AGENDA
Thursday, May 21, 2020
1:30 p.m.

NOTE: Teleconference
https://us02web.zoom.us/j/84540823530

Participants are encouraged to use computer microphone.
Alternately participants may dial-in: 669-900-9128 or 1-253-215-8782
Conference ID: 845 4082 3530
Password: 693513

This meeting is being held by teleconference in accordance with the Brown Act as currently in effect under the State Emergency Services Act, the Governor’s Emergency Declaration related to COVID-19, and the Governor’s Executive Order N-29-20, which allow local board and committee members and the public to participate and conduct meetings by teleconference, videoconference, or both. The full executive order can be found here.

The RTC is committed to facilitating coordination among agencies and encourages members and interested parties to join the online meeting by clicking the meeting link provided above. If you are unable to participate by web or phone or if you need additional assistance to participate, please contact 831-460-3200 at least 3 days in advance of the meeting. Members of the public may not attend this meeting in person. Comments and questions may be shared with the committee through teleconference audio in real time, or by prior written submission to rmoriconi@sccrtc.org.

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, deletions, or other changes 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, 2020 ITAC meeting (Page 4)

6. Receive Information Items:
   a. Santa Cruz Branch Rail Line Railroad Worker Safety Training (Page 9)
   b. RTC Meeting Highlights (Page 11)
   c. Measure D Spring 2020 Project Updates (Page 14)

REGULAR AGENDA

7. Status of transportation projects, programs, studies and planning documents
   a. Verbal updates from ITAC members
   b. Caltrans Project Updates (Page 18)

8. Transit Corridor Alternatives Analysis – Alternatives Screening Results and Short List of Alternatives (Page 26)
   a. Staff Report
   b. Attachments

9. Transportation Funding Impacts due to COVID-19 (Page 39)
   a. Staff Report
   b. Attachments

10. COVID Response and Recovery Strategies (Page 44)
    a. Staff Report
    b. Attachments

11. Transportation Program Updates and Announcements (Page 52)
    a. Updates on state, federal, and other programs

12. Active Transportation Program Cycle 5 Applications
    a. Verbal Updates from ITAC members

13. SB743 Implementation Updates
    a. Verbal Updates on Implementation from ITAC members

14. Next Meeting – The next ITAC meeting is scheduled for 1:30pm on June 18, 2020 in the SCCRTC Conference Room, 1523 Pacific Avenue, Santa Cruz, CA. ITAC meetings will be canceled if there are no action items to be brought before the committee.

Adjourn

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
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 persons affected, please attend the meeting smoke and scent-free.

SERVICIOS DE TRADUCCIÓN/ TRANSLATION SERVICES: Si gusta estar presente o participar en juntas 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.)

TITLE VI NOTICE: The RTC operates its programs and services without regard to race, color and national origin in accordance with Title VI of the Civil Rights Act. Any person believing to have been aggrieved by the RTC under Title VI may file a complaint with RTC by contacting the RTC at (831) 460-3212 or 1523 Pacific Avenue, Santa Cruz, CA 95060 or online at www.sccrtc.org. A complaint may also be filed directly with the Federal Transit Administration to the Office of Civil Rights, Attention: Title VI Program Coordinator, East Building, 5th Floor-TCR, 1200 New Jersey Ave., SE, Washington, DC 20590.
Due to precautions associated with COVID-19 (coronavirus), the meeting was held by teleconference, consistent with Governor Newsom’s Executive Order which allows local or state legislative bodies to hold Brown Act meetings via teleconference.

**ITAC MEMBERS PRESENT**
Gus Alfaro, Caltrans District 5 Planning
Teresa Buika, UCSC
Piet Canin, Ecology Action
Murray Fontes, Watsonville Public Works
Claire Gallogly (Chair), Santa Cruz Public Works and Planning
Paul Hierling, Association of Monterey Bay Area Governments (AMBAG)
Justin Meek, Watsonville Community Development
Wondimu Mengistu, Santa Cruz METRO
Kailash Mozumder (Vice Chair), Capitola Public Works
Pete Rasmussen, Santa Cruz METRO
Anais Schenk, County Planning
Steve Wiesner, County Public Works

**RTC Staff Present:** Rachel Moriconi, Sarah Christensen

**Others Present:**
Oxo Slayer, UCSC; John Olejnik, Doug Hessing, and Darron Hill, Caltrans District 5

1. **Call to Order:** Chair Gallogly called the meeting to order at 1:31 p.m.

2. **Introductions:** Roll call introductions were made. All attendees participated by teleconference.

3. **Oral Communications:** Rachel Moriconi provided reminders on muting and unmuting phones and viewing material on the www.freeconferencecall.com website.

4. **Additions, deletions, or changes to consent and regular agendas:** Item 11 regarding Santa Cruz Branch Rail Line Railroad worker safety training was tabled to a future agenda.
CONSENT AGENDA

The Committee unanimously approved a motion (Buika/Fontes) approving the consent agenda, with all members present voting “yes” by rollcall vote.

5. Approved Minutes of the January 16, 2020 ITAC meeting

6. Received Caltrans Updates
   a. 5 Caltrans Priorities
   b. Briefing Announcements
   c. US 101 Business Plan Fact Sheet
   d. Project Updates

REGULAR AGENDA

7. Status of ongoing transportation projects, programs, studies and planning documents

ITAC members provided updates on Measure D-funded projects, RTC-funded projects, and other major projects and planning efforts. Members also discussed how their agencies were modifying operations and project implementation in response to COVID-19 shelter-in-place orders.

County – Steve Wiesner reported that the County’s Safe Routes to School Plan has been completed and will be going to the Board of Supervisors soon. Several projects are getting ready to start construction, including 30 miles of resurfacing projects funded by a combination of Measure D, RSTPX, STIP, and SB1-RMRA funds; the Soquel Dr/Aptos Creek Dr. intersection signalization project; about a dozen storm damage repair projects; Bear Creek Road repairs, and emergency repairs on Soquel-San Jose Road. The County’s maintenance program is also in full swing. He noted that the County’s operations section is not working remotely and maintenance and other operation work continues on site, whereas transportation professionals are working remotely in response to COVID-19 health mandates.

Anais Schenk reported that the County continues work on the Caltrans’ planning grant-funded Active Transportation Plan, front loading some of the data collection and other planning elements, but may need to modify public outreach in response to COVID-19. Work also continues on the General Plan update. The County is also working on County-level travel model updates. Once completed it will be available to all cities in the county for project-level analysis.

Capitola – Kailash Mozumder reported that the City of Capitola is opening bids for the Brommer St. multimodal project April 1 and has one storm damage project starting soon. He asked committee members for input on if agencies are moving forward with public works projects given COVID-19. Members indicated that agencies are currently planning to move forward with construction and planning projects, though recognizing the dynamic situation.

Watsonville – Murray Fontes reported that the City of Watsonville is working on its Active Transportation Program (ATP) application for the Harkins Slough bicycle/pedestrian crossing over Highway 1. The City is working on providing local street and road information for the statewide report.
**METRO** – Wondimu Mengistu reported that METRO electric charging infrastructure project is underway. Due to the coronavirus, METRO is working to provide essential service in the county, will be reducing some service and looking into free-fare options. State Transit Assistance and other revenues will be impacted.

**University of California at Santa Cruz (UCSC)** – Teresa Buika reported that the move to online learning for the spring quarter is a major shift. She noted that the campus is still open and operating, with international students and those without other housing options allowed to stay on campus. With a reduction of students on campus, they may push up the start date for construction of the RSTPX/ATP-funded bike path reconstruction project. Bids were received on 3/10/20. The non-infrastructure bike safety education portion of the project may be modified, with a focus on innovation and online outreach. She reported that on-campus shuttles and buses are still operating. Jump Bikes are suspended. Zip Carshare is still operating.

Oxo Slayer reported that the deadline for input on the Long Range Development Plan (LRDP) Environmental Impact Report (EIR) Notice of Preparation (NOP) will be extended, possibly to April 8. Two scoping meetings were changed to online meetings and another online forum is scheduled for April 1. John Olejnik requested that Caltrans be added to the outreach list for the LRDP. Mr. Slayer noted that the university is also expected to close the coastal science campus to car and other traffic, including Seymour Center. The area will still be open for construction and essential research.

**Ecology Action** – Piet Canin reported that Ecology Action is assessing the impacts of shelter-in-place mandates on its outreach programs. For Safe Routes to Schools safety education programs they are looking to create online content and lessons, especially focused on students and parents sheltering in place. Ecology Action is conducting health/wellness focused outreach noting outdoor activity, such as biking, is okay if people practice social distancing. Outreach includes messaging with families and schools. They are concerned how non-infrastructure grants could be impacted. He expressed interest in seeing Jump Bikes back in service as a transportation option.

**SCCRTC** – Rachel Moriconi reported that the Regional Conservation Investment Strategy (RCIS) group is expected to hold a stakeholder meeting in April and RTC staff will be reaching out to project sponsors to discuss projects and mitigation needs this spring. Work continues on the rail corridor transit Alternative Analysis and Monterey Bay Sanctuary Scenic Trail Network (MBSST) Segment 5. She reminded members that updates to the Regional Transportation Plan (RTP) project list are due to Amy Naranjo in April. Sarah Christensen reported that the RTC authorized staff to hire a contractor to make emergency rail bridge repairs near Harkins Slough. RTC is expecting to advertise several storm damage repair projects and bridge railing repairs over Highway 1 in Aptos in the next few weeks. She noted that most consultants assisting with pre-construction stages of the RTC’s three Highway 1 projects are able to continue working during the shelter-in-place order. The Highway 1 41st Ave-Soquel Drive project is expected to meet the design milestone in April; public circulation of the environmental document for the Bay-Porter to State Park project is expected later this year. Work on the State Park-Freedom Blvd project environmental document is starting this month. In addition to auxiliary and bus on shoulder lanes, the project includes replacement of the two railroad bridges over Highway 1, the Aptos Creek Bridge and Segment 12 of the Monterey Bay Sanctuary Scenic Trail Network (MBSST).
Santa Cruz – Claire Gallogly reported that the Rail Trail Segment 7, phase 1 is under
construction. ATP-funded Safe Routes to Schools crosswalks projects at 24 locations are
currently under construction. Highway Safety Improvement Program (HSIP) Cycle 8 un-
signalized intersection upgrades at 13 locations is going out to bid soon. River St and Water
St roadway rehabilitation projects are under construction. The city is also gearing up to
prepare ATP Cycle 5 grant applications for the Rail Trail and several other projects, with non-
infrastructure partnerships planned. She also reported that consultant proposals for the city’s
local roadway safety plan are due April 3. She encouraged agencies to complete the simple
application on the HSIP website to prepare their own plans. She reported that city public
works and planning staff are transitioning to working remotely in response to COVID-19.

AMBAG – Paul Hierling reported that the AMBAG board approved draft regional lump sum
numbers for the Regional Growth Forecast for housing, transportation, and job growth.
AMBAG will be meeting with jurisdictions this spring to discuss disaggregation of regional
numbers to each jurisdiction.

Caltrans – John Olejnik suggested inviting BLM to provide an update on the Cotoni-Coast
Dairies National Monument at a future ITAC meeting. He noted plans will impact Highway 1.
Anais Schenk noted that the County is tracking the project, especially parking and access
impacts, and that the deadline to submit comments on the draft Resource Management Plan
was extended to April 3 (https://go.usa.gov/xEJAw). She requested that Caltrans and others
share any comments they submit.

Gus Alfaro reviewed the Caltrans Priorities included on the consent agenda, emphasizing the
work Caltrans is doing related to partnerships, safety, innovation, efficiency, and modality. He
encouraged agencies to review the Freight Mobility Plan, which includes information on
drones, way-finding, delivery and autonomous vehicles. He reported that Caltrans staff is
working, but most are working remotely and that he encouraged agencies to reach out to him
for support. He highlighted some of the information included in the announcements on the
consent agenda, including information about the comprehensive corridor planning guide and
FTA funding opportunities.

8. State Highway Operation and Protection Program (SHOPP) Updates

Darron Hill provided an overview of the 2020 State Highway Operation and
Protection Program (SHOPP), existing project list, planned future candidate
projects, and the online webviewer. He noted that Caltrans goal is to keep partner
agencies informed about planned projects. Caltrans is working to add complete
streets components to SHOPP projects where feasible. Gus Alfaro will reach out to
agencies during project development with the goal of understanding needs and
opportunities to partner. Doug Hessing noted that he is available to answer
questions on specific projects, especially on Highway 9.

9. Update on Transportation Impact Analysis (SB 743-Implementation) and
Caltrans’s Draft Vehicle Miles Traveled (VMT)-Focused Transportation Impact
Study Guide (Draft TISG)

Claire Gallogly provided an overview of SB743 requirements and local and state
implementation. Her presentation included information about a new local vehicle miles
traveled calculator, transportation demand management methods to reduce VMT, and the
Caltrans Draft Vehicle Miles Traveled (VMT)-Focused Transportation Impact Study Guide (Draft TISG). She noted countywide efforts have included estimating baseline regional average vehicle miles traveled per household and employee and developing an excel sheet agencies can use to determine project-level VMT impacts and acceptable transportation demand management strategies. Each jurisdiction is developing VMT thresholds and TDM reasonable strategies.

In response to questions, Anais Schenk and Claire Gallogly noted that the consultant team is working on estimating VMT for trips that start and end outside of the county. Anais noted that there is a separate trip generation rate for students. If a project does not fall within the land use categories identified in the spreadsheet, project sponsors may need to run the model.

John Olejnik reported on the Caltrans proposed guidelines which they will be using to comment on land use proposals. He noted that in some instances, especially in rural areas, countywide TDM strategies might be better than site-specific proposals such as a single bike locker. Anais requested clarification on Caltrans’s implementation and thresholds, since local jurisdictions are allowed to set different thresholds than those provided by OPR; different interpretations of OPR guidelines; land uses that do not fit typical residential or commercial categories; regional vs county-level thresholds; calculator methodologies; how impacts to state highways will be determined; induced demand; and guidance for rural areas. He noted that Caltrans is discussing these and other issues with CalSTA, CARB and others and urged agencies to participate in the webinar scheduled for March 24 and to submit comments on the draft TISG via the online comment form by the March 30 deadline to submit informal feedback.

10. Other Transportation Program Updates

Rachel Moriconi reviewed some upcoming state and federal grant opportunities. She noted that some grant due dates may change given COVID-19 disruptions to business. She requested that agencies inform her if they plan to apply for competitive Local Partnership Program (LPP) grants, since RTC would have to submit the application on their behalf. Santa Cruz, METRO, and Watsonville staff confirmed that they do not plan to apply.

For Active Transportation Program (ATP) grants, committee members indicated interest in having peers, especially local representatives on the state ATP-Technical Advisory Committee. Some committee members offered to review and provide feedback on project ideas and their benefits, especially in consideration of the proposed scoring rubric for ATP grants. Agencies should plan to submit project information in early April. Claire noted the importance of maintaining a regional definition of a DAC for many local projects and indicated she will put together a template for agencies to use.

11. Santa Cruz Branch Rail Line Railroad Worker Safety Training – TABLED TO FUTURE MEETING

12. The next meeting is scheduled for 1:30pm on April 16, 2020. The meeting will be canceled if there are no action items to be brought before the committee.

Adjournment: The meeting adjourned at 3:50pm.

Minutes prepared by: Rachel Moriconi, RTC Planner
RECOMMENDATION

Staff recommends that the Interagency Technical Advisory Committee receive information about the online Railroad Worker Safety Training, which is required before working near the Santa Cruz Branch Rail Line.

BACKGROUND

The Santa Cruz County Regional Transportation Commission (RTC) purchased the Santa Cruz Branch Rail Line in 2012. The RTC entered into a freight operating agreement with Progressive Rail in 2018. As part of the agreement, Progressive Rail’s local operation, called St. Paul & Pacific Railway (SPPR), will not assume full responsibilities of the line north of milepost 3.0 (north of Watsonville) until the RTC makes repairs needed for the railroad to be in a Class I state. The Federal Railroad Administration requires railroad worker safety training for any work within 25 feet of an active railroad. SPPR is currently not offering such training for areas north of milepost 3.0, therefore the RTC must provide it.

DISCUSSION

The RTC must require any workers within 25 feet of the Santa Cruz Branch Rail Line to take a safety training course. Completion of the course certifies workers for one full year from that date. In an effort to provide convenience and flexibility, the RTC has secured a railroad consultant to develop a course that is taken on the internet. Each person takes the course individually and at any time. The certificate of completion is a wallet-size card that must be printed out and carried on one’s person at all times when near the railroad. At any time, an agent of the RTC, SPPR, or FRA may request to see the certificate.

Online Railroad Safety Training How-To

REGISTERING/PURCHASING:

Navigate to: rrtrainers.com

Register a new account. Each person must register with a unique email address.

-> If your company or organization is not available to select in the "Company" field, contact Tommy at RTC (ttravers@sccrtc.org / 831-460-3200)

After successful registration, Log In.
Click Buy Online Classes at the top of the page.
Click “2020 SCCRTC Basic Safety Training for Railroad Workers & Volunteers.”
*At this stage, one user may purchase trainings for multiple colleagues, and later assign the purchased trainings to users who have registered in the system by going to My Account > Enroll Students
Purchase the training ($50 per person).

**TAKING THE COURSE (allow 35 minutes):**
Click on My Account > My Courses (or follow the link in the confirmation email of purchase/enrollment)
Click on the SCCRTC Basic Safety Training to begin.
Follow the required steps:
- Print the safety procedure document
- Take the training (turn on computer audio)
- Take the Knowledge Review quiz at the end
- Print the certificate/wallet-size card

**SUMMARY**

Staff recommends that the Interagency Technical Advisory Committee receive information about the online Railroad Worker Safety Training, which is required before working near the Santa Cruz Branch Rail Line.
Proposed Budget for Fiscal Year (FY) 2020-21 Approved

The RTC approved a preliminary FY20-21 budget. The Commission also accepted the Measure D Revenue Forecast for FY 2019-20 and FY 2020-21 provided by HDL services, the 30-year revenue projection which incorporates the HDL projection, and the 5-year revenue estimates for Measure D recipients.

The budget was drafted before the outbreak of COVID-19. In response to the outbreak, HDL modified the format of their April 2020 HDL Consensus Forecast. This information is helpful to provide a baseline to measure the effects of the National Emergency on the budget.

The RTC directed staff to return with updated revenue forecasts and amendments in May that consider the economic impacts of COVID-19. The budget includes Measure D and Transportation Development Act (TDA) sales tax revenue estimates, as well as estimates of the availability of those and other funding sources for regional, public transit, paratransit, and local jurisdiction projects and programs.
Santa Cruz County Regional Transportation Commission (RTC)

May 7, 2020 Meeting Highlights

Transportation Development Act (TDA) Triennial Performance Audit
The RTC accepted the TDA Triennial Performance Audit for fiscal years 2016 through 2018. According to the audit report, “This performance audit is intended to describe how well the RTC is meeting its obligations under TDA, as well as its organizational management and efficiency.” After interviewing RTC Commissioners and staff and reviewing the RTC’s activities, the auditor concludes that the RTC complied with applicable state legislative mandates for Regional Transportation Planning Agencies. In addition, the RTC completed and initiated a number of significant projects including passage of Measure D and implementation of several segments of the Monterey Bay Sanctuary Scenic Trail Network.

Fiscal Year (FY) 2018-19 Fiscal Audit for RTC Measure D Funds
The RTC accepted the FY 2018-19 fiscal audit for Measure D funds. The Commission received a clean opinion from the Auditor and no major concerns were raised which would require changes to the SCCRTC internal controls and accounting practices.

Public Hearing for the 2020 Unmet Paratransit and Transit Needs
Because of the funding that the RTC provides to transit, paratransit and other non-automobile based transportation, the RTC is not required to go through an unmet needs process for transit and paratransit. However, due to its commitment to improve transportation for everyone, the RTC goes through the unmet needs process, which involves the Elderly and Disabled Transportation Advisory Committee, service providers and the public. Following a public hearing, the RTC adopted the 2020 Unmet Paratransit and Transit Needs list. The Commission will consider unmet paratransit and transit needs as funding becomes available.

Emergency Bridge Repair of Ballast Deck Timber Trestle at MP 4.87”
The RTC received an update on the construction cost related to the emergency repair of the bridge at Milepost (MP) 4.87. A construction contract award in the amount of $710,307.60 with Industrial Railways Company for the remaining repair work is expected at the Transportation Policy Workshop on May 21, 2020.
Fiscal Year 2020-21 Article 4 and Article 8 Transportation Development Act (TDA) Claims for Santa Cruz METRO, Volunteer Center, Community Bridges, Bike to Work, and Santa Cruz County Health Services Agency

The RTC adopted resolutions to approve TDA funding for community programs providing public transit, paratransit, transportation for seniors and community members with disabilities, and, and active transportation services to the community. Staff was directed to return to an upcoming RTC meeting with an update on funding impacts related to COVID-19 and to work with TDA recipients on potential adjustments to the approved funding amounts as a result of those impacts.

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Amendments to the Highway 1 Auxiliary Lanes and Bus on Shoulder project (State Park Drive to Bay/Porter) Consultant Contract and Caltrans Cooperative Agreement and Senate Bill 1 Solutions to Congested Corridors and Local Partnership Program Matching Funds

The RTC approved a resolution authorizing amendments to a professional engineering services contract with Mark Thomas & Company, Inc., a cooperative agreement with Caltrans, the Regional Transportation Improvement Program, and the RTC FY 19/20 and 20/21 budgets. The amendments authorize actions related to the bicycle and pedestrian overcrossing at Mar Vista Drive. The resolution included a request that the California Transportation Commission amend the State Transportation Improvement Program to reprogram funds previously programmed to Mar Vista into the combined project. The RTC also approved a resolution to amend the Measure D 5 year Program of Projects to reprogram funding sources for highway corridors.
In November 2016 Santa Cruz County voters passed Measure D, providing stable, local funds to maintain and improve local roads, highways, bridges, sidewalks, bicycle facilities, and transit. Measure D is helping local agencies address some of the significant backlog of transportation needs in Santa Cruz County. The following highlights a few of the projects that Measure D is helping to fund.

**Monterey Bay Sanctuary Scenic Trail Network (MBSST) Rail Trail**
- The City of Santa Cruz completed the new bike/walk bridge at the San Lorenzo River Trestle near the Boardwalk in Summer 2019.
- Construction is underway on the Rail Trail between Natural Bridges Drive and Bay Street/California Avenue in the City of Santa Cruz (Phase 1 of Segment 7). The project will be completed this summer. Phase 2 (California to Wharf) has been designed and Santa Cruz is using Measure D fund as a match in construction grant applications.
- Segments 8 & 9 (Seabright-Live Oak) design and environmental review work is starting this summer.
- Watsonville will start construction of Segment 18 between Ohlone Parkway and the city’s Slough Trail this spring.
- Design of the North Coast Rail Trail project from Davenport to Wilder Ranch State Park (Segment 5) is underway, with the project expected to be ready to start construction in 2021, pending the release of federal funds.

**Highway 1 Projects**
- Design work is nearly complete for auxiliary lanes and bus-on-shoulder facilities between 41st Avenue and Soquel Drive interchanges, and a bicycle/pedestrian overcrossing at Chanticleer Avenue. Construction is expected to begin in early 2021.
- Environmental review of Bay/Porter-State Park Auxiliary lanes and bus-on-shoulder facilities plus Mar Vista bike/pedestrian overcrossing is expected to be ready for public review by the end of 2020.
- RTC is applying for state SB1 grants, using Measure D funds as leverage, to expedite construction of the auxiliary lane and bike/ped bridge projects between Soquel Avenue/Drive and State Park Drive.
- The RTC initiated environmental review of auxiliary lanes and bus-on-shoulder facilities between Freedom Boulevard and State Park Drive in March 2020. The project includes replacement of...
railroad bridges over the highway and construction of Segment 12 of the Rail Trail between State Park Drive and Rio Del Mar/Sumner.

- Cruz511, in coordination with the City of Santa Cruz’s Go Santa Cruz program will be launching its new commute manager in late 2020.

**Rail Corridor**
- The RTC has been working with METRO to do more detailed analysis of high-intensity transit options for the rail corridor, with extensive public outreach. The final analysis will be presented to the RTC in Fall 2020.
- Storm damage repairs and preventative maintenance, including vegetation and drainage work, continues in the rail corridor. Maintenance requests can be directed to maintenance@sccrtc.org.

**Highway 9/SLV Corridor and Highway 17 Wildlife Crossing**
- Caltrans is preparing project initiation documents (PID) on complete streets projects along Highway 9 based on the Highway 9/San Lorenzo Valley (SLV) Complete Streets Corridor Plan. Measure D funds will be used to leverage other funds for priority projects identified in the plan.
- Caltrans is designing the wildlife crossing under Highway 17 near Laurel Curve; construction, which is funded by a combination of Measure D and Land Trust funds, is scheduled to start in 2021.

**Local Road Projects**
City and County public works departments completed several projects over the past year and are gearing up for a busy spring and summer, repairing local roads and improving bicycle and pedestrian facilities throughout the county.

- Santa Cruz
  - 2019-2020 Overlay Program Completed: Broadway, California Street and Soquel Avenue
    Project included new curb ramps and green bike lanes along portions of these arterial streets.
  - River St. and Water St. Overlay Projects includes green, buffered and protected bike lanes and new accessible curb ramps and crosswalks. The project utilized Cold-In-Place Asphalt Recycling which reuses much of the old pavement. Old pavement not used on River and Water Streets was used as base for Segment 7 Phase 1 of the Rail Trail, saving money and resources. The project also
    - The Downtown Bike Lockers project has been put on hold due to funding constraints related to the COVID-19 impacts to the Downtown Parking District.

- Watsonville
Bicycle Safety Improvements – The City continues to contract with Ecology Action for Bicycle Safety Training in Watsonville elementary schools and with Bike Santa Cruz County to implement their Earn-A-Bike program at Pajaro Valley High School and among middle school students. Education programs have integrated online resources and trainings this spring.

Lee Road Trail – Design and environmental documents are being prepared for the Lee Road Trail project.

Trail Maintenance and Improvements – Designs for trail repair and maintenance projects.

Pedestrian & Traffic Safety – Implementing pedestrian safety programs, sidewalk repairs and design for traffic signals.

Maintain Roads – Design for Green Valley Road Improvements Project from Freedom Boulevard to City limits is underway.

- County of Santa Cruz
  - The County finished resurfacing 5.75 miles of roads in the Live Oak, Ben Lomond, Rio Del Mar, and Bonny Doon areas in Fall 2019: [https://scc2019measuredresurfacing.com/](https://scc2019measuredresurfacing.com/)
  - In summer 2020, the County will be resurfacing 6.26 miles of roads in Felton, Seacliff, and Lakeview Road north of Highway 129.

- Capitola
  - Park Avenue Sidewalk: In the spring of 2020 the City completed this pedestrian and roadway improvement project which includes approx. 1600 feet of new sidewalk, new crosswalks, new curb ramps and updated pavement markings.
  - Brommer Street Improvements – in the spring of 2020 the City will be initiating this complete street improvement project. Construction is expected to begin at the end of May 2020 with completion anticipated in July 2020. This project includes approximately 1,000 feet of new rehabilitated roadway, new sidewalks, updated pavement markings, new bicycles loop detectors and a green bike box.

- Scotts Valley
  - East Glenwood Preserve Trails construction is expected to be completed in late summer 2020. ADA parking improvements have been completed for Siltanen Park, K Street, and Glenwood East Trails.
  - Glenwood Drive to be widened with bike lanes from K Street to city limits, construction started in early May 2020.

Lift Line – Paratransit Services
• Lift Line continues its expanded services seven days per week utilizing two additional drivers. For the first three quarters of FY19/20, Lift Line provided 4,069 additional rides funded through Measure D.

• On June 6/28/19, Community Bridges/Lift Line received title of its newly purchased 9,000 sf operation/maintenance facility financed with Measure D funds. Located at 545 Ohlone Parkway in Watsonville, Lift Line has installed fast charging equipment for Electric Vehicles and has been upgrading the building.

• In October of 2019, the driving and maintenance departments started operation out of the new facility. Lift Line plans to move the remainder of its departments into the new facility by the end of 2020.

• Lift Line is currently in the permit process for drainage and paving permits which will allow for additional fleet parking. Work will start as soon as the permits are approved.

Santa Cruz Metropolitan Transit District (METRO)

• METRO used Measure D funding to retrofit 10 hybrid diesel-electric buses for the Highway 17 Express fleet, replacing 2003 CNG buses, which are beyond their useful life.

• METRO purchased four Compressed Natural Gas (CNG) buses which will improve fleet reliability and reflect METRO’s continued commitment to the transition to clear air buses. Acquisition of the new vehicles was made possible because of Measure D and SB1.

• METRO is acquiring four electric buses for its fixed-route buses to replace aging vehicles with more efficient and cleaner running equipment. The new vehicles include METRO’s first four electric buses and six replacement CNG buses. Acquisition of the new vehicles are also made possible because of Measure D and SB1.

Implementation and Oversight

• The Measure D Taxpayer Oversight Committee is reviewing FY18/19 audits and expenditure reports to ensure that revenues have been spent in accordance with the Measure D Ordinance.
## Projects Under Construction

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Description</th>
<th>Construction Timeline</th>
<th>Construction Cost</th>
<th>Funding Source</th>
<th>Project Manager (Resident Engineer)</th>
<th>Contractor</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Santa Cruz 1 CAPM and Bridge Rails (1C85U)</td>
<td>In and near Santa Cruz from North Apts up to Jct. Route 9 PM (10.2 to 17.5)</td>
<td>Pavement Rehabilitation, ADA Curb Ramps, Guardrail/Barrier rail/Bridge</td>
<td>June 2, 2019 – Fall 2020</td>
<td>$22 million</td>
<td>SHOPP</td>
<td>Luis Duazo (GG)</td>
<td>Granite Construction Company Watsonville, CA</td>
<td>Work has started on repairing failed pavement (grinding) in preparation for paving. Works also continues on bridge rails.</td>
</tr>
<tr>
<td>2. Highway 9 Spring Creek Road Soldier Pile Wall (1K140)</td>
<td>Near Boulder Creek at Spring Creek Road (PM 15)</td>
<td>Construct Soldier pile wall restore roadway and facilities, place water pollution control BMPs, erosion control</td>
<td>Summer 2019—Spring 2020</td>
<td>$2.8 million</td>
<td>SHOPP</td>
<td>Doug Hessing (BR)</td>
<td>Gordon N. Ball, Inc. Alamo, CA</td>
<td>Construction completed in March 2020.</td>
</tr>
<tr>
<td>3. Highway 17 Pasatiempo Shoulder Widening (1C670)</td>
<td>South of Pasatiempo overcrossing (PM 0.2/0.5)</td>
<td>Shoulder widening and soil nail wall</td>
<td>Spring 2019-Summer 2020</td>
<td>$5.7 million</td>
<td>SHOPP</td>
<td>Luis Duazo (BR)</td>
<td>Graniterock Company Watsonville, CA</td>
<td>Retaining wall construction has begun and project is scheduled to be substantially complete by Summer 2020; Project is currently in winter suspension.</td>
</tr>
<tr>
<td>4. Highway 17 North Route 17 CAPM (1F760)</td>
<td>Scotts Valley from just north of the Granite Creek Road overcrossing to SCL (PM 6.0/12.5)</td>
<td>Maintenance pavement overlay</td>
<td>Spring 2019—Spring 2020</td>
<td>$19 million</td>
<td>SHOPP SB-1</td>
<td>Doug Hessing (JW)</td>
<td>Granite Construction Company, Watsonville, CA</td>
<td>Construction is underway and is scheduled to be completed in Spring of 2020.</td>
</tr>
</tbody>
</table>
## PROJECTS IN DEVELOPMENT

<table>
<thead>
<tr>
<th>Project</th>
<th>Location Post Mile (PM)</th>
<th>Description</th>
<th>Construction Timeline</th>
<th>Estimated Construction Cost</th>
<th>Funding Source</th>
<th>Project Manager</th>
<th>Phase</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highway 1 Soquel Creek Scour Protection (1H480)</td>
<td>In Capitola at Soquel Creek Bridge (PM 13.3)</td>
<td>Bridge preventative maintenance – Place scour protection</td>
<td>Winter 2022</td>
<td>$2.2 million</td>
<td>SHOPP</td>
<td>Luis Duazo</td>
<td>PS&amp;E</td>
<td>PA&amp;ED was achieved 4/14/2020, Project to move into PS&amp;E (Design Phase).</td>
</tr>
<tr>
<td>TMS Detection Repair (1H990)</td>
<td>Various locations throughout District 5 along SRs 1, 17, 68, 156, 101 (PM Various)</td>
<td>Replace failed TMS Detection</td>
<td>Summer 2020</td>
<td>$451,000</td>
<td>SHOPP SB-1</td>
<td>Brandy Rider/Amy Donatello</td>
<td>PS&amp;E/RW</td>
<td>Project is in Design.</td>
</tr>
<tr>
<td>Highway 1/Highway 17 Ramp Safety Improvements (1H060)</td>
<td>From the fishhook to Pasatiempo overcrossing (PM 16.7)</td>
<td>Construct ramp safety improvements</td>
<td>May 2020</td>
<td>$5.8 million</td>
<td>SHOPP</td>
<td>Luis Duazo</td>
<td>PS&amp;E/RW</td>
<td>PS&amp;E and R/W phase to be completed in June.</td>
</tr>
<tr>
<td>Highway 1 Davenport Culvert Replacement (0J200)</td>
<td>Near Davenport and south of Waddell Creek Bridge (PM 31.9/35.7)</td>
<td>Replace culverts</td>
<td>Fall 2021</td>
<td>$3.6 million</td>
<td>SHOPP SB-1</td>
<td>Doug Hessing</td>
<td>PA&amp;ED</td>
<td>The project is in the design, right of way, and permitting phase.</td>
</tr>
<tr>
<td>SCR 9 South Drainage and Erosion Control Improvements (1F920)</td>
<td>From SR 1 and 9 to slightly north of Glen Arbor Road (PM 0.0/8.5)</td>
<td>Upgrade drainage systems and stabilize slopes</td>
<td>Fall 2020</td>
<td>$2 million</td>
<td>SHOPP</td>
<td>Doug Hessing</td>
<td>PS&amp;E/RW</td>
<td>Project is in Design.</td>
</tr>
</tbody>
</table>
## Projects in Development (Cont’d.)

<table>
<thead>
<tr>
<th>Project</th>
<th>Location Post Mile (PM)</th>
<th>Description</th>
<th>Construction Timeline</th>
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<th>Funding Source</th>
<th>Project Manager</th>
<th>Phase</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.</td>
<td>Highway 9 PM 1.0 and 4.0 Viaduct (1K120)</td>
<td>Near SCr north of Vernon Street (PM 1/1), Construct side-hill viaduct restore roadway and facilities, place Water Pollution Control BMPs, erosion control</td>
<td>Fall 2022</td>
<td>$9.9 million</td>
<td>SHOPP</td>
<td>Doug Hessing</td>
<td>PA&amp;ED</td>
<td>Project is in preliminary Design and Environmental phase.</td>
</tr>
<tr>
<td>12.</td>
<td>SCr 9 Upper Drainage and Erosion Control Improvements (1G950)</td>
<td>In Boulder Creek from Holiday Lane to just south of Ben Lomond to the SR 236/9 Junction (PM 8.5/25.5), Upgrade drainage and erosion control</td>
<td>Spring 2023</td>
<td>$5.4 million</td>
<td>SHOPP</td>
<td>Doug Hessing</td>
<td>PA&amp;ED</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Highway 9 San Lorenzo River Bridge and Kings Creek Bridge Replacement (1H470)</td>
<td>Near Boulder Creek, at San Lorenzo River Bridge and at Kings Creek Bridge, Replace bridges</td>
<td>Summer 2022</td>
<td>$12 million</td>
<td>SHOPP SB-1</td>
<td>Doug Hessing</td>
<td>PA&amp;ED</td>
<td>Project is in preliminary Design and Environmental phase.</td>
</tr>
<tr>
<td>14.</td>
<td>Highway 9 Hairpin Tieback (1K130)</td>
<td>Near Boulder Creek about 1.1 miles south of the SR 236/9 Junction, Soldier Pile Tieback Retaining Wall</td>
<td>Spring 2021</td>
<td>$2.6 million</td>
<td>SHOPP</td>
<td>Doug Hessing</td>
<td>PA&amp;ED</td>
<td>Storm Damage Repair</td>
</tr>
</tbody>
</table>
### PROJECT UPDATE – SANTA CRUZ COUNTY

**PREPARED FOR THE JUNE 4, 2020 SANTA CRUZ COUNTY REGIONAL TRANSPORTATION COMMISSION MEETING**

#### PROJECTS IN DEVELOPMENT (Cont’d.)

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Location</th>
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<th>Construction Timeline</th>
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<th>Project Manager</th>
<th>Phase</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. <strong>Highway 17 Wildlife Habitat Crossing (1G260)</strong></td>
<td>From Laurel Road to just north of Laurel Road (PM 9.442-9.692)</td>
<td>Construct wildlife undercrossing</td>
<td>2020</td>
<td>$6.22 million</td>
<td>SHOPP</td>
<td>Aaron Henkel</td>
<td>PS&amp;E/RW</td>
<td>Project is in design and on schedule.</td>
</tr>
<tr>
<td>16. <strong>Highway 129/Lakeview Road Intersection Improvements (1G990)</strong></td>
<td>Near Watsonville, at Lakeview Road (PM 1.4)</td>
<td>Construct roundabout and improve street lighting</td>
<td>2020</td>
<td>$4.5 million</td>
<td>SHOPP</td>
<td>Luis Duazo</td>
<td>PS&amp;E/RW</td>
<td></td>
</tr>
<tr>
<td>17. <strong>Highway 152 Corralitos Creek ADA (05-1F620)</strong></td>
<td>Near Watsonville, East of Beverly Drive to Holohan/College Road (PM 1.9 to R2.0)</td>
<td>Construct Accessible Pathway</td>
<td>Spring 2022</td>
<td>$3.4 million</td>
<td>SHOPP</td>
<td>Mike Lew</td>
<td>PA&amp;ED</td>
<td>Project is currently at 80% complete for the PA&amp;ED stage.</td>
</tr>
<tr>
<td>18. <strong>Crosswalks and Pedestrian Safety Enhancements (1G760)</strong></td>
<td>Various Locations: Highways 1, 9, 129, and 152 (Note: Project also includes six locations in Monterey County, on Routes 68 and 183)</td>
<td>Electrical/Signs/Flashing Beacons/Markings/Pavements</td>
<td>Spring/Summer 2020</td>
<td>$1,000,000</td>
<td>Minor</td>
<td>Mike Lew</td>
<td>PS&amp;E</td>
<td>Contract was awarded to Alfaro Communications Construction and will begin in Summer 2020.</td>
</tr>
<tr>
<td>19.</td>
<td>Highway 236 Heart Hill Wall (1M450)</td>
<td>Near Boulder Creek (PM 5.4)</td>
<td>Install engineered fill and restore roadway</td>
<td>2022/2023</td>
<td>$1.8 million</td>
<td>SHOPP</td>
<td>Doug Hessing</td>
<td>PID</td>
</tr>
</tbody>
</table>

ACRONYMS USED IN THIS REPORT:

- **ADA**: Americans with Disabilities Act
- **CEQA**: California Environmental Quality Act
- **CMAQ**: Congestion Mitigation Air Quality
- **CMIA**: Corridor Mobility Improvement Account
- **CTC**: California Transportation Commission
- **ED**: Environmental Document
- **EIR**: Environmental Impact Report
- **PA&ED**: Project Approval and Environmental Document
- **PM**: Post Mile
- **PS&E**: Plans, Specifications, and Estimates
- **RW**: Right of Way
- **SB1**: Senate Bill 1, the Road Repair and Accountability Act of 2017
- **SCL**: Santa Clara County Line
- **SHOPP**: State Highway Operation and Protection Program
- **SR**: State Route
- **STIP**: State Transportation Improvement Program
- **TMS**: Traffic Management System
Caltrans Announcements – May 2020

1. Caltrans Issues Special Permits Authorizing Overweight Trucks to Deliver Emergency COVID-19 Supplies
   Caltrans will issue permits for overweight trucks on the State Highway System and will help support transportation operators in obtaining permits from local agencies for local roads. These permits increase the maximum allowable gross vehicle weight from 80,000 to 88,000 pounds and will be valid until further notice. To expedite the permits, Caltrans is performing advance review and analysis on major corridor routes, including: I-5; US-101; I-15; SR 60; I-405; SR 99; I-10; SR 91; I-80 and I-710. This Emergency Declaration provides regulatory relief for commercial motor vehicle operations moving essential goods in support of relief and preventive measures associated with the COVID-19 pandemic. In response to COVID-19, Caltrans continues its critical functions during this crisis, including highway maintenance and roadway access to medical facilities and facilitating transport of essential goods and services throughout the state.

   "Essential Goods" are defined as the following:
   ➢ Medical supplies and equipment related to the testing, diagnosis and treatment of COVID-19
   ➢ Supplies and equipment necessary for community safety, sanitation, and prevention of community transmission of COVID-19 such as masks, gloves, hand sanitizer, soap and disinfectant
   ➢ Food, paper products and other groceries for emergency restocking of distribution centers or stores
   ➢ Immediate precursor raw materials such as paper, plastic or alcohol that are required and to be used for the manufacture of items above
   ➢ Fuel
   ➢ Equipment, supplies and persons necessary to establish and manage temporary housing, quarantine, and isolation facilities related to COVID-19

2. Caltrans Authorizes Food Trucks to Temporarily Operate at State Rest Areas in Support of Truckers During COVID-19
   Gov. Newsom’s Executive Order N-52-20 suspends restrictions of selling commercial food at the state’s rest areas during the COVID-19 crisis. The FHWA suspended related federal prohibitions last week.

   Caltrans will begin accepting applications immediately. Applicants can submit requests for specific rest areas at dot.ca.gov/programs/traffic-operations/food-trucks-rest-areas.
The state rest area system was created to promote greater safety and convenience on state highways. For details on each rest area, visit QuickMap at quickmap.dot.ca.gov. In the left-most QuickMap window, click on Options and then click the Rest Area box. Because many rest areas have been established in remote areas with fewer roadside services available, Caltrans cannot guarantee every rest area will be served by a food truck and at what frequency. Lists of participating food trucks will be posted on the Caltrans website.

If an applicant has any questions, they should contact their local district. See a list of contacts by district here: https://dot.ca.gov/programs/traffic-operations/ep/district-contacts.

3. Vulnerability Assessment for District 5
We appreciate the input received from our stakeholders during the development of the Caltrans District 5 Vulnerability Assessment. The Vulnerability Assessment is now complete and available to view and use as desired. Please share these documents with others you feel may find them of interest. The completed Vulnerability Assessment is comprised of three items: the summary report, technical report, and an interactive web tool. The summary report is an overview of the environment and transportation infrastructure within the district and describes the relationship between the transportation system and identified stressors. The technical report is a data driven look at impacts to the SHS from those stressors and houses the methodology used. The interactive web tool is available online and allows users to toggle stressors on and off to better visualize impacts on the State Highway System. These items can be accessed at the following link: https://dot.ca.gov/programs/transportation-planning/2019-climate-change-vulnerability-assessments

Next Step: in terms of Climate Change planning for Caltrans will be the development of the Adaptation Strategies Report, which will begin for District 5 in the beginning of 2021. This will be a companion report to the Vulnerability Assessment. When the time comes to develop the adaptation report we will once again request input from our stakeholders, internal and external. Thank you again to our stakeholders for the input received during the development of the Vulnerability Assessment. If you have any questions, please feel free to contact:

Jenna Schudson, Associate Transportation Planner, Caltrans, District 5, 805-549-3432

4. CHP and Caltrans
Caltrans has joined with the CHP and the California Office of Traffic Safety (OTS) to urge drivers not to speed on the highways despite lighter traffic during COVID-19. Traffic is down about 35% compared to this time last year. As a result, CHP has seen a whopping 87% increase in citations for speeding above 100 mph since the stay at home orders were issued. We are hoping to let folks know that
speeding and unsafe driving threaten everyone using our highway system, particularly our construction and maintenance crews. We started displaying messages on our CMS system (those electronic highway signs) reminding drivers to slow down if they must be on the roads. Below is the press release that we sent out and shared on social media.

IF YOU MUST TRAVEL DO NOT SPEED
AGENDA: May, 2020

TO: Regional Transportation Commission Advisory Committees
FROM: Ginger Dykaar, Sr Transportation Planner, Brianna Goodman, Transportation Planner, and Luis Mendez, Deputy Director
RE: Transit Corridor Alternatives Analysis – Alternatives Screening Results and Short List of Alternatives

RECOMMENDATIONS

Staff recommends that the Regional Transportation Commission Advisory Committee review and provide input on the alternatives screening results and draft short list of alternatives for the Transit Corridor Alternatives Analysis of high-capacity public transit for the Santa Cruz Branch Rail Line.

BACKGROUND

The Santa Cruz County Regional Transportation Commission (RTC), in cooperation with METRO, is developing the Transit Corridor Alternatives Analysis (TCAA) to evaluate transit investment options that provide an integrated transit network for Santa Cruz County utilizing all or part of the length of the Santa Cruz Branch Rail Line as a dedicated transit facility. Transit alternatives will be compared to define a viable project that will provide the greatest benefit to the Santa Cruz County residents, businesses and visitors in terms of equity, environment, and economy. Proposed future intercounty and interregional connections to the Bay Area, Monterey, Gilroy, and beyond will be considered.

Key Milestones for stakeholder engagement are as follows:

1. **Goals/Screening Criteria/Performance Measures & Initial List of Alternatives** – RTC Approval received on March 6, 2020
2. **Screening Results and Short List of Alternatives** –
   **Purpose:** Present screening results that led to short list of transit alternatives. Gather input on short list of transit alternatives to be considered for further analysis.
3. **Performance Analysis Results and Locally Preferred Alternative**
   **Purpose:** Present performance measure results on short list of alternatives and seek input on identified locally preferred alternative.

DISCUSSION

The Transit Corridor Alternatives Analysis project team composed of RTC and METRO staff and HDR consultants seek input from the RTC Advisory Committees on
Milestone 2 - the draft Screening Results and Short List of Alternatives (Attachment 1). Input has already been provided by the Alternative Analysis Ad Hoc Committee.

**Milestone 2**

The Initial List of Alternatives were evaluated based on a triple bottom line screening criteria of economy, equity and the environment. Results are presented under each triple bottom line goal with a 3-level rating where A=most desirable, B=moderately desirable and C=least desirable (Attachment 1). Data was collected from best available information including national data sets on the various alternatives as well as information from previous local studies. The four alternatives that are the draft recommendations to move forward to a quantitative analysis are the following:

1. **Arterial and Right-of-Way Bus Rapid Transit**

   **Benefits:**
   - Capital costs relatively lower than other alternatives
   - Level boarding is typical component of system allowing independent accessibility for people with mobility devices and bicycles
   - Ability to easily integrate with overall transportation system
   - Greater ability to adapt to new technologies
   - Depending on permanence of design, could support Transit Oriented Development

2. **Autonomous Road “Train” (on pavement with rubber tires)**

   **Benefits:**
   - Strong transit ridership potential
   - Level boarding is typical component of system allowing independent accessibility for people with mobility devices and more space for bicycles
   - Supportive of greenhouse gas emission reduction goals
   - Travel time is likely to be more reliable
   - Supports Transit Oriented Development

3. **Electric Light Rail**

   **Benefits:**
   - Strong transit ridership potential
   - Travel time is likely to be more reliable
   - Corridor has least risk of losing continuity of corridor from loss of easements
   - Level boarding is typical component of system allowing independent accessibility for people with mobility devices and more space for bicycles
   - Compatible with freight rail if temporally separated
   - Supportive of greenhouse gas emission reduction goals
   - Supports Transit Oriented Development
4. **Electric Commuter Rail**

Benefits:
- Faster and more reliable travel times
- Strong transit ridership potential
- Vehicles can comingle with freight in shared-use corridor
- Corridor has least risk of losing continuity of corridor from loss of easements
- Level boarding is typical component of system allowing independent accessibility for people with mobility devices and more space for bicycles
- Supportive of greenhouse gas emission reduction goals
- Supports Transit Oriented Development

Input will also be sought on Milestone 2 from the public and community organizations, through an online open house available on the RTC TCAA webpage from April 13 to May 11, as well as a partner agencies meeting prior to seeking input and approval from the RTC at the June 4, 2020 commission meeting. The outreach timeframe as well as the RTC meeting date for seeking approval of Milestone 2 was revised to increase the length of time for public input due to the coronavirus pandemic.

**NEXT STEPS**

**April 13 - May 11**: Online public outreach for Milestone 2 – Screened Alternatives
**June 4, 2020**: Short List of Alternatives presented to the RTC for potential approval
**May - September, 2020**: Performance measure analysis on Short List of Alternatives
**September 2020**: Outreach on Milestone 3 – Analysis Results and Draft Locally Preferred Alternative
**October 2020**: Presentation to the RTC on the Analysis Results and Locally Preferred Alternative
**November 2020**: Locally Preferred Alternative presented to the RTC for potential approval
**January 2021**: TCAA Report and Business Plan presented to the RTC for potential approval

**SUMMARY**

The Transit Corridor Alternatives Analysis is using a triple bottom line framework for evaluating transit investment options that provide an integrated transit network for Santa Cruz County utilizing all or part of the length of the Santa Cruz Branch Rail Line as a dedicated transit facility. The TCAA project team requests that the RTC Advisory Committees review and provide input on Milestone 2 – the screening results and short list of alternatives to be considered for further analysis.

**Attachments:**
1. TCAA Screening Results and Draft Short List of Alternatives with definitions
   I:\RAIL\Alternatives Analysis-2019\Staff Reports\Advisory Committees\202004\00-SR 202004-TCAA-M2.docx
MILESTONE 1 identified transit alternatives categorized into core and connector services

**CORE SERVICES**
Utilizes rail right-of-way for majority of its available length and to its fullest extent possible

**BUS ALTERNATIVES:**
Passenger-carrying vehicles with rubber tires running on pavement with capacity generally greater than 10 persons

**RAIL ALTERNATIVES:**
Passenger-carrying service with fixed steel rails, fixed stops and using exclusive guideway

**OTHER ALTERNATIVES:**
Progressive and innovative transit services designed to meet unique transportation needs more regularly in many communities

**CONNECTOR SERVICES**
Offers connections between core services and destinations

See [RESOURCES](#) to review full Alternatives handout.
## ALTERNATIVE SCORING RESULTS: ECONOMY

**Goal:** Results in a well-integrated transportation system that supports economic vitality

**Metric:**

<table>
<thead>
<tr>
<th>Metric</th>
<th>CAPITAL COSTS</th>
<th>OPERATIONS &amp; MAINTENANCE COSTS</th>
<th>FUNDING</th>
<th>TRANSIT ORIENTED DEVELOPMENT (TOD)</th>
<th>JOBS</th>
<th>FREIGHT &amp; OTHER RAIL BUSINESSES</th>
<th>TRANSPORTATION CORRIDOR UTILIZATION &amp; PRESERVATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = Most Desirable</td>
<td>Capital cost/mile less than $20M/mile.</td>
<td>O&amp;M less than $1/passenger mile.</td>
<td>Funding readily available to support these alternatives.</td>
<td>Transit service with fixed infrastructure that suggests permanence.</td>
<td>High capital expenditures and a high likelihood of TOD.</td>
<td>Co-mingling with freight allowed.</td>
<td>Rail has least risk of losing continuity of corridor from loss of rail easements.</td>
</tr>
<tr>
<td>B = Moderately Desirable</td>
<td>Capital cost/mile - $20M/mile to $40M/mile.</td>
<td>O&amp;M is $1.01-$2.00/passenger mile.</td>
<td>Traditional transit core services implemented nationally in numerous communities. Funding available through variety of public and private sources.</td>
<td>Transit service that may or may not be designed to suggest permanence.</td>
<td>Moderate capital expenditures and/or likelihood of TOD.</td>
<td>Temporal separation from freight allowed. Elevated alternative, may be compatible with freight rail but will be dependent upon design.</td>
<td>Alternative uses entire corridor but is not rail.</td>
</tr>
<tr>
<td>C = Least Desirable</td>
<td>Capital cost/mile greater than $40M/mile and/or technology uncertain.</td>
<td>O&amp;M is greater than $2.00/passenger mile.</td>
<td>Non-traditional core services not implemented nationally in variety of communities. Funding may or may not be available to support these alternatives.</td>
<td>Transit service with non-fixed infrastructure that does not suggest permanence or alternatives with limited capacity.</td>
<td>Low capital expenditures and low likelihood of TOD.</td>
<td>Incompatible with freight.</td>
<td>Alternative other than rail and uses less of the right-of-way as is likely with bus/shuttle options.</td>
</tr>
</tbody>
</table>

### Local Bus & Right-of-Way Bus
- A
- B
- C

### Arterial & Right-of-Way Bus Rapid Transit
- A
- B
- C

### Dual Rail & Bus Vehicles
- B/C
- B/C
- B/C

### Commuter Express Bus
- A
- A
- B

### Autonomous Road "Train" (on pavement w/ rubber tires)
- B
- C
- B/C

### Micro-shuttles
- A
- B
- B

### Shuttles (Light Duty, Van, Electric Vehicle)
- A
- A
- B

### Intercity Rail
- C
- A
- B

### Light Rail/Electric Multiple Unit
- B
- A
- B

### Monorail/Automated People Mover
- C
- C
- C

### Commuter Rail/Electric Multiple Unit
- B
- A
- B

### Light Rail/Diesel Multiple Unit
- B
- A
- B

### Tram/Trolley/Streetcar
- B
- B
- B

### Personal Rapid Transit
- C
- C
- C

### Inverted/Elevated Personal Rapid Transit
- C
- C
- C

### Hyperloop
- C
- C
- C

### Gondola
- B
- C
- C

### String Rail
- C
- C
- C

### FUNDING

- Traditional transit core services implemented nationally in numerous communities. Funding available through variety of public and private sources.
- Non-traditional core services not implemented nationally in variety of communities. Funding may or may not be available to support these alternatives.
- Capital cost/mile greater than $40M/mile and/or technology uncertain. "Funding readily available to support these alternatives."

### TRANSPORTATION CORRIDOR UTILIZATION & PRESERVATION

- Rail has least risk of losing continuity of corridor from loss of rail easements.
- Alternative uses entire corridor but is not rail.

### IS Fiscally Feasible

- Yes
- No
- Uncertain

### CAPITOL COSTS

- Less than $20M/mile
- $20M/mile to $40M/mile
- Greater than $40M/mile

### OPERATIONS & MAINTENANCE COSTS

- Less than $1/passenger mile
- $1.01-$2.00/passenger mile
- Greater than $2.00/passenger mile

### RESULTS

- Goal: Rail has least risk of losing continuity of corridor from loss of rail easements.
- Alternative uses entire corridor but is not rail.
- Alternative other than rail and uses less of the right-of-way as is likely with bus/shuttle options.
## EQUITY

**Goal:**
- Promotes active transportation
- Supports safer transportation for all modes
- Provides accessible and equitable transportation system that is responsive to needs of all users
- Offers reliable and efficient transportation choices that serve the most people

<table>
<thead>
<tr>
<th>Metric:</th>
<th>ACTIVE TRANSPORTATION</th>
<th>SAFETY</th>
<th>ACCESS</th>
<th>TRAVEL TIME</th>
<th>RELIABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A = Most Desirable</strong></td>
<td>Alternative can transport relatively more bicycles.</td>
<td>National statistics report fatalities and injuries per 100 million miles traveled with collision costs of &lt; $100 million.</td>
<td>Level boarding is typically a component of system allowing independent accessibility for most users.</td>
<td>Less than 45 minutes in travel time between Pajaro and Westside Santa Cruz.</td>
<td>Alternative primarily remains on rail corridor as a dedicated facility for greater reliability.</td>
</tr>
<tr>
<td><strong>B = Moderately Desirable</strong></td>
<td>Can transport a minimal number of bicycles, depending on space.</td>
<td>National statistics report fatalities and injuries per 100 million miles traveled with collision costs between $100 - $200 million.</td>
<td>Level boarding is typically a component of system but access point is elevated requiring use of elevator.</td>
<td>Between 45-70 minutes in travel time between Pajaro and Westside Santa Cruz.</td>
<td>Alternative remains on only a portion of the rail corridor as a dedicated facility for relatively less reliability.</td>
</tr>
<tr>
<td><strong>C = Least Desirable</strong></td>
<td>Bicycles cannot be transported on vehicle and/or vehicle is relatively small. Elevated systems are less desirable as access requires elevator.</td>
<td>National statistics report fatalities and injuries per 100 million miles traveled with collision costs greater than $200 million.</td>
<td>Level boarding is not typically a component of system and not likely to have independent accessibility.</td>
<td>Greater than 70 minutes in travel time between Pajaro and Westside Santa Cruz.</td>
<td>Alternative is not on a significant portion of the rail corridor as a dedicated facility and thus is the least reliable.</td>
</tr>
</tbody>
</table>

| Local Bus & Right-of-Way Bus | B | A | C | C | B |
| Arterial & Right-of-Way Bus Rapid Transit | A/B | A | A | B | B |
| Dual Rail & Bus Vehicles | B | A | C | B | B |
| Commuter Express Bus | B | A | C | B | B |
| Autonomous Road “Train” (on pavement w/ rubber tires) | A | A/B | A | B | A |
| Micro-shuttles | C | A/B | C | B | B |
| Shuttles (Light Duty, Van, Electric Vehicle) | C | A | C | C | B |
| Intercity Rail | A | A | A | A | A |
| Light Rail/Electric Multiple Unit | A | B | A | B | A |
| Monorail/Automated People Mover | B/C | A | B | B | A |
| Commuter Rail/Electric Multiple Unit | A | A | A | A | A |
| Light Rail/Diesel Multiple Unit | A | B | A | B | A |
| Tram/Trolley/Streetcar | A/B | B | A | C | A |
| Personal Rapid Transit | C | A | A | A | A |
| Inverted/Elevated Personal Rapid Transit | C | A | B | A | A |
| Hyperloop | C | A | B | A | A |
| Gondola | C | A | B | C | B |
| String Rail | C | A | B | A | A |
## ENVIRONMENT

<table>
<thead>
<tr>
<th>Goal:</th>
<th>Promotes A Healthier Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metric:</td>
<td>TRANSIT RIDERSHIP</td>
</tr>
<tr>
<td>A = Most Desirable</td>
<td>Estimated daily ridership relatively high.</td>
</tr>
<tr>
<td>B = Moderately Desirable</td>
<td>Estimated daily ridership relatively moderate.</td>
</tr>
<tr>
<td>C = Least Desirable</td>
<td>Estimated daily ridership relatively low.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alternative</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Bus &amp; Right-of-Way Bus</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arterial &amp; Right-of-Way Bus Rapid Transit</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dual Rail &amp; Bus Vehicles</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commuter Express Bus</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomous Road “Train” (on pavement w/ rubber tires)</td>
<td>A</td>
<td>A</td>
<td>C</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Micro-shuttles</td>
<td>C</td>
<td>C</td>
<td>B/C</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shuttles (Light Duty, Van, Electric Vehicle)</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>A</td>
<td></td>
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</tr>
<tr>
<td>Intercity Rail</td>
<td>C</td>
<td>C</td>
<td>B/C</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light Rail/Electric Multiple Unit</td>
<td>A</td>
<td>A</td>
<td>C</td>
<td>A/B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monorail/Automated People Mover</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>B/C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commuter Rail/Electric Multiple Unit</td>
<td>A</td>
<td>A</td>
<td>C</td>
<td>B/C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light Rail/Diesel Multiple Unit</td>
<td>A</td>
<td>A</td>
<td>C</td>
<td>B/C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tram/Trolley/Streetcar</td>
<td>B</td>
<td>B</td>
<td>C</td>
<td>A/B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Rapid Transit</td>
<td>B</td>
<td>B</td>
<td>C</td>
<td>A/B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inverted/Elevated Personal Rapid Transit</td>
<td>B</td>
<td>C</td>
<td>A</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hyperloop</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gondola</td>
<td>C</td>
<td>C</td>
<td>A</td>
<td>B/C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>String Rail</td>
<td>B</td>
<td>A</td>
<td>A</td>
<td>B/C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Alternative Scoring Results: Other Goals

### Technical Feasibility
- **A** = Most Desirable
- **B** = Moderately Desirable
- **C** = Least Desirable

<table>
<thead>
<tr>
<th>Goal:</th>
<th>Technical Feasibility</th>
<th>Consistent with Other Planning Efforts</th>
<th>Consistent with Regulatory Requirements</th>
<th>Integration</th>
<th>Ability to Adapt to New Technology</th>
<th>Right-Of-Way</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = Most Desirable</td>
<td>Tested technology, traditional and technically feasible.</td>
<td>Consistent with greatest number of plans, including SCORTC Regional Transportation Plan, AMBAG Metropolitan Transportation Plan/Sustainable Communities Strategy, METRO Plans, and Unified Corridor Study, CA State Rail Plan.</td>
<td>Consistent with regulations, including GHG emissions, Coastal Commission, Proposition 116.</td>
<td>Traditional bus or rail transit that has shown to easily integrate into the overall transportation system.</td>
<td>More flexible infrastructure and lower vehicle purchase cost/shorter useful life therefore more flexibility to adapt to new technologies.</td>
<td>Right-of-way supports two-way service with single lane and sidewalks or one-way travel in the right-of-way with reverse on parallel local road network.</td>
</tr>
<tr>
<td>B = Moderately Desirable</td>
<td>Infrastructure exists and has been tested. Not a traditional transit option and may be less technically feasible/is more uncertain.</td>
<td>Consistent with some plans, including those listed above.</td>
<td>Consistent with some regulations, listed above.</td>
<td>Elevated alternative/non-traditional which may be integrated into the overall transportation system but few examples exist.</td>
<td>Infrastructure is less flexible and vehicles are relatively more costly/relatively longer useful life therefore less flexibility to adapt to new technologies.</td>
<td>Elevated systems may accommodate two-way transit travel on the right-of-way.</td>
</tr>
<tr>
<td>C = Least Desirable</td>
<td>Alternative has either not been build or there are limited examples for distances of 20 miles.</td>
<td>Not consistent with any plans listed.</td>
<td>Not consistent with any regulations, listed above.</td>
<td>Uncertain how alternative will interact with overall transportation system.</td>
<td>Infrastructure and vehicles are often proprietary therefore least flexible to adapt to new technologies.</td>
<td>Accommodating two-way travel on right-of-way may be problematic.</td>
</tr>
</tbody>
</table>

### Specific Goals

- **Local Bus & Right-of-Way Bus**
  - **A**
  - **C**

- **Arterial & Right-of-Way Bus Rapid Transit**
  - **A**
  - **C**

- **Dual Rail & Bus Vehicles**
  - **B**
  - **C**

- **Commuter Express Bus**
  - **A**
  - **B**

- **Autonomous Road “Train” (on pavement w/ rubber tires)**
  - **B**
  - **C**

- **Micro-shuttles**
  - **B**
  - **C**

- **Shuttles (Light Duty, Van, Electric Vehicle)**
  - **A**
  - **C**

- **Intercity Rail**
  - **A**
  - **C**

- **Light Rail/Electric Multiple Unit**
  - **A**
  - **B**

- **Monorail/Automated People Mover**
  - **B**
  - **C**

- **Commuter Rail/Electric Multiple Unit**
  - **A**
  - **A**

- **Light Rail/Diesel Multiple Unit**
  - **A**
  - **B**

- **Tram/Trolley/Streetcar**
  - **A**
  - **C**

- **Personal Rapid Transit**
  - **C**
  - **A**

- **Inverted/Elevated Personal Rapid Transit**
  - **C**
  - **B**

- **Hyperloop**
  - **C**
  - **C**

- **Gondola**
  - **B/C**
  - **C**

- **String Rail**
  - **C**
  - **B**
The initial screening identified seven alternatives that ranked at the top. Of these alternatives, the four in bold are being recommended to move forward for a detailed performance analysis.

- Commuter Rail/Electric Multiple Unit
- Light Rail/Electric Multiple Unit
- Light Rail/Diesel Multiple Unit
- Arterial & Right-of-Way Bus Rapid Transit (BRT)
- Intercity Rail
- Autonomous Road “Train” (on pavement with rubber tires)
- Tram/Trolley/Streetcar

The following logic was used to identify four out of the seven alternatives moving into a Quantitative Performance Measure Analysis:

- Clean and green/sustainable alternatives will be considered for the TCAA planning process and thus fossil fuel options have been eliminated.
- Commuter Rail/EMU has similar benefits to Intercity Rail but is better suited to frequent, all-day service with multiple stations.
- Tram/Trolley/Streetcar alternatives implemented in many urban areas typically run on city roadways shared with private vehicles rather than dedicated corridors similar to the Santa Cruz Branch Line. In addition, this alternative typically runs at a slower speed and provides less transit capacity than other alternatives. The Light Rail/EMU alternative could accommodate “streetcar” style vehicles as long as the speeds and capacity meet the definition of this alternative.
Arterial & Right-of-Way Bus Rapid Transit (BRT)

A fixed-route bus system that could operate primarily on the Santa Cruz Branch Line as a dedicated right-of-way, as well as on Highway 1 bus on shoulders/auxiliary lanes and the local roadway network. BRT systems typically provide an urban or interurban service. These systems typically have defined passenger stations, short headway bidirectional services for a substantial part of weekdays and weekend days, off-board fare collection to reduce travel times, and separate branding of the service. BRT operations on the Santa Cruz Branch Line could be a combination of two-way and one-way with reverse direction on parallel local streets.

**Typical Characteristics:**
- Vehicle speeds up to 65 mph maximum
- BRT is incompatible with freight on the same corridor, but BRT could be moved off corridor to preserve freight in Watsonville
- Transit signal priority at roadway crossings
- Frequency of peak period service
  - 8 to 20 minute headways
- Level-platform boarding and non-level boarding at on-street stops
- Propulsion type
  - Electric–hydrogen fuel cell, battery

**Benefits:**
- Capital costs relatively lower than other modes
- Level boarding allows independent accessibility for mobility devices and space for bicycles
- Integrates easily with overall transportation system
- Greater ability to adapt to new technologies
- Depending on permanence of design, could support Transit Oriented Development
Autonomous Road “Train” (on pavement with rubber tires)

An emerging transit mode that combines the benefits of bus rapid transit and light rail with advanced autonomous driving features, providing an urban or interurban service. The system uses rubber tires running on pavement within a dedicated running way. The vehicles resemble light rail vehicles with a similar passenger capacity. The system would use similar infrastructure to a BRT system, including permanent stations, transit signal priority, and offering frequent service. The autonomous road “train” will run solely on the Santa Cruz Branch Line. Operation on a single lane with sidings allows for two-way travel. An autonomous road “train” system has recently been deployed in the city of Yibin, China.

### Typical Characteristics:
- Vehicle speeds capable of 40 to 45 mph maximum
- System runs on pavement and thus is incompatible with freight on the same corridor
- Transit signal priority at roadway crossings
- Frequency of peak period service
  - 10 to 30 minute headways
- Level or non-level platform boarding
- Propulsion type
  - Electric–Overhead, hydrogen fuel cell, battery

### Benefits:
- Strong transit ridership potential
- Level boarding allows independent accessibility for mobility devices and space for bicycles
- Supports greenhouse gas emission reduction goals
- Greater ability to adapt to new technologies
- Travel time will likely be more reliable
- Supports Transit Oriented Development
Light Rail/Electric Multiple Unit

Passenger rail service operating on fixed rails with single or multiple individually-propelled cars typically providing an urban or interurban service with a lighter volume ridership capacity compared to commuter rail. Operations on a single track with sidings that allow for two-way travel.

Typical Characteristics:
- Vehicle speeds capable of 30 to 60 mph maximum
- Vehicle can operate with freight in shared-use corridors only if temporally separated
- Centralized Traffic Control (CTC) or similar signal system only, as light rail is temporally separated from freight operations
- Frequency of peak period service
  - 10 to 30 minute headways
- Level or non-level platform boarding
- Propulsion type
  - Electric–Overhead, hydrogen fuel cell, battery

Benefits:
- Strong transit ridership potential
- Corridor has least risk of losing continuity from loss of easements
- Level boarding allows independent accessibility for mobility devices and bicycles
- Supportive of greenhouse gas emission reduction goals
- Supports Transit Oriented Development
Commuter Rail/Electric Multiple Unit

Passenger rail service operating on fixed rails with multiple individually-propelled cars typically providing an interurban or regional service. Commuter rail typically has a higher volume ridership capacity and relatively longer distance between stops compared to light rail. Operations on a single track with sidings allows for two-way travel.

**Typical Characteristics:**
- Vehicle speeds capable of 30 to 60 mph maximum
- Vehicles can comingle with freight in shared-use corridors
- Centralized Traffic Control (CTC) and Positive Train Control (PTC) is required
- Frequency of peak period service
  - 20 to 30 minute headways
- Level or non-level platform boarding
- Propulsion type
  - Electric – Overhead, hydrogen fuel cell, battery

**Benefits:**
- Faster travel times and strong transit ridership potential
- Compatible with freight rail
- Corridor has least risk of losing continuity from loss of easements
- Level boarding allows independent accessibility for mobility devices and space for bicycles
- Supportive of greenhouse gas emission reduction goals and Transit Oriented Development
AGENDA: May 21, 2020

TO: Interagency Technical Advisory Committee
FROM: Rachel Moriconi, Sr. Transportation Planner
RE: Transportation Funding Impacts due to COVID 19

This item is for information only.

BACKGROUND

Santa Cruz County’s multimodal transportation system is primarily funded by a combination of sales taxes, gasoline and diesel excise taxes, diesel sales taxes, certain fees on vehicle ownership, and user fees. These funds pay for transit, state highway, and local road, bicycle, and pedestrian infrastructure and operations. The COVID-19 global health crisis has triggered an economic crisis impacting transportation funding in Santa Cruz County and throughout the nation due to changes in fuel consumption and other behavioral and economic factors.

DISCUSSION

COVID-19 related drops in retail sales, fuel consumption, fuel prices, and transit ridership are expected to have impacts on transportation funding for several years. Entities throughout the county, state and nation have started forecasting what the economic impacts and funding shortfalls might be under different scenarios.

Measure D and TDA Revenues

Last month, RTC staff and local project sponsors discussed some of the potential impacts of COVID-19 on the RTC’s budget and local revenues, including Measure D, TDA, and State grants. While there is too much uncertainty to precisely predict the length and severity that COVID-19 will have on transportation funding sources, allocations of Measure D revenues and payments on TDA claims will be lower than previously projected in the RTC’s FY20/21 budget (which was developed pre-COVID-19). Measure D does not have a reserve and payments are based on actual revenue receipts. Although TDA (made up ¼ cent of the state sales tax), does have a reserve, the reserve is not expected to cover the full amount of the expected revenue drops.
Preliminary estimates for the Measure D transaction and use tax, prepared in mid-April 2020, show a 17% drop in FY20/21 over FY18/19 levels. RTC employs the services of Hinderliter, de Llamas & Associates (HdL) for revenue projections of the Measure D transaction and use tax dedicated to transportation. Locally, HdL projected year-to-year revenue decreases for Measure D as follows:

- FY19/20: -12.2%
- FY20/21: -4.4% (in addition to FY19/20 -12.2%)
- Total: FY20/21 revenues estimated to be ~17% lower than FY18/19

Since mid-April, many economic indicators are signaling there will be a more severe and longer-term impact on sales tax revenue. RTC staff will continue to monitor and estimate potential economic impacts of COVID-19 and will provide Measure D and TDA recipients with updates as they become available. Staff is currently preparing a revision to the budget based on preliminary COVID-19 impact forecasts for review by the RTC in June. As the economic impacts of COVID-19 change, it will likely be necessary to return to the RTC during FY 2020-21 with further budget amendment recommendations.

RTC’s budget includes several revenue sources, including federal funding, state funding, and local funds. Our biggest concern for revenue decreases continues to be sales, use, transaction and gas taxes, particularly Transportation Development Act (TDA) funding and Measure D.

California Forecasts

On May 14, 2020, Governor Newsom released the “May Revise”. The May Revise predicts that COVID-19 will have a $54 billion impact on the State budget, including a 27% drop in FY20-21 sales tax statewide. The May Revise predicts a $600 million drop in gas tax revenues in FY19/20, another $602 million drop in FY20/21, with a total $1.8 billion drop in gas tax revenues over five years. While these drops in revenue are significant, proportionally the revenue drops are significantly less than state General Funds. This is partly because of annual CPI adjustments to SB1 fuel taxes and vehicle fees, robust revenues earlier in FY19/20, firewalls on SB1 and Article 19 transportation funding, and a strong reserve. The May Revise also assumes that some state revenue losses will be backfilled by a future federal stimulus. The proposed state budget maintains existing Caltrans staffing levels in order to support delivery of currently programmed projects and to support project readiness if federal stimulus funds become available.
Federal Stimulus

The Coronavirus Aid, Relief, and Economic Security (CARES) Act (HR 748), approved March 27, 2020, provides $25 billion in emergency relief funds by formula to transit agencies nationwide to support capital, operating, and other expenses generally eligible under those programs to prevent, prepare for, and respond to COVID-19. Santa Cruz METRO has requested to use $20,560,417 in CARES Act funds for operating assistance for public transit service within the Santa Cruz and Watsonville urbanized areas.

On May 12, 2020, House Democrats released the HEROES Act (Attachment 1). While things could change between the writing of this staff report and the ITAC meeting, there does not appear to be much enthusiasm for the package from Senate Republicans or the White House at this point, many expect several weeks of negotiation before anything is finalized.

The transportation-related components of the House proposal include:
- $15 billion in highway funds to state DOTs (with some funding sub-allocated to regions via the Surface Transportation Block Grant Program (STBG)) - California’s would receive approx. $1.4 billion
- $15.75 billion for public transit (with most being allocated to urbanized areas over 3 million population)
- $1 trillion in state and local aid (including $187.5b each to cities and counties)
- $4 billion for home broadband connections
- $1.5 billion for broadband “hotspots”
- Removes provision of second COVID-19 relief package that denies tax credits to government entities to offset mandates of expanded medical and family leave

The HEROES Act also includes funds for housing, community development, homeless, schools, fire, police, food stamps and other nutrition programs, child care, utility assistance, hospitals, COVID-19 testing and contact tracing, workforce development, $1,200 payments for individuals, small business grants, and funds for U.S. Postal Service and 2020 Census.

SUMMARY

State, federal and local agencies have started estimating the impacts that COVID-19 will have on transportation revenues.

Proposed Phase 4 COVID-19 Relief Bill Contains $15B for State DOTs

editor@aashto.org  May 13, 2020

A $3 trillion, 1,815-page COVID-19 relief measure proposed by the House of Representatives on May 12 contains $15 billion in stopgap funds for state departments of transportation – well below the nearly $50 billion the American Association of State Highway and Transportation Officials projects state DOTs will need to continue operations in the face of drastic falloffs in motor fuel tax revenues, toll road receipts, and other funding sources.

Specifically, the House’s proposed “Phase 4” COVID-19 bill – entitled the “Health and Economic Recovery Omnibus Emergency Solutions” or “HEROES” Act – would provide $15 billion in grants to support the ongoing work of state, U.S. territorial, and Native American Indian tribal DOTs and certain local governments to mitigate the effects of the COVID-19 pandemic, including the salaries of staff and other administrative expenses.

Transit agencies would get a further $15.75 billion in operating assistance funding, with $11.75 billion distributed by formula and $4 billion available via grants. That money would be in addition to the $25 billion in emergency relief doled out to transit providers via the $2 trillion CARES Act passed on March 27.

According to an analysis of the “Phase 4” relief bill by AASHTO, state DOTs would receive $14.775 billion distributed by formula funding, with tribal DOTs getting $150 million, Puerto Rico getting $60 million, and territorial DOTs receiving $15 million. Additionally, HEROES Act funds would be subject to Surface Transportation Block Grant Program or STBGP eligibilities and be provided at 100 percent federal share, with those funds allowed to cover operational, maintenance, and administrative expenses, including payroll needs.

The Phase 4 proposal also would also provide remaining fiscal year 2020 Federal-aid Highway formula dollars from the Fixing America’s Surface Transportation or FAST Act at 100 percent federal share and allow them to cover operational, maintenance, and administrative expenses, including payroll.
More broadly via the proposed HEROES Act, state governments – as well as those of territories and tribes – would receive $540 billion in flexible funding to help them cope with the fiscal impacts of the COVID-19 pandemic, while local governments would get $375 billion.

“We want to thank House leadership for acknowledging the challenge facing state DOTs due to impacts from the COVID-19 pandemic,” noted Jim Tymon, AASHTO’s executive director, in a statement. “While this isn’t the $49.95 billion we asked for, it’s a good start. We look forward to working with House and Senate leadership to determine a level of funding that will allow state DOTs to continue to meet the needs of a nation and its economy that is getting ready to return to work.”

However, Senate Majority Leader Mitch McConnell, R-Ky., noted in a statement on May 12 that the House’s bill is “exactly the wrong approach” and is focused on developing a different Phase 4 COVID-19 relief proposal.

Bipartisan support had been growing for the nearly $50 billion state DOT funding “backstop,” with more than 130 members of the House of Representatives supporting that request in a letter sent on May 11 to House Speaker Nancy Pelosi, D-Calif., and Minority Leader Kevin McCarthy, R-Calif.

“Our transportation system is essential to America’s economic recovery, but it is facing an immediate need as the COVID-19 pandemic is significantly impacting states’ transportation revenues,” the letter said. “With millions of Americans following ‘stay-at-home’ orders to reduce the spread of COVID-19, many state governments are facing steep across-the-board reductions in tax revenues.”

For example, Oregon is facing a $3 billion drop in tax revenues due to the impact of COVID-19 and Governor Kate Brown (D) is directing state agencies to prepare for a 17 percent across-the-board budget cut for the upcoming fiscal year.

“One of the many challenging results of the COVID-19 pandemic is the dramatic impact on our economy,” she said in a statement. “With many Oregon businesses restricted or shut down, travel suspended and jobs lost, we expect the revenue that we receive to fund state services will also be significantly reduced.”

The House members noted in their letter that state motor fuel tax revenues and toll receipts are falling off dramatically as vehicle traffic declines by 50 percent in most parts of the country due to work and travel restrictions.

As a result, state DOTs expect to experience an estimated 30 percent average decline in forecasted revenues over the next 18 months – with some potentially experiencing revenue losses as high as 45 percent – and those revenue losses will be steeper sooner rather than later.

“Due to these grim realities, some states are unable to make contract commitments for basic operations such as salt and sand purchases for winter operations,” the members said. “Both short-term and long-term transportation projects that were previously set to move forward are being delayed, putting construction jobs at risk.”
RECOMMENDATION

Staff recommends that ITAC members share information and discuss how COVID-19 is impacting the local transportation system, including possible short and longer term response and recovery strategies related to biking, walking, transit, roadways and telecommuting.

DISCUSSION

COVID-19 has significantly changed travel patterns as people shelter-in-place and focus on social distancing. There has been a huge spike in telecommuting (e.g. 80% of Caltrans workforce is now telecommuting; previously only 5% telecommuted), a drop in traffic on roadways (30-40% statewide), a significant increase in delivery trips to individual residences, modifications to transit operations to focus on essential trips and safety, and a significant increase in biking and walking. It has resulted in less congestion, reduced greenhouse gas and other emissions, and less roadway wear.

Staff recommends that local agencies share information about changes to the local transportation system that have been implemented and ideas that could be implemented in the future as part of COVID response and recovery.

In an effort to reduce transmission of the coronavirus and in consideration that some level of social distancing may be needed for one or two years, many cities and transit agencies across the world have taken actions to help essential workers and the general public get around safely and to address longer term changes in travel behaviors (see attached articles). These have included increasing space for walking and biking, modifying street designs and modifying transit operations, including:

- temporary bike and pedestrian facilities
- temporary slow streets
- pop up protected bike lanes – sometimes by converting vehicle lanes
• repurposing or closing certain streets to vehicular traffic to provide more space for people to walk and bike at safe physical distances
• widening sidewalks
• expanding sidewalks in front of essential businesses to facilitate safe queueing
• building out bike facilities to ease demand on transit
• redesigning street grids
• creating more open spaces and temporary parklets for health and social distancing
• incentivizing telecommuting
• modifying parking
• traffic signal changes
• adding transit service on busy workhorse routes to allow for distancing
• analyzing transit ridership and loads to understand new travel patterns
• experimenting with on-demand or micromobility services to augment fixed routes.

Agencies may use simple tools and low-cost materials like cones, barricades, signs and movable bollards. Local agencies are encouraged to discuss any planning or projects that are being considered to meet shifting transportation demand and preferences as travel restrictions are gradually lifted. With more people biking and walking for health, exercise and transportation, agencies are encouraged to consider options to maintain this level of sustainable transportation.

**Transit**

In response to the COVID-19 pandemic, transit agencies nationwide are in the odd position of encouraging people temporarily not to ride transit, with lower ridership actually a measure of success right now. That said, transit remains critical for people who do not have the option to telework or need transit to get to essential jobs at grocery stores, hospitals, and other essential businesses.

Temporary safety measures that METRO has taken in response to COVID-19 have included:

• Limited passenger capacity on buses to maintain 6 feet of physical distancing between passengers who are not from the same household, resulting in a capacity of 5 to 8 passengers per bus; ParaCruz limited capacity as well
• Temporarily suspended fare collection and directed passengers to board at the rear door rather than the front door when feasible, in order to decrease potential exposure of passengers and bus operators
due to the confined space near the farebox (passengers who need to use a ramp are still able to board at the front)

- Created a policy that during this time of limited onboard capacity, travel on METRO is limited to “essential” travel only (e.g. “essential” workers traveling to/from work; grocery/pharmacy shopping)
- Passengers are required to wear masks or other facial coverings onboard
- Expanded nightly bus cleaning regimen to include disinfectant on all high-touch surfaces
- Suspended school term service when local schools and colleges suspended on-campus classes
- Incrementally reduced service as ridership dropped; most routes are operating daily on a reduced weekend service schedule, with some evening trips suspended.
- Transit center lobbies at Santa Cruz Metro Center and Watsonville Transit Center closed; customer service handled by phone

Transit remains a critical component of the transportation system and recovery of the transit system will be important, especially considering that many people do not drive and cannot bike or walk and access, mobility, and environmental goals for the transportation system.

**SUMMARY**

Some agencies around the world are modifying transportation systems because of COVID-19. ITAC members are encouraged to share information and ideas on COVID-19 response and recovery strategies for the local transportation system.

**Attachments:**
1. Article Tiffany Chu (May 12, 2020). In A Pandemic, Transportation Ushers in a New Age Of Agile Experimentation. *Forbes*
In A Pandemic, Transportation Ushers In A New Age Of Agile Experimentation

Forbes | May 12, 2020
By Tiffany Chu, Contributor

COVID is pushing cities to quickly plan everything from pop-up bike lanes, temporary parklets, and transit recovery services to keep residents safe and moving.

In Dallas, non-profit Better Block built a temporary parklet in a day to help with distancing.
Jason Roberts, Better Block Foundation

As many of us enter month three of shelter-in-place, much of our country remains on pause. Businesses are shuttered, transit is operating with limited service. Healthcare workers, first responders, grocers, bus drivers, and others continue to work, keeping our cities moving.

This pandemic—and the distancing required to stop the spread—has created an instant transportation crisis for densely populated cities. *Everything we’ve ever learned about efficiently moving more people in as little space as possible has now been turned on its head.* We must find new ways to achieve the goals placed on transportation service delivery.

Even while local government budgets are cratering, **cities are responding and adapting.** Transit agencies, departments of transportation and public works — not typically known to be the swiftest organizations — are jumping into action. They are re-evaluating existing infrastructure to identify new ways to get essential employees to work. They are repurposing streets—once used exclusively for automobiles—for pedestrians and cyclists. The creativity, adaptation, and unprecedented speed behind this will keep us safe and lay the foundation for a more sustainable recovery.
In Barcelona, the famous promenade Las Ramblas remains a global inspiration for functional, public space

Learn From Others: Three Actions to Take Quickly

This is the type of rapid experimentation required to battle COVID not only in big metro areas, but every city across the globe. Leaders should consider these three actions as they prepare:

1. **First, prioritize areas of greatest need.** COVID is disproportionately impacting communities of color in the US, both infections and death. Services for essential and frontline workers who are more likely to be lower-income and minorities should take higher priority than recreation. When determining areas of investment (be it new initiatives, projects, or funding itself), there are many considerations including appropriate and equitable public outreach, and particular focus should be given to neighborhoods with the least amount of access to transit, to public space, and the greatest need.

2. **Second, open not one street, but a thoughtful network.** When a few cities moved to shut down singular thoroughfares, advocates initially balked (see Lakefront Trail in Chicago, JFK Drive in San Francisco). Shutting down one street may cause crowding and risk public health; opening several will help residents stay healthy and get to and from essential locations, especially as transit capacity is impacted.

3. **Finally, embrace the “temporary.”** Instead of expensive civil engineering projects requiring heavy construction and high regulatory/permitting barriers, we can show what’s possible today with quickly-sketched concepts, paint, and posts. With lightweight infrastructure interventions under the framing of “a pilot”, or simply planning for 4 different transit service scenarios in 4 days, more cities can build, test, and learn right now than ever before.

Everything does not need to happen all at once. “Temporary” means things may likely change. Phase 1 can be cones and barricades; phase 2 can be extending the curb or generating a shared space with a local community group; phase 3 can be providing gifts-to-the-street such as colorful crosswalks, tire planters, movable gardens, and more. Community feedback can be rolling, as opposed to more rigid, pre-COVID public engagement to fit a capital project timeline.
Concept proposal for a slow street, including temporary barricades, orange cones, modified signage; Shireen Brathwaite, Remix

**Beyond COVID**

As we improve testing capability, develop a vaccine, and combat this pandemic, experimentation will be required to keep our cities moving in the meantime. Perhaps we will see broad decongestion efforts, with new travel patterns and flattening of typical commute peaks. Perhaps we will see holistic emission-reduction measures that are rooted in justice and equity. Perhaps we will have new streets designated for people.

Because we’re in an emergency, city departments are collaborating in more nimble, cross-functional ways than ever before. Wherever we land, our cities must adapt, pushing beyond our traditional transportation paradigm, building back better and more resilient than before. Our lives depend on it.

*Tiffany Chu is the environment commissioner for the City of San Francisco and the chief executive officer of Remix. Special thanks to Rachel Zack, Peter Donald, and Arti Harchekar for their perspectives.*
Global cities transform space for post-Covid transport

Glimpses are beginning to emerge of how European and US cities plan to change the way people travel.

UTC / May 7, 2020
By Adam Hill, https://www.itsinternational.com/

With the coronavirus crisis likely to continue for some months at least, city authorities are concerned that, as lockdown is lifted, people will shy away from public transport and revert to using their own cars.

This risks increasing pollution, congestion and road danger – and while there seems to be little desire to see full subway trains anytime soon, not least because capacity will likely be reduced - planners’ thoughts have turned to making it easier for people to walk and cycle.

This would take pressure off public transport, perhaps allowing social distancing measures to be enforced, while giving people an alternative for some, or all, of their journeys as they get back to work.

Among the many measures either under consideration or actually being implemented are widening pavements and increasing the amount of temporary bicycle lanes.

Barcelona, for example, is planning an extra 30,000m2 of pedestrian space, bus lane improvements and an added 21km of bike lanes.

Paris has confirmed that bike transport will be an important part of mobility going forward, while Milan has made reduced car use one of the key pillars of its emergence from lockdown.

Meanwhile, cycling could increase 10-fold and walking five-fold post-lockdown, according to London mayor Sadiq Khan and Transport for London (TfL).

Their ‘London Streetspace’ programme suggests that the UK capital’s public transport capacity may run at just 20% of pre-crisis levels, which means “millions of journeys a day will need to be made by other means”.

TfL, working with London’s boroughs, will focus on “rapid construction” of a temporary strategic cycling network, adding to the existing 160km, with new routes to reduce crowding on Underground, train and bus services.

There will also be wider footways on high streets, including space to queue for shops “as well as enough space for others to safely walk past while socially distancing”. Finally, reduced traffic on residential streets is planned, “creating low-traffic neighbourhoods right across London to enable more people to walk and cycle as part of their daily routine, as has happened during lockdown”.

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In California, San Francisco Municipal Transportation Agency (SFMTA)’s Slow Streets programme has been designed to limit through traffic on certain residential streets and allow them to be used more as a shared space for foot and bicycle traffic.

Due to concerns over social distancing, “many pedestrians are choosing to walk in the street, exposing themselves to swiftly moving vehicle traffic”, the agency says.

To improve safety, 12 corridors have been identified as potential ‘slow streets’, and signage is being added to these to prioritise walking and biking – although motor vehicles will still have right of way.

SFMTA says it hopes to create two or three such corridors per week in residential streets connecting people to “essential services” as the city’s Muni bus service has been reduced.

The city of San Diego is currently rolling out a similar ‘slow streets’ plan.
Transportation Program Updates and Announcements

i. Highway Safety Improvement Program (HSIP) Cycle 10:
   - Caltrans issued the call for projects earlier this month
   - Applications are due: September 4, 2020
   - Caltrans webinar on Cycle 10: Wednesday, May 20, 2020 at 1:30pm.

ii. California Transportation Commission (CTC) Programs: https://catc.ca.gov/programs
   - SB1 Local Streets and Roads Funds: At its 4/29/20 meeting, CTC extended the deadline to submit FY2020-21 Local Streets and Roads Road Maintenance and Rehabilitation Account (RMRA) project lists and resolutions. **FY20/21 project lists are now due to the CTC by 7/15/20.** The updated deadline for FY19/20 Expenditure Reports is due 12/1/20. While Maintenance of Effort requirements are set in statute, CTC is meeting with entities in the state to discuss options for meeting MOE.
   - CTC’s updated Timely Use of Funds Policy: In response to COVID-19 and in recognition that some agencies have struggled to award and close out projects, the CTC approved interim timely use of fund deadlines at its May 13, 2020 meeting. An FAQ with links to the required one-page extension request form is on the CTC website: www.catc.ca.gov. While the interim policy allows additional time for some projects, agencies are encouraged to construct, invoice, and close out projects as quickly as possible to ensure no funds are lost.
   - Competitive Programs: On 4/19/20 the CTC revised application deadlines for competitive Local Partnership Program (LPP), Solutions for Congested Corridors Program (SCCP), and Active Transportation Program (ATP).
Estimated competitive (not formula) funds available statewide, subject to final CTC confirmation. RTC programmed LPP-Formula (FY19/20-22/23) funds to Hwy 1 Auxiliary Lanes and Bus on Shoulders State Park Drive to Freedom Blvd 3/5/20; METRO responsible for identifying for its formula share.

iii. SHOPP:
- CTC adopted the 2020 SHOPP at its May 13, 2020 meeting.
- CTC is hosting a workshop on May 28 from 1-4pm to discuss integration of complete streets into SHOPP projects and other updates to SHOPP guidelines. To attend the webinar, please register in advance: https://attendee.gotowebinar.com/register/2596636753435921420

iv. HCD’s LEAP: Applications due to HCD by July 1, 2020 for the Local Early Action Planning Grants Program (LEAP). This is a non-competitive, one-time funding opportunity for all cities and counties to update planning documents and implement process improvements that facilitate accelerated housing production. More information: https://www.hcd.ca.gov/grants-funding/active-funding/leap.shtml

v. Urban Greening Grant Program: Solicitations for the California Natural Resources Agency’s Urban Greening Grant Program are now due July 15, 2020 at 5:00pm. Technical Assistance workshop information for the Urban Greening Grant Program will be available soon.
- https://resources.ca.gov/grants/urban-greening/

vi. Caltrans Planning Grants: The FY 2021-22 Sustainable Transportation Planning Grant Application Guide will be updated with stakeholder input in spring 2020. The call-for-applications expected late summer 2020, with applications due in early to mid-fall 2020
- Discussion Draft FY20/21 Grant Application Guide
- April 2020 Grant Guide Workshops 1 & 2 Presentation
- More information online at: https://dot.ca.gov/programs/transportation-planning/regional-planning/sustainable-transportation-planning-grants

vii. STEP: Call for projects expected by end of May 2020.
The Sustainable Transportation Equity Project (STEP) is a $22 million pilot for grantees to implement planning, clean transportation, and supporting projects. The final application/solicitation will be posted online at: https://ww2.arb.ca.gov/our-work/programs/low-carbon-transportation-investments-and-air-quality-improvement-program/low

viii. Other programs and grant opportunities: Committee members are encouraged to share information about other grants at the meeting.

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