AGENDA  
Thursday, June 18, 2015  
1:30 p.m.  
RTC Conference Room  
1523 Pacific Avenue, Santa Cruz, CA  

1. Call to Order  

2. Introductions  

3. Oral communications  
   
   The Committee will receive oral communications during this time on items not on today’s agenda. Presentations must be within the jurisdiction of the Committee, and may be limited in time at the discretion of the Chair. Committee members will not take action or respond immediately to any Oral Communications presented, but may choose to follow up at a later time, either individually, or on a subsequent Committee agenda. 

4. Additions or deletions to consent and regular agendas  

CONSENT AGENDA  

All items appearing on the consent agenda are considered to be minor or non-controversial and will be acted upon in one motion if no member of the Committee or public wishes an item be removed and discussed on the regular agenda. Members of the Committee may raise questions, seek clarification or add directions to Consent Agenda items without removing the item from the Consent Agenda as long as no other committee member objects to the change. 

5. Approve Minutes of the March 19, 2015 ITAC meeting - Page 3  

REGULAR AGENDA  

6. Status of ongoing transportation projects, programs, studies and planning documents - Verbal updates from project sponsors  

7. Caltrans Project Updates  
   a. Verbal report, Kelly McClendon, Caltrans District 5 Planning  
   b. Project Fact Sheet: SR 1/17 Interchange Widening  

8. Caltrans District System Management Plan  
   a. Report, Kelly McClendon, Caltrans District 5 Planning  

9. Independent Survey on New Local Revenue Options  
   a. Staff report, Karena Pushnik
10. Cruz511 Traveler Information Service for Santa Cruz County
   a. Staff report, Tegan Speiser

11. Draft Passenger Rail Feasibility Study
   a. Staff report
   b. Executive Summary

12. Adjourn. The next ITAC meeting is scheduled for 1:30pm on August 20, 2015 in the SCCRTC Conference Room, 1523 Pacific Avenue, Santa Cruz, CA.

HOW TO REACH US: Santa Cruz County Regional Transportation Commission
1523 Pacific Avenue, Santa Cruz, CA 95060; phone: (831) 460-3200 / fax (831) 460-3215
email: info@sccrtc.org / website: www.sccrtc.org

AGENDAS ONLINE: To receive email notification when the Committee meeting agenda packets are posted on our website, please call (831) 460-3200 or email rmoriconi@sccrtc.org to subscribe.

ACCOMMODATIONS FOR PEOPLE WITH DISABILITIES: The Santa Cruz County Regional Transportation Commission does not discriminate on the basis of disability and no person shall, by reason of a disability, be denied the benefits of its services, programs, or activities. This meeting location is an accessible facility. If you wish to attend this meeting and require special assistance in order to participate, please contact RTC staff at 460-3200 (CRS 800/735-2929) at least three working days in advance of this meeting to make arrangements. People with disabilities may request a copy of the agenda in an alternative format. As a courtesy to those person affected, Please attend the meeting smoke and scent-free.

SERVICIOS DE TRADUCCIÓN/ TRANSLATION SERVICES: Si gusta estar presente o participar en esta junta de la Comisión Regional de Transporte del condado de Santa Cruz y necesita información o servicios de traducción al español por favor llame por lo menos con tres días laborables de anticipo al (831) 460-3200 para hacer los arreglos necesarios. (Spanish language translation is available on an as needed basis. Please make advance arrangements at least three days in advance by calling (831) 460-3200).
ITAC MEMBERS PRESENT
Heather Adamson, AMBAG
Taylor Bateman, Scotts Valley Planning
Russell Chen, County Planning Proxy
Erich Friedrich, Santa Cruz Metropolitan Transit District (METRO)
Murray Fontes, Watsonville Public Works and Planning Proxy
Scott Hamby, Scotts Valley Public Works
Kelly McClendon, Caltrans District 5
Steve Wiesner, County Public Works

STAFF PRESENT
Grace Blakeslee
Ginger Dykaar
Rachel Moriconi

OTHERS PRESENT
Eric Child, Santa Cruz Resident

1. **Call to Order:** Chair Wiesner called the meeting to order at 1:30pm.

2. **Introductions:** Self introductions were made.

3. **Oral Communications:** Rachel Moriconi requested updates to the Committee roster and reported that the Air District (MBUAPCD) is soliciting applications for the AB2766 grant program.

4. **Additions/ Changes to consent and regular agenda:** None.

**CONSENT AGENDA:** Hamby moved and Fontes seconded approval of the consent agenda.
The motion passed unanimously with Adamson, Bateman, Chen, Fontes, Friedrich, Hamby, McClendon, and Wiesner voting “yes”.

5. Approved minutes of the January 15, 2015 ITAC meeting.
6. Received Santa Cruz METRO Notice of Public Hearings to Consider Fare Restructure and Paratransit Changes

**REGULAR AGENDA**

7. **Status of ongoing transportation projects, programs, studies and planning documents - Verbal updates from project sponsors**
County of Santa Cruz: Russell Chen reported that work continues on the Nelson Road bypass and North Rodeo Gulch retaining wall. Several storm damage and bridge repair projects will be under construction this spring and summer including projects on Redwood Lodge, Highland, El Rancho, Glenwood, Graham Hill Road Bridge, Old County Road-Earl Creek bridge, and Soquel Drive bridge near Rodeo Gulch. Highway Safety Improvement Program (HSIP) guardrail projects are also planned in several locations; and sidewalks on Dolphin Drive will be going to construction.

Scotts Valley: Scott Hamby reported that the Vine Hill Road/Tabor Drive sidewalks and bike lanes project is complete. Design for Mt. Hermon Dr/Scotts Valley Dr/Whispering Pines intersection project has been initiated. Design for storm damage repairs at Granite Creek overpass is underway.

AMBAG: Heather Adamson reported that the Strategic Growth Council (SGC) and the Department of Housing and Community Development (HCD) received 147 concept applications requesting over $760 million from the state’s Cap and Trade Affordable Housing and Sustainable Communities Program (AHSC). SGC and HCD invited 54 concept proposals from 22 counties requesting $301,788,579 to compete for the approximately $120 million in the full proposal phase, including one affordable housing project in Watsonville and one CalVan vanpool program.

Caltrans: Kelly McClendon reported that Caltrans will be working on a ramp metering development plan and is reviewing the draft project report and environmental document for the Highway 1 Corridor.

Watsonville: Murray Fontes reported that the City of Watsonville has gone out to bid for pedestrian upgrades around schools, is in the process of hiring an environmental services consultant for several projects, and is forming a trails committee.

RTC: Rachel Moriconi reported that the RTC approved the FY15/16 budget, which includes Transportation Development Act apportionments and Regional Surface Transportation Program Exchange (RSTPX) funds. The tiered environmental document for the Highway 1 Corridor and 41st Ave-Soquel Auxiliary Lanes project are scheduled for public review in the fall. The Passenger Rail Feasibility Study will be released for public review this spring. Public input is also being sought for the Unified Corridor Plan modeling effort.

8. Reviewed the 2040 Metropolitan Transportation Plan (MTP)/ Sustainable Communities Strategy (SCS) Draft Work Plan

Heather Adamson reviewed the draft work plan for the next MTP/SCS update, which includes working with local agencies on the growth forecasts, including information from General Plans and development plans, and project updates. The Air Resources Board will provide new greenhouse gas emission targets for the region in late 2015 or early 2016.

9. Received October 2014 Bicycle, Mode Split, and Vehicle Occupancy Counts Report
Ginger Dykaar presenting information on bicycle, pedestrian, and motor vehicle counts, as well as ridership trends and mode split information at several intersections in Santa Cruz County. Members discussed the findings and factors which could impact count information.

10. **Received a Presentation on the Highway 17 Access Management Plan**

Kelly McClendon provided a powerpoint presentation on the Highway 17 Access Management Plan currently under development. The plan will evaluate vehicle access between Granite Creek and Summit Road, including safety information, data for driveways, turnouts, and roads, and potential conflict points. Members provided ideas for public outreach and analysis.

11. **Received Caltrans’ Transportation Concept Report and California Transportation Plan Updates**

Kelly McClendon provided information on the Caltrans Transportation Concept Report development process for several state routes in Santa Cruz County and provided an overview of the California Transportation Plan (CTP) - including state goals. Comments on the CTP are due April 17. The TCRs are a 20-year plan for each state route and include information on existing and planned auto lanes and complete streets facilities for bicycles, pedestrians and transit. He noted that the TCRs and TCP are available on the Caltrans website.

12. **Received State Transportation Funding Update**

Rachel Moriconi provided updates on the State Board of Equalization proposal to reduce state gas taxes which will significantly impact funding for local streets and roads and the State Transportation Improvement Program (STIP). She also provided information on Active Transportation Program (ATP), Highway Safety Improvement Program (HSIP), and Cap and Trade funding opportunities, and encouraged local agencies to submit applications for these grants.

13. **Adjournment:** The meeting adjourned at 3:38 p.m.

*Minutes prepared by: Rachel Moriconi*
LOCATION MAP:

PROJECT DESCRIPTION/SCOPE

Description:
The project proposes to widen southbound (SB) State Route 17 (SR-17) from 3 lanes to 4 lanes, eliminating the forced merge of vehicles from SR-1 NB #1 lane with SR-17 SB #2 lane. Shoulders will be widened on SR-17, both north and south of the 1/17 separation. Concrete barrier will be installed, drainage improved, and highway lighting relocated.

Need for Project:
Sideswipe and rear-end collisions are occurring at merging locations at each end of this highway segment. The accident rate at this location is currently twice the statewide average for similar facilities.

FUNDING STATUS
Current Construction Capital Estimate: $1,142,000  Current Right of Way Capital Estimate: $0
Fund Source: SHOPP – Collision Reduction
* Recommended to be voted at the August 2015 CTC Meeting

SCHEDULE STATUS

<table>
<thead>
<tr>
<th>Environmental Approval</th>
<th>Begin R/W Appraisals</th>
<th>Right-of-Way Certification</th>
<th>Ready To List</th>
<th>Advertise</th>
<th>Begin Construction</th>
<th>End Construction</th>
</tr>
</thead>
</table>

*“A” denotes Achieved date  “P” denotes Planned date

Note: Construction start may be delayed until Spring if weather is an issue.
AT THE ROUTE 1 AND 17 INTERCHANGE

Proposed

Existing

May 2016
TO: Interagency Technical Advisory Committee (ITAC)

FROM: Rachel Moriconi, Senior Transportation Planner

RE: Caltrans District System Management Plan

RECOMMENDATION

Staff recommends that the Interagency Technical Advisory Committee (ITAC) provide input on the Caltrans District System Management Plan (DSMP).

BACKGROUND

The Caltrans System Planning process is primarily composed of three parts: the District System Management Plan (DSMP), Transportation Concept Reports (TCR), and Corridor System Management Plans (CSMP). The district-wide DSMP is a strategic policy and planning document that focuses on maintaining, operating, managing, and developing the transportation system. The DSMP includes a project list, including projects that are not fully programmed and are recommend for funding. The plan is intended as a resource for stakeholders and the public.

DISCUSSION

The Caltrans District 5 DSMP serves as the 20-year vision document for District 5 to carry out Caltrans’ mission to provide a safe, sustainable, integrated and efficient transportation system to enhance California’s economy and livability. This strategic planning document describes the unique qualities of the area within District 5 and the vision for serving the area with an integrated and vital transportation system. The DSMP consists of three main sections: District Profile, Management Plan and a Project List.

District Profile
The District Profile provides the District’s setting and context. It serves as a high-level overview of the socio-economic data, environmental resources, transportation systems including all modes, and land use characteristics. Caltrans District 5 is located along the Central Coast of California connecting the San Francisco Bay Area to the north, the San Joaquin Valley to the east and Los Angeles to the south. The District’s staff of about 725 employees, including 350 field employees, is largely located in three main offices in the city of San Luis Obispo. District 5 has eight maintenance stations that care and upkeep 30 State routes and 1169 centerline miles.

Management Plan
The Management Plan chapter describes the District 5 goals and supporting objectives and strategies. It identifies how the District intends to implement Caltrans’s Mission, Vision and Goals. The District has identified eleven objectives to meet the Department’s five Strategic Goals.
**Goal 1 Safety and Health:** Provide a safe transportation system for workers and users and promote health through active transportation and reduced pollution in communities.
   - Objective 1: Promote Safe Design for All Travelers
   - Objective 2: Promote Worker Safety
   - Objective 3: Support Active Modes of Transportation and Access to Transit

**Goal 2 Stewardship and Efficiency:** Money counts. Responsibly manage California’s transportation related assets.
   - Objective 4: Improve Decision Making
   - Objective 5: Manage Assets Responsibility

**Goal 3 Sustainability, Livability, and Economy:** Make long-lasting, smart mobility decisions that improve the environment, support a vibrant economy and build communities, not sprawl.
   - Objective 6: Plan for Multi-modal Integration
   - Objective 7: Sustain Environmental Excellence

**Goal 4 System Performance:** Utilize leadership, collaboration and strategic partnerships to develop an integrated transportation system that provides reliable and accessible mobility for travelers.
   - Objective 8: Strengthen Strategic Partnerships
   - Objective 9: Optimize System Performance through Technology

**Goal 5 Organizational Excellence:** Be a national leader in deliver quality service through excellent employee performance, public communication and accountability.
   - Objective 10: Prepare the next generation of leaders
   - Objective 11: Encourage healthy lifestyles

**Project List**
The DSMP Project List presents a District-wide, 20-25 year list of multi-modal SHS transportation improvements identified in the District CSMPs, TCRs, the ITSP, Regional Transportation Plans (RTPs), and local Capital Improvement Programs (CIPs). The primary purpose of the DSMP Project List is to recommend a reasonable and effective range of transportation improvements for future investments within a variety of programs, including but not limited to the STIP and the SHOPP. The project list for Santa Cruz County is attached (Attachment 1).

Kelly McCleandon will be available to present and discuss this planning document at the June 18 meeting. Staff recommends that the ITAC provide input on the plan. Caltrans invites agencies to provide comments by June 19th, 2015.

**SUMMARY**
Staff recommends that the ITAC provide input to Caltrans on the Draft Caltrans District System Management Plan.

**Attachment:** DSMP Santa Cruz County Project List
<table>
<thead>
<tr>
<th>DSMP 2015 ID#</th>
<th>Beginning County, Route, and Postmile</th>
<th>Ending County, Route, and Postmile</th>
<th>Location</th>
<th>Description</th>
<th>Mode</th>
<th>CTC_Category</th>
<th>Year</th>
<th>Est. Total Cost ($1000)</th>
<th>Proposed Completion Year</th>
<th>PID Completion Date</th>
<th>Lead Agency</th>
<th>Source Document</th>
<th>Uncons. RTF</th>
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<th>PRMO</th>
<th>RTP ID #</th>
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<td>Reconfiguration of ramp and local streets for installation of ramp metering, bike and pedestrian improvements</td>
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<td>SR 1 Corridor Investment Program</td>
<td>Program level design/environmental analysis to establish a Corridor Investment Program (CIP) to reduce congestion along the 8 mile section of SR 1 between San Andreas/Larimer Valley Road (Aptos) and Monterey Boulevard (Santa Cruz)</td>
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<td>SR 1 between State Park Dr and Park Ave</td>
<td>Construct bike/pedestrian bridge connecting New Brighton State Beach and Cabrillo College as part of larger Niceame SP to the Sea trail concept.</td>
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<td>SR 1 from Park Ave to Bay/Porter</td>
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<td>SR 1 from Bay/Porter to 41st Ave</td>
<td>Reconstruct highway to operate as a single interchange. Includes construction of a frontage road that includes bike lanes and sidewalks connecting the Bay/Porter and 41st Ave intersections; reconstruction of the Bay/Porter undercrossing and the 41st Ave</td>
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<td>SR 1 at 41st Ave and Bay/Porter Interchange</td>
<td>Implement 41st Avenue &amp; Bay Ave/Porter Avenue single interchange improvements as detailed in SR 1 HDV project (RTC 24)</td>
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District 5: Santa Cruz County

Appendix A
Pages 17 of 20
Recent Update: 6/3/2015
<p>| DSMP 2015 ID# | Beginning County, Route, and Postmile | Ending County, Route, and Postmile | Location | Description | Mode | CTC Category | Year | Ext. Total Cost ($1000) | Proposed Completion Date | PID Completion Date | Lead Agency | Source Document | Unconst. RTP | Project ID # | PRINO | RTP ID # | Funding Source |
|--------------|-------------------------------------|----------------------------------|----------|-------------|------|--------------|------|----------------------|-----------------------|-------------------|-------------|---------------|--------------|----------------|-------------|------------|-------------|-----------------|
| 5011         | SCR_1_13.620 SCR_1_14.864         | SR 1 from 41st Ave to Soquel Ave | Construct auxiliary lanes and a bicycle/pedestrian crossing at Chanticleer Ave. | Bicycle | System Management | I    | $27,000       | 2015 TCI 2006, SCCRTC RTP 2014 | Y | E120002 20 | DOT7a | RTC 24h | N/A |
| 5042         | SCR_1_13.62 SCR_1_14.864         | SR 1 from 41st Ave to Soquel Dr | SR 1 from 41st Ave to Soquel Dr Auxiliary Lanes and Chanticleer Bike/Pedestrian Bridge | Bicycle | System Management | II   | $19,500       | 7/32/1505 | N/A | | | | | | |
| 5052         | SCR_1_10.881 SCR_1_10.881         | SR 1 at Soquel Ave Interchange | Reconstruct the interchange with enhanced pedestrian and bicycle facilities, reconfigure ramps to accommodate the new interchange, and ramp metering. Part of SR 1 CIP project (RTC 206) | Highway | System Management | III  | $61,100       | 4/7/06 | N/A | | | | | | |
| 5054         | SCR_1_10.881 SCR_1_10.881         | SR 1 at Soquel Ave Interchange | Reconstruct the Morrison crossing with enhanced pedestrian and bicycle facilities. Reconfigure ramps and local streets to accommodate interchange and ramp metering. Part of SR 1 CIP project (RTC 206) | Highway | System Management | I    | $35,100       | 4/7/06 | SCCRTC | | | | | | |
| 5056         | SCR_1_11.412 SCR_1_11.412         | SR 1 at San Lorenzo River | Replace the SR 1 bridge over San Lorenzo River to increase capacity, improve safety and seismic stability, Reduce flooding potential and improve fish passage. | Highway | System Management | III  | $20,000       | 2015 TCI 2006, SCCRTC RTP 2014 | Y | N000201 01 | 1401 | SC-P29 | N/A |
| 5058         | SCR_1_10.130 SCR_1_10.130         | SR 1 from Chestnut St and King St | Intersection Control Evaluation | Highway | System Management | III  | $4,900        | 2015 TCI 2006, SCCRTC RTP 2014 | N | N/A | N/A | SC-P81 | N/A |
| 5061         | SCR_1_10.259 SCR_1_10.730         | SR 1 at Laurel St | Intersection Control Evaluation | Highway | System Management | V    | $100          | 2015 TCI 2006, SCCRTC RTP 2014 | Y | N/A | N/A | SC-P12 | N/A |
| 5064         | SCR_1_10.259 SCR_1_10.090         | SR 1 at Swift St | Intersection Control Evaluation | Highway | System Management | V    | $100          | 2015 TCI 2006, SCCRTC RTP 2014 | N | N/A | N/A | SC-P13 | N/A |
| 5067         | SCR_1_20.411 SCR_1_20.411         | SR 1 at Shaffer Rd | Intersection Control Evaluation | Highway | System Management | V    | $100          | 2015 TCI 2006, SCCRTC RTP 2014 | N | N/A | N/A | SC-P10 | N/A |
| 5046         | SCR_1_Var SCR_1_Var               | Park &amp; Ride Lots TBD | Construct park and ride lots within City limits. | Transit | System Management | V    | $20,000       | 2015 TCI 2006, SCCRTC RTP 2014 | Y | N/A | N/A | SC-P14 | N/A |
| 5034         | SCR_9_0.171 SCR_9_0.171           | SR 8 at Fern St | Intersection Control Evaluation, Provide bike lanes. | Highway | System Management | V    | $500          | 2015 TCI 2006, SCCRTC RTP 2014 | N | N/A | N/A | SC-P11 | N/A |
| 5035         | SCR_9_0.221 SCR_9_0.221           | SR 9 at Eucalyptus St | Intersection Control Evaluation | Highway | System Management | V    | $300          | 2015 TCI 2006, SCCRTC RTP 2014 | N | N/A | N/A | SC-P11 | N/A |
| 5047         | SCR_9_1.933 SCR_9_1.933           | SR 9 at Rincon Trail to Glen Coodlge Dr | Class 1 bike facility from Glen Coodlge Dr to Hwy 9 to provide eastern access to UCSC | Off-Ramp System | System Preservation | V    | $2,300        | 2015 TCI 2006, SCCRTC RTP 2014 | N | N/A | N/A | SC-P40 | N/A |</p>
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<th>Source Document</th>
<th>Unincor. RTIP</th>
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<th>RTP ID #</th>
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<td>5052</td>
<td>SCR_5_3.991 SCR_5_4.46</td>
<td></td>
<td>SR 9 from Laurel Dr to Graham Hill Rd</td>
<td>Install sidewalks and bike lanes on Hwy 9 through downtown Felton.</td>
<td>Bicycle</td>
<td>System Preservation</td>
<td>V</td>
<td>$2,200</td>
<td>2014</td>
<td>Y</td>
<td>Santa Cruz County</td>
<td>SCCRTC RTP 2014</td>
<td>Y</td>
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<td>5058</td>
<td>SCR_5_83.991 SCR_9_86.830</td>
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<td>SR 9 from Laurel Dr to San Lorenzo Way</td>
<td>Construct new bike/pedestrian facilities (SR 9/San Lorenzo Valley Trail)</td>
<td>Bicycle</td>
<td>System Management</td>
<td>II</td>
<td>$3,300</td>
<td>2014</td>
<td>Y</td>
<td>Santa Cruz County</td>
<td>SCCRTC RTP 2014</td>
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<td>5050</td>
<td>SCR_9_4.46 SCR_9_4.46</td>
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<td>SR 9 at Graham Hill Rd</td>
<td>Graham Hill Rd major rehabilitation with Intersection Control Evaluation at SR 9</td>
<td>Highway</td>
<td>System Preservation</td>
<td>V</td>
<td>$6,800</td>
<td>2014</td>
<td>Y</td>
<td>Santa Cruz County</td>
<td>SCCRTC RTP 2014</td>
<td>Y</td>
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<td>5053</td>
<td>SCR_9_4.46 SCR_9_4.38</td>
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<td>SR 9 San Lorenzo Valley Trail, North Felton</td>
<td>Install sidewalk/pedestrian path on west side, shoulder widening to 5’ for bicycle lanes.</td>
<td>Bicycle</td>
<td>System Management</td>
<td>V</td>
<td>$7,400</td>
<td>2014</td>
<td>Y</td>
<td>Santa Cruz County</td>
<td>SCCRTC RTP 2014</td>
<td>Y</td>
<td>N/A</td>
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<td>SCR_9_86.46 SCR_9_8.431 SCR_9_8.51</td>
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<td>SR 9 from Graham Hill Rd to Ben Lomond Rd</td>
<td>Construct new bike/pedestrian facilities, and increase shoulder width (SR 9/San Lorenzo Valley Trail)</td>
<td>Bicycle</td>
<td>System Management</td>
<td>IV</td>
<td>$7,400</td>
<td>2014</td>
<td>Y</td>
<td>Santa Cruz County</td>
<td>WI 1 TOP 2006</td>
<td>Y</td>
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<td>SR 17, Sims Rd, and El Rancho Dr (Improvements on La Madrona Dr)</td>
<td>Sims Rd and El Rancho Dr with Intersection Control Evaluation at SR 17</td>
<td>Off-System</td>
<td>System Preservation</td>
<td>V</td>
<td>$3,500</td>
<td>2014</td>
<td>Y</td>
<td>Santa Cruz County</td>
<td>SCCRTC RTP 2014</td>
<td>Y</td>
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<td>N/A</td>
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<td>SCR_17_3.442 SCR_17_3.453 SCR_17_3.453</td>
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<td>SR 17 between Mt. Herman Rd and Granite Creek Rd Interchange</td>
<td>Construct new interchange</td>
<td>Highway</td>
<td>System Management</td>
<td>IV</td>
<td>$30,000</td>
<td>2014</td>
<td>N</td>
<td>City of Scotts Valley</td>
<td>SR 17 TCR 2006</td>
<td>N</td>
<td>N/A</td>
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<td>5051</td>
<td>SCR_17_3.501 SCR_17_3.501</td>
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<td>SR 17 at Mt. Herman Rd</td>
<td>Add lane to SB off ramp interchange</td>
<td>Highway</td>
<td>System Management</td>
<td>III</td>
<td>$1,500</td>
<td>2014</td>
<td>N</td>
<td>City of Scotts Valley</td>
<td>SR 17 TCR 2006</td>
<td>N</td>
<td>N/A</td>
<td>SU-R44</td>
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<td>SCR_17_3.453 SCR_17_3.453 SCR_17_3.453</td>
<td></td>
<td>SR 17 at Granite Creek Rd Interchange</td>
<td>Realign/Reconfigure the Granite Creek Road over crossing, add bike lanes and sidewalks.</td>
<td>Highway</td>
<td>System Management</td>
<td>IV</td>
<td>$8,000</td>
<td>2014</td>
<td>N</td>
<td>City of Scotts Valley</td>
<td>SR 17 TCR 2006</td>
<td>N</td>
<td>N/A</td>
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<td>5023</td>
<td>SCR_17_3.453 SCR_17_12.553</td>
<td></td>
<td>SR 17 from Granite Creek Rd to City of Santa Cruz/Santa Clara County Line</td>
<td>Access management, grade separation</td>
<td>Highway</td>
<td>System Management</td>
<td>V</td>
<td>$0</td>
<td>6/1/04</td>
<td>N/A</td>
<td>SR 17 TCR 2006</td>
<td>N</td>
<td>N/A</td>
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<td>RTP ID #</td>
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<td>SCR_1_32.1</td>
<td>SCR_1_35.5</td>
<td>On Route 3 in Santa Cruz County Near Davenport and South Of Waddell Creek</td>
<td>Jack new culverts at the four locations.</td>
<td>Highway</td>
<td>I</td>
<td>$4,200</td>
<td>2022</td>
<td>Caltrans</td>
<td>2015 10-yr SHOPP</td>
<td>SHOPP</td>
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<td>SCR_9_6.5</td>
<td>SCR_9_12.99</td>
<td>On Highway 9 in Santa Cruz County from Holiday Lane, just South of the City of Ben Lomond, to the junction of Route 338 and 9, in the City of Boulder Creek.</td>
<td>Culvert Repair/Pollutant Source Control</td>
<td>Highway</td>
<td>I</td>
<td>$2,800</td>
<td>2022</td>
<td>Caltrans</td>
<td>2016 10-yr SHOPP</td>
<td>SHOPP</td>
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<td>SCR_9_13.0</td>
<td>SCR_9_23.9</td>
<td>On Highway 9 in Santa Cruz County from the junction of Route 338 and 9, in the City of Boulder Creek, to the Santa Cruz County line.</td>
<td>Culvert Repair/Pollutant Source Control</td>
<td>Highway</td>
<td>I</td>
<td>$2,800</td>
<td>2022</td>
<td>Caltrans</td>
<td>2016 10-yr SHOPP</td>
<td>SHOPP</td>
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<td>MON_68.0.50</td>
<td>MON_68.0.60</td>
<td>In MON County in Pacific Grove from 17 Miles Drive to Congress Avenue</td>
<td>Provide Accessible Pedway</td>
<td>Highway</td>
<td>I</td>
<td>$1,000</td>
<td>2022</td>
<td>Caltrans</td>
<td>2016 10-yr SHOPP</td>
<td>SHOPP</td>
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<td>SCR_152_3.7</td>
<td>SCR_152_8.29</td>
<td>East of Watsonville in Santa Cruz County, Near Carlton/Casserly Roads County Line</td>
<td>Cerritos Rumble Strip</td>
<td>Highway</td>
<td>I</td>
<td>$900</td>
<td>2022</td>
<td>Caltrans</td>
<td>2016 10-yr SHOPP</td>
<td>SHOPP</td>
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<td>SCR_Var_Var</td>
<td>SCR_Var_Var</td>
<td>On Various Routes in Monterey and Santa Cruz Counties</td>
<td>Replacement of overhead signs with retro-reflective sheeting</td>
<td>Highway</td>
<td>I</td>
<td>$2,150</td>
<td>2022</td>
<td>Caltrans</td>
<td>2016 10-yr SHOPP</td>
<td>SHOPP</td>
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<td>SCR_Var_Var</td>
<td>SCR_Var_Var</td>
<td>In MON, SCR, SLO and SB Counties within the Coastal Zones along the state highway</td>
<td>Create an Interagency Agreement to form an instrument to fund and enable the construction of segments of the California Coastal Trail by the stakeholder agencies.</td>
<td>Highway</td>
<td>I</td>
<td>$625</td>
<td>2022</td>
<td>Caltrans</td>
<td>2017 10-yr SHOPP</td>
<td>SHOPP</td>
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<td>SCR_Var_Var</td>
<td>SCR_Var_Var</td>
<td>In MON, SBT, SLO and SCR counties on various routes and at various locations.</td>
<td>Establish or support the establishment of a mitigation bank or an in-lieu fee program or other mechanism to mitigate future impacts to Federally Listed Salamander habitat</td>
<td>Highway</td>
<td>I</td>
<td>$1,000</td>
<td>2022</td>
<td>Caltrans</td>
<td>2017 10-yr SHOPP</td>
<td>SHOPP</td>
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<td>SCR_Var_Var</td>
<td>SCR_Var_Var</td>
<td>Various locations in SB, SLO, MON and SCR Counties</td>
<td>Countdown pedestrian signal (CPS) heads and accessible pedestrian signal (APS) pedestrian pushbuttons</td>
<td>Highway</td>
<td>I</td>
<td>$350</td>
<td>2022</td>
<td>Caltrans</td>
<td>2021 10-yr SHOPP</td>
<td>SHOPP</td>
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<td>SCR_Var_Var</td>
<td>SCR_Var_Var</td>
<td>In San Benito, Santa Cruz and Northern Monterey County</td>
<td>Advance Mitigation of impacts to wildlife corridors by preservation and enhancing safe and viable passage along the highways</td>
<td>Highway</td>
<td>I</td>
<td>$333</td>
<td>2020</td>
<td>Caltrans</td>
<td>2024 10-yr SHOPP</td>
<td>SHOPP</td>
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TO: Interagency Technical Advisory Committee (ITAC)
FROM: Tegan Speiser, Sr. Transportation Planner
RE: Cruz511 Traveler Information Service for Santa Cruz County

RECOMMENDATION

Receive an update on the Cruz511 Traveler Information Service for Santa Cruz County.

BACKGROUND

With the support of a Caltrans Partnership Planning Grant, the Santa Cruz County Regional Transportation Commission (RTC) and the Transportation Agency for Monterey County (TAMC) completed a feasibility study and implementation plan for establishing a 511 traveler information service in the Monterey Bay Area. In December 2013, the RTC authorized staff to develop and implement a web-based 511 traveler information service for Santa Cruz County as outlined in the 511 Implementation Plan.

DISCUSSION

As a nationally recognized brand for traveler information, 511 provides travelers with easy access to traveler information and empowers people to better plan or adapt their trips based on knowledge about current travel conditions. Communities across California have developed and implemented 511 programs and the Monterey Bay Area is one of the few remaining gaps in this information network.

In May 2015, RTC launched Cruz511.org, a 511 mobile responsive website for Santa Cruz County travelers designed for viewing on smart phones and tablets as well as on computers. The Cruz511.org website features:

- Information on real-time traffic speeds, incident information and traffic cameras using data from Caltrans and the CHP
- Multimodal information and trip planning tools
- Specialized transportation information
- Emergency alerts and notices
- Rideshare tools and information
- Station locations for electric vehicle charging and alternative fuels
- Links to local transportation providers, services and resources
- A strong focus on usability and convenience

Cruz511 is now the umbrella and brand under which all RTC traveler information services will take place including those previously delivered through Commute Solutions.

System monitoring is critical to the success of 511 services, and performance metrics are being established for these four categories: usage, reliability, accuracy and
customer engagement. Usage information is especially important to marketing and outreach activities and for fine-tuning how information is organized and presented on the website. Web analytics will help RTC gauge consumer response and engagement with 511 services.

Although many good traveler information tools and resources exist in our area, there is significant value in having them all in one place and easy to access. This will also allow the RTC’s rideshare program to provide more online and streamlined delivery of information to users of the transportation system and to reach more people simultaneously. The Cruz511 website is a one-stop shop for traveler information around the clock especially during emergencies that impact the transportation network.

We welcome input from ITAC members about additional information and resources they feel would benefit travelers who live and/or visit Santa Cruz County.

**SUMMARY**

RTC developed and launched a 511 website, Cruz511.org, to provide traffic conditions and multimodal transportation information that is tailored to Santa Cruz County residents and visitors.
RECOMMENDATION

This item is for information only.

BACKGROUND

In June 2014 the Regional Transportation Commission (RTC) adopted the long range Regional Transportation Plan (RTP). This document identifies transportation projects, programs and funding through the year 2035 and assumes approximately $400 million in new revenue from a ½ cent sales tax and $10 vehicle registration fee to address some of the gap between anticipated revenues for transportation projects and the extensive list of needs.

DISCUSSION

Recently a survey of likely voters was conducted by local business organizations to assess voter support for a new ½ cent local transportation sales tax. A 2/3 supermajority of support from voters is required for passage, which necessitates:

- defining a package of projects with broad appeal based on voter polls
- building a strong and broad coalition of supporters and vocal advocates
- conducting education (why the pie is not big enough, what are the needs, what has been done, how to plan for the future, address concerns of potential opposition, etc.)
- large voter turnout
- a well funded and active private campaign

Summary results from the privately-funded phone survey of likely voters will be provided at the meeting.

SUMMARY

As part of implementation of the 2014 Regional Transportation Plan, the RTC and community groups have been looking at options for placing a ½ cent transportation sales tax on the 2016 presidential election ballot. Staff will present results of a survey of likely voters at this meeting.
AGENDA: June 18, 2015

TO: Interagency Technical Advisory Committee (ITAC)
FROM: Rachel Moriconi and Karena Pushnik, Senior Transportation Planners
RE: Draft Passenger Rail Feasibility Study

RECOMMENDATIONS

Staff recommends that the Interagency Technical Advisory Committee (ITAC) receive a presentation on the Draft Passenger Rail Feasibility Study, provide feedback, and provide outreach assistance.

BACKGROUND

In order to expand mobility options along the most heavily traveled areas of the county, the Regional Transportation Commission acquired the 32-mile Santa Cruz Branch Rail Line -- a continuous transportation corridor from Davenport to Watsonville and Pajaro. Current, planned, and potential future uses of the rail corridor include freight and recreational passenger rail services, a new bicycle/pedestrian path next to the tracks, and new rail transit or intercity rail service connecting with local bus transit and planned regional and state rail service. The RTC used voter-approved bond funds designated for expanding passenger rail service to purchase the rail line from Union Pacific Railroad in October 2012.

With this transportation resource now in public ownership, the Regional Transportation Commission (RTC) received a transit planning grant from the California Department of Transportation (Caltrans) to analyze the feasibility of rail transit on the Santa Cruz Branch Rail Line. Rail transit is regularly scheduled public transportation service, with established fares on fixed guide way railroad tracks. In May 2014, the RTC issued a contract with Fehr & Peers, a consulting firm specializing in transit planning, and their team of subconsultants to conduct the study. The consultant contract is $180,000.

In summer 2014, over 2,000 people provided input through an online survey, a community meeting and by email on community goals and objectives, service parameters, including station locations. Agencies with experience planning and implementing rail transit provided peer review of technical information, and community stakeholders also provided input at several points during development of the study. The study was prepared in partnership with Santa Cruz METRO, Iowa Pacific/Santa Cruz & Monterey Bay Railway, and Caltrans who provided oversight as members of the Project Team.

In September 2014, the RTC approved service scenarios to undergo detailed analysis, as well as goals, objectives, and performance measures to evaluate those scenarios. The service scenarios include the length of service, number of stations, and frequency.
DISCUSSION

The Passenger Rail Feasibility Study – Draft Report was posted on the RTC website (www.sccrtc.org/rail) for public review on May 21. The study is a high-level analysis of a range of rail transit options on the Santa Cruz Branch Rail Line between Santa Cruz and Watsonville/Pajaro based on goals and objectives developed with community input. **Staff will provide a presentation on the draft Passenger Rail Feasibility Study and requests feedback from the committee as a group or individually.**

Report contents

The study includes the following sections:

ES) Executive Summary

1) Introduction: Purpose of the study, rail corridor history, and coordination with the MBSST/Rail Trail, and summary of public outreach
2) Comparable Systems and Technology Options: Description of rail systems and range of rail vehicles used in the United States.
3) Study Goals and Objectives: Three core goals and corresponding objectives for rail transit used to evaluate each scenario.
4) Passenger Rail Service Alternatives: Description of all service scenarios initially considered and process for selecting seven scenarios for detailed analysis, representing a range of station locations, service hours, vehicle types.
5) Methods and Assumptions: General assumptions, operating details, and ridership forecasting methodology used for this study
6) Technical Assessment of Service Scenarios: Description of findings from the technical analysis of seven service scenarios.
   - Capital Cost Estimates
   - Operations & Maintenance Cost Estimates
   - Ridership Forecasts
   - Funding Assessment – funding sources currently used by Metro for bus transit operations were not considered
7) Evaluation of Service Scenarios: Summary of the level each scenario advances community goals and objectives.
8) Preferred Service Alternative: Discussion of the two highest rated service options.
9) Implementation: Describes next steps and timeline if the community decides to pursue implementation of passenger rail transit service in the near future; includes planning, design, environmental clearance activities and regulatory and governance considerations.

The Executive Summary is attached (Attachment 1). The Executive Summary, full plan and appendices are available for download on the RTC website – www.sccrtc.org/rail. Hard copies are also available for review at the RTC’s downtown Santa Cruz office and the Santa Cruz Central, Aptos and downtown Watsonville libraries.
Key Findings

- The technical analysis and evaluation of the seven service scenarios found that phased implementation of rail service on the Santa Cruz Branch Rail Line is feasible.
- Differences between the scenarios include: type of train technology, speed of implementation, level of upfront investment, ongoing operating costs, and advancement of community goals.
- Ridership estimates range from 480,000 to 1,413,000 passengers annually (base year), depending on the scenario.
- Funding for construction would need to be secured from competitive grants.
- Some funding for operations would need to be secured from a local transportation ballot measure. Federal, state, and local funding sources currently used for operations by Metro for bus transit were not considered.
- Of seven scenarios analyzed, phased implementation could include:
  - Start up limited service (Scenario S) between Bay Street in Santa Cruz (connecting to buses to UCSC and Westside Santa Cruz) and Seacliff Village (with bus connections to Cabrillo College). Includes minimal upgrades to the rail line, fewer stations, and fewer trains in off-peak hours, using leased locomotive vehicles.
  - Local Service between Westside Santa Cruz and Aptos Village (Scenario E), serving 9 stations, with 30-minute headways, upgrades to the rail line and new Diesel Multiple Unit (DMU) vehicles aimed at attracting strong ridership, and maximizing operational efficiencies.
  - Expanded Local Service to Watsonville (Scenario G). Since this scenario is twice as long as Scenario E it has higher ridership, however the level of funding necessary for upfront capital investments and ongoing operations and maintenance would be more challenging to secure, or the service could be added as funding becomes available.

Public outreach

Public input gathered at the beginning of the analysis helped shape this study. Two community presentations were held on June 4; one to the Regional Transportation Commission board at their meeting held in Watsonville, and the other an evening Open House at the Simpkins Swim Center in Live Oak. **Input on the draft report received by the July 31 deadline will inform the Final Report.** As always, widespread public participation and engagement is encouraged. The committee and the community (through the RTC’s Rail eNews group which has over 2,000 email subscribers and neighborhood distribution lists) are encouraged to review the document and provide feedback.

In addition, information about the draft report is included in the RTC’s web newsfeed, Facebook and Twitter pages, as well as through newsletters, news media, local business, and community partners. The Fact Sheet (Attachment 2) on the study and
flyers announcing the public open house were also distributed at multiple venues. In additions to the RTC Advisory Committees, staff is presenting information on the draft document to local technical stakeholders and community groups, the METRO board, and other community groups and service clubs.

There are several ways for members of the community to provide input on the Draft Study:

- An online survey will be available June 4 to July 31 from [www.sccrtc.org/rail](http://www.sccrtc.org/rail)
- Written comments can be submitted to the RTC:
  - online (sccrtc.org/rail) by using the comment form
  - via email to: info@sccrtc.org with the subject: “Draft Rail Study Comments”
  - by postal mail

This is an important community discussion about the possibility of adding a new transportation option in Santa Cruz County.

**Next Steps**

Staff will review comments received through July 31, seek RTC guidance on issues identified by the public, and request that the consultant team conduct additional analysis if needed. Consultants Fehr & Peers will prepare the final report for presentation to the RTC in the fall, including next step recommendations for consideration.

**SUMMARY**

The RTC was awarded a transit planning grant to analyze passenger rail transit service along the Santa Cruz Branch Rail Line. This high-level study focuses on public rail transit options within the most populated sections of the rail corridor. The study includes cost, ridership, and funding options for a range of transit service scenarios. All are encouraged to review the draft report (posted online and at public locations) and submit written comments on the draft report and use of an online survey are encouraged through July 31, 2015 for ITAC Committee may submit comments as a group or individually.

**Attachments:**

1) [Executive Summary](http://www.sccrtc.org/rail) (the full report is available electronically on the RTC website – [www.sccrtc.org/rail](http://www.sccrtc.org/rail))
2) Fact Sheet
Passenger Rail Feasibility Study Draft Report

Study prepared with funding from the California Department of Transportation’s FTA 5304 Transit Planning Program

Study prepared by
- Fehr & Peers
- LTK Engineering Services
- RailPros
- Bob Schaevitz

Santa Cruz County Regional Transportation Commission

May 2015
0.0 EXECUTIVE SUMMARY

Is passenger rail transit service feasible in Santa Cruz County? What criteria should be used to define what is feasible? How can the community maximize use of the publicly-owned Santa Cruz Branch Rail Line? How much would it cost and how many people would ride trains? Could it help advance the community’s mobility, environmental, economic, and other goals? Is there a “starter” passenger rail service that could be implemented in the near term, and then augmented as demand and resources change? Could passenger rail service be part of an integrated transportation network? How will passenger rail service be coordinated with existing transit service, freight trains, and the planned Monterey Bay Sanctuary Scenic Trail Network – especially the 32 mile rail-with-trail project? These are some of the questions that spurred policy makers, agency staff, and community members to investigate if rail transit could serve some of Santa Cruz County’s extensive transportation needs.

The Santa Cruz County Regional Transportation Commission (RTC) received a transit planning grant from the California Department of Transportation (Caltrans) to evaluate the feasibility of passenger rail transit service on the Santa Cruz Branch Rail Line. Rail transit provides regularly scheduled public transportation with established fares, using either locomotive-hauled or self-propelled railroad passenger cars on a fixed guideway (rail). In May 2014, the RTC hired a team of consultants, led by Fehr & Peers to conduct this high-level study, based on their extensive transit planning experience. The study includes technical analysis of several public transportation service scenarios (developed based on input from the public), ridership projections, capital and operating cost estimates, review of train technologies, and evaluation of funding options. Service scenarios were evaluated against multiple goals and objectives identified by the community, and compared to other rail transit systems in the nation. The report also discusses integration with other rail corridor uses; connectivity to other bus and rail services; and identifies feasible options for further analysis, environmental clearance, engineering, and construction, if the community decides to implement rail transit service on the Santa Cruz Branch Rail Line.

1 While there are many different types of passenger service that could operate on the Santa Cruz Branch Rail Line, this study focuses on public transportation options using the fixed guideway rail, characterized by passenger train service (using either locomotive hauled or self-propelled passenger cars) operated on a regular basis by or under contract with a public transit agency or Joint Powers Authority for the purpose of transporting passengers within urbanized areas, or between urbanized areas and outlying areas.
STUDY AREA

The Santa Cruz Branch Rail Line is a continuous transportation corridor offering a variety of mobility options for residents, businesses, and visitors. In October 2012 the RTC completed acquisition of the rail line, which has been a transportation corridor since the mid-1870s, bringing it into public ownership. Funding for acquisition was approved by the voters of both Santa Cruz County and the state of California. The rail corridor (see Figure ES-1) spans approximately 32 miles of Santa Cruz County’s coast from Davenport to Watsonville/Pajaro, runs parallel to the often congested Highway 1 corridor, and connects to regional and state rail lines. This underutilized transportation corridor is within one mile of more than 92 parks, 42 schools and approximately half of the county’s population. Based on public input, travel patterns, and analysis of existing and forecast future demographic conditions, this study focuses on the most populous and congested sections of Santa Cruz County – from the western edge of the city of Santa Cruz to downtown Watsonville; though service north west to Davenport is not precluded from future analysis.

Figure ES-1: Santa Cruz Branch Rail Line

Source: SCCRTC, 2015
Although Santa Cruz County is not considered a metropolitan area, the topography of the area concentrates development between the ocean and the mountains. The county’s population density is one of the highest in California, about 600 people per square mile overall, with areas along the rail line significantly higher (City of Santa Cruz and the Seacliff area are over 4,000 people/square mile; Live Oak almost 5300 people/square mile, Twin Lakes area and City of Watsonville over 7,000 people/square mile).

**PURPOSE OF STUDY**

The RTC was awarded a federal transit planning grant by Caltrans to conduct a passenger rail study for the Santa Cruz Branch Rail Line. The objective of this study is to analyze potential commuter rail service scenarios, along with potential station locations that could serve Santa Cruz County. If found to be feasible, this analysis is intended to lay the groundwork for decisions about pursuing more detailed definitions of operational characteristics and costs. Overall objectives of the study include:

- Analyze the feasibility of passenger rail service on the Santa Cruz Branch Rail Line.
- Identify, evaluate and compare a range of near- and long-term passenger rail service options.
- Understand how commuter and/or intercity passenger rail service can improve people’s access to jobs, schools, recreation, goods/services, and other activities.
- Provide data regarding ridership potential, capital and operating/maintenance costs, revenue projections, and connectivity with other transportation modes.
- Identify governance and financing options.
- Meet sustainable communities, greenhouse gas emission reduction and natural environment protection goals.
- If found to be feasible, provide the community with practical recommendations regarding implementation of passenger rail service, in accordance with forecasted ridership demand and funding.
- If the community decides to implement passenger rail service, recommendations on station locations and train passing sidings will assist local entities in ensuring coordination of land use, transit, trail, and freight plans along the corridor.
- Involve the community and the RTC board in the decision making process.

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2 [http://quickfacts.census.gov/qfd/states/06000.html](http://quickfacts.census.gov/qfd/states/06000.html)
Why Consider Rail Transit for the Santa Cruz Branch Line?

When considering the current state of our strained infrastructure and the housing shortage in the County, as well as anticipated growth in population and jobs, we are faced with many questions. How will people get around? Where will they live? What kind of jobs will they find? What does this mean for quality of life? Will our highways support our growing transportation needs? Essential for a stronger local economy and quality of life, improvements in the housing supply and the transportation network will be needed.

- **The need to ease traffic congestion.** Congestion is not just an inconvenience – it is costly. Unpredictable trip times, wasted fuel and lost time are costs paid by residents and businesses alike. Trips taken by rail could free up capacity and provide relief for those able to use an alternative to Highway 1.
- **Rising demand for complete communities.** Walkable neighborhoods with good quality transit service and a variety of essential services nearby are increasingly desirable.
- **Rail supports compact land use** that allows cities and counties to make the most of existing infrastructure and reduce the number of miles driven through more integrated transportation and land use planning.
- **Reduce emissions.** Rail transit could reduce the number of miles people drive and decrease associated greenhouse gas and other emissions.
- **Improve connectivity.** A commuter rail service would provide a new option for travel within the County, and could connect with rail services to adjoining counties, the San Francisco Bay Area and Southern California.
- **Scalable.** Once investment is made in basic infrastructure such as track, structures, signals and stations, capacity of trains can be increased by adding railcars as demand grows.
- **Funding landscape is changing.** The state’s new Cap and Trade program includes significant funding for conventional as well as high-speed rail investments and is expected to grow over time.

Passenger rail service could contribute to or support many existing policies and goals of the RTC, local government, environmental groups and local business organizations. Coordination and collaboration with these other entities would be essential to realize many goals and policies. As the backbone of a more diverse transportation system, rail service would need to be integrated with existing fixed route bus service. It is not realistic to represent passenger rail as the singular solution to many problems, yet it could provide a very strong supporting role in the future development of healthy sustainable communities in Santa Cruz County.
Study Limitations

The scope of this study is limited to a high-level analysis of rail transit options along the Santa Cruz Branch Rail Line. This is not a detailed service or implementation plan. If the community decides to move forward with implementing service, environmental review and engineering level design work would be initiated to provide more detailed analysis of potential environmental impacts, station locations, parking needs, and integration with the planned Monterey Bay Sanctuary Scenic Trail (MBSST or “rail trail”). Train operating schedules would be evaluated and coordinated with METRO buses. Also, evaluation of multimodal transportation improvements along the heavily-traveled Santa Cruz to Aptos corridor is also in process as part of the Santa Cruz County Unified Corridors Plan. Starting with development of a multimodal county level travel demand model, the Unified Corridors Plan will analyze transportation investments on the parallel routes of Highway 1, Soquel Avenue/Drive and the Santa Cruz Branch Rail Line to identify the combination of investments that most effectively move people and provide transportation choices.

The RTC recognizes that there are also other options for the rail right-of-way that have been analyzed in the past or could be analyzed in the future. This includes other passenger rail service – such as recreational rail service or intercity rail service to the San Francisco Bay Area or Monterey County; or expanded freight service. Some members of the community have also expressed interest in using the Santa Cruz Branch Rail Line for bus rapid transit (BRT) or personal rapid transit (PRT). Expanding rail transit service up to Felton and other parts of San Lorenzo Valley, and operating train service from Santa Cruz to San Jose over the Santa Cruz Mountains have also been mentioned frequently. This study does not preclude future analysis of these and other options, but they are outside of the scope of this study.

MEASURING FEASIBILITY: GOALS AND OBJECTIVES

An initial step in development of this study, the RTC solicited input from the public on the goals, objectives and measures that should be used to evaluate the feasibility of rail service. Goals and objectives identified as priorities by the community are shown in Figure ES-2. These goals and objectives for rail transit in Santa Cruz County are consistent with regional, state and federal transportation planning goals and objectives related to access, mobility, maintenance, efficiency, economic vitality, safety, quality of life, and the environment.
**Figure ES-2: Study Goals and Objectives**

<table>
<thead>
<tr>
<th>Transportation Alternatives/Choices</th>
<th>Sustainability</th>
<th>Cost Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GOAL 1: Provide a convenient, competitive and accessible, travel option</strong></td>
<td><strong>GOAL 2: Enhance communities &amp; the environment, support economic vitality</strong></td>
<td><strong>GOAL 3: Develop a rail system that is cost effective and financially feasible</strong></td>
</tr>
<tr>
<td>More Options&lt;br&gt;Provide additional and competitive travel options to address the current and future needs of the community (including employment, school, visitor, shopping, recreational, neighborhood and other daily trips)</td>
<td>Reduce Traffic&lt;br&gt;Reduce the number of cars on Highway 1 and local roads</td>
<td>Cost to Benefit (Cost Effectiveness)&lt;br&gt;Develop a rail system that is cost effective</td>
</tr>
<tr>
<td>Ridership&lt;br&gt;Increase the number of people using transit</td>
<td>Climate&lt;br&gt;Reduce fuel consumption, greenhouse gas emissions, and air pollution</td>
<td>Cost per Rider&lt;br&gt;Generate sufficient ridership to minimize per rider and system costs</td>
</tr>
<tr>
<td>Faster Travel Times&lt;br&gt;Reduce how long it takes to get places</td>
<td>Other Car Impacts&lt;br&gt;Reduce need for parking, road expansion and other land use effects of cars (preserve open space and reduce sprawl in other areas)</td>
<td>Existing Resources&lt;br&gt;Optimize use of existing infrastructure</td>
</tr>
<tr>
<td>Transit Connections&lt;br&gt;Connect to the existing (METRO) bus transit system</td>
<td>Serve Major Destinations&lt;br&gt;Locate stations in areas with high concentrations of housing, jobs, services, visitors and activities</td>
<td>Financially Feasible&lt;br&gt;Develop a system that keeps operating and capital costs to a minimum</td>
</tr>
<tr>
<td>Bike &amp; Walk Connections&lt;br&gt;Ensure connectivity to sidewalks, bike lanes and Monterey Bay Sanctuary Scenic Trail (or Rail-Trail)</td>
<td>Economy&lt;br&gt;Support access to jobs, shopping, tourist, and other economic activity centers/opportunities</td>
<td>Funding Options&lt;br&gt;Identify service options that are competitive for local, state, &amp; federal funding sources</td>
</tr>
<tr>
<td>Non-Driver&lt;br&gt;Non-drivers for seniors, children, people with disabilities, low-income, and those who cannot or do not drive</td>
<td>Revitalization&lt;br&gt;Stimulate sustainable development and revitalization of areas near stations</td>
<td>Efficiencies&lt;br&gt;Maximize operational efficiencies, build partnerships with public and private agencies, groups and interests</td>
</tr>
<tr>
<td>Visitors&lt;br&gt;Expand options for visitors and tourists to reduce traffic congestion</td>
<td>Minimize Impacts&lt;br&gt;Minimize negative impacts of trains on neighborhoods, adjacent property owners, and the environment (including traffic, noise, parking, construction, etc.)</td>
<td></td>
</tr>
<tr>
<td>Reliability&lt;br&gt;Make it easier to predict how long it will take to get places (improve reliability of transit travel times)</td>
<td>Safety&lt;br&gt;Provide safety measures to avoid conflicts between trains &amp; cars, bicyclists or pedestrians</td>
<td></td>
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</tbody>
</table>
STATIONS AND SCENARIOS ANALYZED

Based on existing and forecasted future travel patterns, as well as input from community members, technical stakeholders and rail peers, a series of station locations and service scenarios were analyzed for this study. The project team conducted a high-level, initial screening of ten service scenario concepts, with varying station locations, termini, and service hours. This included a qualitative assessment of ridership potential, capital costs, and connectivity to local, regional, state transit and intercity rail systems. Taking into consideration the initial screening, service scenarios (which represent a range of costs and near and longer term implementation potential, were selected for more detailed evaluation.

- Limited Service, Santa Cruz ↔ Capitola: Weekday and weekend service limited to primary stations\(^3\) and a few key visitor destinations (Scenario B)
- Peak Express Service, Santa Cruz ↔ Watsonville: Service hours limited to peak weekday commute hours (Scenario D)
- Local Service, Santa Cruz ↔ Aptos: Weekday and weekend service to primary and secondary stations, including service near Cabrillo College (Scenario E)
- Expanded Local Service, Santa Cruz ↔ Watsonville: Weekday and weekend service to primary and secondary stations expanded to Watsonville (Scenario G)
- Santa Cruz ↔ Watsonville Locomotive-Powered (can come with freight): Weekday and weekend service to primary and secondary stations (Scenario G1)
- Regional Rail Connector, Santa Cruz ↔ Pajaro: service connecting to future Capitol Corridor/Amtrak and Coast Daylight service at Pajaro to test potential for ridership demand with regional rail accessibility (Scenario J)
- Limited Starter Service, Santa Cruz ↔ Seacliff/State Park Drive: Very limited weekday and weekend service hours and station stops utilizing locomotives. (Scenario S)

While this represents a range of rail transit service options, the locations where trains start and stop (route/termini), the number and location of station stops, service days and times, vehicle types, passing sidings, station design and other factors could ultimately reflect a scalable hybrid of these scenarios and could change over time if and when the community decides to add rail transit service.

\(^3\) Potential station locations anticipated to have higher ridership potential were identified as “primary stations”. “Secondary stations” also have promising ridership potential, but not as high as primary stations. Other potential station locations were screened out for this analysis; however could ultimately be developed, in-step with growth in ridership potential (jobs, housing, infrastructure development or transit connections) or be utilized at special time periods (such as seasonal weekends or for special events).
TECHNICAL ANALYSIS: RIDERSHIP AND COSTS

Technical analysis of the scenarios described above included ridership forecasts, capital cost estimates, as well as operations and maintenance cost estimates.

**Ridership:** Fehr & Peers conducted a ridership modeling analysis to determine potential ridership demand at each station under each scenario. Based on existing travel and land use patterns, population and employment levels, as well as projected train travel times, the ridership models found that in the base year, up to 1.65 million passengers per year (5,500 daily weekday boardings) would ride trains between Santa Cruz and Watsonville in Scenario G, which serves the greatest number of stations with the most frequency. In 2035, ridership could increase for this same service to over two million annual boardings. For the base year, the scenario with trains limited to morning and evening peak commute hours, serving significantly fewer stations had the lowest ridership estimate of 1,100 per day (287,500 annual boardings in Scenario D).

**Capital Costs:** In order to assess the capital needs of each scenario, consultants RailPros conducted an assessment of existing infrastructure conditions and identified upfront and long-term cost estimates for the track, signal systems, crossings, stations, vehicles, and other components. In many instances, to minimize construction impacts once service is initiated and to reduce maintenance needs, full replacement and reconstruction of many rail elements is recommended and included in the cost estimates; though it is possible to initiate passenger service before making all of the upgrades identified. The initial infrastructure construction costs (capital outlay) range from a low of $23 million (Scenario B: Capitola to/from Santa Cruz) to a high of approximately $48 million (Scenario G1: Watsonville to/from Santa Cruz using locomotives). In addition to the base (or “raw”) construction estimates, the study assumes an additional 30 percent for support costs (e.g. preliminary design and environmental review, preparing construction documents, permitting, construction management) and a 30 percent contingency. Not surprisingly, the capital cost is closely related to the amount of line that is utilized for passenger service, number of stations, and number of rail vehicles. The cost estimates are conceptual, based on recent unit costs on other rail projects, as no engineering was performed for this feasibility-level study. Actual capital costs could range between 70 percent and 130 percent of these estimates, with more precise cost estimates only available following detailed surveying and engineering analysis.

**Operations and Maintenance:** LTK Engineering Services developed travel time forecasts, identified where new passing tracks (sidings) may be required to allow trains traveling in opposite directions to pass, as well as annual operating and maintenance costs. This analysis found that with the capital upgrades identified, including new passing sidings, it would take 36 or 41 minutes for trains to travel between Santa Cruz and

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4 “Base year” is based on 2010 AMBAG Regional Travel Demand Model information.
Watsonville, depending on the number of station stops (6 or 10, respectively). Service between the Westside of Santa Cruz to Capitola Village would take 16 minutes.

Estimated operating and maintenance costs included in this study vary depending on the number and distance of trains operating per day. Generally, the cost per revenue hour of $376 was assumed in this study, using an average cost from similar peer rail systems. This number includes fuel, operator salaries, general rail and station maintenance, and other ongoing expenses utilizing a Diesel Multiple Unit (DMU) vehicle. Vehicle maintenance per DMU train set is assumed to be $173,000 per year. General Administration, which includes marketing, security, scheduling, and other administrative activities, is assumed to be an extra 38 percent. The operating costs for scenarios utilizing locomotives pulling coaches are higher due to the additional vehicles and fuel use.

Table ES-1 provides a summary of the ridership, travel time, and cost estimates for each scenario analyzed. Preliminary capital and operating costs for Scenario S were provided by Iowa Pacific, then adjusted for consistency regarding contingency and support costs, Positive Train Control, and labor rates.

**TABLE ES –1: SUMMARY OF TECHNICAL ANALYSIS**

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</thead>
<tbody>
<tr>
<td>Track Miles</td>
<td>6.6</td>
<td>20.5</td>
<td>9.5</td>
<td>20.5</td>
<td>20.5</td>
<td>21.8</td>
<td>7.6</td>
</tr>
<tr>
<td>One-way Travel Time</td>
<td>16 min</td>
<td>36 min</td>
<td>23 min</td>
<td>41 min</td>
<td>41 min</td>
<td>43 min</td>
<td>25 min</td>
</tr>
<tr>
<td>Trains per weekday (both directions)</td>
<td>60</td>
<td>24</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>12</td>
<td>36</td>
</tr>
<tr>
<td>Number of vehicles (train sets)</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>3 (leased)</td>
</tr>
<tr>
<td>Number of stations (weekday)</td>
<td>6</td>
<td>6</td>
<td>9</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>4 + 1 seasonal</td>
</tr>
<tr>
<td>Operating hours per year (rev train hours)</td>
<td>9800</td>
<td>4313</td>
<td>9800</td>
<td>13,591</td>
<td>13,591</td>
<td>5024</td>
<td>5513</td>
</tr>
<tr>
<td>Annual service miles (revenue train miles)</td>
<td>145,000</td>
<td>136,000</td>
<td>204,000</td>
<td>400,000</td>
<td>400,000</td>
<td>56,000</td>
<td>91,500</td>
</tr>
<tr>
<td>Annual Boardings Low Estimate (Base Year)</td>
<td>846,000</td>
<td>287,500</td>
<td>1,413,000</td>
<td>1,509,000</td>
<td>1,509,000</td>
<td>528,000</td>
<td>420,000</td>
</tr>
<tr>
<td>Annual Boardings High Estimate (2035)</td>
<td>1,287,000</td>
<td>405,000</td>
<td>1,926,000</td>
<td>2,031,000</td>
<td>2,031,000</td>
<td>741,000</td>
<td>660,000</td>
</tr>
</tbody>
</table>
TABLE ES-1: SUMMARY OF TECHNICAL ANALYSIS

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Daily weekday boardings Low Estimate (Base Year)</td>
<td>2,800</td>
<td>1,100</td>
<td>4,700</td>
<td>5,000</td>
<td>5,000</td>
<td>1,750</td>
<td>1,400</td>
</tr>
<tr>
<td>Daily weekday boardings High Estimate (2035)</td>
<td>4,300</td>
<td>1,600</td>
<td>6,400</td>
<td>6,800</td>
<td>6,800</td>
<td>2,500</td>
<td>2,200</td>
</tr>
<tr>
<td>Annual O&amp;M cost (operations, vehicle maintenance, general admin, &amp; contingency)</td>
<td>$6.9M</td>
<td>$3.8M</td>
<td>$6.9M</td>
<td>$9.9M</td>
<td>$14M</td>
<td>$3.7M</td>
<td>$5.4M</td>
</tr>
<tr>
<td>“Raw” Construction-only outlay cost (excluding vehicles, support and contingency)</td>
<td>$23M</td>
<td>$40M</td>
<td>$28M</td>
<td>$41M</td>
<td>$48M</td>
<td>$41M</td>
<td>$19.7M</td>
</tr>
<tr>
<td>Upfront Capital Cost (Outlay) (tracks, stations, vehicles, +30% contingency &amp; 30% support)</td>
<td>$77M</td>
<td>$119M</td>
<td>$85M</td>
<td>$133M</td>
<td>$176M</td>
<td>$93M</td>
<td>$31.5M (vehicle lease under O&amp;M)</td>
</tr>
<tr>
<td>Total Capital Outlay/mile</td>
<td>$12M</td>
<td>$6M</td>
<td>$9M</td>
<td>$6M</td>
<td>$9M</td>
<td>$4M</td>
<td>$4M</td>
</tr>
</tbody>
</table>

Source: Fehr & Peers, LTK, RailPros, 2015, Scenario S – Iowa Pacific, adjusted for consistency
Notes: SC = Santa Cruz, Cap = Capitola, W = Watsonville, FRA = Federal Railroad Administration; “Raw” items include capital construction costs such as tracks, stations, and sidings.

FUNDING ASSESSMENT

A core component of demonstrating feasibility for any transit project is the ability to secure adequate funding for project implementation (planning, environmental review, design, procurement and construction) and for ongoing system operations and maintenance. Initiation of new passenger rail service in Santa Cruz County will require a combination of federal and/or state capital funding, as well as new revenues for ongoing operations. This study includes an inventory of existing and potential new federal, state, regional, local, and private funding sources and identifies funding strategies or recommendations for sources or mechanisms that are most reasonable to pursue. The study also evaluated a range of passenger fare levels that could optimize revenues without significantly impacting ridership levels.
A base assumption used for this study was that funding sources used to fund the existing bus transit system would not be redirected to fund rail transit. The study found that a successful funding strategy for any scenario will need to include a new countywide sales tax with some portion dedicated to rail and some combination of the following sources – U.S. Department of Transportation TIGER grant program, Federal Transit Administration (FTA) $5309 Fixed Guideway Small Starts grant program, and/or California Cap and Trade program funds. Additional potential sources of revenue include regional shares of state and federal funds (e.g. State Transportation Improvement Program), federal Economic Development Administration public works grants, FTA §20005(b) Transit Oriented Development (TOD) grants, developer fees, smart cities, sustainable communities, healthy neighborhoods and other land use or planning type grants; as well as public-private partnerships (P3).

Taking into consideration the universe of sources that may be available for capital and ongoing operations, it appears unlikely that capital costs in excess of $100 million can be met with grant programs and other sources that currently exist or could be potentially available. As with capital needs, annual operating subsidies in excess of $10 million annually would be difficult to achieve in the current funding environment.

OTHER EVALUATION MEASURES/FEASIBILITY

In addition to the base metrics of ridership and cost described above, an evaluation framework was developed to evaluate rail transit service along the Santa Cruz Branch Rail Line in the context of the goals and objectives identified by the community for this study. Each of the seven scenarios was comparatively evaluated against several quantifiable metrics. These evaluation measures included criteria to measure transit operations and performance, connectivity and quality of access, livability and economic vitality, neighborhood and environmental impacts, impacts of construction on homes and businesses, capital and operating costs, and funding competitiveness. Comparing the seven service scenarios based on the evaluation measures and goals (Figure ES-3) each with equal weight, Scenario E (local service between Santa Cruz and Aptos Village), Scenario G (local service between Santa Cruz and Watsonville), and Scenario S scored the highest. Scenario D (Watsonville/Santa Cruz Peak Express), which only operates during peak commute hours, scored the lowest.
PREFERRED ALTERNATIVE RECOMMENDATIONS

This study evaluates the feasibility of implementing rail transit service along the Santa Cruz Branch Rail Line based on how well the range of potential service scenarios advance goals and objectives identified by the community. The technical analysis and evaluation of the service scenarios found that phased implementation of rail service within Santa Cruz County is feasible.

Of the seven service scenarios, two potential strategies for implementing passenger rail transit service on the Santa Cruz Branch Line are recommended to move forward for further analysis. Both strategies are feasible options for introducing rail transit service on the corridor; the ultimate decision by the RTC Board to pursue and implement either option will be based on key decision factors.

- Option 1 (Higher investment) – Rail Transit | Scenario E, Santa Cruz to Aptos, Local Service.

Goal 1 - Transportation Alternatives/Choices: Provide a convenient, competitive and accessible, travel option

Goal 2 – Sustainability: Enhance communities & the environment, support economic vitality

Goal 3 - Cost Effectiveness: Develop a rail system that is cost effective and financially feasible

Source: Fehr & Peers, 2015
• Option 2 (Lower investment) – Railroad | Scenario S, Santa Cruz to Secliff, Limited Local Service.

Both service options are feasible from a constructability and operational standpoint. Both Scenario E and Scenario S would improve accessibility and mobility along a section of this passenger rail corridor that is currently underutilized.\(^5\) Available funding, ability to achieve community goals, and customer needs are the key factors to be considered by RTC when making a determination of which service alternative or hybrid of scenarios to pursue for implementation. Feasibility will rely heavily on securing a new sales tax with a portion of the funds dedicated for ongoing operation of rail transit service and which would provide an attractive match to federal and/or state grants for capital infrastructure.

NEXT STEPS/ IMPLEMENTATION

Implementation considerations include: regulatory requirements, freight integration, governance structure for operations, project development activities, and potential funding strategies. Based on the findings in this study, the following recommendations and action plan are organized into near-term (1-5 years) and mid-term (5-10 years) horizons with the objective of providing RTC with a program to follow for further planning, identification of funding sources, and potential implementation of service by the year 2025.

• Draft Environmental Studies and Conceptual Engineering –near-term.
• Final Design, Construction Documents, and Funding – near-term
• Right-of-way (ROW) Acquisition for stations and sidings, if needed – near-term
• Contractor Procurement – mid-term
• Construction – mid-term
• Vehicle Procurement – mid-term
• Opening – mid-term

Other considerations that need to be addressed when passenger rail service moves through subsequent planning and design activities towards implementation include:

• Integration/coordinating with freight service
• Rail line governance

\(^5\) With the exception of excursion services and occasional freight service in the Watsonville area.
• Regulatory agency requirements
• Coordination with Santa Cruz METRO
• Ridership forecasting using FTA Simplified Trips-on-Project Software (STOPs) methodology required for federal funding
• Funding competitiveness and procurement

PUBLIC INVOLVEMENT

Public interest in this study is high, as demonstrated by extensive public input gathered at the project outset in 2014. Broad community participation helped shape this study. Information about the study is posted online at: www.sccrtc.org/rail, was distributed through an eNews email group with over 1,700 subscribers. In summer 2014, 2,000 members of the community participated in online questionnaires, or attended public workshops and meetings. The community provided input on study goals and objectives, evaluation measures, service scenarios, station locations, and operating hours. Through this Draft Study, the RTC requests that the community consider the results of ridership, revenue and cost estimates and engage in a thoughtful discussion about the feasibility of future rail transit service. To receive additional information about the passenger rail study and to participate in the discussion, sign up for eNews at: http://www.sccrtc.org/about/esubscriptions/. Comments on the draft study should be submitted to the RTC.
The RTC was awarded a transit planning grant by Caltrans to analyze passenger rail transit service along the Santa Cruz Branch Rail Line. Rail transit is regularly scheduled public transportation service, with established fares on fixed guideway railroad tracks. This high-level study focuses on the most populated sections of the rail corridor, between Santa Cruz and Watsonville.

The Draft Report is now available online: [www.sccrtc.org/rail](http://www.sccrtc.org/rail)

Public input gathered at the beginning of the analysis helped shape this study which includes:

- **Introduction** including why consider rail transit
- **Goals and Objectives** used to evaluate the feasibility of each scenario
- **Service Scenarios** representing a range of station locations, service hours, vehicle types (over for map)
- **Technical Assessment** of Seven Service Scenarios
  - Capital Cost Estimates
  - Operations & Maintenance Cost Estimates
  - Ridership Forecasts - how many people would ride trains
  - Funding Assessment - how it could be funded
- **Evaluation** of how well each scenario advances community goals and objectives
- **Preferred Service Alternatives** – two highest rated options based on evaluation criteria
- **Implementation Options**

**Key Findings**

- The technical analysis and evaluation of the seven service scenarios found that phased implementation of rail service within Santa Cruz County is feasible.
- Of seven scenarios analyzed, two are recommended to be considered for implementation.
- Differences between the scenarios include: type of train technology, speed of implementation, level of upfront investment, ongoing operating costs, and level community goals advanced.
- Ridership estimates range from 480,000 to 1,413,000 annually (base year), with a $2.50 fare per ride.
- Funding for construction would need to be secured from competitive grants.
- Funding for operation would need to be secured from a local transportation ballot measure. Funding sources currently used for operations by Metro for bus transit were not considered.

**Get Involved - Your participation will help ensure that the Final Report reflects community input.**

**Step 1: Review the Draft Report**

- Online: [www.sccrtc.org/rail](http://www.sccrtc.org/rail)
- In person: Review a print copy at the RTC’s Santa Cruz office; Libraries in downtown Santa Cruz, Live Oak, Aptos or Watsonville; or Capitola City Hall

**Step 2: Join the Conversation! Submit Comments by July 31, 2015**

- **Online Survey:** See link from [www.sccrtc.org/rail](http://www.sccrtc.org/rail)
- **Comment Form:** Submit comments online - [http://www.sccrtc.org/rail-study-comments/](http://www.sccrtc.org/rail-study-comments/)
- **Email:** Send comments to info@sccrtc.org with subject “Draft Rail Study Comments”

**Step 3: Stay Involved** - Sign up for eNews to receive information about the study and to participate in the discussion. [http://www.sccrtc.org/about/esubscriptions/](http://www.sccrtc.org/about/esubscriptions/)

For more information, please visit the RTC web site: [www.sccrtc.org](http://www.sccrtc.org) or call (831) 460-3200.

Santa Cruz County Regional Transportation Commission, 1523 Pacific Avenue, Santa Cruz, CA 95060
Passing siding locations subject to change based on start/end times and service frequency.