Smart Mobility, Smart Measures

Smart Mobility 2010: A Call to Action for the New Decade

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California Sustainability Indicators Symposium
Sacramento
February 23, 2011
Why Smart Mobility

- Respond to the transportation needs of the state’s people and businesses
- Address climate change
- Advance social equity and environmental justice
- Support economic and community development
- Reduce per capita VMT
Caltrans’ Objectives for Smart Mobility

- Increase Transportation Choices
- Enhance Community Quality
- Reduce Environmental Impacts
- Support System Preservation
- Increase System Efficiency
## In Good Company: Regional Blueprint Planning

<table>
<thead>
<tr>
<th>Southern CA (SCAG)</th>
<th>Sacramento Area</th>
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<tr>
<td><img src="image1" alt="SCAG Logo" /></td>
<td><img src="image2" alt="Sacramento Blueprint" /></td>
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<td>Council of Govts (SACOG)</td>
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<tr>
<th>San Diego (SANDAG)</th>
<th>SF Bay Area agencies</th>
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<td><img src="image3" alt="San Diego Logo" /></td>
<td><img src="image4" alt="FOCUS Logo" /></td>
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<td><img src="image5" alt="2007 RTP" /></td>
<td><img src="image6" alt="SF Bay Area Images" /></td>
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*FOCUS: a development and conservation strategy for the San Francisco Bay Area*
In Good Company: Other State DOT Efforts

New York DOT

Florida DOT

Penn DOT

Texas DOT
In Good Company: Federal Activities

**Design Guidance**

- Flexibility in Highway Design
- Contract Sensitive Solutions for roadway Communities

**Research**

- TCRP Report 111
  - Elements Needed to Create High Ridership Transit Systems

**New Initiatives**

- United States Department of Transportation
- U.S. Department of Housing and Urban Development

**Best Practices**

- National Award for Smart Growth Achievement
Supporting Smart Mobility in California:

- Caltrans Director’s Policies and Deputy Directives
- State Legislation & Executive Orders
- CEQA Greenhouse Gas (GhG) Guidelines
- Calif. Transportation Commission’s guidelines for Regional Transportation Planning (RTP) to reduce GhG
- Regional efforts, such as Blueprint Plans
- Various Local Government efforts
Governor’s Strategic Growth Plan: Mobility Pyramid

- System Completion and Expansion
- Operational Improvements
  - Intelligent Transportation Systems
  - Traveler Information/Traffic Control
  - Incident Management
- Smart Land Use
  - Demand Management/Value Pricing
- Maintenance and Preservation
  - System Monitoring and Evaluation
Smart Mobility 2010

- Defines “Smart Mobility”
- Describes Smart Mobility visions and benefits
- Lays a foundation for implementation
- “Speaks to” all concerned agencies and organizations
- Includes policy, planning and programming actions
Smart Mobility moves *people and freight* while *enhancing* California’s *economic, environmental* and *human resources* by *emphasizing*:

- convenient and safe multi-modal travel,
- speed suitability,
- accessibility,
- management of the circulation network, and
- efficient use of land.
Smart Mobility Principles

1. Location Efficiency
2. Reliable Mobility
3. Health and Safety
4. Environmental Stewardship
5. Social Equity
6. Robust Economy
“Location efficiency” describes the fit between the physical environment and the transportation system.

Location efficiency is key to integrating transportation and land use.
Location Efficiency:

- **Regional Accessibility**: Characteristics of development use, form, and location that combine with the multimodal transportation system to make destinations available through non-SOV travel and efficient vehicle trips at the regional, interstate, and international scales, and

- **Community Design**: Characteristics of development use, form, and location that combine with the multimodal transportation system to support convenience, non-motorized travel, and efficient vehicle trips at the neighborhood and area scale.
Opportunity to Create Location Efficiency (LE) Benefits

Location-Efficient Community Design

- Moderate to Strong
- Weak to Moderate

Regional Accessibility

- Strong to Very Strong
- Moderate to Strong
Place Types

There is an appropriate Smart Mobility Framework for all places in the state.
Smart Mobility Place Types

1. Urban Centers
2. Close-in Compact Communities
3. Compact Communities
4. Suburbs
5. Rural Towns
6. Agricultural & Protected Lands

Smart Mobility FRAMEWORK
Suburban Communities

Smart Mobility Framework

Relative to the principle of location efficiency, suburban communities are characterized by weak presence of community design elements and variable presence of the regional accessibility elements that constitute to location efficiency. Suburban communities will be impacted by these factors for years to come. Achieving Smart Mobility benefits in suburban communities is difficult. These challenges point to the importance of minimizing the creation of new suburban communities, i.e., places ranking poorly relative to both of the Smart Mobility factors. This does not mean that lower-to-moderate density development should be prevented. Rather, all efforts should be made to direct the form of new development so that new compact communities or close-in compact communities are encouraged and incentivized while new suburban community characteristics are discouraged. New lower-density development should be in the form of urban neighborhoods or compact communities that are characterized by complete community design and whenever possible by high regional accessibility. All levels of government should work together to minimize the creation of new suburban communities because they are characterized by low location efficiency factors, and the absence of these factors will work against efforts to control greenhouse gas emissions and maintain a healthy economy and economy. Instead, new development should be in the form of compact communities, whether close-in or planned locations remote to urban centers.

The overall Smart Mobility strategy for suburban communities is to transition suburban centers and corridors to close-in compact centers and corridors. Higher density development with location-efficiency design elements would be concentrated in these transition areas. Larger suburban centers may transition to urban centers, which will create regional accessibility benefits for surrounding suburban communities. The implementation possibilities identified below reflect this emphasis on transition away from suburban centers and corridors. Section 3.4 further addresses place type transitions. Stewardship priorities under the Smart Mobility Framework for transitioning away from suburban communities to compact communities and urban centers, with a focus on change in suburban centers and corridors. In suburban communities, freeways and arterial widening projects, including HOV systems, should be undertaken only when they can be demonstrated to be unlikely to generate increased pressure on outlying lands for suburban expansion. For the same reason, new intersections on existing freeways should be constructed only where they are tied directly to adapted local and regional plans for new location efficient growth as evidence by Smart Mobility performance measures.

A strong presence of location efficiency factors is difficult to achieve in suburban communities, which is the main reason for the Smart Mobility Framework’s emphasis on transportation to other place types. Within suburban communities, activity is relatively concentrated in suburban centers, so suburban opportunities for location efficiency are typically best there. The principle of Reliability supports an approach to street and intersection operations that focuses on providing predictable travel times through effective traffic and incident management. Health and Safety principles directs attention in particular to conditions on suburban arterials, many of which lack basic accommodation for bicyclists and pedestrians. Slower speeds and improved facilities will address paramout health concerns as well as promoting public health outcomes.

Planning

Key Activities:
- Identify centers and corridors that can be transformed into more location-efficient places. Plan for them in terms of land use, urban design character, and transportation services. Given the high level of public investment and the lengthy time horizons required to stimulate these changes, locations should be prioritized to align with market potential and other community objectives.
- Identify near-term opportunities to improve health and safety through active travel, safe routes to school programs, and traffic safety initiatives.

Transportation Projects and Programs

Likely priorities in Suburban Communities:
- Investments that improve the operational efficiency of existing arterial and freeway corridors. (Reliability, Robust Economy)
- Projects that improve connectivity to shorter average-trip lengths and increased non-auto mode share. (Location Efficiency, Environmental Stewardship, Health and Safety)
- Investments in “compact streets” and safe routes to school measures that improve conditions for walking and bicycling. (Health and Safety, Social Equity, Location Efficiency)

Access management and speed management on the arterial system. (Reliability, Mobility, Health and Safety)
Where there are concentrated employment centers, commute transit service and rideshare promotion. (Social Equity, Location Efficiency, Environmental Stewardship)

Development and Conservation Projects and Programs

Likely priorities in Suburban Communities:
- Where high capacity transit stops and stations are located along high capacity transit corridors between cities, transit-oriented development with managed parking and car and bike share at stations. (Reliable Mobility, Robust Economy, Environmental Stewardship)
- Strategic redevelopment of commercial corridors and dedicated use areas such as large shopping malls and business parks, in order to incorporate Location Efficiency factors. (Location Efficiency)
- Strong presence of community design elements for all new construction. (Environmental Stewardship, Location Efficiency)
Place Type Transition
Anchored Places. Places in which the presence of location efficiency factors will increase over time, but where a single Smart Mobility place type framework will consistently apply. In these places, investment decisions would be based on enhancing the presence of location efficiency factors.
Place Type Transitions:

Transitional Places. These places will be targeted for significant change, “evolving” over time to feature a significantly greater presence of location efficiency factors that justifies a change in smart mobility place type framework.
Place Type Transitions

Using place types to aid strategic decision-making about projects and programs that will **support smart mobility** as cities and towns change over time.
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<tr>
<th>Principle</th>
<th>Performance Measure</th>
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<td>1. Support for Sustainable Growth</td>
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<td>2. Transit Mode Share</td>
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<td>3. Accessibility and Connectivity</td>
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<td>Reliable Mobility</td>
<td>4. Multi-Modal Travel Mobility</td>
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<td>5. Multi-Modal Travel Reliability</td>
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<td>6. Multi-Modal Service Quality</td>
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<td>Health and Safety</td>
<td>7. Multi-Modal Safety</td>
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<td>8. Design and Speed Suitability</td>
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<td>9. Pedestrian &amp; Bicycle Mode Share</td>
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<td>Principle</td>
<td>Performance Measure</td>
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<td>10. Climate and Energy Conservation</td>
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<td>11. Emissions Reduction</td>
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<td>12. Equitable Distribution of Impacts</td>
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<td>13. Equitable Distribution of Benefits</td>
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<td>Robust Economy</td>
<td>14. Congestion effects on Productivity</td>
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<td>15. Efficient Use of System Resources</td>
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<td>16. Network Performance</td>
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<td>17. Return on Investment</td>
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1. Multi-Modal Focus
2. Speed Suitability
3. Activity Connectedness
4. Network Management
5. Land Use Efficiency
Performance Measures with Equity Dimensions

- Accident rates
- Speed suitability
- Modal mobility, consistency
- Activity connectedness
- Universal Accessibility (ADA)
- Emissions and noise impacts
- Land use efficiency
- LOS
Implementation Actions: 10 Themes

1. SMF Impact
   Planning & Programming
2. Interregional Blueprint
   Design Standards & Procedures
3. Caltrans Policy & Practice
   Major Cross-Functional Initiatives
4. Other Departments’ Activities
   Local Government Planning
5. Data & Tools
   Local Government Implementation
California Interregional Blueprint Highlights

- Requires interim report by December 31, 2012, based on SB 375 sustainable communities strategy (SCS) targets.

- SB 391 requires the State Transportation Plan by December 31, 2015, to identify an integrated, multimodal system needed to achieve the AB 32 targets.

- California Interregional Blueprint process ensures shared compliance in SB 391 based on your SB 375 SCS targets.
California Interregional Blueprint Action Plan

- Phase I – Produce a snapshot of where we are today-- using the best available data – and report to BTH by September 2010

- Phase II -- Build more robust data and modeling tools by 2012 to evaluate the system and test scenarios

- Interim Report due December 31, 2012

- Enhance scope of the existing California Transportation Plan (CTP) for 2040 -- due December 31, 2015
California Interregional Blueprint Outcomes

- Better information on interregional travel
- Better data and tools
- Coordinated approach to planning and modeling
- AB 32, SB 375, and SB 391 compliance
- Make the next California Transportation Plan (CTP) update more relevant
Implementation Actions: Highlights

- Support for Ongoing Activities
  - Regional Blueprint Planning
  - Complete Streets Implementation
  - HDM revisions

- Call for New Initiatives
  - Speed Suitability Initiative
  - Location-efficiency Initiative

- Integration with Related Activities
  - Sustainable Communities Planning and Alternative Planning Strategies
  - Federal Sustainable Communities Partnership
Smart Mobility 2010: A Call to Action for the New Decade

- Final document is available online: http://www.dot.ca.gov/hq/tpp/offices/ocp/smf.html
- Provides implementation checklists for local, regional and state agencies
- Includes illustrations, examples, resources, and graphics