

**Comments Deadline Extended Until January 15, 2019**



# **Sustainable Communities Strategy Program & Evaluation Guidelines**

**Public Workshop (December 12, 2018)**

**Satellite Locations:**

**Sierra Hearing Room**

**CalEPA Headquarters, 2nd Floor**

**1001 I Street , Sacramento, CA 95814**

Fresno Council of Governments  
Sequoia Conference Room  
2035 Tulare Street, Suite 201  
Fresno, CA 93721

Southern California Association of Governments  
Policy Room A  
900 Wilshire Boulevard, Suite 1700  
Los Angeles, CA 90017

# Overview

- Goals of SB 375
- Roles & Responsibilities
- CARB Board Direction
- Purpose of Draft Release
- Need for Updating Guidelines
- Proposed SCS Program and Evaluation Framework
- Other Elements of Guidelines
- Next Steps

# Goals of SB 375

- Support the State's climate goals to reduce GHG emissions
- Require MPOs to prepare an Sustainable Communities Strategies (SCS) or Alternative Planning Strategy (APS) to reduce GHG emissions through coordinated land use & transportation planning



Source: Smart Growth America

# Roles & Responsibilities

Under SB 375 & SB 150

## CARB

- Set regional GHG reduction targets
- Review MPO's technical methodology, provide comments on whether methodology is appropriate
- Review SCS & determine whether it would, if implemented, achieve target
- Monitor progress made by each MPO in meeting GHG emission reductions

## MPO

- Develop an SCS or APS
- Submit the technical methodology to demonstrate the process of estimating GHG reductions from the SCS/APS
- Provide supporting data/information for the SCS/APS evaluation

# Purpose of Draft Release and Workshop

- Guidelines can be found here:  
<https://ww2.arb.ca.gov/index.php/resources/documents/scs-evaluation-resources>
- Solicit public input from MPOs & affected stakeholders
- Please provide comments to CARB staff by January 4, 2019 via email at  
[SustainableCommunities@arb.ca.gov](mailto:SustainableCommunities@arb.ca.gov)

# Need for Updating SCS Guidelines (1/2)

- Existing evaluation guidelines developed in 2011
- In 2011 SCSs uncharted territory – thus original evaluation framework focused on modeling
- Ten years into program
  - staff have evaluated >20 SCSs
  - access to on-the-ground implementation data to understand how strategies reduce GHGs and address potential risks

# Need for Updating SCS Guidelines (2/2)

- Updated regional GHG targets in March – all MPOs have higher targets than originally set in 2010
- CARB Board direction to shift focus to SCS strategies and associated actions
- Need for clarification & methodological guidance

# Progress of SB 375 SCS Evaluation Guidelines

**Dec 2017**  
Board  
Meeting  
on GHG  
Targets

**Jan/Feb  
2018**  
1<sup>st</sup> Public  
Workshops  
on SCS  
Guidelines

**March 2018**  
Board  
Meeting to  
consider SB  
375 Targets

**June 2018**  
2<sup>nd</sup> Public  
Workshops  
on SCS  
Guidelines

**Dec 2018**  
Workshop  
on Draft  
SCS  
Guidelines



# Strategy-based SCS Program & Evaluation Framework



## Tracking Implementation (Reporting Element):

Report on the progress regions have made towards meeting their SB 375 GHG reduction targets (i.e. SB 150 reporting)



## Policy commitments (Determination Element):

Determine whether the strategies and commitments would achieve the GHG reduction targets, if implemented, and whether there are any risks to not achieving those reductions



## Incremental Progress (Reporting Element):

Report on whether an MPO's proposed SCS has more or improved strategies than the currently adopted SCS



## Equity (Reporting Element):

Report on the efforts MPOs are taking to meet federal and state requirements related to equity

Lessons Learned



# Tracking Implementation (Reporting Element)



- Report on the progress regions have made towards meeting their SB 375 GHG reduction targets
- Key Questions: Is the region following through on its strategy commitments from the previous SCSs? Is the region meeting, or on track to meet, its targets? What barriers exist?
- Report comparison of observed data with projections provided by MPOs from the previous SCS

# Tracking Implementation

HAVE GREENHOUSE GASES FROM PERSONAL VEHICLE TRAVEL DECLINED?

GREENHOUSE GAS EMISSIONS PER CAPITA

PASSENGER VEHICLE MILES TRAVELED (VMT) PER CAPITA

HOW HAVE TRAVEL PATTERNS CHANGED?

COMMUTE MODE SHARE

COMMUTE TRIP TRAVEL TIME BY MODE

TRANSIT RIDERSHIP PER CAPITA

WHAT TRANSPORTATION CHOICES ARE AVAILABLE?

TRANSIT SERVICE HOURS PER CAPITA

LANE MILES BUILT

ARE INVESTMENTS SHIFTING TOWARD MORE SUSTAINABLE TRANSPORTATION CHOICES?

CHANGE IN LONG-TERM SPENDING PLANS BY MODE

CHANGE IN SHORT-TERM SPENDING PLANS BY MODE

CHANGE IN TRANSIT OPERATIONS SPENDING

HOW HAS HOUSING SUPPLY CHANGED?

NEW HOMES BUILT BY TYPE

VACANCY RATE

JOBS-HOUSING BALANCE

HOW ARE LOCAL JURISDICTIONS PLANNING AND PERMITTING HOME CONSTRUCTION?

PERCENT OF JURISDICTIONS WITH A CERTIFIED HOUSING ELEMENT

HOUSING UNITS PERMITTED COMPARED TO HOUSING NEEDS ALLOCATION

IS GROWTH MORE COMPACT?

ACRES DEVELOPED

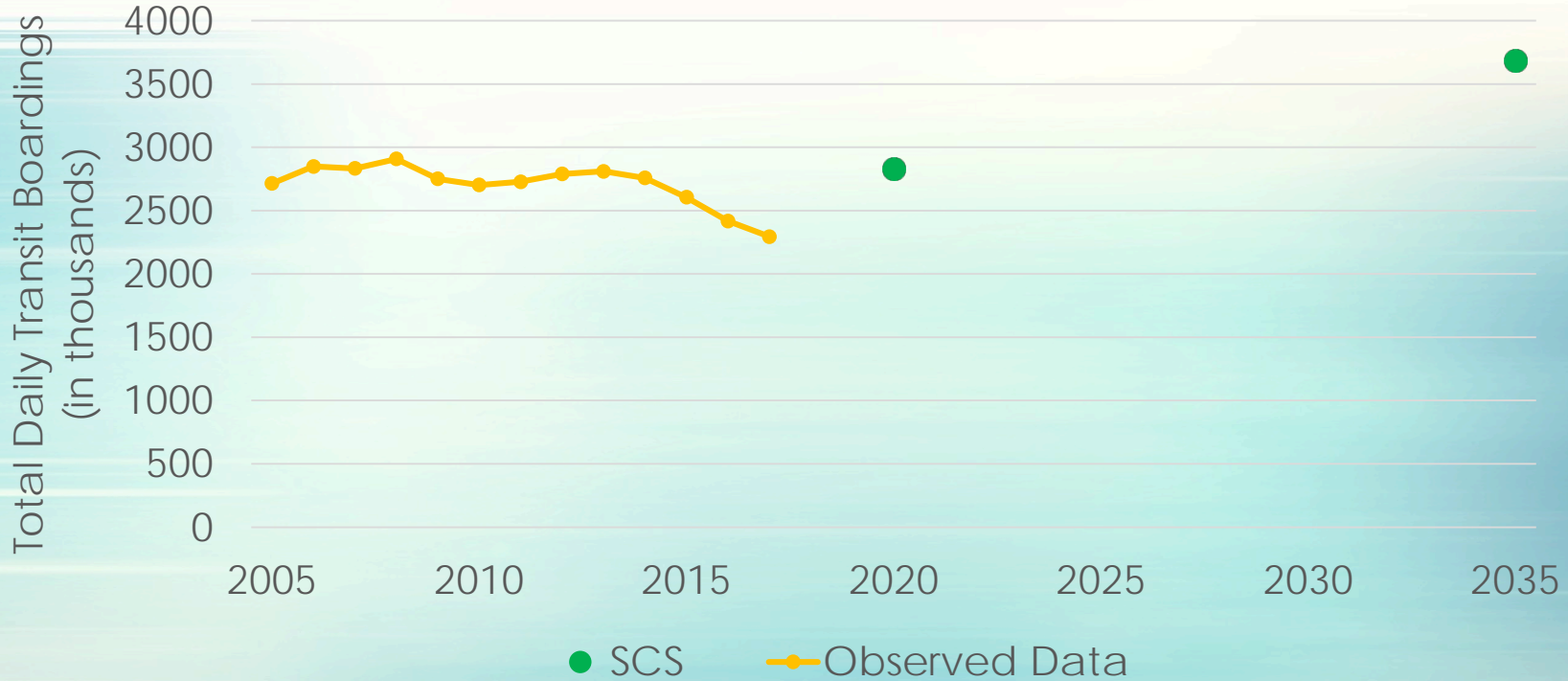
AGRICULTURAL LAND LOST

LAND CONSERVATION

ARE WE BUILDING NEIGHBORHOODS THAT ARE ACCESSIBLE TO DAILY NEEDS?

PERCENTAGE OF POPULATION LIVING NEAR A GROCERY STORE

# Example of Tracking Implementation



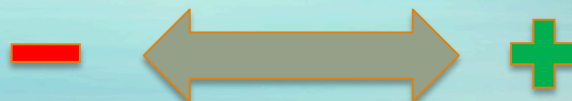
# Policy Commitments (Determination Element)



- Assess whether the strategies and commitments support the stated GHG reductions, and whether there are any risks to not achieving those reductions
- Key Elements: 1) Trend Analysis, 2) Elasticity Analysis, 3) Policy Analysis, 4) Investment Analysis and 5) Plan Adjustment Analysis

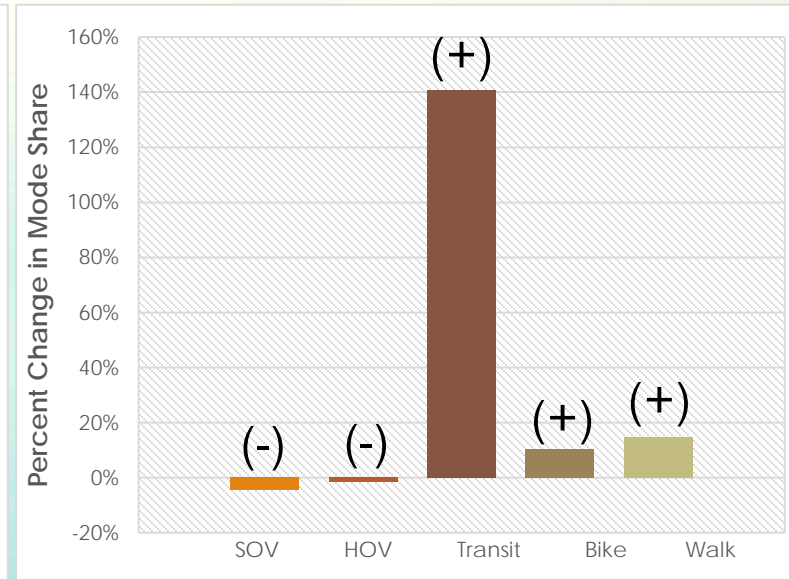
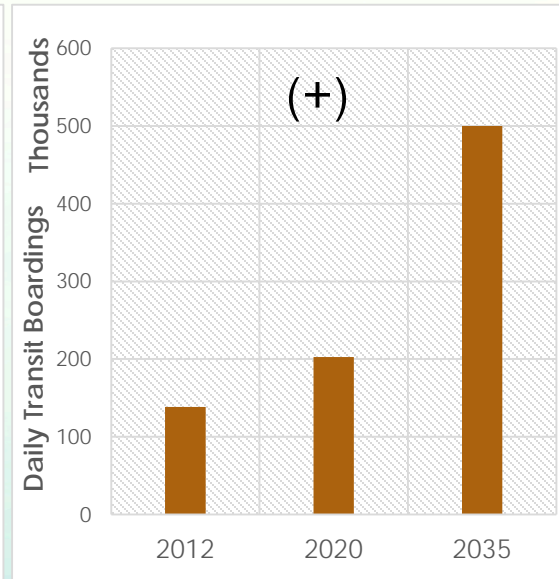
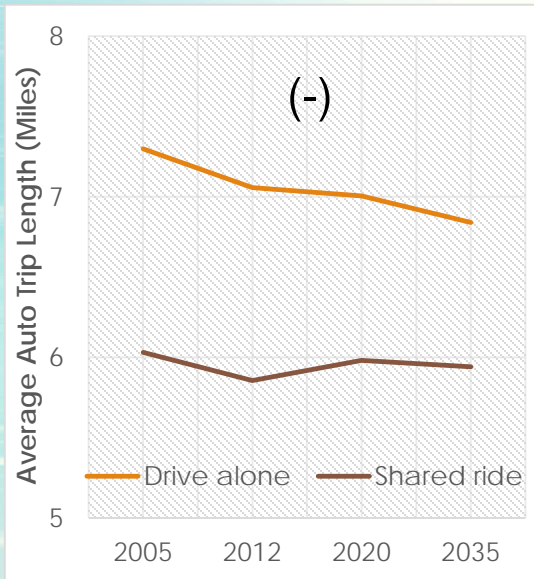
# 1. Trend Analysis

- Key Question: Do the data show that the plan is moving a direction consistent with the planned outcomes, including the planned regional GHG reductions?
- Screening Criteria: Performance indicator should track the directionality (see noted + or -)
- Performance Indicators
  - Household vehicle ownership (-)
  - Mode split (non-auto: +, auto: -)
  - Travel time by mode (non-auto: -)
  - Transit ridership (+)
  - Average trip length (-)
  - Seat utilization (+)
  - Household VMT/capita (external-external [XX] trips excluded) (-)
  - GHG/capita (-)



Performance Indicators

# Examples of Plan Trend Analysis



Reduced Auto Trip Length

Increased Transit Ridership

Mode Shift Result in Less VMT

## 2. Elasticity Analysis

- Key Question: Does the scientific literature support the stated GHG emissions reductions?
- Serves as check on the MPO's reported VMT & GHG results, based on existing literature and the MPO's sensitivity test results
- Screening Criteria: analysis should account for at least for 85% of reported plan performance (including exogenous variables & strategies)



# Example of Elasticity Analysis

Model Strategies	% $\Delta$ Plan Attribute from 2005-2035	Elasticity	Effect size	% $\Delta$ VMT or % $\Delta$ GHG
Net Residential Density	25%	-0.05	100% regional average	
Increased Transit Frequency	40%	-0.8	15% regional coverage; 4% mode share	
Transit Capacity Expansion	15%	-0.7	30% regional coverage	<b>-6.12%</b>
Bike and Pedestrian Infrastructure	30%	-0.04	40% regional coverage	
Roadway Capacity	5%	+0.6	25% new population growth	
<b>Exogenous Variables</b>				
Auto Operating Cost	40%	-0.15	100% regional coverage	<b>-9.1%</b>
Household Income	-15%	-0.11	100% regional coverage	
<b>Off-Model Strategies</b>				
EV Charging Infrastructure				<b>-3.50%</b>
Grand Total				<b>-18.7%</b>
Plan Performance				<b>-19%</b>
Screening Criteria: within no less than 85% of reported plan performance				<b>√ Screening criteria met</b>

# 3. Policy Analysis

- Key Question: Are there supportive key actions for the SCS strategies?
- Evaluate relationship between the stated GHG emission reductions in the SCS & relevant MPO actions
- Example: MPO incentivizing subsidizing ride-sharing, which supports SCS transportation strategy

# 4. Investment Analysis

- Key Question: Do the investments support the stated GHG emissions reductions?
- Evaluate whether planned expenditures support the GHG reductions
- Also, compare the region's long-range funding strategy to the region's shorter-term TIP

# 5. Plan Adjustment Analysis

- Key Question: If the region is falling behind on implementation, what measures are the MPO taking to correct course in the plan, as necessary, to meet the target?
- Based on implementation assessment, if SCS plan performance benchmarks are falling short, CARB will look for evidence that the MPO has considered this information, and if applicable, made course corrections to planning

# Data for Policy Commitments Analyses

Type of data MPOs should submit:

- Land use & transportation attributes
- Land use allocations (forecasted development pattern) by place type
- Provide list of transportation projects including project costs, funding source (if known), project time period, and project locations
- Strategy-based performance indicators

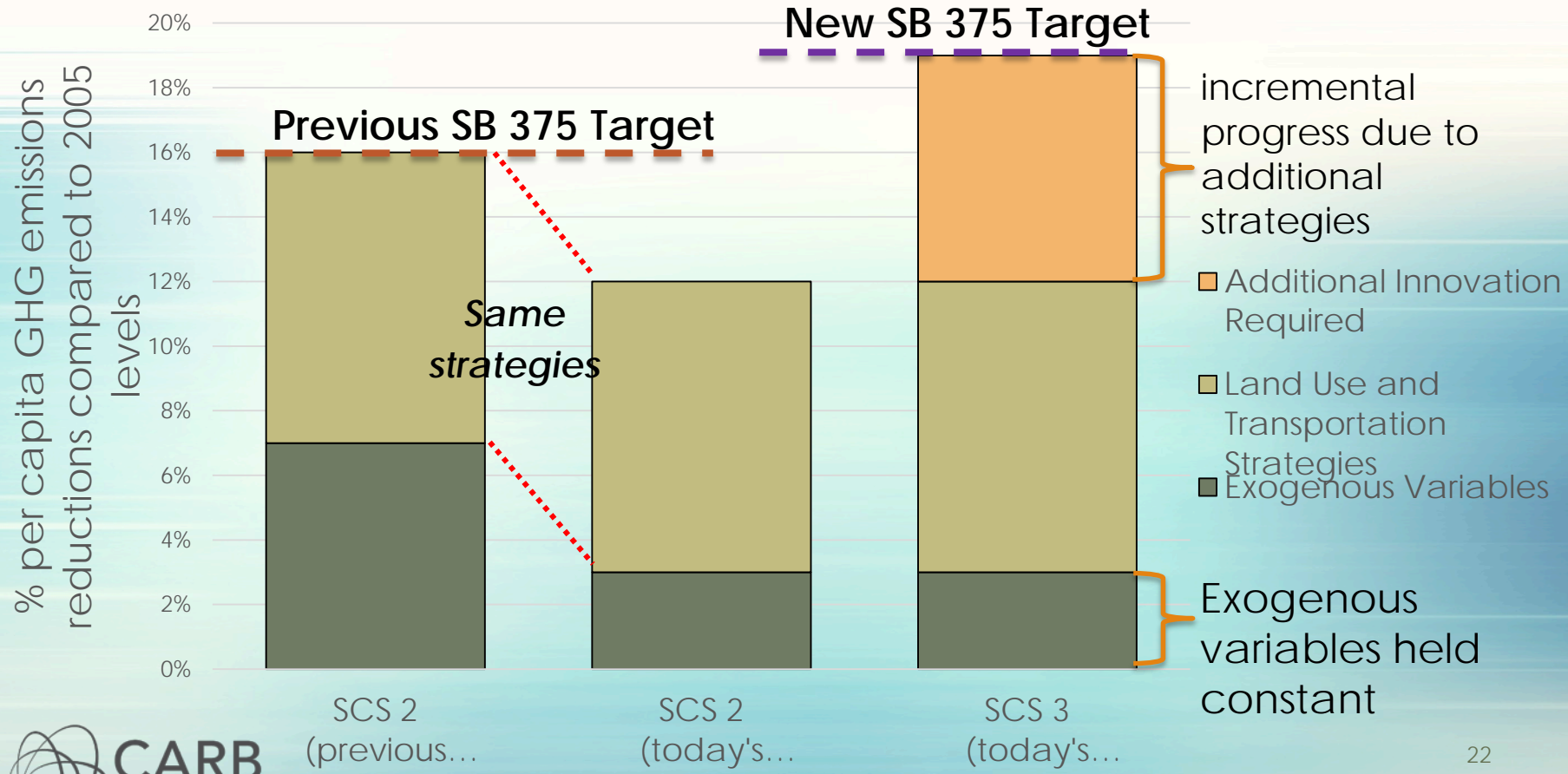


# Increment of Progress (Reporting Element)



- Report on whether an MPO's proposed SCS has more or enhanced strategies than the currently adopted SCS (if applicable)
- Key Questions: What strategies have changed or been added since the last SCS? What is the increment of progress achieved through the strategies in this SCS as compared to the last SCS?

# Example of Incremental Progress



# Equity Analysis (Reporting Element)



- Report on the efforts MPOs are taking to meet federal & state requirements related to equity
- Key Questions: How have vulnerable communities been identified? What qualitative and quantitative equity analyses are conducted? How have stakeholders in vulnerable communities been engaged?



# CARB's Overall Program Evaluation

- Determination based on:
  - MPO GHG quantification
  - Outcomes of five **Policy Commitment** analyses
- Separate reporting on Implementation, Incremental Progress & Equity

*If any **Policy Commitment** analysis screening criteria are not met, CARB staff will look to the MPO to provide supporting information to explain the outcome. If there is insufficient evidence to explain or overcome a deficiency in any of the assessments, this could be grounds for CARB staff to reject an MPO's determination.*

# Other SCS Guideline Elements

- Off-Model Strategy Guidance
- Auto Operating Cost
- Inter-regional Travel
- EMFAC Adjustment

# Off-Model Strategy Guidance



- Bicycle and Pedestrian Facility Enhancement



- Bike Share



- Car Sharing



- Electric Vehicle Charging Infrastructure



- Parking Management



- Telecommuting/Work-At-Home



- Transit Improvements

- Transportation System Management (TSM)/Intelligent Transportation Systems (ITS)



- Vanpool



- Electric Vehicle Incentive



# Next Steps

Event	Date
Close of Comments	January 4, 2019
Release Final SCS Program & Evaluation Guidelines	February, 2019

Please provide comments on the draft Guidelines to CARB staff by January 4, 2019 via email at [SustainableCommunities@arb.ca.gov](mailto:SustainableCommunities@arb.ca.gov).

Thank you  
Questions/Comments?