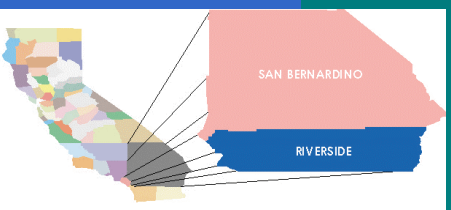
Workshop #2

Inland Empire Regional ITS Architecture Project

March 4, 2003



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Agenda

- Introductions
- Project Background
- ITS Inventory Review
- ITS Needs and Services
- Operational Concepts
- Next Meeting/Calendar Review

Project Background

What is ITS?

Roadway Mgmt

Traveler info

Rural Systems

Goods Movement

Vehicle Control

Electronic Tolls

Transit Systems

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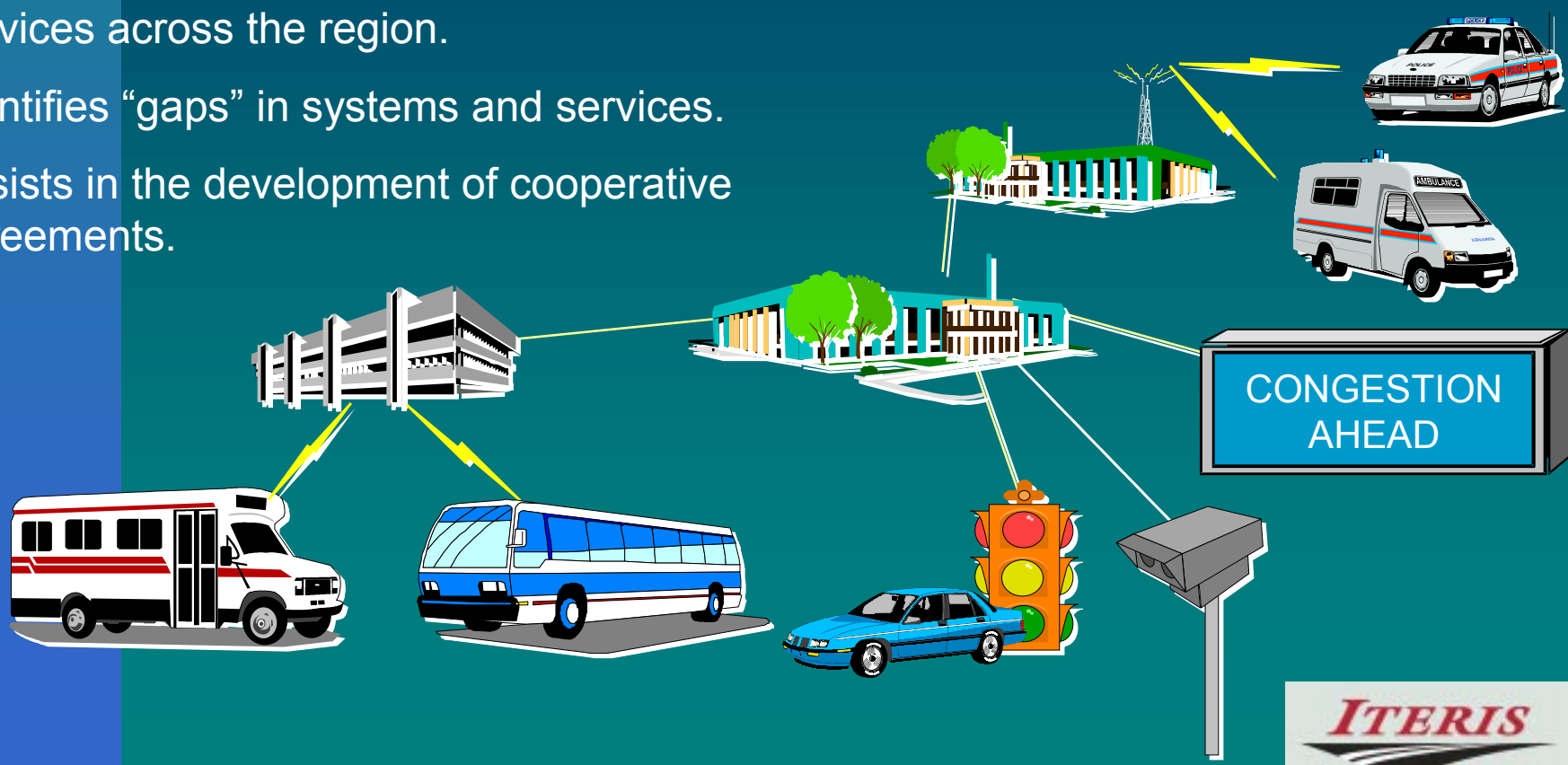
What is a Regional ITS Architecture?

Provides a structured framework for deployment and integration.

Helps to introduce and interconnect ITS services across the region.

Identifies “gaps” in systems and services.

Assists in the development of cooperative agreements.



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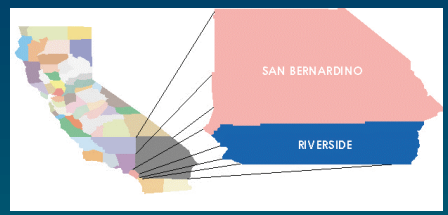
What does a Regional ITS Architecture include?



- Description of the Region
- List of Stakeholders
- Current and Future ITS Elements
- Information Exchange between the ITS Elements
- Operational Concept for the ITS Services
- Functions of each of the ITS Elements
- Applicable ITS Standards
- Project Sequencing
- List of Agreements

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What isn't included?

- Selection of Specific Technologies or Designs
- Inventory Counts of Devices/ Elements
- Confirmation that Projects will be Funded

Why this project, why now?

- FHWA/FTA published a Rule/Policy:
  - ITS projects funded from the Highway Trust Fund be in *conformance* with the National ITS Architecture and appropriate standards.
- "Conformance" is defined:
  - As using the National ITS Architecture to develop a regional ITS architecture and the subsequent adherence of ITS projects to the regional ITS architecture.
- Inland Empire status:
  - Earlier ITS Strategic Plan preceded the Rule/Policy
  - Needs modifications to be in conformance
  - Critical date for completion is April 2005

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Project Objective

Develop an ITS architecture that is useful to the region and in conformance with FHWA/FTA guidelines.

Project Work Scope

Task 1	Project Management
Task 2	Develop Steering Committee and Identify Stakeholders
Task 3	Define Region and Update ITS Inventory
Task 4	Determine Needs, Services, and Operational Concepts
Task 5	Analyze Functional Requirements and Define Interfaces
Task 6	Develop Project Sequencing
Task 7	Develop List of Agency Agreements
Task 8	Develop Maintenance Plan
Task 9	Produce Final Report

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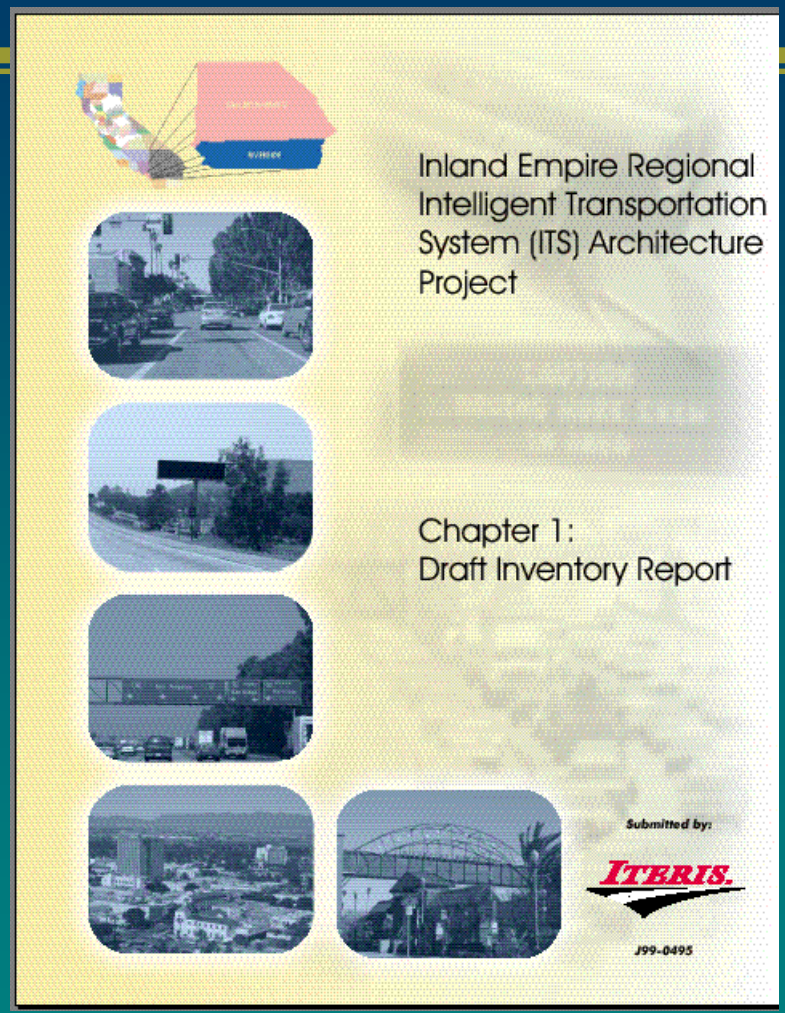
ITS Inventory Review

ITS Inventory

- Include Existing and Planned ITS
- Focus on “Centers”
- Collect System Name, Associated Stakeholder(s), Description, Status, Field Element Types, External Data Exchange Interfaces

Inventory Report

- Comments were due Feb. 28
- Received 35 comments from 8 stakeholders
- Still accepting ITS inventory



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TurboArchitecture

- Software tool that supports development of regional and project ITS architectures using the National ITS Architecture as a starting point.
- Uses ITS inventory as input; output includes reports, diagrams, and preliminary architecture.

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ITS Inventory

- Existing systems appear to map to the following National ITS Subsystems:
  - Centers: Traffic Management, Emergency Management, Transit Management, and Information Service Provider
  - Roadside: Roadway, Commercial Vehicle Check
  - Vehicles: Emergency Vehicles and Transit Vehicles
  - Travelers: Personal Information Access

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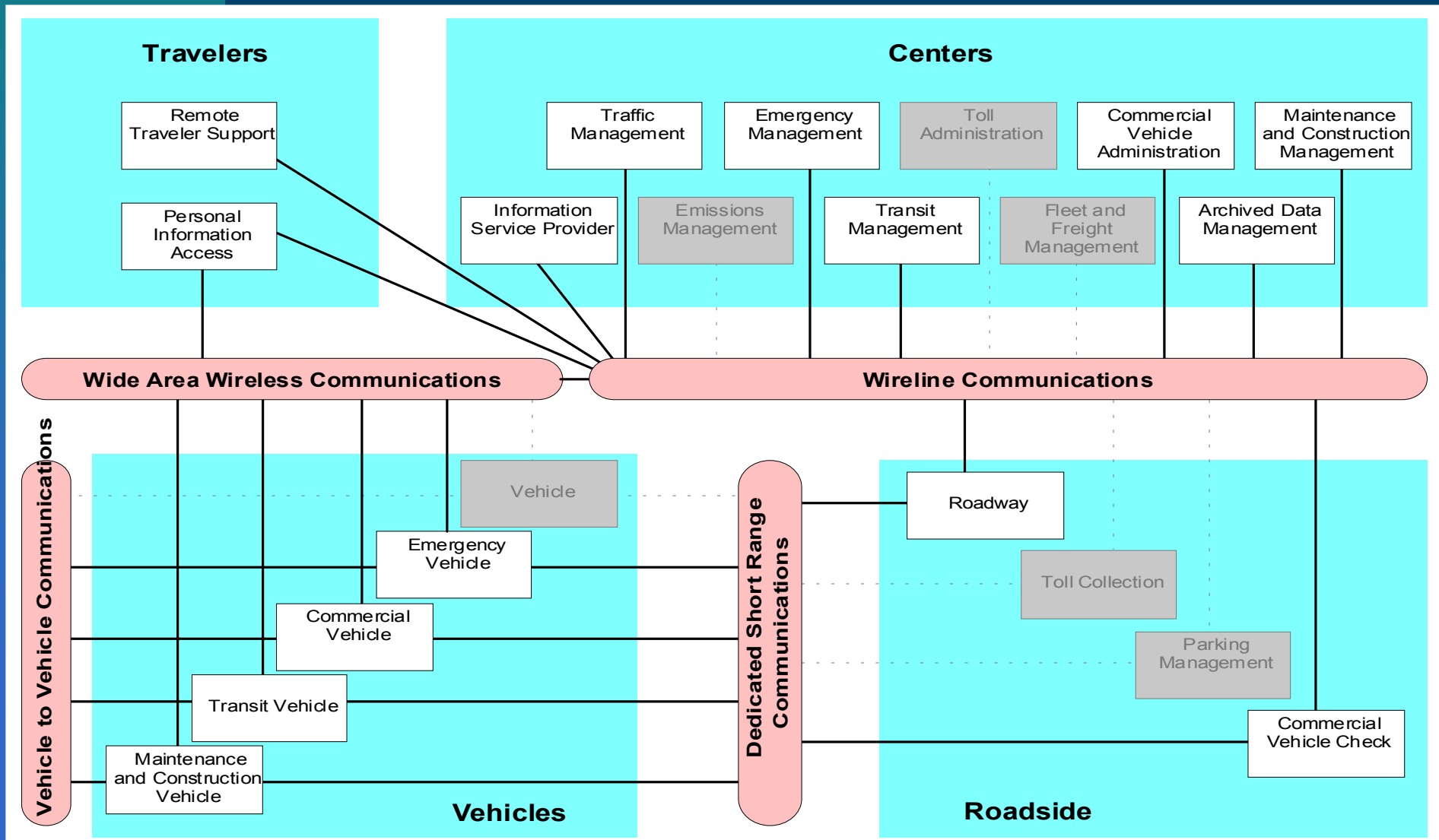
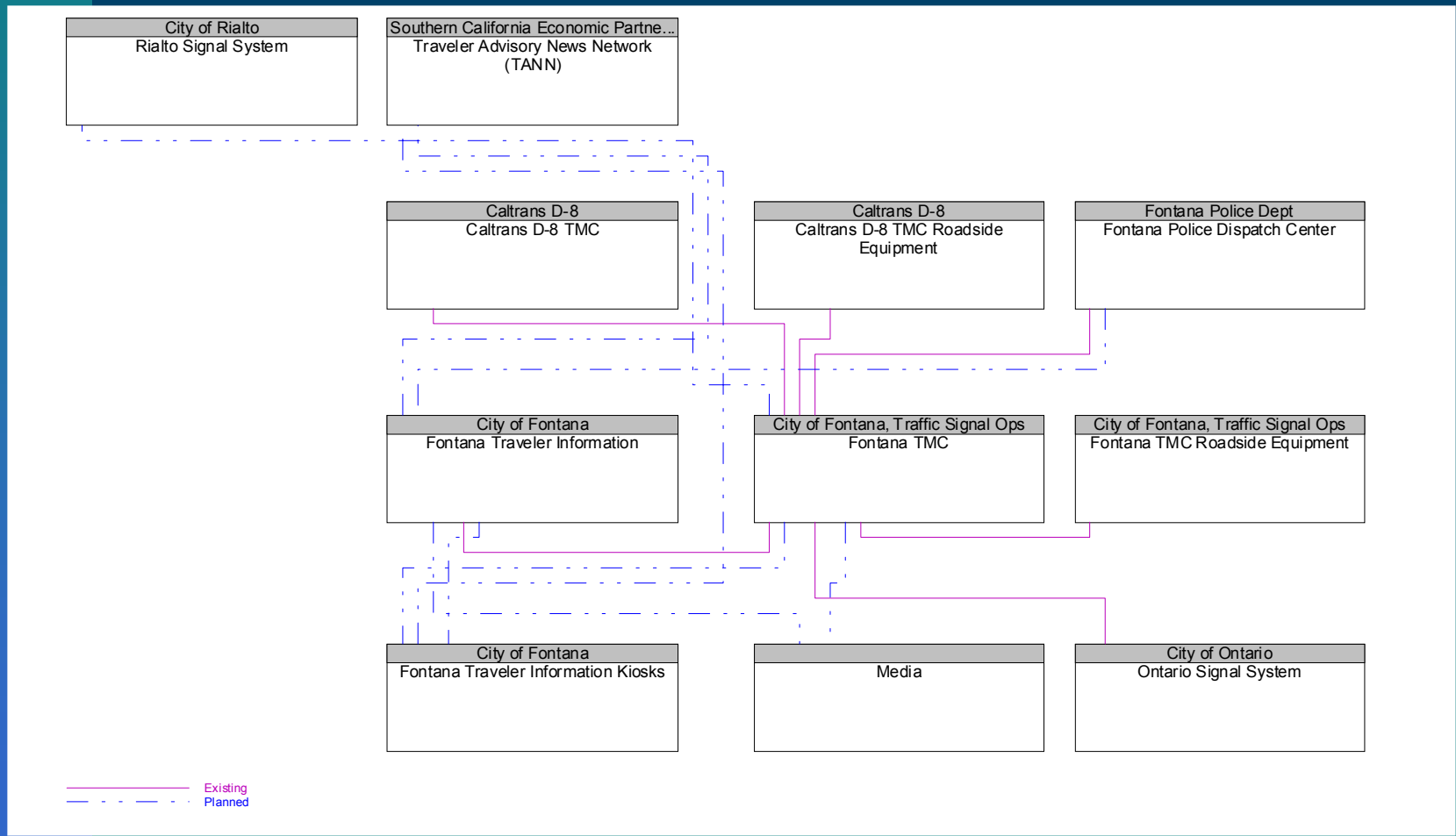
"Sausage" Diagram

- A diagram which depicts all subsystems in the National ITS Architecture and the basic communication channels between these subsystems.
- The sausage diagram is a top-level architecture interconnect diagram.

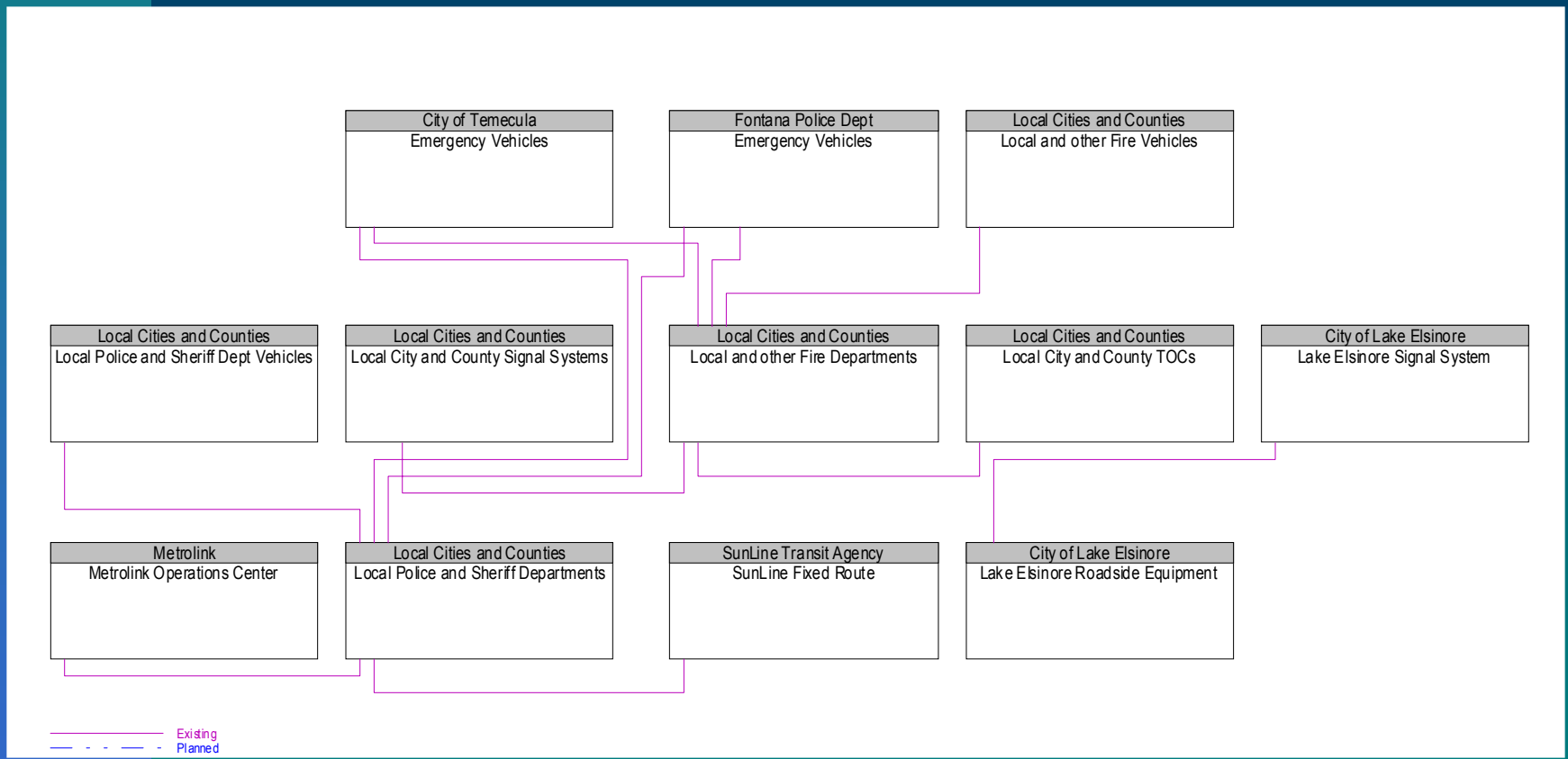
Preliminary "Sausage" Diagram for Inland Empire



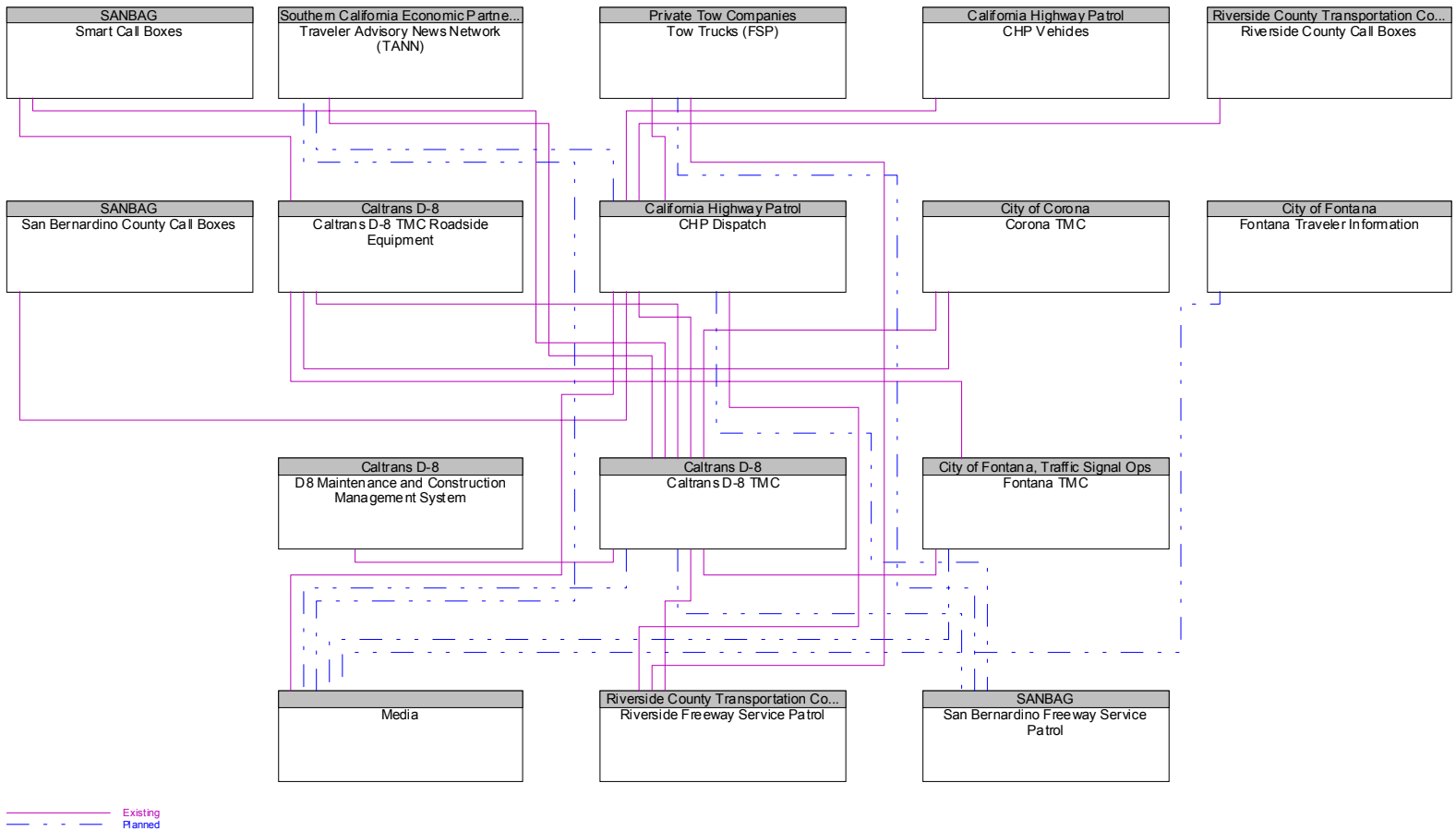
Fontana Interconnects



Lake Elsinore and Other Local Agencies Interconnects

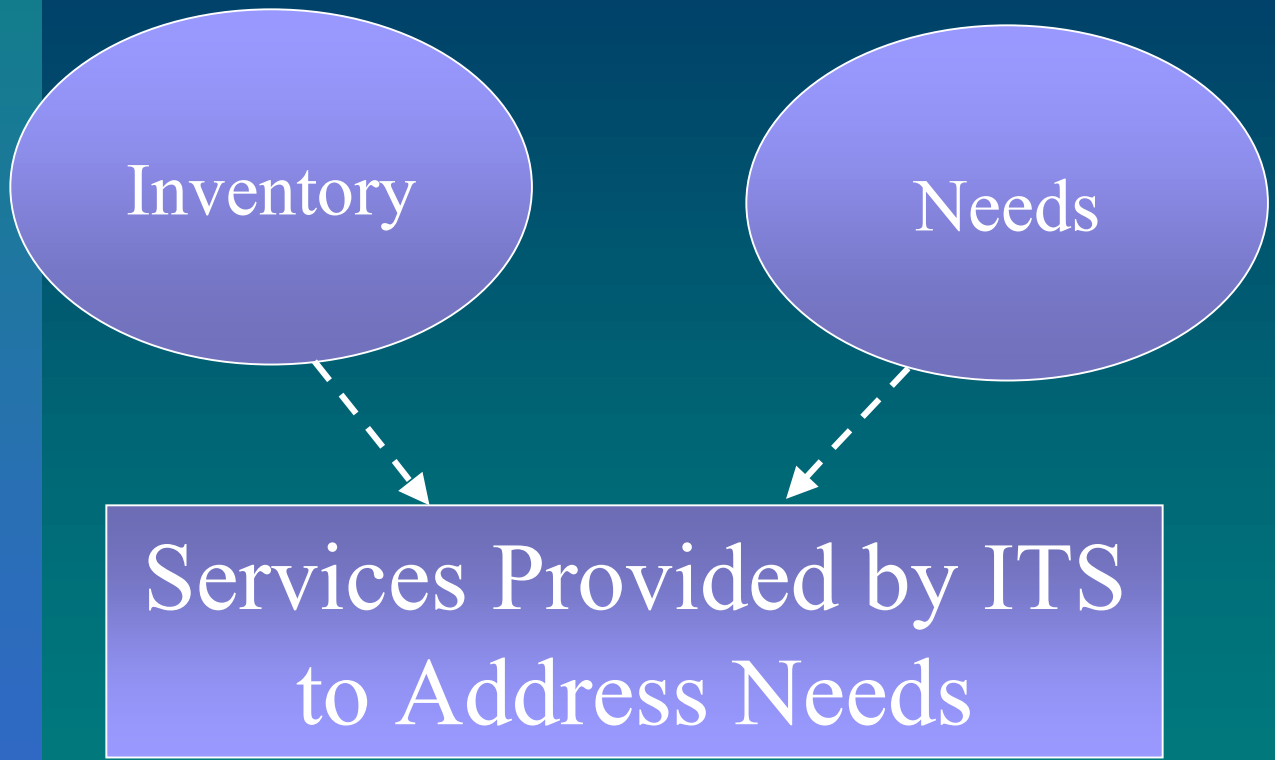


Caltrans/CHP/FSP Interconnects



ITS Needs & Services

Needs & Services



First Step in Determining What the Systems Should Do Tomorrow That They Don't Do Today

Needs & Services

- Needs Previously Documented in Strategic Plan, such as:
  - Increasing Congestion
  - Lack of Traveler Information
  - Lack of Real-Time Traffic Info
  - Transit Service Coordination

Needs & Services

- Refer to handout

Operational Concepts

Operational Concepts

- Defined:

Current and Future Stakeholder Roles and Responsibilities in the Implementation and Operation of Regional ITS Elements

Process

- Use inventory to identify the entity that currently implements, operates, and maintains the ITS element.
- Develop operational scenarios.
  - Tables, Diagrams, Narratives such as “A Day in the Life”
- Example:
  - Incident Management

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Incident Management

- Situation:
  - Truck overturns on the I-10, forcing lane closures and traffic diverting through cities
- Who's in charge?
- How does info get out?
- Who does what?

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Web Site Reminder

Web Site Contents

site last updated: 02/27/03
01:08 PM

Inland Empire Intelligent Transportation Systems (ITS) Architecture Project

- Home
- Background
- Deliverables
- Meetings
- Miscellaneous
- Contacts
- Links

Purpose

The Inland Empire Intelligent Transportation Systems (ITS) Architecture Project website has been established to encourage easy access, timely review and use of the documents and materials by the wide audience of project stakeholders. Project stakeholder feedback will be invaluable in developing an ITS Architecture that reflects the transportation system vision for the Inland Empire. This effort is being funded through a Federal Highway Administration (FHWA) grant to the City of Fontana, and the primary work effort is being carried out through a contract with Iteris, Inc.

What's New?

- The Draft ITS Inventory Report is now available. Click on the document name to download a PDF version of the document. Also, click here to download the Comment Form that you will use to submit your written comments. Stakeholder comments due Friday, February 28, 2003

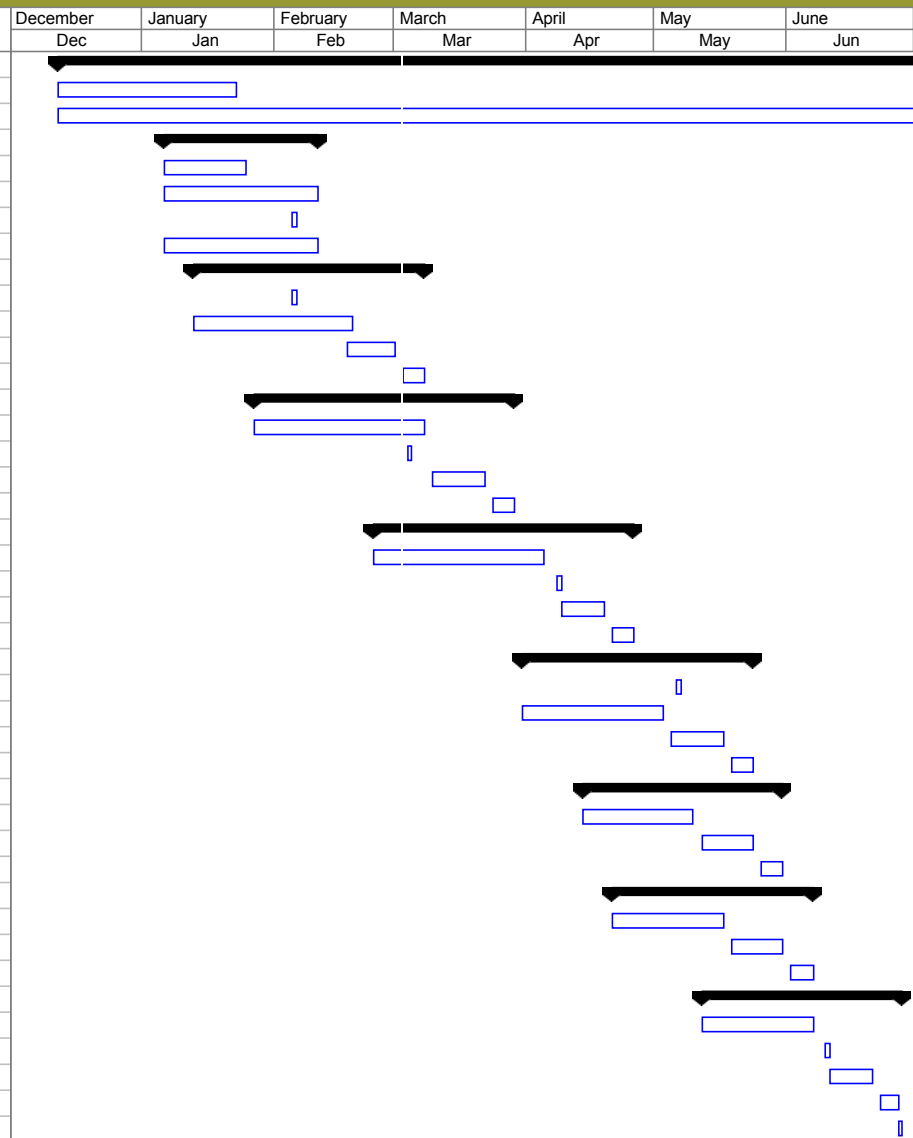
Web Site URL

www.iteris.com/inlandempire-its

Next Meeting/Calendar Review

Project Schedule

ID	Task Name	Start	Finish
1	**Project Management**	**Thu 12/12/02**	**Mon 06/30/03**
2	Project Management Plan	Thu 12/12/02	Wed 01/22/03
3	Monthly Status Meetings (1/22, 2/18, 3/18, 4/15, 5/20, 6/17)	Thu 12/12/02	Mon 06/30/03
4	**Develop Steering Committee and Identify Stakeholders**	**Mon 01/06/03**	**Mon 02/10/03**
5	Informational Flyer	Mon 01/06/03	Fri 01/24/03
6	Project Web Site	Mon 01/06/03	Mon 02/10/03
7	Task Workshop #1	Wed 02/05/03	Wed 02/05/03
8	Stakeholder List	Mon 01/06/03	Mon 02/10/03
9	**Define Region and Update ITS Inventory**	**Mon 01/13/03**	**Fri 03/07/03**
10	Task Workshop #1	Wed 02/05/03	Wed 02/05/03
11	Draft ITS Inventory Report	Mon 01/13/03	Tue 02/18/03
12	Stakeholder Review	Tue 02/18/03	Fri 02/28/03
13	Comment Disposition	Mon 03/03/03	Fri 03/07/03
14	**Determine Needs, Services, and Operational Concepts**	**Mon 01/27/03**	**Fri 03/28/03**
15	Draft Needs, Services, and Operational Concepts Report	Mon 01/27/03	Fri 03/07/03
16	Task Workshop #2	Tue 03/04/03	Tue 03/04/03
17	Stakeholder Review	Mon 03/10/03	Fri 03/21/03
18	Comment Disposition	Mon 03/24/03	Fri 03/28/03
19	**Analyze Functional Requirements and Define Interfaces**	**Mon 02/24/03**	**Fri 04/25/03**
20	Draft Functional Requirements and Interface Report	Mon 02/24/03	Fri 04/04/03
21	Task Workshop #3	Tue 04/08/03	Tue 04/08/03
22	Stakeholder Review	Wed 04/09/03	Fri 04/18/03
23	Comment Disposition	Mon 04/21/03	Fri 04/25/03
24	**Develop Project Sequencing**	**Mon 03/31/03**	**Fri 05/23/03**
25	Task Workshop #4	Tue 05/06/03	Tue 05/06/03
26	Draft Project Sequencing Report	Mon 03/31/03	Fri 05/02/03
27	Stakeholder Review	Mon 05/05/03	Fri 05/16/03
28	Comment Disposition	Mon 05/19/03	Fri 05/23/03
29	**Develop List of Agency Agreements**	**Mon 04/14/03**	**Fri 05/30/03**
30	Draft List of Agency Agreements	Mon 04/14/03	Fri 05/09/03
31	Stakeholder Review	Mon 05/12/03	Fri 05/23/03
32	Comment Disposition	Mon 05/26/03	Fri 05/30/03
33	**Develop Maintenance Plan**	**Mon 04/21/03**	**Fri 06/06/03**
34	Draft Maintenance Plan	Mon 04/21/03	Fri 05/16/03
35	Stakeholder Review	Mon 05/19/03	Fri 05/30/03
36	Comment Disposition	Mon 06/02/03	Fri 06/06/03
37	**Produce Final Report**	**Mon 05/12/03**	**Fri 06/27/03**
38	Draft Final Project Report	Mon 05/12/03	Fri 06/06/03
39	Task Workshop #5	Tue 06/10/03	Tue 06/10/03
40	Staekholder Review	Wed 06/11/03	Fri 06/20/03
41	Comment Disposition	Mon 06/23/03	Thu 06/26/03
42	Final Project Report	Fri 06/27/03	Fri 06/27/03



Upcoming Deliverables

- Draft Inventory Report Comment Disposition
- Draft Needs, Services, and Operational Concepts Report
- Draft Functional Requirements and Interfaces Report

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Workshop Calendar

Workshop #1: Stakeholders/Inventory	February 5
Workshop #2: Needs/Services	March 4
Workshop #3: Interfaces	**April 8**
Workshop #4: Project Sequencing	**May 6**
Workshop #5: Project Results	**June 10**

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Workshop #2

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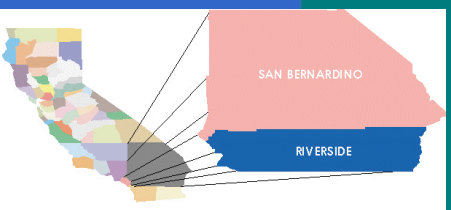

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