

# STAFF REPORT

**SUBJECT:** 2018 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Scenario Performance Update for Board Direction

**RECOMMENDED ACTION:** Support Staff’s Recommendation to Use Scenario 2a as the Basis for the Draft Regional Transportation Plan and Associated Environmental Impact Report and to Coordinate with Local Jurisdictions on Refinement of Draft Transportation Project Lists, Revenue Assumptions, and SCS Elements



**SUMMARY:**

After nearly a year of public, stakeholder, and community partner outreach, SJCOG staff is seeking committee input for a recommendation to the SJCOG Board to use Scenario 2a as the foundation for the Draft 2018 RTP/SCS and Environmental Impact Report (EIR). These includes staff’s further coordination with local jurisdictions to refine any changes to project lists, revenue assumptions, or SCS elements since the scenarios were originally presented, or any refinements as a result of committee input and SJCOG Board direction this month.

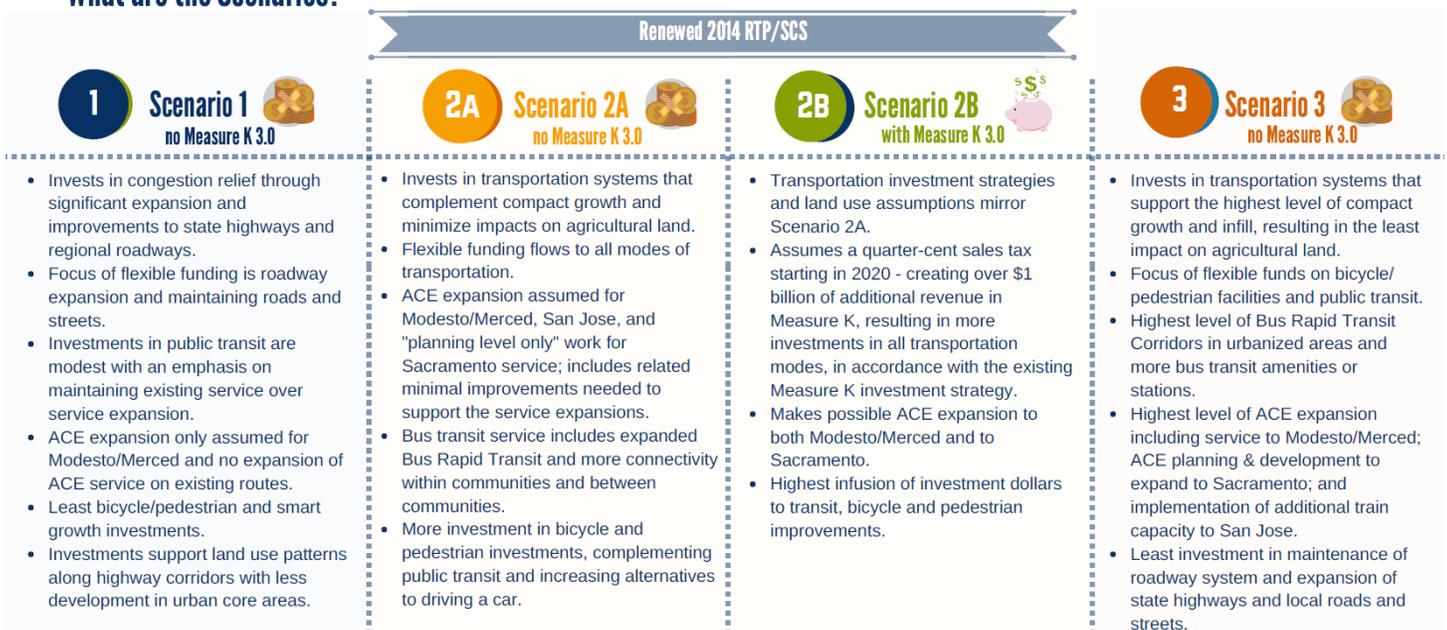
Over the last several months, staff has presented four possible “scenarios” or transportation futures for consideration as the foundation of the 2018 RTP/SCS. The approach to the 2018 RTP/SCS has been an emphasis on continuation of the goals and strategies from the 2014 plan, which have provided a guide for specific policy and funding decisions made by the SJCOG Board and informed by committee recommendations and actions since the adoption of that plan in June 2014. The 2018 plan update will continue to serve as the general framework for future Board actions. A short description of the four scenarios put forward by staff, identified as 1, 2a, 2b, and 3, is included in the text and graphics on the next page. The attachments to the staff report provide additional information on the scenarios, important performance metrics (including performance in communities of concern), and more detailed information on the second round of public outreach. Transportation model related measures were not final in final form as of the writing of this staff report and will be discussed as part of the presentation at the meeting on November 16.

**Scenario 2a** preserves the foundational elements of SJCOG’s ambitious 2014 plan, while refreshing important planning assumptions, project lists, revenue assumptions, and implementation activities undertaken by SJCOG and local jurisdictions since the 2014 plan was adopted. The staff recommendation for Scenario 2a does not include the additional ¼ cent sales tax assumption from the 2014 plan. As with the 2014 plan, the recommendation captures the ability of the region, within the limits of local general plans, to satisfy the intent of SB375 through its sustainability focused metrics. And, although final updated SB375 greenhouse gas reduction targets have not been finalized by the California Air Resources Board (CARB), Scenario 2a achieves reductions similar to 2014 and is consistent with the target recommendation report provided by SJCOG to CARB staff in December 2016. This recommendation further reflects public input to date, which is further detailed later in the staff report.

**Scenario 2b** varies from 2a in its total revenue assumption and, thus, funds additional projects across all funding categories. The increased revenue allows for the inclusion of projects that would otherwise be considered “tier 2” – a separate list of projects in the RTP that identify additional funding and project needs but cannot be constrained to forecast revenue.

**Scenarios 1 and 3** have the same overall revenue assumption as 2a, but pivots on the investment “theme” in support of possible alternative growth patterns. As noted in the short descriptions in the graphic that follows – Scenario 1’s investment focus for the 10% of total funding identified as “flexible” (versus “core”) is on congestion relief on the State highway system and regional roadways, while Scenario 3’s investment theme is more transit oriented in support of increased jobs and housing near downtown cores. The scenarios all represent possible futures in San Joaquin County over the next 25 years and are responsive to not only early public outreach, committee input, and Board direction to date for this plan, but also public and stakeholder group comments on the 2014 effort.

## What are the Scenarios?



The following sections provide additional information on differences in scenario investments, some initial metrics, and a summary of round 2 of the public outreach effort.

### Key Project List Differences:

As would be expected, the list of projects associated with each of the three alternative scenarios pivots from Scenario 2a on the investment themes identified above. In some cases, there are project specific impacts – such as a project from the “tier 2” or unconstrained project list moving to the fiscally constrained project list (available to receive funding). In other cases, the differences are less specific, such as less money for overall operations (transit) or less money for as yet unspecified projects (bike and pedestrian). The funding graphic included on page 7 of the staff report shows the funding changes in aggregate; the attachments to the staff report illustrate changes in the number of potential projects funded.



Once the SJCOG Board have weighed in on their preference for the investment approach for the plan, staff will develop the project list for the draft plan in conjunction with local jurisdictions’ planning and public works departments. *While the draft plan will detail total revenue assumed and planned investments, it will be up to future calls for projects and actions by the SJCOG Board and local project sponsors to assign specific funding to specific projects. While the RTP serves as a high-level blueprint for transportation investments, it is subject to*

*amendment as required to support delivery of future transportation projects.*

### Public Outreach Summary:

The poor condition of roads and the need for repair and maintenance was strongly felt across the region.

During late 2016 and into 2017, the committees and the SJCOG Board received regular updates and provided input and initial direction to staff on key financial assumptions, goals and strategies, performance metrics, and priorities for investment choices. In September and October the committees and the SJCOG Board were given an update on the results of the second round of the public outreach process; this followed an August 24<sup>th</sup> workshop where staff presented the four draft 2018 RTP scenarios prior to release for public and stakeholder input.

The second phase of the public outreach process for the 2018 RTP/SCS began with the release of the Metro Quest on-line public engagement tool on September 11 (English version) and September 18 (Spanish version). Both the English and Spanish surveys closed in October. This second round of outreach was designed to elicit public input on each of four possible RTP scenarios, priorities for evaluating the scenarios, and some clarifying questions on the strategies to address those priorities. Staff engaged residents at 11 different community events or meetings to answer questions and encourage participation with the on-line tool. Participants rated each of the scenarios based on how well the policies, investment themes, and strategies aligned with their wishes for the future of transportation in San Joaquin County.



A total of 590 San Joaquin County residents responded to either the English or Spanish on-line engagement tool, answering questions on priorities for measuring the scenario outcomes, or answering clarifying questions on strategies for addressing transportation concerns expressed in phase one outreach surveys.

The input received is shown in the graphic below. ***The results indicate support for all scenarios, with 2a, the scenario based on the 2014 plan without the additional ¼ cent sales tax (Measure K 3.0), receiving the highest rating.***

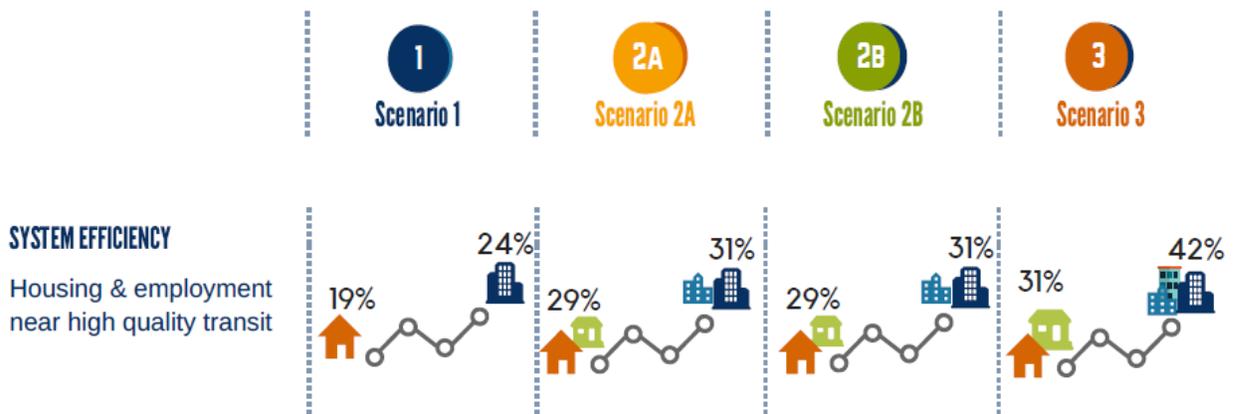


While the Metro Quest public input process was on-going, SJCOG staff worked on quantifying additional performance measures for each scenario.

Alongside the public outreach results and discussion of key transportation projects, staff will be presenting additional technical information on how the four scenarios perform one to another. The workshop is planned for November 9 from 6pm to 8pm in the SJCOG Boardroom, one week prior to the staff presentation at the SJCOG Board meeting on November 16. The purpose of the workshop is for participants to view additional technical information on the four scenarios, ask questions of staff, or, if they have not previously provided input via the MetroQuest platform, to do so at the workshop.

**Technical Metrics:**

The metrics noted above will further assist policymakers, members of the public, and stakeholder groups, over and above the financial details and policy choices already provided, in weighing in on which scenario will best guide San Joaquin County’s future transportation investments. These metrics will include congestion, mobility, air quality, and impacts to the environment and agricultural lands. The metrics to be presented are identical in most respects to the measures used in the 2014 plan, with some additions related to potential health impacts, improved measures of access to jobs and other destinations, as well as enhanced measures of plan performance in communities of concern. An example is included below. A variety of scenario metrics are included on the attachments; certain transportation model metrics are being reviewed and finalized – these will be presented at the November meeting. Several metrics and their relevance to the RTP will be further discussed with Board members.



**RECOMMENDATION:**

Provide direction to staff to use Scenario 2a as the basis for the Draft Regional Transportation Plan and Associated Environmental Impact Report and additionally coordinate with local jurisdictions on any needed refinement to draft transportation project lists, revenue assumptions, or SCS elements based on changes since the scenarios were originally defined or on SJCOG Board direction.

**FISCAL IMPACT:**

Developing the 2018 RTP/SCS is programmed in SJCOG’s Overall Work Program. The Regional Transportation Plan itself is not a budget document but a comprehensive transportation plan that sets forward policies and identifies eligible transportation improvements for future Board funding actions. If a project is not in the SJCOG’s adopted RTP, it is not eligible for state/federal funds.

**BACKGROUND:**

**RTP Components**

There are four required elements of the RTP; all must be internally consistent. The goals and strategies in the policy element reflect regional priorities for mobility, which are supported by the assumptions in the SCS, and are further reflected in the funding allocations in the financial element. A scenario represents the potential future interaction of these elements. Each scenario will be evaluated through a series of metrics to inform policymakers and the public how the scenario meets regional goals and strategies for improvement over current conditions. Each element’s relationship to scenario development is discussed below.

RTP Components



*Policy Element:*

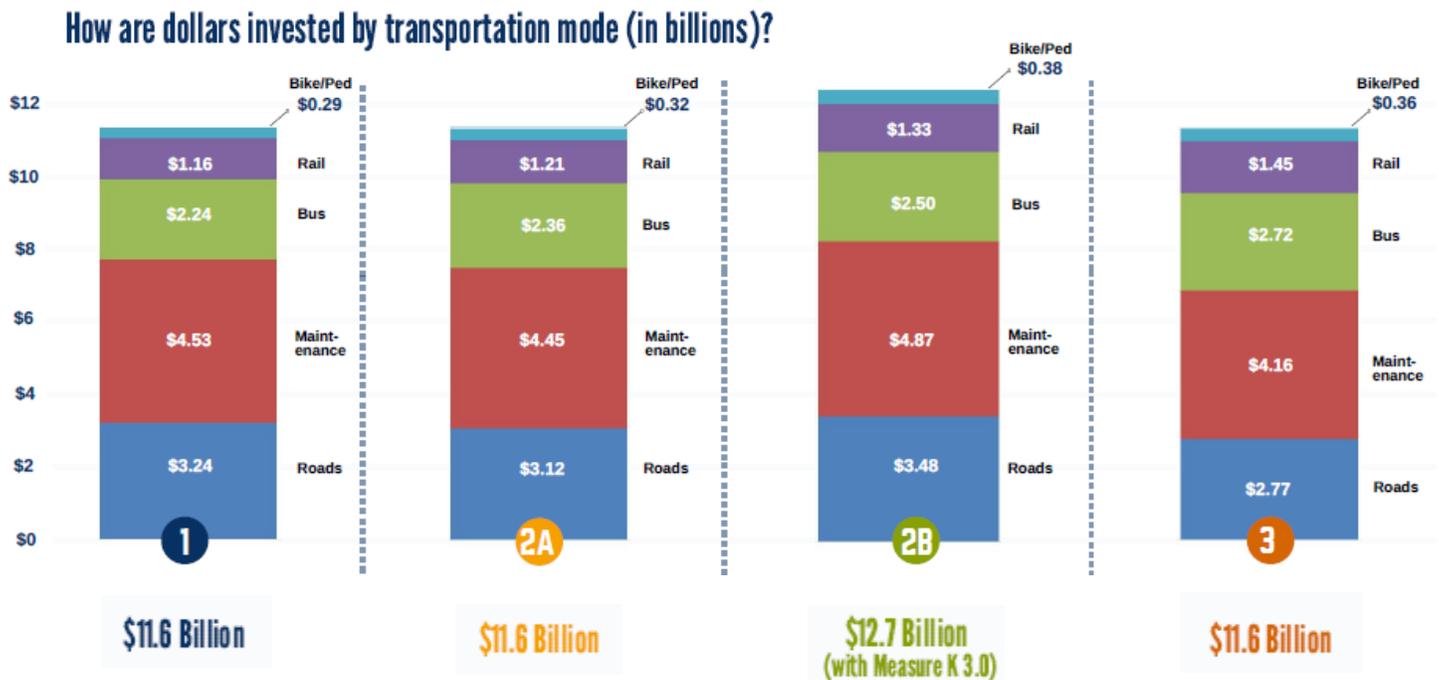
The overall approach to the 2018 RTP/SCS is to build upon the “ambitious and achievable” 2014 plan with updated planning assumptions. Goals, policies, and strategies have been carried over to the 2018 plan, plus any additional policies needed to address new requirements or updated technologies. The scenarios address the overall policy goals and intent with a different strategic focus, as has been illustrated throughout the staff report. SJCOG staff will compare not only metrics from each scenario against one another, but will look at measurable results against previous and current conditions based on empirical data. In other words, we can measure progress over time since the last RTP and assess whether a forecast of future conditions is better today over a similar set of policies and strategies as in 2014.

*Financial Element:*

The total funding for the 2018 RTP/SCS has been allocated to projects in five broad funding categories: roadway expansion, roadway operations and maintenance, bus transit, rail transit, and active transportation.

SJCOG staff estimates the total funding for the 2018 RTP at \$11.46 billion. Of this funding, 90%, or about \$10.3 billion dollars is in funding sources dedicated to one or more of the five broad funding categories: highway and regional roadway expansion, roadway operations and maintenance, bus transit, rail transit, and active transportation (called “core” revenues). The remaining \$1.2 billion shifts between the five project categories depending on the focus of each scenario investments (called “flexible” revenues).

Outside of this “core” versus “flexible” funding discussion for Scenarios 1, 2a, and 3, an additional ¼-cent sales tax increment illustrated in Scenario 2b would add approximately \$1.1 billion to the total forecast for that scenario, for a total of \$12.56 billion. The following graphic (also included on Attachment 1) illustrates the total funding amounts:



*Action Element:*

SJCOG staff has met with each jurisdiction in the County, as well as the Regional Transit District, CalTrans, and the Regional Rail Commission to update and refine a baseline project list for the 2018 RTP. This includes removal of completed or substantially completed projects, adding any new future projects, or modifications to projects based on changes to scope or schedule. Project lists for each scenario are modified to reflect the different theme, policy choices, and investment priority focus of each of the alternative scenarios. At the November workshop, each scenario will be presented indicating how projects and programs being funded will change across the scenarios. In addition, key projects across the four scenarios will be highlighted. Once the SJCOG Board has

weighed in on the preferred foundational scenario for the RTP, a final project list will be established for the plan based on those priorities and investments.



### *Sustainable Communities Strategy:*

This element provides future land-use assumptions upon which each scenario is constructed. SJCOG staff has met with each jurisdiction in San Joaquin County to discuss any changes to current planning assumptions, or potential changes to the location of future development since the last RTP/SCS was developed. As with 2014, the scenarios presented for consideration vary in the location and intensity of future growth. These assumptions are guided in each scenario by general plans; however, general plans provide for a range of specific development characteristics based on future priorities and desires of residents, shifting demographics, incentives, and private sector responses to these variables. Each scenario's land-use assumptions are matched to investment priorities and project lists for the public, stakeholders, and SJCOG committees and Board to weigh in on for the 2018 RTP/SCS.

### **Draft Scenarios & Scenario Development <sup>1</sup>**

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*“Scenario planning is a unique methodology for any community to better prepare for its future. It offers powerful analytical tools to estimate how well existing or potential plans and strategies will do in meeting important local and regional needs given different assumptions about the future.”*

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The process for developing the RTP involves providing the public and policymakers options known as “scenarios” of possible future planning assumptions that will be the foundation of the RTP. Each scenario is similar in:

- Total countywide forecasts of jobs, population, and households
- Location of growth will be guided by most recent general plans

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<sup>1</sup> <http://envisiontomorrow.org/what-is-scenario-planning/>

- For three of the four scenarios, the total revenue available will be identical, the fourth scenario will respond to the SJCOG’s Board request that one scenario illustrate the effect of the additional ¼-cent sales tax assumption included in the 2014 RTP.

Each scenario differs in some respects that respond to Board and committee input, public outreach, and stakeholder input. Differences are:

- Theme and focus of investment strategies
- Mix of transportation projects/options
- Assumptions on development patterns, development intensities, and housing options.

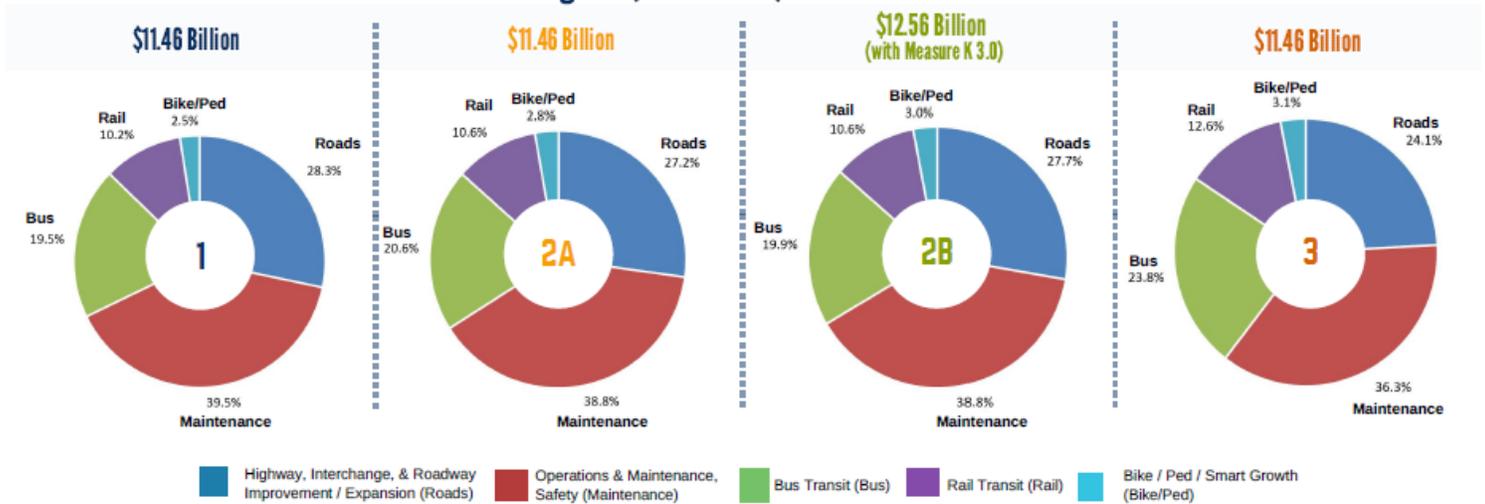
These variations affect how each scenario performs against various metrics, including congestion, mobility, air quality, and impacts to the environment and agricultural lands. The metrics provide an additional basis for committee members, stakeholders, the public, and policy makers to weigh in on their preferred vision for future transportation investments in San Joaquin County.



During late 2016 and into 2017, the SJCOG Board received regular updates and provided input and direction to staff on key financial assumptions, goals and strategies, performance metrics, and priorities for investment choices. Two of the four scenarios, labeled as 2a & 2b, are refreshed versions of the adopted and approved 2014 plan and are identical except for the total revenue assumption and expanded project list. The increased revenue allows for the inclusion of projects that would otherwise be considered “tier 2” – a separate list of projects in the RTP that identifies additional funding and project needs but cannot be constrained to forecast revenue. This additional revenue is owing to inclusion of an additional ¼ cent sales tax increment (over and above the current ½ cent Measure K Renewal) that has not been approved by San Joaquin County taxpayers. In the 2014 plan, the “MK 3.0” was assumed to begin in 2016. This assumption adds \$1.1 billion to Scenario 2b’s total revenue available for projects across the region. If the scenario with this assumption is chosen as the foundation for the 2018 plan, it would be assumed to begin in 2020. The continuation of this assumption from 2014 has not enjoyed wide support from the Board or SJCOG committees, but the SJCOG Board was interested in seeing how the scenario performed relative to the other alternatives.

In addition to the sales tax assumption, SJCOG staff has identified “core” funding (that which is assigned to specific project types), and “flexible” funding (funding which can be moved between project categories). This amounts to \$1.2 billion and is assigned to projects in each scenario based on the priorities in that scenario. The differences are detailed on the graphic below.

## What is the difference in investment strategies? (2016 - 2042)



### Outreach

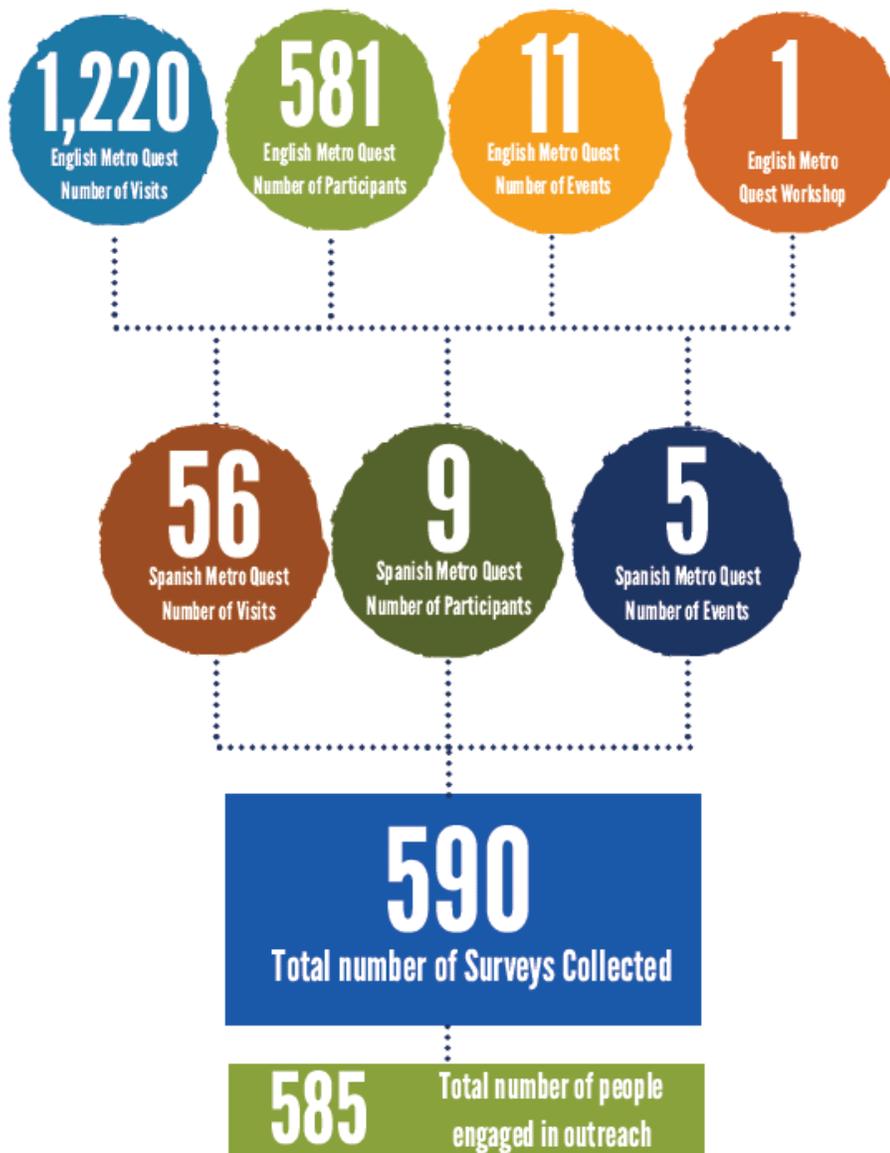
The graphics on the next two pages summarize the formal outreach efforts to date for the RTP/SCS. Civic engagement during the 2018 update process has been robust and has exceeded 2014 plan participation at the same point in the process. Additionally, staff has provided an attachment further highlighting specific outreach efforts in communities of concern.

# PHASE 1 OUTREACH RESULTS



SJCOG will continue civic engagement efforts on the RTP/SCS over the next eight months until the consideration of the adoption of the final plan in June 2018. This will include mini-presentations to civic groups, member agencies, and others on the plan contents, both before and after the anticipated release of the draft plan in February 2018. Once the draft plan is released, formal outreach and public hearings will be conducted to elicit public feedback and formal comment letters on the plan. The required public review period for the RTP/SCS is 55 days; the required public review period for the accompanying Environmental Impact Report is 45 days.

# PHASE 2 OUTREACH RESULTS



## COMMITTEE ACTIONS:

As of the writing of the staff report, only the RTP/SCS Working Group has provided input on the staff recommendation. The working group is not an official standing committee of the SJCOG Board, but rather a group of technical experts in a variety of disciplines as recommended by SB375. Of the nine group members providing input, five supported Scenario 3, three supported Scenario 2a, and one supported 2a with additional bike/ped and transit elements. Two of those supporting Scenario 3, secondarily supported 2a, and one supporting 2a secondarily supported 2a with enhanced transit and bike/ped options. The group did not reach a consensus.

## SCHEDULE & NEXT STEPS:

The direction received from the second round of public outreach will culminate in a workshop on November 9 for staff to provide additional technical information on the four potential RTP/SCS scenarios to SJCOG standing committee members, the public, and other stakeholders. The same workshop materials and the input received at the workshop will be communicated to the SJCOG Board at its regular November 16, 2017 meeting, where staff will ask for input from Board members on their preferences for the foundational scenario elements for the 2018 RTP/SCS. Recommendations and input from the SJCOG standing committees will also be communicated to the Board at that time. Once staff receives this input, additional technical work will be completed, leading to the release of the full draft 2018 RTP/SCS plan and associated Environmental Impact Report (EIR) for public review in February 2018. The public draft will be accompanied by a robust outreach campaign to ensure a thorough review prior to a final plan in June 2018. The chart below highlights the milestones in this timeline.

Scenario Revenue Assumptions / Project Lists	Complete
Phase One Public Outreach Meetings	Complete
Scenario Refresh / Update	Complete
Phase Two Outreach: Metro Quest Launch / Scenario Review	Complete
Phase Two Outreach: Workshop	November 2017
Public Review Draft Plan / EIR	February 2018
2018 RTP / EIR & Associated Documents for Board Consideration	June 2018

Staff will continue to update the SJCOG standing committees and Board on progress and milestones as the update process continues.

*Prepared by: Kim Anderson, Senior Regional Planner*

# SCENARIO FRAMEWORK



## What are the Scenarios?

Renewed 2014 RTP/SCS

### 1 Scenario 1 no Measure K 3.0

- Invests in congestion relief through significant expansion and improvements to state highways and regional roadways.
- Focus of flexible funding is roadway expansion and maintaining roads and streets.
- Investments in public transit are modest with an emphasis on maintaining existing service over service expansion.
- ACE expansion only assumed for Modesto/Merced and no expansion of ACE service on existing routes.
- Least bicycle/pedestrian and smart growth investments.
- Investments support land use patterns along highway corridors with less development in urban core areas.

### 2A Scenario 2A no Measure K 3.0

- Invests in transportation systems that complement compact growth and minimize impacts on agricultural land.
- Flexible funding flows to all modes of transportation.
- ACE expansion assumed for Modesto/Merced, San Jose, and "planning level only" work for Sacramento service; includes related minimal improvements needed to support the service expansions.
- Bus transit service includes expanded Bus Rapid Transit and more connectivity within communities and between communities.
- More investment in bicycle and pedestrian investments, complementing public transit and increasing alternatives to driving a car.

### 2B Scenario 2B with Measure K 3.0

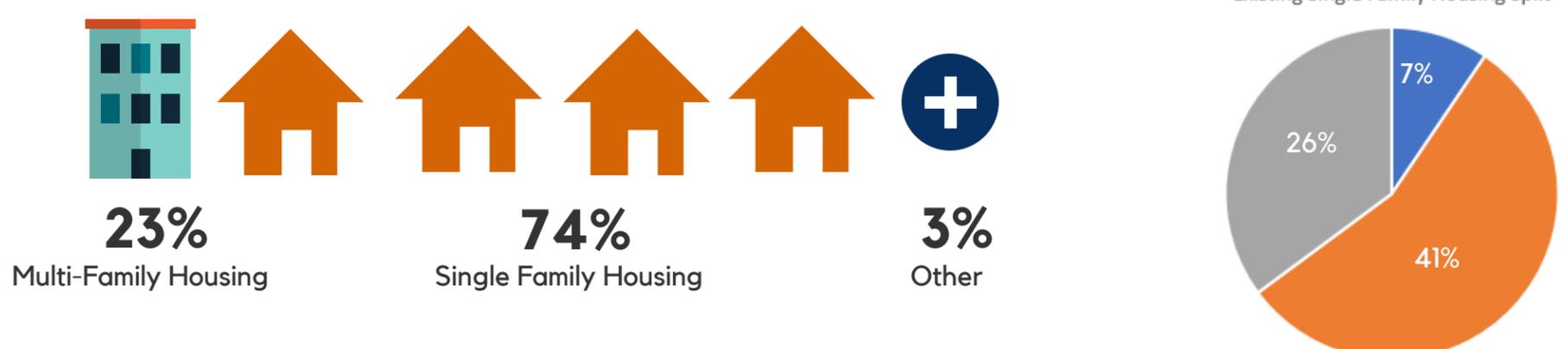
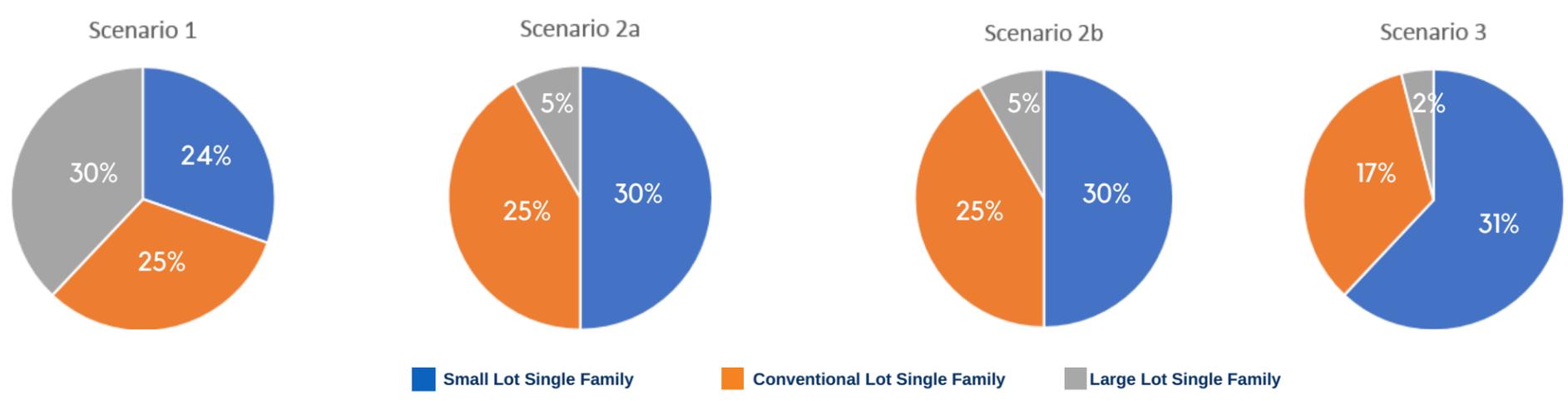
- Transportation investment strategies and land use assumptions mirror Scenario 2A.
- Assumes a quarter-cent sales tax starting in 2020 - creating over \$1 billion of additional revenue in Measure K, resulting in more investments in all transportation modes, in accordance with the existing Measure K investment strategy.
- Makes possible ACE expansion to both Modesto/Merced and to Sacramento.
- Highest infusion of investment dollars to transit, bicycle and pedestrian improvements.

### 3 Scenario 3 no Measure K 3.0

- Invests in transportation systems that support the highest level of compact growth and infill, resulting in the least impact on agricultural land.
- Focus of flexible funds on bicycle/ pedestrian facilities and public transit.
- Highest level of Bus Rapid Transit Corridors in urbanized areas and more bus transit amenities or stations.
- Highest level of ACE expansion including service to Modesto/Merced; ACE planning & development to expand to Sacramento; and implementation of additional train capacity to San Jose.
- Least investment in maintenance of roadway system and expansion of state highways and local roads and streets.

## What are the assumptions about the future?

New housing units



# PERFORMANCE METRICS page 1



## 2035

**1**  
Scenario 1

**2A**  
Scenario 2A

**2B**  
Scenario 2B

**3**  
Scenario 3

### MOBILITY & ACCESSIBILITY

Average trip length



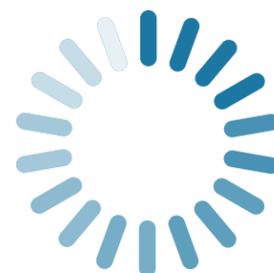
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Daily Transit Ridership

Trip Delay

### ENVIRONMENT

Acres of land consumed by new development

30,681



17,403



17,403



13,974



Acres of prime farmland consumed by new development

13,774



6,250



6,250



3,932



Residential energy use per capita (million BTU/yr)

103



89



89



80.6



Outdoor residential water consumption (gallons/day)

269



146



146



116



Meets greenhouse gas reduction targets



Conforms with Federal Clean Air Act



### SYSTEM EFFICIENCY

Housing & employment near high quality transit



Vehicle miles traveled (per capita)



loading...



loading...



loading...



loading...

Non-auto mode share

## 2035

### 1 Scenario 1

### 2A Scenario 2A

### 2B Scenario 2B

### 3 Scenario 3

#### SAFETY

Collision rate



#### JOBS & ECONOMY

New local jobs resulting from RTP/SCS investments

91,314



90,422



97,648



91,559



Labor income (in billions of dollars)

\$4.6



\$4.5



\$4.9



\$4.5



Value added, or contribution to GDP (in billions of dollars)

\$6.55



\$6.49



\$7.07



\$6.49



Output, or total value of industry production (in billions of dollars)

\$13.9



\$13.8



\$15.2



\$13.7



#### QUALITY OF LIFE & PUBLIC HEALTH

Percent of all households within 500' of a freeway

4%



4.3%



4.3%



4.4%



Weekly total walking minutes per person

74.36



74.37



74.37



74.54



Daily total biking minutes per person

0.332



0.332



0.332



0.333



Daily total recreational physical activity minutes per person

7.04



7.06



7.06



7.10



Average body mass index

28.25



28.24



28.24



28.23



General poor health

17.1%



16.9%



16.9%



15.5%



# 2018 RTP/SCS Public Outreach



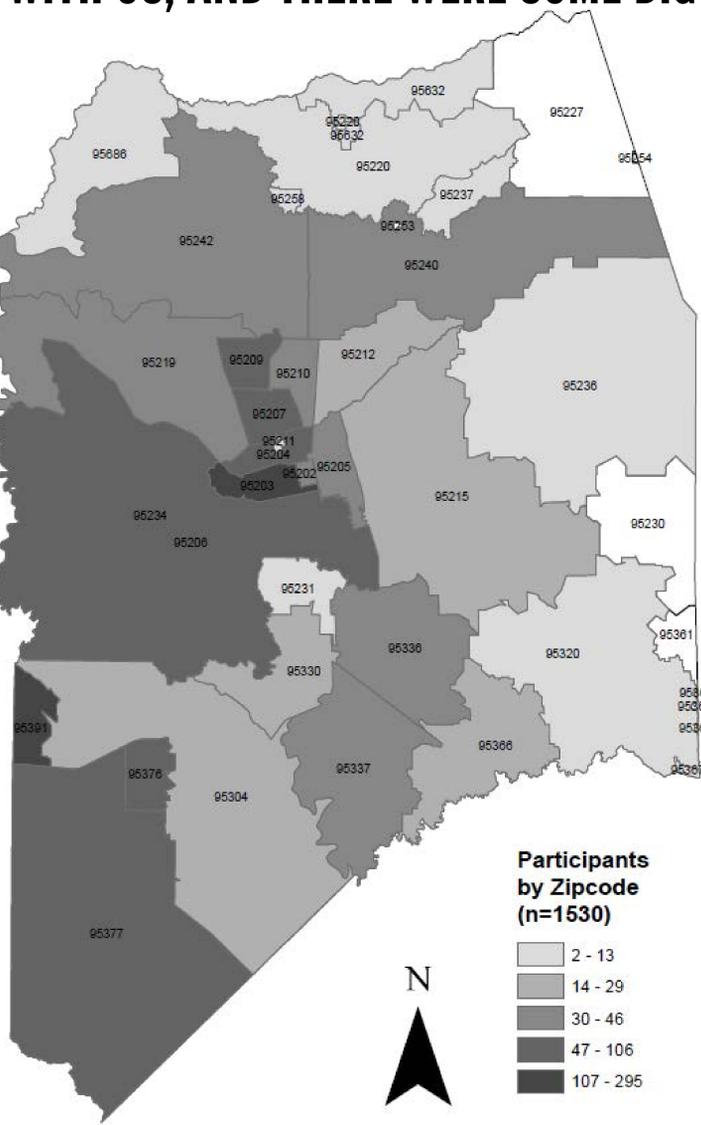
## Public Outreach Process



## What Have We Heard?

**RESIDENTS ACROSS THE REGION SHARED THEIR INPUT WITH US, AND THERE WERE SOME BIG THEMES.**

Residents across the region would like to see improvement in alternative transportation modes, such as public transit, biking, and walking. A number of residents want to ensure mobility for low income residents, youth, seniors, and people living with disabilities.



The poor condition of roads and the need for repair and maintenance was strongly felt across the region.



Some residents expressed support for providing more housing options that are affordable and safe. One commented on the lack of housing available for residents making median family income for the region.

Some residents noted the lack of good paying jobs nearby and the resulting need to commute outside the county for work. Many would like to see more jobs that pay livable wages brought to the region.

San Francisco Bay Area commuters are struggling with heavy congestion and long travel times. To address congestion, some residents favor adding new lanes and roads, while others would like to see improved bus and rail transit connectivity to Bay Area transit systems.

Some residents commented on the lack of basic services nearby, such as groceries, gas stations, etc. While others noted concerns with blight and personal safety in their communities.



# 2018 RTP/SCS Public Outreach



## ROUND 1: March - June 2017

The first round of public outreach and engagement gathered input to guide the development of scenarios which represent potential alternative futures for the regional transportation system. SJCOG staff asked the public what transportation options are needed, what transportation investments should we prioritize, and how should the region grow? SJCOG staff reached community members at local events, through local organizations, and with community-based groups as partners in historically underrepresented communities. Here is Round 1 by the numbers:

**29**

Community Outreach Events

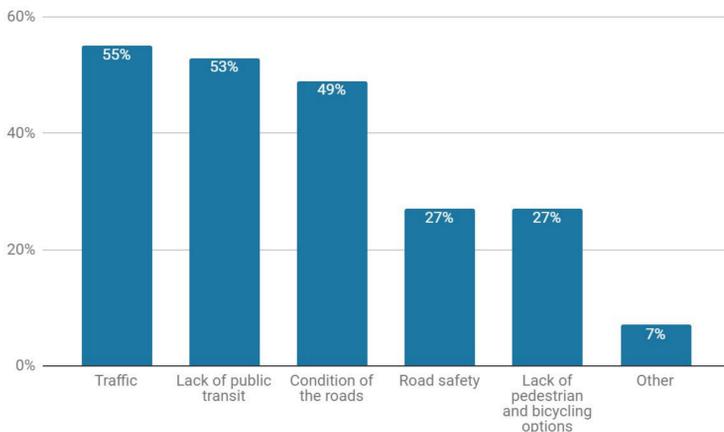
**2200+**

Community members engaged

**1222**

Surveys Collected

### Top Transportation Problems



### Needs a Lot of Improvement

- 1 Traffic on the freeways
- 2 Pavement conditions
- 3 Commute times

### Regional Transportation Goals

★ **A future with less driving** ★

**82%** think it is important to reduce miles traveled by car

**78%** think it is important to increase walking, bicycling, and public transit use

★ **A more prosperous region** ★

**90%** think it is important to increase the number of new jobs in San Joaquin County

### Investment Priorities



Tier 1	Tier 2	Tier 3
<ul style="list-style-type: none"> <li>Fix it first</li> <li>Transit service expansion</li> <li>Optimized routes</li> </ul>	<ul style="list-style-type: none"> <li>Increase road network capacity</li> <li>Protect our environment</li> </ul>	<ul style="list-style-type: none"> <li>Anticipate new technology</li> </ul>

# 2018 RTP/SCS Public Outreach



## ROUND 2: September - October 2017

The second round of public outreach and engagement presented four scenarios which represent potential alternative futures for the regional transportation system. SJCOG staff asked the public to consider how the different scenarios impact mobility and environment and give each scenario a rating. SJCOG staff reached community members through social media, at local events, through local organizations, and with the help of community-based groups to reach smaller communities in the eastern rural areas of San Joaquin County. Here is Round 2 by the numbers:

**13**

Community Outreach Events

**1900+**

Community members engaged

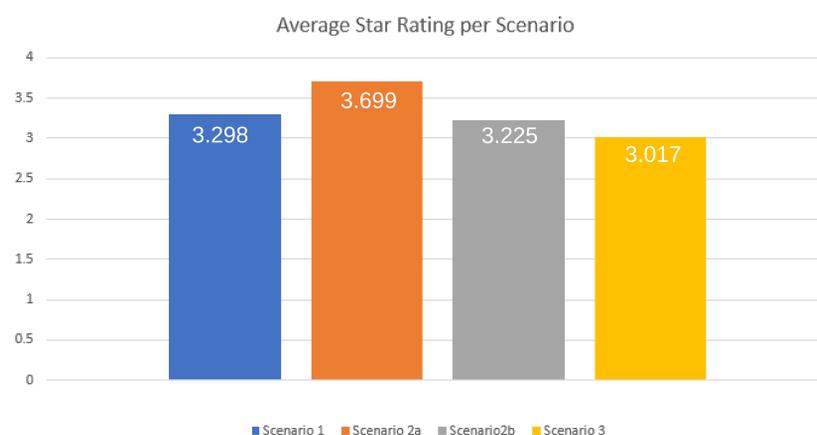
**590**

Surveys Collected

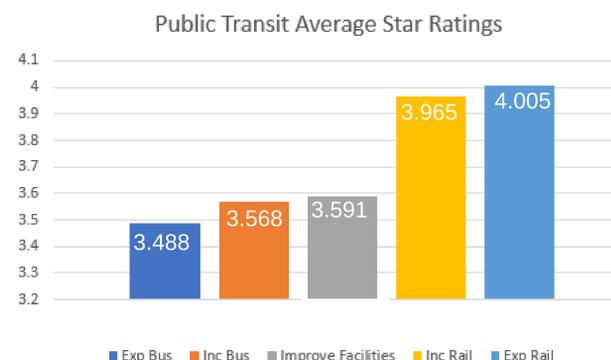
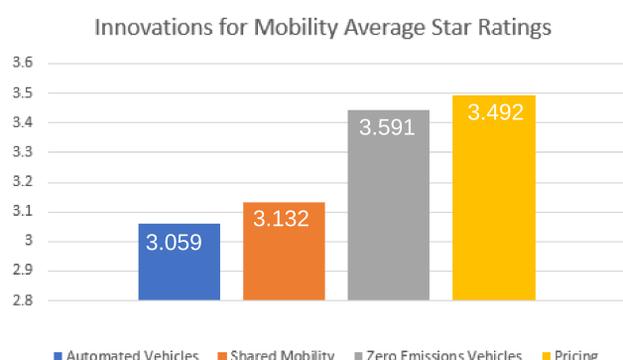
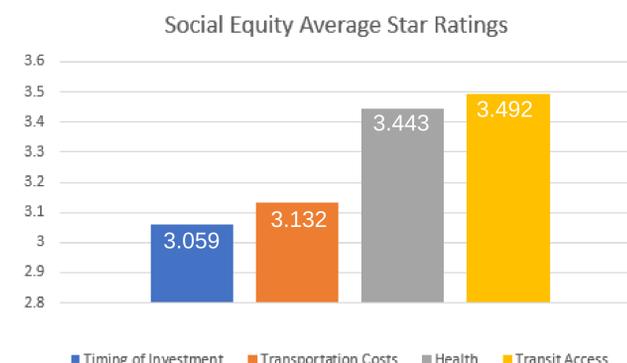
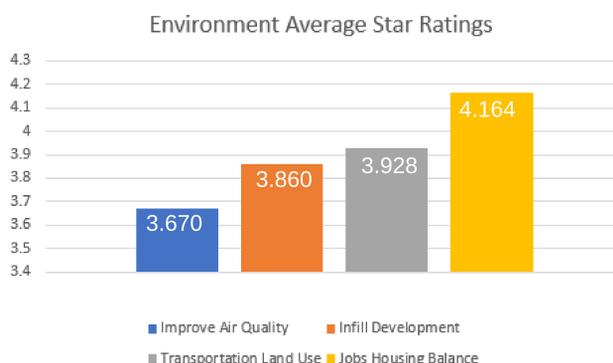
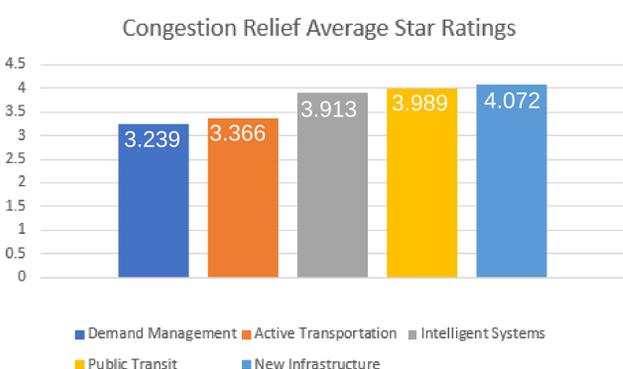
### Priorities



### Public Response to Scenarios



### Tending to Regional Issues



## MEMO

To: RTP/SCS Working Group

From: SJCOG Staff

Date: November 8, 2017

RE: How does the RTP/SCS impact Environmental Justice communities?

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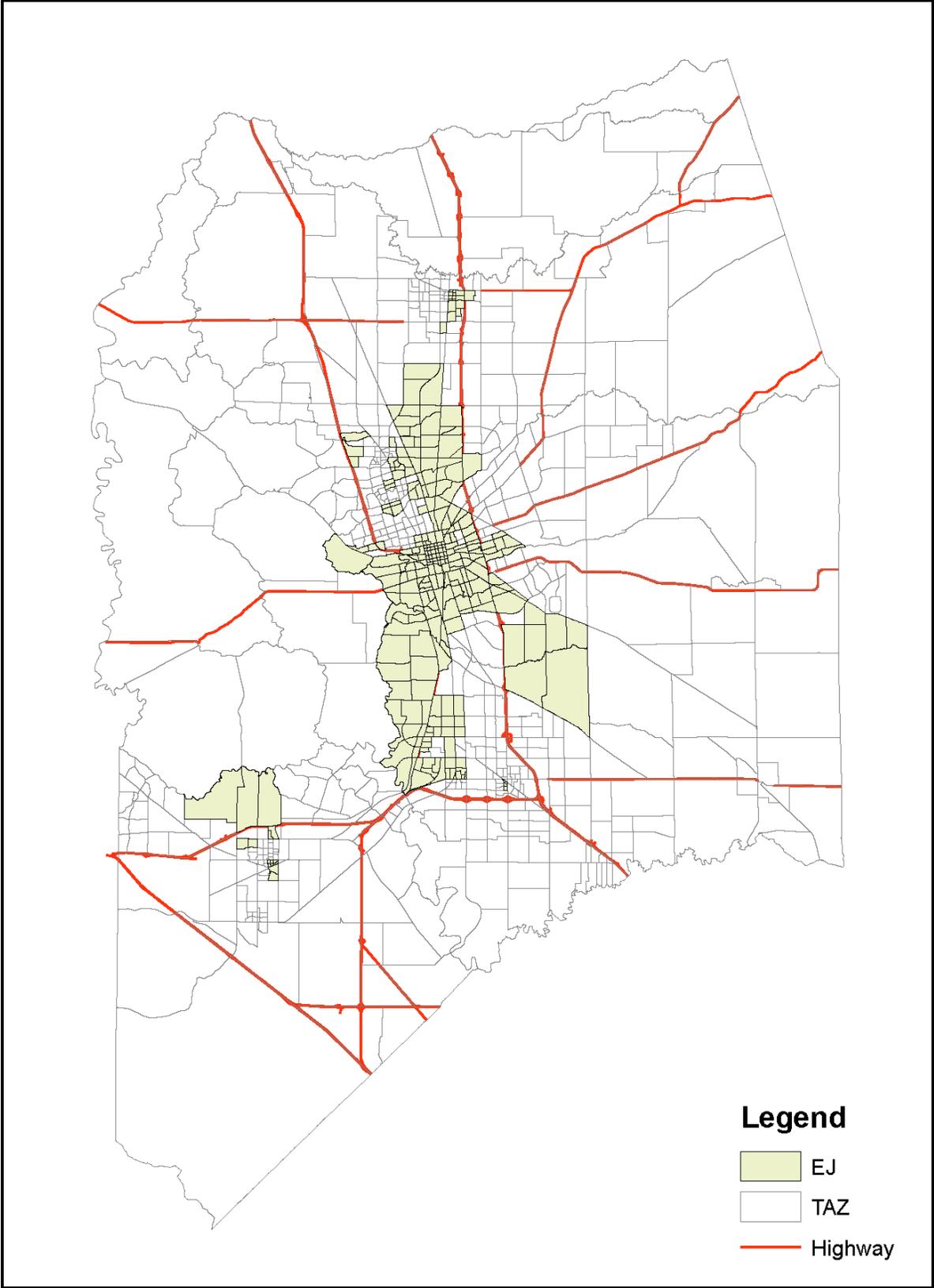
To determine 2018 Regional Transportation Plan & Sustainable Communities Strategy (RTP/SCS) impacts to the region's minority and low-income populations, and in accordance with federal and state statutes, SJCOG estimates the distribution of benefits and burdens of proposed land use and transportation policies and projects on disadvantaged communities. For the purposes of this work, SJCOG defines Environmental Justice communities as any census block group that meets the following conditions:

- Greater than 70% of the population identifies as minority (e.g. NOT non-white, non-Hispanic); and/or
- Greater than 30% of the population lives below the federal poverty level.

Using these criteria, Environmental Justice (EJ) Communities were identified across the region, with many located within the urban core of San Joaquin County (Figure 1). Overall, the areas highlighted in Figure 1 cover approximately 30% of the regional population.

Using land use and transportation modeling tools available to SJCOG, various performance metrics were examined to determine RTP/SCS impacts on EJ communities compared to non-EJ communities in the region across the scenarios. The results of this analysis are summarized in this memo.

Figure 1. San Joaquin County Environmental Justice Communities



System Efficiency

Figure 2. Housing & Jobs Near High Quality Transit – San Joaquin County Total

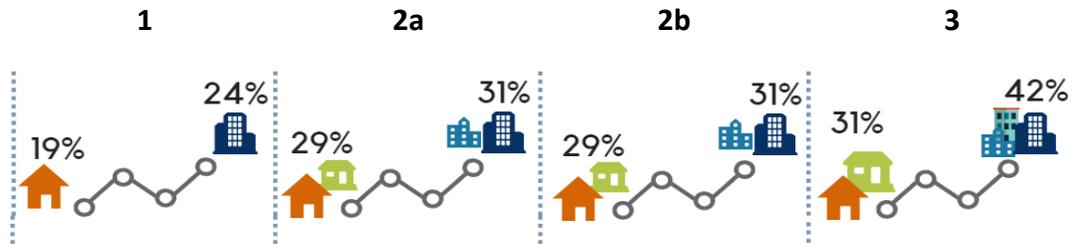


Table 1. New Housing and Jobs Near High Quality Transit – EJ versus Non-EJ Communities

	1		2a		2b		3	
	Housing Units	Jobs						
EJ	14%	18%	19%	26%	19%	26%	23%	29%
Non-EJ	4%	6%	11%	5%	11%	5%	8%	13%

High quality public transit access is an important indicator for EJ communities, where car ownership rates are statistically lower and thus dependency on other modes of transportation are higher than the general population. Adding housing and jobs that are near high quality public transit helps to improve the ability to get around without a car. Across each of the scenarios, EJ communities are assumed to receive a larger share of new housing and new jobs near high quality transit compared to non-EJ communities. Scenario 3 represents the greatest positive impact for EJ communities under this performance metric.

Quality of Life & Public Health

Figure 3. Housing Mix: Multi-family / Single-Family – San Joaquin County Total

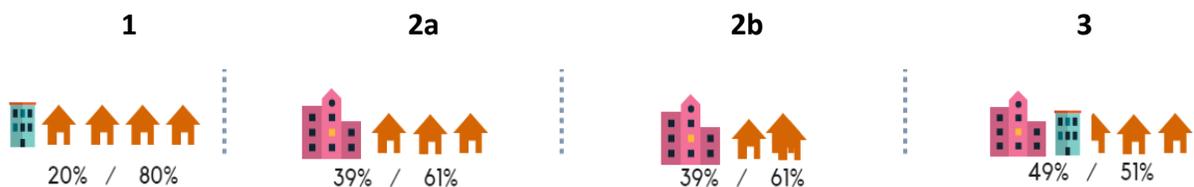


Table 2. Housing Mix by Type - EJ versus Non-EJ Communities

	1		2a		2b		3	
	Multi-family	Single Family						
<b>EJ</b>	38%	63%	47%	52%	47%	52%	51%	48%
<b>Non-EJ</b>	14%	86%	36%	63%	36%	63%	48%	53%

Housing mix is yet another important indicator for EJ communities, where housing affordability weighs heavily on a household’s ability to pay for other critical needs, such as food, clothing, and transportation. A more diverse housing mix can help to assure that individuals and families at all income levels can have a safe place to stay. When compared to non-EJ communities, EJ communities are assumed to see new housing development with a greater emphasis on multi-family housing options with each scenario. Scenario 3 presents the most aggressive assumptions on increased multi-family housing options.

Figure 4. Percent of All Households within 500 Feet of Freeway – San Joaquin County Total

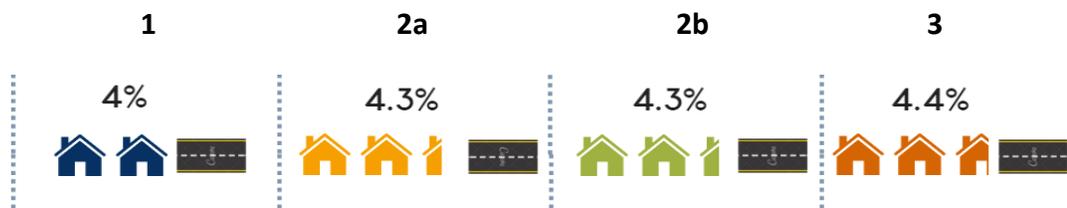


Table 3. Percent of All Housing Units within 500 Feet of Freeway - EJ versus Non-EJ Communities

	1	2a	2b	3
	<b>EJ</b>	32.2%	31.3%	31.3%
<b>Non-EJ</b>	67.8%	68.6%	68.6%	68.4%

Freeways are one of the most pressing concerns for air pollution and studies point out that there are health risks associated with living nearby. People in these areas suffer higher rates of asthma, heart attacks, strokes, and lung cancer. In Table 3, EJ communities have less housing units within 500 feet of freeway compared to non-EJ communities. It is important to note that EJ communities make up approximately 30% of the regional population, yet the scenarios show at least 31.3% of all housing units are within 500 feet of freeway in San Joaquin County. This may suggest a disproportionately adverse effect for EJ communities in the region and will require measures to minimize or mitigate these effects.