



SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

# 2012 RTP/SCS Development Subregional Planning Session Imperial County

January 27, 2011

# Southern California Association of Governments Regional Transportation Plan

- Required by federal government to develop and update Regional Transportation Plan (RTP) every four years
- Must be long-range (~20 years)
- Must be financially constrained
- Must meet air quality conformity
- Transportation projects must be included to receive federal & state funds, & federal environmental clearance
- And...



Metrolink: Image courtesy of Metro © 2010  
LACMTA



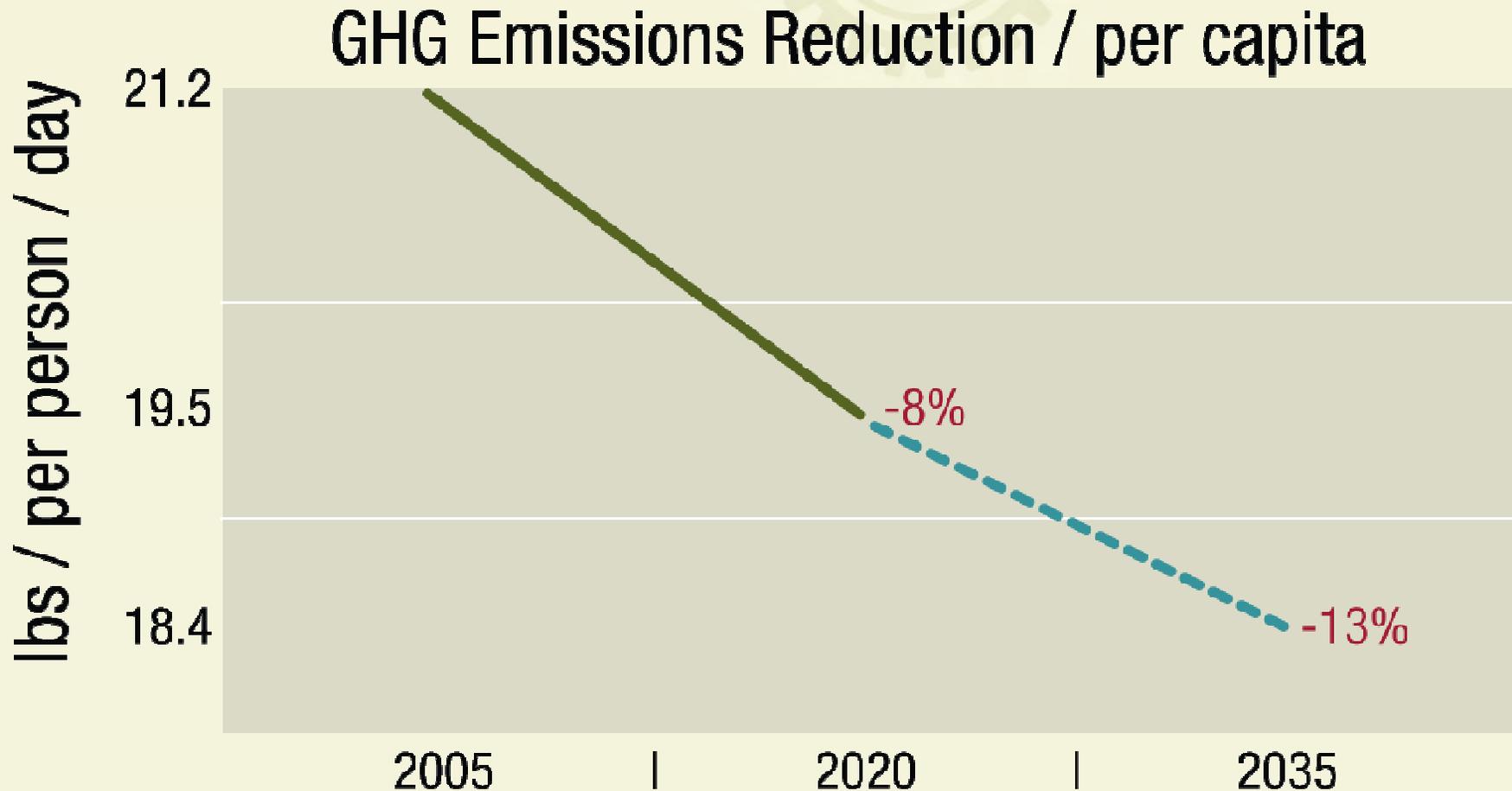
Port: Image courtesy of Port of Long Beach



Metro Gold Line: Image courtesy of Metro  
© 2010 LACMTA

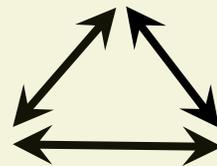
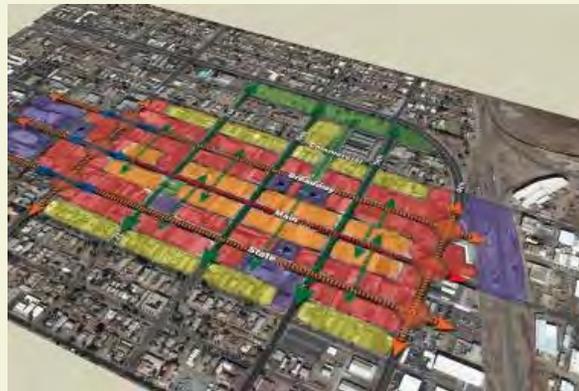
# AB 32 / SB 375 → Sustainable Communities Strategy (SCS)

- RTP must now incorporate a SCS that will meet the regional Greenhouse Gas emission target.



# Sustainable Communities Strategy (SCS) Development

- The SCS includes eight required elements aiming to better integrate regional and local land use & housing strategies with transportation investments and transportation policies to achieve the state's Greenhouse Gas Emissions (GHG) reduction targets.



# Sustainable Communities Strategy (SCS) Co-Benefits

## Comprehensive Planning Evaluation Framework

Planning Outcomes	Traditional Congestion Mitigation	Vehicle Fuel Efficiency Gains	Sustainable Communities Strategies
Congestion Reduction	√	x	√
Parking Cost Savings	x	x	√
Facility Costs Savings	x	x	√
Consumer Costs Savings	x		√
Reduced Traffic Accidents (Fatalities)	x	x	√
Improved Mobility Options	x		√
Energy Conservation	x	√	√
Pollution Reduction	x	√	√
Physical Fitness & Health	x		√
Land Use Conservation	x	x	√
Federal Livability Objectives	x		√
(√) Gains (x) Losses			

(Litman, 2005)

# Sustainable Communities Strategy (SCS) Development

## Work Collaboratively



## Provide Assistance

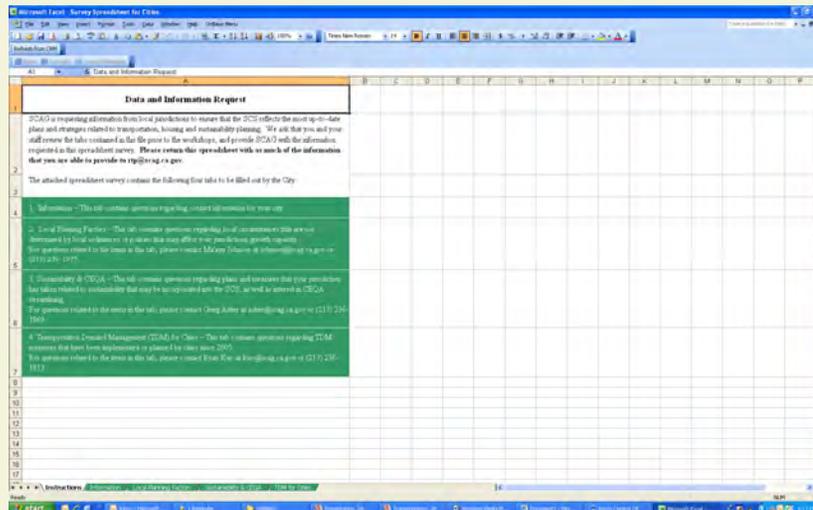
# SCS Development – Bottom Up Surveys/Data Collection

- Starting in January 2009, SCAG collected data from local jurisdictions, including existing land use, General Plan land use, zoning, TAZ, etc. This data collection is on-going.
- E-mailed surveys on December 23, 2010 to City Managers, Planning Directors and Subregional Coordinators to assess current and planned local activities that may lead to reduced GHG emissions to incorporate into our SCS.
- Mailed Local Sustainability Planning Tool (LSPT) packet on January 7, 2011.

# SCS Development – Bottom Up Surveys/Data Collection

## Today

- Providing overview of surveys/information/data that SCAG requested in the mail outs
- Asking local jurisdictions to review and revise, if needed, preliminary scenarios for SCS planning horizon years
  - Scenarios based on existing land use and General Plan data sets collected by SCAG from local jurisdictions



# Here. Now.

## Subregional Planning Session Agenda

- Transportation Strategies
- Land Use and Housing
- Next Steps
- Q&A
- Breakout Sessions



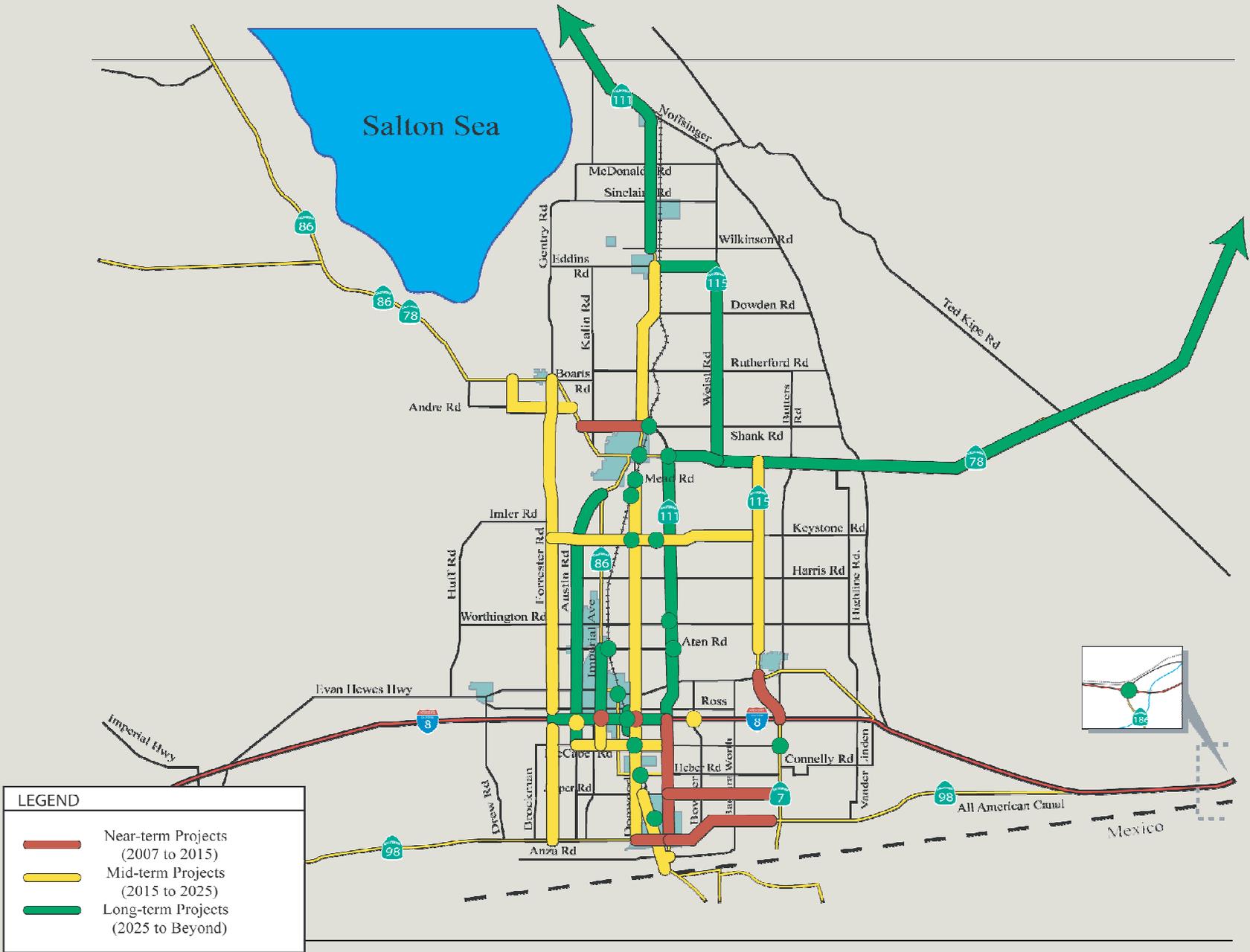
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# Transportation Strategies

Naresh Amatya  
Manager of Transportation Planning



# 2007 Long Range Transportation Plan Short, Mid & Long Term Projects



**Imperial County Transportation Plans – Highway Element: 1990, 1997, 2002, & 2007**

**SCAG's 2012 RTP: In Progress**

**Completed Projects**

- SR-86 Expressway
- SR-111 Expressway
- SR-7 Expressway
  - POE to SR-98
  - SR-98 to I-8

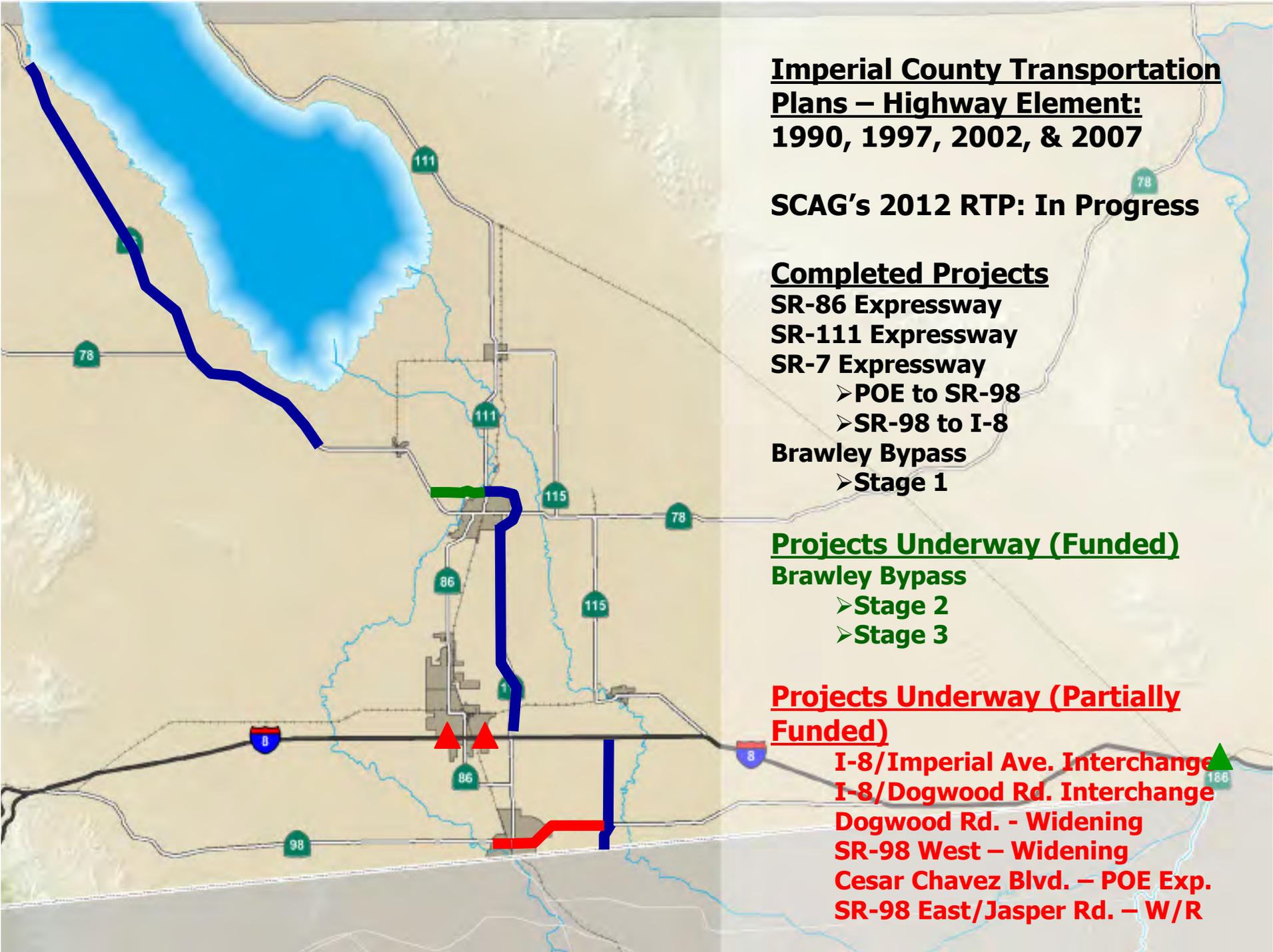
- Brawley Bypass**
- Stage 1

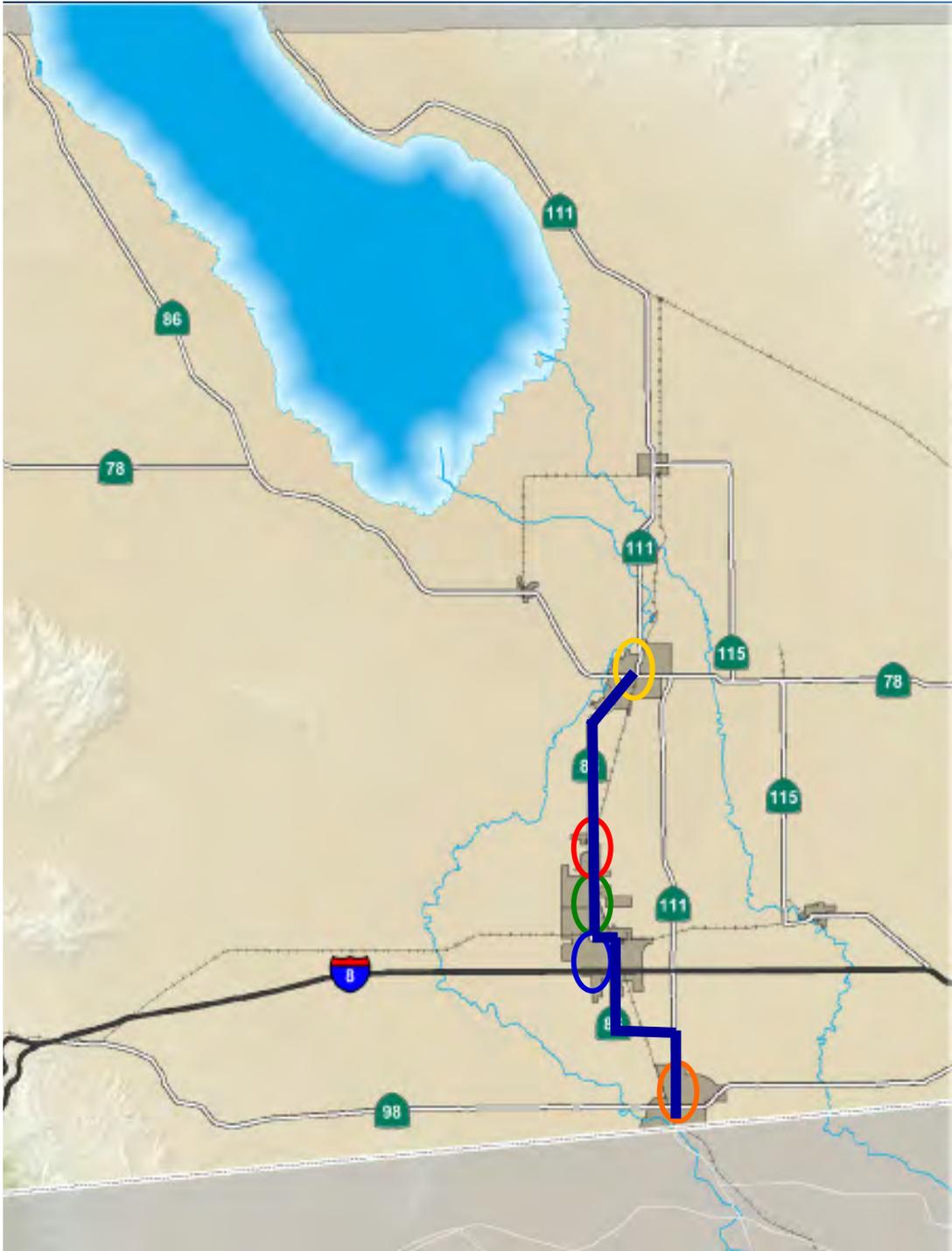
**Projects Underway (Funded)**

- Brawley Bypass**
- Stage 2
  - Stage 3

**Projects Underway (Partially Funded)**

- I-8/Imperial Ave. Interchange ▲
- I-8/Dogwood Rd. Interchange
- Dogwood Rd. - Widening
- SR-98 West – Widening
- Cesar Chavez Blvd. – POE Exp.
- SR-98 East/Jasper Rd. – W/R





**Past Transit Plans**

**1999 Imperial County Transit Vision**

**2004 Short Range Transit Plan**

**Completed - Operational**

**Blue Line (2006)**

**Green Line (2009)**

**Conceptual Circulators & Terminal**

**Red Line – Imperial**

**Gold Line – Brawley**

**Orange Line – Calexico**

**Calexico Transfer Terminal**

**Proposed Plans and Studies**

**2010 - Short Range Transit Plan**

**2010 – Feasibility Conceptual**

**Design Plan for Local Transit**

**Circulators**

**Capital Projects Underway**

**El Centro Transfer Terminal**

**IVC Transfer Terminal – Phase 2**

**Brawley Transfer Terminal**

# Local Transportation Strategies

## The Missing Link

### Let's Get Local

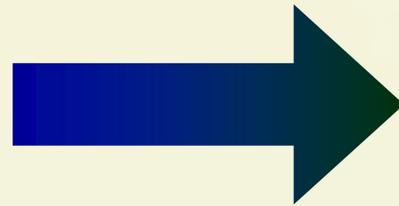
- Local transportation investments have traditionally been captured in the RTP Project List as “lump-sum line items” with no detailed sub-list.
- Meanwhile, cities have implemented or planned local transportation strategies that improve mobility and reduce GHG emissions.
  - Note: these are TDM measures implemented after 2005

# TDM Strategies

Local TDM Strategies can yield regional benefits

**1%**

reduction in vehicle  
miles traveled



**54 million**

fewer gallons of gasoline  
each year

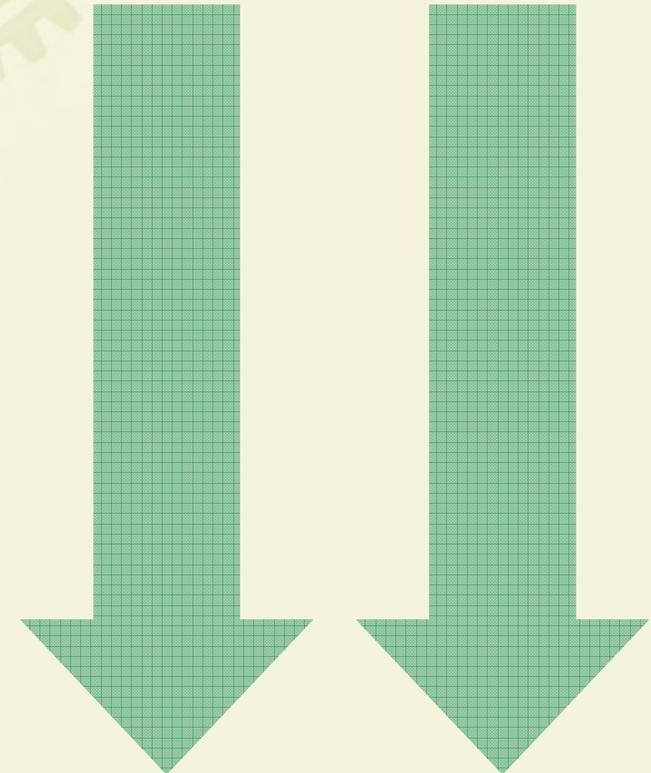
- We need to demonstrate GHG reduction benefits from current and planned TDM strategies → New TDM Tool
- We need your help in identifying TDM strategies that are already in place or planned for the future!

# TDM Strategies

- Tier 1
  - Walking and bicycling
  - Parking management
- Tier 2
  - Public transit improvements
  - TDM programs (employer and non-employer-based)
  - Carpooling/ridesharing
- Tier 3
  - HOV/HOT lanes
  - Major transit investments
  - Intelligent transportation

**LOW  
COST**

**QUICK TO  
IMPLEMENT**



**HIGH  
COST**

**SLOW TO  
IMPLEMENT**

# TDM Strategies

## Tier One

### Walking and Bicycling

- New bike lanes, paths, routes and cycletracks
- Bicycle parking
- Bikes on Transit programs
- Folding bicycles
- Sidewalks/ADA compliance
- Enhancing the pedestrian environment



Bicycle Commuters in Portland Oregon represent 6.4% of all commuters (compared to less 0.67% for SCAG region).

# TDM Strategies

## Tier One

### Parking Management

- Parking cash-out program
- Preferential parking for carpools
- Reduced parking requirements
- Parking prices/fees
- Smart meters



# TDM Strategies

## Tier Two

### Public Transit Improvements

- Expanded or new service
- More frequent service
- Real-time information
- Mobility hubs
  - Bike stations

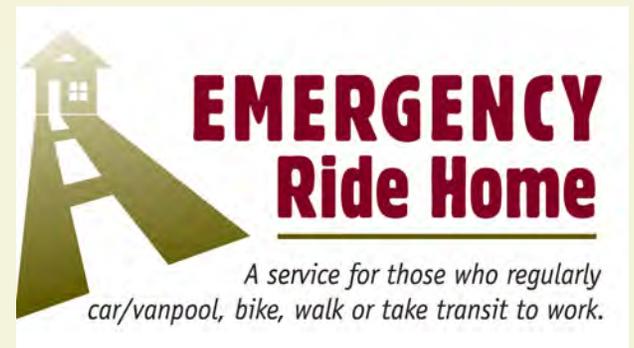


# TDM Strategies

## Tier Two

### Employer-Based TDM Programs

- Transportation coordinators
- On-site services
- Guaranteed ride home program
- Parking management
- Carpool/vanpool/transit/bicycling incentives
- Telecommuting
- Compressed work schedule



# TDM Strategies

## Tier Two

### Non-Employer-Based TDM Programs

- School-based programs
- Community-based programs
- Development-based Programs
- Special event programs



# TDM Strategies

## Tier Two

### Carpooling/Ridesharing

- Park-and-Ride facilities
- Carpool/vanpool incentives
- Two-way taxi rides



Image courtesy of Metro © 2010 LACMTA

# TDM Strategies

## Tier Three

### Major Capital Investments

- HOV/HOT lanes
- Major transit investments
  - Rail
- Intelligent transportation
  - Signal synchronization
  - Changeable message signs



# Next Steps

## Local Jurisdictions

- Fill out the **TDM Survey for Cities** that was sent to your city manager in December.
- Help distribute the **TDM Survey for Employers** to major employers in your city.

## SCAG

- Analyze survey responses for GHG reduction benefits using TDM Tool.



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# Land Use and Housing

Mark Butala

Manager of Comprehensive Planning

# Land Use and Housing RTP/SCS Goals



- Identify a forecasted development pattern integrated with transportation investment and strategies that will meet the State's GHG emissions reduction targets.
- Produce a RTP that complies with all federal requirements.

# Land Use and Housing

## Local Input

### 1. Local planning factors

Requesting input from local jurisdictions on housing, suitable land for urban development, etc.

### 2. Scenario planning with Local Sustainability Planning Tool

Requesting local jurisdiction input/review/revision on land use for SCS planning horizon years utilizing the LSPT.

# Local Planning Factors

## Local Factors, Local Input

- Similar to AB 2158 Factors that are used for the Regional Housing Needs Assessment (RHNA) process
- Local Planning Factors or AB 2158?
- Ensure integration into growth forecast used for SCS/RTP development

Input Regarding Local Planning Factors

City: \_\_\_\_\_ Subregion: \_\_\_\_\_  
 Contact Person: \_\_\_\_\_ Phone Number/Email: \_\_\_\_\_

Factor	Input
1. Existing and projected job housing balance	
2. Lack of capacity for sewer or water service due to federal and state laws, regulations or regulatory actions, or supply and distribution decisions made by a sewer or water service provider other than the local jurisdiction that preclude the jurisdiction from providing necessary infrastructure for additional development during the planning period.	
3. The availability of land suitable for urban development or for conversion to residential use, the availability of underutilized land, and opportunities for infill development and increased residential densities.	
4. Lands preserved or protected from urban development under existing federal and state programs, or both, designed to protect open spaces, farmland, environmental habitats, and natural resources on a long-term basis.	
5. County policies to preserve agricultural land within an unincorporated area.	
6. The distribution of household growth assumed for purposes of a comparable period of regional transportation plans and opportunities to maximize the use of public transportation and existing transportation infrastructure.	

1/1/03

7. The loss of low-income housing units in assisted housing developments due to contract expirations or termination of use restrictions.	
8. The market demand for housing.	
9. Agreements between a county and cities in a county to direct growth toward incorporated areas of the county.	
10. High housing costs burdens.	
11. Housing needs of farm workers.	
12. Housing needs generated by the presence of a private university or a campus of the California State University or the University of California within any member jurisdiction.	
13. Other factors beyond those found in Government Code 65584.04 (d). Suggestions are welcome.	

# Local Planning Factors

1. Existing and projected job housing balance
2. Lack of capacity for sewer or water service
3. Availability of land suitable for urban development or for conversion to residential use
4. Lands preserved or protected under existing federal and state programs



# Local Planning Factors



5. County policies to preserve farmland within an unincorporated area
6. Opportunities to maximize existing transit infrastructure
7. Loss of low-income units in assisted housing developments
8. Market demand for housing

# Local Planning Factors

9. Agreements between county and cities to direct growth toward incorporated areas of the county
10. High housing cost burdens
11. Housing needs of farm workers
12. Student housing needs
13. Other factors



# Local Planning Factors

## Schedule for Input

- Local Planning Factor surveys due March 25, 2011
- AB 2158 factor survey
  - send out in mid-April 2011
  - Confirm input
  - Due May 2011

# Land Use and Housing

## Local Sustainability Planning Tool (LSPT)

### What is Local Sustainability Planning Tool (LSPT)?

- A GIS-based sketch planning tool that local jurisdictions can use to analyze the impact of different land use scenarios on vehicle ownership, vehicle miles traveled (VMT), mode use, and their associated effects on GHG emissions.
- Requirements driven by SB 375 to assist in the development of SCS through a bottom-up process.

# LSPT

## Characteristics

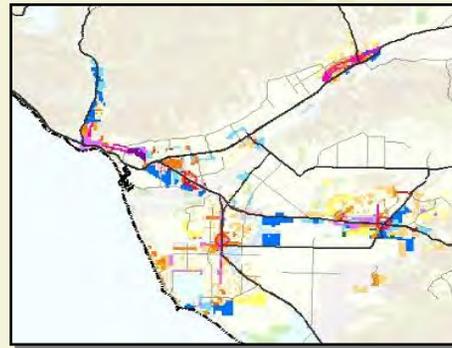
### What can the LSPT do?

- ArcGIS based scenario development and visualization
- “Instant feedback” on results of scenarios
- Sensitive to key land use strategies
- Geographically scalable
- Easy to customize
- Understandable to non-technical audiences

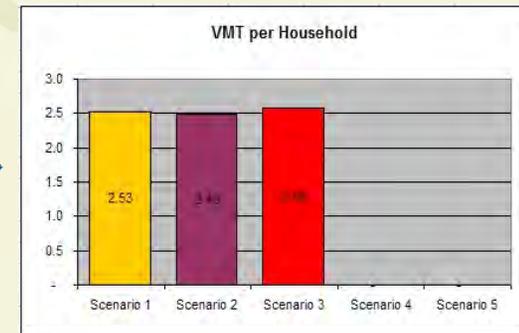
# 3 Step Process



Development Types



Scenario Development



Evaluation



# STEP 1: Select a Development Type

## 24 default types

Variety of buildings, streets,  
and amenities create a “Place”



## ➔ “Development Type”

Generic place types for the region that group and categorize land uses for 196 local jurisdictions that have distinct land use designations.

Each development type has a specific land area, housing and employment mix, density (housing and employment) and land mix.

# Spatial Unit for Scenario Planning

## Utilization of 5.5 acres Grid Cell

Preparation of growth forecast at the Grid cell level:

SCAG Growth Forecast



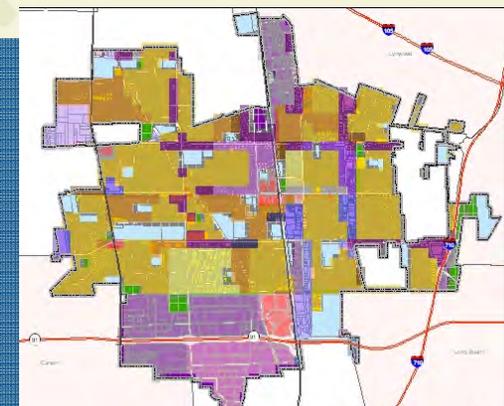
Household and Employment estimates and forecasts approved by local jurisdictions

Local Land Use Data



2008 Existing and General Plan land use datasets updated with local input

Grid Cell Data

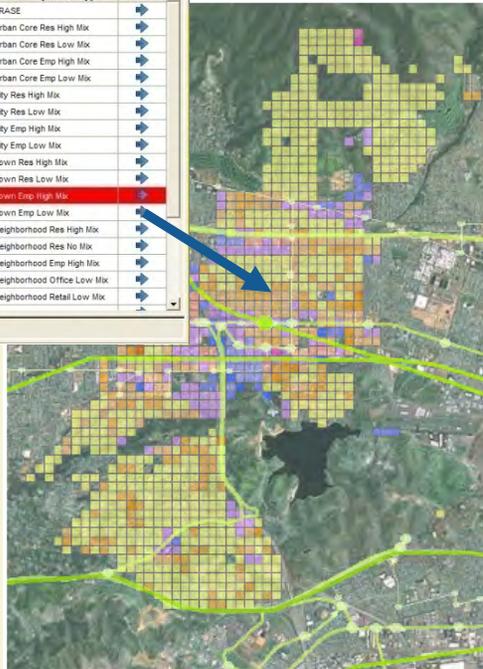


Household and Employment estimates and forecasts represented as Development Types

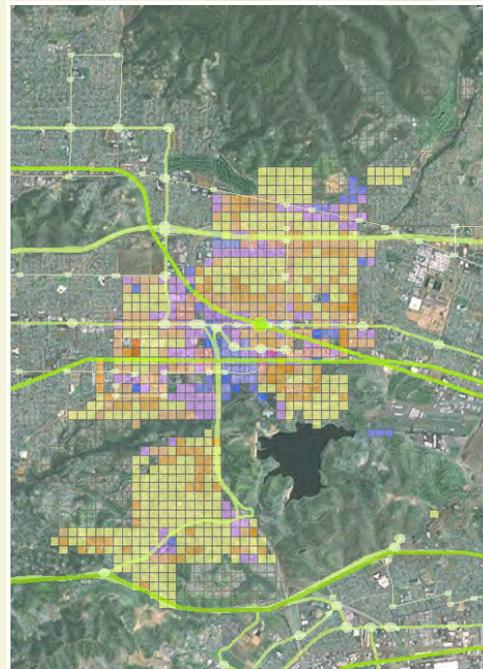
- Manageable size for capturing local land use benefits on transportation while maintaining instant feedback capability

# STEP 2: Paint a Scenario

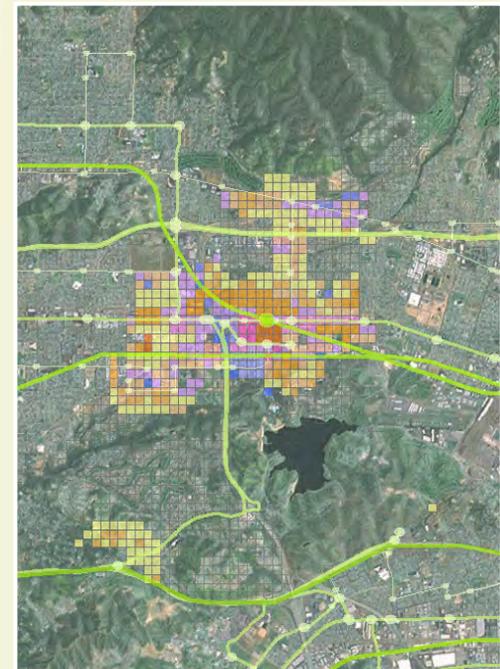
Design scenarios by painting Development Types on to the landscape



**Baseline**



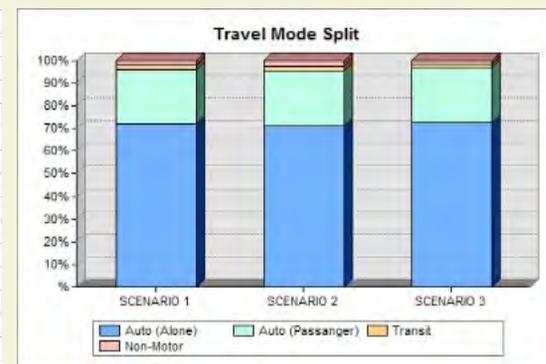
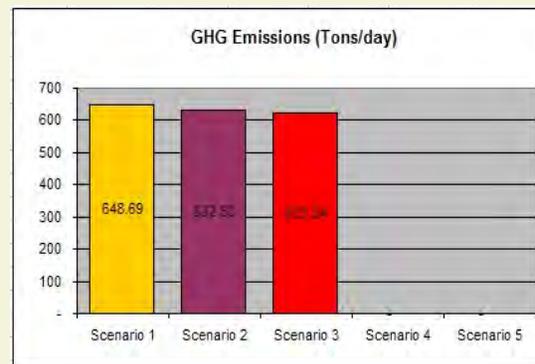
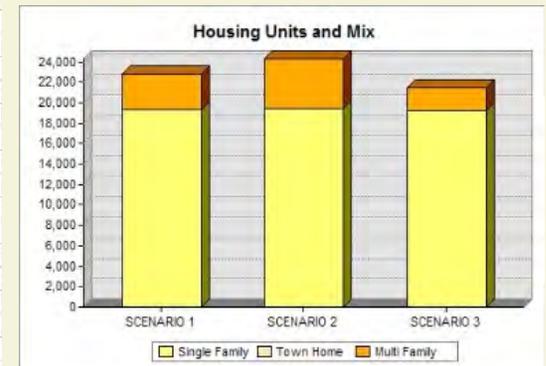
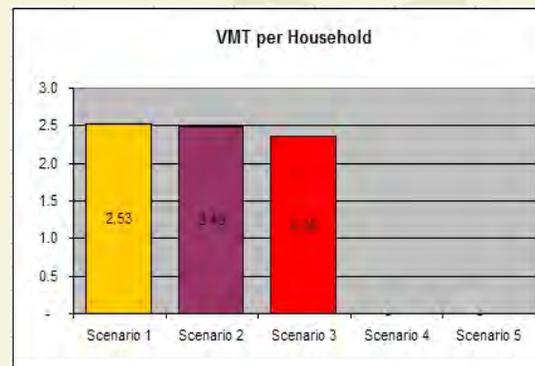
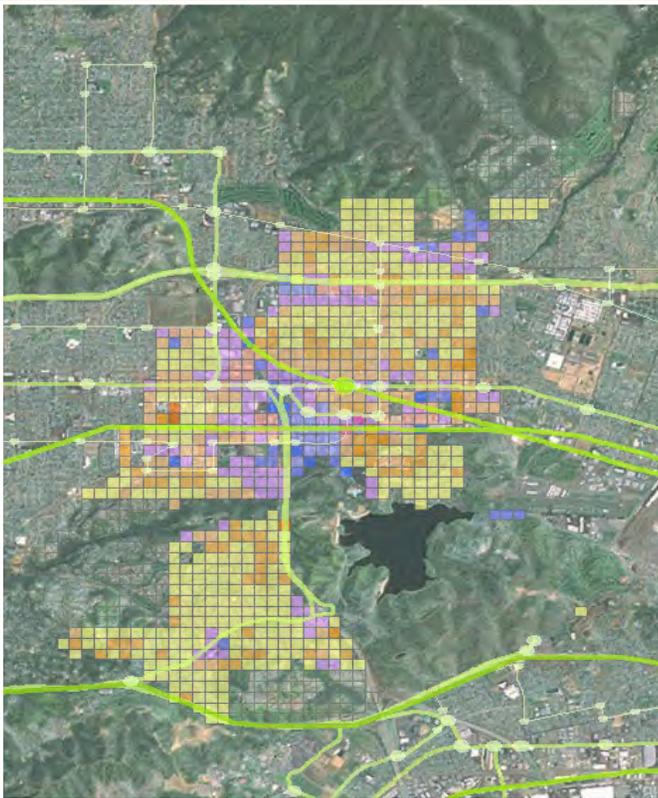
**Compact Design**



**Transit Oriented**

# STEP 3: Monitor Indicators on-the-fly

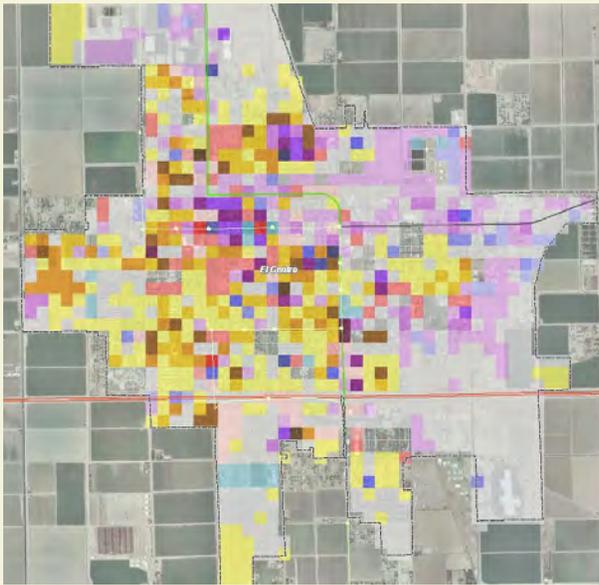
Compare the scenarios and monitor the impact of land use decisions in real time



# Local Example: City of El Centro

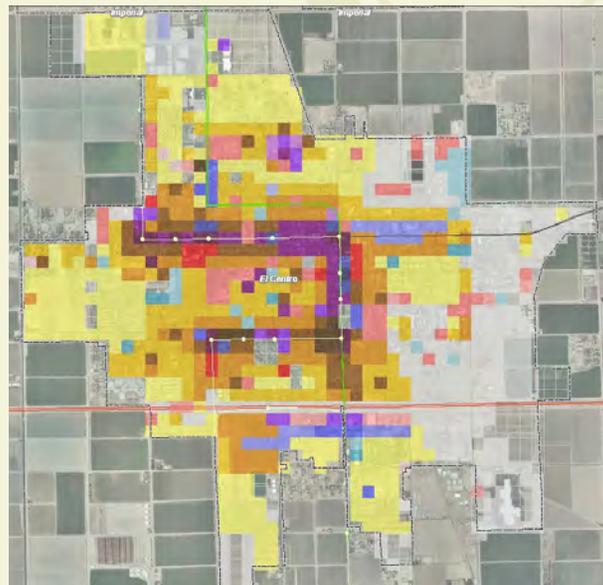
## 2035 Land Use Scenarios

SCENARIO 1



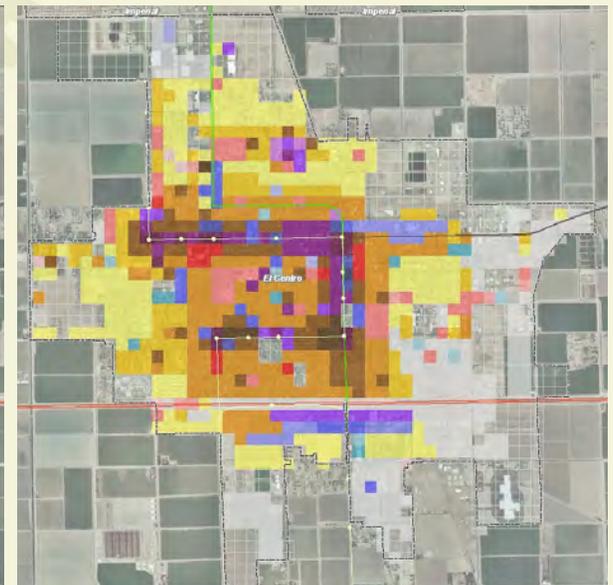
Preliminary:  
General Plan based

SCENARIO 2



Alternative 1:  
Transit Oriented Development

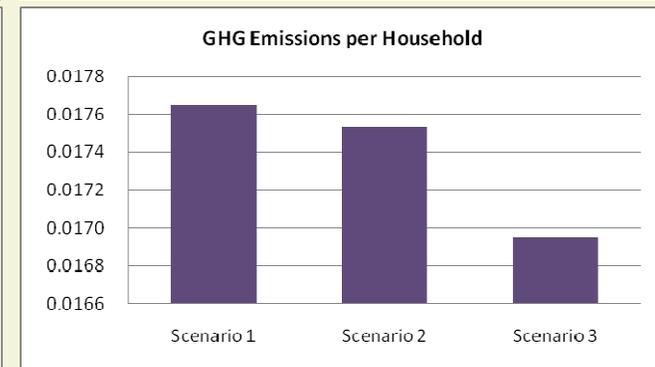
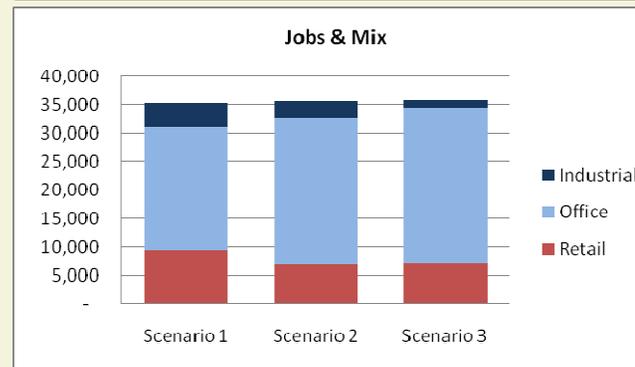
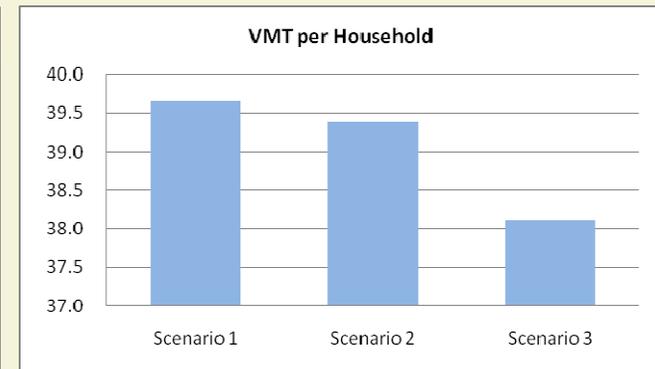
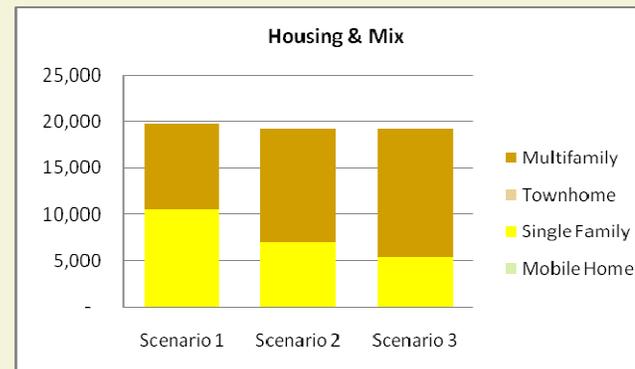
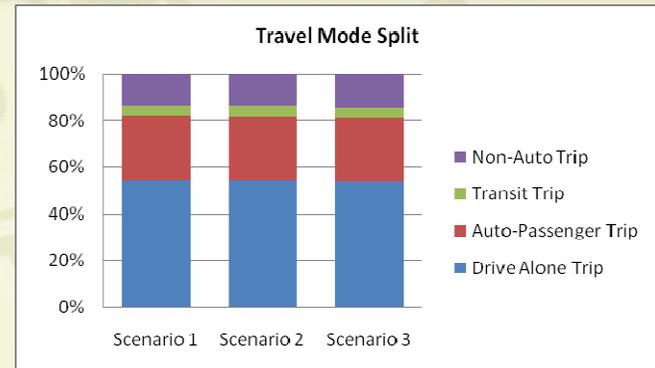
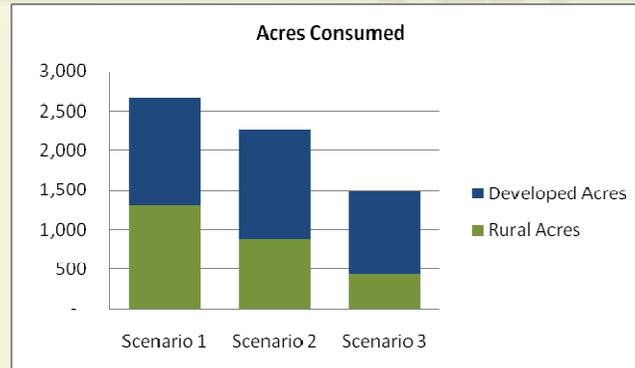
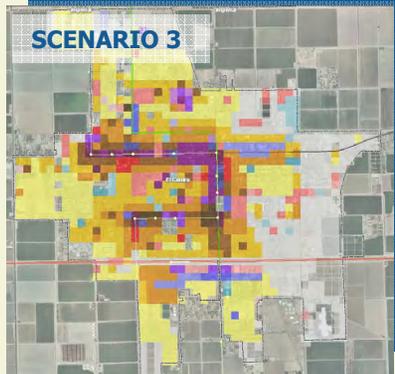
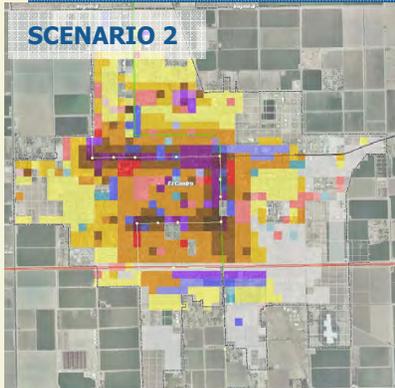
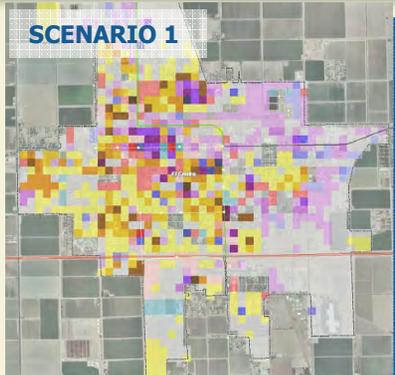
SCENARIO 3



Alternative 2:  
Compact Development

# Local Example: City of El Centro

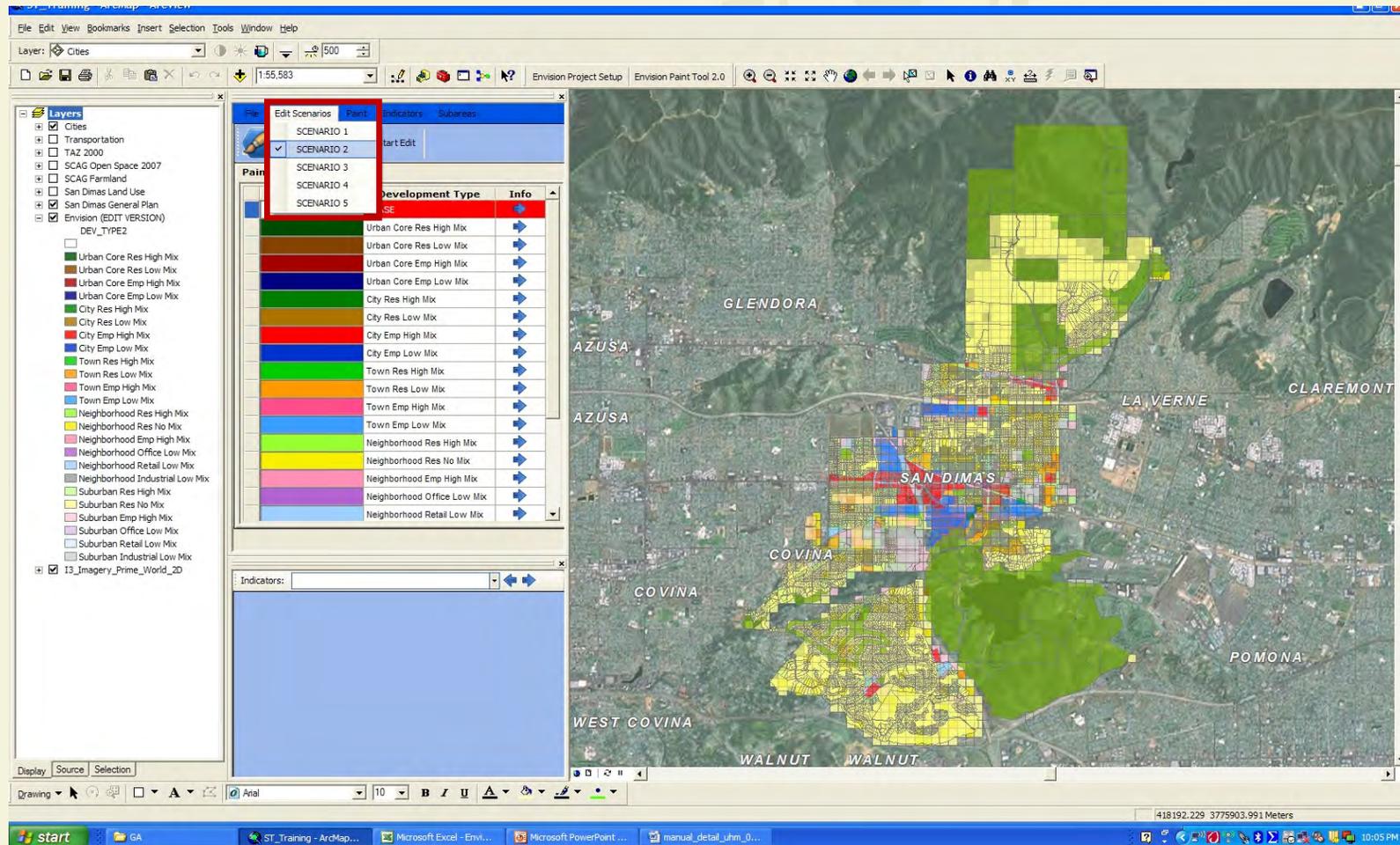
## Scenario Results



# Scenario Review/Revision process

## 1. Select a Scenario to view/edit

Users can work on up to 5 scenarios at a time



# Scenario Review/Revision process

## 2. Use reference layers

Users can turn on/off additional GIS layers to use as reference

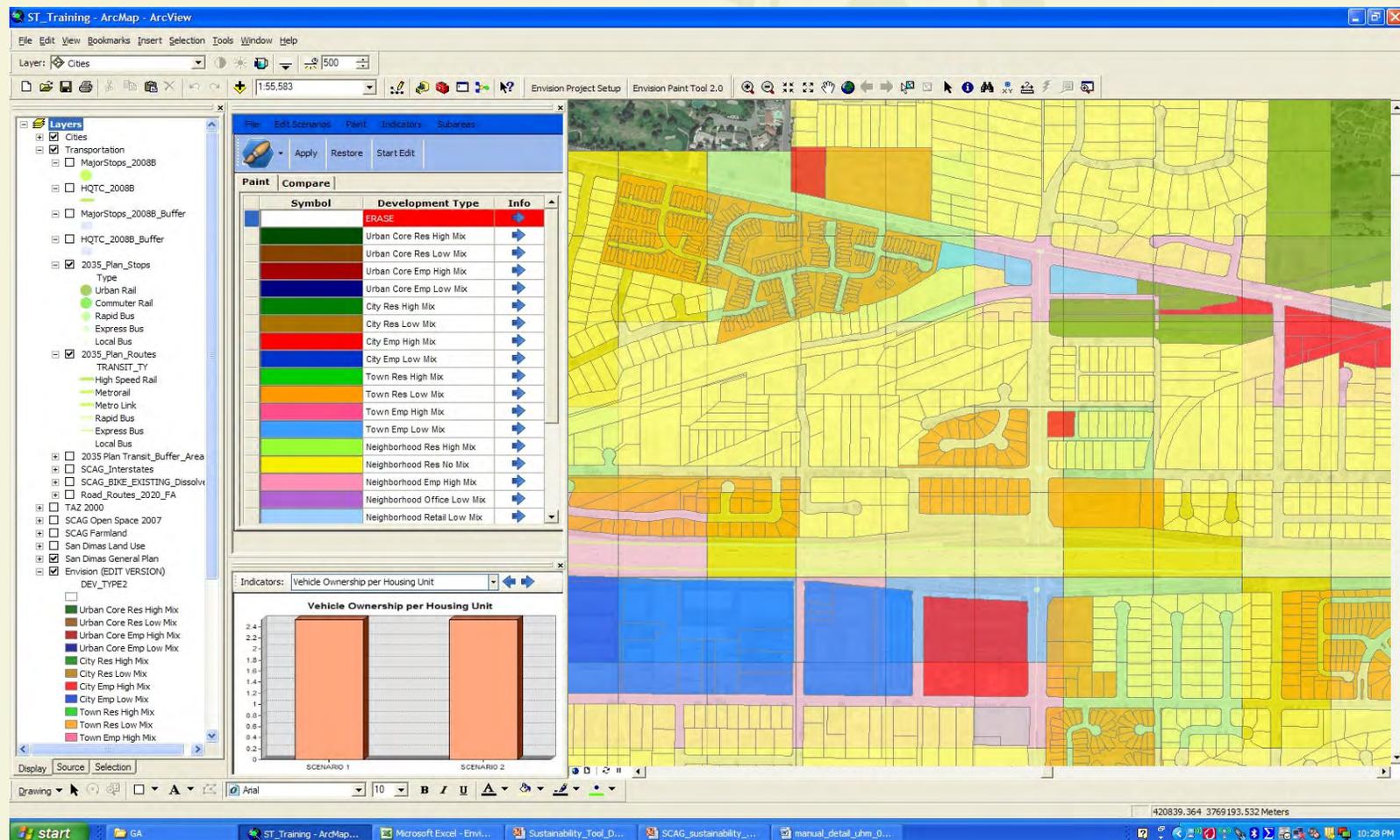
The screenshot displays the ArcMap interface with several key components:

- Layers Panel:** A list of GIS layers on the left side, including 'Cities', 'Transportation', 'MajorStops\_2008B', 'HQTC\_2008B', 'MajorStops\_2008B\_Buffer', 'HQTC\_2008B\_Buffer', '2035\_Plan\_Stops', 'Type', 'Urban Rail', 'Commuter Rail', 'Rapid Bus', 'Express Bus', 'Local Bus', '2035\_Plan\_Routes', 'TRANSIT\_TV', 'High Speed Rail', 'Metrolink', 'Metro Link', 'Rapid Bus', 'Express Bus', 'Local Bus', '2035 Plan Transit\_Buffer\_Area', 'SCAG\_Interstates', 'SCAG\_BIKE\_EXISTING\_Dissolve', 'Road\_Routes\_2020\_FA', 'TAZ 2000', 'SCAG Open Space 2007', 'SCAG Farmland', 'San Dimas Land Use', 'San Dimas General Plan', and 'Envision (EDIT VERSION)'. A red box highlights the 'Envision (EDIT VERSION)' group.
- Legend:** A legend titled 'Turn on/off GIS layers to use as reference' showing a list of development types with corresponding symbols and colors. The 'ERASE' layer is highlighted in red.
- Map:** A map showing a geographic area with various development types and a 'Transit Buffer' overlay. The buffer is shown as a light blue area surrounding transit routes. Labels on the map include 'GLENDORA', 'AZUSA', 'LA VERNE', 'CLAREMONT', 'SAN DIMAS', 'COVINA', 'WEST COVINA', 'WALNUT', and 'POMONA'.
- Indicators Panel:** A panel titled 'Indicators: Vehicle Ownership per Housing Unit' showing a bar chart with two bars for 'SCENARIO 1' and 'SCENARIO 2'. The y-axis ranges from 0 to 2.4.

# Scenario Review/Revision process

## 3. Zoom into an area

Zoom into an area of interest to examine in detail



# Scenario Review/Revision process

## 4. Examine parcel level information

Click on a parcel to get detailed information

The screenshot shows the ArcMap interface with the 'Identify' window open. The 'Identify from' dropdown is set to 'San\_Dimas\_GP\_ZN\_LU'. The 'Location' is 425,504.285 3,776,082.643 Meters. The 'Identified 1 feature' window displays the following data:

Field	Value
OBJECTID	8752
Shape	Polygon
ACRES	0.95002
APN	8661012014
OBJECTID_2	2144416
SCAGYID	47275642560508
COUNTY	37
CITY_NAME	San Dimas
LU01	1211
LU05	1211
LU08	1240
SLOPE	3
LOTSQFT	41382.95217
IMPSQFT	18000
TOTVALUE07	537868
YEARBUILT	1991
ZONE_CODE	PS
CITY_GP_CO	O/P
SCAG_GP_CO	1210
DENSITY	0
LOW	0
HIGH	0
YEAR_ADAPT	
GP_NOTE	
SCAG_GP_TX	General Office
SCAG_LU_TX	Facilities
Shape_Length	312.252903
Shape_Area	3844.60333

The 'Paint' window shows a list of development types with their corresponding symbols. The 'Town Emp High Mix' is highlighted in red. The 'Indicators' window shows a 'Travel Mode Split' bar chart for two scenarios, with 'Auto (Alone)' and 'Auto (Passenger)' being the primary modes.

# Scenario Review/Revision process

## 5. Examine Development Type characteristics and select

Enable Development Type Characteristics Viewer to examine and select a Development Type to apply

The screenshot displays the ArcMap interface with the 'Development Type Characteristics Viewer' window open. The viewer shows the following data for 'City Emp High Mix':

Density		
Housing:	13.3	Units/Acre
Employment:	316.3	Jobs/Acre

Employment Mix		
Retail:	11.8	%
Office:	88.2	%
Industrial:	0	%

Housing Mix		
Multifamily:	93.4	%
Townhome:	0	%
Single Family:	6.6	%
Mobile Home:	0	%

Land Area		
Building Site:	67	%
Streets:	25	%
Civic:	4	%
Parks:	4	%

Below the viewer, a 'Travel Mode Split' chart compares two scenarios. The chart shows the percentage of travel by mode (Auto (Alone), Auto (Passenger), Transit, Non-Motor) for SCENARIO 1 and SCENARIO 2.

A callout box in the top right of the map area says: "Browse to different Development Types".

# Scenario Review/Revision process

## 6. Select a paint brush and an area to paint

Each brush offers different capabilities to select areas

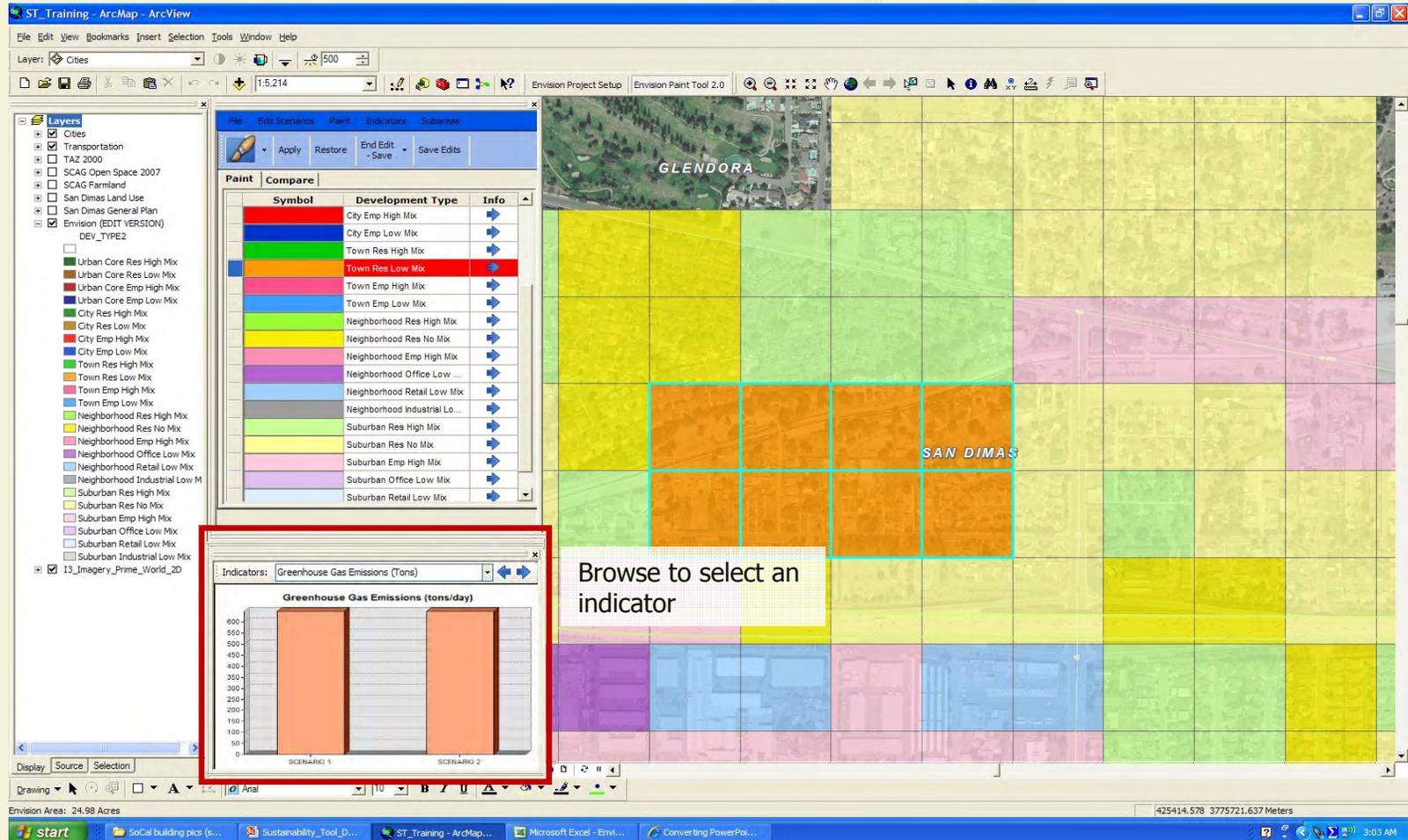
The screenshot displays the ArcMap interface with the Envision Paint Tool 2.0. The 'Paint' menu is open, showing various brush options: Point Brush, Polygon Brush, Rectangle Brush, Circle Brush, and Polyline Brush. The 'Point Brush' is highlighted with a red box. The main map area shows a grid of colored zones over an aerial view of Glendora and San Dimas. A 'Travel Mode Split' chart is visible in the bottom left corner, showing the percentage of travel mode for two scenarios: SCENARIO 1 and SCENARIO 2. The chart compares Auto (Alone), Auto (Passenger), and Non-Motor modes.

Scenario	Auto (Alone)	Auto (Passenger)	Non-Motor
SCENARIO 1	~70%	~25%	~5%
SCENARIO 2	~70%	~25%	~5%

# Scenario Review/Revision process

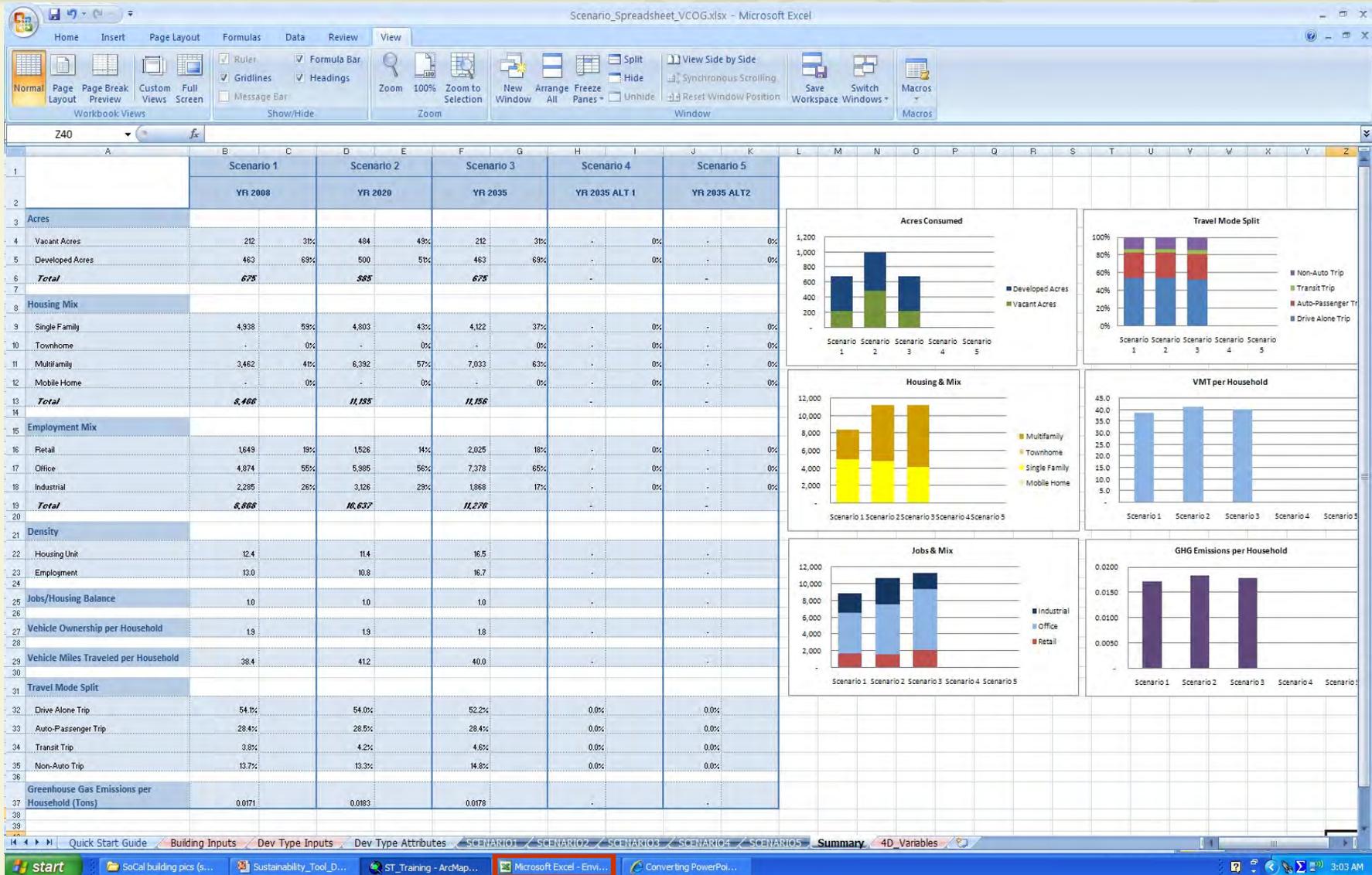
## 7. Monitor progress

Available indicators include: Housing & Job Mix, Job Housing Balance, Vehicle Ownership, VMT, Travel Mode, and GHG



# Scenario Review/Revise process

## 8. Evaluate scenarios in Excel spreadsheet



# Past Efforts and Moving Forward

- Offered training sessions throughout the SCAG subregions
  - ICTC – Calexico, May 2010 (14 participants)
- Tool made available to all local jurisdictions in Jan. 2011
  - If you do not have ArcGIS 9.3, you can access the tool on SCAG server remotely from your workstation
- On-site help available after the planning session
- Additional tool training forthcoming
- One-on-one meeting at your request



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# Next Steps

# 2012 RTP/SCS Development

## Next Steps for Local Jurisdictions

### Survey Input

- Transportation Demand Management (TDM)
- Local Planning Factors
- CEQA Streamlining and Sustainability

### Review of preliminary land-use scenarios

- Review/revise preliminary land-use scenarios provided on Local Sustainability Planning Tool
- Approve or submit revisions to SCAG

Input is requested by March 25, 2011

# 2012 RTP/SCS Development

## Draft SCS

After planning sessions and follow-up, SCAG will:

- Revise preliminary scenarios to reflect input provided
- Measure GHG emissions reductions for preliminary land use scenarios
- Develop policy-based, alternative land use scenarios

SCAG will hold workshops in subregions in Spring/Summer introducing a draft SCS

# Applying CEQA Streamlining in Imperial County

## Residential projects

- Projects where at least 75% total building square footage is residential
- Must be consistent with land use designation, density, intensity in approved SCS
- CEQA relief – no discussion of growth-inducing impacts and some cumulative impacts

## Survey items

- CEQA streamlining – to gauge jurisdictions' interest
- Sustainability survey – to create inventory of sustainability efforts in the region

# 2012 RTP/SCS Schedule

2011  
Q1

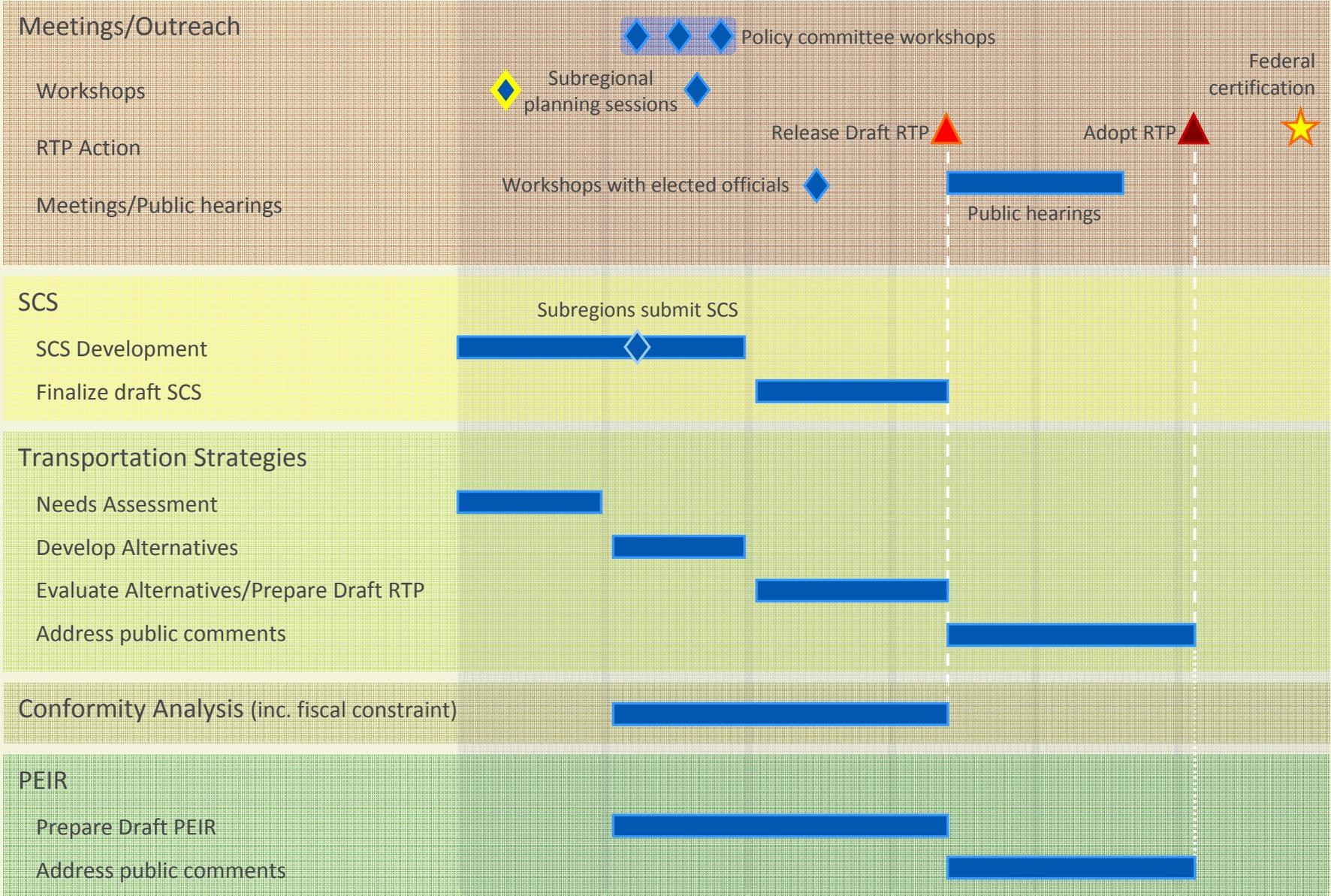
2011  
Q2

2011  
Q3

2011  
Q4

2012  
Q1

2012  
Q2



# 2012 RTP/SCS Development

## SCAG Contacts

### Local Planning Factors

- Ma'Ayn Johnson – (213) 236-1975 johnson@scag.ca.gov

### Sustainability

- Grieg Asher – (213) 236-1869 asher@scag.ca.gov

### CEQA Streamlining

- Jennifer Sarnecki – (213) 236-1829 sarnecki@scag.ca.gov

### Transportation

- Ryan Kuo – (213) 236-1813 kuo@scag.ca.gov

### TDM

- Alan Thompson – (213) 236-1940 thompson@scag.ca.gov

### Local Sustainability Planning Tool

- JungA Uhm – (213) 236-1939 uhm@scag.ca.gov



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Thank you

<http://scag.ca.gov/rtp2012>