Highway 1 Corridor Projects in Measure D

What Highway 1 corridor projects are included in Measure D?

- **Traffic Flow Improvements - Three auxiliary lane projects** connecting lanes between on and off ramps from Soquel to 41st Avenue, Bay/Porter to Park Avenue, and Park Avenue to State Park Drive
- **Bicycle and Pedestrian Connectivity - Two new bicycle/pedestrian overcrossings** at Chanticleer and Mar Vista
- **Transportation Demand Management - Cruz511 Travel Choice Information, Car/Vanpool Match**
- **Safety and Congestion Reduction - Freeway Service Patrol (roving help), safety enforcement**

Why Auxiliary Lanes?

- Auxiliary lanes extend the distance drivers have to safely merge onto and off of the highway by connecting one on ramp to the next off ramp -- similar to between Morrissey Boulevard and Soquel Drive.
- Auxiliary lanes are cost-effective ways to smooth traffic flow, reduce stop-and-go traffic, shorten both the distance and time of bottlenecks, and improve safety.
- Traffic flow is smoothed by providing more space for cars wanting to merge in and out of through-lanes to the auxiliary lanes.
- Costs and construction impacts are lower than adding new through lanes because interchanges are not reconstructed and less right-of-way is required.
- Funding from Measure D will bring auxiliary lanes down to Aptos (State Park Drive).

Why include Highway 1 projects in Measure D?

- **Highway 1 is our county’s main travel artery, used by over 100,000 vehicles each day.**
- Medical, public safety and other first responders, Santa Cruz METRO buses, employees, students, visitors and the movement of goods and services, depend on Highway 1.
- Traffic from Highway 1 spills over into neighborhoods, as local motorists avoid highway congestion and seek the fastest route home.
- Highway 1 connects the county’s more affordable housing area with local employment centers, making it a critical link for low income families.
- **Collisions on Highway 1 between 41st Avenue and Soquel exceed the statewide average for similar facilities by over 40%**. Of those collisions, 77% were found to be rear-end and sideswipe collisions.
What will be the effect of including Highway 1 projects in Measure D?

- A Draft Environmental Impact Report (DEIR), completed in 2015, analyzed three options for Highway 1 using a base year 2035: Do Nothing/No Build; Transportation Systems Management (TSM); and High Occupancy Vehicle (HOV) Lanes.
- Highway 1 projects included in Measure D are a subset of the TSM alternative; including three of the five auxiliary lanes and likely none of the ramp meters.
- While there is no environmental analysis of only the projects included in Measure D, the results of the analysis indicate that the three auxiliary projects included in Measure D would contribute to better travel times, average speeds, less delay and more vehicles/person trips.
- Specifically, the EIR showed the following:
  - Doing nothing, the No Build alternative for 2035, will result in significantly worsened travel time and delays.
  - During the evening peak period (2:00 to 8:00 pm) a comparison of the No Build and TSM Alternative – using measures such as travel time, speeds, delay, numbers of vehicles, numbers of persons -- shows significant improvements in the southbound direction (see below).
  - The TSM alternative does, however, estimate a 2% increase in delay during the peak-of-the-peak-hour due to the effect of metering ramps, which are not included in the Measure D projects.

<table>
<thead>
<tr>
<th></th>
<th>2035 No-Build</th>
<th>2013 TSM Alternative</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Travel Time</td>
<td>47</td>
<td>33</td>
<td>-30%</td>
</tr>
<tr>
<td>(minutes)</td>
<td>47</td>
<td>33</td>
<td>-30%</td>
</tr>
<tr>
<td>Average Speed (mph)</td>
<td>15</td>
<td>21</td>
<td>40%</td>
</tr>
<tr>
<td>Delay (minutes per vehicle)</td>
<td>35</td>
<td>21</td>
<td>-40%</td>
</tr>
<tr>
<td>No. of Vehicle Trips (per hour)</td>
<td>2,696</td>
<td>3,479</td>
<td>29%</td>
</tr>
<tr>
<td>No. of Persons Trips (per hour)</td>
<td>3,168</td>
<td>4,216</td>
<td>33%</td>
</tr>
<tr>
<td>Freeway Travel Time (VHT)</td>
<td>2,101</td>
<td>1,903</td>
<td>-9%</td>
</tr>
</tbody>
</table>

*Source: Highway 1 Draft Environmental Analysis - Traffic Operations Report, Table 5-7, Comparison of Measure of Effectiveness Year 2035 No-Build versus Year 2035 TSM Build Scenarios, page 5-57, April 2012.*

- Freeway Service Patrols reduce non-recurring congestion that results when there are collisions, obstacles in the roadway, mechanical breakdowns, and other incidents which may lead to rubbernecking or secondary collisions.
- Cruz511.org traveler information program can help people plan ahead for their trips and form or join carpools and vanpools to increase the efficiency of Highway 1.
What about the Traffic Operations Report in the Highway 1 EIR?

- The Traffic Operations Report (TOR), completed in 2012, was one of 23 technical reports prepared for the Highway 1 Draft Environmental Document.

- Caltrans is currently updating the TOR for the final Highway 1 EIR primarily to address changes in projected travel patterns, based on updated population and employment forecasts for the region. The regional planning agency, AMBAG, adopted substantially reduced population and employment forecasts in 2014, due to the impacts of the 2008 recession.

- Combined with changing demographics, land use, and an expansion of alternative travel modes, traffic congestion in 2035 is expected to be far less than was projected in the TOR, which underestimated the effectiveness of proposed projects. To properly document and report these changes, the TOR is being updated to better respond to comments received on the Draft Environmental Document.

- The purpose of TOR analysis was to evaluate the effectiveness of each of the auxiliary lanes separately and in isolation of each other. Adding together the separate lane analyses is flawed, in that it does not take into account cumulative benefits.

- In addition, this analysis does not evaluate traffic conditions if nothing is done to address daily congestion already experienced on the highway.

Air Quality/Greenhouse Gas Emissions

- Better traffic flow is better for the environment. Stop-and-go or idling in traffic is less efficient and increase greenhouse gas emissions.

- For gasoline vehicles, the optimum speed for reducing fuel consumption and greenhouse gas emissions (GHG) is 30 to 60 miles per hour (MPH).

- Increased fuel economy, including low- and zero-emission vehicles, will continue reducing greenhouse gases.

  California’s target for zero-emission vehicles is 1.5 million by 2025. This will further reduce greenhouse gases even if people drive the same amount of miles.

Traffic and Demand

- Santa Cruz County is projected to continue growing, albeit at a slow pace.

- Even with modest population and employment growth, existing infrastructure and traffic delays are projected to worsen without additional investments.

- Improving traffic flow on Highway 1 encourages travelers to use the highway rather than local streets.
• Caltrans and the Federal Highway Administration do not consider auxiliary lanes capacity increasing; though as noted above they improve traffic flow by providing more area to merge on and off the highway.
• Most development in the county is now planned to be infill in urban areas that are served by public transit, sidewalks, and bicycle lanes.
• Highway traffic flow improvements and additional bike/ped overcrossings make transit, bicycling and walking more viable options.

Funding
• Gas tax revenues, a traditional source of transportation funding, have decreased 50%, in the last three years.
• State Transportation Improvement Program funds (STIP), the only source of state transportation dollars currently available for major capital projects, have decreased by 50% over the last three years.
• Over 80% of Californians live in “self help” transportation counties and use their local dollars as match to leverage additional state and federal funds. Santa Cruz County is not one of them, putting us at a severe competitive disadvantage when applying for funding.