

October 18, 2012



System Planning

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System Planning Overview

- What is System Planning?
- Who tells us to do System Planning?
- Why is System Planning still needed?
- Core System Planning products.

What is System Planning?

- Partnership based: external & internal.
- Identify existing conditions and deficiencies.
- Forecast future demand and identify needed improvements to meet demand.
- Articulate State's vision as "owner operator" to meet needs of all users.
- Identify candidate projects and strategies for regional plans (RTPs), IGR mitigation, Local Measure programs, PIDs, STIP & SHOPP.

Based in Law

California Government Code

65086. The Department of Transportation, in consultation with transportation planning agencies, county transportation commissions, counties, and cities, shall carry out long-term state highway system planning to identify future highway improvements.

Based in Law

U.S. Code, Title 23, Part 450, Subpart B...

The purpose of this subpart is to implement the provisions of 23 U.S.C. 135 and 49 U.S.C. 5304, as amended, which require each State to carry out a **c**ontinuing, **c**ooperative, and **c**omprehensive statewide **multimodal** transportation planning process, including the development of a long-range statewide transportation plan and statewide transportation improvement program (STIP), that facilitates the safe and **efficient management, operation, and development** of **surface transportation systems** that will serve the mobility needs of people and freight (including accessible pedestrian walkways and bicycle transportation facilities) and that fosters economic growth and development within and between States and urbanized areas, while minimizing transportation-related fuel consumption and air pollution in all areas of the State, including those areas subject to the metropolitan transportation planning requirements of 23 U.S.C. 134 and 49 U.S.C. 5303.

Change is Constant

- Increased population, vehicle miles, and freight volume.
- Land Use.
- New standards and technologies.
- Shift from capacity expansion to system management, operations and integration.
- Community, environmental, health and climate change.
- New legislation and directives.

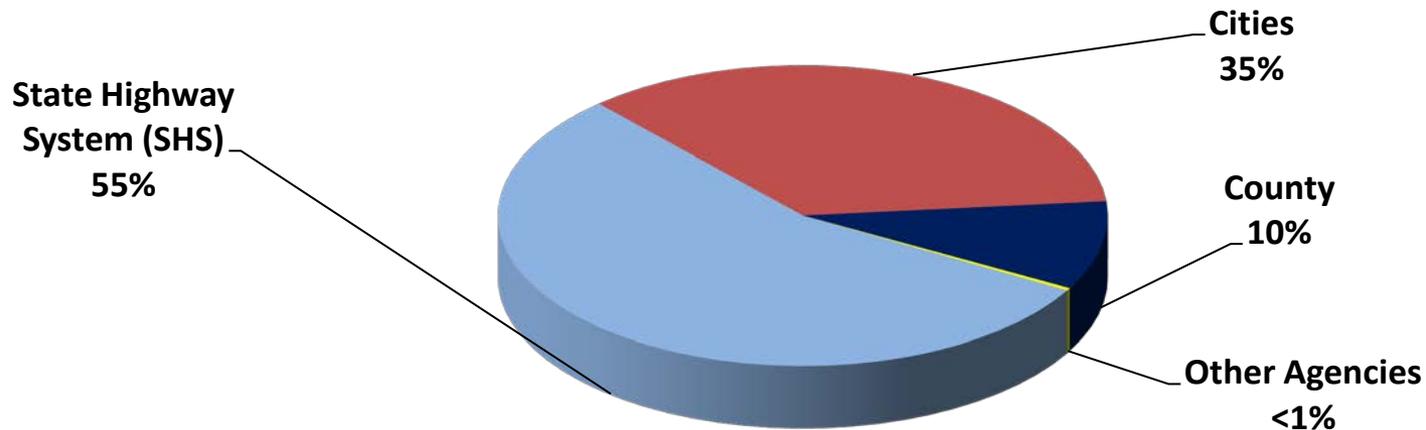
Long-Term Trends

Year	1966	1990	2010
California Population (Millions)	~18	~30	~38
Centerline Miles	14,308	15,170	15,160
Lane Miles	38,585	48,737	50,462
Annual Vehicle Miles of Travel (Millions)	49,097	139,209	180,259
Daily Vehicle Miles of Travel Per Lane Mile	3,486	7,826	9,786

California Statewide

California State	2010 Center Line Miles	2010 Daily Vehicle Miles of Travel (DVMT 1,000's)
State Highway System (SHS)	15,159.7	493,860
Cities	75,207.8	315,589
County	65,166.4	86,064
Other Agencies	16,604.7	2,486

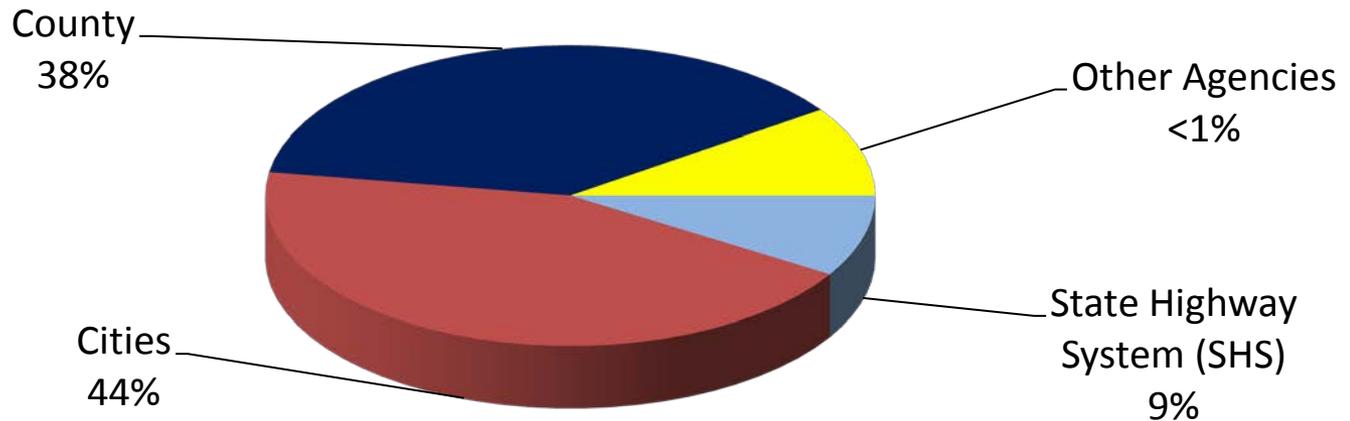
% Share of DVMT

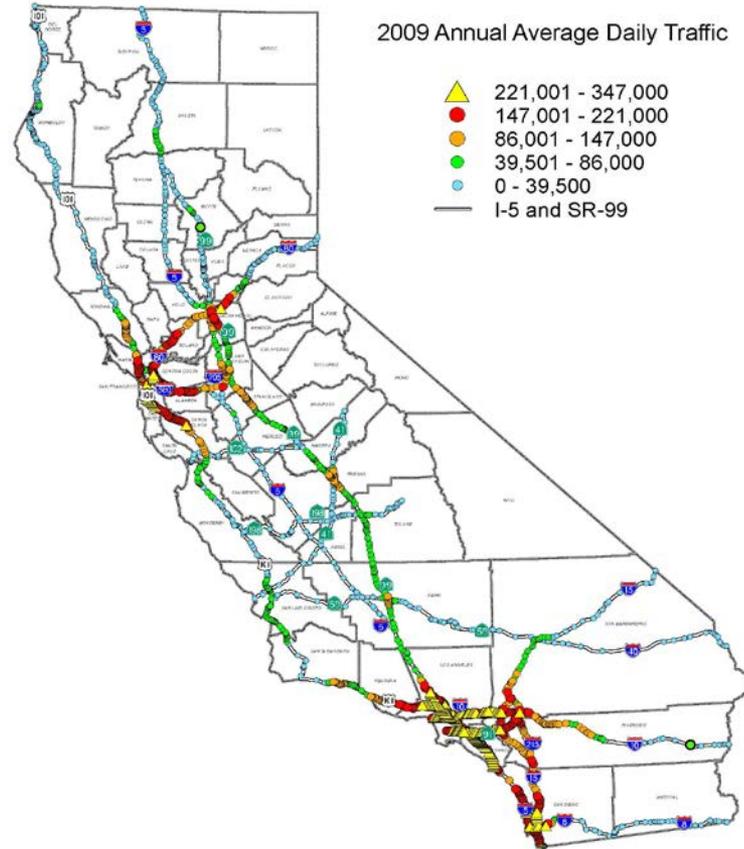


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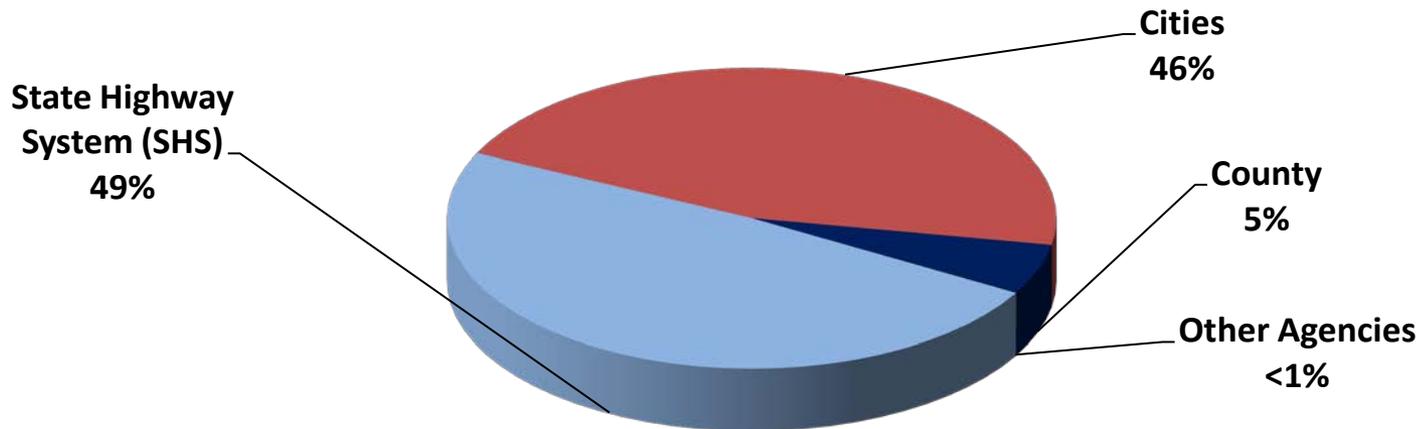




Los Angeles County

Los Angeles County	2010 Center Line Miles	2010 Daily Vehicle Miles of Travel (DVMT 1,000's)		
		Rural	Urban	Total
State Highway System (SHS)	860.6	5,324	98,003	103,326
Cities	17,299.1	344	96,608	96,951
County	3,206.9	2,376	9,194	11,570
Other Agencies	380	19	10	29

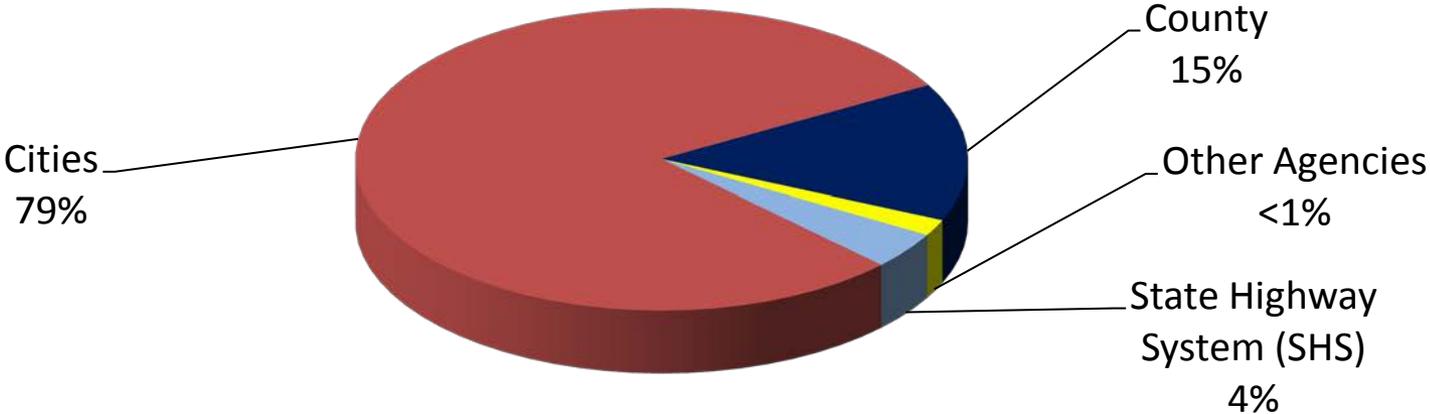
% Share of DVMT



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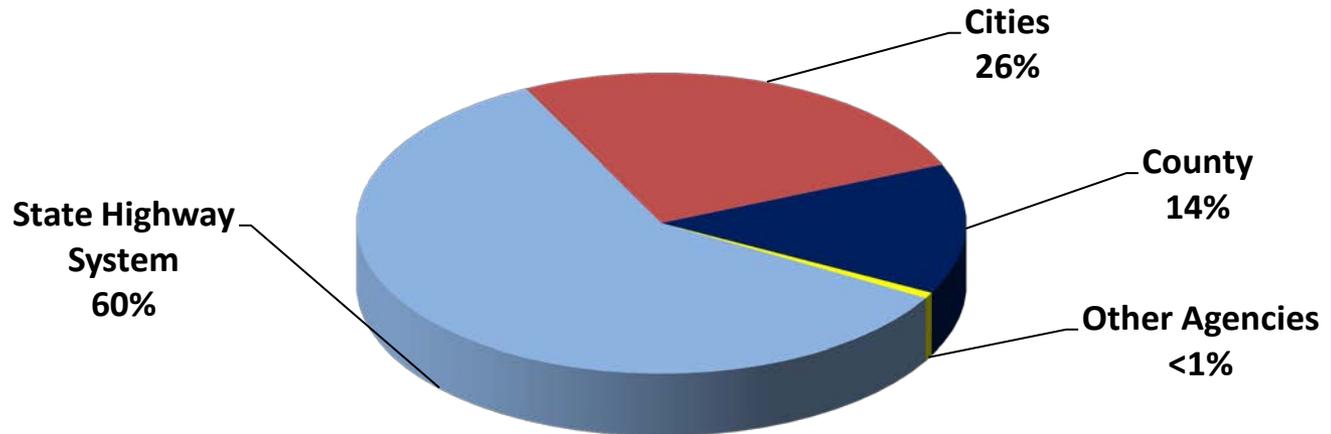
% Share of Center Line Miles



Shasta County

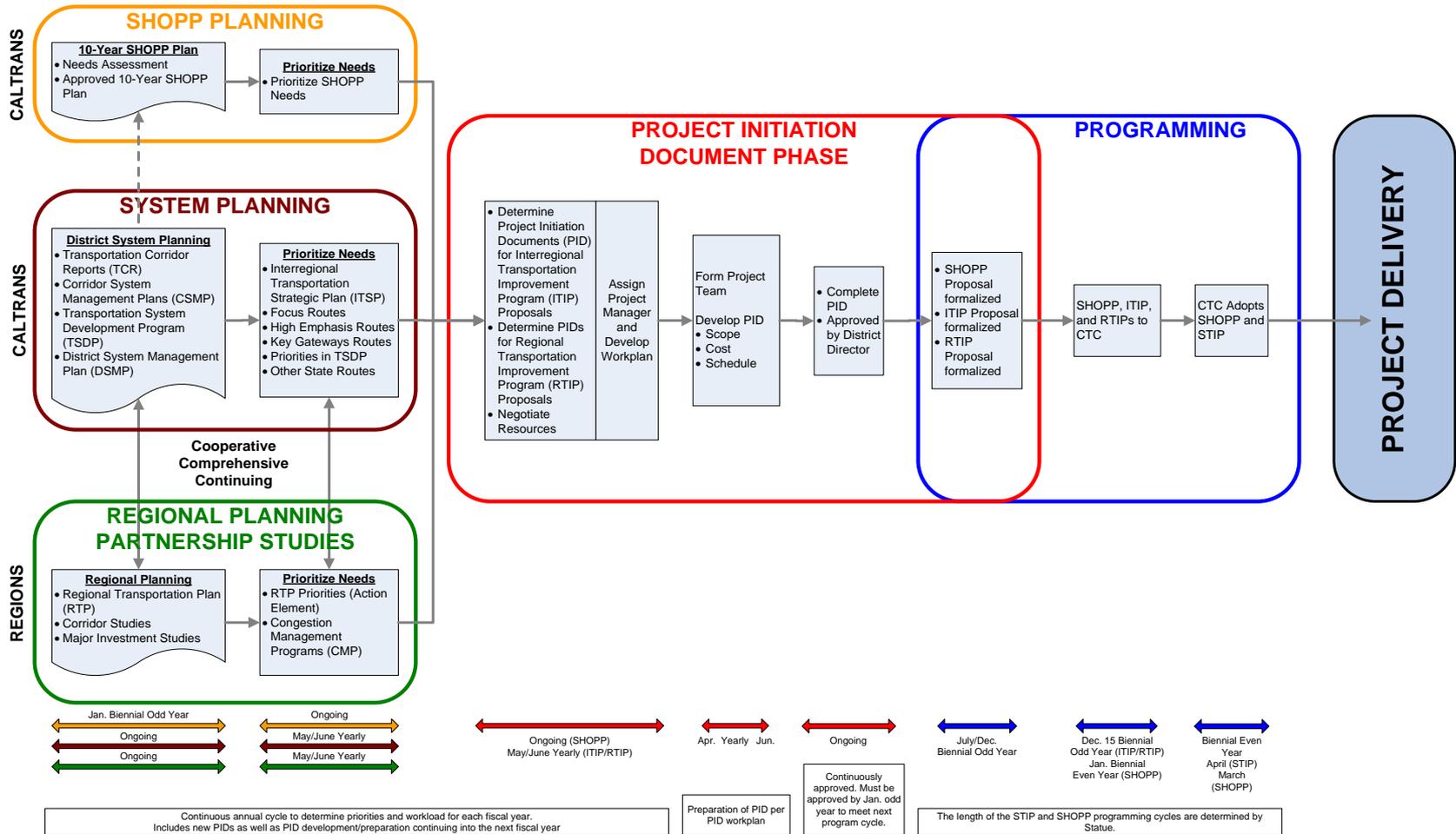
Shasta County	2010 Center Line Miles	2010 Daily Vehicle Miles of Travel (DVMT 1,000's)		
		Rural	Urban	Total
State Highway System (SHS)	313.9	1,789	1,290	3,079
Cities	519.4	11	1,337	1,348
County	1,191.2	549	182	731
Other Agencies	574.5	33	0	33

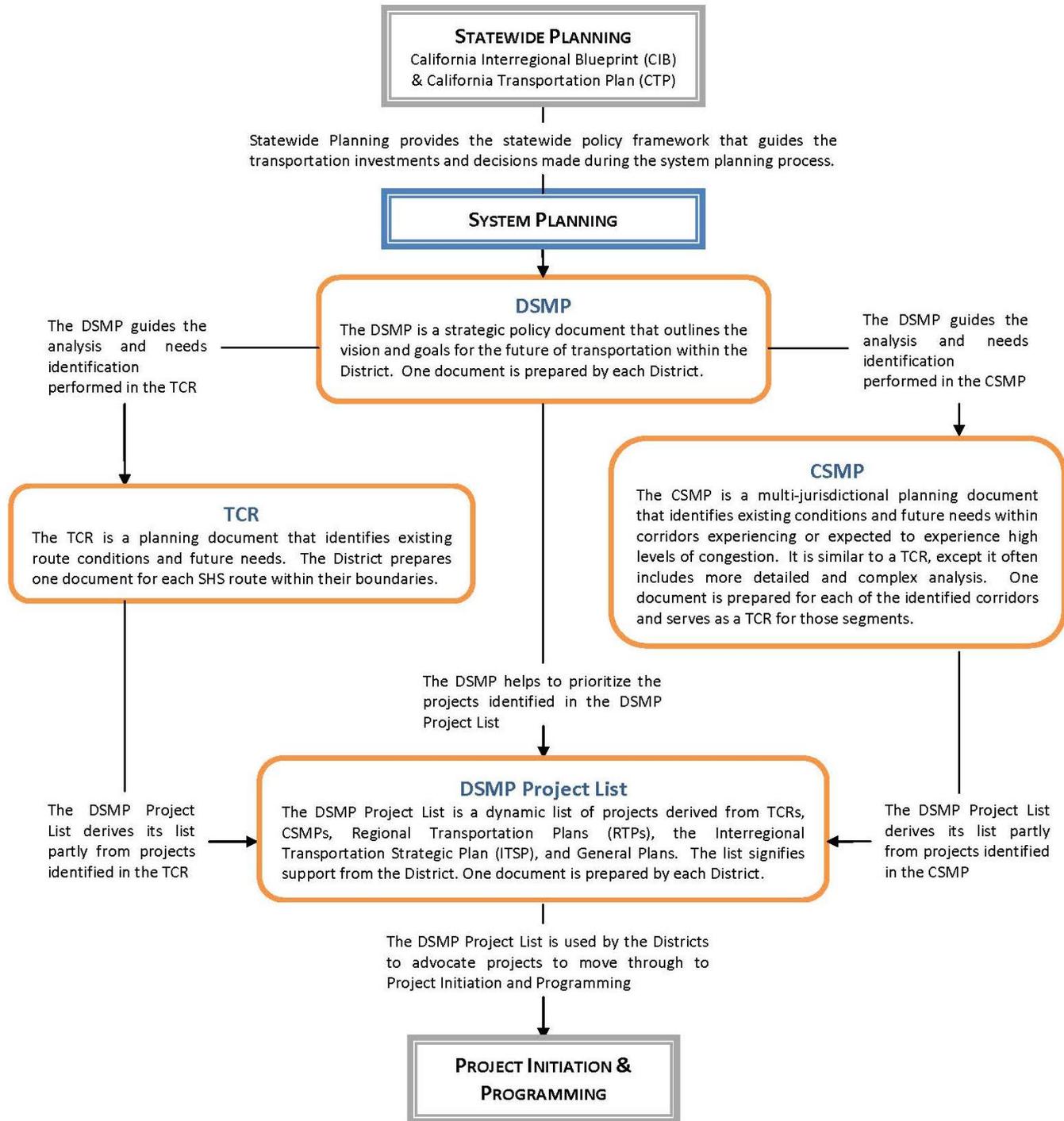
% Share of DVMT



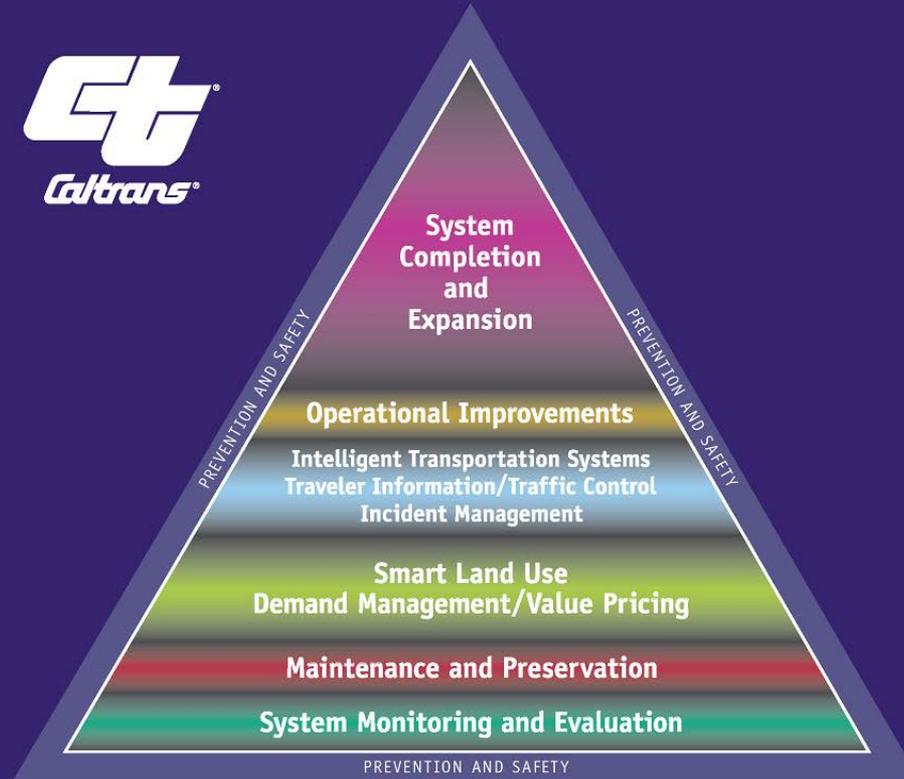
Simplified Statewide and Regional Planning and STIP and SHOPP Programming Cycle

Project Initiation Document Links Planning to Programming





Mobility Pyramid



Transportation investments have more impact when built on this foundation

Transportation Concept Report

- Updated guidelines (1987) provide consistent format, data collection, template, system measures, ability to more easily update TCR.
- Roll-up data for multi-district corridor, regional network, or statewide by measure and GIS.
- Identify specific projects and operations strategies to submit for competitive funding opportunities.

TCR

TRANSPORTATION CONCEPT REPORT

GUIDELINES



June 2012

California Department of Transportation
Division of Transportation Planning



- **Bicycle Facility:**
 - Bicycle access
 - Facility type
 - Paved shoulder width
- **Pedestrian Facility:**
 - Pedestrian access
 - Sidewalk presence
- **Transit Facility:**
 - Mode
 - Route end points

- System Characteristics:
 - Managed lane system and characteristics
 - TMS elements existing and future build-out
- Operation Measures:
 - Daily and peak hour Vehicle Hours of Delay
 - Bottleneck location and causality
 - Various managed lane performance measures
 - 20-25 Year System Management and Operations Concept

- Freight:
 - Mode
 - Facility Type
 - Location
- Environmental Considerations:

Consideration of several environmental factors (e.g. Air Quality, Section 4(f) land, Coastal Zone, Floodplain, Species Considerations, Habitat Connectivity, Fish Passage)

TCR Uses & Customers

- Capital development process – need and purpose, identify projects for PIDs
- Identify projects for inclusion in RTPs
- Project Development Teams
- IGR/LDR
- Partner Agencies
- Local jurisdictions
- Property Owners
- Corridor preservation

Corridor System Management Plan

- Required by CTC for all Prop 1B Bond funded projects – CMIA.
- Intended to preserve the mobility gains provided by Bond projects.
- Approximately 45 original corridors.
- Identifying operations and management strategies that are lower cost and more quickly implemented.
- Getting more mobility for fewer capital \$.

District System Management Plan

- Updated guidelines under development to be complete this year.
- Combines DSMP (1991) and TSDP (1995).
- Identifies District challenges and priorities.
- Comprehensive project list serving as source for funding opportunities.
- Will be updated every 2 years in conjunction with STIP cycle.

Interregional Road System

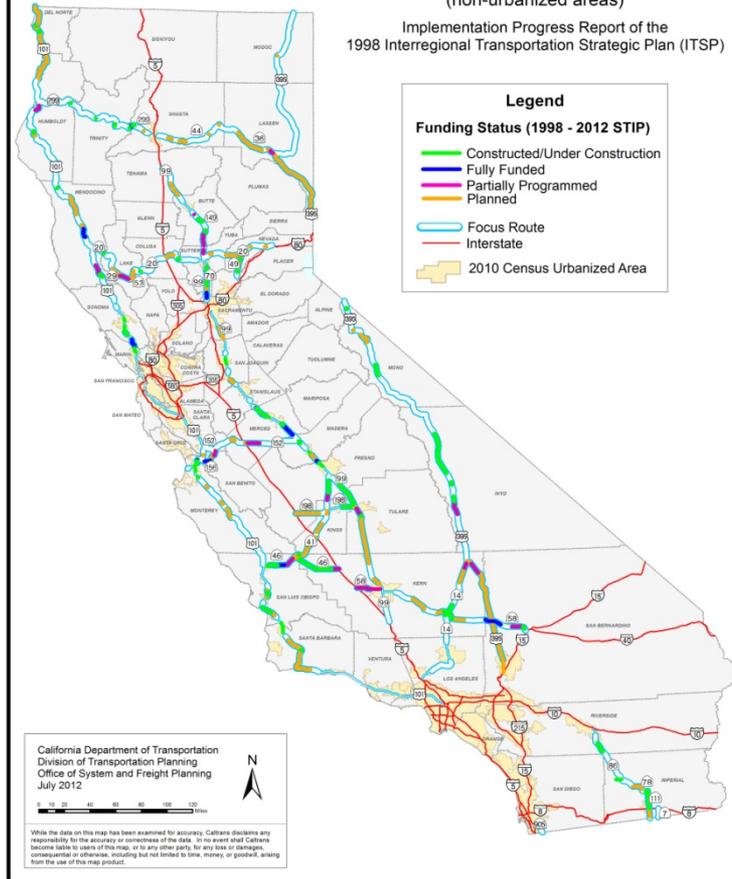
- Streets and Highways Code
- IRRS – routes outside urbanize areas that provide access and links.
- High Emphasis Routes – subset of IRRS characterized by Caltrans as most critical (most interstates and select State Routes)
- Focus Routes – subset of High Emphasis – 10 highest priority routes

Interregional Transportation Strategic Plan (ITSP)

- Update from original plan (1998) to address new legislation and planning factors.
- Identifies Department priorities for ITIP funding.
- Provides status of routes, what's been completed and what remains.
- Will be updated again in conjunction with California Transportation Plan 2015 and availability of new statewide model.

DRAFT

Focus Route Development Strategy
1998 - 2020
(non-urbanized areas)
Implementation Progress Report of the
1998 Interregional Transportation Strategic Plan (ITSP)



Focused Reports

- Ramp Meter Development Plan
- Roundabouts Inventory
- Relinquishments
- SHS compared to CHSR
- Corridor Studies/Major Investment Studies
- State Planning and Research grants
- Needs Inventory for funding opportunities

<http://www.dot.ca.gov/hq/tpp/corridor-mobility/>