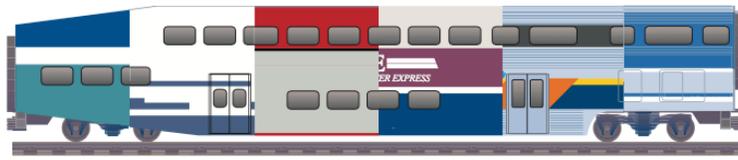


# TRAC

Train Riders  
Association  
of California



1025 Ninth Street Suite 223  
Sacramento CA 95814-3516

(916) 557-1667  
www.calrailnews.org  
president@calrailnews.org

## Officers

David Schonbrunn  
President  
Marin County

Greg Thompson  
Secretary  
Sacramento County

Gordon Osmundson  
Treasurer  
Alameda County

Susan MacAdams  
Washington, D.C. Rep.

## Board Members

Ron Jones  
Madera County

Art Brown  
Orange County

Derek Casady  
San Diego County

John Deeter  
Sacramento County

Fred Glienna  
Los Angeles County

William F. McGeehan III  
Contra Contra County

August 24, 2020

By E-Mail to:  
StateRoute37  
@dot.ca.gov

California Department of Transportation District 4  
Attn: Yolanda Rivas  
P.O. Box 23660  
Oakland, CA 94623-0660

RE: Comments on State Route 37 Traffic Congestion Relief Project NOP  
and Long-term Planning

Dear Ms. Rivas:

TRAC, the Train Riders Association of California has long served as the visionary rail planner for California. We were early supporters of Proposition 116, which enabled the start of a statewide intercity rail program now run by Amtrak. We write to you in the context of the NOP for the State Route 37 Traffic Congestion Relief Project.

We fully support the NOP comments of our sister organization, TRANSDEF. In this letter, however, we seek to convey our profound disagreements with the current state of long-range planning for the State Route 37 Corridor (Project).

The only alternatives in the *Alternatives Assessment Report for the Ultimate Project*, April 2019, are highway alternatives. TRAC asserts that they will all cause induced demand, resulting in increased VMT and increased accompanying GHG emissions. This is directly contrary to the thrust of Executive Order N-19-19 and current State climate policy, as indicated in the Department's recent *Transportation Impacts Analysis Under CEQA* document.

TRAC finds it disturbing that the leading transportation agency in the most climate-sophisticated State in the country fails to grasp **its own role in creating** the very climate impact—sea level rise—that the Project is intended to remedy.

The Air Resources Board acknowledges that transportation accounts for roughly half of all GHG emissions in its inventory, when the production and distribution of motor vehicle fuel is included. Recent reports indicate that GHG emissions from motor vehicles are increasing, at the same time that emissions from other source categories are decreasing, as a result of other State agencies having applied significant effort.

Caltrans is unique in the roster of state agencies in blithely heading into the future as if emissions directly attributable to its activities were not implicated as the leading California source of climate change impacts, including wildfire, drought and sea level rise. Even though the world of transportation has been turned upside down by climate change, that has not resulted in any modification to Caltrans' view of itself as highway builder.

TRAC contends that mobility needs to change, not only in California, but across the globe. The world that Caltrans is planning for no longer exists. A useful step in getting used to the changes that are needed would be to implement the mitigated Alternative 1 described by TRANSDEF. That quick and cheap alternative would offer a real-world test of drivers' willingness to shift to higher-occupancy modes to avoid being stuck in traffic.

When it comes to the provision of mobility in the SR 37 Corridor over the longer term, Caltrans would do well to seriously consider the attachments to this letter, which propose a low-cost passenger rail system connecting SMART with the Capitol Corridor station in Suisun City and with Napa and Vallejo. A project like this could be implemented relatively quickly by a private-sector operator.

Note our claim that "Typically, upgrading existing tracks to 60 mph standards costs less than \$1 million/mile, and less than \$2 million per mile including PTC. Contrary to recent Highway 37 studies, initial hourly rail service between Novato and the Suisun-Fairfield Capitol Corridor station would cost substantially less than \$100 million, exclusive of rolling stock." Protecting rail from sea level rise can be done incrementally at modest cost, unlike the need to protect highway travel with a multibillion-dollar viaduct. This cost analysis radically changes the stakes in longer-term planning.

Disregarding the unreasonable engineering standards promulgated by SMART, which led to ~1 billion cost estimates, would allow the near-term implementation of a starter system that could begin to change modal choices in the Corridor. Keeping the cost low minimizes the consequences if the project draws disappointing patronage. If successful, however, it would be easy and efficient to upgrade the track and roadbed either while remaining in operation, or with a brief service outage and bus bridge.

Thank you for considering these comments. TRAC would be pleased to discuss our proposal with any and all interested parties.

Sincerely yours,

David Schonbrunn, President, TRAC

Attachments:

TRAC's A Vision for Passenger Rail in The North Bay and Sacramento Region  
TRAC's North Bay Rail Forum presentation

# A VISION FOR PASSENGER RAIL IN THE

By Michael D. Setty  
Editor, California Rail News

In addition to ideas for improving the Altamont Commuter Express (ACE) and San Joaquins proposed by TRAC in the previous California Rail News, passage of the SB-1 transportation funding measure opens up many options for improving and expanding rail passenger service throughout California.

SB-1 raised gas taxes and registration fees for improved highway and street maintenance, as well as more funding for transit capital and operations, intercity rail, pedestrian and bicycle projects.

With SMART service beginning in August 2017 between San Rafael and Santa Rosa, this is an opportune time to examine potential future improvements in the North Bay.

The Sacramento Area Council of Governments (SACOG) also recently began a study of proposed light rail transit (LRT) parallel to I-80 between Sacramento and Davis at the behest of Yolo County interests. With the proposed increase of San Joaquin service to the Sacramento region, looking at additional improvements in the Sacramento region is also warranted.

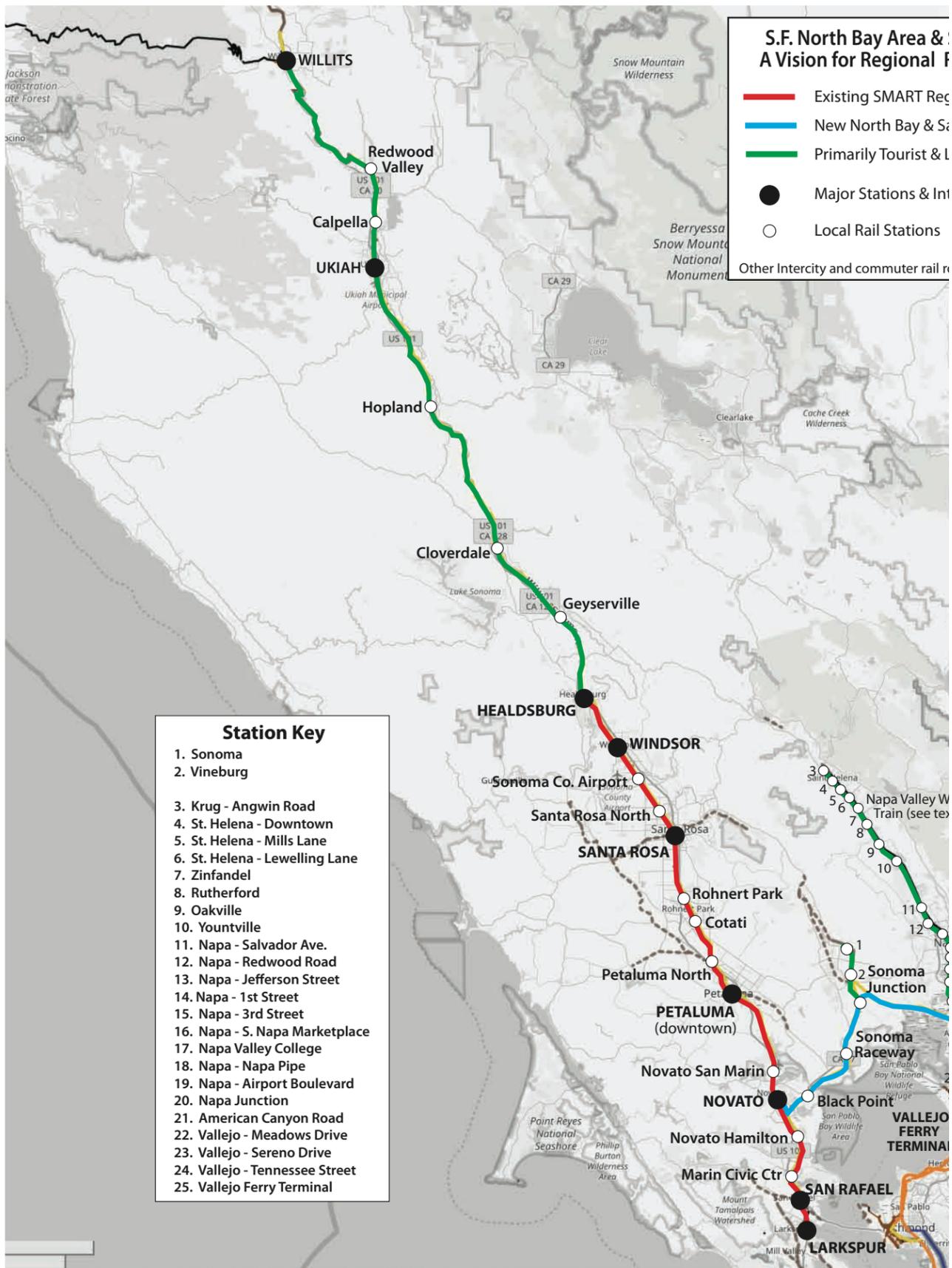
## Upgrading & Extending SMART

Now that SMART service has successfully launched, its startup experience can be evaluated and viable improvements identified. In our view, SMART's current shortcomings include the following:

- An inability to hire enough operating personnel has left significant gaps in its peak hour service, harming both its usefulness and its ridership.
- No significant midday service between 10:00 a.m. and 3:00 p.m. or evening service. The unexpected weekend ridership success with only four round trips demonstrates a strong market for midday, evening and additional weekend service.
- Full trains on selected peak period schedules demonstrate the need for obtaining full 3-car trains within a few years. However, even with 4 additional cars, the total fleet of 18 cars will quickly limit capacity and ridership within a few years.
- Poor schedule coordination, and a lack of connections between SMART and existing bus services. For example, Golden Gate Transit buses leave San Rafael Transit Center too soon to allow convenient connections from arriving SMART trains. Similarly, while the SMART station platform is only a block from the Petaluma Transit Center, a 3-block walk around a large fenced area is required to make bus-train connections.

SMART should commit to the following short term service goals:

- Providing consistent peak period service every 30 minutes in each direction between 5:00 a.m. and 9:00 a.m., and 3:00 p.m. to 8:00 p.m.



- Provide hourly service in the early morning, midday, evenings after 8:00 p.m. and hourly frequencies on weekends and holidays.
- In cooperation with Golden Gate Transit (GGT), fix the schedules to make timed transfers between SMART trains and buses to San Francisco and the East Bay in San Rafael work better.
- Once SMART is able to provide consistent 60-minute all-day service (every 30 minutes during weekday peaks) seven days per week, redundant GGT transit service can be reduced or eliminated with major cost savings.
- Extend SMART service to Windsor and Healdsburg using the existing mix of welded and jointed rail. The diminished ride quality and possibly lowered speeds for this section of track are an acceptable tradeoff for getting this service into operation as soon as possible. TRAC believes that attracting drivers to rail is far more important than eliminating the clickety-clack. Welded rail can be installed later.

As ridership grows, SMART should start planning for peak period service every 15 minutes, and midday service every 30 minutes Monday-Friday.

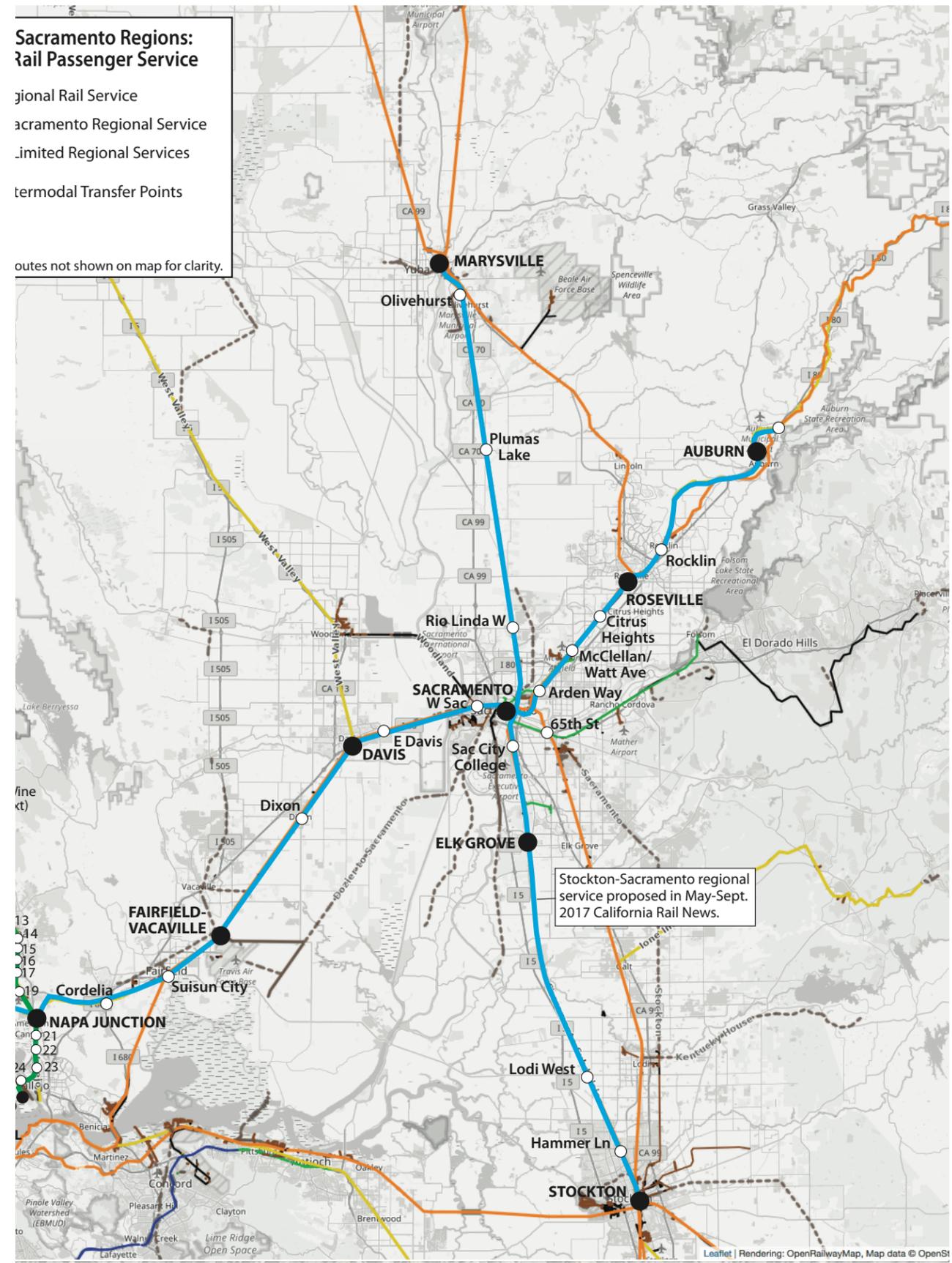
SMART will require significant capital expenditures for an expanded fleet and double track or new sidings in key areas. Study should begin on extending SMART to a location closer to the GGT ferries in Larkspur, including the possibility of a cross-platform transfer.

## Other 101 Corridor Rail Services

While the original SMART plan included a 15-mile extension beyond Healdsburg to Cloverdale, this proposal is not cost-effective for less than 500 projected daily riders. However, a low-cost approach could make it feasible to extend passenger service to Cloverdale, Ukiah and Willits. For the anticipated volumes, upgrading existing tracks to 60 mph standards and adding modern signals would cost less than \$150 million (excluding rolling stock).

The volume of Mendocino County tourists appears sufficient to support

# THE NORTH BAY & SACRAMENTO REGION



demand to justify the \$500 million+ cost of LRT between Davis and downtown Sacramento. However, the Davis-Sacramento idea would fit nicely with Novato-Suisun service, and potentially provide some of the funding.

If additional Solano County rail capacity is needed to support this service, a 3rd exclusive passenger track—from the west end of the existing Yolo Bypass rail bridge to the Suisun/Fairfield station—would allow passenger service independent of Union Pacific (UP) freight trains and Capitol Corridor intercity trains. With careful scheduling, the Yolo Bypass railroad bridge has a capacity of more than 100 trains day, vs. 20-25 freight and 34 passenger trains operated at present. This project should be relatively cheap to build since few structures are needed. In the longer run, an exclusive passenger track across the Bypass is desirable but it will not be cost-effective in the next decade or so.

As demonstrated by Austin's Metro-rail, light DMUs can operate "in-street" over short distances. On-street operations from West Sacramento over the Tower Bridge, and along the L Street corridor connecting to proposed service along the UP Sacramento Subdivision through Midtown should be explored.

Light DMUs could also connect downtown Sacramento with Placer County along the 3rd Capitol Corridor track proposed to Roseville (with 4th track/passing sidings). This track could also be extended to Auburn, allowing frequent all-day regional rail service independent of UP freights along the I-80 corridor northeast of Sacramento. This plan would not preclude UP's usage of the 3rd track at night as a freight lead to its Roseville Yard.

**Vallejo-Napa (Wine Train) Corridor**

A large fraction of Napa Valley tourists also visit San Francisco in their Bay Area stays. While it is doubtful that ridership between Napa and Vallejo by local residents would cover operating costs, potentially large volumes of visitors accessing the Napa Valley via the San Francisco-Vallejo Ferry connection would put such service well into profitability assuming the low operating costs of lightweight DMUs. In Vallejo, there are tantalizing real estate opportunities that could offset rail capital costs. Timed transfers at an American Canyon station connecting the Napa Valley and the North Bay to Sacramento routes could generate heavy ridership and revenues. These are exciting possibilities for private investment.

robust weekend and holiday service from the Bay Area, possibly via a public-private partnership. While weekday ridership potential is modest, it appears 5-6 daily round trips can be supported. This should be operated by modern lightweight Diesel Multiple Units (DMUs) that meet the latest Federal safety standards. These trains would make a cross-platform timed transfer to SMART's heavy DMUs at Healdsburg.

**North Bay-Sacramento Rail Corridor**

Typically, upgrading existing tracks to 60 mph standards costs less than \$1 million/mile, and less than \$2 million per mile including PTC. Contrary to recent Highway 37 studies, initial hourly rail service between Novato and the Suisun-Fairfield Capitol Corridor station would cost substantially less than \$100 million, exclusive of rolling stock. This figure includes upgrading existing jointed track to 60 mph standards, PTC, more sidings simple stations with 17"-18" high platforms and allowances for bridge repairs. For another \$200 million, new railroad bridges over the Petaluma and

Napa Rivers could be included since their replacement is ultimately required.

Novato-Suisun service should also be extended to downtown Sacramento along the existing Capitol Corridor, to provide regional service covering the local stops not served by the Capitol Corridor, including East Vacaville (Elmira), Dixon, East Davis, and West Sacramento. Service could be further extended to Yuba City and Marysville, because light DMUs are cheap to run.

Davis to Sacramento light rail (LRT) is currently being studied, as noted above. This would require new tracks across the Yolo Bypass, because standard LRT cars cannot share mainline freight tracks as can the Capitol Corridor and DMU trains. In our view, there is not enough potential



Light DMUs get 2 mpg for 160 seats, vs. 1 mpg for SMART trains, and can operate "in street" over 1-2 miles. Wikipedia. By Michlaovic - Own work, Public Domain



I'm David Schonbrunn, TRAC's Vice President for Policy. This all started with my participation in the Highway 37 Policy Committee, which wants to build a multibillion dollar widened highway across protected wetlands. Building more lanes will trap more people in driving, adding to the greenhouse gas emissions. I'm an environmentalist working to reduce the levels of GHG emissions from transportation, so that project concept was a non-starter for me.

TRAC wanted to create a viable transit alternative to give options to commuters that would otherwise be stuck in Highway 37 traffic. That way, we could protect the environment and start building a greener future. We propose to put passenger service on the existing rail line that parallels Highway 37. We call it the East-West train.

## SMART – A High-Cost Project



We see the Highway 37 corridor as having different needs than the SMART corridor. That's why the project we're proposing is not a simple extension of SMART. I worked for nearly 30 years to bring passenger service back to the historic NWP corridor in Marin and Sonoma counties.

I believe SMART cost far more than was necessary, due to high-cost design decisions. Public rail projects typically cost too much because the business is driven by consultants whose fees are based on the size of the project. It is in their interest to have the public spend as much as possible. We've come up with a much less expensive project.

## TRAC's Proposal – A Low-Cost Project



The Highway 37 corridor needs to prove itself as a transit corridor. We need to get past the many that claim the North Bay has too low a density for transit. For this reason, we've adopted a strategy of "build it as cheaply as possible, as quickly as possible, to get service into operation now." We firmly believe there's a demand out there—but we need to prove it.

This line is in freight use now, so we know passenger service can work technically. To keep capital costs way down, we propose to make use of the existing jointed rail and the existing roadbed. The major expense we foresee is replacing some ties to enable the trains to be cleared for 60 mph operation. Tracks and roadbed can easily be improved later, after ridership has grown enough to warrant a larger investment.

## SMART's ADA Solution



SMART's high-platforms are a vestige of the history of the Northeast Corridor. They are very expensive to build, and quite ugly in urban settings. While they do provide level boarding to comply with ADA, TRAC believes they do not belong in California.

## TRAC's ADA Solution



Low platforms are much cheaper to build, and are inconspicuous. We propose the train would terminate on the Capitol Corridor, which uses low platforms, like the other California intercity services. The platform is on the far right of this photo.

Dealing with ADA is much cheaper too. This is called a mini-high platform. It provides level boarding for wheelchair users, moms with strollers and bicyclists. The one pictured gives access to the first door of the train. Some stations could have more than one of these mini-highs.

## Low-Floor DMUs

Much less expensive to operate



Low-floor cars are the leading trend in Europe now. That is where the future of railcars seems to be heading. TRAC sees the regulatory environment changing to enable 24 inch platforms to be built next to rail lines. Note the platform in the photo. Right now, that's not allowed in California on lines that carry freight. Regulations are still in place to protect brakemen from hitting a trackside obstacle like a platform. Until regulators wake up to the fact that there aren't brakemen anymore in these settings, the existing 8" low platforms will remain adequate. Access to these cars is only one step up.

These low-floor DMUs are much lighter than the cars SMART bought. That makes them significantly less expensive to operate, which makes a very big difference on a rail line that has no identified revenue source. These cars are FRA-certified to operate on tracks alongside freight trains. They are designed with Crash Energy Management — a crumple zone that absorb crash energy. This enables the car to be much lighter than the brute strength American approach to safety, which is now pretty obsolete.

## TRAC's East-West Proposal



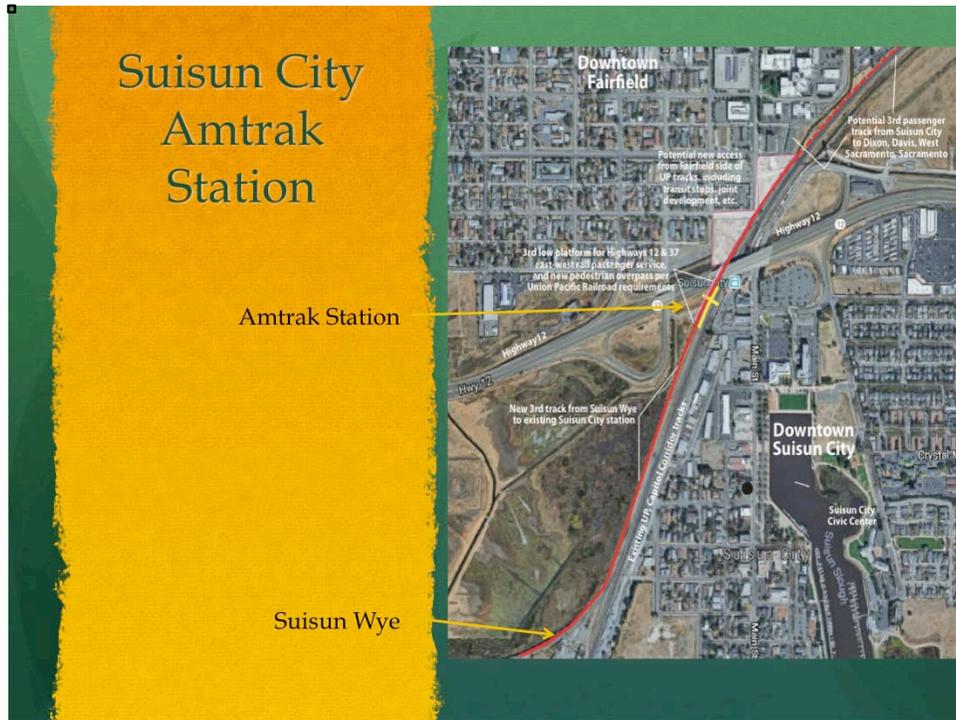
This map is in the current issue of California Rail News, along with a full description of the proposal. In the first phase of our proposal, the train would start in Novato and terminate at the Suisun City Amtrak station. This is where the NWP line from Marin connects to the Capitol Corridor, which goes from San Jose to Sacramento.

At some point in the future, we see gaining access to the UP track to Sacramento. This may take some additional capital investments. Extending this train to Sacramento makes much more sense than a concept currently under consideration, namely building a new light rail line from Sacramento from Davis. In our proposal, the East-West train would become a local on the Capitol Corridor, allowing stops at stations not currently served by rail, such as Dixon and East Davis.

## Suisun City Amtrak Station-- Capitol Corridor



This is where the line would start. In the area between the tracks and the chain link fence in the distance, we're suggesting a third track and a low platform similar to the existing platforms.



The Suisun Wye connects the NWP to the Capitol Corridor. A short section of track from the Suisun Wye to the Suisun station would keep the DMU entirely separate from Capitol Corridor and UP freight trains, greatly simplifying regulatory approvals.

The station area could be improved by transit-oriented development, building on land on the west side of the tracks that is poorly utilized now. A pedestrian overcrossing of the tracks would connect this development and the adjacent Solano County Government Center to the existing Capitol Corridor station.

## Low-Lying Tracks



Unlike Highway 37, it is relatively easy to build up the height of the rails, when needed in response to sea level rise. An embankment can be gradually created at night by placing gravel under the tracks, while trains continue to operate in the daytime.

## Napa River Bridge



There are two bridges on the East-West alignment. This one seems to be in pretty good condition.

## Napa Junction- Transfer to Napa & Vallejo



Napa Junction is where the tracks connect to rail lines going north to St. Helena and south to Vallejo. We foresee a transfer platform, enabling east-west passengers to go north-south, or vice versa.

## Sonoma Raceway



After Napa Junction, a special event stop would be built at the Sonoma Raceway. The Capitol Corridor has already provided train service to a few NASCAR races. We see this as a regular feature. The tracks go right past the Main Gate.

## Sonoma Raceway Main Gate

The train platform would be on the right

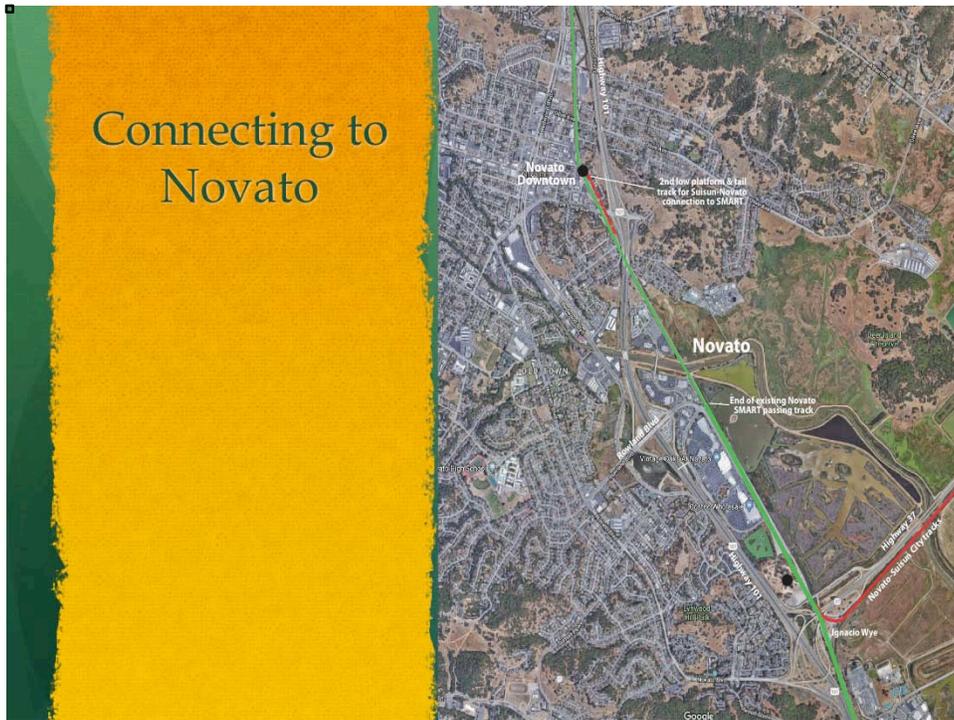


Here's a ground-level view, with the main gate on the left, and the train tracks to the right of Highway 121.

## Black Point Swing Bridge Petaluma River



The Black Point bridge is a serviceable swing bridge, but is probably not optimal long-term. This is an investment to consider down the road...



We picked downtown Novato as an appropriate terminus for this East West train, because it would not require any capital improvements to the SMART line. A stretch of passing siding is located on both sides of the Ignacio Wye. This should make it much easier to fit East-West trains into slots in SMART's schedule.

## Downtown Novato Terminus

A low-level platform for transfers to SMART



We see a low-level platform being built, along with a pocket track, to enable the East West trains to get off the SMART mainline. Passengers would wait here for a SMART train going north or south, as needed. Schedules would be coordinated to minimize waits.

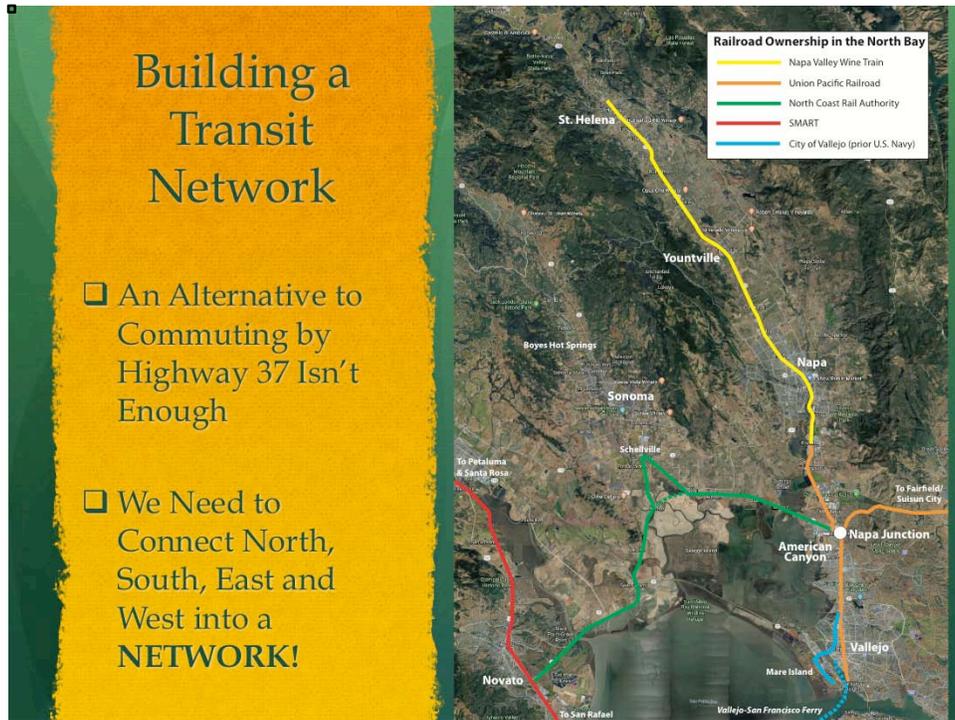
## Napa-Fairfield-Vallejo “Triangle” Largest Sources of Commute & Other Trips

**NORTH BAY RAIL VISION: Estimated 2015 Commute Trips To/From Selected County Subdivisions**

FROM	TO										TOTAL
County Subdivision (CCD)	Vacaville	Fairfield-Suisun	Vallejo-Benicia	Napa	St. Helena	Sonoma (city)	Novato	San Rafael	Petaluma	Santa Rosa/Rohnert Park	
Vacaville CCD			1,965	1,627	82	154	139	220	246	10	4,843
Fairfield-Suisun CCD			4,395	4,131	227	403	315	472	565	668	11,176
Vallejo-Benicia CCD				5,283	236	900	862	1,325	836	683	10,125
Napa CCD	732	1,576	2,291		3,708		611	811	1,111	1,365	12,205
St. Helena CCD	21	40	37	542		49	17	34			740
Sonoma (city) CCD	35	113	206					433			787
Novato CCD	59	116	119	359	20	284					1,157
San Rafael CCD	61	90	101	203	45	120					720
Petaluma CCD	182	256	36	1,049	211						2,134
Santa Rosa/Rohnert Park CCD	366	367	576	1,106							2,415
<b>TOTAL</b>	<b>1,456</b>	<b>2,558</b>	<b>10,426</b>	<b>14,300</b>	<b>4,529</b>	<b>1,910</b>	<b>1,944</b>	<b>3,295</b>	<b>2,758</b>	<b>3,126</b>	

Blue shading indicates trips not served by proposed rail, already served by SMART, or travel times not competitive with driving.  
Source: U.S. Census. <http://onthermap.ces.census.gov>

We started out thinking only about a transit alternative to commuting over Highway 37. That went out the window, however, when we saw the census data for commute trips. It’s clear from this table that the largest numbers of North Bay commuters by far are coming from the Napa-Fairfield-Vallejo triangle, and going to the triangle. See the first four columns of numbers and the first four rows. The numbers for Triangle to Triangle commutes are an order of magnitude higher than the Highway 37 numbers. There’s definitely a market for connecting Napa and Vallejo to Fairfield/Suisun and SMART.



What that table tells us is that the North Bay has been a missed opportunity for transit. Napa's very high level of tourism is an opportunity that would appeal to a private-sector rail operator. Tourists connecting by the Vallejo ferry from San Francisco would love to be able to take the train to tastings at various wineries. No more designated drivers! Wineries would promote themselves by providing van service from their local station.

It's possible the private-sector operator would be interested in implementing the entire network, if sweetened by the public sector in a public private partnership. The key to maximizing ridership is to schedule easy and fast transfers between the trains, and between trains and connecting local buses. We'd like to see a government agency either buy or secure operating rights on the remaining tracks owned by Union Pacific.

## Extend Existing Tracks to Vallejo Ferry Terminal



While existing tracks connect to the City of Vallejo, they don't currently go all the way to the ferry terminal. A ferry connection is needed to make the line to the Napa Valley economically feasible. The City of Vallejo already owns the tracks that used to serve the Mare Island Naval Base. These could be extended to the ferry.

## Possible Rail Terminus



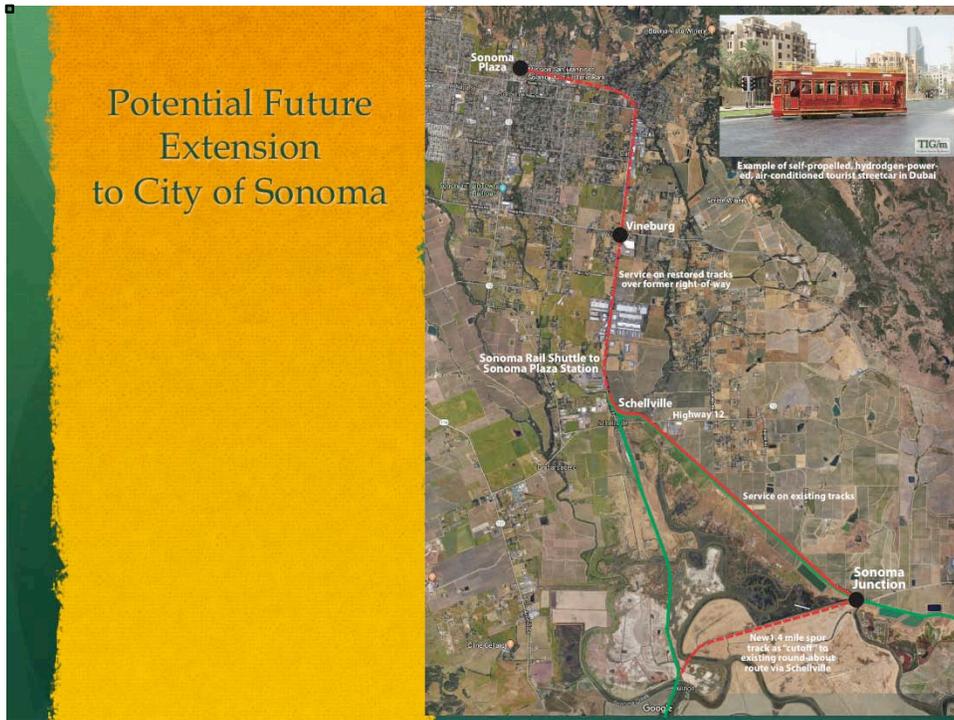
This is the Vallejo Ferry Terminal. City Hall is nearby, as is the bus transit station. A train stop could be located right here.

# Interim Rail-Ferry Connection

## Mare Island



If permission for a short stretch of new track can be secured, TRAC believes it is feasible to provide interim rail service to the ferry dock on Mare Island, using the existing City-owned tracks that go over the Mare Island Causeway. This would enable a low-cost “testing of the waters” to gauge the passenger demand, before committing to the investment in the track extension to the Vallejo Ferry Terminal.



A future possibility is restoring rail service to the City of Sonoma. Much of the right of way is still owned by the public. For the initial service, however, we suggest reestablishing the historic bypass at Sonoma Junction, to shorten the circuitous route via Schellville. The historic embankment across the wetlands still exists, and is apparently in State ownership. A rail shuttle could connect downtown Sonoma to Sonoma Junction, to transfer to the East-West train. Note the photo of the hydrogen powered streetcar, a fun idea for this service. Battery-powered trams are now common, as well.

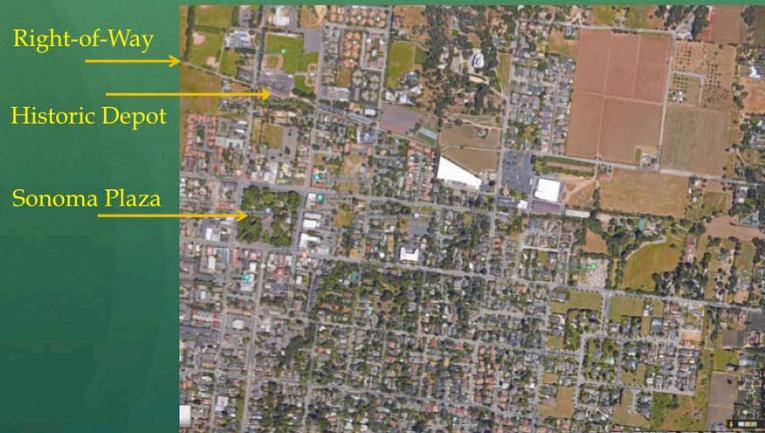
## Sonoma Junction

(For the bypass, turn left before the barn)



Here's Sonoma Junction! The historic embankment is on the left, between the two trees. It is marked by a telephone pole.

## Downtown Sonoma



The Sonoma Plaza is a big tourist attraction.

## Historic Sonoma Depot and right-of-way



Tracks would have to be laid where there are currently walking paths, but that's all part of the fun of restoring railbanked lines.

## Other TRAC Activities

PAGE 4: TRAC'S PLAN TO INTEGRATE SAN JOAQUINS & ACE

# California Rail News

Volume 27 Number 3

May-September 2017

## Metro: Transit Provider or Developer? -- LA Union Station Quandary

By Susan MacAdams  
TRAC Board Member

Los Angeles Union Station, one of the great train stations in America, is undergoing a hugely ambitious redevelopment scheme called "LINK US," formerly known as "The Union Station Master Plan" and the "Southern California Regional Interconnector Project" or SCRIP. This project is intended to expand station capacity to handle much larger passenger volumes. First, to improve passenger access to the tracks, it would reconfigure access, adding a large amount of retail development under the tracks; second, it would incorporate run-through tracks for Amtrak, Metrolink and high speed rail.

### The Proposal

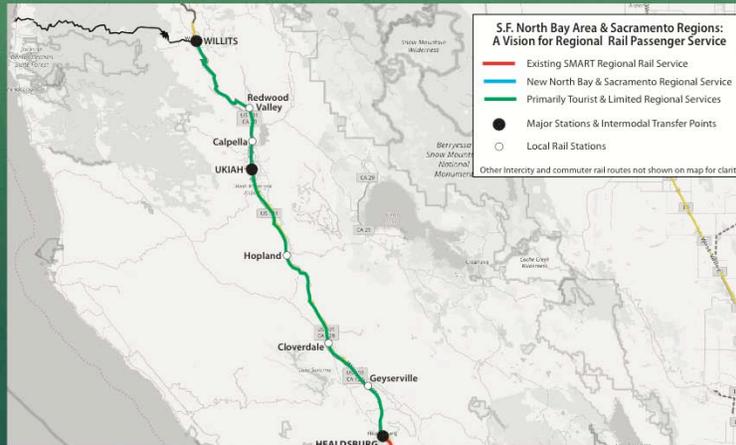
Currently the station is stub-ended; trains enter the station area to pick up and drop off passengers, then exit in the reverse direction. Run-



Los Angeles Union Station, view through Main Waiting Room to train boarding area.  
Photo by Aisha Weitz. Used with permission.

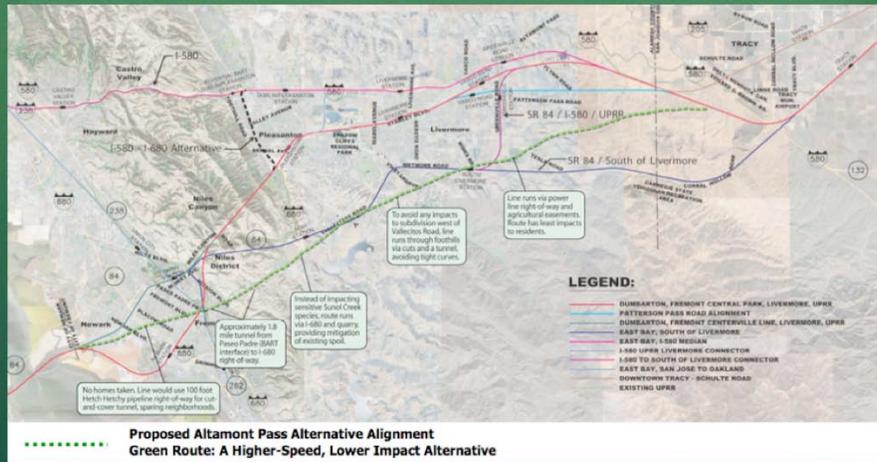
In addition to working on proposals like this one, TRAC also produces a newspaper. See links to our archive.

## TRAC's Far North Proposal



We're also working on other proposals, including this one to provide service to Willets, using low-floor DMUs to keep costs down. With a much lower population density, keeping costs low for this service area is crucial.

# TRAC's Altamont Corridor Proposal



We're making a presentation soon to the JPA that runs the San Joaquin intercity service. This proposal would create a new fast corridor connecting Tracy and Fremont, leading to all-day service between the Central Valley and the Bay Area.

Thank you for your interest.

Train Riders Association of California

[www.CalRailNews.org](http://www.CalRailNews.org)

We'd like your help in making this all happen.