The San Joaquin Council of Governments is in compliance with the Americans with Disabilities Act and will make all reasonable accommodations for the disabled to participate in employment, programs and facilities. Persons requiring assistance or auxiliary aid in order to participate should contact Rebecca Calija at (209) 235-0600 at least 24 hours prior to the meeting.

PARKING:
For your convenience, parking is available at the COG Regional Center. There is additional parking available at Public Parking Lot K, located on American Street, just south of Weber Avenue. Additional meter parking is available on Weber Avenue.

AGENDA

1. Call to Order / Introductions / Roll Call

2. Minutes: January 9, 2019

3. Public Presentation
   At this time, the public may address the Technical Advisory Committee on any non-agendized item that is within the subject matter of this agency. If a member of the public wishes to speak on an agenda item he or she is invited to address the Technical Advisory Committee at the time the item is up for consideration. A five-minute maximum time limit for a speaker will apply to all “items from the audience”. The determination of whether an item is within the subject matter of the Committee is a discretionary decision to be made by the chair of the Technical Advisory Committee.

4. Technical Items: B through E are available for action by the committee. The left hand column identifies only recommendations from staff.

   Action   A. Consent Calendar Items: F through G

   Discussion  B. Regional Transportation Plan Amendment for Valley Link (Verbal Report) (Niblock/Chesley)

   Action   C. One Voice® Regional Projects Criteria (Chesley)
Action D. FY 2019/20 Congestion Mitigation and Air Quality Program Call for Projects: Funding Recommendations (Niblock)

Discussion E. 2022 Regional Transportation Plan/Sustainable Communities Strategy Briefing: Scenario Planning Defined (Corrales)

CONSENT CALENDAR

Information F. 2019 Measure K Strategic Plan Schedule (Ripperda)

Action G. FY 2020/21 Local Transportation Fund Revenue Estimate and Apportionment Schedule (Dial)

5. Other Matters of Business

6. Meeting Adjourned to Thursday, March 12, 2020 at 10:00 a.m.
AGENDA ITEM 2
1. Call Meeting to Order/Introductions:
George Lorente called the meeting to order at 10:00 a.m. and introductions were made.

2. Meeting Minutes from November 14, 2019:
Mr. Lorente indicated he has a correction to the minutes regarding Alejandro Gomez being in attendance for RTD rather than himself.

Correction noted, it was moved/seconded (Lovell/Lantsberger) to approve the meeting minutes from November 14, 2019. Motion passed unanimously by voice vote.

3. Public Presentation:
None.

4. Technical Items for Discussion and Action: B through F
A. Consent Calendar:

G. Draft Congested Corridor Plan
H. Reissuance of Fiscal Year 2019-20 State Transit Assistance Revenue and Apportionment Schedule
I. FY 2019-20 Local Transportation Fund Revenue Update and Draft FY 2020-21 Revenue Estimate & Apportionment Schedule
J. Draft Fiscal Year 2020/21 Overall Work Program (OWP)

It was moved/seconded (Lovell/Lantsberger) to approve the consent calendar. Motion passed unanimously by voice vote.

Jeremy Terhune said the Technical Advisory Committee (TAC) really misses San Joaquin County at their meetings so they would like to get all San Joaquin County involved in and included in the plan. Therefore, invites went out to the jurisdictions.

Sofia Zander stated her firm has been hired to develop the master plan. They currently completed the kickoff and plan to embark on a public outreach campaign in the spring. After the draft plan is complete, they would like to convene another meeting to get feedback from all the agencies including San Joaquin County and then present the final plan in Winter 2021.

Ms. Gayle asked if they get federal funding on the new national designation. Mr. Terhune confirmed they received more than $100,000 to develop a project management plan. The whole process is about the opportunities that can arise.

Mr. Terhune indicated they will distribute material to the committee through COG.

This item was for information only.

**John Andoh, Najee Zarif, and Elizabeth Quilici joined the meeting during the discussion of this item.**

C. Adoption of 2019 Measure K Strategic Plan Revenue Estimate and Status Update:
Steve Dial stated SJCOG staff recommends keeping the Measure K Renewal revenue estimate at the current level of $2.6 billion. Upon adoption of the revenue estimate, PFM will prepare a cash flow analysis of the projects to prepare the Draft Strategic Plan for review in March 2020. Further, staff will be looking to receive recommendations from the committee regarding project delivery schedules already in the expenditure.

Mr. Ripperda said that he and Ryan Niblock will be setting up meetings with the jurisdictions’ staff to discuss the scope costs and schedules for projects.

It was moved/seconded (Lorente/Zaca) to recommend that the SJCOG Board adopt the 2019 Measure K Strategic Plan Revenue Estimate of $2.6 billion. Motion passed unanimously by voice vote.
D. Consolidated Transportation Services Agency (CTSA) Annual Report:
Joel Campos announced that SJCOG staff is asking Access San Joaquin RTD to deliver a report of the CTSA services as part of their annual review process.

Ms. Gayle stated RTD is preparing the requested information.

Mr. Lovell asked if a timeline has been set to deliver the report. Ms. Gayle said RTD staff agreed to deliver the report by the end of January.

It was moved/seconded (Lantsberger/Lovell) to request RTD (operating as Access San Joaquin CTSA), to deliver an annual report of services as part of the annual review process no later than January 31, 2020. Motion passed unanimously by voice vote.

E. SB 743 – Vehicle Miles Traveled Analysis (No Staff Report):
Travis Yokoyama stated staff is requesting input to identify how SJCOG can help the jurisdictions prepare for SB 743’s implementation on July 1, 2020.

Mr. Chang stated the City of Lodi is in the process of doing the VMT study themselves so they are not looking for SJCOG’s help.

Mr. Zarif said San Joaquin County has started the process themselves but they are concerned that the jurisdictions throughout the county are doing different things. There needs to be some kind of consistency so they would be supportive of a working group.

Mr. Yokoyama asked if the Cities of Manteca, Tracy or Ripon would like to comment.

Mr. Koosun indicated they do not need COG’s assistance.

This item was for discussion only.

F. 2021 Active Transportation Program Cycle 5 Draft Guidelines:
David Ripperda announced that this Active Transportation Program (ATP) cycle will provide a great opportunity to do a combined Call for Projects, which will be available for the next four fiscal years, totaling $18.5 million. Feedback was requested from the committee.

Mr. Lorente stated RTD would be open to looking into combining the Call for Projects to streamline the process.

Mr. Ripperda said the California Transportation Commission (CTC) is still developing the draft guidelines. They will be taking the final guidelines to the CTC in March, then applications will be due in June. However, if planning to do the combined Call for Projects, applications will be due in early fall. The CTC will be adopting their recommendations in December and SJCOG will be adopting their recommendations in summer 2021.

This item was for discussion only.
5. **Other Matters of Business:**
Mr. Stark announced that Allegiant and United have lowered their fares.

Ms. Lantsberger requested for a status on the CMAQ applications. Mr. Ripperda stated staff is currently working with the review committee to look at the applications. It will be coming back in February.

6. **Adjournment:**
There being no further business to discuss, the meeting was adjourned at 10:51 a.m. to Thursday, February 13, 2020, at 10:00 a.m.
STAFF REPORT

SUBJECT: One Voice® Regional Projects Criteria

RECOMMENDED ACTION: Motion to Recommend the Policy Below to the SJCOG Board of Directors

DISCUSSION:

In 2019, the SJCOG Board adopted seven projects as regional priorities for the One Voice® effort in Washington D.C. The effort was not easy, and the board expressed before and after the trip dissatisfaction with the results.

The seven projects that were adopted for the 2019 One Voice® trip were:

Aviation:
- Stockton Metro Airport Terminal Modernization/Expansion (County)

Bus/Rail:
- Stockton Diamond Grade Separation (SJRRC)
- Valley Link Commuter Rail Project (Tracy)
- Shared Autonomous Vehicle (SAV) Demonstration Project (RTD)

Roadway:
- Central Valley Gateway Project (Tracy)
- SR 99/120 Interchange Improvements (Manteca)
- Grant Line Road Improvements (County)

A small group of board members was convened and laid out several principles that they would like to see implemented in the 2020 process. These principles were broadly expressed. They indicated the following:

- They wanted to limit the number of regional projects to no more than three
- They wanted projects to be regional in nature
- They wanted a premium placed on project readiness
- They wanted projects to be eligible to receive federal funding

Staff Recommended Policy Language:
There was extensive discussion in January at the Executive Committee and the SJCOG Board with support for the four principles. SJCOG staff is recommending some further definition around these principles which are stated below:
• Limit the number of regional projects to no more than three.
• Projects should be regional in nature meaning their impact extends beyond the immediate location of the project to other jurisdictions within the region.
• Project readiness should be key to selection meaning any request should be able to utilize funding, or whatever authority is granted, within two years.
• A project must be eligible to receive federal funding at the time of request.

This is only the criteria for identifying regional projects. Local projects will not be affected and will be brought back to the One Voice® trip as they have in previous years.

Based on these criteria, it is likely only the State Route 99/120 Interchange project and the Tracy Gateway projects would still make the regional priority list. Projects with a CEQA only document like the Grant Line Road project and the Valley Link project would be challenged to demonstrate they are eligible for federal funding or could utilize those funds within two years. The RTD project would likely not qualify as regional in nature. The airport terminal project and the Stockton Grade Separation projects would not be “project ready”.

As a result of a change in criteria, it could be that other local projects submitted might rise to the level of being regional in nature.

Prepared by: Andrew T. Chesley, Executive Director
AGENDA ITEM 4D
STAFF REPORT

SUBJECT: Fiscal Year 2019/20 Congestion Mitigation and Air Quality Program Call for Projects: Funding Recommendations

RECOMMENDED ACTION: (1) Recommend that the SJCOG Board approve the CMAQ programming recommendations (2) Recommend that two unfunded projects be placed on a CMAQ Contingency List, which would expire upon the start of the next CMAQ call for projects

DISCUSSION:

The San Joaquin Council of Governments has completed the Board-approved Congestion Mitigation and Air Quality (CMAQ) Project Selection Process and has selected the attached list of projects as those proposed for programming in the 2019 Federal Transportation Improvement Program (FTIP). The recommended list of projects is for the CMAQ funding cycle covering Fiscal Years (FY) 2020/21, FY 2021/22, and FY 2022/23 and includes $20.5 million to be programmed in CMAQ funds for new projects. The CMAQ program funds transportation projects or programs that reduce carbon monoxide, ozone, and particulate matter emissions. Examples of CMAQ-funded projects include alternative fuel vehicles, transit projects, bicycle/pedestrian projects, traffic signal synchronization and signal installation projects, as well as intermodal freight facility projects.

FISCAL IMPACT:

Approval of the CMAQ funding recommendations will result in $20.5 million in CMAQ funds to be programmed in FFYs 2020/21, FY 2021/22, and FY 2022/23 of the SJCOG 2019 FTIP.
BACKGROUND:

CMAQ Funding Availability

Under the Fixing America’s Surface Transportation Act (FAST Act), CMAQ funds are apportioned to the region, for distribution by SJCOG. In total, approximately $20.5 million is available to conduct a Call for Projects.

CMAQ Call for Projects and Scoring Committee Recommendations

Based on funding estimates received from Caltrans and the Board-approved CMAQ Scoring Criteria, SJCOG issued a CMAQ Call for Projects on August 13, 2019. At the close of the application filing period (October 25, 2019), SJCOG received 19 project applications requesting $35,889,516 in CMAQ funding.

SJCOG formed a CMAQ Technical Review Committee – the membership of which is made up of representatives from our partner agencies – to review applications to confirm project eligibility, confirm calculations, and ask applicants to provide additional back up data as needed. The Technical Review Committee met on December 19, 2019. At their meeting, the Technical Review Committee ranked all applications based on the SJCOG Board-approved scoring criteria. A ranked list of project submissions is provided in Table 1.

Based on the scores shown in Table 1, the committee’s recommendation is that the first 14 projects be funded. In doing this, funded projects would offer an average cost-effectiveness of $39.77 per pound of emissions reduction (i.e., projects above the dashed red line in Table 1).

Based on the policy adopted by the SJCOG Board, unfunded projects offering a competitive CMAQ cost-effectiveness score would be eligible to be placed on a contingency list. Projects on the contingency list would be positioned to receive CMAQ funds if there were project cost savings, significant delays, or undeliverable projects. The project sponsors would be contacted to see if they could mobilize and use any funding to advance the project. The contingency list would expire upon the start of the next CMAQ call for projects. Based on the CMAQ cost-effectiveness scores, SJCOG staff recommends that the City of Manteca’s “Phase II Communications Equipment” project and RTD’s “Zero-Emission Electric Bus Replacement (15 2010 and 2021 Hybrid Buses)” project be placed on the contingency list.

Programming of Projects

SJCOG staff will work with the local agencies to prioritize the programming of CMAQ projects based on the ranked list and priorities established under the SJCOG Project Delivery Policies. SJCOG staff will program preliminary engineering phases for the projects in earlier years to allow a substantial amount of time for completing the preliminary work before the construction phase.
SJCOG CMAQ Cost-Effectiveness Policy
The eight San Joaquin Valley Metropolitan Planning Organizations (MPOs) adopted CMAQ Cost-Effectiveness policies in 2007. These policies require SJCOG to program at least 20 percent of the CMAQ funds available that meet a CMAQ cost-effectiveness threshold of $45 per pound (or less) for emission reductions, during the four-year FTIP programming period. Based on the CMAQ funding recommendations, SJCOG will allocate a minimum of $6.3 million (31 percent) to CMAQ projects that meet the cost-effectiveness threshold.

RECOMMENDED ACTION:

(1) Recommend that the SJCOG Board approve the FY 2019/20 CMAQ programming recommendations outlined by staff.

(2) Recommend that the two unfunded projects be placed on a CMAQ contingency list, which would expire upon the start of the next CMAQ call for projects.

ATTACHMENT:
None.

Prepared by: Ryan Niblock, Senior Regional Planner
<table>
<thead>
<tr>
<th>Applicant</th>
<th>Project Title</th>
<th>Total Project Cost</th>
<th>Total CMAQ Request</th>
<th>Cost Effectiveness ($ per lb.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Joaquin County</td>
<td>Hospital Solar EV Charger</td>
<td>$840,000</td>
<td>$790,000</td>
<td>$10.99</td>
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<tr>
<td>Stockton</td>
<td>Transportation Management Center Equipment Upgrade</td>
<td>$4,056,000</td>
<td>$3,906,000</td>
<td>$15.27</td>
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<tr>
<td>San Joaquin County</td>
<td>Mountain House Parkway Traffic Signal Synchronization Project</td>
<td>$102,500</td>
<td>$102,500</td>
<td>$15.55</td>
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<tr>
<td>Ripon</td>
<td>East Main Street Traffic Signal</td>
<td>$720,000</td>
<td>$480,000</td>
<td>$25.41</td>
</tr>
<tr>
<td>Manteca</td>
<td>2019 Street Sweeper Replacement</td>
<td>$1,050,000</td>
<td>$929,565</td>
<td>$26.52</td>
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<tr>
<td>Ripon</td>
<td>One CNG Solid Waste Collection Vehicle</td>
<td>$375,000</td>
<td>$100,000</td>
<td>$28.85</td>
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<tr>
<td>SJRTD</td>
<td>Zero-Emission Electric Bus Replacement Project (2 2006 Hybrid Buses)</td>
<td>$2,140,000</td>
<td>$2,140,000</td>
<td>$96.30</td>
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<tr>
<td>Stockton</td>
<td>Arch Airport Road Traffic Synchronization and Signal Prioritization Project</td>
<td>$1,257,000</td>
<td>$1,157,000</td>
<td>$99.33</td>
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<tr>
<td>SJIRRC</td>
<td>Railcars Purchase</td>
<td>$11,625,000</td>
<td>$7,500,000</td>
<td>$115.16</td>
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<tr>
<td>Port of Stockton</td>
<td>Port of Stockton Near Zero Emission Cargo Handling Equipment</td>
<td>$614,000</td>
<td>$614,000</td>
<td>$126.87</td>
</tr>
<tr>
<td>San Joaquin County</td>
<td>Signalization of Mariposa Road and Jack Tone Road</td>
<td>$700,000</td>
<td>$619,700</td>
<td>$137.01</td>
</tr>
<tr>
<td>Stockton</td>
<td>Alpine &amp; Alvarado Traffic Signal with Intersection Coordination</td>
<td>$1,040,000</td>
<td>$921,000</td>
<td>$139.36</td>
</tr>
<tr>
<td>Tracy</td>
<td>Adaptive Signal System on Grant Line Road</td>
<td>$925,000</td>
<td>$875,000</td>
<td>$150.29</td>
</tr>
<tr>
<td>Tracy</td>
<td>Signalization at Corral Hollow Road &amp; Linne Road</td>
<td>$660,000</td>
<td>$330,000</td>
<td>$154.70</td>
</tr>
<tr>
<td>Manteca</td>
<td>City of Manteca Phase II Communications Equipment</td>
<td>$4,855,000</td>
<td>$4,563,000</td>
<td>$199.39</td>
</tr>
<tr>
<td>SJRTD</td>
<td>Zero-Emission Electric Bus Replacement Project (15 2010 and 2021 Hybrid Buses)</td>
<td>$16,057,500</td>
<td>$8,109,000</td>
<td>$322.39</td>
</tr>
<tr>
<td>Lodi</td>
<td>Lodi Electric Bus Demonstration</td>
<td>$1,291,252</td>
<td>$774,751</td>
<td>$539.89</td>
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<tr>
<td>Stockton</td>
<td>San Joaquin &amp; Acacia Conversion to Roundabout</td>
<td>$1,666,000</td>
<td>$1,475,000</td>
<td>$610.00</td>
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<tr>
<td>San Joaquin County</td>
<td>Autonomous Transit Vehicle (ATV) New Service Project</td>
<td>$636,000</td>
<td>$503,000</td>
<td>$2,019.07</td>
</tr>
</tbody>
</table>

**Total:** $49,974,252 $35,889,516
Attachment A:

Description of Project Submissions
<table>
<thead>
<tr>
<th>Project Applicant</th>
<th>Project Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Joaquin County</td>
<td>Hospital Solar EV Charger</td>
<td>The project would install electric vehicle charging equipment at San Joaquin General Hospital. The charging station will be powered by solar energy, meaning that it will not draw from the electrical grid (whose power is generated through a mix of sources, including combustion of fuels).</td>
</tr>
<tr>
<td>Stockton</td>
<td>Transportation Management Center Equipment Upgrade</td>
<td>Stockton plans to upgrade the current Transportation Management System, including upgrading 230 traffic signal controllers and 297 unmanaged ethernet switches to managed switches. These upgrades will allow the city to manage congestion hot spots in real time, minimizing vehicle stopping and queuing.</td>
</tr>
<tr>
<td>San Joaquin County</td>
<td>Mountain House Parkway Traffic Signal Synchronization Project</td>
<td>This project will implement traffic signal coordination between Bryon Road and Von Sosten Road. The scope of the project will include the installation of wireless modems at five intersections, procurement of a centralized computer system, and signal coordination to reduce air pollution and congestion.</td>
</tr>
<tr>
<td>Ripon</td>
<td>East Main Street Traffic Signal</td>
<td>The project would install a four-way traffic signal, with ADA compliant ramps, and restriping of the intersection. Installation of the signal will improve level of service from &quot;LOS F&quot; to &quot;LOS C.&quot;</td>
</tr>
<tr>
<td>Project Applicant</td>
<td>Project Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Manteca</td>
<td>2019 Street Sweeper Replacement</td>
<td>The City would replace three of its oldest street sweepers with new sweepers powered by compressed natural gas. Such a project provides air quality benefit in two ways: (1) replacement of aging equipment with cleaner equipment, and (2) removal of particulate matter from roadways, minimizing the impact of traffic on road dust.</td>
</tr>
<tr>
<td>Ripon</td>
<td>One CNG Solid Waste Collection Vehicle</td>
<td>The City would replace its existing diesel fueled refuse truck with a new refuse truck powered by compressed natural gas.</td>
</tr>
<tr>
<td>SJRTD</td>
<td>Zero-Emission Electric Bus Replacement Project (2 2006 Hybrid Buses)</td>
<td>The project would replace two 2006 hybrid diesel-electric buses with two zero-emission electric buses.</td>
</tr>
<tr>
<td>Stockton</td>
<td>Arch Airport Road Traffic Synchronization and Signal Prioritization Project</td>
<td>The project includes installation of two traffic signals, crosswalks, intersection lighting, lane striping, signs and signal priority, retiming and synchronization. Currently, the existing traffic signals on Arch Airport Road are operated in “Free” mode, and are not sensitive to traffic levels or stopped delay. Implementation of the project will substantially improve congestion along the corridor.</td>
</tr>
<tr>
<td>Project Applicant</td>
<td>Project Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SJRRC</td>
<td>Railcars Purchase</td>
<td>Purchase of three railcars and associated spare parts to support the expansion of ACE service. With the surrounding highway system at full capacity, ACE expansion will help to divert cars to rail, helping to address the regional congestion experienced on I-5, I-205, I-580, SR-99, and SR-120.</td>
</tr>
<tr>
<td>Port of Stockton</td>
<td>Port of Stockton Near Zero Emission Cargo Handling Equipment</td>
<td>The project would replace two existing diesel-powered cargo front end loaders with new zero-emission cargo handling equipment. Port equipment used to offload ships are a significant contributor to emission levels in the county. Replacement of this equipment with zero-emission equipment will have an immediate impact on the health of port employees and nearby residents.</td>
</tr>
<tr>
<td>San Joaquin County</td>
<td>Signalization of Mariposa Road and Jack Tone Road</td>
<td>This project proposes an intersection improvement at the current all-way STOP controlled intersection of Mariposa Road at Jack Tone Road. Signalization will improve the peak hour level of service from &quot;LOS D&quot; to &quot;LOS B.&quot;</td>
</tr>
<tr>
<td>Stockton</td>
<td>Alpine &amp; Alvarado Traffic Signal with Intersection Coordination</td>
<td>The project would convert the existing side-street stop at E. Alpine Avenue and Alvarado Avenue into a signal, as well as coordinate signals along the Alpine Avenue corridor. This area experiences significant delay and queuing - which this project will help to alleviate.</td>
</tr>
<tr>
<td>Project Applicant:</td>
<td>Tracy</td>
<td></td>
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<td>-------------------</td>
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<td></td>
</tr>
<tr>
<td><strong>Project Name:</strong></td>
<td>Adaptive Signal System on Grant Line Road</td>
<td></td>
</tr>
<tr>
<td><strong>CMAQ Request:</strong></td>
<td>$875,000</td>
<td></td>
</tr>
<tr>
<td><strong>Emissions Reduced (lbs):</strong></td>
<td>5,822</td>
<td></td>
</tr>
<tr>
<td><strong>Cost Effectiveness ($ per lb):</strong></td>
<td>$150.29</td>
<td></td>
</tr>
<tr>
<td><strong>Description:</strong></td>
<td>The project would install adaptive signal controllers, detection equipment, and software at signalized intersections on Grant Line Road from Byron Road to Naglee Road at six locations. The corridor currently operates at deficient LOS, and this project would restore operations to an acceptable level - thereby reducing congestion and emissions.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Applicant:</th>
<th>Tracy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Name:</strong></td>
<td>Signalization at Corral Hollow Road &amp; Linne Road</td>
</tr>
<tr>
<td><strong>CMAQ Request:</strong></td>
<td>$330,000</td>
</tr>
<tr>
<td><strong>Emissions Reduced (lbs):</strong></td>
<td>2,133</td>
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<tr>
<td><strong>Cost Effectiveness ($ per lb):</strong></td>
<td>$154.70</td>
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<tr>
<td><strong>Description:</strong></td>
<td>The project would install a new signal at the intersection of Corral Hollow Road and Linne Road. Signalization would improve the level of service from &quot;LOS F&quot; to &quot;LOS C.&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Applicant:</th>
<th>Manteca</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Name:</strong></td>
<td>City of Manteca Phase II Communications Equipment</td>
</tr>
<tr>
<td><strong>CMAQ Request:</strong></td>
<td>$4,563,000</td>
</tr>
<tr>
<td><strong>Emissions Reduced (lbs):</strong></td>
<td>22,885</td>
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<tr>
<td><strong>Cost Effectiveness ($ per lb):</strong></td>
<td>$199.39</td>
</tr>
<tr>
<td><strong>Description:</strong></td>
<td>The project will interconnect (via fiber optic cable) existing traffic signals and City buildings along 8.5 miles of city roadway. Interconnecting the traffic signals will enable coordination along the corridors and also provide the City with remote monitoring of the traffic signals during incidents and fine tuning the signal timing during the peak periods.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Applicant:</th>
<th>SJRTD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Name:</strong></td>
<td>Zero-Emission Electric Bus Replacement Project (15 2010 and 2012 Hybrid Buses)</td>
</tr>
<tr>
<td><strong>CMAQ Request:</strong></td>
<td>$8,109,000</td>
</tr>
<tr>
<td><strong>Emissions Reduced (lbs):</strong></td>
<td>25,153</td>
</tr>
<tr>
<td><strong>Cost Effectiveness ($ per lb):</strong></td>
<td>$322.39</td>
</tr>
<tr>
<td><strong>Description:</strong></td>
<td>The project would replace fifteen 2010 and 2012 hybrid diesel-electric buses with fifteen zero-emission electric buses.</td>
</tr>
<tr>
<td>Project Applicant</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Lodi</td>
<td>The project would replace one 2012 compressed natural gas bus with a zero-emission electric bus.</td>
</tr>
<tr>
<td>Stockton</td>
<td>The proposed project will convert an existing signal-controlled intersection to a roundabout at N. San Joaquin Street and E. Acacia Street.</td>
</tr>
<tr>
<td>San Joaquin County</td>
<td>This project will implement a new, autonomous battery-operated transit service between Mountain House and the RTD/ACE regional transit station. It also includes a two-year operational budget. The project would function as a &quot;first mile / last mile&quot; service to complement existing regional transit.</td>
</tr>
</tbody>
</table>
AGENDA ITEM 4E
STAFF REPORT

SUBJECT: 2022 RTP/SCS Briefing: Scenario Planning Defined

RECOMMENDED ACTION: Discussion

SUMMARY:

Scenario planning is a process that evaluates the effectiveness of alternative programs, projects or policies on the future of a region. SJCOG staff utilizes scenario planning as a tool to assist decision-makers in the development of an appropriate set of actions to ensure that the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) delivers a world-class regional transportation system.

“A PRIMARY GOAL OF SCENARIO PLANNING IS TO ENGAGE THE GENERAL PUBLIC, THE BUSINESS COMMUNITY, RESOURCE AGENCIES, AND ELECTED OFFICIALS ON A BROAD SCALE; TO GAIN A THOROUGH UNDERSTANDING OF COMMUNITY VALUES, GROWTH TRENDS, AND TRADE-OFFS; AND TO INCORPORATE PARTICIPANTS’ VALUES AND FEEDBACK INTO FUTURE PLANS.”
The Next Generation of Scenario Planning

For the 2018 RTP/SCS (2014, as well), SJCOG staff presented planning scenarios that varied on transportation investment strategies (Figure 1), as well as broadly defined assumptions on development patterns, housing options, growth location and intensity. Each of the scenarios was evaluated with metrics such as infill development, housing mix, regional density, agricultural land lost, building energy use, and water consumption, and others. The SJCOG Board took action to select a preferred scenario from which the 2018 RTP/SCS was developed.

Figure 1. 2018 RTP/SCS Planning Scenarios (excerpt)

Unlike previous scenario planning efforts at SJCOG, the “next generation” of scenario planning will open up a broader conversation about the region’s future and provide the opportunity to explore and anticipate uncertainties in the RTP/SCS. Key features of the 2022 approach to scenario planning will include:

- Alternative futures defined by the level of autonomous vehicle adoption, the extent of climate impacts felt, the impact of job location and commuting behavior, etc.;
- A menu of strategies ranging from policies, projects, and programs to select from;
- An evaluation process that includes stakeholder and public input and tests strategy performance under each alternative future.

External forces beyond our control will create both opportunities and challenges for the region, the end goal of the scenario development process is to develop a preferred package of strategies that performs well across any, and all alternative futures. External forces will form the pillars on which SJCOG future scenarios will be built (Figure 2).
**Figure 2. Example of Assumptions Underlying Future Scenarios**

<table>
<thead>
<tr>
<th>Scenario Pillars</th>
<th>Future 1</th>
<th>Future 2</th>
<th>Future 3</th>
<th>Implementation</th>
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<td>15% increase in transit access</td>
<td>Gentrification and Displacement Risk Assessment</td>
</tr>
</tbody>
</table>

To begin the process of defining alternative futures and developing a menu of strategies, SJCOG staff has prepared a briefing packet (Attachment 1), which includes:

- A conceptual overview of scenario planning practice;
- A review of recent MPO led scenario planning efforts; and
- A preliminary menu of strategies for further development and discussion.
RECOMMENDATION:

This item is for information/discussion; no action is requested at this time.

BACKGROUND:

Following the adoption of the 2018 RTP/SCS, SJCOG initiated several studies intended to not only meet new federal and state planning requirements but also gain a better understanding of emerging issues for future transportation planning. Funded by SB1 Formula Planning funds, eight of these studies are currently underway. To keep SJCOG’s committees, the Board, and the public aware of progress, staff will be presenting information in the form of issue briefings. Besides the direct connection to on-going studies, the presentations will also be responsive to previous Board member questions and present new information for discussion. The intent of the series is to encourage dialogue on emerging transportation issues for the 2022 RTP/SCS.

FUTURE BRIEFING SCHEDULE AND NEXT STEPS:

<table>
<thead>
<tr>
<th>Topic / Study / Planning Activity</th>
<th>Tentative Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation Innovation &amp; Technology (completed)</td>
<td>May 2019</td>
</tr>
<tr>
<td>Transportation Resiliency Defined (completed)</td>
<td>June 2019</td>
</tr>
<tr>
<td>Scenario Planning Defined</td>
<td>February 2020</td>
</tr>
<tr>
<td>Housing and Economy</td>
<td>April 2020</td>
</tr>
<tr>
<td>Scenario Development Framework, Action</td>
<td>June 2020</td>
</tr>
<tr>
<td>Preferred Scenario, Draft</td>
<td>April 2021</td>
</tr>
<tr>
<td>Preferred Scenario, Action</td>
<td>August 2021</td>
</tr>
<tr>
<td>2022 RTP/SCS, Draft</td>
<td>January 2022</td>
</tr>
<tr>
<td>2022 RTP/SCS, Adoption</td>
<td>July 2022</td>
</tr>
</tbody>
</table>

ATTACHMENTS:

- Attachment 1. Scenario Planning Briefing Packet

Prepared by Christine Corrales, Associate Regional Planner, and Hailey Lang, Associate Regional Planner
EMERGING PLANNING ISSUE BRIEFING

SCENARIO PLANNING DEFINED

FEBRUARY 2020// PREPARED BY HAILEY LANG AND CHRISTINE CORRALES
# Table of Contents

**Introduction to Scenario Planning**  
- Benefits of Scenario Planning  
- Challenges and Constraints  
- Types and Scenario Planning  
- Examples of Scenario Planning  

**SJCOG Scenario Planning Efforts**  
- Assumptions of Underlying Scenarios  
  - Assumption: Autonomous Vehicle Adoption  
  - Assumption: Climate Adaptation  
  - Assumption: Housing Production  
  - Assumption: In and Out Commuting  
  - Assumption: Jobs and Economy  
  - Assumption: Vibrant Neighborhoods  

**Next Steps**
WHEN WE PLAN FOR THE FUTURE, WHAT SORT OF FUTURE ARE WE PLANNING FOR?

Technologies, gentrification and displacement, housing production, climate impacts, commuting patterns, and other external forces may alter the future of the San Joaquin County region. To explore a range of challenging questions, SJCOG has developed a revised scenario initiative to better explore these challenges that the region may face. The findings from this process will better inform decision-making on transportation, economic development, risk and uncertainty, and other elements established through the RTP/SCS. The information provided will help guide the public, stakeholders, and elected officials in considering the best strategies to improve regional outcomes.
Introduction to Scenario Planning

“A PRIMARY GOAL OF SCENARIO PLANNING IS TO ENGAGE THE GENERAL PUBLIC, THE BUSINESS COMMUNITY, RESOURCE AGENCIES, AND ELECTED OFFICIALS ON A BROAD SCALE; TO GAIN A THOROUGH UNDERSTANDING OF COMMUNITY VALUES, GROWTH TRENDS, AND TRADE-OFFS; AND TO INCORPORATE PARTICIPANTS’ VALUES AND FEEDBACK INTO FUTURE PLANS.”

Scenario planning is a process that evaluates the effectiveness of alternative policies, plans, and/or programs on the future of a region. This process can provide decision-makers information as they develop transportation plans. Scenarios may be used by stakeholders and the public to explore and debate alternatives and trade-offs. By then testing strategies (programs, projects or policies) that are responsive to input received against performance indicators, decision-makers can select those strategies that perform well under multiple uncertain futures and identify an appropriate set of actions that will ensure world-class infrastructure.

Scenarios are narratives or sets of assumptions that explore plausible trajectories of change. They provide a means of visioning possible future changes and different policy and investment options. Scenarios translate complex thoughts into descriptions about what could be in the future. Stakeholders assess scenarios through qualitative comparison, brainstorming, use of visualization tools, application of travel demand models, and use of scenario analysis tools.

The most common types of scenarios consider land-use, different levels of growth, or changes in policies:

- Cluster or compact land-use;
- Dispersed, fringe, or highway-oriented land-use;
- Corridor land-use;
- Infill or redevelopment;
- Baseline/continuation of trends;
• Growth/socioeconomic change;
• Policy changes; or
• Hybrid of the above.

Other than land-use, scenarios generally include transportation, economic, political, technological or environmental topics. Our intent is to identify the assumptions in each scenario that will drive the evaluation of policies, programs, and projects; not to use the assumptions as a measuring tool as we have in past scenario development.

Since 2004, the Federal Highways Administration (FHWA) has encouraged transportation-focused scenario planning as an approach that enhances the traditional planning process. This type of scenario planning is a technique designed to help citizens and stakeholders in the public and private sectors understand how demographic and land-use changes could potentially impact transportation networks in a region. Scenario planning is also an important tool for performance-based planning and programming (PBPP) and is specifically encouraged by the Moving Ahead for Progress in the 21st Century Act (MAP-21) for the development of metropolitan transportation plans.

Factors that scenario planning may consider include climate impacts, alternative energy, population growth, and population decline. The “next generation” of scenario planning may consider how demographics shifts, such as immigration or aging populations, technology, fuel type and prices, climate change and associated policies, and economic shifts could impact the future.

By predicting and assuming the trajectory of human behavior into the future and integrating potential environmental changes, MPOs can plan their investments to meet these changes. The Lincoln Institute of Land Policy defines scenario planning as methods that involve the analysis of driving forces or key uncertainties and the creation of multiple alternative plausible scenarios. Besides these basic characteristics, scenario planning typically also has these characteristics, some of which are shared with other planning methods:

1. It utilizes systems thinking where the connections between issues are explored,
2. It integrates quantitative and qualitative information,
3. It explicitly considers visionary or normative elements,
4. It is a process and product, and
5. It involves learning and conceptual change as key outcomes.
Benefits of Scenario Planning

Urban planning professionals have increasingly adopted scenario planning methods for projects that address urban land use, transportation, economic development, resilience, and many other issues. Scenario planning can help agencies to convey critical information to policy makers and elected officials who make investment decisions. It also helps agencies to build relationships and forge partnerships that can strengthen their effectives and build their capacity. Lastly, scenario planning can help transportation practitioners. Scenario planning assesses differing long-term strategies.

Additionally, scenario planning can be used within the PBPP process to help stakeholders determine their desired direction. It also helps to visualize and articulate, in both qualitative and quantitative terms, how the combination of strategies could help meet public policy goals and performance targets. It allows for the consideration of how various factors, such as revenue constraints, demographic trends, economic shifts, or technological innovation, can affect a region’s transportation performance. Additionally, it can assess the impacts of external factors such as economic growth and select a future vision and investment priorities. Through scenario planning, we are able to take a comprehensive approach to visioning and make well-informed decisions.
Challenges and Constraints

Although scenario planning is valuable, there are still challenges or constraints that may arise, noted below:

<table>
<thead>
<tr>
<th>CHALLENGE/CONSTRAINT</th>
<th>WHY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning Metric</td>
<td>May be qualitative and/or difficult to assess</td>
</tr>
<tr>
<td>Resource Limitations</td>
<td>Time, money, staff capacity</td>
</tr>
<tr>
<td>Public Involvement</td>
<td>More public involvement may be required than usual</td>
</tr>
<tr>
<td>Funding</td>
<td>Finite amount</td>
</tr>
<tr>
<td>Experience</td>
<td>Lack of knowledge and skill to develop appropriate scenarios</td>
</tr>
<tr>
<td>Data Requirements</td>
<td>May need more specific data</td>
</tr>
<tr>
<td>Growth</td>
<td>Low/no growth challenges</td>
</tr>
</tbody>
</table>

In general, other criticisms of planning include difficulty in determining if the chosen scenarios are truly representative of plausible future trends; if other scenarios are selected, one may arrive at different conclusions. It is also difficult to avoid information overload and most people have a challenge keeping multiple indicators for multiple scenarios clear in their mind. Many people and organizations have a difficult time conceiving single views of the future, let alone multiple views. Likewise, it may be challenging to go from scenario results to decision-making. It is also unclear how scenario analysis performs with other methods to forecast and plan for the future; especially in terms of the cost to develop relative performance.

Types of Scenario Planning

One hallmark of scenario planning is identifying land-use patterns as variables (rather than as static inputs) that could affect transportation networks, investments, and operations. Scenario planning is a flexible approach that can be used in areas of fast, slow, or declining growth to address questions related to quality of life, development, transportation, infrastructure, and financial resources. Scenario planning focuses on a range of interactions between both controllable or internal factors (transportation investments) and less controllable or external factors (political and economic trends). There are numerous types of scenarios, including:
The selection of appropriate tools to help with the scenario planning process is crucial. Most transportation planning agencies engaged in scenario planning use a combination of visualization, forecasting, impact analysis, process-oriented, and community outreach tools to help them transition from a broad, policy-level strategic direction-setting to a more detailed analysis for programming and planning stages.

Examples of Scenario Planning

Each scenario planning effort may address a different set of issues. Some agencies have used scenario planning to help develop a statewide or regional vision for growth and development and to identify specific principles or strategies to support the vision. Other agencies have implemented scenario planning to test possible futures once a vision has already been developed. The following table summarizes examples of scenario planning efforts from a wide range of agencies:
# EXAMPLES OF SCENARIO PLANNING

<table>
<thead>
<tr>
<th>MPO</th>
<th>POPULATION</th>
<th>KEY FEATURES OF SCENARIOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlanta Regional Commission</td>
<td>4,471,045</td>
<td>WORLD-CLASS INFRASTRUCTURE, BUILDING A COMPETITIVE ECONOMY, AND HEALTHY LIVABLE COMMUNITIES</td>
</tr>
<tr>
<td>City and County of Denver</td>
<td>619,968</td>
<td>CREATED 6 VISION ELEMENTS TO SERVE AS BASIS FOR THE COMPREHENSIVE PLAN</td>
</tr>
<tr>
<td>Fresno COG</td>
<td>654,628</td>
<td>VIDEOS TO BRIEF PUBLIC, FOCUSED ON TRANSPORTATION, LAND-USE, PRIME FARMLAND, TOD, AND SMART GROWTH</td>
</tr>
<tr>
<td>MTC</td>
<td>6,866,861</td>
<td>CLIMATE FOCUSED AND UTILIZED THEMATIC SCENARIO PLANNING</td>
</tr>
<tr>
<td>SACOG</td>
<td>1,968,660</td>
<td>IMPLEMENTED SMART GROWTH PRINCIPLES TO ENCOURAGE A VARIETY OF HOUSING CLOSER TO EMPLOYMENT, SHOPPING, AND ENTERTAINMENT. HAS WEB-BASED SCENARIO PLANNING TOOL FOR THE PUBLIC.</td>
</tr>
<tr>
<td>North Central Texas</td>
<td>5,658,096</td>
<td>CREATED 12 GUIDING PRINCIPLES KNOWN AS, &quot;PRINCIPLES OF DEVELOPMENT EXCELLENCE&quot; TO EXPAND REGIONAL VISION</td>
</tr>
<tr>
<td>SCAG</td>
<td>17,425,875</td>
<td>HAS WEB-BASED SCENARIO PLANNING MODEL FOR THE PUBLIC TO REVIEW AND EDIT</td>
</tr>
<tr>
<td>RTSCN</td>
<td>6,096,372</td>
<td>PUBLIC PARTICIPATION TASK FORCE GUIDES SCENARIOS AND STRATEGIES</td>
</tr>
</tbody>
</table>
SJCOG Scenario Planning Efforts

HOW SHOULD WE GET STARTED?

WHERE ARE WE NOW?

WHO ARE WE AND WHERE DO WE WANT TO GO?

WHAT COULD THE FUTURE LOOK LIKE?

WHAT IMPACTS WILL THE SCENARIOS HAVE?

HOW WILL WE REACH OUR DESIRED FUTURE?
An exploratory scenario approach allows for each of the scenarios to pass current and potential strategies through a “stress test”. Each scenario represents an alternative future, which are defined by external factors (long-term trends or one-time events) that affect San Joaquin County residents. Analyzing how the region fares under different external forces, stakeholders will identify strategies that result in the best outcomes. Strategies could range from policies, programs, regulations, or investments.

### SCENARIO DEVELOPMENT STEPS

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td><strong>COLLABORATE</strong>&lt;br&gt;Collaborate and create 3 &quot;futures&quot; to explore in detail. In conjunction with a consultant, experts, and elected officials will develop scenarios to analyze. The &quot;futures&quot; will incorporate external forces and assumptions up until year 2050.</td>
</tr>
<tr>
<td>02</td>
<td><strong>IDENTIFY</strong>&lt;br&gt;Identify which strategies would be most effective to address the challenges posed by each scenario. Outreach workshops to encourage stakeholders, local agencies, and the public to learn about the futures and share which strategies they think would improve outcomes in each future. The SJCOG Board will be briefed on outreach findings and the set of strategies to test out in each future.</td>
</tr>
<tr>
<td>03</td>
<td><strong>ANALYZE</strong>&lt;br&gt;Analyze and simulate the extent to which future outcomes for the San Joaquin County region may improve as a result of selected strategies.</td>
</tr>
</tbody>
</table>
Assumptions of Underlying Scenarios

External forces beyond our control will create both opportunities and challenges for the San Joaquin County region. External forces will form the pillars on which SJCOG scenarios will be built. This section demonstrates how these forces may affect three different futures.

### Examples of Assumptions of underlying scenarios

<table>
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Assumption: Autonomous Vehicle Adoption

The availability of autonomous transportation options will be key in understanding how the region will move in 2050. Adoption rates will directly affect the region’s mobility. Technology advancements and higher adoption rates of both AVs and EVs in the San Joaquin County region can lead to varying futures. If adoption rates increased, a number of current and potential strategies could help this effort:

**Support testing of autonomous vehicles (AV) and initial pilots.**
Supporting testing of AV and initial pilots will help the region further develop technologies. Through this development, the region may see higher adoption rates.

**Encourage AV technology integration with public transit (example: paratransit; first/last mile solutions).**
AV technology integration with public transit may lead to higher adoption rates because public transit vehicles will have that specific technology.

**Support freeway modernization through connected vehicle capabilities (“smart roads”).**
Connected vehicle capabilities will grow and residents will want to use these technologies for better efficiency and safety. Cars that are fully AV or cars that have added AV capabilities will be able to participate in freeway modernization.

**Plan for flexible or adaptive use in new facilities (example: transit projects in which vehicles used today may be automated in the future).**
Planning for flexible or adaptive use in new facilities may increase AV adoption, especially for vehicles previously not automated. This strategy may cover a wide range of vehicles and may be a cost-effective option for many residents.

**Low-cost AV/EV makes mobility more affordable.**
Technology advancements may make it less expense to get from point A to point B, drivers across the San Joaquin region will benefit-especially those with lower incomes and more sensitivity to prices. While travel time may grow or decrease, driverless vehicles make it possible to be productive while traveling to destinations.

**Plan and implement a regional alternative fuels strategy.**
Implementation of a regional alternative fuels strategy may help local agencies and residents on incorporating efficient vehicle technologies. This may also directly affect AV adoption rates.

Assumption: Climate Impacts

Weather events have impacts on the transportation system, including evacuation route planning and degradation of roadway pavement. If extreme precipitation events occur more frequently with 21-25% more intensity by 2050, how would that affect the region and our assets? The following strategies may assist in maximizing the useful life of investments in transportation infrastructure:
Plan and implement adaptation strategies for most vulnerable transportation assets (identified in Phase I Study).
Strategies informed by the SJCOG Climate Action & Resilient Study may affect or change the overall quality of the regional transportation system and network. Improvements to make for our most vulnerable assets may include road reconstruction, evacuation route planning, improved transit facilities and routes, or retrofits to ensure effective drainage.

Develop a regional adaptation guide/toolkit to encourage consistency in adaptation efforts across SJC (Phase II study).
Our Phase II study may provide insight on how to better adapt our transportation system, this may affect how we plan for future improvements or projects.

Integrate adaptation into transportation project prioritization and selection.
Besides project prioritization, inclusion of adaptation strategies may affect how we plan our transportation projects. Certain projects or improvements may rise up to the top or fall below based on integration of vulnerable assets in our project selection.

Assumption: Housing Production
Housing production in the San Joaquin region may affect other housing challenges such as affordability. If more housing is produced, will affordability decrease? What if the San Joaquin region meets their RHNA numbers?
In order to meet RHNA and increase housing units, the following strategies may meet those goals:

Funding to improve utility infrastructure (state/local funding).
Securing funding to improve burdensome utilities will help parcels and existing buildings become more “shovel ready”. Existing buildings and parcels that have outdated utility systems are cost-prohibitive and these improvements may make land and existing buildings more attractive to build residential units on.

Accessory Dwelling Unit (ADU) and other impact fee-waivers.
Impact fees can typically increase the construction costs for housing and residential projects. Waiving fees for ADUs or other housing construction may encourage more housing production.

Support local efforts to plan and implement transit-oriented development projects.
Providing funding, technical assistance, and coordination support to local jurisdictions will facilitate development projects near high quality transit stations and corridors.

Funding for planning activities to enable local jurisdictions to accelerate housing production and meet the regional housing needs allocation. The AB 101 planning grant to San Joaquin Valley regional agencies will provide an opportunity to address the unique challenges in the Valley.
Assumption: In and Out Commuting

Commuting patterns directly affect the transportation system in a number of ways. The amount of in-commuting and out-commuting affects transportation assets, the economy, telecommuting, and traffic congestion. Some strategies that may affect commuting patterns include:

**Support technologies that transform and shift to telecommuting.**
Improvements to how people conduct work and business may drastically change, and therefore affect commuting patterns. With improvements in technologies that support telecommuting, the region’s in and out-commute patterns may change.

**Support improvements and expansion of transit and rail facilities.**
Expansion and improvements in transit and rail services and facilities may provide better reliability and efficiency. Improvements may make other modal options more attractive, and more people may use and depend on these options compared to their personal vehicles, which will also alter commuting patterns.

Assumption: Jobs and Economy

Jobs and economy play a role in how the San Joaquin County region develops. What if the region attracts more tech jobs? What if distribution jobs increase? What if the locations of jobs become either more centralized or dispersed? Industries affect our region and our transportation network. Strategies that will affect San Joaquin jobs and the economy include:

**Support the expansion of workforce or trade programs.**
Support of workforce or trade programs for residents with jobs that are at-risk of being lost due to automation, will help residents gain new skillsets and potentially offset job loss.

**Continue the Goods Movement Working Group in order to inform policy.**
SJCOG currently holds meetings for the Goods Movement Working Group. In order to prepare for a changing economy due to automation, this group may help to better inform policymakers with how to integrate automation into the freight industry and how automation will affect the transportation network.

**Explore pilot program options to incentivize employees to switch to telecommuting.**
Exploring the feasibility of different incentives to provide local employees that normally commute across the region and mega-region may assist in alleviating congestion and traffic on our regional roadways and directly impact telecommuting patterns.
Assumption: Vibrant Neighborhoods

When we think of the term, “vibrant neighborhood”, what comes to mind? Vibrant neighborhoods are neighborhoods that are well connected, provided services and housing options, as well as transportation options and a high quality of life. Strategies that can create vibrant neighborhoods, may include:

**Support increased transit service and facilities.**
Support the increase of transit service in neighborhoods that currently do not have service or frequent service in order to better connect residents across the region. Providing more service will directly provide more access. Support improvements to transit facilities in order to provide better efficiency and connectivity.

**Support of an adequate and quality active transportation network.**
Support to improve or add transportation facilities such as sidewalks, complete streets improvements, or multi-modal facilities will create a better-connected neighborhood. These improvements may also help to provide access to residents to travel to other neighborhoods that they previously were not able to.

**Support local adoption of anti-displacement policies.**
Local adoption of anti-displacement policies may better help local government to combat gentrification or displacement of residents and will help facilitate vibrant neighborhood placemaking.

**Develop and integrate displacement mitigation measures as a component of major transportation investments.**
Informed by our Gentrification and Displacement study, the mitigation measures will be developed with input from member agencies and local stakeholders and incorporated in order to further the benefits of SJCOG transportation investments.
Next Steps

TIMELINE

MARCH 2020
- Housing and Jobs Policy Briefing

APRIL 2020
- Pricing Policy Briefing

JUNE 2020
- Scenario Development Framework, Action

APRIL 2021
- Preferred Scenario, Draft

AUGUST 2021
- Preferred Scenario, Action

JANUARY 2022
- Draft 2022 RTP/SCS

MAY 2022
- Draft 2022 RTP/SCS

JULY 2022
- Final 2022 RTP/SCS, Action
AGENDA ITEM 4F
STAFF REPORT

SUBJECT: 2019 Measure K Strategic Plan Schedule

RECOMMENDED ACTION: Information Only

SUMMARY:

Pursuant to the Measure K Renewal Expenditure Plan, a Strategic Plan is to be updated every two years.

SJCOG will prepare a Strategic Plan every two years. The Strategic Plan will be the master document for delivery of the Expenditure Plan projects and can be amended at any time. The purposes of the Strategic Plan are as follows:

- Defines the scope, cost, and schedule of each project
- Identifies accomplishments and critical issues
- Lists a set of amendments to these projects
- Details the revenue projections and possible financing tools needed to deliver the Expenditure Plan
- Gathers into one document the policies and procedures of the Expenditure Plan
- Serves as an annual budget

In January 2020, the SJCOG Board approved keeping the Measure K Renewal revenue estimate at the current level, $2.6 billion. SJCOG staff is meeting with all local agencies and transit operators to discuss the implications of the Measure K financial picture and how to prioritize projects through Fiscal Year 2030/31. SJCOG staff is working with the sponsors to finalize the scope, cost, and schedule of their projects. SJCOG’s financial consultant Public Financial Management (PFM) is preparing a cash flow analysis of the projects. This cash flow analysis will be used to prepare the Draft Strategic Plan for review in March 2020

RECOMMENDATION:

Information Only.

FISCAL IMPACT:

None at this time. Fiscal impact will be determined as the Strategic Plan approaches draft form.
BACKGROUND:

Measure K is the half-cent sales tax dedicated to transportation projects in San Joaquin County. With its original passage in November 1990, Measure K began laying the groundwork for funding for a system of improved highways and local streets, new passenger rail service, regional and inter-regional bus routes, new bicycle facilities, and railroad crossings.

**Measure K Renewal:** On November 7, 2006, San Joaquin County voters decided to extend Measure K for an additional 30 years.

The categorical allocations of Measure K Renewal (hereafter referred simply as Measure K) include Local Street Repairs and roadway Safety (35%), Congestion Relief projects (32.5%), Railroad Crossing Safety Projects (2.5%), and Passenger Rail, Bus, and Bicycles (30%), which includes subcategories for Rail Transit, Bus Transit, Bus Rapid Transit, and Bicycle, Pedestrian, and Safe Routes to Schools improvements.

The renewal of Measure K was initially estimated to generate $3 billion, but current estimates are at $2.6 billion, representing a $370 million decrease.

**Measure K Strategic Plan:**

The Measure K Strategic Plan serves as the guiding document for the delivery of Measure K (Renewal) projects and programs. The Strategic Plan functions as a Measure K capital improvement program (CIP) for all eligible categories approved by San Joaquin voters. Its financial plan describes the long-term revenue forecast, capital funding requirements, borrowing needs and the associated debt service costs of the program. The current version of the Plan, the 2017 Measure K Strategic Plan, provides a twenty-year outlook of Measure K projects through Fiscal Year 2030/31. A copy can be found at:


**NEXT STEPS:**

Prepared by: David Ripperda, Associate Regional Planner.
AGENDA ITEM 4G
STAFF REPORT

SUBJECT: FY 2020-21 Local Transportation Fund Revenue Estimate & Apportionment Schedule

RECOMMENDED ACTION: Recommend Adoption of the FY 2020-21 Local Transportation Fund Revenue Estimate and Apportionment Schedule

DISCUSSION:

BACKGROUND

The Local Transportation Fund (LTF) is an important source of transit, roads and street funding in San Joaquin County. Revenues to the LTF are derived from 1/4 cent of the 7 1/4 cents retail sales and use tax (Bradley-Burns) collected statewide. This tax is collected at the point of sale contrasted with Measure K, and other special district taxes, which are transaction and use taxes where the tax is assessed based upon where the merchandise will be used. The 1/4 cent is returned by the California Department of Tax and Fee Administration (CDTFA), formerly the State Board of Equalization (SBOE), to each county according to the amount of tax collected in that county.

In San Joaquin County, SJCOG administers the LTF. In February of each fiscal year, the SJCOG Board must adopt an LTF revenue estimate and apportionment schedule for the following year. Based upon an analysis of sales tax receipts over the past two years and other economic indicators, SJCOG is recommending an FY 2020-21 revenue estimate of $38,320,300, an increase of 3% over the current year’s estimate. By midyear, if this estimate appears to below, the Board can amend the estimate and associated apportionments.

The rationale for a 3% increase for the upcoming year is Since the California Department of Tax and Fee Administration changed the distribution methodology two years ago, revenues are erratic compared to the same period the previous year. The month over month distributions for the first four months of FY 2019-20 show growth rates of 7.7%, -3.7%, 12.2%, and -1.5%. The average is 3.7%. Looking forward to FY 2020/21, staff is not seeing any signs of sales tax growth in the “robust” category. There doesn’t appear to be a significant revenue enhancement from the Wayfair decision.

RECOMMENDATION

That TAC recommends to the Board approval of the attached tables estimating the LTF revenue at $38,320,300 for FY2020-2021.
FISCAL IMPACT

Adopting the $38,320,300 revenue estimate will provide local agencies with a prudent number from which to budget for the coming fiscal year's transportation programs. In the event revenues are higher than this estimate, local agencies will be able to claim the difference later in the next fiscal year as previously unclaimed funds.

LOCAL TRANSPORTATION FUND APPORTIONMENTS

Once the revenue estimate is adopted, the LTF apportionments follow according to procedures specified in the Transportation Development Act. The funds are to be allocated for the designated purpose in the sequence stated in the TDA guidelines. Table 1 displays the recommendations for the distribution of the revenue estimate.

I. The administrative allocations tentatively remain the same:
   a. County Auditor-Controller $2,000
   b. SJCOG TDA Administration remains the same at $290,000
   A. SJCOG Transportation Planning remains at 2.9% of revenue or $1,111,289
   B. Bicycle and Pedestrian 2% or $738,340
   C. San Joaquin Regional Rail Commission receives 11.5% or $4,160,547
   D. San Joaquin Regional Transit District receives 2% for the Consolidated Transportation Service Agency or $640,362

II. Balance available for area apportionments under Articles 4 and 8 is $31,377,761

Table 2 apportions the available funds to the claimants for Article 4, Transit Operator, or Article 8, generally contracted transit operations and local street repairs. The apportionments are determined by population. The source for population is the latest estimate from the State Department of Finance, January 2019.

- By statute, the San Joaquin Regional Transit District (SJRTD) is the primary claimant for TDA funds within the SJRTD boundaries. Since the City of Stockton is completely within the SJRTD boundaries, it (Stockton) has no population estimate for general transportation purposes. Since a portion of the Stockton Metropolitan Area is unincorporated and that population lives within the SJRTD boundaries, the transit district's population estimate includes them as well. At the bottom of Table 2, the composition of SJRTD's apportionment is detailed. The County of San Joaquin and San Joaquin Regional Transit (SJRTD) have amended their contract allowing RTD to claim and receive all of the County’s population-based LTF apportionment.
- Stockton and the County receive their population-based apportionment of the 2% bicycle/pedestrian funds.
- As county population growth was moved south, RTD’s population share has declined as Stockton’s proportionate share has declined. While the general pot of funds has increased 3%, because of the shifting population, each agency receives a different share of that total revenue as evidenced by the % Change column on Table 2

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1 Subject to Auditor Controller approval
## TABLE 1

<table>
<thead>
<tr>
<th>LOCAL TRANSPORTATION FUND</th>
<th>REVENUE ESTIMATE AND APPORTIONMENT</th>
<th>3.00%</th>
<th>19-20 Rev Est</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>FISCAL YEAR: 2020-21</td>
<td>ESTIMATED REVENUE FY 2020-21</td>
<td>$38,320,300.00</td>
<td>$37,204,131</td>
<td>$1,116,169.00</td>
</tr>
</tbody>
</table>

### RECOMMENDATIONS

I. LESS ADMINISTRATIVE ALLOCATIONS

| COUNTY AUDITOR* | 2,000 | 2,000 | 0 |
| COG TDA ADMINISTRATION* | 290,000 | 290,000 | 0 |

A. COG TRANSPORTATION PLANNING
   2.9% PLANNING
   APPORTIONMENT**
   | 1,111,289 | 1,078,920 | 32,369 | 3% |
   |
   | 36,917,011 | 35,833,211 | 1,083,800 | 3% |

B. COUNTY AND CITIES
   2% BICYCLE/PEDESTRIAN**
   APPORTIONMENT
   | 738,340 | 716,664 | 21,676.00 | 3% |
   |
   | 36,178,671 | 35,116,547 | 1,062,124.10 | 3% |

C. SAN JOAQUIN REGIONAL RAIL COMMISSION **
   | 4,160,547 | 4,038,403 | 122,144.27 | 3% |
   |
   | 32,018,124 | 31,078,144 | 939,979.83 | 3% |

D. ARTICLE 4.5 -Consolidated Transportation Service Agency
   2% APPORTIONMENT
   | 640,362 | 621,563 | 18,799.60 | 3% |
   |
   | 31,377,761 | 30,456,581 | 921,180.23 | 3% |

II. BALANCE AVAILABLE FOR 2018-19 BY AREA APPORTIONMENT
   ARTICLE 4 AND ARTICLE 8 PURPOSES**
   | 31,377,761 | 30,456,581 | 921,180.23 | 3% |

*Upon adoption by the COG Board, these amounts are fixed and will be apportioned “off the top”.

**These amounts will vary with actual revenues received.

See Table 2 for breakdown of 2% bicycle/pedestrian funds and general purpose revenues.
<table>
<thead>
<tr>
<th>POPULATION</th>
<th>BIKE/PED ESTIMATE</th>
<th>% ART.</th>
<th>4 OR 8 APPT.</th>
<th>19-20 Rev Est</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAN JOAQUIN REGIONAL TRANSIT DISTRICT **</td>
<td>476,218</td>
<td>0.61816</td>
<td>0</td>
<td>19,396,347</td>
<td>18,868,257</td>
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<tr>
<td>LATHROP</td>
<td>24,936</td>
<td>0.03237</td>
<td>23,899</td>
<td>1,015,643</td>
<td>1,039,541</td>
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<tr>
<td>LODI</td>
<td>68,272</td>
<td>0.08862</td>
<td>65,432</td>
<td>2,780,717</td>
<td>2,846,149</td>
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<tr>
<td>MANTECA</td>
<td>83,781</td>
<td>0.10875</td>
<td>80,296</td>
<td>3,412,398</td>
<td>3,492,694</td>
</tr>
<tr>
<td>TRACY</td>
<td>92,800</td>
<td>0.12046</td>
<td>88,940</td>
<td>3,779,742</td>
<td>3,868,682</td>
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<tr>
<td>RIPON</td>
<td>16,613</td>
<td>0.02156</td>
<td>15,922</td>
<td>676,647</td>
<td>692,569</td>
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<tr>
<td>ESCALON</td>
<td>7,765</td>
<td>0.01008</td>
<td>7,442</td>
<td>316,268</td>
<td>323,710</td>
</tr>
<tr>
<td>UNINCORPORATED**</td>
<td>0</td>
<td>0.00000</td>
<td>0</td>
<td>153,161</td>
<td>153,161</td>
</tr>
<tr>
<td>SAN JOAQUIN REG. RAIL COMM</td>
<td>0</td>
<td>0.00000</td>
<td>0</td>
<td>4,160,547</td>
<td>4,160,547</td>
</tr>
<tr>
<td>STOCKTON</td>
<td>0</td>
<td>0.00000</td>
<td>303,249</td>
<td>0</td>
<td>303,249</td>
</tr>
<tr>
<td>COUNCIL OF GOVT'S</td>
<td>1.00000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRANSPORTATION PLANNING</td>
<td>0.00000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>770,385</td>
<td>2.00000</td>
<td>738,340</td>
<td>35,538,309</td>
<td>36,276,649</td>
</tr>
</tbody>
</table>

**State Department of Finance population estimates (January, 2019).**

*Funds apportioned in the unincorporated area outside the Stockton Urbanized will continue to be split 76/24% per previous agreement.

The 24% will be apportioned to RTD based upon a new 3-year agreement b/w SJCO & RTD

Total Unincorporated population (used to determine bike/ped apportionment) = 159,808