STEEL WHEELS

PASSENGER RAIL IN CALIFORNIA AND THE WEST

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RAILPAC • ALL ABOARD ARIZONA • PASSENGER RAIL KANSAS • NEW MEXICO RA • MINNARP
CALIFORNIANS FOR ELECTRIC RAIL • THE AURORA GROUP • NEVADA RAIL COALITION • PASSENGER RAIL OKLAHOMA

Caltrain EMU's ready for Service.
Photo: Caltrain

SW 3Q24 Contents

3rd QUARTER 2024 PUBLICATION OF THE RAIL PASSENGER ASSOCIATION OF CALIFORNIA & NEVADA

Guest Editorial

By Dick Spotswood, Past Secretary, RailPAC

RailPAC member and past Secretary Dick Spotswood writes an excellent column for The Marin Independent Journal. His August 7th column addresses one of RailPAC's key concerns; the inability to get projects built because every special interest demands a veto. Dick writes:

"It's become apparent that America has lost its way when it comes to building things. The problem isn't lack of construction know-how. It stems from the process we've enacted with the best of intentions that's made improving our infrastructure unnecessarily time-consuming and expensive.

We're witnessing that here in Marin with stymied efforts to control historic Ross Valley flooding. Californians know the problem well. The effort to build a high-speed rail line linking the Bay Area and Sacramento to Los Angeles and San Diego is a comic punchline. Due to skyrocketing land, labor and material costs, in addition to environmental red tape, building affordable housing now can cost up to $1 million per unit.

Author and political scientist Francis Fukuyama coined the term "vetocracies" in which wide swaths of society have veto power over the construction of new public infrastructure including transit lines, housing and even essential efforts to address climate change and flooding.

The result is inaction. It arises both from a political left that seemingly embraces bureaucracy and complicated regulations and a political right that so distrusts government that it presumes inaction is safer than action. The federal, state and local bureaucracies, each with competing missions, all have veto power. Affected citizens pursued lax rules which guarantee almost unlimited public input which effectively torpedoes action. Vetoes occur when almost anyone can file litigation to tie up even well-conceived plans in a judicial limbo. The vetocracy is exemplified by the perversion of the California Environmental Quality Act to concentrate on the relatively trivial over the big picture.

The result is frustration. High-speed rail is open and running all over the developed world. Japan was the pioneer. In recent decades China, France, Italy, Spain, Germany and Saudi Arabia are operating fast trains brimming with passengers.

In 2008, California voters passed Proposition 1A with a 53% majority to partially fund 21st century trains linking northern and southern California by 2020. Today, no one has any idea when the entire line will open. The first section through the rural San Joaquin Valley is projected to be finished in 2033. California high speed rail has become more about creating union construction jobs than moving people.

The delays and uncertainty caused by our cumbersome process are why we've lost the ability to build big. We don't even know the true costs of these projects since inflation does its dirty job when projects are delayed for decades.

Americans managed to build the transcontinental railroad during the Civil War from Omaha to Sacramento. It started with the Railroad Act of 1862 and ended with the driving of the golden spike at Promontory, Utah in May 1869. The original public-private partnership was accomplished with rudimentary technology and labor from Irish and Chinese immigrants over the Sierra and the deserts of the West in just seven years.

If we reform the process and curb the "vetocracies" we might again be able to satisfy the needs and desires of a supermajority of Americans who don't believe inaction is always better than action."

I can only echo and concur with what Dick has written. Even simple double track projects within existing right of way are not safe from the menace of small but noisy (and noisome) groups. Reform is urgently needed.

pauldyson@railpac.org

COVER STORY

Caltrain Electrification and Service Relaunch

By Steel Wheels Staff

The San Francisco & San Jose Railroad inaugurated rail passenger service between San Francisco and San Jose on January 16, 1864, and is the oldest continually run railroad west of the Mississippi. The expanding Southern Pacific Railroad took over the route in 1870. SP operated freight and passenger trains until 1980 and after several attempts to discontinue the passenger service, Caltrans contracted with SP to operate with a subsidy. Caltrans named the operation Caltrain.

The Peninsula Corridor Joint Powers Board (PCJPB) was setup in 1987 and purchased the SP line running from San Jose to San Francisco in 1991. In 1992 the PCJPB took over operations and began modernization.

2024 marks the launch of Caltrain Electrified service, another historic milestone in the evolution of rail in the Bay Area. The Caltrain Electrification project electrified the corridor from the San Francisco Station at 4th and King Streets to the Tamien Station in San Jose, replacing noisy polluting diesel-hauled trains with clean quiet electric trains.

Electrification will transform Caltrain into a faster, more efficient, and sustainable service. New, faster and more frequent trains are expected to have what is known in the industry as "the sparks effect", increasing ridership and revenue. The primary purpose of Caltrain Electrification is to improve Caltrain system performance and curtail long-term environmental impacts by reducing noise, improving regional air quality, and lowering greenhouse gas emissions. Each trainset will have seven cars, as opposed to the current five or six.

The new vehicles, true bilevels, will offer riders enhanced amenities, including new digital onboard displays, a quieter ride, power outlets at each forward-facing seat, a new seat color palette selected by the public, energy-efficient lighting, coat hooks, security cameras, and expanded storage under the cantilevered seats.

The trains were built by Stadler US at their facility in Salt Lake City, Utah. After they were assembled, they were sent to a test facility in Pueblo, Colo. where they were tested at high speeds under numerous conditions as required by the Federal Railroad Administration.

The Caltrain electrification is more than just equipment. It is a complete reimagining of its service with faster, more reliable, more frequent schedules (baseline service every thirty minutes with additional Limited and Express trains) and a much longer service day. This transitions Caltrain from a 9 to 5 commuter rail focus to a regional rail line better able to serve hybrid workers on flexible schedules, shift workers outside the 9 to 5 office model and leisure travelers. It also sets the framework for California's future High Speed Rail route from San Jose to San Francisco.

So, join RailPAC at its Annual meeting Sunday October 20th to celebrate California's new electrified railway. (See announcement p3)

Do you want to receive email news and updates? info@railpac.org will add you to our list.

We never share personal data.

President's Commentary

By Steve Roberts – RailPAC President

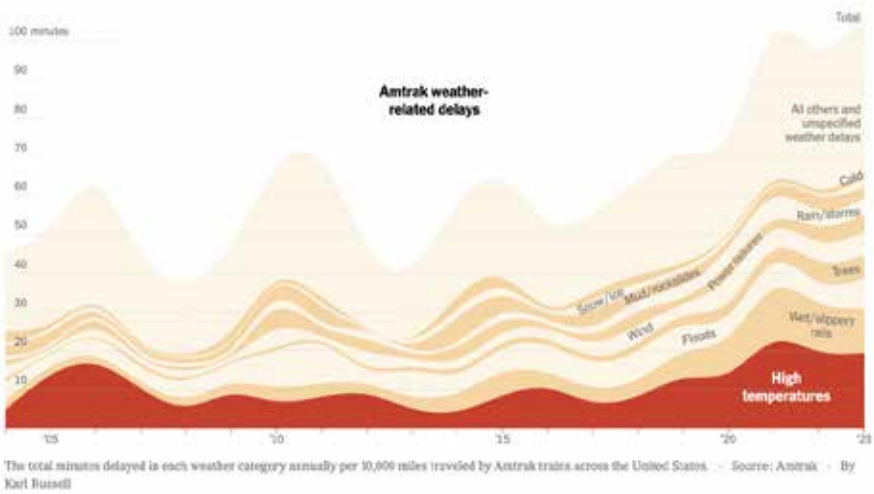
"In the nothing ever changes category," we have the final Congressional Committee outlines of the FY25 rail budget. First some history. Many times, over the years, Amtrak would be reauthorized over five years with a substantial capital budget. If appropriated, the monies would enable Amtrak to invest, expand and provide a quality operation. With that multi-year authorization as guidance, each fiscal year Congress approves an appropriation for the actual funding available to Amtrak to invest and operate over the next fiscal year. But more often than not, Congress appropriates only enough funding for Amtrak to barely maintain operations - duct tape and bailing wire - to make it through the year.

Well, the situation for the FY25 rail appropriation appears to follow that pattern. The Infrastructure Bill authorized $2.7 Billion yearly for the Amtrak National Network. For FY25 the House Committee appropriated $1.123 Billion a 58% reduction, while the Senate Committee appropriated $1.617 Billion a 40% reduction. Since mid-route refueling cannot be reduced, the shortfall will most likely fall entirely on return to service equipment repairs, investments for better service, etc. Likewise for FY25, the Federal-State Partnership, the foundation for passenger rail service expansion, saw a 100% reduction (House) and a 93% reduction (Senate). This is still early in the process so those who want expanded, quality rail service need to be active in advocating with their legislators.

Outlined starting on page 12 of this issue of Steel Wheels, I discuss how advocates can utilize FRA's Long-Distance Service Study (LDSS) to develop strategies for route prioritization and implementation of new long-distance service. I ended up disappointed with the study's final presentation because it ended up solely as a cost study. There are no forecasts of ridership, ticket revenue and community benefits to offset the estimated costs.

What is frustrating is that, at January's LDSS outreach meeting, I asked the study team if they were going to use Amtrak's Long-Distance Forecast Model to estimate ridership and ticket revenue, and the Rail Passengers Association Benefits Model to calculate community benefits. The study team said they had their own forecast models for these key factors, but in the end it was not done. So when a mayor asks "What is the value of expanded rail service to my city?" we have no answer. All we have is giga-billions in costs.

Figure 1

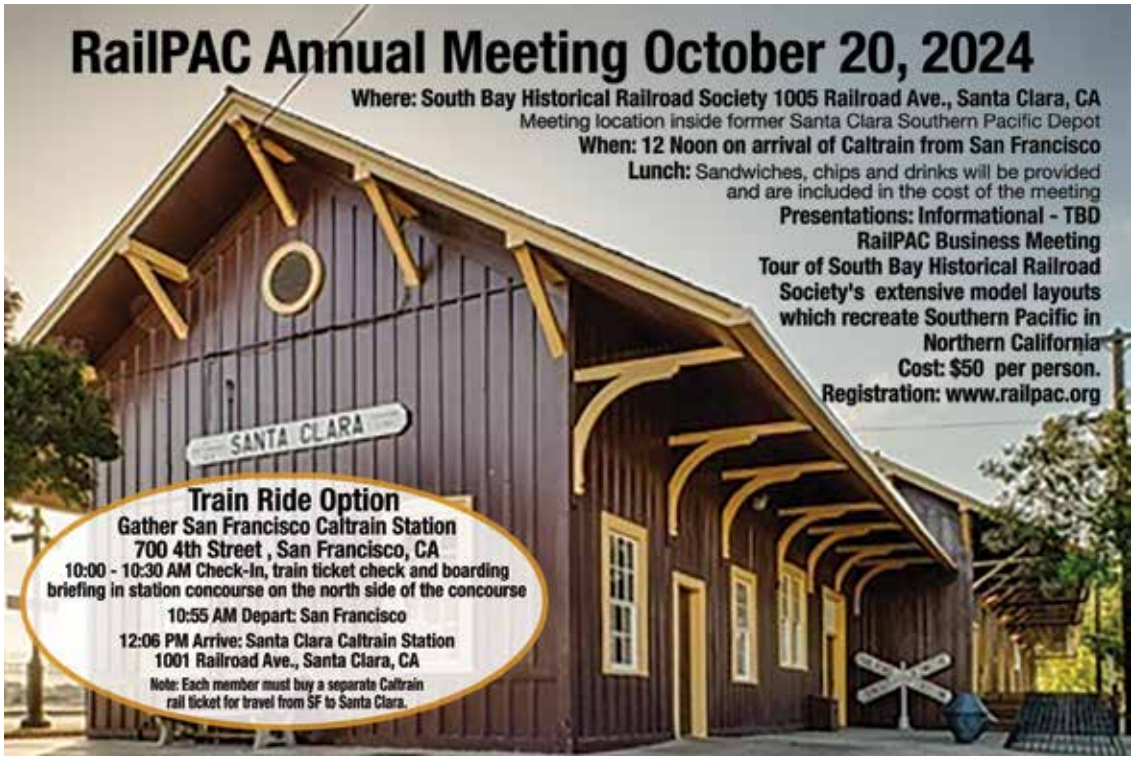


The total minutes delayed in each weather category annually per 10,000 miles traveled by Amtrak trains across the United States. · Source: Amtrak · By Karl Russell

In the 1st Quarter 2024 issue of Steel Wheels I wrote an article titled "It's Not Your Father's Railroad (or Climate)" Steel-Wheels-2024.Q1.pdf (railpac.org) page 5, about how changes in rail freight operations and increasing extreme and intense weather events were significantly impacting the reliability of rail transportation. Recently a New York Times reporter Minho Kim, did an in-depth analysis of 313,000 Amtrak conductor delay reports to create a database documenting the significant increase in weather related delays over the past decade. These are shown graphically in Figure 1. There are simply more extreme heat events, floods, power failures, mudslides, fallen trees, etc. than was experienced historically. The full New York Times article, "Amtrak Passengers Face Record Delays from Extreme Weather" is available via a free link on the Rail Passenger Associations website in Weekly Hotline #1359-July 19, 2024.

• Rail Passengers Association: Hotline #1,359 (mailchi.mp)

Finally save the date, Sunday October 20th, 2024. As part of our annual meeting, RailPAC celebrates the new electrification and service expansion by Caltrain between San Francisco and San Jose.



JOIN TODAY!

YOU can make a difference!

Rail Passenger Association of California and Nevada

A statewide membership organization working for the improvement and expansion of passenger rail service.

Organized in 1977 by a group of passenger rail supporters, RailPAC has been working for over 45 years to establish a network of rail services that will provide service to and throughout California and Nevada.

We need your support to improve and expand passenger rail service in the west!

Your Membership includes...

- *STEEL WHEELS: Passenger Rail in California and the West*
- *Weekly newsletter and periodic email alerts*
- *Eligibility to attend our annual and regional meetings*

Representation and Advocacy

RailPAC presents a strong case to federal, state and local governments for reliable rail services from long-distance trains to commuter operations. Your organization gains strength with a growing membership base and members are invited to review and reflect on proposed changes in budgets, routes and service frequencies.

Cooperative Alliances

RailPAC works closely with other rail organizations and transit advocacy groups.

Volunteer Efforts

Members work with local rail passenger groups including Station Hosts at several Amtrak stations, attend and report on meetings of regional and transit boards and write letters to editors of newspapers. Members also submit personal reports of on-board service levels for distribution in Steel Wheels and the weekly e newsletter.

FOR MORE INFORMATION

about RailPAC and how you can help expand and improve passenger rail, visit our website ***RailPAC.org*** *or fill out and return the form on the back page of this newsletter.*

RailPAC.org

Our website includes a complete listing of our current positions, as well as frequent articles and reports from around the state. Visit RailPAC.org to learn more about these and other regional passenger rail projects we support.

Social Media

To receive the latest rail news from around the state:

- *Follow us on Twitter: www.twitter.com/RailPAC*
- *Become a fan on Facebook: www.facebook.com/RailPAC*

RAILPAC'S WORK AT-A-GLANCE

RailPAC is working with Amtrak, Caltrans and all agencies involved in achieving the following goals for expanding and extending safe and reliable rail passenger service. We support adequate funding for these services and vigorously promote them.

High Speed Rail

Build the High Speed Rail system together with electrification Caltrain and Metrolink.

Coast Corridor

Reduce travel times. Continue to enhance onboard amenities. Restore connections to Long-Distance trains at Los Angeles Union Station. New stations at Gilroy, Watsonville, Soledad and King City.

Pacific Surfliner Corridor

Campaign for run through tracks at Los Angeles Union Station to improve punctuality and travel times for Amtrak and Metrolink. Extend service to the Coachella and Imperial valleys. Built bypass tunnels at San Clemente and Del Mar.

Sunset Corridor

Introduce daily service via Phoenix.

San Joaquin Corridor

Integrate service with High Speed segment. Extend service north of Sacramento. Add stations at Elk Grove, Marysville, Chico and Redding.

Capitol Corridor

Increase frequency to hourly service between Sacramento and Oakland. Increase frequency of service to San Jose. Extend service to Reno and San Luis Obispo.

Las Vegas

Reestablish service between Los Angeles and Las Vegas. Support the Brightline High Speed Rail Project linking Las Vegas with Southern California

RailPAC is a 501c3 Organization therefore all donations are tax deductible.

Don't forget to check your subscription expiration date on the mailing label and renew your membership if it is due.

Thank you for your continued support for RailPAC and passenger rail.

Mind the Gap! - The Danger of Procrastination

A gap has opened between the expected delivery of new rolling stock and the "retirement" of the existing fleet.

James Tilley, President, Florida Coalition of Rail Passengers, Co-chair, TheAuroraGroup

"When bad CSX track caused the northbound Auto Train to derail 14 of 16 Superliners at Crescent City, Fla., on April 18, 2002, Amtrak strategists scrambled but were able to counteract the resulting equipment shortage." "Dealing with a similar shock to the system today . . .is much more difficult." "The question now is whether Amtrak management's missteps have caused irreversible damage to the ability to meet the rural-to-urban travel demand that only its national-network trains are positioned to provide." – Bob Johnston, Trains Newswire, July 6, 2022.

Amtrak tries to blame all its shortcomings on Congress. Case in point is this sentence in the letter CEO Stephen Gardner wrote to me on March 4, 2024, "... the way to solve many of the challenges Amtrak faces, including with long-distance equipment, is with adequate, ongoing and assured federal funding for intercity passenger rail service." He continued by outlining Amtrak's "battle" every year for sufficient annual appropriations.

This is a red herring. No management ever has unlimited resources. A good management knows how to allocate scarce resources to their best use and to adapt quickly to changed circumstances.

The long distance train fo tomorrow without urgent action today. Capitol Limited in Maryland in 2022. Photo Steven Walter.

Nearly three years after passage of the IIJA, Amtrak still has not placed an order for new long-distance equipment. Their Request for Proposals (RFP), issued this past December, is currently in its fifth iteration and does not anticipate signing a contract until summer 2025, a year later than anticipated just six months ago.

The shortage of Superliner equipment is serious and getting worse. Six years ago, when Amtrak last reported detailed fleet data (see its FY19-23 Five Year Service Plan), the bi-level long-distance Superliner fleet totaled 452 cars, 428 "active" and 24 "inactive" (Table I). Today, UMLER – a rail industry register of railcars – no longer lists 14 of those 24 inactive cars, suggesting that Amtrak has permanently retired (scrapped or sold) them. It still lists the other 10 but shows all of them as being long overdue for their mandatory air brake maintenance. So, they are still "inactive." Moreover, 60 of the 428 cars that Amtrak classified as "active" in October 2018 are now also well beyond their mandatory brake test dates, indicating that they are, or should be, currently out of service (Table II).

So, it is entirely possible that Amtrak has no more than 367 Superliners cars that are currently "serviceable." That is 20 cars short of the 387 Superliners that Amtrak said in its 2018 fleet plan it needed to support the operating plan, which remains unchanged today.

Amtrak leadership, however, has failed to address this shortage with the urgency it demands. For example, the mechanical plan for FY23 did not include any wreck repairs; the one for FY 24 only ten. As of June 30, this year, Mechanical had released seven but one may still sidelined because it may still require its mandatory brake maintenance.

It should be obvious to even the most casual observer that the Superliner fleet is extremely fragile and puts the operating plan at risk. Amtrak's Inspector General has documented that lack of available parts frequently forces mechanics to cannibalize serviceable cars for spare parts. Amtrak cancels trains frequently because there is no back up capacity to respond when inbound equipment arrives too late to prepare it for its scheduled departure. Of greatest concern? One more serious wreck could very well force capacity cuts or frequency reductions on any route supported by Superliners. Although a serious disruption could occur at any time, it is a near certainty that one will happen sometime between today and the time new equipment enters service eight to ten – or more – years from now.

There are actions that Amtrak management could take today that would bolster the long-distance fleet in the near term with only a modest expenditure of funds. All it requires is managerial creativity, imagination, initiative and, most importantly, desire. Some examples:

Deploy stored single-level dining and sleeping cars along with coaches to equip the Capitol Limited and/or the City of New Orleans to free up bi-level long-distance equipment for the western markets.

Redeploy long-distance Amfleet II equipment from short-distance, state-supported routes to the long-distance routes for which they were acquired.

Accelerate redeployment of bi-level equipment from the mid-west; address axle count requirement with Horizon cars now being freed up by the Siemens Venture fleet.

Consider using concrete blocks or sandbags to increase the axel weight of Horizon cars to equal that of the Superliner bi-levels now deadheading on short-distance routes.

Negotiate a termination of the bi-level cars leased to California.

Utilize outside maintenance providers such as Alstom at Mare Island, CA to accelerate wreck repairs.

Plan and commence executing a plan to extend the useful life to the existing fleet.

A maintenance plan that stabilizes the long-distance fleet and extends its service life will also enable some growth as envisioned by the IIJA while awaiting delivery of the new equipment that Amtrak does not even expect to order for another year.

Table I
Amtrak Superliner Fleet Status
October 2018

Count of Unit	Column Labels		
Row Labels	Active	Not Active	Grand Total
Coach ("Arcade") Modified (ADA)	5		5
Coach (ADA)	104	8	112
Coach (CalTrans Service)	3		3
Coach/Baggage	44	1	45
Deluxe Sleeper	6		6
Diner	43	2	45
Diner-Lounge	15	2	17
Lounge	49	5	54
Sleeper	107	3	110
Smoking Coach		1	1
Snack Coach	10	1	11
Transition Dorm / Transition Sleeper	42	1	43
Grand Total	**428**	**24**	**452**

Note 1-Ten of 24 "not active" Superliner cars continue to have severely overdue airbrake test dates
Note 2-14 of 24 "not active" Superliners are not reported in UMLER
Source: Amtrak, FY19-23 Five Year Service Line Plans

Table 2
Current Status of Superliners reported as "Active" in October 2018

Active Status	Active

Count of Unit	Column Labels			
Row Labels	Current	Overdue	Unknown	Grand Total
Coach ("Arcade") Modified (ADA)	5			5
Coach (ADA)	89	15		104
Coach (CalTrans Service)	3			3
Coach/Baggage	35	9		44
Deluxe Sleeper	6			6
Diner	40	3		43
Diner-Lounge	14	1		15
Lounge	41	8		49
Sleeper	90	17		107
Snack Coach	7	2	1	10
Transition Dorm / Transition Sleeper	37	5		42
Grand Total	**367**	**60**	**1**	**428**

Note 1: Of 428 Superliner cars reported as active in Oct. 2018-367 have current ABT date
Source: RAILINC, UMLER file (data current as of Aug 13, 2024).

New Concepts for Superliner Travel

Extracts from Amtrak's Request for Proposals to the Railcar Builders

by George Chilson, RailPAC Board

Amtrak and prospective manufacturers have been discussing design concepts for long distance equipment to replace Superliners. The Request for Proposals (RFP) issued July 12 – the fifth revision in seven months -- provides insight about what passengers might experience when new cars eventually – if ever – actually go into service five, six, seven or more years in the future. The schedule for signing a contract has already slipped a year to summer 2025.

Coach passengers would have a choice of standard or premium service. Both classes would provide each seat with reading lights imbedded in privacy "wings," adjustable head, leg, foot and arm rests, power outlets, tables, cup holders, coat hooks and seat back storage for "electronic devices." The upgrade to Premium would provide more space and a larger seat similar to a "Lazy Boy" recliner – a seat bottom that rocks up when the back reclines. Windows would have two pull down shades: a light filtering screen and a blackout screen. The RFP, however, has a serious flaw. It requires only each seat "have a view out of the window." We strongly urge Amtrak to require that seats and windows align with each other and that each row of seats be able to control window shade position.

Key differences between coach classes:

	Coach	Premium Coach
Seat row arrangement	2 + 2	2 + 1
Aisle Width	22"	32"
Seat Pitch	42"	48"
Seat Width	19.5"	22"
Seat Depth	17"	20"
Seat back recline	20°	30°
Seat slide forward	Partial	None
Knee space in recline	7"	8"

Sleeping car passengers would have three choices: "roomettes," "club bedrooms" and, a new accommodation, "solo suites." Like coach, all windows would have two pull down shades, multiple electrical outlets, tables, cup holders, "cubbies" for bottles, sinks, trash bins and luggage storage – both under the seat and in a separate space. The upper berth would store flat against the ceiling. An unfortunate outcome of the "solo suite" design is that half of passengers would be forced to sleep with their head, not their feet, facing forward – a safety hazard in case of a derailment.

Key differences between classes:

	Roomette	Solo Suite	Club Bedroom
# Passengers	1-2	1	2-4
# Seats	2	1	2
Seat width	26"	34"	48"
Leg room between seats	19.5"	21"	19.5"
Seat recline	No	10°	No
Dimensions Lower Berth	77" x 27"	77" x 34" taper to 22"	77" x 48"
Dimensions Upper Berth	77" x 27"	n/a	77" x 48"
Toilet & shower	Communal	Communal	In room

Passengers in wheelchairs would be able to choose accessible seats in regular or premium in coach or an accessible bedroom for two in sleeper. Accessible accommodations would be in the "accessible core," immediately adjacent to the feature cars with 32" wide aisles and gangways between these cars. At least two elevators (or their equivalent) would provide access to the upper level.

Current procurement envisions 47 "train sets." Each set would have four "feature" cars: lounge, café, diner and first-class lounge. Cars would be semi-permanently attached with "Low Slack Couplers." This new coupler would function much as a drawbar – increase inter-car stability, prevent disengagement and telescoping, eliminate collision posts and permit a bridged, weather tight, 40" wide gangway between cars – but, unlike a drawbar, permit addition or removal of cars in the field in one hour or less. Each trainset would have conventional APTA Type H Tightlock couplers at each end.

The procurement anticipates 10-car train sets for most routes. Three would get different configurations:

- Auto Train: 22-car set.
- Empire Builder: 10-car set for Seattle; 9-car set for Portland. When combined, 2 sets with 19 cars Spokane – Chicago.
- Texas Eagle: 9-car set Chicago – San Antonio.
- Sunset: 7-car set New Orleans – San Antonio.
- Sunset-Eagle – 9-car set San Antonio – Los Angeles (sleeper & coach transferred between Eagle and Sunset at San Antonio).

Discussions continue. Amtrak has asked manufacturers to assess the feasibility and cost of adding optional "skylights" to each car. It has also requested suggestions for cost savings. So, final designs may – and probably will – vary from the descriptions in this report.

Australian Rail Journeys

by Bill Winslow, RailPAC member.

Spirit of Queensland, diesel powered, tilting train, 3ft 6 in guage. Photo: Chris Walters

This spring my wife, Laura, and I spent 30 days in the Land Down Under. Here is a short sampler of our experiences.

We were instructed to arrive at the Sydney railway station by 12:00 noon to embark on the *Indian Pacific*. After checking in at about 11: 45, we were directed to a capacious bar. It was already packed with our fellow passengers, mostly elderly Australians, feasting on the free food and drinks of all types. I guess we didn't get the email! But no worries. True to its name, this train runs from one ocean to the other, a four-day, three-night trip. Due to time constraints and the enormity of Australia's arid places, we stayed aboard for only one night, disembarking in Adelaide. Nearly all the other passengers were going all the way to Perth. This is expensive. I think that for most of these travelers, the full trip is a sort of patriotic pilgrimage, a journey into the wild heart of their country.

Our room on the *Indian Pacific* was nicely appointed, tolerably spacious, with a commode/shower and convertible bunks, much like a room on the *California Zephyr* though more modern. Meals were served in the stately dining car. Each time we were seated opposite people we had not met before. As with our Amtrak experiences of this practice, we found this aspect of the journey both entertaining and informative. It's one of the things we like best!

The westbound *IP* initially heads into the Blue Mountains. The heights are named for the slate-colored, slightly bluish haze that is the product of oil emanating from the eucalyptus trees covering the range. Eucalyptus is the dominant species in much of the forested areas of southern Australia. Along the highest ridge the route offers occasional impressive views of the wild country to the west. Beyond the mountains the train traverses a mix of rugged terrain and scattered farms supported by the occasional stream. Nearer to Adelaide farming and ranching abound, and several premiere wine regions beckon.

As we like to overnight on trains, we decided to ride the *Spirit of Queensland* from Brisbane to Cairns. While most passengers on the other great long-haul trains are tourists, the *Spirit of Queensland* is used for business trips and routine family and friends visits. The scenery to the west of the route includes strikingly steep mounds reminiscent of volcanic forms along California's Highway 395. There are many small rivers to cross, coastline vistas, and vast fields of sugarcane. The food service and sleeping accommodations are like business class on an airliner. A tray on a mini table holds the meal, and for sleeping there is a full-recline pod. For a sleeper on this train, a booking well in advance is needed.

Like most Australian cities, Brisbane is on a harbor; but it also has a fine riverfront with an excellent family water park. We took in an Australian Rules Football match. It was damned exciting. Played on a huge oval field by 18 players to a side, there was frenetic sprinting, passing by punching the ball and dozens of kicks (no throwing allowed), plus frequent scoring by kicking.

Cairns is well up the eastern coast and serves as gateway to the Great Barrier Reef. Among the seven wonders of the natural world, the Reef extends for hundreds of miles.

Indian Pacific heads west through New South Wales. Photo: Trevor Harris

RailPAC is supporting Californians for Electric Rail Streets For All's initiative

to call out CARB's misinformation on electrification which is the playbook of the oil and gas companies. The following is the text of the letter being sent to CARB. RailPAC is a signatory.

Electrified Throughout, Freight On The Trans-Siberian Near Chelyabinsk. Photo: Vitaly Amtrakov

August 23, 2024

Liane Randolph, Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Dear Chair Randolph,

We write to correct some inaccuracies and omissions in CARB's publications on zero-emission rail, including the Zero Emissions Rail Project Dashboard, the 2016 locomotive reports "Draft Technology Assessment: Freight Locomotives" and "Transitioning to a Zero or Near-Zero Emission Line-Haul Freight Rail System in California Operational and Economic

Considerations, Final Report", and the 2024 "Feasibility Analysis: Zero Emission Train from the Port of Los Angeles to Barstow". [see CARB website: https://ww2.arb.ca.gov/]

CARB has an important mission to reduce greenhouse gas emissions and improve air quality in California through regulation, policy and programming. For CARB to achieve its ambitious climate and air quality goals it must be informed by the best available information and research regarding its regulated industry and technology. Unfortunately, the Dashboard, Feasibility Analysis, and 2016 Reports demonstrate that CARB does not have access to the latest information about global zero emissions railways and rail technology. This seriously threatens CARB's ability to regulate and craft policy necessary to fight climate change and reduce particulate and other emissions.

The dashboard website makes the claim that only 28 overhead catenary system (OCS) electric rail projects exist in the world compared to 28 hydrogen and 36 battery-electric locomotive projects. This is effectively stating that hydrogen rail is at the same level of deployment as OCS, and that battery-electric locomotives are more common than OCS. Of the "zero emissions" trains and locomotives in operation today, over 99% of them are conventional OCS/third rail electrification, and battery and hydrogen technology combined is a fraction of one percent. This dramatically understates the situation and is misleading. Over 30% of the world's railroad track is electrified – a percentage that is growing every year.

Here are some of the biggest omissions from the dashboard, but this list is non-comprehensive:

* Indian Railways is 94% electrified with overhead catenary (aiming for 100% by the end of 2024), operating 10,238 freight and passenger locomotives over 67,547 mi of tracks. Meanwhile, the dashboard lists only one catenary project in Nagpur as "Delivery Started", even though India has electrified 25,000 miles of rail since 2014 and has had some electric trains since 1947.
* The only overhead catenary project listed for Japan in the dashboard is the Shinkansen. This ignores the fact that in 2003, Japan Railway Group operated a total of 22,499 overhead catenary locomotives and EMUs in addition to the Shinkansen, with an additional 25,768 overhead catenary locomotives and EMUs operated by private companies, bringing the total number of overhead catenary vehicles operating in Japan for passenger service to 51,998. Similar numbers of electric trains are in operation today. Japan Railways Freight also operates a mixture of diesel and electric locomotives for freight operations.
* In Russia, the 5,758 mile Trans-Siberian Railway has been entirely electrified since 2002. In addition to passenger trains, the corridor transports 144 million tons of freight annually.
* South Africa's Sishan-Saldana (OREX) freight rail line is entirely electrified with overhead catenary and operates over 535 miles, hauling trains >2 mi long and up to 41,000 tons, heavier than American freight. It has been operating since 1976.
* Metra Electric and the South Shore Line are overhead catenary electric passenger rail lines in the Chicagoland area that together operate over 91 miles of track and served 5 million riders in 2022. This route has been electrified since 1926 and shares portions of the line with freight. Metra Electric operates 228 EMUs, while the South Shore line operates 90 EMUs.
* While the tracker includes the Acela, it ignores numerous other catenary electric passenger rail lines that operate on the Northeast Corridor, including Amtrak's Northeast Regional service (66 locomotives), Metro-North (945 catenary/3rd rail tri voltage EMUs), CT Rail Shore Line East pooled with Metro-North, SEPTA regional rail (351 EMUs + 15 locomotives), and New Jersey Transit (65 electric and 60 catenary-diesel dual mode locomotives along with 230 EMUs). The total number of locomotives/EMUs operating on the Northeast corridor is 1692 with current orders expected to grow that to over 1,800, rather than just the 20 high speed Acela locomotives listed in the table.
* RTD commuter rail in Denver operates 66 overhead catenary EMUs over 54.09 miles of track, with 7.9 million riders in 2022.
* It also omits one of the few actually operating hydrogen rail systems in the world: LVNG in Lower Saxony, Germany, which operated 14 hydrogen fuel cell passenger trains starting in 2022. Notably, this service is being discontinued due to poor performance, massive service disruptions caused by mechanical issues, and high costs, and the hydrogen trains will be replaced with a mix of catenary and battery-electric trains.
* The listed SBCTA H2 project is not zero-emissions as SBCTA will not be using green hydrogen.

(CONTINUED ON PAGE 14)

Arizona News –

Todd Liebman, President, All Aboard Arizona

I hope you will attend the Rail Nation Conference in Tucson on November 1-3, 2024 cohosted by Rail Passengers Association and All Aboard Arizona. Information for registration is on the RPA website. The agenda is amazing and this promises to be an excellent conference focusing specifically on the efforts to improve rail in the Southwest. Amtrak President Stephan Gardner, FRA Administrator Amit Bose, Assistant Secretary of Transportation for Tribal Affairs Arlando Teller, and a host of Arizona elected officials are on the agenda. This is a wonderful chance to hear some great presentations, do some networking, enjoy some unique events, and have some fun in Tucson. We look forward to welcoming you to beautiful Tucson in November!

Imagine almost every community in Arizona linked by close access to passenger rail, either directly, or through connections to a nearby, regional rail hub. That is the goal All-Aboard Arizona is working toward, and it is much closer than it might seem.

There are two major programs that are going to get us there. The first is the Corridor ID program. The State of Arizona is currently working on Phase I of the Tucson-Phoenix-Buckeye corridor. That will truly be the lynchpin of rail passenger service with a multi-frequency corridor linking Arizona's two largest cities and the growing areas in between. We envision each station becoming a regional hub where connections can be made to the neighboring communities in the catchment area.

The second program is the FRA's Long Distance Study. That effort includes a daily Sunset Limited/ Texas Eagle returned to Phoenix. A new service from Dallas to the Bay Area will serve Benson, Tucson, Phoenix, Wickenburg, Parker and on to the Bay Area. A second new service will run from Phoenix to Minneapolis/St Paul running from Phoenix, Wickenburg, Ash Fork, Flagstaff and on the Southwest Chief route to Belen where it will run through Amarillo and then up to Kansas City, Sioux Fall and to Minneapolis/St Paul. With the existing Southwest Chief, a substantial portion of Arizona will be linked by rail. All Aboard Arizona is going to push for these service expansions and work on regional partnerships, so each station becomes a regional transit hub.

Part of our job as advocates is to help overcome challenges. One key value of the long-distance study is to serve as a vision to work toward. With future routes identified, we can find segments that are easier to implement and faster wins that build out the system. For example, if the Texas Eagle divided at Fort Worth rather than San Antonio and joined the Sunset Limited in El Paso, it would have a faster running time between end points and move us down the path toward the new Dallas to Bay Area service contemplated by the Long Distance Study. The Heartland Flyer could be extended to San Antonio keeping service to important Texas cities. Long discussed was a section of the Southwest Chief that would divide in northern Arizona and serve Phoenix and perhaps Tucson. Again, that would move us down the path toward a vision of a connected Arizona.

Rail Workers United has a very serious proposal promoting public ownership of the railways. However you feel about that proposal, we need to take a step back and determine a vision for what the railroads need to be. Railroads must be more than a hedge fund profit machine. The country is growing, and more freight and passengers will have to move by rail in the future. It's just a fact. The railroads have always been a public/private partnership and were built with significant public subsidies and we, collectively as Americans, have a right to decide what we need the railroads to be. The Staggers Act turned railroading on its head, and not in a good way, leading to the declining market share, abandoned infrastructure and long, slow trains that have become a feature of American railroading. What America needs are railroads that operate shorter, faster trains, both passenger and freight and provide superior customer service. The American railroads of the future will look more like the European railways. The challenge is that those sorts of railroads may not have the eye-popping return on investment that Wall Street craves. Is some separation of the railroad infrastructure from operations in order? It bears remembering that public ownership is no guarantee that railroads will thrive. Many countries have lost their national railroads entirely, and Britain suffered massive abandonments in the 1960's. What is certain is that the need for rail transport is growing, particularly in the growing Southwest.

I hope to see you in Tucson in November.

Tucson and Phoenix Sun Rail Corridor

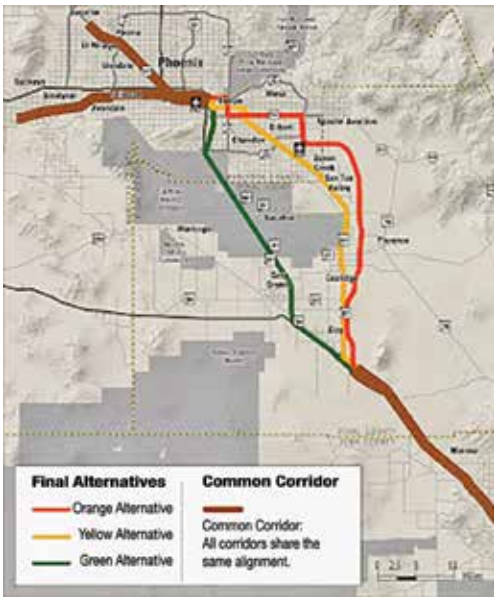
Earl Van Swearingen -All Aboard Arizona

Progress is being made on the Sun Corridor, but it may be a decade before the first wheels will turn on a train between Tucson and Phoenix. This time frame is not unusual for major projects these days. There are three steps that the Arizona Department of Transportation (ADOT) must take prior to the approval to advance to final design and construction of the corridor project. Each step must be approved by the Federal Railroad Administration (FRA). The FRA would be the lead agency and authority for intercity passenger rail service connecting Phoenix and Tucson. The first step, to be completed in about six months, will determine the scope, schedule and budget to conduct a Service Development Plan for the Phoenix to Tucson Intercity Passenger Rail Corridor. A $500,000 federal grant was used to help cover this initial study by ADOT.

Once the first step is approved by the Federal Railroad Administration, the FRA will fund step two which will present a service development plan for the corridor. This plan would include public and stakeholder outreach, route analysis and recommendations, proposed service and operations, station locations, implementation plan, equipment and infrastructure improvements required. During this step, ADOT would be working with Amtrak, the Union Pacific Railroad, regional and local partners and members of the public to seek input in the process. Once approved by the FRA, ADOT would move onto step three.

Step three, the final step of the project development process, would be to conduct an environmental review and preliminary engineering study of the project. In the case of step two and three, the FRA will require a local matching fund of 10 percent and 20 percent, respectively, from the state. Steps two and three would likely take four or five years to go through the planning, preliminary engineering, environmental and outreach process. Once all the steps are approved, and if there is a funding mechanism established for the implementation of passenger rail, funds for final design and construction would be sought, which could easily take another five years before the startup of the train service.

In the meantime, as members of All Aboard Arizona, it is our task to make sure our legislators will continue to support this program.



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People are demanding more passenger rail across America. Rail Passengers Association is ready to bring them together. We are building the platform to enrich rail communities and inspire more advocates.

TOPICS + GUESTS INCLUDE:

- LEGISLATIVE UPDATES
- AMTRAK LEADERSHIP
- USDOT + FRA PLANNING
- LOCAL STAKEHOLDERS

November 1st - 3rd 2024

Sunset Limited arrives on Thursday. Westbound departs Sunday. Eastbound departs Monday. Please plan accordingly and book your travel!

"The conference will begin on Friday and conclude Sunday with substantive content, speakers and optional events on Friday and Saturday. Watch railpassengers.org and @railpassengers for details on speakers, add-on events, and local interests!

The focus in Arizona is on all things Infrastructure & Jobs Act, Corridor ID and the FRA Long Distance Study. The heart of this system will be the Tucson- Phoenix-Buckeye Corridor. The Sunset Limited and the Southwest Chief are two current anchors. All Aboard Arizona's vision is that each station will become regional transit hubs.

How far off is this? As far off as we make it! Get involved! See you at our gatherings this summer and early fall, and in Tucson for the great RailNation Conference!"

Todd Liebman
Rail Passengers Association Vice Chair
and President of All Aboard Arizona

For Registration and More Information visit:
railpassengers.org/tucson2024

Join the conversation:
@railpassengers

Long-Distance Service Study

Determining Priorities and Implementation Strategies

by Steve Roberts, President RailPAC

The Federal Railroad Administration's (FRA) Long-Distance Service Study (LDSS) was a well-organized, comprehensive, in-depth and data driven analysis of potential long-distance rail passenger service in the US. It addressed key legislative criteria in developing its proposed Network of Preferred Routes. The coverage and travel options offered by the proposed network are very impressive.

FRA_LDSS_REVISED_FINAL_Presentation_Round_4_Web.pdf (fralongdistancerailstudy.org)

Now comes the challenge for rail advocates, to utilize the study's findings in developing outreach and actionable strategies to implement the findings of the LDSS. And, as I noted in my President's Commentary (page 3), advocates must do this within the limits of a cost study without any estimates of ridership, ticket revenue and community benefits to offset estimated costs.

In reviewing the LDSS and presentation it is important to note that Congress defined specific boundaries for the LDSS to keep it focused and manageable – routes needed to be over 750 miles, offer connectivity to the national network, priority was on rural access and the study needed to look at routes discontinued in prior years.

Prioritization

As a first step to the route prioritization process, the FRA study team developed a ratings assessment of the complexity, benefits and cost metrics of each route evaluated in the LDSS. The Complexity category considered key factors such as the number of host railroads and the readiness of specific rail lines for passenger service. The Benefits category considered key factors such as new and improved access and network connectivity. The Level of Cost category considered operating and maintenance costs of the route. The categories for each route were scored by the study team on a scale from 3 (lowest priority) to 15 (highest priority). The scores were weighted by the study team based on stakeholder input developed at the LDSS outreach meetings. The result of this prioritization process is shown on Table 1 which is from the LDSS presentation (page 176).

The ratings by route are designed to guide stakeholders as they move toward the Corridor ID process. The Seattle – Chicago route (North Coast Hiawatha) was not rated because it has already entered the Corridor ID process indicating that it is a priority for Pacific Northwest and Northern Tier stakeholders.

However, without knowing the specific underlying rating in each category it is hard to know which of the categories are driving the overall rating number. As a result, there is a need to identify tradeoffs that might improve a route's topline rating. The final LDSS Report to Congress may show the specific rating in each category.

Table 1

Initial Rating by Preferred Route	
Preferred Route	**Rating (Weighted)**
Houston – New York	14
Chicago – Miami	11
Dallas/Ft. Worth – New York	10
Detroit – New Orleans	10
Phoenix – Minneapolis/St. Paul	10
Dallas/Ft. Worth - Miami	9
Denver - Houston	9
San Francisco – Dallas/Ft. Worth	9
Dallas/Ft. Worth - Atlanta	8
Denver – Minneapolis/St. Paul	8
Los Angeles - Denver	8
San Antonio – Minneapolis/St. Paul	8
Seattle - Denver	7
El Paso - Billings	6
Seattle – Chicago (Via MSP)	Not Applicable

While the detailed category ratings have not been published, the LDSS presentation outlines data that is part of the ratings assessment. Stakeholders can use this data to prioritize the preferred routes for implementation.

The first set of data is the additional population added to the Amtrak network because of the new route (Table 2). Since improved access and connectivity was one of the key Congressional considerations in the study, population is a key ranking metric. As part of the LDSS outreach stakeholders also indicated that access and connectivity were the most important attributes.

Table 2

Additional Population Added to the Amtrak Network as a Result of the New Route	
Preferred Route	**Population Added**
Detroit – New Orleans	9,560,000
Chicago – Miami	6,640,000
Dallas/Ft. Worth – New York	5,820,000
Houston – New York	5,490,000
Phoenix – Minneapolis/St. Paul	4,930,000
Dallas/Ft. Worth - Miami	4,220,000
San Francisco – Dallas/Ft. Worth	3,720,000
Los Angeles - Denver	3,230,000
San Antonio – Minneapolis/St. Paul	2,660,000
Denver – Houston	2,520,000
El Paso - Billings	2,030,000
Denver – Minneapolis/St. Paul	1,740,000
Seattle - Denver	1,660,000
Seattle – Chicago (Via MSP)	1,090.000
Dallas/Ft. Worth - Atlanta	810,000

The routes, via Louisville, KY, and Nashville, skirting the Cumberland Plateau rank high with the greatest additional population and connectivity to the Amtrak network. This reflects the current lack of service and large and fast-growing population along these routes. Seattle – Chicago (North Coast Hiawatha) has a lower population ranking because the major cities along the route are also served by the Empire Builder and are part of the Amtrak network.

Table 3 ranks the preferred routes by their capital expense. Costs are listed from lowest to highest reflecting the increasing financial challenge each route faces in implementation.

Table 3

Preferred Route Ranked by Capital Expense	
Preferred Route	**Route Capital Expense***
Dallas/Ft. Worth - Atlanta	$1,480,000,000
Denver – Houston	$2,000,000,000
El Paso - Billings	$2,060,000,000
Seattle - Denver	$2,090,000,000
Los Angeles - Denver	$2,240,000,000
San Antonio – Minneapolis/St. Paul	$2,410,000,000
Chicago - Miami	$2,740,000,000
San Francisco – Dallas/Ft. Worth	$2,780,000,000
Seattle - Chicago	$2,910,000,000
Detroit – New Orleans	$3,180,000,000
Dallas/Ft. Worth - Miami	$3,540,000,000
Phoenix – Minneapolis/St. Paul	$3,620,000,000
Houston – New York	$3,840,000,000
Dallas/Ft. Worth – New York	$4,570,000,000
Denver – Minneapolis/St. Paul	$6,220,000,000

* Estimate – Passenger service required projects, 2025-year dollars plus 35% contingency

Capital costs estimated are for passenger related investments and do not include any freight railroad capacity investments. Also, these cost estimates do not include an FRA recommended additional 30% unallocated contingency to account for unforeseen circumstances. Two major factors impact the cost difference between routes. The first is route length while the second is the miles of track that require upgrading from Class 3 to Class 4.

As can be seen at both the route level and in total, the capital requirements for the long-distance initiative are substantial and represent a major barrier when communicating the value of additional service. This is especially true given that the study did not quantify estimated ticket revenues and community benefits

Table 4 tries to address the route length differential by showing cost per mile for each route.

Table 4

Preferred Route Ranked by Capital Cost per Mile		
Preferred Route	**Capital Cost per Mile***	**Route Miles**
Seattle - Chicago	$1,257,000	2,316
Seattle - Denver	$1,269,000	1,647
San Francisco – Dallas/Ft. Worth	$1,459,000	1,906
El Paso - Billings	$1,482,000	1,390
Phoenix – Minneapolis/St. Paul	$1,564,000	2,316
Los Angeles - Denver	$1,575,000	1,423
Dallas/Ft. Worth - Atlanta	$1,731,000	855
Chicago - Miami	$1,790,000	1,531
Denver - Houston	$1,839.000	1,088
San Antonio – Minneapolis/St. Paul	$1,866,000	1,292
Houston – New York	$2,086,000	1,841
Dallas/Ft. Worth - Miami	$2,349,000	1,507
Dallas/Ft. Worth – New York	$2,397,000	1,907
Detroit – New Orleans	$2,557,000	1,244
Denver – Minneapolis/St. Paul	$5,442,000	1,143

* Estimate – Passenger service required projects, 2025-year dollars plus 35% contingency

Please note the capital cost per mile is calculated for comparison purposes. It does not represent spending per mile. Capital spending will be for major projects at specific locations.

Comparing the rankings shown on Table 4 with those on Table 3, shows that calculating capital costs to reflect route length changes the positions of routes in the rankings. For example, on a capital cost per mile basis the North Coast Hiawatha. a longer route, moves to the top of the rankings while Dallas/Ft. Worth – Atlanta, the shortest route, moves down in the rankings.

Advocates can cross-reference these ranking tables as guidance in the development of an implementation strategy. For example, both Chicago – Miami and Detroit – New Orleans adds high populations to the network and has mid-range capital costs leading to high rating numbers. Dallas/Ft. Worth – Miami has mid-range capital cost numbers and adds mid-range populations to the network. Denver – Houston adds mid-range populations to the network and has one of the lowest capital cost numbers.

Implementation Strategies

Given the high capital costs (Table 3), the challenge for advocates is the development of an implementation strategy that can move the long-distance initiative forward. Developing that strategy is going to mean a great deal of effort in networking, coalition building and outreach to civic and business leaders and other advocacy groups. The task will not be quick or easy and there will be disappointments and setbacks. There are models showing techniques and outreach providing a foundation for a way forward. Two organizations that have shown progress toward route implementation are the Southern Rail Commission and Big Sky Passenger Rail Authority.

There are several strategies that advocates can pursue as they move toward service implementation. Some of these strategies can be options or phasing timelines within the Corridor ID and Service Development planning process. Also, in developing these options, advocates are not constrained by the Congressional boundaries of the LDSS. Advocates can be flexible and "think outside the box." They can look at where the study boundaries may have resulted in viable service options not being considered. For example, the original concept of service from the Southeast to Texas was Meridian to Dallas/Ft. Worth. But at about 530 miles it was too short and did not match the parameters of the study, so the route was extended and became Atlanta to Dallas/Ft. Worth. Similarly, the LDSS did not consider extensions or sections off the existing long-distance route. For example, Meridian – DFW was originally conceived by Amtrak as a section of the Crescent.

Given the significant capital investment involved (Table 3), advocates could explore "early start" options that substantially reduce capital costs. For example, these could be extensions of existing routes, i.e., extending the Crescent from New Orleans to Houston or a through car on the California Zephyr to Las Vegas.

In addition to identifying existing route extensions or operating just part of a route, other strategic implementation options are:

Identify key high-cost segments, i.e., segments with Class 3 track. Is there a shorter segment that is viable for an early start service?

Identify route segments that overlap potential state funded rural access routes (i.e., Johnson City, TN/Bristol, VA - NEC) or emerging corridors (i.e., Tucson - Phoenix or the Coachella Corridor (Los Angeles to Indio).

Reduce the route length and associated capital costs by truncating the service where it connects with high-speed rail service (i.e., Las Vegas, NV).

Are there route segments with a potential dual use capacity enabling expanded freight service (i.e., the Wellton Branch for container shuttles from the Ports of LA and Long Beach), expanded freight service on the Meridian Speedway between Meridian MS and Shreveport, LA. and between Mobile, AL and Jacksonville, FL.

By focusing on route segments that overlap other potential services, initial local support is potentially stronger, the complexity of service development is reduced and capital costs for start-up can be shared or reduced. In addition, locally focused start-up service can facilitate state funding for operations, which further reduces initial costs. Early service start-up on a segment of the route will provide tangible forward motion and build grass-roots support for expanded rail service.

(CONTINUED FROM PAGE 9)

Overall, the dashboard is heavily biased towards new or recently completed projects, implying that zero-emissions rail technology is new and in development when in fact overhead catenary is a mature technology that is the foundation for entire countries' supply chains and transport networks. In contrast, the hydrogen projects listed on the dashboard genuinely are all prototypes or in testing. This implication is counter to CARB's own enforcement goals. By our count, there are over one thousand overhead catenary electric projects omitted from the dashboard representing tens of thousands of locomotives, over 100,000 electric multiple unit (EMU) trainsets, and over 200,000 miles of tracks. This website continues a disheartening trend of CARB research that is factually inaccurate and serves the interests of opponents of zero-emissions rail.

CARB's April 2024 Feasibility Analysis: Zero Emission Train from the Port of Los Angeles to Barstow does not fully analyze overhead catenary locomotives. The Cajon Pass has long been regarded as an ideal use case for catenary due to the high traction requirements of the steep grades, and the report itself admits that overhead catenary would reduce the number of locomotives needed. By failing to gather comprehensive performance data on catenary, the report paints a false picture of battery and hydrogen fuel cell locomotives as the only option, and makes both of these immature technologies appear more ready by lack of comparison to a superior option.

CARB's 2016 reports on Zero Emissions Rail are also riddled with factual inaccuracies. These include:

- Claiming catenary locomotives do not have the power for the large loads of American freight trains based on fast, light European trains that operate under very different conditions, ignoring the aforementioned heavy freight trains in South Africa and elsewhere.
- Claiming catenary trains could have as low an efficiency as 30% with no evidence, when most analyses put the efficiency at 90%, far higher than diesel (36%), battery (66%), or fuel cell (25%) trains, greatly inflating the projected power requirements.
- Using a $50 million/route mile cost for overhead electrification, mistakenly using a cost estimate from Caltrain that includes signal upgrades and other upgrades unrelated to catenary infrastructure. Restricting only to overhead wire infrastructure brings Caltrain electrification costs down to $12.5 million/mile, still exceptionally expensive due to Caltrain's unique project management issues. Overhead electrification for CA HSR is expected to cost only $6 million/mile, and proposed reforms could bring down costs even further for future projects.
- Since the publication of the 2016 reports, these CARB publications have been cited repeatedly to oppose zero emissions rail. Notably, the American Association of Railroads, which is currently suing to overturn CARB's landmark In-Use Locomotive Rule, cites the reports in a 2020 fact sheet that has formed the basis of its talking points against the rule.

Advocates are taking on the responsibility to point out the short-sightedness of wasteful public investments in hydrogen trains. It is concerning that proven, effective and practical solutions are being ignored in favor of a "shiny new thing" promoted heavily by the oil and gas industry, that has no indication of being capable of performance, economics and safety needed for effective, frequent rail transportation. Hydrogen power does eliminate diesel smoke, but unless it uses 'green hydrogen' (100% sourced from renewable energy), it has very little value in addressing the climate crisis, and its own environmental problems and safety risks to neighboring communities. The energy required to produce and store green hydrogen requires three times more electricity than that needed to power a train from the grid. CARB's decision-making on regulation, programming and policy must be grounded in these facts.

CARB's repeated downplaying of the viability of overhead catenary, used in 30% of the world's railway, while hyping immature technology with serious flaws, ultimately undermines the agency's attempts to regulate railroad emissions. At best this encourages experimental pilots with low chance of success that delay full adaptation of zero emission technologies, and at worst emboldens political opponents of CARB's rulemaking who seek to maintain the status quo for decades into the future. California's railside communities, which suffer every day from the nation's worst air quality, do not have decades to wait.

It is irresponsible to release public-facing educational sources and reports riddled with such inaccuracies. We politely request that CARB do the following:

- Update the Zero Emissions Rail Project dashboard to reflect the full global landscape of overhead catenary projects.
- Remove the 2016 locomotive reports from the CARB website, due to their factual inaccuracies and misleading conclusions (as detailed in a February 2024 white paper by RailPAC). [https://calelectricrail.org/wp-content/uploads/2024/08/RailPAC-CARB-rail-white-paper-2024.04.04.pdf]
- Fully evaluate overhead catenary in future publications related to zero-emissions rail.

The report in the above link documents in more detail the past and present errors, omissions, and outright misinformation that CARB has been promoting in regard to zero-emissions rail technology.

Sincerely,

Adriana Rizzo,
Californians for Electric Rail

Marc Vukcevich
Director of State Policy
Streets For All

Steve Roberts
President Rail Passenger Association
of California and Nevada (RailPAC)

Indian Railways, Investing Heavily In Electrifying The Whole Network. Photo: Jay

From the Rear Platform

By Paul Dyson, Editor

Metrolink:

Truth in advertising is important, as is clear information to would be passengers about the type of service on offer. A clear case in point is the Metrolink map. If you compare Metrolink's schematic to that of, say the London Underground, or BART for that matter, you would get the impression that the frequency and span of service is equivalent, i.e. that trains run everyday at reasonable levels of frequency from early morning to late evening. That's the global standard for urban transit and regional rail. Unfortunately Metrolink is nowhere near meeting that global standard. Designed as a predominantly peak hour service, Metrolink is only now evolving to true regional rail. But what is worse, the service improvements that Metrolink has made, or that are in the pipeline, are not uniform throughout the network, and for practical reasons never will be.

It's time then for Metrolink to review its map and consider color coding or using hatched lines instead of solid lines to designate the level of service available. This need not be a complicated exercise. The map key should indicate the service type for each line, and solid lines would denote all day (e.g. San Bernardino line and Antelope Valley) while hatched lines would be used for the Riverside line or IE-OC. It will be easy enough to update as new frequencies are introduced.

Caltrain:

While we celebrate Caltrain electrification finally in service, I have to confess mixed feelings. To quote Pyrrhus of Epirus: "One more such victory and we are undone". For those of us advocating more electrification, that dollar per mile figure for putting up the wires will be a rod that others will use to beat us, especially the hydrogen lobby. Other lessons that we hope will be learned will be to reduce the level of consultant input, much of which was really bad advice. And of course their invoices will still be paid. We need an electrification group at State level to oversee a continuous program rather than Caltrain being a one of a kind. I hope that the "sparks effect" causes ridership to take off and justify further extension of the wires.

Surfliner and Starlight:

Another good question about misinformation. Why is the Coast Starlight schedule not included in the Surfliner timetable? With only two Surfliners and three buses between Santa Barbara and San Luis Obispo the Starlight fills a gap in the service which may be the difference between someone buying a ticket or not taking the train. I've asked the agencies why. I'll let you know if they respond.

High Speed Rail

California High Speed Rail Authority has appointed a new CEO to take over from the retiring Brian Kelly. Ian Choudri was previously with HNTB, a consulting firm that has done a lot of business with the Authority and many other agencies in California. We hope to secure an interview with Mr. Choudri in time for the next issue.

Thruway Buses

Finally the wording is getting out about using Amtrak Thruway buses for "local" trips without a train segment .

Thruway Bus at the Capitol, Sacramento. Photo: Paul Dyson

New Redding to Chico bus line starts this week

Redding Record Searchlight August 20th 2024 – Michelle Chandler

Travelers will be able to take Redding Area Bus Authority transportation from downtown Redding to Chico starting Thursday under a new agreement with the San Joaquin Joint Powers Authority.

It's the first RABA bus service to operate outside of Shasta County, said Transit General Manager John Andoh.

"We're hoping that it'll get more riders, especially people going between Shasta and Butte counties," he said.

"I figure, like, maybe we can get folks that live in Redding that would want to go to classes at California State University, Chico, for instance," said Andoh.

He said the agency is hoping the expansion means ridership will increase from the current 10 to 15 passengers per trip to 25 to 30 riders, or "half a full bus. So that would be ideal for us."

How Amtrak's 'bus bridge' operates

Currently, the bus out of Redding carries passengers from Redding to Sacramento via Amtrak's Thruway bus service that is open only to Amtrak passengers heading for the train station in Sacramento.

California law hadn't allowed people to buy Amtrak tickets just to ride the bus. But lawmakers in 2022 changed the law so public transit agencies like RABA that operate an Amtrak route now can sell bus tickets without requiring people to also ride the train.

That translates to new travel destinations for RABA bus riders, since passengers can ultimately buy an Amtrak bus ticket between Redding, Red Bluff and Chico and connect to buses going to Sacramento or Stockton, all stops along the Route 3 corridor. "And they don't have to ride the train," said Andoh.

People can see the bus-only schedule on the RABA website and buy Amtrak tickets for bus travel on Amtrak.com.

Amtrak's operator in the region, the San Joaquin Joint Powers Authority, was hearing that the public wanted a bus-only service along the Interstate 5 corridor that did not also require the purchase of a train ticket.

The authority is paying RABA $392,000 annually to operate the Redding-to-Chico bus service 365 days a year, said Andoh.

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Address: _____

_____

City: _____ **State:** _____ **Zip:** _____

Phone: _____ **Email:** _____

DUES LEVEL

☐ Regular ($45)

☐ Student ($25)

Donations above the minimum level are welcome

Members: Please notify the RailPAC Office if and when there is a change of address. RailPAC is not responsible for re-delivery if mailed to an outdated address.