From: Stanley Sokolow  
Sent: Wednesday, December 05, 2018 10:35 AM  
To: Regional Transportation Commission <info@sccrtc.org>  
Cc: sensibletransportation@googlegroups.com  
Subject: Unified Corridors study's omission of bus improvements on Soquel Ave/Dr.

Commissioners,

You should watch this short video which was published yesterday about Boston's pilot project to test and demonstrate a simple way to enhance their bus service along major streets.

[Link](https://www.youtube.com/watch?v=oDDPbbw_cag)  

They temporarily have placed time-of-day no-parking signs to allow only buses and right-turns to use the rightmost lane during commute hours. You could implement a similar test along Soquel Ave/Drive to let buses bypass the congested traffic. It need not be permanent nor expensive until the changes are tested, measured for performance, and approved for permanence.

I urge you to make a pilot project to test this partial BRT-lite improvement.

Sincerely,

Stanley Sokolow

---

From: Carey Pico  
Sent: Tuesday, December 04, 2018 9:52 PM  
To: Regional Transportation Commission <info@sccrtc.org>  
Cc: Ginger Dykaar <gdykaar@sccrtc.org>; Grace Blakeslee <gblakeslee@sccrtc.org>  
Subject: right-of-way is easements

On p.23-3 of the RTC agenda Dykaar and Blakelee address the issue of potential consequences if the rail corridor is not used for rail passenger service. They state a number of parcels exist lacking historical record as to ascertain whether or not a rail easement ever existed that would have reverted to fee-simple ownership under the 1982 California Marketable Record Title Act if the easement was not renewed. Adding to the mix, they mention the lack of identifiable property lines in some parcels.

The implication of their address is that the RTC would potentially lose railroad easements in these parcels if the tracks were ever removed. With trail being in the background of the discussion, railbanking was mentioned as well with the suggestion railbanking (i.e. trail-only) could lead to future legal issues for the County.

Lacking in their discussion is a) unidentified property easement titled properties are already at risk for private ownership claim, regardless of rail service or not, b) building a trail with or without accompanying rail service carries the same risk of easement loss. This is because trails are not, in general, critical to railroad operations and fall outside the easement grants (see US Supreme Court cases addressing utilities such as telephone wires versus non-utility uses such as loading docks), and c)
railbanking protects the RTC/County from any damages related to citizen demands for compensation for the "taking of property" because the rail easement would be under Federal stewardship. While the authors of p.23-3 allude lawsuits and that the landowners of the easement lands won compensation for unlawful taking of land, they failed to mention the local municipalities who controlled the rail corridors/easements were not harmed.

What I want to make clear, building the MBSST as planned would violate the railroad easements on record. With the large number of parcels lacking proper easement title, it is highly probable a landowner will challenge ownership and use, especially with the issue being discussed publicly. This is potential problem that should not be ignored.

From a straight risk analysis point of view, railbanking is the least risk-averse strategy if a trail is ever to be built.

Carey Pico, attorney-at-large

From: Manu Koenig  
Sent: Tuesday, December 04, 2018 6:08 PM  
To: john.leopold@co.santa-cruz.ca.us; Patrick Mulhern <BDS023@co.santa-cruz.ca.us>; greg.caput@co.santa-cruz.ca.us; Bertrand, Jacques <jbertrand@ci.capitola.ca.us>; rlj12@comcast.net; Cynthia Chase <ccchase@cityofsantacruz.com>; tim_gubbins@dot.ca.gov; ebottorff167@yahoo.com; Ryan Coonerty <ryan.coonerty@santacruzcounty.us>; bruce.mcpherson@co.santa-cruz.ca.us; Sandy Brown <sbrown@cityofsantacruz.com>; trina.coffman@cityofwatsonville.org; openup@cats.ucsc.edu  
Cc: Regional Transportation Commission <info@sccrtc.org>; Guy Preston <gpreston@sccrtc.org>  
Subject: Scenario "R"ealistic and Corridor Principles

Dear Commissioners,

Please find attached Santa Cruz County Greenway's proposed Scenario "R"ealistic for the Unified Corridors Study as well as a set of principles for the Coastal Corridor that we hope will serve as common ground for our community.

I look forward to providing comment at your Dec. 6th meeting.

Sincerely,

Manu

--

Manu Koenig, Executive Director  
849 Almar Ave, STE 247, Santa Cruz, CA 95060  
(831) 234-3922 | www.sccgreenway.org
Members of the Santa Cruz County community are proposing a realistic, effective and affordable set of projects from the Unified Corridors Study called Scenario R. Scenario R provides congestion relief and public transit options on Hwy 1, Soquel/Freedom and the Coastal Corridor for $423M less capital ($1,154M vs $731M) and about half the annual operating expense ($30M vs. $16M). Using Measure D, Self-Help funds and conservative assumptions on federal and state grants, Scenario R can be implemented sooner, more flexibly and realistically with the resources under the RTC’s control or reasonably available.

<table>
<thead>
<tr>
<th>Highway 1 Projects</th>
<th>RTC Staff Preferred</th>
<th>Scenario “R”ealistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buses on shoulders</td>
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<tr>
<td>High occupancy vehicle lanes (HOV) &amp; increased transit frequency</td>
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<td>Auxiliary lanes to extend merging distance IN ADDITION TO MEASURE D</td>
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<tr>
<td>Metering of on-ramps</td>
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<td>Additional lanes on bridge over San Lorenzo River</td>
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<tr>
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<tr>
<td>Soquel Avenue/Drive and Freedom Blvd</td>
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<tr>
<td>BRT lite (fast boarding, transit signal priority and queue jumps)</td>
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<td>Increased frequency of transit with express service</td>
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<td>Buffered/protected bike lanes</td>
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<td>Intersection improvements for auto</td>
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<td>Intersection improvements for bikes/ pedestrians</td>
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<td>Rail Right of Way</td>
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<td>Bike and pedestrian trail</td>
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<td>Local rail transit with interregional connections</td>
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<td>Bus rapid transit</td>
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<tr>
<td>Freight service on rail</td>
<td></td>
<td>Only Watsonville</td>
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</table>
Statement of Principles for the Coastal Corridor

The Santa Cruz County Coastal Corridor is a unique resource with enormous potential to enhance life by connecting people from all walks of life. Like the corridor itself, the process of determining the best use of the corridor should unify the community.

This Statement of Principles attempts to capture the outcomes we all seek:

- **An equitable multi-modal transportation corridor** that provides alternative commuter options from Watsonville to Santa Cruz, including transit, bike, and pedestrian facilities.

- **Built as quickly as possible**, for the lowest possible cost and highest projected usage by all modes and people of all ages, abilities and income, with the least environmental impact.

- **In a way that has the most positive impact on the communities it traverses**, by uniting neighborhoods, enhancing health, safety and beauty, while improving access to shops, amenities and recreational facilities.

- **That is most adaptable to emerging ACES (Automated, Connected, Electric, Shared) transportation technologies** such as bike share, scooters, electric and automated buses and avoids the risk of stranded costs as technology evolves.
<table>
<thead>
<tr>
<th>NEW PUBLIC INVESTMENT - CAPITAL</th>
<th>RTC Staff Preferred</th>
<th>Scenario &quot;R&quot;ealistic</th>
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</thead>
<tbody>
<tr>
<td><strong>Highway 1 Projects</strong></td>
<td></td>
<td></td>
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<tr>
<td>Buses on shoulders - (end point varies depending on aux lanes included)</td>
<td>$7,900</td>
<td>$7,900</td>
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<tr>
<td>High occupancy vehicle lanes (HOV) &amp; increased transit (incl. ramp metering and interchange reconstruction)</td>
<td></td>
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<tr>
<td>Auxiliary lanes to extend merging distance</td>
<td>$97,800</td>
<td>$13,400</td>
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<tr>
<td>Metering of on-ramps w/o HOV (including intersection/ramp improvements)</td>
<td>$113,000</td>
<td>$74,400</td>
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<tr>
<td>Additional lanes on bridge over San Lorenzo River</td>
<td></td>
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<tr>
<td>Mission St intersection improvements</td>
<td>$10,300</td>
<td>$10,200</td>
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<tr>
<td><strong>Subtotal- SR 1</strong></td>
<td>$229,000</td>
<td>$105,900</td>
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<tr>
<td><strong>Soquel Avenue/Drive and Freedom Blvd</strong></td>
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<td>Bus rapid transit lite</td>
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<tr>
<td>Increased frequency of transit with express service</td>
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<tr>
<td>Buffered/protected bike lanes</td>
<td>$19,700</td>
<td>$11,600</td>
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<tr>
<td>Intersection improvements for bikes/ pedestrians/auto</td>
<td>$30,800</td>
<td>$30,800</td>
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<tr>
<td><strong>Subtotal- Soquel/Freedom</strong></td>
<td>$50,500</td>
<td>$42,400</td>
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<tr>
<td><strong>Rail Right of Way</strong></td>
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<tr>
<td>Bike and pedestrian trail</td>
<td>$283,000</td>
<td>$197,700</td>
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<tr>
<td>Reconstruction of Capitola Trestle</td>
<td>$20,000</td>
<td>$0</td>
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<td>Local rail transit with interregional connections</td>
<td>$339,800</td>
<td>$99,000</td>
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<tr>
<td>Electric train</td>
<td>$210,000</td>
<td>$0</td>
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<td>Bus transit connections to rail</td>
<td>$11,700</td>
<td>$0</td>
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<tr>
<td><strong>Bus rapid transit</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Freight service on rail</strong></td>
<td>$10,000</td>
<td>$10,000</td>
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<tr>
<td><strong>Subtotal Rail Right-of-Way</strong></td>
<td>$874,500</td>
<td>$306,700</td>
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<tr>
<td><strong>SCENARIO TOTAL- (2018 dollars)</strong></td>
<td>$1,154,000</td>
<td>$455,000</td>
</tr>
</tbody>
</table>

1. The funding potential from Scenario B is used for both the Staff Preferred Scenario and Scenario “R”ealistic.
2. Funding potential of $13,400 is applied to the additional auxiliary lanes for Staff's preferred scenario in order to balance total Funding Potential of $455,000,000 based on RTP, State and Federal sources.
3. The Funding Potential of $10,200,000 from Scenario B is used for both Scenarios shown.
4. Funding potential for BRT lite ranges from $18,100,000 in Scenario A to $37,000,000 in Scenario C.
5. The RTC Staff Preferred Scenario includes intersection improvements for bikes and pedestrians but NOT for autos in Table 52 (UCS p150, Nov 2018). However, capital costs for these projects are represented as a single line item in Table 39 (UCS, p105, Nov 2018). The combined price is used in absence of another figure.
6. Cost estimate from Alta Planning + Design’s “Proposed Modifications to the UCS Analysis Methods” is used. The Funding Potential includes Measure D and some additional State or Federal funds to balance total Funding Potential at $455,000,000. The cost of constructing a trail with BRT on corridor is considerably lower because it assumes a combined roadway for bus, bikes and other wheeled vehicles and a narrower trail for pedestrian access alongside.
7. A cost of $20 million was estimated in the attachment "Bridge Replacement and Rehabilitation", Dec. 3, 2015 RTC meeting, attachment 3-B.
8. From the UCS, the cost for an electrified rail system that utilizes electrical multiple unit vehicles is estimated to cost a total of $549.5 million.
9. Approximate cost to repair the entire corridor for freight use
<table>
<thead>
<tr>
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<tr>
<td></td>
<td>Cost Estimate-O&amp;M</td>
<td>Funding Potential-O&amp;M</td>
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<td><strong>Highway 1 Projects</strong></td>
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<td>$3,500</td>
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<td>Mission St intersection improvements</td>
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<td><strong>Subtotal- SR 1</strong></td>
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<td>Increased frequency of transit with express service</td>
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<tr>
<td>Buffered/protected bike lanes</td>
<td>$170</td>
<td>$170</td>
</tr>
<tr>
<td>Intersection improvements for bikes/ pedestrians/auto</td>
<td>$0</td>
<td>$0</td>
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<tr>
<td><strong>Subtotal- Soquel/Freedom</strong></td>
<td>$170</td>
<td>$170</td>
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<td><strong>Rail Right of Way</strong></td>
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<tr>
<td>Bike and pedestrian trail</td>
<td>$606</td>
<td>$606</td>
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<tr>
<td>Local rail transit with interregional connections¹</td>
<td>$11,800</td>
<td>$8,823</td>
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<td>Bus transit connections to rail</td>
<td>$12,100</td>
<td>$3,200</td>
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<td>Bus rapid transit</td>
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<td>Freight service on rail</td>
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<tr>
<td><strong>Subtotal Rail Right-of-Way</strong></td>
<td>$24,506</td>
<td>$12,629</td>
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<td>Overall Project Area Transportation System Management and Demand Management</td>
<td>$900</td>
<td>$900</td>
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<tr>
<td><strong>SCENARIO TOTAL- (2018 dollars)</strong></td>
<td><strong>$30,276</strong></td>
<td><strong>$18,399</strong></td>
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</tbody>
</table>

¹ For RTC Staff Preferred Scenario with rail transit, costs are for electric units. Funding potential for rail transit is assumed to be at parity with bus transit.
Dear Commissioners,

Please find attached a press release put out by the following community groups regarding support for METRO’s proposed Alternatives Analysis of the Coastal Corridor.

Santa Cruz County Business Council
Santa Cruz New Tech Meetup
Campaign for Sustainable Transportaiton
Santa Cruz County Greenway
Santa Cruz Works
Community Groups Support METRO’s Request for an Alternatives Analysis of the Rail Corridor

December 4, 2018

Community groups, including Santa Cruz County Business Council, Campaign for Sustainable Transportation, Santa Cruz Works, Santa Cruz New Tech Meetup and Santa Cruz County Greenway announced today they are supporting METRO’s request for a detailed Alternatives Analysis of the two public transit options for the rail corridor in Santa Cruz County: rail & trail and electric bus & trail. The Alternatives Analysis was requested by METRO and approved unanimously by its Board of Directors on November 16, 2018. The Alternatives Analysis would also fully comply with the requirements of Measure D to analyze the “best use” of the corridor. The request is timely as the RTC could vote as early as January 17th, 2019 on a plan that would re-establish rail freight for 10 years north of Watsonville and eliminate the option of running electric buses on the corridor.

The Alternatives Analysis proposed by METRO would determine the most appropriate mode of public transit for the Rail Corridor and include:

- Ridership forecasts
- Operating and capital costs, including “value engineering”
- Funding sources for capital improvements
- Funding sources for operating expenses

METRO’s staff report explains why the Alternatives Analysis is needed: “The mode selection in this corridor should not be based on a choice between steel and rubber wheels but rather on the service profile (alignment, frequency, daily span of service) that most effectively meets the travel patterns and mobility needs in Santa Cruz County.”

The recently completed Unified Corridors Study (UCS) provides a foundation for the Alternatives Analysis but it is not sufficient by itself. According to METRO staff, “The [UCS’s] Scenario-based analysis does not provide enough mode/corridor specific comparable data, and information is insufficient to determine the most appropriate public transit mode to pursue in the rail corridor.”

Moreover, METRO’S staff expressed concern that passenger rail could jeopardize the bus system’s already lean budget. “All of these services and facilities could draw from the same limited funding sources. A review of the UCS suggests that some funding sources currently used for METRO operations and capital needs are being assumed as possible sources for UCS projects.”

“The Business Council represents over 80 of the major employers in Santa Cruz County,” said Robert Singleton, Executive Director. “The Council’s board issued a statement last week emphasizing incremental approaches to improve transportation in the county using already approved Measure D funds. METRO’s proposed Alternatives Analysis will provide the detailed information needed to make the right transportation decisions in the corridor.”

“METRO’s proposed Alternatives Analysis makes good policy sense,” said Doug Erickson, President of Santa Cruz New Tech Meetup. “Before locking our county into one strategy, it is essential to
understand ridership forecasts, operating and capital costs, and funding sources to be able to build and operate each alternative. This work has not been done and needs to be done before a strategic direction and set investment decisions is made.”

“Greenway is interested in clean, affordable, and flexible transit options for the corridor,” said Manu Koenig, Executive Director of Santa Cruz County Greenway, “METRO already carries 5.2 million passengers every year so there may be huge benefits in expanding its service on the Coastal Corridor.”

“Campaign for Sustainable Transportation (CFST) advocates that our transportation dollars prioritize transit and active transportation,” said Rick Longinotti, Chair of the CFST. “If we want to offer a practical alternative to auto dependency, then we need to make public transit affordable, safe and convenient. We need the best information we can get before making large investment decisions.”

“Santa Cruz Works fully supports METRO's proposal to evaluate in detail all transportation alternatives for our coastal corridor,” said Keri Waters, President, Santa Cruz Works. “Our emerging economic hubs in downtown Santa Cruz and Westside Santa Cruz need better transportation links with each other, as well as to the neighborhoods of the workers that are commuting here from Watsonville and points between. The current plans don't adequately consider the rate at which our communities are adopting personal short-range transportation options like bike share and scooters, and the infrastructure needs that can and must be met for that segment.”

**Contact Info: Community Groups Supporting METRO’s Alternatives Analysis**

Santa Cruz County Business Council
   Robert Singleton, Executive Director, Robert.singleton@sccbusinesscouncil.com

Santa Cruz New Tech Meet-up
   Doug Erickson, President, dougwerickson@gmail.com

Santa Cruz County Greenway
   Manu Koenig, Executive Director, manu.koenig@sccgreenway.org

Campaign for Sustainable Transportation
   Rick Longinotti, Chairman, longinotti@baymoon.com

Santa Cruz Works
   Keri Waters, President, keri@buoy.ai
From: Shinshu Roberts  
Sent: Tuesday, December 04, 2018 9:36 AM  
To: info@sccrtc.org  
Subject: Support Metro's Alternatives Analysis, Don't Vote Till It's Done!

Dear RTC,

Please stop blocking the desires of many Santa Cruz residents to do rail banking. I am appending this paragraph to the statement below. Capitola's Measure L is a clear indication that you are going in the wrong direction. At the very least the rail corridor should be brought to a community vote and not be a decision made by a few people.

Our METRO system moves 5.2 million people every year. Please conduct the Alternatives Analysis requested by METRO to understand how bus service could be improved and expanded onto the Coastal Corridor. This level of analysis is required by Measure D. Do not vote on a transportation scenario until this Alternatives Analysis is complete!

Thank You, Lani Roberts, Capitola, CA

The SCCRTC received the following email sent by the individuals listed below:

Subject: Support Metro's Alternatives Analysis, Don't Vote Till It's Done!

Dear RTC,

Our METRO system moves 5.2 million people every year. Please conduct the Alternatives Analysis requested by METRO to understand how bus service could be improved and expanded onto the Coastal Corridor. This level of analysis is required by Measure D. Do not vote on a transportation scenario until this Alternatives Analysis is complete!

Thank You

December 4, 2018
Christy Tall
Bill Gray
Janet Perry
Phillip Rupp
Enda Brennan
Nadeau Thorne
Michael Hollister
K.C.
Christopher Lucas
DeAnna Lopez
Scott Roseman
From: Brian Peoples  
Sent: Tuesday, December 04, 2018 4:26 AM  
To: Regional Transportation Commission <info@sccrtc.org>  
Cc: rlj12@comcast.net; bruce.mcpherson@co.santa-cruz.ca.us; ryan.coonerty@santacruzcounty.us; jbertrand@ci.capitola.ca.us; jimmy.dutra@cityofwatsonville.org; cchase@cityofsantacruz.com; trina.coffman@cityofwatsonville.org; ebottorff167@yahoo.com; openup@cats.ucsc.edu; John Leopold <John.Leopold@santacruzcounty.us>; Zach Friend <BDS022@co.santa-cruz.ca.us>; 'Patrick Mulhearn' <Patrick.Mulhearn@santacruzcounty.us>; Manu Koenig; Will Mayall; Carey Pico; joex; Miles Reiter; Robert Stephens; Robert Quinn; Ryan Sarnataro; Rodoni Farms; Grace Blakeslee <gblakeslee@sccrtc.org>; Cory Caletti <ccaletti@sccrtc.org>; Ginger Dykaar <gdykaar@sccrtc.org>; Guy Preston <gpreston@sccrtc.org>; Luis Mendez <lmendez@sccrtc.org>; Sarah Christensen <schristensen@sccrtc.org>  
Subject: Trail Now response to Item #23 on RTC Agenda (12/6/18)

RTC,

For item #23 on the RTC Agenda (12/6/18), please include the following statement.

We believe the Unified Corridor Study (UCS) has achieved some goals, however, based on gaps and shortcomings identified by Caltrans, Metro and local community groups, we suggest the following:

1. With the completion of the Final Environmental Impact Report (FEIR) for Highway 1 Tier I and II, Caltrans and California Transportation Commission (CTC) recognize this as the definitive information source for long term plans for Santa Cruz County. We recommend RTC publicly confirm long-term plans for Highway 1 Tier I upgrades (HOV/BRT lanes, metering lights, widening to Larkin Valley Road) and proceed with request to CTC for Self-Help County and SB1 Funding.

2. RTC commitment to preserve the historic timber trestles, i.e., Seascape, Hidden Beach, Capitola, along the Coastal Corridor.

3. Perform Alternatives Analysis to determine the most appropriate mode of public mass transit for the Coastal Corridor. In addition to the suggested Metro criteria, we ask that the analysis include an assessment of a “trail designed for transportation” that allows for market-based mass transit that is governed by vehicle size (no wider than 6 feet) and safe operating speeds. Mass transit is not necessarily “public transit”.

4. Agreement that the old railroad tracks from Natural Bridges to Davenport are no longer required and RTC Staff can work directly with the local Farmers and Property-owners on a collaborative win-win solution to build a world-class rail-trail along the North Coast by 2020.
5. Explore License Agreement as outlined in Trail Now January, 2018 proposal to begin using the Coastal Corridor today as an interim trail for alternative transportation while property ownership rights are adjudicated.

Best regards,

Brian Peoples

Executive Director

Trail Now

From: Stanley Sokolow  
Sent: Monday, December 03, 2018 11:21 AM  
To: info@sccrtc.org  
Cc: Campaign for Sustainable Transportation <rick@sustainabletransportationsc.org>; sensibletransportation@googlegroups.com  
Subject: Agenda item #23 for the Dec 6 2018 meeting of the RTC

Dear RTC,

Please accept the attached letter as public comment on item #23 about the Unified Corridors update.

Stanley M. Sokolow
December 3, 2018

Regional Transportation Commission of Santa Cruz County

VIA email to info@sccrtc.org

Re: Agenda item #23 on meeting agenda for December 6, 2018

A letter in the Sentinel newspaper today asks: “All present tracks must be replaced with new tracks, so why preserve them in the first place?” Your staff report on the Unified Corridors Investment Study provides some insight. It explains (paraphrased):

There are approximately 120 parcels along the rail right-of-way between Davenport and Pajaro Station. Approximately 10% of these parcels include easements across other properties and there are 20 to 50 parcels with unknown title.\(^1\) If the rail right-of-way is not used for rail service, it could result in the loss of rights to the easements along the rail right-of-way. It is not possible to determine the extent to which this may occur as the courts would evaluate title records for each property individually to determine property rights. There are court cases where an adjacent property owner to a rail line that was railbanked and converted to a trail sued the U.S. government and won - claiming that the trail is a new use of their land which entitles them to just compensation.

One such case was reported in 2014 in the Seattle Times newspaper: [Was public railroaded in trail deal?](http://seattletimes.nwsource.com/html/connections/2014-07-01/was-public-railroaded-in-trail-deal-1.html) That rails-to-trails class action concerned land previously held as a right-of-way by Burlington Northern and Santa Fe Railway Company (“BNSF”) in King County, Washington, and converted into a recreational trail. That case continued even after the article was written: [Haggart v. United States, 09-103 (Fed. Cl. 2017)](https://www.fedcircuit.gov/Opinions/ByYear/2017/201709103.pdf) in the United States Court of Federal Claims. Plaintiffs alleged that this conversion resulted in a taking of their land without just compensation in contravention of the Fifth Amendment. **After multiple trials and appeals, the court awarded compensation to some of the parcel owners where only an easement for railroad purposes had been owned by BNSF.** The federal government agreed to pay out a huge settlement, $140 million to 253 property owners along the Eastside rail line from Renton to Woodinville. The money was compensation for using their land for the planned hiking and biking trail after removal of the tracks. A whopping $35 million of that went as a fee to the lawyer who won the case, Stewart, of a Kansas City law firm. He said he had a perfect 26-0 record in rails-to-trails cases around the country because the law is clear and had been since the 1990s. It’s the federal government that’s paying this settlement, not King County or the Port, because it authorized the change in use from rail to trail. **The federal railbanking act was supposed to preclude such Fifth Amendment claims, but something often has gone wrong apparently.**

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\(^1\) Records of those mystery parcel deeds may never be found. I recall that an RTC staff member earlier had said that a fire in the Union Pacific administrative office many years ago destroyed property records it held.
The Rails to Trails Conservancy advocates for and supports local agencies for creation of recreational trails on former railroad rights of way. Its website explains how railbanking can allow for the trail without the tracks while preserving the right to future resumption of railroad service: Railbanking. A more thorough examination of the legal issues that often arise with railbanked corridors, as well as an overview of how some of those issues have been resolved, can be found in the Conservancy's article Rails-to-Trails Conversions: A Legal Review. It concludes: “The law on rails-to-trails conversions is continually evolving as the number of rail-trails increases. Rails-to-Trails Conservancy has materials and resources on its website and provides other services to assist governmental and non-governmental organizations in sorting through the various legal, political and communications issues that may arise during the course of a rails-to-trails conversion.” I have not heard or read yet that your staff has contacted the Conservancy for advice.

The Unified Corridor study includes scenarios which involve replacement of the tracks with either a paved busway alongside a paved trail or a paved trail alone on the railroad corridor. The Santa Cruz Metro Board is advocating for a more detailed analysis comparing rail service with bus rapid transit (BRT) service on the railroad corridor to determine which will best integrate with the existing transit network to meet the needs of the entire county at a cost we can afford. Either the trail-only or BRT plan for the rail corridor would require railbanking done right so that the RTC retains the use of the entire corridor, not losing parts of it when easements for only a railroad are challenged by the property owners underlying those easements. However the staff admits that even now the status of many parcels on the railroad corridor is still unknown.

Is the RTC dreaming the impossible dream and misleading the public and the Metro by continuing to study alternatives to a train on the entire railroad corridor without first having a definitive answer on the feasibility of railbanking to replace the tracks with bus transit? Did the RTC purchase “a pig in a poke” and now has no option other than to continue railroad use of the entire corridor because to do otherwise could result in a corridor that looks like Swiss cheese? Why hasn’t the RTC taken the questionable parcels to a court for a declaration of rights and to quiet title? An action to quiet title is a lawsuit brought in a court having jurisdiction over property disputes, in order to establish a party's title to real property against anyone and everyone, and thus "quiet" any challenges or claims to the title. An action to quiet title resembles other forms of "preventive adjudication," such as the declaratory judgment.

Sincerely yours,

Stanley M. Sokolow
The SCCRTC received the following letter sent by the individuals listed below:

SAFER STREETS AND RELIEF FROM TRAFFIC

Dear Santa Cruz County Regional Transportation Commission,

- We need fast reliable public transit and safer streets for cyclists and pedestrians.
- We need alternatives to being stuck in highway traffic congestion.
- Please use the rail line for dependable passenger train service for workers, students and everyone.
- Please make our streets safer for bikes and pedestrians.

I live in Santa Cruz County and I support the improvements in Scenario B of the Unified Corridor Investment Study

December 3, 2018
Annie Boheler

From: Mountain andSurf
Sent: Monday, December 03, 2018 9:43 PM
To: john.leopold@co.santa-cruz.ca.us; ebottorff167@yahoo.com; zach.friend@santacruzcounty.us; ryan.coonerty@santacruzcounty.us; greg.caput@co.santa-cruz.ca.us; bruce.mcperson@co.santacruz.ca.us; jbertrand@ci.capitola.ca.us; sbrown@cityofsantacruz.com; cchase@cityofsantacruz.com; openup@cats.ucsc.edu; tim_gubbins@dot.ca.gov; Regional Transportation Commission
<info@sccrtc.org>
Subject: No Rail Trail, No Longterm Train Contracts Until Comprehensive Plan. Prioritize Active Transport - Trail Only, Trail Now

Today I received the Ecology Action newsletter urging me to “Support the Westside Rail Trail Phase II Development on December 6th”, but the details contained within the newsletter have encouraged me to do exactly the opposite.

The Ecology Action newsletter begins with a discussion of Segment 7 – what was initially thought to be one of the more straightforward sections of the corridor to begin constructing rail/trail – however, bids for this particular section are way over initial estimates, have strained relations with local businesses, and by Ecology Action’s own admission will require “expensive retaining walls and the removal of trees that will displace native habitat”.

Ecology Action’s newsletter goes on to celebrate that plans are in the works to expand the pedestrian crossing of the San Lorenzo River Trestle, picturing the current 4ft wide path juxtaposed with the neighboring but long idle train tracks. I do not disagree that this area is a particular bottleneck and a wider path is desirable, but it seems foolhardy and needlessly expensive to modify a portion of the river crossing when the whole trestle could be put to better use supporting active pedestrian transit.

Our rail corridor represents a tremendous opportunity. I am frustrated that significant time and expense have been dedicated to prioritizing a train system that won’t improve traffic congestion but will be extremely expensive. Capitola’s passage of Measure L, the RTC’s hiring of a new executive director,
and the findings of the Rail Trail Feasibility Study and Unified Corridor Investment Study suggest that the time is right to reconsider the train. While I eagerly await a world-class pedestrian trail, I do not support construction of any piece of a path until a comprehensive plan is established.

Sincerely,
Ryan Hoffman, RN, MBA
Live Oak, Santa Cruz

From: Schwartz Susan
Sent: Monday, December 03, 2018 5:19 PM
To: Regional Transportation Commission <info@sccrtc.org>
Subject: Build the trail now - forget the rail

It just can’t be any simpler. Santa Cruz needs a bicycle and walking corridor that passes through our various neighborhoods and is safe. The issues with adding a train to the picture put plans for the trail off indefinitely. Build the trail now. So so many people want it!

Sincerely,
Susan Schwartz

From: Family Gmail
Sent: Monday, December 03, 2018 8:36 AM
To: Regional Transportation Commission <info@sccrtc.org>
Subject: Stop the rail trail

Please stop the rail trail, make it trail only. For the health of our community and allow safe access for children to schools. Please vote no on the rail trail, make it trail only!

Thanks,
Brett

From: David Kunis
Sent: Monday, December 03, 2018 7:30 AM
To: Regional Transportation Commission <info@sccrtc.org>
Subject: Rail Corridor

Stop this nonsense with a commuter train because it's a stupid idea, lacks public support and you aren't going to believe the outrage directed your way if it ever does come to pass. Trains will be required to blast their horns at every unprotected crossing and the many people impacted will be calling for your resignation or worse. Public funding will be harder and harder to get and taxpayers will revolt. Give it up!!!

David Kunis
Comments on UCS for Commissioners' Consideration

Ramp Metering and Auxiliary Lane timelines

A comprehensive ramp metering system is long overdue on the Highway 1 Corridor. For example, traffic volumes and speeds on the two SB 41st Avenue on-ramps often exceed mainline Highway 1 volumes and speeds during afternoon peak periods. Slowing and increasing gaps in the flow of on-ramp traffic and maximizing ramp storage capacity is one of the most cost effective ways to begin reducing mainline congestion. For that reason, I do not support the scenario on page 154 stating that ramp metering should be added after 2035 when auxiliary lanes are completed to San Andreas Road. I recommend amending the preferred scenario to:

- The first phase of a Highway 1 ramp metering system should be installed along with interchange modifications and ramp widening at Morrissey Blvd., Soquel Drive, 41st Av. and Bay/Porter interchanges during the next 6 to 8 years in conjunction with the Phase 1 Auxiliary Lane projects. The second phase of the Highway 1 ramp metering system should be installed in conjunction with auxiliary lane projects to San Andreas Road.

The Transportation Commission should adopt the following policy positions:

- Installation and operation of ramp metering systems are of regional importance and maximum benefit to Highway 1 will occur if each City and county support their installation as a system. Local street and traffic signal improvements and increased ramp storage must be an integral part of any ramp metering system.
- Current interchange designs should be redesigned as needed to maximize traffic flows and safety on both the mainline and local streets for all users.
- Ramp meters should be activated as mainline traffic conditions warrant and not be seen as only operational during "traditional" peak congestion periods.

My comments are based upon review of the draft study, my observations and my experience of 32 years serving as head of municipal transportation in the Cities of Santa Cruz and San Jose and one of the founding members of the Safe on 17 Task Force formed after the 1989 Loma Prieta Earthquake.

James Helmer, P.E., T.E.
Hello UCS,

I agree with the New Prefered Scenario with adding;

BRT lite (faster boarding, transit signal priority and queue jumps), and Increased frequency of transit with express services. Less emphasis on ramp metering, but more emphasis on auxillarty lanes.

Also add & expand bike share & scooter share to the County.

Thank you
Michael Pisano

Hi UCS study,

I reside in Live Oak.

Please include frontage roads on Hwy 1 & Hwy 17 to allow those locales ease of access to their local areas with not hopping on the highway.
One example;
Connect Auto Plaza Drive to Bay Ave.

We also need a safe pedestrian & bike path between Santa Cruz & Scotts Valley.
From;
Ocean St Extension - along the edge of Henry Cowell.
Graham Hill Road
Glen Canyon Road

If Brookwood Drive could add a two-way bike lane.

Thank you
Michael Pisano
From: Bill Gray  
Sent: Sunday, December 02, 2018 8:21 AM  
To: Regional Transportation Commission <info@sccrtc.org>  
Subject: Please support the North Coast Plan, and...  

Stop the rail folly, NOW.

Bill Gray  
Capitola

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From: Brian Peoples  
Sent: Sunday, December 02, 2018 6:41 AM  
To: Regional Transportation Commission <info@sccrtc.org>  
Subject: Support TrailNow / Farmer’s North Coast Rail Trail Plan  

RTC,

One of the key goals of the Unified Corridor Study (UCS) was to provide guidance for the North Coast Rail Trail to meet the Federal Grant deadline of 2020. Now that Metro and other key organizations are against the results of the UCS and requesting that more studies for the rail corridor be performed, we are concerned that this could delay moving forward with the North Coast Rail Trail and jeopardize Federal Grant funds.

With an estimated cost of over $15M to refurbish the railroad tracks for excursion trains to Davenport, we believe it can be concluded that our community will not make this type of investment. We believe the results of the UCS can provide enough guidance that the old railroad tracks from Wilder Ranch to Davenport are no longer required. Making this determination will allow RTC staff to begin working directly with the Farmers and Property-owners on a collaborative win-win solution to build a world-class rail-trail along the North Coast. The North Coast Rail Trail EIR report shows that our plan has the least environmental impact and can meet the 2020 deadline to use the Federal Grant funds.

We ask that you please support the recommendation that the old railroad tracks from Wilder Ranch to Davenport are no longer required and RTC Staff can proceed with developing the Farmers’ Alternative Rail Trail plan along the North Coast.

Best regards,

Brian Peoples  
Executive Director  
Trail Now
November 30, 2018

Supervisor John Leopold
Chair, Regional Transportation Commission
1523 Pacific Avenue
Santa Cruz, CA 95060

John,

On November 16, 2018, the Santa Cruz Metropolitan Transit District (METRO) Board of Directors approved the following recommendations to the Santa Cruz County Regional Transportation Commission (RTC) related to the Unified Corridor Investment Study:

1. Support Bus Rapid Transit (BRT) Lite operational improvements in the Soquel Avenue/Soquel Drive/Freedom Boulevard corridor.
3. Commit to a public mass transit service and facility in the Rail Corridor, and:
   - Non-Mode Specific Alternatives Analysis: Begin implementation planning in the near term by conducting a comprehensive alternatives analysis to determine the most appropriate mode of public transit for the Rail Corridor; and
   - Add a full analysis of specific operations and capital funding sources to the alternatives analysis; and
   - Support mass transit use in the rail corridor in which mass transit would run adjacent to bike and pedestrian facilities, but not under the “rail banking” concept; and
   - Support an RTC policy that would commit to funding METRO with TDA-LTF, TDA-STA and TDA-SGR at current percentage levels in perpetuity.

The METRO Board staff report for this item (#15) is attached.

The METRO Board requests that the RTC facilitate the development of a scope of work by the two agencies’ staffs for an alternatives analysis, which would iteratively develop and compare the most cost effective and efficient approaches to providing a high capacity mass transit service; taking into consideration operating and capital costs, land use development opportunities and impacts, and using realistic assumptions about the County’s public transit funding capacity.

Any major public transit facility and services proposed for the corridor would require significant local, state and/or federal funding. An alternatives analysis conforming to New Starts and Small Starts documentation requirements seems an essential
prerequisite to receiving federal funding for a major capital investment such as a rail or BRT project.

State of METRO

METRO is in the midst of developing a 10-Year Strategic Business Plan identifying priorities and funding capacity for the agency, a timeframe in which a mass transit solution could be implemented in the rail corridor.

METRO has only recently achieved a relatively stable budget with the injection of funding from Measure D and SB-1. Current funding levels are always under threat from changing economic conditions and funding allocation levels from external agencies.

Currently METRO is only able to maintain its bus service at a minimally effective level with available funding and it is acknowledged that in order to attract additional riders there is a need to increase the frequency and span of existing service prior to pursuing new services.

The METRO Board looks forward to working with the RTC to establish a realistically fundable solution in this corridor as part of effective countywide public transit network, and one that will not negatively impact METRO's current funding levels, inclusive of any growth.

Yours truly,

Bruce McPherson, Chair
Santa Cruz METRO Board

Enc: November 16, 2018 METRO Board Item #15
DATE: November 16, 2018
TO: Board of Directors
FROM: Barrow Emerson, Planning & Development Director
SUBJECT: UNIFIED CORRIDOR INVESTMENT STUDY UPDATE

I. RECOMMENDED ACTION

That the Board receive a presentation on the Unified Corridor Investment Study and recommend to the Regional Transportation Commission the following:

a) Support Bus Rapid Transit (BRT) Lite operational improvements in the Soquel Avenue/Soquel Drive/Freedom Boulevard corridor

b) Support pursuit of a Bus-On-Shoulders (BOS) facility on State Route (SR) 1

c) Commit to a public transit service and facility in the Rail Corridor and begin implementation planning by conducting in the near term a comprehensive alternatives analysis to determine the most appropriate mode of public transit for the Rail Corridor and to support efforts to secure funding from federal and other sources, and adding a full analysis of operations funding sources as part of the alternative analysis.

d) Support mass transit use in the rail corridor in which mass transit would run adjacent to bike and pedestrian facilities, but not under the “rail banking” concept; and, an RTC policy that would commit to funding METRO with TDA-LTF, TDA-STA and TDA-SGR at current percentage levels in perpetuity.

II. SUMMARY

- The Regional Transportation Commission has conducted the Unified Corridor Investment Study (UCIS), an analysis of potential multi-modal transportation investments in the State Route (SR) 1, Soquel Avenue/Soquel Drive/Freedom Boulevard, and the Santa Cruz Branch Rail Line (Rail Corridor) corridors.

- RTC staff will have presented a preferred "Scenario" to the RTC meeting on November 15, 2018 with selection of a preferred scenario targeted for the December 6, 2018 RTC meeting.

- METRO staff has participated in the development of public transit networks for the UCIS and continues to work with RTC staff to analyze data presented in the UCIS.

- Key issues of the METRO review of the UCIS include:
maximizing benefits in terms of efficient mobility, health and equity, the natural environment, and economic vitality.

Highway 1 and Soquel Ave/Drive are two of the most heavily traveled roadways in Santa Cruz County. Freedom Blvd provides an extension of Soquel Ave/Drive in the southern portion of Santa Cruz County. The Santa Cruz Branch Rail Line provides a new opportunity to provide transportation options between north and south county.

RTC staff will recommend a preferred scenario at the Nov. 15, 2018 RTC meeting. The final draft of the UCIS will consider the comments received at the November 15, 2018 Commission meeting and any other comments received by 5:00 PM on November 20, 2018. The final draft of the Unified Corridor Investment Study will be presented to the RTC at the December 6, 2018 RTC meeting to be held at 9:00 AM at the County Board of Supervisors Chambers, 701 Ocean St., 5th floor.

METRO staff will provide a detailed review and recommendations for next steps of the UCIS at METRO’s November 16th Board meeting.

**Key Issues of METRO UCIS Review**

METRO staff review of the UCIS identifies the following key issues:

- Acknowledgement that the three corridors serve different and distinct markets and origin/destination pairs. Improvements in any one of the corridors does not provide needed services in the other corridors. Specifically, improvements in the Soquel/Freedom or SR 1 corridors to not address travel needs along the coastal community.

- Need for public transit priority and services in the Rail Corridor
  - A bicycle/pedestrian only facility in the corridor would not address demand for longer distance and higher capacity mobility. As bicycle/pedestrian facilities are possible in the Rail Corridor with either Rail or BRT operations, the desire for these facilities are addressed
  - The scenario-based analysis does not provide enough mode/corridor specific comparable detailed data and information is insufficient to determine the most appropriate public transit mode to pursue in the Rail Corridor
  - Whether Santa Cruz County has the financial capacity to fund METRO’s existing network, anticipated and necessary future service expansion that is unrelated to the UCIS, along with these new services and facilities being considered by RTC. All of these services and facilities could draw from the same limited funding sources. A review of the UCIS suggests that some

*Unified Corridor Investment Study*
The mode selection in this corridor should not be based on a choice between steel and rubber wheels but rather on the service profile (alignment, frequency, daily span of service) that most effectively meets the travel patterns and mobility needs in this area.

Any major public transit facility and services proposed for the corridor would require a significant state and/or federal funding contribution. METRO strongly recommends that a formal alternatives analysis be conducted directly comparing the ridership, operating and capital costs of the options. This type of analysis is required for projects pursuing federal funding such as the New Starts and Small Starts programs, which can fund both rail and BRT projects.

Therefore, as part of the commitment to implementation of a public transit service and facility in the Rail Corridor METRO recommends that in addition to a formal alternatives analysis being undertaken in the near term to identify the type of service and facility that would be most appropriate to meet the specific mobility needs in the corridor; that in order to support efforts to secure funding from federal and other sources, a full analysis of operations funding sources should also be conducted. Having this analysis will support efforts at securing federal funding support, including form the New Starts and/or Small Starts programs.

Issues Requiring Further Analysis

Without stating a preferred mode alternative, METRO staff notes a number of issues which need further investigation and clarity prior to determining the most cost-effective and appropriate service in the corridor including:

- The bus networks and service levels (frequency and span of daily service) provided to RTC for the UCIS were hypothetical for order of magnitude cost purposes and were not the subject of any rigorous detailed analysis of alternative networks as is necessary prior to making such a major investment decision.

- Ridership
  
  Ridership comparisons suggest major differences between rail and BRT ridership based on travel times. There has not been the necessary "value engineering" of various segments of the Rail Corridor to determine with certainty the most cost-effective treatments which would determine alignment opportunities and thereby travel times.

  Bus service planning is a balance/tradeoff between travel time and accessibility to the service. More detailed analysis of development patterns and non-motorized paths of access/egress to/from transit are necessary before finalizing placement of stations/stops and choice of service alignment directions.
TDA Funds Apportioned by RTC

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<tr>
<td>RTC Admin/Planning</td>
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<tr>
<td>Bike &amp; Ped</td>
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<tr>
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TDA/STA Allocation to METRO

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TDA/STA-SGR Allocation to METRO

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</tr>
<tr>
<td>METRO</td>
<td>671,079</td>
</tr>
</tbody>
</table>

1 METRO believes that these funding sources could be vulnerable because RTC could change the % to METRO by amending its Rules and Regulations

2RTC’s 99313 funds will be allocated, in part, to projects other than METRO beginning FY20 through FY22, at which time METRO’s share will be reduced by 25%.

Additionally, a passenger rail service requires an extensive bus feeder network which is traditionally very costly to provide and are a significant use of vehicle and operator resources. The costs of these services need to be considered as part of the cost of the rail service in both capital costs and operating costs (specifically its contribution to cost per trip).
UCIS would require an increased commitment of METRO services and equipment, the funding source of which is as yet undetermined.

V. ALTERNATIVES CONSIDERED

The alternative of not pursuing transit improvements along these three corridors would limit the ability to provide viable attractive options to drive-alone vehicle use. Without competitive public transit options the region cannot address the issues of traffic congestion, air quality, and the economic impact of significant commute times and associated costs,

Not pursuing these improvements is not recommended.

VI. ATTACHMENTS

None.

Prepared by: Barrow Emerson, Planning & Development Director
From: Michael Pisano  
Sent: Friday, November 30, 2018 2:09 PM  
To: Regional Transportation Commission <info@sccrtc.org>  
Subject: 12/6/18 SCCRTC Meeting

Hi SCCRTC board,

I am a resident of Live Oak.

I highly recommend Scenario B on the rail trail study.  
I highly recommend a full METRO ITS, and AVL with route information on solar powered visual & voice signage notifications systems at several key points (such as Ocean & Water, and all Transit Stations).

Common Acronyms:  
ITS=Intelligent Transportation Systems - AVL=Automated Vehicle Locator  
AVA=Automated Vehicle Announcement - APC=Automatic Passenger Counters

Our County voted overwhelmingly for Measure D & again has shown support with the defeat of Measure 6. Our METRO has done a tremendous job in cutting $6 million dollars from its budget to give us a just adequate local mass transit system. We need options in our County. I have joined a few other locals to be car-less by choice since March of this year – I can tell you sustainable transportation in this County is very difficult. We need Options like a rail with trail, bike share, scooter share, carpools, and vanpools access. More walkable areas – bring back the five & dime stores with pharmacies, a diner/cafe (with milkshakes), grocery & retail. I hope that the recent Bird Scooter dropping In Santa Cruz has not discouraged our County from Scooter share. It is my opinion that this is what sustainable transportation looks like for the first & last mile solutions.

For example;
I took the METRO 66 to Capitola Mall, after work, from Pacific Station to gain some good value from Sears (before the notice of Sears closing). I finished shopping waiting for a return 66 back to Santa Cruz and hopped off at Coles BBQ for a rib dinner. Then had to wait in the cold for an hour for the next 66 going to the Mall then to return to Soquel Ave to transfer to the 71 to go home in Live Oak. Please have more transportation options in Live Oak.

My ex-wife worked at, as temporary help, at West Marine in Watsonville during a transition for them, and the closest bus stop arrived at 5pm. The next bus was at 6pm (she was able to get a ride to Watsonville, but not back home). I had the brilliant idea to use Uber to get her to the Watsonville Metro Station to catch whatever bus was going back to Santa Cruz. I would then either wait at 41st & Soquel to pick her up or at the bus stop at Soquel & Thurber. This quickly became better for me to be dropped off at Pasatiempo to catch the 35A into Scotts Valley, and for her to continue to Watsonville for when we shared our one car. Please have more transportation options in the Watsonville Square Area.

Rideshare;
I have tried Zimride a UC Santa Cruz TAPS supported rideshare program. I have been on the Zimride site for over four years now and have failed to find adequate, timely rideshare. Enterprise Car Rental Company had recently purchase Zimride & Rideshare vanpool. I did reach out to & met with Rideshare, but I have not successfully gained a ride to work & back. I have tried WazeCarpool with only three rides.
in the last seven months. I have tried scoop & duet to no avail. I can use some of the ride share apps, but the convenience is lost either I have to get up an hour early or work with my supervisor to come in later (my supervisor is very supportive of my endeavor). My time is just a valuable as anyone else’s, and if it is too much an inconvenience for me - I might as well buy a car. I currently use either Uber or Lyft to get to work in a timely manner at $16 to $20 a trip and take the METRO home with a UCSC staff buss pass ($16 a month).

We have a free Lyft rides back and forth to Campus, but only students can use this for commute purposes. I found out recently that TAPS has not gathered enough data to justify other options between campus, downtown and the UC Scotts Valley Center. We have been at the Enterprise Technology Center (ETC) in Scotts Valley since January of 2017. UCSC TAPS only supports Zimride as an alternative to a TAPS vanpool as affiliates feel safer with other affiliates (less the non-affiliated Lyft free rides for staff & students).

Maybe help UberPool & LyftPool with accessibility in our county, and other viable less expensive ride share options?

FYI:
It is about 25 minutes back and forth from Campus to Scotts Valley on Lyft (this does not include wait times).
Uber & Lyft are smartphone app based ride hailing services.
UberPool, Lyftpool, Wazecarpool, Scoop & Duet are smartphone app based car-pool options – you have to walk to a convenient pick-up spot (up to ten minutes – another reason for scooter share).
Wazecarpool, Scoop & Duet are encouraged by Cruz511 ($4 a trip).

Kaiser Changing Service
I just learned from my Kaiser Doctor that Kaiser is ending therapy for adults at the Santa Cruz Kaiser location, but they are expanding Watsonville & Scotts Valley locations (Santa Cruz Kaiser will still have child therapy).

How will those in need of service & campus students get to Watsonville & Scotts Valley Kaiser in a timely manner?

Can the SCCRTC, the METRO, Kaiser, Cabrillo, the Enterprise Technology Center (ETC) & U.C. TAPS work together to find an equitable transportation solution?
Maybe there is grant money available from Kaiser?
Maybe ETC can move from free Lyft service to a shuttle service or help enhanced METRO service to ETC & Kaiser?
Maybe METRO can loop from Santa Cruz to Scotts Valley stopping at the ETC & Kaiser (both ways on Scotts Valley Drive)?
Maybe METRO can go from half-hour intervals to 20 minutes intervals on Metro routes 35/35A?

Safety
I have been pretty amenable to going car-less, but as of late, safety has been on my mind. Our Highways are designed to trickle people in, but it also trickles people out. As for safety, this is very disadvantageous. We need to have three lanes on at least Hwy1 to safely help get people out of our County in an emergency. We also need to attain some evacuation help for those that are car-less.
Please note for future thoughts:
I wonder if autonomous vehicles would help get people out, or would those companies that own the autonomous vehicles keep them out of harm’s way & have them not enter evacuation areas? Will future autonomous vehicles insurance companies allow their property to help evacuate car-less citizens?

Our County needs more options.

Thank you for your time and consideration

From: GARY PLOMP
Sent: Thursday, November 29, 2018 9:42 AM
To: Undisclosed recipients:
Subject: RE: Repair of the Santa Cruz Branchline

To all:

The storms of 2017, damaged and undermined the Santa Cruz Branch rail line just North of Watsonville at Mile Post 5 rendering it unusable. The Army Corps of Engineers are not scheduled to repair it until late next year. Of course, the anti-rail groups in North Santa Cruz County have impeded this process too. This is ridiculous!

I respectfully ask that you LOBBY or contact the CTC (California Transportation Commission) and your Local, State and Federal representatives to fast track (no pun) the repairs of this important transportation entity. Thank you for your attention.

Gary V. Plomp
Rail Advocate

The SCCRTC received the following letter sent by the individuals listed below:

SAFER STREETS AND RELIEF FROM TRAFFIC

Dear Santa Cruz County Regional Transportation Commission,

- We need fast reliable public transit and safer streets for cyclists and pedestrians.
- We need alternatives to being stuck in highway traffic congestion.
- Please use the rail line for dependable passenger train service for workers, students and everyone.
- Please make our streets safer for bikes and pedestrians.

I live in Santa Cruz County and I support the improvements in Scenario B of the Unified Corridor Investment Study

November 28, 2018
Francis Nimmo  Golden Love
From: Kirill Petrov  
Sent: Tuesday, November 27, 2018 12:15 PM  
To: Regional Transportation Commission <info@sccrtc.org>  
Subject: I support Greenway

Dear Commissioners,

I support Santa Cruz County Greenway's plan for the rail corridor and their healthy, forward-thinking vision for our overall county transportation outlook.

Please help to ensure Greenway's alternative plan is given fair consideration in the Unified Corridor Study. Our county needs realistic, affordable alternatives to gridlock not a fantasy train with invisible riders.

Thank you,

Kirill Petrov

From: Craig Chatterton  
Sent: Monday, November 26, 2018 11:44 AM  
To: tim_gubbins@dot.ca.gov; jbertrand@ci.capitola.ca.us; sbrown@cityofsantacruz.com; rlj12@comcast.net; trina.coffman@cityofwatsonville.org; john.leopold@co.santa-cruz.ca.us; zach.friend@santacruzcounty.us; ryan.coonerty@santacruzcounty.us; greg.caput@co.santa-cruz.ca.us; bruce.mcpherson@co.santa-cruz.ca.us; cchase@cityofsantacruz.com; ebottorff167@yahoo.com; openup@cats.ucsc.edu; david.reid@santacruzcounty.ca.us; patrick.mulhearn@santacruzcounty.us; aschiffr@ucsc.edu; Ginger Dykaar <gdykaar@sccrtc.org>; Regional Transportation Commission <info@sccrtc.org>  
Subject: draft Unified Corridor Investment Study Document

To: RTC commission and UCS team members,

As a resident of the 2nd district in Santa Cruz County, I have significant concerns about the draft Unified Corridor Investment Study document (UCS). Like many residents, my life is significantly impacted by the transportation issues and decisions facing the county. Attached are some comments on the draft UCS.

Thank you for time and consideration.

Craig Chatterton  
Resident, 2nd District
November 26, 2018

To: RTC commission and UCS team members,

I reviewed the draft Unified Corridor Investment Study document (UCS), attended half of the RTC meeting on Nov 15th in Watsonville, and watched the CTV video. I also reviewed the videos from several previous RTC forums. Thank you for holding these critical public meetings and making these videos available for public review. In my humble opinion, the county meeting videos are an underutilized asset for the community. I subscribe to the CTV channel and find them very valuable.

Despite reviewing all of this information, I do not know how I would vote today if asked to pick a scenario or confirm the preferred recommendation. Despite the extensive work, I still have questions and conflicting thoughts about the merits of some of the projects that are outlined in the study. It seems I am not alone. My goal in writing to you is to outline some of the key insights, questions and concerns I have concluded and offer several recommendations that may help all of us proceed with a plan that will effectively address the transportation needs we face in the decades ahead.

**Some scary/sobering observations from study:**
1) Overall pre-2035 construction cost of \(~950M\$ = \(3450/\text{person}\) in the county, or \(10K\$\) for a family of three. Yes, some of this comes from outside the county, but it is real money. Yikes!

2) Over \(600M\$\) (\(\sim 2/3\) of the cost) are for the rail and trail elements, which are very divisive issues. Double yikes!

3) Measure D FAQ implies a 30-40\% improvement in transit times and speeds on Hwy 1. However, the UCS (tabled 3) shows a degradation of 25\% for vehicles unless/until HOV lanes are added \(~20\) years from now. Moreover, the additional cost for HOV lanes is over \(450M\$\) in 2018 dollars and much higher beyond 2035. Triple yikes!

4) There was no discussion of project risk in the study. The word “risk” appeared only once in a footnote.

Given the path many infrastructure projects take, the UCS projections are probably optimistic. Actual results could significantly worse. The potential “bait and switch” performance projections (\(-25\%\) vs. \(+30\%\)/\(+40\%\) in the FAQ) are particularly concerning. I suspect the public is not prepared for this shock. The commission may not be prepared for the backlash.

**Several key questions:**
1) The population growth is projected at 10\%, but traffic increase on Hwy 1 is projected at 38\%. The models may be correct, but I think this deserves some validation and explanation.

2) The study does not state the hours when work will be done - e.g. during the day or at night. Given the multi-year duration of many of these projects, the impact of ongoing daytime lane closures/obstacles for construction work could be severe. On the other hand, the cost of doing work at night is substantially higher and still affects traffic. What assumptions does the UCS budget make? These trade-offs need to be discussed and reviewed prior to approval to avoid surprises.

3) How will the project elements be sequenced? How long will each project/phase take? These projects will take many years to complete. Time frames will play a critical role in determining feasibility, allocating funds, and assessing the positive and negative impact to the public. Inflation will also increase
costs for projects that are not started for 3-5 years. The projects are not just a menu of options. The sequencing choice has many impacts and needs to be stated prior to approval.

**Several Issues could potentially derail the project:**
1) Public outrage due to worse traffic/congestion resulting from multi-year construction on heavily used roadways, and/or failure of auxiliary lanes, metering and other elements to improve traffic flow. Recall that Commissioner Rotkin questioned the value of auxiliary lanes in the meeting. Perceived benefits will also suffer from ongoing growth in traffic that diminishes performance despite upgrades.

2) Public outrage due to cost overruns, additional taxes, project delays, etc... Tempers are already high.

**Recommendations to mitigate the potential risks and issues outlined above.**
1) Run a pre-mortem on the 2035 preferred and beyond scenarios. Imagine we are in 2025 and the program has failed miserably. Everyone is pointing fingers and trying to deflect blame for bad decisions and failed implementation. Careers are in jeopardy and the local economy is suffering. The public is outraged. As Supervisor Leopold said, people are very passionate about transportation in Santa Cruz County. This program could be our Brexit moment. Your votes and decisions will be remembered.

FYI - a pre-mortem is a look ahead at the challenges that could cause everything to fail. This is then used to create plan to navigate around these challenges or to modify the plan accordingly. Depending on results, the pre-mortem should include other scenarios to consider alternatives with lower risk.

Several articles that discuss pre-mortems in more detail. Nobel laureate Daniel Kahneman’s three-minute video is a great intro with some relevant insights:
https://www.youtube.com/watch?v=MzTNMalfyhM

2) Select a draft project sequence and calculate year-by-year impacts on the budget, speeds, transits times, traffic flows, etc. The current study lacks this detail, which makes it impossible to properly evaluate.

3) Start the education and enforcement measures for accident reduction immediately. These are independent of the scenarios and they can be validated quickly to determine if the projections are realistic. Fewer accidents would also increase traffic flow and reliability and bolster public confidence.

4) Run a metering pilot now using portable units on one or more segments on Hwy 1, and measure traffic flows and driver acceptance. At least one of the entrance ramps should provide adequate space for this. Positive or negative results could significantly affect longer term planning/implementation.

5) Secure voter approval on the selected plan before spending 25M$. This likely implies starting with common projects like intersection improvements that are minimally controversial and that have low risk. Given the high cost and divisive elements, the risk of proceeding without public support is very high.

I hope these comments are of some value. Similarly to Brexit, voters approved a concept called Proposition D, but what they end up with may be something quite different and less palatable.

Craig Chatterton
From: Robert Esposito  
Sent: Saturday, November 24, 2018 9:18 AM  
To: info@sccrtc.org  
Subject: UCS

Dear RTC members,

I am sure much time has been spent discussing the engineering feat of the UCS. As a licensed contractor in the building industry for over 20yrs, I feel the expense doesn't justify the current planned options. Typically 2 tracks are required for safe and efficient commuter rail service. The corridor currently seems only wide enough for single (1) tracking which usually is only used for branch lines. How can you have a commuter rail service with only one track?

Sincerely,

Robert Esposito  
Resident of Rio Del Mar

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From: John Speyer  
Sent: Tuesday, November 20, 2018 1:09 PM  
To: ucs@sccrtc.org  
Subject: Comments on Unified Corridor Investment Study

Dear SCCRTC:

As a resident of Watsonville for more than 20 years, I urge you to support Preferred Scenario B, which include Rail + Trail route between south & north county.

Destroying the rail line would be disastrous for our county, eliminating one of the best options for North-South commutes. Don’t listen to the Greenway folks: most county residents will not be commuting north & south on bikes! The rail offers an excellent option to move folks, assuming the price is not out of the range of service/hospitality/factory workers.

It’s been proven time and again that widening lanes will NOT help solve the problem in the long run, as HWY 1 will simply turn into a rush hour parking lot after a few years of its widening. Drivers need to be encouraged to carpool or take alternative forms of transportation.

Final thought: how about encouraging private or public smaller vehicles - mini-vans that hold a dozen or so, and run every 15 min or less - to get folks to and from work at the train hubs, “the last mile” scenario. This would be essential for getting folks from Watsonville to Pajaro train station, and from the Santa Cruz station to the industrial Westside & River St/Hwy 9 areas.

Sincerely,

John Speyer  
Watsonville CA
**From:** margherita zavatta  
**Sent:** Monday, November 19, 2018 4:48 PM  
**To:** UCS <UCS@sccrtc.org>  
**Subject:** Public Comment

I urge Commissioners to support the Preferred Scenario (B) of the Unified Investment Corridor Study. Using the rail corridor for both rail and trail is definitely the best option when considering public safety, reducing carbon emissions, improving social equity, increasing use of public transit and benefiting the local economy.

Thanks,

Margherita Zavatta

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**From:** Bob F  
**Sent:** Monday, November 19, 2018 12:07 PM  
**To:** UCS <UCS@sccrtc.org>  
**Subject:** Improving Quality of Life in Santa Cruz County by easing HWY1 traffic during Commute Times

Apparently the RTC is still undecided between the "Rail-Trail" and "Trail-only". I feel the very distant "promise" of one mixed with all the realities of the other, may be best and to offer it now! With the RTC delaying a decision, I’d like to encourage a “Bus-Trail Corridor” alternative that allows a very viable means for transporting people safely and comfortably across Santa Cruz County that can essentially be guaranteed to be a fraction of the time that it now takes during commute times. This should appeal to those who can only dream of one day taking a safe passenger train. It also should appeal to those who want the opportunity to freely travel along this corridor via a variety of human-powered means.

I just sent the following to the newspapers, please support this alternative that I feel will most likely further improve Quality of Life in Santa Cruz County.

Bob Fifield  
Aptos, Ca. 95003

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**From:** Dianne  
**Sent:** Monday, November 19, 2018 11:34 AM  
**To:** UCS <UCS@sccrtc.org>  
**Subject:** Keep the Rail!

Regional Transportation Commission:

I urge Commissioners to support the Preferred Scenario (B) of the Unified Investment Corridor Study. Using the rail corridor for both rail and trail is definitely the best option when considering public safety, reducing carbon emissions, improving social equity, increasing use of public transit and benefiting the local economy.
Public safety - fewer traffic collisions, injuries and deaths.

Significant reduction in VMT (vehicle miles traveled) - critical for reducing carbon emissions and traffic congestion.

Economic benefits - the increase in visitor related tax revenue will be as much as 60% higher than the other scenarios.

Funding availability - Santa Cruz County voters overwhelmingly approved Measure D, which includes ongoing funding for the rail and trail. Most importantly, the recently adopted California State Rail Plan specifically allocates $1.5 billion for the Central Coast to “Implement Regional Rail Connecting Monterey and Santa Cruz to the Statewide Rail Network”.

Equitable - Rail with trail will serve many modes of travel for many differing abilities.

**Keep the rail and build the trail** - Scenario B is the best option to address the climate crisis, provide equitable transportation access for everyone, improve local economic vitality and develop a truly sustainable transportation system that will serve Santa Cruz County now and well into the future.

Dianne Dryer
Santa Cruz County resident

From: Martha Macambridge
Sent: Monday, November 19, 2018 9:11 AM
To: UCS <UCS@sccrtc.org>
Subject: Keep the rail and build the trail

I urge Commissioners to support the Preferred Scenario (B) of the Unified Investment Corridor Study. Using the rail corridor for both rail and trail is definitely the best option when considering public safety, reducing carbon emissions, improving social equity, increasing use of public transit and benefiting the local economy.

Public safety - fewer traffic collisions, injuries and deaths.

Significant reduction in VMT (vehicle miles traveled) - critical for reducing carbon emissions and traffic congestion.

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Equitable - Rail with trail will serve many modes of travel for many differing abilities.
Keep the rail and build the trail - Scenario B is the best option to address the climate crisis, provide equitable transportation access for everyone, improve local economic vitality and develop a truly sustainable transportation system that will serve Santa Cruz County now and well into the future.

Thank you,

Martha Macambridge

From: Nadene Thorne
Sent: Sunday, November 18, 2018 8:22 PM
To: Ryan Coonerty <ryan.coonerty@santacruzcounty.us>
Cc: Regional Transportation Commission <info@sccrtc.org>
Subject: Way Forward in Light of the UC Study

Commissioner Coonerty,

As your district constituent, I was highly disappointed by your vote in June to approve the Progressive Rail contract. Most of the commissioners who voted for it with you expressed the same justification: “We HAVE to do something for the businesses in Watsonville who depend on freight.”

My question to you, and to these other commissioners, is why you didn’t direct the RTC staff to write and negotiate a contract that would have done only what we all agreed was immediately needed: provide rail service for Watsonville businesses and to the south, rather than a 10-year contract (potentially) committing the county to make substantial – and expensive – repairs to the rail line whose value we are far from a consensus on. None of the commissioners, to my knowledge, has answered that question.

Now we have the results of the highly touted UCI Study, one that, for all its advertised community input and presumed foundation on verified fact, nevertheless seems to offer a mishmash of partial proposals, and further postpones substantive solutions until 2035! It appears as though the commission staff would rather study the transportation problems, rather than actually recommend doing anything about them any time soon.

Doesn’t it make sense at this critical juncture, before further obligating the county to whatever uncertainty is proposed in Progressive Rail’s contract, to at least step back and consider the implications of some of the significant circumstances that have changed since the UCI Study was authorized:

1) The Measure L vote in Capitola,

2) The Progressive Rail contract,

3) The sudden and perhaps unexpected popularity of e-bikes in Santa Cruz as a viable transportation option rather than as simply recreation,
4) The inability to date of the City of Santa Cruz to fund the astonishingly expensive Segment 7 phases of even a narrow trail aside the railroad tracks,

5) The substantial number of community speakers and letter writers who have lobbied you all to pursue bus and trail only (as opposed to the ambiguous dot-and-vote system of several of the presentations), and to oppose the Progressive Rail contract as written,

6) The less-than-enthusiastic local responses to the north coast EIR proposal and presentations,

7) The comments and recommendations of several transportation speakers which you, the RTC, sponsored,

8) And there are probably innumerable other changes to the transportation landscape which only you all may be aware, and through which you commissioners must negotiate.

In short, accepting the staff recommendation of Scenario B will undermine the explicit goals the study: to ascertain transportation solutions which offer economy, meet environmental goals, and enhance social equity. The study itself makes it clear that no rail option will be equitable, or will effectively reduce traffic on Highway 1, or will be affordable for the long term, or achievable in the near term.

Before simply rubber-stamping this flawed scenario recommendation of the RTC staff, who, it should be noted, were not elected as representatives of us citizens but rather function only at the behest of you commissioners, I would hope that you would use this opportunity to re-evaluate “the plan of record” in light of the present and near future and create a scenario that genuinely offers viable and affordable transportation improvements for both north and south county residents.

I would be happy to meet with you to discuss these options further.

Nadene Thorne

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From: Joel Isaacson  
Sent: Sunday, November 18, 2018 6:50 PM  
To: ucs@sccrtc.org  
Subject: Rail trail

Keep the rails for the future. Build the trail now.

Joel Isaacson

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From: Nancy  
Sent: Sunday, November 18, 2018 10:15 AM  
To: ucs@sccrtc.org  
Subject: Rail + Trails
I urge Commissioners to support the Preferred Scenario (B) of the Unified Investment Corridor Study. Using the rail corridor for both rail and trail is definitely the best option when considering public safety, reducing carbon emissions, improving social equity, increasing use of public transit and benefiting the local economy.

Some of the reasons cited in the recent Unified Corridor Study:

- Public safety - fewer traffic collisions, injuries and deaths.

- Economic benefits - the increase in visitor related tax revenue will be as much as 60% higher than the other scenarios.

- Funding availability - Santa Cruz County voters overwhelmingly approved Measure D, which includes ongoing funding for the rail and trail. Most importantly, the recently adopted California State Rail Plan specifically allocates $1.5 billion for the Central Coast to “Implement Regional Rail Connecting Monterey and Santa Cruz to the Statewide Rail Network”.

- Equitable - Rail with trail will serve many modes of travel for many differing abilities.

- Climate - Significant reduction in VMT (vehicle miles traveled) - critical for reducing carbon emissions

- Traffic - Significant reduction in traffic

Keep the rail and build the trail - Scenario B is the best option to address the climate crisis, provide equitable transportation access for everyone, improve local economic vitality and develop a truly sustainable transportation system that will serve Santa Cruz County now and well into the future.

Thank you,
Nancy Willard
Aptos resident

From: Chuck Johnson
Sent: Sunday, November 18, 2018 8:37 AM
To: ucs@sccrtc.org
Subject: Save the rails for the future of transport

From: Eva Brunner
Sent: Saturday, November 17, 2018 10:52 PM
To: ucs@sccrtc.org
Subject: Rail Trail

Commissioners -

Keep the rail and build the trail - Scenario B is the best option to address the climate crisis, provide equitable transportation access for everyone, improve local economic vitality and develop a
truly sustainable transportation system that will serve Santa Cruz County now and well into the future.

Eva Brunner

From: Tom Rath  
Sent: Saturday, November 17, 2018 1:51 PM  
To: Regional Transportation Commission <info@sccrtc.org>  
Subject: RAIL TRAIL CORRIDOR

I live in Capitola and have been a member of the national Rails To Trails Conservancy since 2005. I receive their quarterly magazine and am amazed at how much has been accomplished nationwide in either converting rails to trails or establishing trails alongside rails. It dismays me to see that we are stuck with advancing our rail/trail with opposition primarily from Trail Now and Greenway. I am a firm proponent of rails WITH trails for our corridor.

I only get the weekend subscription to the SC Sentinel and every week there is a letter to the editor on this topic either pro or con. I have subscribed to emails from Trail Now to read about their positions as well. I have read your studies provided by consultants and completed your surveys when asked upon to do so. I am a voter and checked elections results this morning because they are still counting mail in ballots. Measure L here in Capitola now trailing by 127 votes.

I think a lot of negativity regarding rail comes from prior years when Union Pacific ran the rock train from Aromas to CEMEX once or twice per week. It was extremely heavy, loud, spewed lots of diesel exhaust, not energy efficient and basically obnoxious. I don't think the trains to Christmas Town helped improve the image of rail much for some of the same reasons. It amazes me that we ran that heavy rock train over all of our 100 plus year old bridges without incident but now cannot run "light" rail passenger service over those same bridges. This reeks of litigation issues even with scheduled structural inspections and retrofits if deemed necessary.

I have researched Siemens in Sacramento and they have some really modernized, low floor, light weight, low emissions and quiet light rail vehicles. Although they do have many electric only applications they also have Tier 4 diesel/electric and brand new hydrogen/electric power options for their engines. Tier 4 is the lowest emissions level for diesel powered vehicles in use currently. They provide their various products now on a world wide basis and are considered a leader in the industry.

I believe I read where SMART in Marin/Sonoma offered free demo rides for a limited period of time. This offered proponents, opponents, stakeholders and general public an opportunity to experience the service prior to full implementation. Some of our stakeholders have gone up to ride SMART to experience for themselves light rail transit. I think a similar demo here having the RTC, Progressive the local cities and the County develop a proposal for submission to Siemens for this purpose. Many of our County residents are basing their opinion either pro or con without ever having experienced what a light rail service could provide. A former coworker of mine who lives just South of Watsonville and works at the main County building on Ocean told me his morning commute is now 1.5 hours minimum and his evening commute is now 2 hours notwithstanding any traffic incidents. He would love to drive in to Watsonville, hop on a light rail, ride to the Boardwalk area and then take a SC Metro shuttle up Pacific and over to Ocean.
Next phase of widening HWY 1 from Soquel Ave to 41st Ave not to begin until 2021. That's no more than one mile. HWY 1 commute traffic now spilling onto surface streets in attempt to evade the congestion. Tourism is our number one industry and agriculture is number two. We have an opportunity to increase our eco tourism economy by providing light rail service. Imagine many of the tourists entering our County from the East, the North and the South, parking their cars, hopping on light rail with a day pass and enjoying our County's many attractions without having to navigate the traffic. Rails To Trails Conservancy has reported that many businesses within 1/2 mile of the rail/trail corridors report a 20% to 25% increase in sales revenues. I just don't see many other options for us to consider bound in with the ocean on one side and the mountains on the other. I wish to thank you sincerely for your efforts on behalf of the residents of Santa Cruz County!!

From: GARY PLOMP  
Sent: Saturday, November 17, 2018 7:17 AM  
To: UCS <UCS@sccrtc.org>  
Cc: Regional Transportation Commission <info@sccrtc.org>  
Subject: RE: Support for "B"

To whom it may concern:

I once again write this letter to voice my support for Measure "B" in regard to Rail with Trail.

It is paramount that the Santa Cruz Branch Rail Line be preserved for future use! It is a historic transportation asset that will factor big time into the future of transit in Santa Cruz County in the years ahead.

Keep in mind, other than the Greyhound bus, there is NO DECENT INTERCITY connections in or out of Santa Cruz County at this time. Also, the Santa Cruz Branch rail line will not only provide a link to future Amtrak service at Watsonville Junction in Pajaro but providing a needed transportation option for COMMUTERS as well.

Hopefully, freight service will be increased in the Santa Cruz and North County area in the future and preserving the rail line is essential for the economy of the county.

In addition the trail aspect will appease those who desire a walking and bike path as well. It is a win-win for all.

Thank you for your attention.  
Gary V. Plomp  
Rail Advocate
Hi Grace,

To follow-up with our conversations, we believe we can support a non-trail-only plan along the Coastal Corridor, but it can not be rail.

We have drafted a statement we are willing to socialize with you prior to releasing. We have other important organization(s) co-authoring.

In the parking lot, we went further about possible next steps to using the Coastal Corridor soon, specifically getting the Coastal Corridor from Buena Vista Road (Milepost 7) to Davenport as an interim trail. We are willing to submit a proposal for a License Agreement to manage property as a railroad and provide needed investments. Our proposal would eliminate the need to railbank the property, provide capital funding to perform maintenance on the property, ensure security of corridor and allow Metro/RTC to pilot e-buses along the corridor. It would allow RTC to further investigate property boundaries and take the appropriate action to secure the deed. We would maintain railroad operations throughout the duration of the License Agreement that comply with all federal and state regulations for such operations.

We would like to discuss both our public statement on "non-trail-only" and a potential License Agreement for the corridor prior to anymore RTC planning for UCS recommendation.

Is there a time we can meet?

We want to be able to have "official" discussions that we can expect would be presented to the Board. Maybe after Preston arrives?

Are you all interested?

Best regards,

Brian Peoples

Executive Director
From: Dan  
Sent: Friday, November 16, 2018 7:51 AM  
To: Regional Transportation Commission <info@sccrtc.org>  
Subject: Viable traffic solutions

We are retired and walk the area near Newbrighten elementary. If we are serious about traffic solutions we should talk a hard look at returning to school bus program. It would be far more effective in removing surface and highway traffic in the area. Also by studies estimates 3500 daily commuters would use new rail most of which would most likely be taken from existing bus passengers. By the way that is almost the same number I came up with several years ago when this all came up. I based it on existing public bus ridership. But to my point 3500 daily compared to 100,000 on highway is only 3.5% think about that number and the money that will have to be spend and continued to be spent to subsidize 3500 riders on 60 trains daily. Lastly freight on rail in our area is a fantasy. Maybe a few decades ago but not in today’s world. Perhaps from Watsonville or Salinas eastward but not our area. Good to hear that meeting has been rescheduled . Thank you for all your efforts.

The SCCRTC received the following letter sent by the individuals listed below:

SAFER STREETS AND RELIEF FROM TRAFFIC

Dear Santa Cruz County Regional Transportation Commission,

- We need fast reliable public transit and safer streets for cyclists and pedestrians.
- We need alternatives to being stuck in highway traffic congestion.
- Please use the rail line for dependable passenger train service for workers, students and everyone.
- Please make our streets safer for bikes and pedestrians.

I live in Santa Cruz County and I support the improvements in Scenario B of the Unified Corridor Investment Study

November 15, 2018

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<thead>
<tr>
<th>Monica Alvarez</th>
<th>Nayerli Ortiz</th>
<th>Anna Castillo</th>
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<tr>
<td>Yahir Alvarez</td>
<td>Freddy Garcia</td>
<td>Fidelina Mendoza</td>
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<td>Noe Fernandez-Duarte</td>
<td>Ivan Salvador</td>
<td>Sarah Aquilina</td>
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<td>F. Perez</td>
<td>Edgar Rocha</td>
<td>Monica Gracizo</td>
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<td>Domonique R.</td>
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<td>Bianca Castameda</td>
<td>Carolyn Candia</td>
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<td>Sergio Hernandez</td>
<td>Shane Soarez</td>
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<td>Jesus Mores</td>
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<td>Richard Walsh</td>
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The SCCRTC received the following letter sent by the individuals listed below:

CALLES MÁS SEGURAS Y ALIVIO DE TRÁFICO

Estimada Agencia Regional de Transportación de Santa Cruz:

- Necesitamos tránsito público rápido y confinable y calles más seguras para ciclistas y peatones.
- Necesitamos alternativas para aliviar la congestión del tráfico en el autopista.
- Favor de utilizar la vía de tren para servicios de pasajero confinable para trabajadores, estudiantes y todo el público.
- Favor de hacer nuestras calles más seguras para bicicletas y peatones.

Yo vivo en el condado de Santa Cruz y apoyo las mejoras en el Escenario B del Estudio “Unified Corridor Investment Study”.

November 15, 2018

Mark Poza
Gabino E. Torres S.
Carlos Plasceria
Lexio Valeria

Daniel Oviedo
Adriana Cruz
Eduardo Jiménez

Jeremi
Gerardo Cruz
Mariah

Angel Barrientos
Romero Roberto
Guadalupe Grande

Jorge Hernandez
Maria Pocel
Yaneli

Adriana Zacarias
Joaquin Lane
Rodrigo Hernandez

Ian M.
Ana Martinez
Xitlali Suarez

Eric B.
Joel Garcia
Alejandro Martinez

From: kaki rusmore
Sent: Thursday, November 15, 2018 10:47 PM
To: ucs@sccrtc.org
Subject: Unified Corridor Study

Dear RTC staff,
I have reviewed information on the UCS and want to encourage you to recommend keeping the rails for future possible use, while developing the trail alongside them now: scenario B.

This option helps move our county towards sustainable transportation, supports healthy lifestyles, and offers a long-term affordable solution to north-south transportation. We need to move away from supporting cars as our main form of transportation. We need to take action towards an equitable, affordable solution to our transportation challenges. This option will help that happen.

I also want to take this opportunity to comment on Measure L in Capitola. I do not think you can take its passing as a measure of support for abandoning the rail option. The Yes on L publicity was extremely misleading, talking about "saving the trestle", providing bike paths (as though that is not already in the plans) and never mentioned the way it would inhibit the development of rail transit. I walked neighborhoods for No on L with my daughter who lives there, and at least 90% of the people we talked
to had no idea that L would make it more difficult to develop rail transit. They thought getting rid of the tracks and effectively eliminating the possibility of developing modern rail transit in the future was a very bad idea. As you are probably aware, L passed by only 90 votes. I am sure that if Capitola voters all had clear information about the implications of L on future rail transit, it would have been defeated by a wide margin.

Thank you for your hard work on this contentious issue. I hope that Santa Cruz Co. takes this opportunity to stand behind its rhetoric of loving the natural environment and caring about other human beings and puts a plan in place that demonstrates both those values.

Warmly,
Catherine Rusmore

From: T & G Schuttish
Sent: Thursday, November 15, 2018 4:57 PM
To: Regional Transportation Commission <info@sccrtc.org>
Subject: Safer streets and relief from traffic

Dear Santa Cruz County Regional Transportation Commission,

- We need fast reliable public transit and safer streets for cyclists and pedestrians.
- We need alternatives to being stuck in highway traffic congestion.
- Please use the rail line for dependable passenger train service for workers, students and everyone.
- Please make our streets safer for bikes and pedestrians.

I live in Santa Cruz County and I support the improvements in Scenario B of the Unified Corridor Investment Study. Please decide quickly, we are ready for the Rail & Trail.

From: Robert Stephens
Sent: Thursday, November 15, 2018 10:20 AM
To: Regional Transportation Commission <info@sccrtc.org>
Subject: My Comments for the Commissioners

Dear RTC Commissioners:

It looks like the majority of voters in Capitola are not interested in a train in their community and prefer a safe useable trail. Watsonville wants to widen the freeway like north county has done (look how nice the fish hook works after the improvements were made), San Lorenzo Valley and Scotts Valley residents will never use a train or want to pay for one, no one working in ag in Watsonville will ever use a train (but they will pay for it), METRO is concerned about their funding being cannibalized by the train, and Jump bikes are moving a lot of people at no cost to tax payers. All the while the RTC staff is
recommending: “stay the course”: don’t widen the freeway, keep the rusty rails, and are causing the trail to not be built anytime soon due to and extremely high cost (look at segment 7.1 costs).

The UCIS is nothing but an exercise in “continue with the plan” from the RTC staff. There is now a big push to wrap this up by the end of the year. What is the rush? Is this good government, or more a political push? There will not be any trains going past Watsonville for six months or more. The RTC has a new ED, who should have time to weigh in on all this, as he will have to deal with this in the end. You are also facing a CEQA lawsuit that is not resolved. Let’s see if the UCIS can stand up to a peer review. You will also have some new commissioners, who will want to weight in on this issue. I am sure the staff will tell you a lot of reasons for a rush to get this done, but they are all just set up by staff to "push this through". You and I all know this.

Let’s spend a little time and effort to get this right, as it is very important to our community. Use some common sense and don’t rush into this and make another mistake. Remember the last rail operator the staff recommended, how much did that improve traffic in our community or help anything.

Rail banking leaves all doors open: rail, wheeled vehicles, trail and any combination of the above (yes it can be iron clad to allow for future trains), while going with Progressive closes the door for ten years, except for spending a lot of money on a trail and losing local control of the corridor.

Stop, listen to your community and try and make transportation improvements we can afford and implement in a timely fashion that works for everyone.

Sincerely,

Robert Stephens
Aptos

---

From: Keresha J Durham
Sent: Wednesday, November 14, 2018 11:56 PM
To: Regional Transportation Commission <info@sccrtc.org>
Subject: Support for Scenario B

Dear Chair Leopold and Commissioners,

After close review of the Unified Corridor Investment Study, myself and many local environmental and transportation activists feel that Scenario B best meets our local environmental and social equity goals.

As you may know the October 8, 2018 report issued by the Intergovernmental Panel on Climate Change (IPCC) stated that time to act to limit global warming to 1.5°C is “rapidly closing.” Due to this fact, we urge you to make a decision by your December 6 meeting.

Scenario B is the best for our regional environment for the following reasons:
1) has the fewest vehicle miles traveled (VMT) of any option.
2) emits the lowest level of pollutants of any option.
3) has the greatest CO2e emission reductions.
4) is the most equitable choice. It is responsive to needs of all people as it serves the highest number of County transit users.
5) includes a rail option which according to national Sierra Club Transportation Policy, is “most effective in stimulating compact development patterns, increasing public transit patronage and reducing motor vehicle use.” (policy from September 2018)
6) results in the highest mode share for bicycle use.
7) has the second lowest mode share for driving alone.
8) results in the highest mode share for transit use.

Scenario B is not perfect; special attention must be paid to the avoidance and mitigation of environmental impacts during the design phase of transportation projects. It can do a better job of implementing modern transportation design that protects the environment, sensitive habitat and wildlife, by including:
- Continued use of the rail line for transport of goods by freight must be included. Every freight rail car removes three to four trucks from the highway improving safety for road users and reducing greenhouse gases.
- Mission Street intersection improvements must be designed for increased safety for bicyclists and pedestrians, not just to improve automobile traffic flow.
- We urge future upgrade of public transit modes to all electric as soon as possible. This conversion coupled with the County’s participation in Monterey Bay Community Power will further reduce greenhouse gas emissions.

Transportation is the highest source of CO2 emissions in the United States. As the national Sierra Club Transportation Policy states, transportation strategies must “protect natural systems and open space, reduce vehicle miles traveled, and promote environmental and economic justice and access for all, including low-income communities and those most impacted by pollution.” Also national Sierra Club policy opposes the building or widening of limited access highways and states that HOV lanes should come from converting existing highway lanes rather than constructing new lanes.

Please move forward with Scenario B and providing transit options for our County!

Keresha J Durham
Environmentalist, former Chair of the City of Santa Cruz Transportation Commission
37 year resident of Santa Cruz, lifetime member of the Sierra Club

From: Bill Rutherford
Sent: Wednesday, November 14, 2018 10:47 PM
To: Regional Transportation Commission <info@sccrtc.org>
Subject: Rail

I just can't believe you will move forward with rail. The cost benefit ratio is glaringly ridiculous. This project is a boondoggle. Stop it! You are moving on this way too fast. There is no crisis that will be fixed by going forward with commuter rail now. Your ideas and plans today will be obsolete before they can be implemented. Please wake up before its too late. Since I have not had the chance to have my opinion counted in at the poles, this is my NO vote on a rail option at this time.
To: George Dondero

Dear Mr. Dondero,

I'm attaching the report from a study of the potential of Automated Transportation Networks in Santa Cruz (ATNs, aka PRT). This study was commissioned by Santa Cruz PRT Inc. member Brett Garrett with a supplemental stipend FROM Santa Cruz PRT Inc., and is intended to support and inform the Unified Corridor Investment Study.

The consultant performing this study is Peter Muller from PRT Consulting, Inc. (http://prtconsulting.com/) This is the same consultant who performed the recently published study for the Greenville-Pickens Area Transportation Study (GPATS) Long-Range Transportation Plan (LRTP) process.*

In my opinion, Santa Cruz RTC is fortunate to have this consultant draw upon his recent work experience and prepare this study for Santa Cruz.

I am attaching the PDF file of the Santa Cruz study for your use and for any distribution you may wish to make.

I'm writing to make a specific request. That is, we would like to present this study to the Commission with the hope that there would be a motion from a Commission member to accept the study. Our thinking is that this could happen at the meeting 2 weeks from now.

You will notice that I have cc'd Commissioner Sandy Brown so that she will be informed of my request.

I'd also like to comment at this time that we think ATN/PRT should be considered within the broad category of "Rail Transit" since there are a wide variety of rail possibilities in size of vehicle and other specifications.

Best Regards,

Ed Porter

*GPATS is the MPO, for the Greenville, South Carolina Urbanized Area. Here is a link to that working group: 
http://www.gpats.org/about-gpats/gpats-101
INTRODUCTION

“The objective of the Unified Corridor Investment Study (UCS) is to identify multimodal transportation investments that provide the most effective use of Highway 1, Soquel Ave/Soquel Dr/Freedom Blvd, and the Santa Cruz Branch Rail Line to serve the community’s transportation needs.”¹ The UCS considered bus transit, rail transit, auto, bike/ped and rail freight modes. It also considered automated vehicles/connected vehicles even though those modes are still emerging. Despite this multi-modal approach, the study completely ignores a mode that has been operating in public service since 1975. This mode is called automated transit networks (ATN – an umbrella term for personal and group rapid transit - PRT & GRT). ATN suppliers such as Vectus, Ultra, Modutram and 2getthere have had ATN systems in continuous public service since 1999². ATN systems have completed over 200 million injury-free passenger miles.

The purpose of this paper is to document why the UCS should add ATN to the modes considered. This is accomplished by addressing each of the performance measures used in the UCS in turn, with emphasis being placed on comparison with Scenario B, understood to be the likely preferred scenario.

¹ SCCRTC’s Unified Corridor Investment Study, Step 2 Analysis Results, Draft, September 2018, by Kimley Horn
² Video clip of ATN systems in operation: https://www.youtube.com/watch?v=8IM5299tXcw&
AUTOMATED TRANSIT NETWORKS

DEFINITION AND DESCRIPTION

Automated transit networks (ATN) is an umbrella term for two concepts that are now merging into one. These are personal rapid transit (PRT) and group rapid transit (GRT). PRT was conceived to use small (2 – 6 seated passengers) driverless vehicles carrying individuals or parties travelling together nonstop from origin to destination and not sharing rides with strangers. GRT uses large driverless vehicles (up to 20 or even 30 seated and/or standing passengers) which often wait before departing to encourage ride sharing and stop at intermediate stations if necessary. Modern PRT systems generally have 4 to 6 seats, encourage ride sharing and may make an intermediate stop or two. Other terms for these systems include Podcars (commonly used in Sweden) and Pod Taxis (commonly used in India). This study refers to these systems as PRT, GRT or ATN as appropriate.

ATN systems provide a very high level of service and passengers have no need to know routes, schedules or transfer points. All they need to know is the name of their destination station.

Table 1 on the following page provides a comparison of PRT with cars and conventional transit.

ATN systems proven in public service have capacities ranging from 2,000 to 10,000 passengers per hour per direction (pphpd) and maximum speeds ranging from 25 to 43 miles per hour. Higher capacities and speeds up to 20,000 pphpd and 60 mph are under development now that the American Society of Civil Engineers has agreed to adapt their Automated People Mover Standards to better apply to ATN systems. The maximum speed assumed in this study is 40 mph while the maximum capacity assumed is 5,000 pphpd.
TABLE 1. COMPARISON BETWEEN TRANSIT, CAR AND PRT (Source: PRT Consulting)

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Transit</th>
<th>Car</th>
<th>PRT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Level</td>
<td>Mature</td>
<td>Mature</td>
<td>Emerging</td>
</tr>
<tr>
<td>Total Trip Time</td>
<td>Poor</td>
<td>Depends on traffic</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Operating Cost/Passenger</td>
<td>Poor</td>
<td>Poor</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Infrastructure Capital Cost/Passenger</td>
<td>Poor</td>
<td>Poor</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Accident Potential and Cost Savings</td>
<td>Acceptable</td>
<td>Poor</td>
<td>Good</td>
</tr>
<tr>
<td>On-Demand 24/7</td>
<td>No</td>
<td>Yes</td>
<td>Feasible</td>
</tr>
<tr>
<td>Transfers</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Seated Travel</td>
<td>Yes, with limits</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Private</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Non-Stop Travel</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Short waiting time</td>
<td>No</td>
<td>Yes</td>
<td>Less than 1 min</td>
</tr>
<tr>
<td>ADA Compliant</td>
<td>Acceptable</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Safe and Secure</td>
<td>Acceptable</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>User Friendly</td>
<td>Acceptable</td>
<td>Acceptable</td>
<td>Yes</td>
</tr>
<tr>
<td>Snow &amp; Ice</td>
<td>Varies</td>
<td>Poor</td>
<td>Mostly</td>
</tr>
<tr>
<td>Minimal Walking</td>
<td>Not Often</td>
<td>Yes</td>
<td>Mostly</td>
</tr>
<tr>
<td>Environmentally Friendly</td>
<td>Somewhat</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Energy Efficient</td>
<td>Somewhat</td>
<td>Somewhat</td>
<td>Yes</td>
</tr>
<tr>
<td>Visually Appealing</td>
<td>Acceptable</td>
<td>Acceptable</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Operates inside buildings</td>
<td>No</td>
<td>No</td>
<td>Possible</td>
</tr>
</tbody>
</table>

Legend: Poor × Acceptable ○ Good ✓
SOLUTIONS PROVEN IN PUBLIC SERVICE

The Ultra PRT System

The Ultra system is rubber-tired, battery-powered, and runs on an open guideway. The front wheels are steerable, and the vehicle keeps itself on the guideway without any physical lateral guidance (using lasers), simplifying switching, which is accomplished by steering. This system has been in operation at London’s Heathrow International Airport since April 2011. The commitment to using off-the-shelf technology, wherever possible, coupled with a rigorous testing and development program, has allowed the Ultra system to be the first modern PRT system to win a commercial contract.

Heathrow Airport has expressed its satisfaction with the system by including significant expansion in its budget. However, it is understood that construction of a new runway may oblitrate the existing system and alter the plans for expansion.

The Ultra vehicle was designed for four adults, plus luggage. However, Heathrow has opted to replace the bucket seats with bench seats, allowing the vehicle to carry a family of six. Commuter versions of this vehicle are anticipated to include two jump seats allowing six adults to be accommodated.

Open guideway PRT, such as that used by Ultra and 2getthere, tends to be more economical, but the rubber/guideway interface can be problematic during inclement weather conditions. Ultra has plans to address this issue, by using a glass fiber reinforced plastic grating as the riding surface. Preliminary testing by PRT Consulting in the winters of 2006 and 2007 has shown this solution to be very successful in mitigating the effects of Colorado snowfall.

Ultra PRT Ltd. is under new ownership that is aggressively marketing the system in Asia. They are reducing costs by implementing vehicle manufacture in India and other means. They are also developing a next-generation control system to allow higher speeds and shorter headways intended to increase capacity while reducing costs.
The 2getthere GRT System
2getthere, a Dutch company, has been operating an automated GRT-like shuttle bus system, in cooperation with Frog Navigation Systems in Rotterdam, Holland, since 1999. They are delivering their second GRT system using third-generation vehicles in Dubai in the United Arab Emirates. This system will have 25 vehicles and a capacity up to 5,000 pphpd. A third system is being delivered to Brussels Airport. The vehicles are capable of speeds up to 37 mph. Operation in mixed traffic is possible with top speeds up to about 30 mph.

The 2getthere PRT System
2getthere’s true PRT system was the first of its kind when it went into operation in Masdar City in the United Arab Emirates in November 2010.

2gethere’s PRT system is of the open guideway type, with somewhat similar attributes to those of the Ultra system.

The Vectus PRT System
Vectus is a subsidiary of POSCO, one of the world’s largest steel manufacturers. Despite being a British company owned and operated by Koreans, Vectus chose to establish a full-size test track, with an off-line station, in Sweden to prove operability in winter weather conditions and to meet the rigorous Swedish safety requirements. They have now accomplished both goals and moved on to implement a system in South Korea.

The Vectus system is of the captive-bogey type, where the undercarriage, or bogey, is not steerable, but has wheels which run along vertical side elements, thus, keeping the vehicle on the guideway. Switching is accomplished by movable wheels mounted on the vehicle. The test track vehicles were propelled (and braked) by linear induction motors mounted in the guideway. Mounting the motors in the guideway reduces the weight of the vehicles but increases the cost of the guideway. This is advantageous for high-capacity systems, but expensive for low-capacity systems. Their first application in Suncheon Bay, South Korea, uses
conventional rotary motors which obtain wayside (third rail) power. Propulsion batteries are not required, allowing the vehicles to be lighter in weight.

The Vectus Vehicle is designed to carry four or six seated adults, plus their luggage. In an urban transportation mode, the vehicle can also accommodate up to six standees.

**The Modutram ATN System**

While not yet in public service, the Modutram system has been included here because of the extensiveness of its test track and demonstration program. A public project is understood to be imminent.

Modutram, is being developed as a university effort with considerable funding from the Mexican government. This system is comprised of rubber-tired vehicles operating on a steel track. The vehicles have electric motors that are battery-powered.

The Modutram system has been designed specifically for the Mexican climate and is not initially intended to be capable of operating satisfactorily in snow and ice conditions. Development has progressed fairly smoothly from the initial design through a small test track to a larger test track with two stations and, more recently, a demonstration system that carries passengers in six-passenger vehicles.

Modutram appears well suited for urban operations. The system is designed for speeds up to 40 mph with minimum headways of 3 to 4 seconds. Vehicles can be physically coupled together to increase capacity.

**SOLUTIONS NOT YET PROVEN IN PUBLIC SERVICE**

Numerous ATN systems are in various stages of development ranging from being mere concepts to having engineering design completed and prototype systems in various stages of development. Some of the better-known names include JPods, Metrino, Futran (Milotek), PRT International, skyTran, Swift ATN and Transit X. Taxi 2000 recently closed its doors after decades of being unable to fund a full-scale test track demonstrating full functionality, the same hurdle that is holding many of the previously-mentioned systems from emerging onto the market.

Some of these emerging suppliers make aggressive claims regarding the costs and capabilities of their systems. These claims have typically not been proven in practice and have therefore been ignored in this study. Should high speeds and capacities become viable at very low costs, this will further enhance the feasibility of the solutions discussed here.

More information on ATN can be found here: [www.prtconsulting.com](http://www.prtconsulting.com) and here: [www.advancedtransit.org](http://www.advancedtransit.org)

CONCEPTUAL ATN LAYOUT

A conceptual layout (Figures 7 and 8) has been developed for purposes of comparison with the Scenario B rail project. Like the rail project, it extends along the Santa Cruz Branch Rail Line right-of-way from the Westside of Santa Cruz to Pajaro Station near Watsonville. Unlike the rail project, portions of the alignment (mostly those through developed areas) are one-way with return one-way guideways located in the adjacent communities, mostly along the Soquel Avenue/Drive BRT routes. These return guideways are elevated to facilitate retrofitting into existing road rights-of-way. Portions of the alignment within the rail right-of-way are also elevated to avoid at-grade crossings with other traffic (a key factor contributing to ATN safety and reliability).

Note that the routing and station locations shown are in no way intended to be final. The southern portion of the route could serve Freedom Blvd. (equivalent to BRT Lite in the UCS) or Highway 1. It could do so as a two-way line or it could be in the form of a one-way loop. In the latter case it would provide service/stations along two of the three routes (the rail corridor, Freedom Blvd. and Highway 1). It would also be possible to extend the system to UCSC and/or other destinations. If a goal is to improve circulation within Santa Cruz (for example), more guideway could be added, including additional north-south connectors with new stations between the loops shown.

ATN has almost infinite capability to be scaled up or down. It would be possible to start with a simple two-station demonstration shuttle system and to scale up from there in phases. As new routes and stations are added, the new stations will be accessible from the old with no transfers being necessary. The portion of the system from Santa Cruz to Aptos is likely to be very viable as a stand-alone system that could cover its own operating costs and most, if not all, of its capital costs through fare-box revenue.
TABLE 2. CONCEPTUAL ATN LAYOUT CHARACTERISTICS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>At-Grade Track Length (miles)</td>
<td>20</td>
</tr>
<tr>
<td>At-Grade Stations</td>
<td>5</td>
</tr>
<tr>
<td>Elevated Track Length (miles)</td>
<td>38</td>
</tr>
<tr>
<td>Elevated Stations</td>
<td>52</td>
</tr>
<tr>
<td>Average Speed (mph)</td>
<td>39</td>
</tr>
<tr>
<td>Trip Time Santa Cruz to Watsonville (mins)</td>
<td>30</td>
</tr>
</tbody>
</table>

The ability of ATN to achieve a 39-mph average speed with a 40-mph maximum speed derives from the fact that all stations are offline, requiring no slowing of through vehicles. Note that slowing for horizontal alignment characteristics (tight curves – of which there are few) has been accounted for.

A single at-grade ATN track only requires about seven feet of right-of-way. The ATN may thus be able to co-exist with the existing rail line allowing for freight operations. However, the assumption has been made here that the rail track will be removed, and those costs have been accounted for.
CONCEPTUAL ATN ALTERNATIVE ANALYSIS – 2035 FORECASTS

This section provides a conceptual analysis of the ATN alternative with particular reference to passenger rail and bus rapid transit as envisioned for Scenario B (understood to presently be preferred by some community groups).

SAFETY
Automated guideway transit is held to a far higher standard of safety (American Society of Civil Engineers Automated People Movers Standards) than any other mode of surface transportation. ATN operates on exclusive guideways separated from pedestrians and traffic. There are no crossings, only merges and diverges. The results speak for themselves – over 200 million injury-free passenger miles. Couple this with the fact that ATN’s higher level of service attracts more passengers than any other transit mode and it is clear that ATN will significantly increase safety over any other solution.

RELIABILITY AND EFFICIENCY
ATN systems for which data is publicly available (Heathrow Airport and Masdar City) are operating at availabilities more than 99.5%. This is five times more reliable than transit level of service A (97.5%).

Peak Period Mean Auto Travel Time
While an analysis of the impacts of ATN on auto travel time has not been undertaken, the significantly higher mode share with ATN (see below) will result in fewer autos on the road than with other transit modes and thus should have a greater positive impact on congestion and travel speeds.

Peak Period Mean Transit Travel Time
Referring to UCS Table 17, the ATN average travel time of 30 minutes between Downtown Watsonville and Downtown Santa Cruz is better than the average AM and PM peak period auto times of 52 and 60 minutes respectively. Referring to UCS Table 35, Scenario B, it is also better than the best bus time of 53.6 minutes and the passenger rail time of 41.0 minutes and considerably better than the worst bus time of 83.7 minutes.

Travel Time Reliability
ATN systems are designed to avoid traffic jams. Overcrowding results in people waiting a bit longer in stations which encourages ridesharing and thus boosts capacity at the time it is most needed. Trip times are always the same between any two stations with the small exception that some passengers may have a small detour or an intermediate stop or two if they have agreed to rideshare. Even these passengers will be able to count on very little daily variability in trip and waiting times.

Mode Share
The mode share for ATN has been based on the transit mode share for Scenario B adjusted to account for changes in waiting and travel times as well as revenue miles. The transit mode share for Scenario B includes 7,396 rail boardings per day (10/16/18 UCS FAQ) and an unstated number of bus boardings per
day. Based on boardings reported by the Santa Cruz Metropolitan Transit District, Route 91X, the Santa Cruz/Watsonville Express has 704 daily boardings and Route 71, Santa Cruz to Watsonville has 1,920 daily boardings.

The following discussion explains how bus daily ridership and ATN daily and peak period ridership were estimated for Scenario B from this information.

The analysis was based on work done by Liu\(^3\) and uses a Logit Model to estimate changes in mode share based on modal preferences and changes in trip times. Mode preference is the extra time a person would spend to use their preferred mode. For example, people have been shown to be willing to take a 25-minute longer trip by car rather than catch a bus. Public stated-preference surveys by PRT Consulting have shown ATN mode preference over bus to be higher than auto but, to be conservative, it has been assumed to be the average of auto (25 minutes) and rail (10 minutes). Transit wait times have been assumed to be the square root of peak headway as per UCS Table 11. Since the number of bus stops varies, the first and last mile times for all systems have both been assumed to be five minutes. The BRT times have been averaged into one time. The average fare per trip was assumed to be the same for all modes ($5.50 per trip) and was therefore not a factor.

The Logit Model can predict the increase or decrease in ridership of a given mode based on the known ridership and any changes in service level (headways, first- and last-mile times and travel times). With the addition of modal preference values, it can be used to predict the ridership if one mode is replaced with another.

First, the Logit Model was used to estimate the BRT boardings in Scenario B. To do this, the model calculated the number of BRT boardings that would result if passenger rail, which produced 7,396 boardings, was paralleled with BRT service running a mile or so away through roughly similar neighborhoods. The characteristics of the rail and BRT service used in the model are shown in Table 3. The result was 1,479 BRT trips. This seemed low relative to the existing boardings and the BRT boardings were increased by 30% to 1,920 (the same as Route 71) to be conservative.

Next, the model was run in the same manner using the factors in Table 3 to predict the number of ATN boardings that would result if the rail system was replaced by an ATN system (22,800) and, secondly, if the BRT system was replaced with an ATN system (28,100). These results total 50,900 ATN boardings.

Table 3 shows the assumptions for each mode and the resulting ATN trips.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Headway</th>
<th>Wait Time</th>
<th>First + Last Mile</th>
<th>Travel Time</th>
<th>Mode Preference</th>
<th>Boardings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger Rail</td>
<td>30</td>
<td>5.5</td>
<td>10</td>
<td>41.0</td>
<td>10</td>
<td>7,396</td>
</tr>
<tr>
<td>BRT (estimated average)</td>
<td>15</td>
<td>3.9</td>
<td>10</td>
<td>70.5</td>
<td>0</td>
<td>1,920</td>
</tr>
<tr>
<td>ATN</td>
<td>1</td>
<td>1.0</td>
<td>10</td>
<td>30.0</td>
<td>17.5</td>
<td>50,900</td>
</tr>
</tbody>
</table>

\(^3\) Liu, R et al (1997), “Assessment of Intermodal Transfer Penalties Using Stated Preference Data”, Transportation Research Record 1607 pp 74-80
To test the accuracy of the Logit Model, it was used (in a previous project) to predict the bus ridership on the Red Route in Clemson, South Carolina, based on the actual automobile ridership and the differences in trip characteristics between the auto and bus trips. The model was run twice with slightly different factors each time. It predicted an average bus ridership of 3,459 which was 4% higher than the actual bus ridership of 3,239.

To compare the Logit Model to the model used in the UCS, it was used to predict the ridership on BRT in the rail corridor based on the rail ridership and the difference between the rail and BRT characteristics. The characteristics used are shown in Table 4 below. The first/last mile times used reflect the fact that the BRT has twice the number of stations as the passenger rail.

**TABLE 4. RIDERSHIP ASSUMPTIONS AND RESULTS (RAIL & BRT IN RAIL CORRIDOR)**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Headway</th>
<th>Wait Time</th>
<th>First + Last Mile</th>
<th>Travel Time</th>
<th>Mode Preference</th>
<th>Boardings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario B Rail</td>
<td>30</td>
<td>5.5</td>
<td>15</td>
<td>41.0</td>
<td>10</td>
<td>7,396</td>
</tr>
<tr>
<td>Scenario C BRT</td>
<td>15</td>
<td>3.9</td>
<td>7.5</td>
<td>65.1</td>
<td>0</td>
<td>3,698</td>
</tr>
</tbody>
</table>

The 3,698 predicted BRT trips are 251 (6%) less than the 3,949 predicted by the UCS (10/16/18 FAQ).

The results in Table 3 above are consistent with those of other investigators around the world as illustrated in Figure 9, which is based on studies undertaken in the named cities using a variety of methodologies.

Part of the reason the ATN system does so well is that it covers both the rail and the Soquel BRT routes and would undoubtedly also pick up traffic from the local bus routes (a factor not accounted for above). This is largely because, unlike BRT, ATN combines high average speeds with numerous stations. Note that savings in local bus operating costs have not been accounted for here.

The 50,900 daily ATN boardings result in about 3,000 ATN pphpd in the peak hour (assuming 10% of trips are in the peak hour and a 60/40 directional split), which is less than the previously-selected maximum line capacity for this project of 5,000. The projected ATN boardings are not out of line with the 13,900 average daily boardings reported in 2010 for the Morgantown PRT system which only has five stations.

To estimate countywide mode share, it was anticipated that bus ridership for UCSC and Highway 17 will exceed the current level of at least 11,000 daily trips, for a countywide total of at least 61,900 daily.

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4 PRT Facilities Master Plan, West Virginia University, by Gannett Fleming, Lea+Elliott, Olszak, June 2010
5 Santa Cruz Metro, Comprehensive Operational Analysis, January 2016
transit trips. Therefore, assuming a total of 947,700 daily trips for all modes (10/16/18 UCS FAQ) the countywide transit mode share with ATN is likely 6.53% or better, exceeding the anticipated result for Scenario B.

Despite the comparisons and justifications, some will doubt the ability of high-quality transit with reliable express, on-demand service, numerous stations and short waiting times to attract riders. **The ATN boardings have therefore been reduced 25% in the following analyses. This results in a daily ATN ridership of 38,800.**

**ECONOMIC VITALITY**

**Public Investment**

The UCS revenue analysis appears to ignore fare-box revenues. This analysis assumes fare-box revenues at the average rate of $5.50 per boarding. In addition, to obtain a true comparison of the total cost of each system, the operating costs and fare-box revenues are estimated over a life of 30 years, assuming the 2035 ridership represents the average ridership. The daily boardings have been multiplied by 300 to determine annual boardings. The daily boardings are for weekday ridership and the 300 multiplier is used in place of 365 to account for lower ridership on weekends and holidays.

**TABLE 5. TOTAL COST COMPARISON (SCENARIO B)**

(All figures in thousands of year 2018 dollars, except subsidy per ride in 2018 dollars)

<table>
<thead>
<tr>
<th>Mode</th>
<th>Capital Cost ($000)</th>
<th>O&amp;M Costs Over 30 Years ($000)</th>
<th>Fare-Box Revenue Over 30 Years ($000)</th>
<th>Total Net Cost Over 30 Years ($000)</th>
<th>Subsidy Per Ride ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soquel/Freedom BRT + bus-on-shoulder (1,920 daily boardings)</td>
<td>$44,863</td>
<td>$534,000</td>
<td>-$95,040</td>
<td>$483,823</td>
<td>$28.00?^6</td>
</tr>
<tr>
<td>Rail (7,396 daily boardings)</td>
<td>$339,800</td>
<td>$420,000</td>
<td>-$366,100</td>
<td>$393,700</td>
<td>$5.91</td>
</tr>
<tr>
<td>Scenario B Total</td>
<td>$384,663</td>
<td>$954,000</td>
<td>-$446,142</td>
<td>$877,521</td>
<td>$10.47</td>
</tr>
<tr>
<td>ATN (38,800 daily boardings)</td>
<td>$1,403,500</td>
<td>$1,158,000</td>
<td>-$1,920,600</td>
<td>$640,900</td>
<td>$1.84</td>
</tr>
</tbody>
</table>

Even though table 5 shows that the ATN solution is considerably more expensive, it attracts far more passengers and thus has higher fare-box revenues. The ATN system more than covers its own operating costs through fare-box revenues (almost unheard of for US transit systems). In order to also cover the capital costs over 30 years (neglecting interest), the subsidy per ride for ATN is only $1.84. Even if the ATN ridership estimate is halved, the capital costs would be reduced (since fewer vehicles are needed). The operating cost would be approximately halved, and the required a subsidy would be $5.42 per ride,

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^6 Ridership based on Table 3 assumptions. The UCS estimated BRT ridership is unknown.
about half of Santa Cruz Metro’s current subsidy (for operating costs only) for intercity routes. On the other hand, as ATN ridership increases, the required subsidy decreases.

Note that it has proven impossible to ascertain the extent, if any, of BRT costs not included in the UCS Study. The study seems to imply that the costs shown are additional to existing service, which will continue, but does not provide the cost of the continuing service. Also, it is unclear whether the projected fare-box revenue has been deducted from the annual O&M costs in the study or not (Table 4 assumes not).

An analysis of the potential amount of funding from known federal, state, and local revenue sources for ATN is not included here. Even though the ATN solution has the potential to fund itself (should the contingency allowances not be required), it is eligible for FTA funding in competition with other fixed-guideway modes as evidenced by the continuing federal grants being awarded to the Morgantown PRT System.

It is likely that an ATN system can be acquired under a design/build/finance/operate/maintain/transfer procurement model requiring little to no upfront funding. The supplier team would finance the project and receive payments over time in return for ensuring the system is available for public use meeting predetermined criteria. Technical and business failure risks would be protected by performance and payment bonds ensuring all debts will be paid and the system will be removed if it fails to work.

Visitor Tax Revenues and Other Economic Impacts
While no analysis is included here, the increased transit use, shorter trip times and reduced congestion should result in increased visitor tax revenues and positive economic impacts.

Costs Associated with Collisions
Motor vehicle collisions and associated costs should reduce approximately in proportion to the increase in transit mode share.

ENVIRONMENT AND HEALTH

Automobile Vehicle Miles Traveled
If we assume the average transit trip length is 5.9 miles (UCS Page 119), we find that ATN increases the daily transit person trip miles by approximately 245,000. Assuming an average automobile occupancy of 1.29 (UCS Table16) and disregarding any induced automobile travel demand, this would reduce daily automobile vehicle miles traveled by approximately 190,000. This is about twice the anticipated VMT reduction for Scenario B.

Environmentally Sensitive Areas
While no analysis has been undertaken, ATN has a smaller footprint (seven feet wide for one-way track at grade) than any other transit mode. In addition, the lightweight vehicles produce almost no noise, vibrations, emissions or electro-magnetic interference. Accommodating a trail next to the ATN system
will be relatively easy compared to train or bus, especially since the ATN guideway can be elevated the entire way or just in tight situations.

Greenhouse Gas and Criteria Pollutants
ATN vehicles themselves do not emit greenhouse gases, and in general ATN systems consume about one third of the energy per passenger mile of other transit systems. ATN guideways are well-suited to support solar panels (costs not considered here) which may be sufficient to meet the needs for motive power. Even if the system lacks solar panels, it would likely be powered with carbon-free electricity from Monterey Bay Community Power. Battery-powered vehicles could facilitate energy storage. Reduction in automobile vehicle miles traveled and congestion should have significant positive impacts on emissions.

EQUITABLE ACCESS

Transit Vehicle Miles Traveled
Unlike most other transit modes, ATN vehicles do not have to travel to the end of the line or even the end of a scheduled route before turning around. Furthermore, they do not need to move to provide availability when there is no demand. This means there is less relatively empty vehicle movement. It also makes it more complicated to determine vehicle miles traveled without a detailed station-to-station trip demand matrix. Nonetheless, the ATN vehicle miles traveled have been estimated at 43.8 million miles per year. This is 6.5 times higher than the 6.65 million shown in UCS Figure 41.

Household Transportation Cost
Since “How much a household spends on transportation depends primarily on the number of automobiles in the household” (UCS Page 130), it is clear that the increased transit mode share with ATN will do more to reduce household transportation costs than any other alternative.

The community may wish to implement a tiered fare structure to encourage ride sharing and give passengers more control over their transit spending. For example:

- Tier one passengers pay per vehicle. They get a vehicle dedicated to them and their party (one to six). They wait less than a minute and travel nonstop to their destination.
- Tier two passengers pay per ride. They must be willing to wait up to (say) five minutes for others to arrive who are on the same route and can share the ride. They may have to make an intermediate stop or two.
- Tier three passengers pay a very low fare per ride and must be willing to wait longer (up to 20 or 30 minutes) for their ride.

This fairly unique ability to match the level of service to the fare paid promotes equitable access and mobility for all. An animation of an ATN station configured to accommodate this type of operation may be viewed here: https://www.youtube.com/watch?v=dXyBJ_nyh4M&
SUMMARY AND CONCLUSIONS
ATN systems are commercially available from a number of suppliers. They have been in continuous public service since 1975 (1999 for commercially-available systems). This conceptual study has found a six-passenger ATN system to be superior to the UCS Scenario B combination of passenger rail and BRT. It is believed that consideration of a 24-passenger GRT system would probably also find superior results.

This analysis has not been undertaken to the same depth as the UCS analysis. However, the level of accuracy is adequate to demonstrate that ATN will be a far superior solution that is worthy of further consideration. The operating characteristics have been proven in public service. The costs have been derived by experienced suppliers from projects that have been implemented. Even if the ridership estimate is halved, the ATN system will still cover its operating costs with fare-box revenues and it will only require a subsidy of $5.42 per ride to also cover its capital costs. This is far lower than any other alternative.

The thirteen key criteria in the UCS study have each been addressed. ATN has been found to be superior to Scenario B for each criterion. There appears to be no credible argument to exclude ATN from consideration.
APENDIX A – PROJECT DESCRIPTION AND COST ESTIMATES

The ATN project description and cost estimates are provided below. This project has been evaluated at a conceptual level and a contingency of 50% has been used. Costs are based mostly on fixed bid prices in South Carolina in 2016 adjusted to reflect this project’s size and location.

“Annual Operations and Maintenance” includes costs for new ATN service, vehicle operations and maintenance as well as facility maintenance. Maintenance costs include replacement of worn parts up to and including vehicle replacement as necessary.

<table>
<thead>
<tr>
<th>Project</th>
<th>Table A-1: ATN System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limits</td>
<td>Natural Bridges Drive in Santa Cruz to Pajaro Station near Watsonville. The route from Aptos to Cabrillo Highway near Watsonville consists of two-way track along the Santa Cruz Branch Rail Line right-of-way, mostly at-grade. The remainder of the route is mostly elevated and consists of one-way track along the Santa Cruz Branch Rail Line right-of-way forming interconnected loops with one-way track along Mission Street, Lincoln Street, Soquel Avenue/Drive, 17th Avenue, Capitola Road, Clares Street and Wharf Road in Santa Cruz and along Salinas Road, Porter Drive, Main Street, Freedom Boulevard, South Green Valley Road and Ohlone Parkway in Watsonville. See Figures 7 and 8 for maps of the layout showing proposed station locations. It should be noted that the guideway routing and station locations shown are conceptual. They are intended for use in this conceptual analysis only. Determining preferred routing and locations requires extensive public input.</td>
</tr>
<tr>
<td>Description</td>
<td>On-demand passenger service provided by driverless small (six-passenger) vehicles traveling along exclusive guideways and serving offline stations. Guideways and stations may be elevated or at-grade. This analysis is based on six-passenger battery-powered vehicles such as offered by Ultra or Modutram (and possibly 2getthere if they can accommodate six passengers).</td>
</tr>
<tr>
<td>Scope</td>
<td>Connect 57 stations with 58.3 miles of one-way track. Provide 20 hours of service 365 days a year with an average wait time less than three minutes at any station and average speeds exceeding 35 mph.</td>
</tr>
</tbody>
</table>

**CAPITAL COSTS**

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Track Removal</td>
<td>$5,400,000</td>
</tr>
<tr>
<td>Guideway &amp; Control System</td>
<td>$609,500,000</td>
</tr>
<tr>
<td>Stations/Maintenance Facility</td>
<td>$114,000,000</td>
</tr>
<tr>
<td>Vehilcles (480)</td>
<td>$50,800,000</td>
</tr>
<tr>
<td>Soft Costs (30%)</td>
<td>$234,000,000</td>
</tr>
<tr>
<td>Contingency (50%)</td>
<td>$389,800,000</td>
</tr>
<tr>
<td>Total Capital Costs</td>
<td>$1,403,500,000</td>
</tr>
</tbody>
</table>

**OPERATIONS AND MAINTENANCE COSTS**

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual O&amp;M Cost</td>
<td></td>
</tr>
<tr>
<td>ATN service 20 hours a day for 365 days a year</td>
<td>$25,700,000</td>
</tr>
<tr>
<td>Contingency (50%)</td>
<td>$12,900,000</td>
</tr>
<tr>
<td>Total Annual O&amp;M Costs</td>
<td>$38,600,000</td>
</tr>
</tbody>
</table>
Dear Chairman Leopold and Commissioners,

Thank you for all the time and resources you have invested in identifying the right transportation choices for our community. Greenway has also spent a large amount of hours examining the UCS. We request that you carefully consider the following due to the complexity of the study’s data and the fact that whatever is decided will impact the lives of all county residents for years to come:

1. Allow the RTC’s new Executive Director, Guy Preston, to have an adequate amount of time to evaluate the UCS findings and make his recommendations.

2. Do an objective Alternatives Analysis of the options on the rail corridor which includes input from METRO (see METRO memo pages 223 - 231: https://www.scmtd.com/images/department/board/current/111618BODAgendaPOST.pdf) and fully complies with Measure D’s language of studying “transportation uses of the corridor through an open and transparent public process.”

3. Authentically seek community consensus to ensure fair and equitable outcomes.

As a justification for delaying any further action on the UCS, we have taken the liberty to outline some of the main issues with the study for your review.

A close look at the benefits of each Scenario shows they are nearly identical and within the study’s margin of error, thus making them essentially useless for comparison purposes.

When Greenway examined all the benefits, including; total collisions, mean auto speed, person trips, economic vitality, tax revenue, cost associated with collisions, vehicle miles traveled, criteria pollutants, CO2 emissions, household transportation costs, and equity considerations, the benefits do not vary much from Scenario to Scenario. In fact, there isn’t much difference from the Baseline or No Build Scenarios.

The RTC staff’s “preferred scenario” is recommending we spend 76% of capital on projects in the rail corridor which will not benefit Watsonville residents for 20 years.

South County will bear the brunt of the cost to maintain these projects via a regressive sales tax, which is already close to the statutory limit (and requires approval of 2/3s of all county residents). In fact, the UCS shows only 3,698 roundtrip passenger train riders per day countywide and the previous Rail Transit Feasibility Study showed only 300 of those coming from Watsonville. In addition, in the area in which South County residents have the most pain--Hwy 1--the UCS predicts there will be NO change in average...
mean auto speed from now until 2035. So the RTC staff is recommending no improvement for South County residents in their daily struggle to go north in the morning and south in the afternoon.

The “preferred scenario” recommendation is even more perplexing when you look at the cost per user over the next 30 years.

Greenway has calculated the cost per user of the four different modalities included in the study; passenger train, Hwy 1 HOV lane, Trail Only, and METRO. The analysis looks at a 30 year period since this is a reasonable timeframe for an investment of this type and the time period of a needed sales tax to fund the operating expenses of a train. All the data comes from the UCS except for METRO, where we are using publicly available capital, operating expense and ridership data.

The calculations show that a train user is 16 times more expensive than an incremental user of an HOV lane, 16 to 34 times more expensive than a trail user, and 1.6 times more expensive than a METRO user. The use of “battery electric trains,” even if available in the next twenty years, will not change this calculation significantly since ridership forecasts are so low.

<table>
<thead>
<tr>
<th>Transportation</th>
<th>Capital Cost &amp; Opex Over 30 Yrs</th>
<th>Users/30 Years</th>
<th>Cost/User</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger Train</td>
<td>$1,321M</td>
<td>81M</td>
<td>$16</td>
</tr>
<tr>
<td>Highway 1 HOV</td>
<td>$615M</td>
<td>548M</td>
<td>$1</td>
</tr>
<tr>
<td>Trail Only</td>
<td>$116M - $240M</td>
<td>246M</td>
<td>$0.47 - $0.98</td>
</tr>
<tr>
<td>METRO</td>
<td>$1,533M</td>
<td>156M</td>
<td>$10</td>
</tr>
</tbody>
</table>

All capital and opex data is taken from the UCS, all METRO data, is taken from published METRO sources (see Appendix below for further detail)

The RTC is proposing locking up the corridor for 10 years North of milepost 7 to preserve the tracks for a passenger train in 20 years if ever. At the same time, it is providing no relief to Hwy 1 commuters.

South County commuters will bear the greatest harm to their health and well being.

No change in commuter time will inevitably lead to increased stress and poor health caused by sitting in hours of traffic. CO2 emissions don’t change dramatically in the four scenarios, so more emphasis should be paid to short and medium-term health, personal time loss and real business costs to those stuck in traffic. Not to mention the lost opportunity for a healthy lifestyle provided for by the use of a Greenway for safe, active transportation and an affordable means of exercise and important community building that could have a profound impact on South County residents.
Let’s create a vision for an Optimal Use Scenario (OUS) that benefits all including South County residents!

There is broad consensus on most of the individual projects delineated in the UCS. These include those that provide real transportation value the county can afford, can implement in a reasonable timeframe and positively impact South County residents. Why not implement an Optimal Use Scenario that includes:

- Freight operations serving Watsonville businesses
- Bus on Shoulder on Hwy 1
- Additional Auxiliary Lanes from Rio Del Mar to Freedom Blvd.
- Ramp Metering
- Mission Street Intersection Improvements
- Soquel and Freedom Intersection Improvements
- Protected Bike Lanes throughout the county
- Bus Rapid Transit on Soquel/Freedom
- Trail Only on the Rail Corridor

The above projects would result in TWO north/south public transit options with optimized traffic flow, one on Hwy 1 and one on Soquel/Freedom. These projects are affordable and nearer-term public transit options for Watsonville residents, who will come to learn that they will pay a disproportionate share of the cost of any sales tax to fund a train, with few of them able to leave their cars at home due to the high cost of train fares, inconvenient schedules, first mile/last mile connections, and need for flexibility.

All of the projects listed above cost about $450M, and together with Measure D funds and state/federal grants, we have a realistic chance of implementing them ALL in the next 10 years and maintaining them thereafter.

Bring the community together by making the right choices for our transportation future.

Thus far, the Capitola voters have been the only Santa Cruz County residents able to express their opinion about the use of the corridor by way of Measure L. Greenway believes that ALL Santa Cruz County residents deserve the right to express their preference at the ballot box on these important transportation choices.

“Do residents of Santa Cruz County want to spend $1.3 billion over the next 30 years, inclusive of an additional ¾% sales tax to fund passenger rail between Santa Cruz and Watsonville?”

This is the question that Greenway will seek to answer moving forward. Please join us in ensuring that ALL residents are considered in the transportation decisions our community faces, and that your decisions have real impact in our lives in the next 10 years!
Appendix

Passenger Train

An electric train has a capital cost of $550M, and $13.2M per year in operating costs or $396M over 30 years. Additional buses for transit connections have a capital cost of $11.7M, and annual operating costs of $12.1M or $363M over 30 years. So total cost of ownership for a train and additional buses is $550M + $396M + $11.7M + $363M = $1.321 billion over 30 years. (Table B-10 and Table 39)

According to the UCS, a train on the rail corridor has estimated ridership of 7,396 people per day, or 2.7M per year. Over 30 years total ridership would be 81M. (Table E-2)

Highway 1 HOV Lane

An HOV lane on Hwy 1 has a capital cost of $453M, and $5.4M annual operating and maintenance expense times 30 years = $162M. So total cost of ownership for an HOV lane for 30 years is $453M + $162M = $615M.  (Table B-2)

Hwy 1 accommodates about 100,000 cars per day in each direction, most with single drivers, so to be conservative, let’s say Hwy 1 currently delivers to their destinations about 100,000 persons per day or 36M per year. One additional lane has the capacity to deliver about 18M persons per year, or 548M people over 30 years.

Trail Only

We strongly dispute the UCS cost estimate for Trail Only of $222M and have provided documentation from Alta Planning and Design with an estimate of $98M. To be fair, let’s use these two numbers as the range for the capital cost and add the $606K annual operating expense, which totals $18M for 30 years. So total cost of ownership over 30 years is $98M + $18M = $116M up to $222M + 18M = $240M. (Table B-13 and Alta memo 10.18.18)

Per the UCS, Trail Only can accommodate about 22,518 people per day, which translates to 8.2M annually or 246M over 30 years. (Table E-1)

METRO

The capital budget of METRO in FY18 for revenue producing buses was $9.4M or $282M in capital over 30 years. The FY18 operating budget is $46.7M per year less approximately $5M for ParaCruz = $41.7M, or $1,251M over 30 years. METRO has ridership of about 5.2M people per year. Over 30 years, METRO carries 156M passengers at an operating cost of $1,251M + capital cost of $282M = $1,533M total cost of ownership.
From: Janie Soito  
Sent: Wednesday, November 14, 2018 9:49 PM  
To: Regional Transportation Commission <info@sccrtc.org>  
Subject: Support Profession staff recommendation of Scenario B

I’m a Watsonville native and am writing to let you know that I support the professional staff’s recommendation for Scenario B with modifications. My biggest concern now is that quick action is needed to approve the plan and start moving forward with more trail construction and starting excursion service as soon as possible. I’m tired of the delay tactics of those who think they can circumvent the process. Now is the time to put the washout repairs on a fast track so that the rail line can be put back into use. With the rail line north of Watsonville out of service since February 2017, it gives some groups the false impression that the rail line is surplus and not needed. Watsonville needs the rail line for rail transit to jobs and recreation on the north side of the county. Santa Cruz needs that rail line for access to Pájaro and the rail transit opportunities that are coming. A trail only plan is insulting to the people of Watsonville. Seize the moment and let’s get the rail rolling!

Sincerely,
Janie Soito

From: Dan Denevan  
Sent: Wednesday, November 14, 2018 5:57 PM  
To: Regional Transportation Commission <info@sccrtc.org>  
Subject: ucs study

How did the UCS study arrive at their train ridership estimate of 7400 per day? The SMART train ridership is closer to 2000 per day for a population 3 times as large as Santa Cruz. Denton,TX and Beaverton, OR are both larger than Santa Cruz and have ridership under 2000 per day. It appears the UCS estimates are off by a factor of ten.

From: Carey Pico  
Sent: Wednesday, November 14, 2018 2:46 PM  
To: Regional Transportation Commission <info@sccrtc.org>; Patrick Mulhearn <patrick.mulhearn@santacruzcounty.us>; Andy Schifferin <andy.schifferin@co.santa-cruz.ca.us>; Ed Bottorff <ebottorff167@yahoo.com>; bruce.mcperson@santa-cruz.ca.us; Gine Johnson <gine.johnson@santacruzcounty.us>; trina.coffman@cityofwatsonville.org; Jacques Bertrand <jbertrand@ci.capitola.ca.us>; Supervisor: Ryan Coonerty <ryan.coonerty@santacruzcounty.us>; Randy Johnson <rlj12@comcast.net>; Cynthia Chase <cchase@cityofsantacruz.com>; Michael Rotkin <openup@ucsc.edu>  
Subject: Costs to taxpayers for UCIS topics - HOV: $0.38/trip; Train: $9.76/trip; BRT: $3.73; (Metro: $5.34)

Please note the operating costs of programs stated in the UCIS: These are the "county cost"/trip (i.e., operating cost - fares).  

Cost per Trip (based on UCIS numbers except METRO)
METRO: $5.34/trip (average fare of $1.52/trip, total cost: $6.86/trip) - included for comparison
Train: $9.76/trip (accounts for $2.50 fare/trip, total cost is $12.26/trip)
HOV: $0.38/trip (using Caltrans flow/speed data suggesting ~30% of trips are affected by congestion)
Trail: $0.07/trip
BRT+Lite: $3.73/trip (note: this value seems too low; calculated as $24.3M/(Scen.C users-baseline))

From: Tom Fredericks  
Sent: Wednesday, November 14, 2018 2:24 PM  
To: Regional Transportation Commission <info@sccrtc.org>  
Subject: In Support of Rail Corridor  

My name is Tom Fredericks. I live in Felton and I will be attending the RTC Meeting November 15 in Watsonville. I support keeping the rails for future transit. I use Metro (including the 91X to Watsonville) and Jump Bike and hope I can include rail in my mix of transportation options in the years ahead.

From: Molly Ording  
Sent: Wednesday, November 14, 2018 12:13 PM  
To: Regional Transportation Commission <info@sccrtc.org>  
Subject: Our Support for the RTC's "Preferred Scenario!"  

Good Day Very Valued and Appreciated RTC Members!

I wish to state my husband’s and my long time support for all of your research and work and dedication of time and talents! We are long time Capitola residents and have been interested in your studies for quite some time!

We unequivocally support your selection of Scenario B, with agreed upon modifications. We feel this is a regional issue and we all need to take a regional approach that will benefit the most in our area as a whole. I might add that the “social equity” portion of the plan has long been of importance to me, as well as the future development of some sort of transportation mode along the rail corridor and an adjacent walking and bike trail! Being retired, we try to stay off Hwy 1 whenever possible...for so many reasons... time, pollution, frustration, etc. etc!

Thanks to each of you, most sincerely, for your very hard and long work and study of the many options! We will look forward to hearing the results of your meeting and very much look forward to some tangible improvements for all of us throughout our coastal region!

Most sincerely,

Molly & Mickey Ording