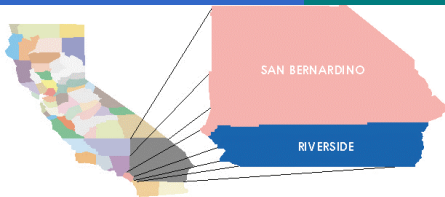*Workshop #1*

Inland Empire Regional ITS Architecture Project

February 5, 2003

Agenda

- Introductions
- Project Background
- Study Boundaries
- Stakeholder List Review
- ITS Inventory Update
- ITS Needs
- Web Site Introduction
- Next Meeting/Calendar Review

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Project Background

What is ITS?

Intelligent Transportation Systems

Uses electronics, communications, and computers in an integrated manner to improve the efficiency and safety of roadways.
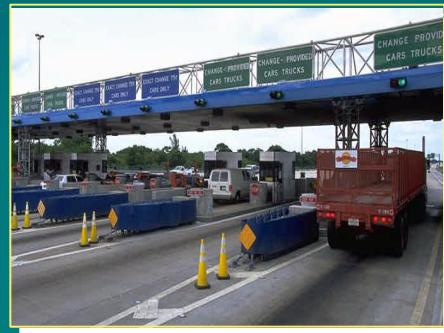
What is ITS?

Roadway Mgmt

Traveler info

Rural Systems

Vehicle Control

Electronic Tolls

Transit Systems

Goods Movement
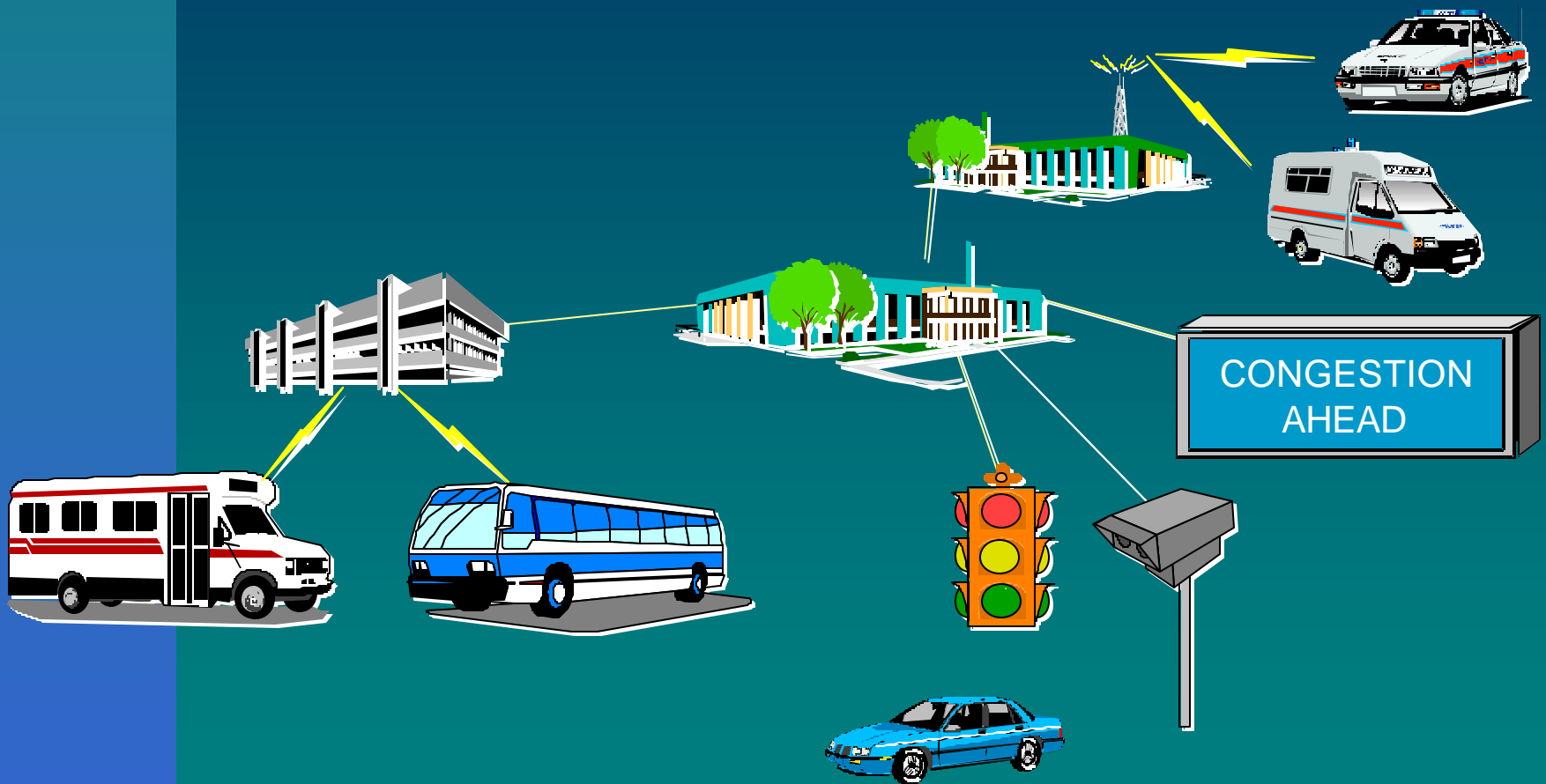
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What is a Regional ITS Architecture?

- 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.

What is a Regional ITS Architecture?

CONGESTION AHEAD

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
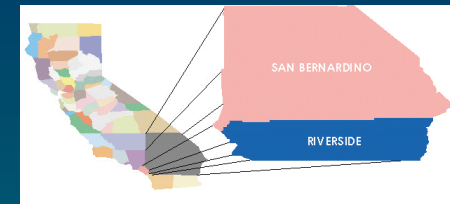
What isn't included?

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

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Why this project, why now?

- FHWA published a Rule (*ITS Standards and Architecture*) and FTA published a companion Policy to foster regional integration by requiring that all 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 tailored to address the local situation and ITS investment needs, and the subsequent adherence of ITS projects to the regional ITS architecture.

- The Inland Empire ITS Strategic Plan preceded the Rule/Policy and is, therefore, in need of modifications in order for the region to continue on a path to 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.**

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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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Project Work Scope

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Roles & Responsibilities
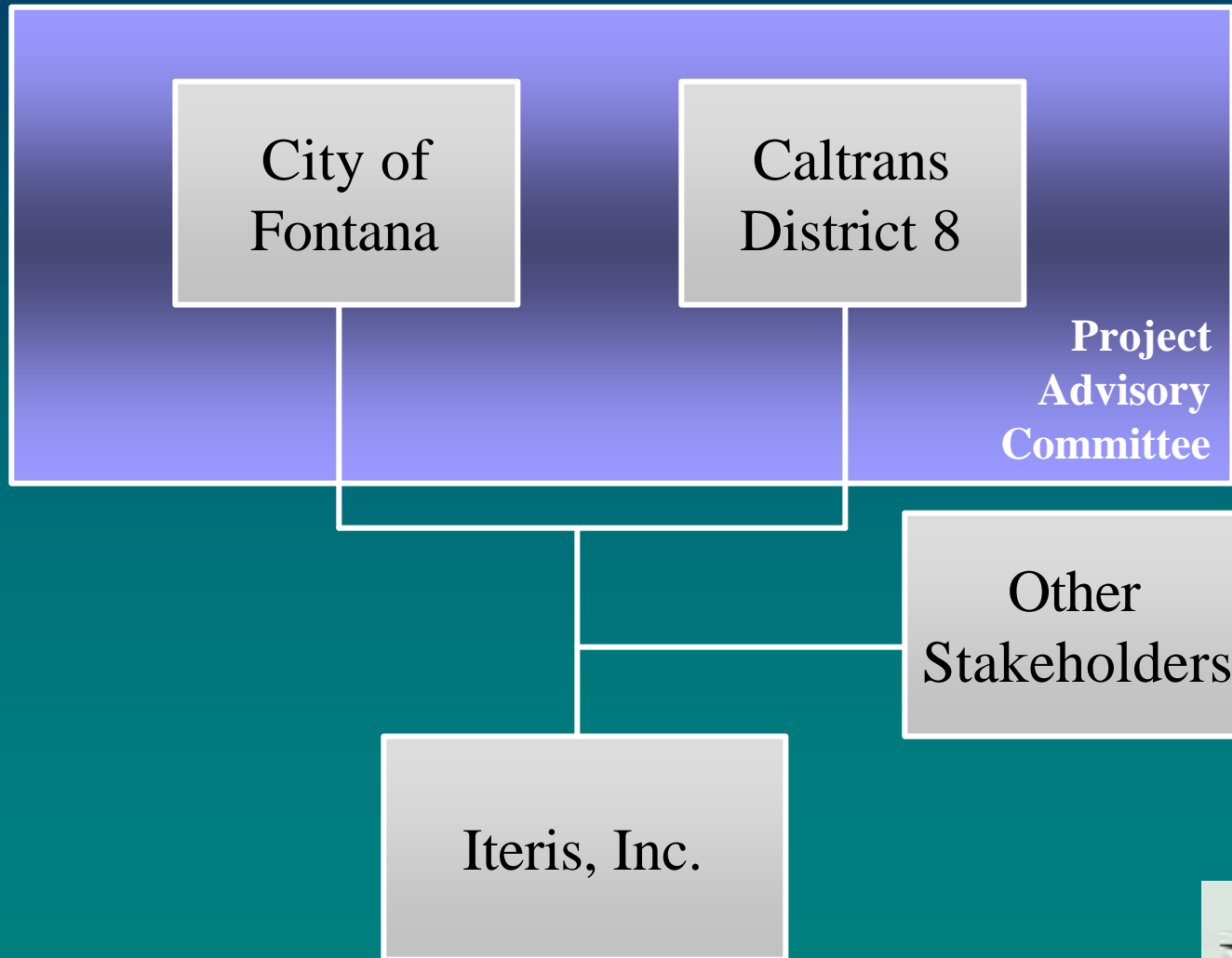
Roles and Responsibilities

- **Project Advisory Committee**
  - Members = Caltrans D8, FHWA, RCTC, SANBAG, and Fontana
  - Duties = Perform project and consultant oversight
- **Stakeholders**
  - Members = All Inland Empire entities with responsibility/interest in transportation
  - Duties = respond to inquiries, participate in workshops, review deliverables, access website

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Study Boundaries

Region Definition

- Use existing metropolitan planning area
- Include cities, counties, corridors
- Note adjacent states, if any
- Special conformity areas, such as for air quality
- Other interfacing ITS architectures

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Map Review

Stakeholder List Review

Candidate Stakeholders

- Transportation Agencies
- Transit Agencies
- Planning Organizations
- Public Safety Agencies
- Activity Centers
- Fleet Operators
- Other….

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Candidate Stakeholders

■ Other….

– Media/Traffic Reporting Services

– National Park Service/Forestry Service

– Air Quality Management

– Universities

– Weather Services

– Others?

Stakeholder List Review

ITS Inventory Update

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

ITS Inventory

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

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Inventory Review

ITS Needs

Needs Analysis

Inventory

Needs

Services Provided by ITS to Address Needs
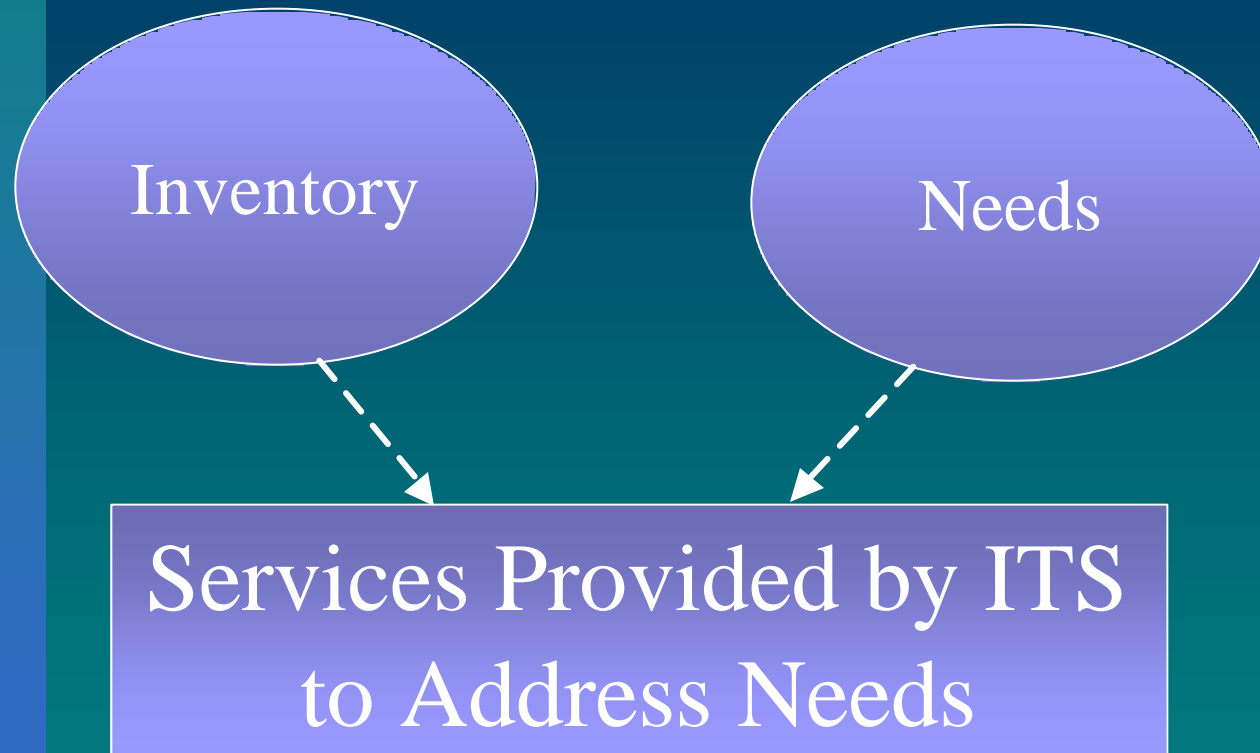
First Step in Determining What the Systems Should Do Tomorrow That They Don't Do Today

Needs Analysis

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

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Needs Analysis

- Representative List of Candidate Needs
- Example:
  - "Alleviate congestion in work zones, freeway interchanges, and in downtown areas" vs. "Alleviate traffic congestion"
- Focus of Next Workshop

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Web Site Introduction

Web Site Contents

- Home (purpose, what's new, navigation, for further info)
- Background
- Deliverables
- Meetings
- Miscellaneous
- Contacts
- Links

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Deliverables

- Because of the expedited nature of the schedule, deliverables will be delivered in draft form only.

- Stakeholder comments will be dispositioned and released, but the deliverable will not be revised and re-circulated.

- The dispositioned stakeholder comments will be reflected in the Final Project Report.

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Web Site URL

www.iteris.com/inlandempire-its

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Next Meeting/Calendar Review

Project Schedule

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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Upcoming Deliverables

- Draft Inventory Report
  - February 14

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Workshop #1

Inland Empire Regional ITS Architecture Project

February 5, 2003