vehicle

#### Lompoc Transit Vehicle Locator (AVL)

Description: AVL system for Lompoc Transit Associated Stakeholder: Lompoc Transit Status: Existing Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem

#### Santa Barbara (City) Advanced Crosswalks

Description: System(s) to increase driver awareness of potential pedestrian conflicts in Santa Barbara (City) Associated Stakeholder: City of Santa Barbara Status: Planned Mapped to Entity: Roadway Subsystem

# Santa Barbara (City) Parking Management System

Description: Parking management system for downtown area and special events Associated Stakeholder: City of Santa Barbara Status: Existing Mapped to Entity: Parking Management

#### Santa Barbara (City) Signal System

Description: City of Santa Barbara signal system with synchronized signals & smart corridor Associated Stakeholder: City of Santa Barbara Status: Existing

Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### Santa Barbara County CCTV

Description: Santa Barbara CCTV cameras/system Associated Stakeholder: Santa Barbara County Status: Existing Mapped to Entity: Roadway Subsystem

#### Santa Barbara County Emergency Medical Services

Description: Santa Barbara County EMT/ambulance system Associated Stakeholder: Santa Barbara County Local Agencies Status: Existing

Mapped to Entity: Emergency Management Mapped to Entity: Emergency Vehicle Subsystem





# Santa Barbara County Signal System

Description: Santa Barbara County signal system with synchronized signals Associated Stakeholder: Santa Barbara County Status: Existing Mapped to Entity: Roadway Subsystem

Mapped to Entity: Traffic Management

### Santa Barbara County TMC

Description: Traffic Management Center for Santa Barbara County Associated Stakeholder: Santa Barbara County Status: Existing Mapped to Entity: Traffic Management

#### Santa Barbara County Vehicle Detection

Description: Santa Barbara County vehicle detection system Associated Stakeholder: Santa Barbara County Status: Existing Mapped to Entity: Roadway Subsystem

# Santa Barbara Metropolitan Transit District (SBMTD)

Description: Transit operations for the Santa Barbara metro area Associated Stakeholder: Santa Barbara Metropolitan Transit District (SBMTD) Status: Existing Mapped to Entity: Transit Management

Mapped to Entity: Transit Vehicle Subsystem Mapped to Entity: Vehicle

### Santa Barbara MTD AVL

Description: Automatic Vehicle Location system for SBMTD fleet Associated Stakeholder: Santa Barbara Metropolitan Transit District (SBMTD) Status: Existing

Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem

#### Santa Barbara MTD Kiosks

Description: Transit information kiosks for Santa Barbara MTD Associated Stakeholder: Santa Barbara Metropolitan Transit District (SBMTD) Status: Existing Mapped to Entity: Information Service Provider

Mapped to Entity: Remote Traveler Support

#### Santa Barbara MTD Next Bus

Description: Next bus arrival system for SBMTD Associated Stakeholder: Santa Barbara Metropolitan Transit District (SBMTD) Status: Existing Mapped to Entity: Remote Traveler Support

#### Santa Barbara MTD Website

*Description:* Website for SBMTD riders. Includes trip planning. (http://www.sbmtd.gov/) *Associated Stakeholder:* Santa Barbara Metropolitan Transit District (SBMTD) *Status:* Existing

Mapped to Entity: Information Service Provider Mapped to Entity: Remote Traveler Support





# Santa Barbara Parking (City and Private)

Description: Parking lots/system in Santa Barbara (City) Associated Stakeholder: Santa Barbara Parking (City & Private) Status: Planned Mapped to Entity: Parking Management

#### Santa Maria Signal System

Description: City of Santa Maria signal system with synchronized signals Associated Stakeholder: City of Santa Maria Status: Existing Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### Santa Maria TMC

Description: Traffic Management Center for the City of Santa Maria Associated Stakeholder: City of Santa Maria Status: Existing Mapped to Entity: Traffic Management

#### SBCAG 511

Description: SB-area traveler information system(s) Associated Stakeholder: Santa Barbara County Association of Governments (SBCAG) Status: Existing Mapped to Entity: Information Service Provider Mapped to Entity: Personal Information Access

#### **SBCAG Call Boxes**

Description: SB-area highway call boxes Associated Stakeholder: Santa Barbara County Association of Governments (SBCAG) Status: Existing

Mapped to Entity: Emergency Telecommunications System

### SBCAG Dynamic Carpool System

Description: Ride matching system for Santa Barbara area Associated Stakeholder: Santa Barbara County Association of Governments (SBCAG) Status: Existing

Mapped to Entity: Personal Information Access

### **SBCAG Freeway Service Patrol**

Description: CHP-dispatched FSP for SB-area freeways Associated Stakeholder: Santa Barbara County Association of Governments (SBCAG) Status: Existing Mapped to Entity: Emergency Management

Mapped to Entity: Emergency Vehicle Subsystem

### **SBCAG Planning**

Description: Transportation planning and data services for SBCAG Associated Stakeholder: Santa Barbara County Association of Governments (SBCAG) Status: Existing

Mapped to Entity: Archived Data Management Subsystem



# **SBCAG Smart Call Boxes**

Description: SB-area highway smart call boxes Associated Stakeholder: Santa Barbara County Association of Governments (SBCAG) Status: Existing

Mapped to Entity: Emergency Telecommunications System Mapped to Entity: Remote Traveler Support Mapped to Entity: Roadway Subsystem

# SBCAG Smart Card

*Description:* Transit Smart Card for use on Clean Air Express/Vista transit systems *Associated Stakeholder:* Santa Barbara County Association of Governments (SBCAG) *Status:* Existing

Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem

#### SMAT (Santa Maria Area Transit)

Description: Transit operations for the City of Santa Maria Associated Stakeholder: Santa Maria Area Transit (SMAT) Status: Existing

Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem Mapped to Entity: Vehicle

#### SMAT AVL

Description: Automatic Vehicle Location system for SMAT Associated Stakeholder: Santa Maria Area Transit (SMAT) Status: Existing

Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem

#### SMAT Smart Card

Description: Transit Smart Card for use on SMAT Associated Stakeholder: Santa Maria Area Transit (SMAT) Status: Existing Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem

#### Solvang Signal System

Description: Solvang traffic signal system, incl. synchronization (SR 246) Associated Stakeholder: City of Solvang Status: Existing Mapped to Entity: Roadway Subsystem

Mapped to Entity: Traffic Management

### **UCSB Smart Card**

Description: UCSB Smart Card for Parking Program Associated Stakeholder: UCSB Status: Existing Mapped to Entity: Parking Management



# **PROJECT ARCHITECTURE: AMBAG REGION**

#### AMBAG Planning

Description: Transportation planning and data services for AMBAG (covering Santa Cruz, San Benito, and Monterey Counties)

Associated Stakeholder: Association of Monterey Bay Area Governments (AMBAG) Status: Existing

Mapped to Entity: Archived Data Management Subsystem

#### **Caltrans D4 TMC**

*Description:* Transportation Management Center for Caltrans District 4 located in the San Francisco Bay area; also backs up the District 5 TMC

Associated Stakeholder: Caltrans D4

Status: Existing

Mapped to Entity: Emergency Management Mapped to Entity: Traffic Management

#### **Caltrans D5 TMC**

Description: Transportation Management Center for Caltrans District 5; located in San Luis Obispo. Planned joint operations w/ CHP

Associated Stakeholder: Caltrans D5

#### Status: Existing

Mapped to Entity: Emergency Management Mapped to Entity: Traffic Management

#### **Capitola Signal System**

*Description:* City of Capitola signal system with synchronized signals & smart corridor *Associated Stakeholder:* City of Capitola *Status:* Existing

Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### **Greenfield Signal System**

Description: Synchronized signal system in the City of Greenfield Associated Stakeholder: City of Greenfield Status: Planned Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### **Hollister Advanced Crosswalks**

Description: System(s) to increase driver awareness of potential pedestrian conflicts in Hollister Associated Stakeholder: City of Hollister Status: Planned

Mapped to Entity: Roadway Subsystem

#### Hollister Signal System

Description: Synchronized signal system in the City of Hollister Associated Stakeholder: City of Hollister

#### Status: Existing

Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management





#### King City Signal System

Description: Synchronized signal system in the City of King City Associated Stakeholder: City of King City Status: Planned Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### Marina Signal System

Description: Synchronized signal system in the City of Marina Associated Stakeholder: City of Marina Status: Existing Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### Monterey (City) Advanced Crosswalks

Description: System(s) to increase driver awareness of potential pedestrian conflicts in Monterey (City) Associated Stakeholder. City of Monterey Status: Existing

Mapped to Entity: Roadway Subsystem

#### Monterey (City) CMS

Description: Changeable message signs for the City of Monterey Associated Stakeholder: City of Monterey Status: Existing Mapped to Entity: Roadway Subsystem

#### Monterey (City) HAR

Description: Highway advisory radio system for the City of Monterey Associated Stakeholder: City of Monterey Status: Existing Mapped to Entity: Roadway Subsystem

#### Monterey (City) Signal System

Description: Synchronized signal system in the City of Monterey Associated Stakeholder: City of Monterey Status: Existing Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### Monterey (City) TMC

Description: Traffic Management Center for the City of Monterey Associated Stakeholder: City of Monterey Status: Planned Mapped to Entity: Traffic Management

#### **Monterey County Emergency Medical Services**

Description: Monterey County EMT/ambulance system Associated Stakeholder: Monterey County Local Agencies Status: Existing Mapped to Entity: Emergency Management

Mapped to Entity: Emergency Vehicle Subsystem





### **Monterey County HRI**

Description: Highway/rail intersections in Monterey County Associated Stakeholder: Monterey County Local Agencies Status: Planned Mapped to Entity: Roadway Subsystem

#### **Monterey County Signal Pre-Emption**

Description: Emergency vehicle signal pre-emption system for Monterey County Associated Stakeholder: Monterey County Status: Existing Mapped to Entity: Roadway Subsystem

#### **Monterey County Traffic Counters**

Description: Motes traffic counters on various Regional roads in Monterey County (w/ TAMC) Associated Stakeholder: Monterey County Status: Planned Mapped to Entity: Roadway Subsystem

#### Monterey Parking (Monterey, Carmel, and Private)

Description: Various parking lots/systems in Monterey County Associated Stakeholder: Monterey County Local Agencies Status: Planned

Mapped to Entity: Parking Management

#### **MST (Monterey-Salinas Transit)**

Description: Transit service for the Monterey-Salinas metro area Associated Stakeholder: Monterey-Salinas Transit (MST) Status: Existing

Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem Mapped to Entity: Vehicle

#### MST AVL

Description: Vehicle location system for MST transit fleet Associated Stakeholder: Monterey-Salinas Transit (MST) Status: Existing Mapped to Entity: Transit Management

Mapped to Entity: Transit Vehicle Subsystem

# MST Integrated Maintenance Management Information System

Description: MST - Please provide info -Associated Stakeholder: Monterey-Salinas Transit (MST) Status: Planned Mapped to Entity: Transit Management

Mapped to Entity: Transit Vehicle Subsystem

#### **MST Signal Priority**

Description: Signal priority system for MST fleet Associated Stakeholder: Monterey-Salinas Transit (MST) Status: Planned Mapped to Entity: Roadway Subsystem



# Pacific Grove Signal System

Description: Synchronized signal system in the City of Pacific Grove Associated Stakeholder: City of Pacific Grove Status: Existing Mapped to Entity: Roadway Subsystem

Mapped to Entity: Traffic Management

#### Salinas Advanced Crosswalks

Description: System(s) to increase driver awareness of potential pedestrian conflicts in Salinas Associated Stakeholder: City of Salinas Status: Existing

Mapped to Entity: Roadway Subsystem

#### Salinas CVO ATIS

Description: ATIS to inform CVO/truckers to location of near-by staging areas (rather than parking in residential or business areas) while waiting to get cargo

Associated Stakeholder: City of Salinas Status: Planned

Mapped to Entity: Roadway Subsystem

# Salinas Signal System

Description: Synchronized signal system in the City of Salinas Associated Stakeholder: City of Salinas Status: Existing Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### Salinas TMC

Description: Traffic Management Center for the City of Salinas Associated Stakeholder: City of Salinas Status: Planned Mapped to Entity: Traffic Management

#### San Benito County Emergency Medical Services

Description: San Benito County EMT/ambulance system Associated Stakeholder: San Benito County Local Agencies Status: Existing

> Mapped to Entity: Emergency Management Mapped to Entity: Emergency Vehicle Subsystem

# San Benito County Express (SBCE)

Description: Transit service for San Benito County Associated Stakeholder: San Benito County Express (SBCE) Status: Existing

> Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem Mapped to Entity: Vehicle

# San Benito Parking (Local Agencies and Private)

Description: Parking lots/systems in San Benito Associated Stakeholder: San Benito Parking (Local Agencies & Private) Status: Planned Mapped to Entity: Parking Management

TRANSCORE.



# Santa Cruz (City) Advanced Crosswalks

Description: System(s) to increase driver awareness of potential pedestrian conflicts in Santa Cruz (City)

Associated Stakeholder: City of Santa Cruz Status: Planned Mapped to Entity: Roadway Subsystem

# Santa Cruz (City) CCTV

Description: City of Santa Cruz CCTV cameras/system Associated Stakeholder: City of Santa Cruz Status: Existing Mapped to Entity: Roadway Subsystem

### Santa Cruz (City) Signal System

Description: Synchronized signal system in the City of Santa Cruz Associated Stakeholder: City of Santa Cruz Status: Existing Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### Santa Cruz (City) TMC

Description: Traffic Management Center for the City of Santa Cruz Associated Stakeholder: City of Santa Cruz Status: Planned Mapped to Entity: Traffic Management

### Santa Cruz County CMS

Description: Changeable message signs in Santa Cruz County Associated Stakeholder: Santa Cruz County Status: Existing Mapped to Entity: Roadway Subsystem

# Santa Cruz County Emergency Medical Services

Description: Santa Cruz County EMT/ambulance system Associated Stakeholder: Santa Cruz County Local Agencies Status: Existing Mapped to Entity: Emergency Management Mapped to Entity: Emergency Vehicle Subsystem

#### Santa Cruz County Freeway Service Patrol

Description: Freeway service patrol for Santa Cruz County-area highways Associated Stakeholder: Santa Cruz County Status: Existing Mapped to Entity: Emergency Management

Mapped to Entity: Emergency Vehicle Subsystem Mapped to Entity: Roadway Subsystem

#### Santa Cruz County HAR

Description: Highway advisory radio in Santa Cruz County Associated Stakeholder: Santa Cruz County Status: Existing Mapped to Entity: Roadway Subsystem





# Santa Cruz County HRI

Description: Highway/rail intersections in Santa Cruz County Associated Stakeholder: Santa Cruz County Local Agencies Status: Planned Mapped to Entity: Roadway Subsystem

# Santa Cruz County Signal System

Description: Synchronized signal system operated by Santa Cruz County Associated Stakeholder: Santa Cruz County Status: Existing Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### Santa Cruz County Website

Description: Informational website for Santa Cruz County (http://www.co.santa-cruz.ca.us/) Associated Stakeholder: Santa Cruz County Status: Existing Mapped to Entity: Information Service Provider

### Santa Cruz Parking (City and Private)

Description: Parking lots/systems in the City of Santa Cruz Associated Stakeholder: Santa Cruz Parking (City & Private) Status: Planned

Mapped to Entity: Parking Management

#### SBtCOG Call Boxes

Description: San Benito County-area highway call boxes Associated Stakeholder: Council of San Benito County Governments (SBtCOG) Status: Existing

Mapped to Entity: Emergency Telecommunications System

#### SBtCOG Planning

Description: Transportation planning and data services for SBtCOG Associated Stakeholder: Council of San Benito County Governments (SBtCOG) Status: Existing

Mapped to Entity: Archived Data Management Subsystem

### **SBtCOG Smart Call Boxes**

Description: San Benito County-area highway smart call boxes Associated Stakeholder: Council of San Benito County Governments (SBtCOG) Status: Planned

Mapped to Entity: Emergency Telecommunications System Mapped to Entity: Remote Traveler Support Mapped to Entity: Roadway Subsystem

#### SC Metro (Santa Cruz Metropolitan Transit District)

Description: Transit operations for Santa Cruz metro area Associated Stakeholder: Santa Cruz Metropolitan Transit District (SC Metro) Status: Existing

Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem Mapped to Entity: Vehicle





# SC Metro Fare Management System

*Description:* Planned passenger and fare management system for SC Metro *Associated Stakeholder:* Santa Cruz Metropolitan Transit District (SC Metro) *Status:* Planned

Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem

### SC Metro Traveler Information System

Description: Planned Traveler Information System for SC Metro Associated Stakeholder: Santa Cruz Metropolitan Transit District (SC Metro) Status: Planned

Mapped to Entity: Information Service Provider Mapped to Entity: Personal Information Access Mapped to Entity: Remote Traveler Support

#### **SCCRTC Call Boxes**

Description: Santa Cruz County-area highway call boxes Associated Stakeholder: Santa Cruz County Regional Transportation Commission (SCCRTC) Status: Existing

Mapped to Entity: Emergency Telecommunications System

### **SCCRTC Planning**

Description: Transportation planning and data services for SCRTC Associated Stakeholder: Santa Cruz County Regional Transportation Commission (SCCRTC) Status: Existing

Mapped to Entity: Archived Data Management Subsystem

### **SCCRTC Smart Call Boxes**

Description: Santa Cruz County-area highway smart call boxes Associated Stakeholder: Santa Cruz County Regional Transportation Commission (SCCRTC) Status: Planned

Mapped to Entity: Emergency Telecommunications System Mapped to Entity: Remote Traveler Support Mapped to Entity: Roadway Subsystem

#### Seaside Signal System

Description: Synchronized signal system in the City of Seaside Associated Stakeholder: City of Seaside Status: Existing Mapped to Entity: Roadway Subsystem

Mapped to Entity: Traffic Management

# Soledad Signal System

Description: Synchronized signal system in the City of Soledad Associated Stakeholder: City of Soledad Status: Planned Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### **TAMC Call Boxes**

Description: Monterey County-area highway call boxes Associated Stakeholder: Transportation Agency for Monterey County (TAMC) Status: Planned Mapped to Entity: Emergency Telecommunications System

TRANSCORE.



# TAMC Freeway Service Patrol

Description: FSP services for Monterey County freeways Associated Stakeholder: Transportation Agency for Monterey County (TAMC) Status: Existing Mapped to Entity: Emergency Management

Mapped to Entity: Emergency Vehicle Subsystem Mapped to Entity: Roadway Subsystem

# TAMC Planning

Description: Transportation planning and data services for TAMC Associated Stakeholder: Transportation Agency for Monterey County (TAMC) Status: Existing

Mapped to Entity: Archived Data Management Subsystem

# TAMC Smart Call Boxes

Description: Monterey County-area highway smart call boxes Associated Stakeholder: Transportation Agency for Monterey County (TAMC) Status: Existing

Mapped to Entity: Emergency Telecommunications System Mapped to Entity: Remote Traveler Support Mapped to Entity: Roadway Subsystem



# PROJECT ARCHITECTURE: CENTRAL COAST REGIONAL ITS PROJECTS

#### AMBAG Planning

Description: Transportation planning and data services for AMBAG (covering Santa Cruz, San Benito, and Monterey Counties)

Associated Stakeholder: Association of Monterey Bay Area Governments (AMBAG) Status: Existing

Mapped to Entity: Archived Data Management Subsystem

#### **Amtrak Next Train CMS**

Description: Train arrival notification system at stations in Santa Barbara and San Luis Obispo Counties (Planned mid-term)

Associated Stakeholder: Amtrak Status: Planned Mapped to Entity: Roadway Subsystem

#### Amtrak/MetroLink Automated Ticketing

Description: Automated ticketing system between Amtrak and MetroLink trains in Santa Barbara and San Luis Obispo County stations (Planned mid-term)

Associated Stakeholder: Amtrak Status: Planned

Mapped to Entity: Transit Management

# **Atascadero Transit Smart Card**

Description: Transit Smart Card for use on Atascadero Transit (Planned long-term) Associated Stakeholder: Atascadero Transit Status: Planned Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem

#### Caltrans 1-800 ROAD Call-In System

Description: Current information regarding the condition of the California State Highway System (in State: 800-427-ROAD/out of State: 916-445-7623)

Associated Stakeholder: California Department of Transportation (Caltrans)

Status: Existing

Mapped to Entity: Information Service Provider

### **Caltrans D4 CCTV**

Description: Caltrans District 4 CCTV cameras Associated Stakeholder: Caltrans D4 Status: Existing Mapped to Entity: Roadway Subsystem

#### **Caltrans D4 CMS**

Description: Caltrans District 4 Changeable Message Signs Associated Stakeholder: Caltrans D4 Status: Existing Mapped to Entity: Roadway Subsystem



#### **Caltrans D4 HAR**

Description: Caltrans District 4 Highway Advisory Radio Associated Stakeholder: Caltrans D4 Status: Existing Mapped to Entity: Remote Traveler Support Mapped to Entity: Roadway Subsystem

#### **Caltrans D4 TMC**

Description: Transportation Management Center for Caltrans District 4 located in the San Francisco Bay area; also backs up the District 5 TMC

Associated Stakeholder: Caltrans D4 Status: Existing Mapped to Entity: Emergency Management Mapped to Entity: Traffic Management

#### **Caltrans D4 Traffic Monitoring Stations**

Description: Caltrans District 4 roadway vehicle detection Associated Stakeholder: Caltrans D4 Status: Existing Mapped to Entity: Roadway Subsystem

#### Caltrans D5 (Portable) HAR

Description: Portable HAR system for Caltrans District 5 Associated Stakeholder: Caltrans D5 Status: Existing Mapped to Entity: Roadway Subsystem

#### Caltrans D5 CCTV

Description: Caltrans District 5 CCTV cameras; images also go to District 4 TMC. Associated Stakeholder: Caltrans D5 Status: Existing Mapped to Entity: Roadway Subsystem

#### **Caltrans D5 CMS**

Description: Caltrans District 5 Changeable Message Signs Associated Stakeholder: Caltrans D5 Status: Existing Mapped to Entity: Roadway Subsystem

#### Caltrans D5 HRI

Description: Highway/rail intersections in Caltrans District 5 Associated Stakeholder: Caltrans D5 Status: Planned Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### **Caltrans D5 Ramp Meters**

Description: Freeway ramp meters in Caltrans District 5 Associated Stakeholder: Caltrans D5 Status: Existing Mapped to Entity: Roadway Subsystem





#### **Caltrans D5 RWIS**

Description: Caltrans District 5 Road Weather Information System Associated Stakeholder: Caltrans D5 Status: Planned Mapped to Entity: Information Service Provider Mapped to Entity: Maintenance and Construction Management Mapped to Entity: Roadway Subsystem

# Caltrans D5 Signal System

Description: Caltrans D5 arterial signal system with synchronized signals & smart corridor Associated Stakeholder: Caltrans D5 Status: Existing

Mapped to Entity: Roadway Subsystem Mapped to Entity: Traffic Management

#### **Caltrans D5 Smart Call Boxes**

Description: Smart call boxes in Caltrans District 5 Associated Stakeholder: Caltrans D5 Status: Planned Mapped to Entity: Emergency Telecommunications System Mapped to Entity: Remote Traveler Support

Mapped to Entity: Roadway Subsystem

# **Caltrans D5 TMC**

Description: Transportation Management Center for Caltrans District 5; located in San Luis Obispo. Planned joint operations w/ CHP

Associated Stakeholder: Caltrans D5

Status: Existing

Mapped to Entity: Emergency Management Mapped to Entity: Traffic Management

# **Caltrans D5 Traffic Monitoring Stations**

Description: Caltrans District 5 roadway vehicle detection Associated Stakeholder: Caltrans D5 Status: Existing Mapped to Entity: Roadway Subsystem

#### **Caltrans Website**

Description: Includes incidents, lane closures, etc. (http://www.dot.ca.gov/cgi-bin/roads.cgi) Associated Stakeholder: California Department of Transportation (Caltrans) Status: Existing Manual to Entity: Information Service Provider

Mapped to Entity: Information Service Provider

# CHP CAD

Description: Dispatch system for CHP in TMCs Associated Stakeholder: California Highway Patrol (CHP) Status: Existing Mapped to Entity: Emergency Management

#### **CHP Website**

Description: Provides incident information on State roads and highways (http://cad.chp.ca.gov/) Associated Stakeholder: California Highway Patrol (CHP) Status: Existing

Mapped to Entity: Information Service Provider



# **Dial-A-Ride Operators (Central Coast)**

Description: On-demand transit services for the Central Coast Region Associated Stakeholder: Dial-A-Ride-Operators (Central Coast) Status: Existing Mapped to Entity: Emergency Management

Mapped to Entity: Transit Management

Mapped to Entity: Transit Vehicle Subsystem

# **Monterey County Freeway Service Patrol**

Description: Freeway service patrol for Monterey County-area highways Associated Stakeholder: Monterey County Status: Existing

Mapped to Entity: Emergency Management

#### **PRCATS Smart Cards**

Description: Transit Smart Card for use on PRCATS (Planned long-term) Associated Stakeholder: Paso Robles City Area Transit Service (PRCATS) Status: Planned Mapped to Entity: Transit Management

Mapped to Entity: Transit Vehicle Subsystem

#### Santa Barbara County TMC

Description: Traffic Management Center for Santa Barbara County Associated Stakeholder: Santa Barbara County Status: Existing Mapped to Entity: Traffic Management

### Santa Barbara Metropolitan Transit District (SBMTD)

Description: Transit operations for the Santa Barbara metro area Associated Stakeholder: Santa Barbara Metropolitan Transit District (SBMTD) Status: Existing

Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem Mapped to Entity: Vehicle

#### Santa Cruz County Freeway Service Patrol

Description: Freeway service patrol for Santa Cruz County-area highways Associated Stakeholder: Santa Cruz County Status: Existing

Mapped to Entity: Emergency Management Mapped to Entity: Emergency Vehicle Subsystem Mapped to Entity: Roadway Subsystem

### **SBCAG Freeway Service Patrol**

Description: CHP-dispatched FSP for SB-area freeways Associated Stakeholder: Santa Barbara County Association of Governments (SBCAG) Status: Existing Mapped to Entity: Emergency Management

Mapped to Entity: Emergency Vehicle Subsystem

### **SBCAG Planning**

Description: Transportation planning and data services for SBCAG Associated Stakeholder: Santa Barbara County Association of Governments (SBCAG) Status: Existing

Mapped to Entity: Archived Data Management Subsystem





# SBCAG Smart Card

Description: Transit Smart Card for use on Clean Air Express/Vista transit systems Associated Stakeholder: Santa Barbara County Association of Governments (SBCAG) Status: Existing

Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem

#### SBtCOG Planning

Description: Transportation planning and data services for SBtCOG Associated Stakeholder: Council of San Benito County Governments (SBtCOG) Status: Existing

Mapped to Entity: Archived Data Management Subsystem

#### SC Metro (Santa Cruz Metropolitan Transit District)

Description: Transit operations for Santa Cruz metro area Associated Stakeholder: Santa Cruz Metropolitan Transit District (SC Metro) Status: Existing Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem

Mapped to Entity: Vehicle

# SCAT Smart Card

Description: Transit Smart Card for use on SCAT (Planned mid-term) Associated Stakeholder: South County Area Transit (SCAT) Status: Planned

Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem

# **SCCRTC Freeway Service Patrol**

Description: Freeway service patrol for Santa Cruz-area freeways Associated Stakeholder: Santa Cruz County Regional Transportation Commission (SCCRTC) Status: Existing

Mapped to Entity: Emergency Management

#### **SCCRTC Planning**

Description: Transportation planning and data services for SCRTC Associated Stakeholder: Santa Cruz County Regional Transportation Commission (SCCRTC) Status: Existing

Mapped to Entity: Archived Data Management Subsystem

#### **SLO Transit Smart Card**

Description: Transit Smart Card for use on SLO Transit (Planned mid-term) Associated Stakeholder: San Luis Obispo Transit (SLO Transit) Status: Planned

Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem

#### **SLOCOG Planning**

Description: Transportation planning and data services for SLOCOG Associated Stakeholder: San Luis Obispo Council of Governments (SLOCOG) Status: Existing

Mapped to Entity: Archived Data Management Subsystem



# **SLORTA Smart Card**

Description: Transit Smart Card for use on SLORTA (Planned mid-term) Associated Stakeholder: San Luis Obispo Regional Transit Authority (SLORTA) Status: Planned Mapped to Entity: Transit Vehicle Subsystem

Mapped to Entity: Vehicle

# SLORTA Transit (RTA)

Description: San Luis Obispo Countywide transit Associated Stakeholder: San Luis Obispo Regional Transit Authority (SLORTA) Status: Existing Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem

Mapped to Entity: Vehicle

# **SMAT Smart Card**

Description: Transit Smart Card for use on SMAT Associated Stakeholder: Santa Maria Area Transit (SMAT) Status: Existing Mapped to Entity: Transit Management Mapped to Entity: Transit Vehicle Subsystem

### **TAMC Freeway Service Patrol**

Description: FSP services for Monterey County freeways Associated Stakeholder: Transportation Agency for Monterey County (TAMC) Status: Existing Mapped to Entity: Emergency Management

Mapped to Entity: Emergency Vehicle Subsystem Mapped to Entity: Roadway Subsystem

# **TAMC Planning**

Description: Transportation planning and data services for TAMC Associated Stakeholder: Transportation Agency for Monterey County (TAMC) Status: Existing Mapped to Entity: Archived Data Management Subsystem

Mapped to Entity: Archived Data Management Sub

# UCSB Smart Card

Description: UCSB Smart Card for Parking Program Associated Stakeholder: UCSB Status: Existing Mapped to Entity: Parking Management