Addressing SB375

Summit on Tools and Strategies to Achieve Smart Growth in Fresno

Jerry Walters

Fehr & Peers

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1. **Legislative Mandate**

2. **Targets for the Valley**

3. **Smart Growth Strategies**

1. Legislative Mandate

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER NO. G-11-024

California Climate Legislation – Generation 1

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AB 32 (2006)

- 2020 -- reduce GHG emissions to 1990 levels
- 2050 -- reduce GHG to 80% below 1990

SB 97 (2007)

- CEQA analysis of GHG emissions required
- Adopt CEQA GHG guidelines by Jan 2010

Legal Action

- US50 HOV Lane EIR declared invalid for failure to analyze GHG

  (Environmental Council of Sacramento v. Caltrans)

- AG letters: San Bernardino County, San Diego County, Pleasanton, Stockton, …

"Settlement"

- Transit developments designed so that internally accessible and at sufficient density to support transit

- VMT per capita for new development no higher than existing city average

- LEED Certification

STOCKTON CITY COUNCIL

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RESOLUTION APPROVING THE SETTLEMENT AGREEMENT WITH THE SIERRA CLUB AND THE CALIFORNIA ATTORNEY GENERAL REGARDING THE GENERAL PLAN LITIGATION AND APPROVING THE FILING OF A CALIFORNIA ENVIRONMENTAL QUALITY ACT NOTICE OF EXEMPTION

SB 375

- Land use/ transport mandate: regional plans must comply with AB 32 GHG reduction targets
- MPO's create "sustainable communities strategies" (Blueprints) that meet targets
- RTP funding decisions consistent with sustainable plan
- CEQA exemptions, streamlining for projects that conform to regional plans

GHG Target Recommendations

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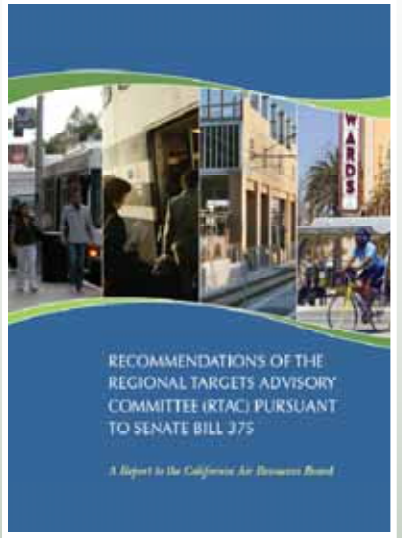

- **Uniform Statewide Target:**
  per capita reduction from 2005
- **Regional Adjustments** for unique characteristics
  subject to a "reasonably tough test."
- **Ambitious Achievable** well beyond "business as usual"
  include all feasible measures to reduce GHG
- **Bottom-Up Process** by MPOs to develop baseline and alternative scenarios and stretch targets by June 2010
- **Travel Model Improvements and BMPs** prescribed standards for deployment and responsiveness

2. Targets for the Valley

Target-Setting Land Use Alternatives

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DESCRIPTORS	SCENARIOS		
	BASELINE	ALTERNATIVE 1	ALTERNATIVE 2
SEGA (Southeast Growth Area) Generally bounded by Dakota, Jensen, Temperance and Highland; Jensen, North, Minnewawa and Temperance	Medium low and medium density residential	Eight mixed-use centers of commercial, office and mixed residential	Eight mixed-use centers of commercial, office and mixed residential
Loma Vista Specific Plan Area Generally bounded by Bullard, Dakota, Locan and McCall	Ag and rural to high density residential	Four master planned communities which includes high and very high density residential and mixed use/business campus use	Four master planned communities which includes high and very high density residential and mixed use/business campus use
Harlan Ranch Area east of DeWolf Bounded by Shepherd, SR 168 and DeWolf	Generally low density residential	A mix of low, medium, medium high, and high density residential	A mix of low, medium, medium high, and high density residential
Blackstone Corridor	Little new growth	Growth from Shaw to Downtown	Growth from Audubon to Downtown
Fresno Urban Form Areas Scattered throughout Fresno particularly along major corridors	No increased densities	10 square miles of infill and density intensification	26 square miles of infill and revitalization in activity centers and intensity corridors
Clovis - 5 square miles Scattered throughout Clovis	No increased densities	No increased densities	Density increases of 20-75%
Thirteen smaller cities	General plan uses at time of baseline development	Recent density increases in general plans	Recent density increases in general plans

Target-Setting Transit Alternatives

	Baseline	Alternative 1	Alternative 2
Blackstone/Ventura BRT	x	x	x
Shaw Ave. BRT			x
Improvement to existing transit		x	x
Air District Rule 9410 (employer-based trip reduction program)		x	x
Car Sharing	x	x	x
Operational Improvements (ITS & ramp metering)	x	x	x

Target-Setting TSM and TDM Strategies

- Signal Synchronization
- Ramp Metering
- Employer Trip Reduction (Rule 9410)
- Vanpool/ Carshare

Target Recommendation to ARB

Percentage Reduction in GHG per Capita

	2020	2035
Baseline	-1.8%	-0.2%
Alternative 1	-6.3%	-3.8%
Alternative 2	-6.8%	-3.9%

SB375 Target Reductions in CO_2/ Capita

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1. "Placeholder" targets for 8 Valley MPOs:
   - 5% in 2020
   - 10% in 2035

2. Recommend MPOs improve data, modeling, and target scenarios prior to first SB375 RTP.

3. Strategic Growth Council allocates $2.5 million to Valley MPOs to improve modeling

Reasons for ARB Recommendation

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- The timing of the Valley RTP cycle in relation to the SB 375 target setting cycle

- Expected improvements in Valley MPO data and modeling

- Pending decisions of Valley MPOs on coordinating SCS development per SB 375.

GHG Reduction Efforts Cited by ARB

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- PTIS
- Measure “C” allocations to transit TOD, school bus, pedestrian and bike programs
- BRT Master Plan
- General Plan Urban Form Element
- Bike Master Plan

3. Smart Growth Strategies

Compliance Objectives

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- **Minimize** vehicle trips and miles per capita (VMT)
- **Preserve** mobility through location efficiency: compact, connected development, transit, ridesharing, ped and bicycle systems, TDM
- **Implement** low-emission local transportation
- **Manage** traffic flow to avoid “hot spots” with high emissions and energy consumption

Adapted Performance Criteria

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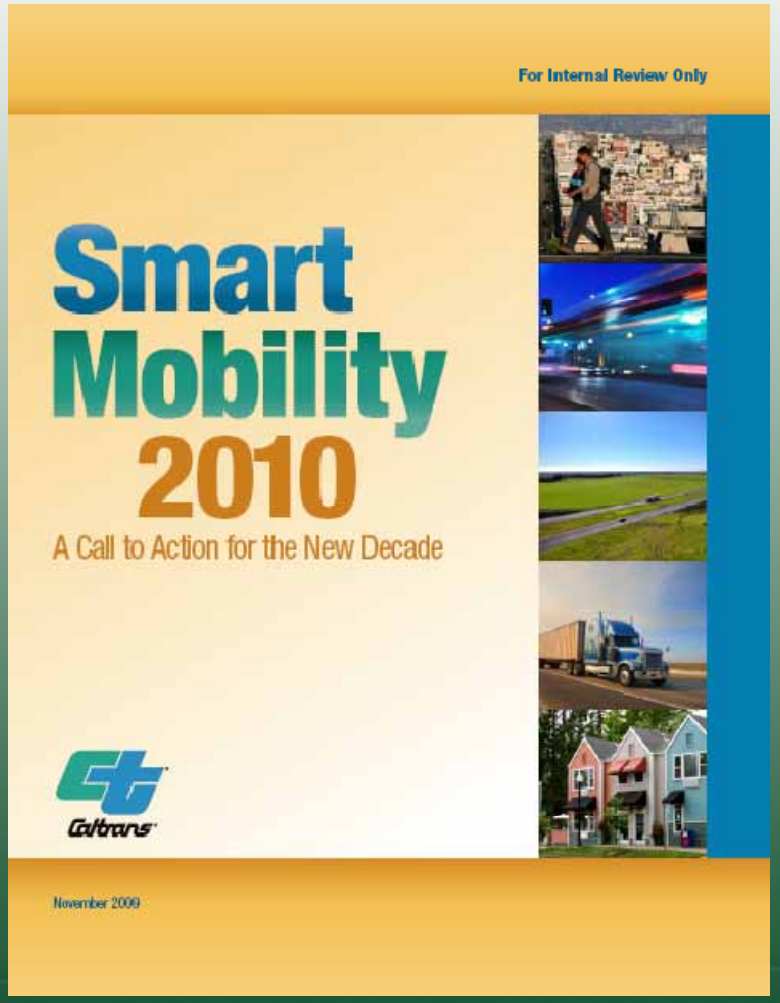
- **Location Efficiency**
- **Multi-Modal Focus**
- **Speed Suitability**
- **Network Management**



"D" Factors that Influence VMT

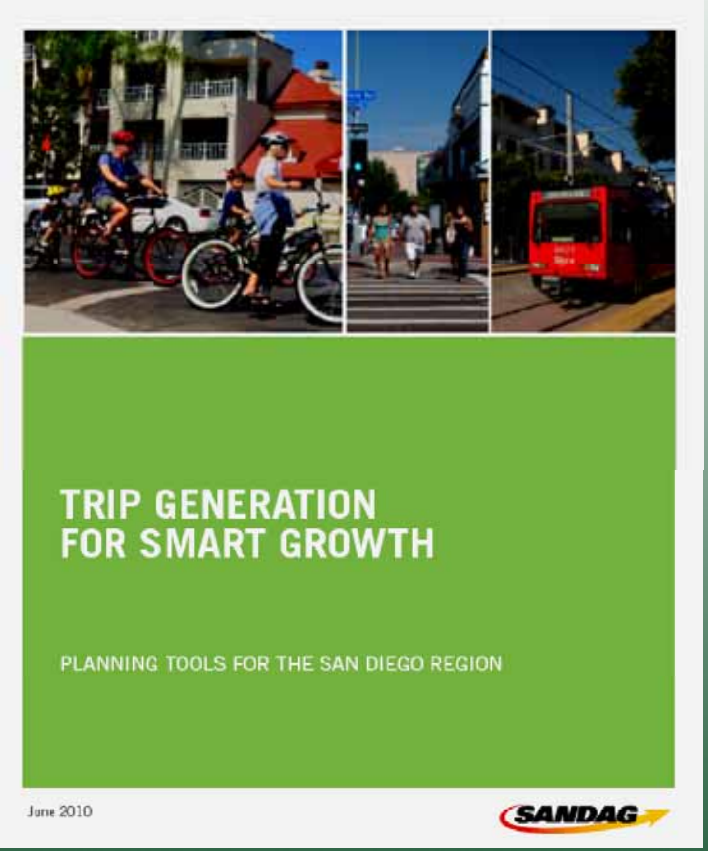
1. **Density** dwellings, jobs per acre
2. **Diversity** mix of housing, jobs, retail
3. **Design** connectivity, walkability
4. **Destinations** regional accessibility
5. **Distance to Transit** rail proximity
6. **Development Scale** pop, jobs
7. **Demographics** household size, income
8. **Demand Management** pricing, incentives

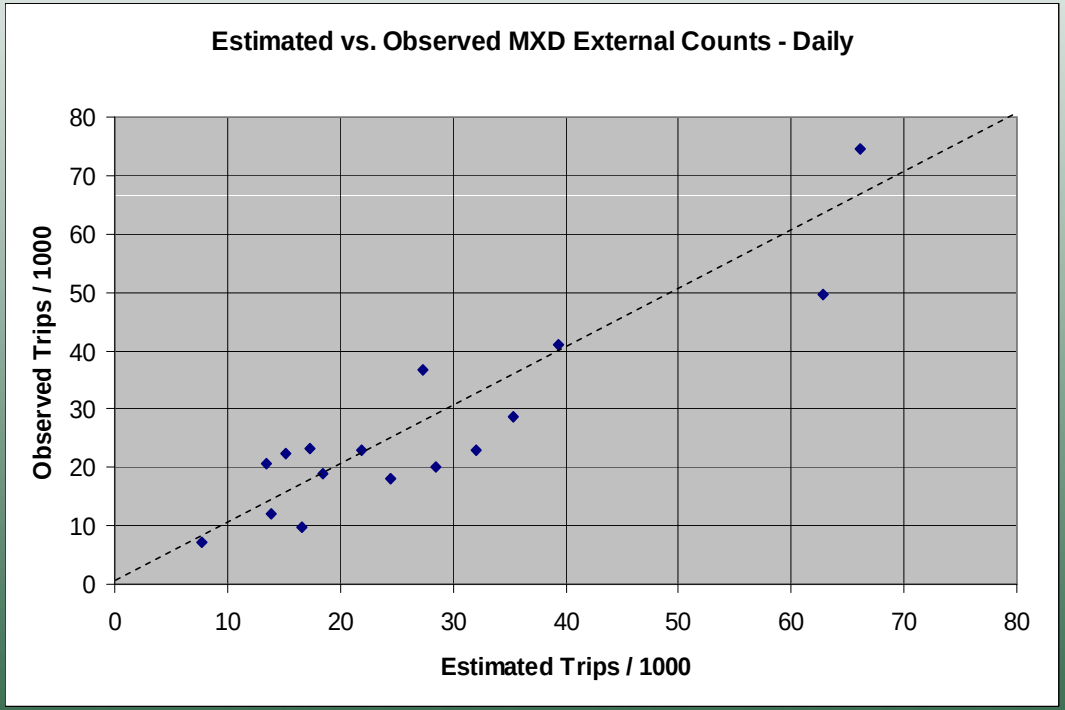
New Findings on Smart Growth Trip Generation

	MXD	TOD	Infill
Trip Discount	30%	44%	36%

Examples: San Diego, Seattle, Portland, Sacramento, Houston, Atlanta, Boston
Sources: EPA MXD, SANDAG SG TG, TCRP 128, Caltrans Urban Infill

MXD Method for Mixed-Use Trip Generation





Network Management Strategies

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Congestion Mitigation

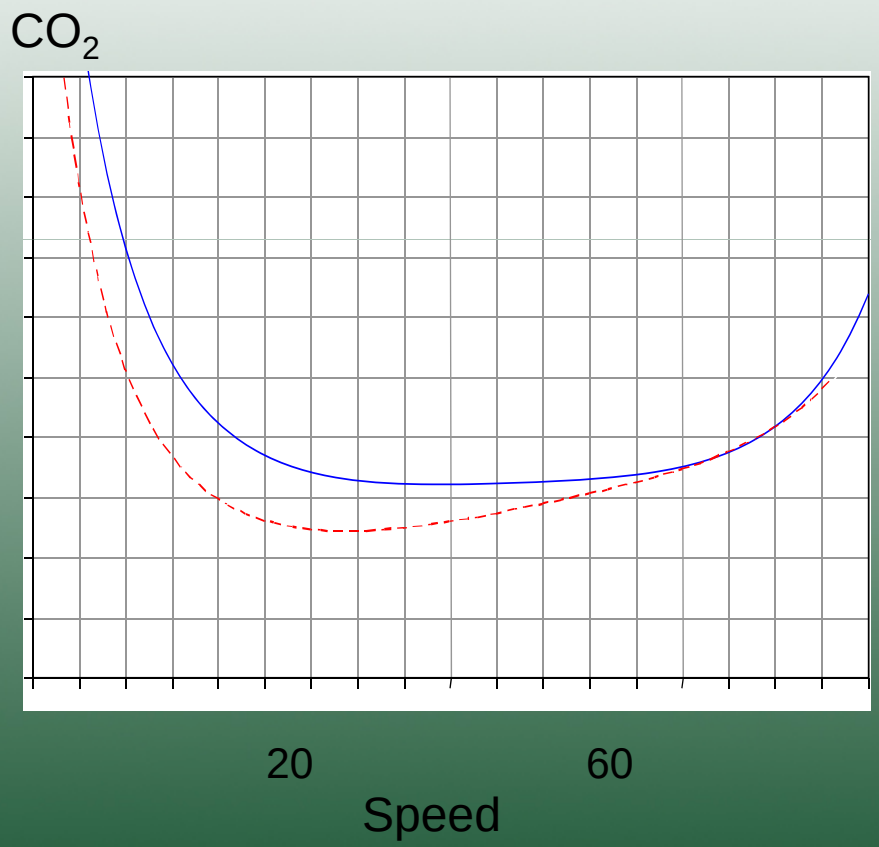
- Judicious capacity increases
- Signal coordination
- Ramp metering
- Incident management

Flow Smoothing Techniques

- Variable speed limit
- Intelligent speed adaptation

Speed Management

- Improved enforcement
- Speed limiters
- Active accelerator pedal



Source: Barth, Matthew; *ITS and the Environment,* UC Riverside, 2008

ARB Transportation Policies and Practices

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- Parking Pricing
- Road User Pricing
- Employer-Based Trip Reduction
- Pedestrian Strategies
- Bicycle Strategies
- Transit Service
- Telecommuting
- Voluntary Travel Behavior Change Programs
- Traffic Incident Clearance Programs

ARB Land Use Policies and Practices

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- Residential Density
- Distance to Transit (Transit Access)
- Land Use Mix
- Network Connectivity
- Regional Accessibility

CAPCOA Land Use BMP

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Land Use/ Location

Max Reduction = 65% (urban), 30% (compact infill), 10% (suburban center), 5% (suburban)

Density (30%)

Design (21.3%)

Location Efficiency (65%)

Diversity (30%)

Destination Accessibility (20%)

Transit Accessibility (25%)

Neighborhood/ Site Enhancements

Max Reduction = 5% (without NEV) 15% (with NEV)

Pedestrian Network (2%)

Traffic Calming (1%)

NEV Network (14.4%)
<NEV Parking>

Car Share Program (0.7%)

Bicycle Network
<Bike Lanes> <Bike Parking> <Land Dedication for Bike Trails>

Urban Non-Motorized Zones

CITYCARSHARE

CAPCOA Parking and Transit BMP

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Parking Policy/ Pricing *Max Reduction = 20%*	**Transit System Improvements** *Max Reduction = 10%*
Parking Supply Limits (12.5%)	**Network Expansion** (8.2%)
Unbundled Parking Costs (13%)	**Service Frequency/Speed** (2.5%)
On-Street Market Pricing (5.5%)	**Bus Rapid Transit** (3.2%)
Residential Area Parking Permits	**Access Improvements**
	Station Bike Parking

CAPCOA Employer and Network BMP

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Commute Trip Reduction (CTR) Progams

Max Reduction = 25% work VMT

Road Pricing/ Management

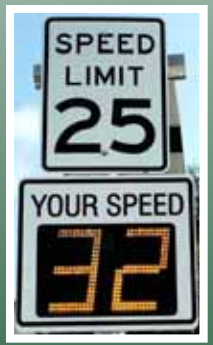
Max Reduction =25%

CTR Program
<Required> (21% work VMT)
<Voluntary> (6.2% work VMT)

Cordon Pricing
(22%)

Transit Fare Subsidy
(20% work VMT)

Traffic Flow Improvements
(45% CO_2)



Employee Parking Cash-Out (7.7% work VMT)

Required Contributions by Project

Workplace Parking Pricing (19.7% work VMT)

Alternative Work Schedules and Telecommute Program
(5.5% work VMT)

CAPCOA BMP Framework

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Global Max Reduction (all VMT)
75% (urban), 40% (compact infill), 20% (suburban center or suburban with NEV), 15% (suburban)

Global Cap Road Pricing

Cross-Category Max Reduction (all VMT)
70% (urban), 35% (compact infill), 15% (suburban center or suburban with NEV), 10% (suburban)

Max Reduction Work, School:
25%/ 65%

Max Reduction (all VMT): 25%

Land Use/ Location	Neighborhood/ Site Enhancements	Parking Policy/ Pricing	Transit System Improvements	Commute Trip Reduction (CTR) Progams	Road Pricing/ Management
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Density (30%)	**Pedestrian Network** (2%)	**Parking Supply Limits** (12.5%)	**Network Expansion** (8.2%)	**CTR Program** <Required> (21% work VMT) <Voluntary> (6.2% work VMT)	**Cordon Pricing** (22%)
Design (21.3%)	**Traffic Calming** (1%)	**Unbundled Parking Costs** (13%)	**Service Frequency/Speed** (2.5%)	**Transit Fare Subsidy** (20% work VMT)	**Traffic Flow Improvements** (45% CO_2)
Location Efficiency (65%)	**NEV Network** (14.4%) <NEV Parking>	**On-Street Market Pricing** (5.5%)	**Bus Rapid Transit** (3.2%)	**Employee Parking Cash-Out** (7.7% work VMT)	**Required Contributions by Project**
Diversity (30%)	**Car Share Program** (0.7%)	Residential Area Parking Permits	**Access Improvements**	**Workplace Parking Pricing** (19.7% work VMT)	
Destination Accessibility (20%)	**Bicycle Network** <Bike Lanes> <Bike Parking> <Land Dedication for Bike Trails>		**Station Bike Parking**	**Alternative Work Schedules and Telecommute Program** (5.5% work VMT)	
Transit Accessibility (25%)	**Urban Non-Motorized Zones**		**Local Shuttles**	**CTR Marketing** (4.0% work VMT)	

CAPCOA BMP Framework

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Perceived Benefits of SB375
(Silicon Valley Network)

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- Environmental streamlining
- Consistency and certainty in building entitlements (2010 ULI report)
- Agglomeration incentives and density
- Job/housing balance
- Housing for the 20-34 age group and blue collar
- Make Bay Area a more desirable place to live (attract “Green Talent”)
- Workforce education and prosperity

Perceived Benefits of SB375 -- Part 2
(Silicon Valley Network)

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- Transit investment
- Accessibility improvements
- Infrastructure and circulation for service delivery
- Make the Bay Area a less expensive place to run business (green savings)

Addressing SB375

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