

California Rail News

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Mineta's Real Amtrak Agenda

DIVERT FOCUS FROM AIRLINES' \$10 BILLION LOSS?

**"Amtrak is on financial life support."
Norman Y. Mineta, U.S. Secretary of
Transportation**

Who's on life support? Is Amtrak being artificially resuscitated or is it the domestic airline industry? Former aviation lobbyist and U.S. Secretary of Transportation Norman Y. Mineta has called for a zero Amtrak budget for 2006 and quibbled with Amtrak President David Gunn about the availability of \$60 million in reserve funds to keep the national railroad operating until October 1. But at the same time, a meltdown of much larger scale is happening in his old industry.

High oil prices have vaporized any profit hopes for the global aviation industry, which already lost more than \$36 billion between 2001 and 2004. "The fifth horseman of the apocalypse, the extraordinary price of fuel, is destroying our profitability. In 2004 alone airlines lost \$4.8 billion and we expect to lose another \$6 billion in 2005," said Giovanni Bisignani, CEO of the International Air Transport Association (IATA).

Figures for U.S. carriers are even more discouraging, since Asian, African, Middle-Eastern and European carriers made profit. In 2004, U.S. carriers lost \$9 billion due to low demand, high labor costs and fare wars launched by low-cost carriers, Bisignani said.

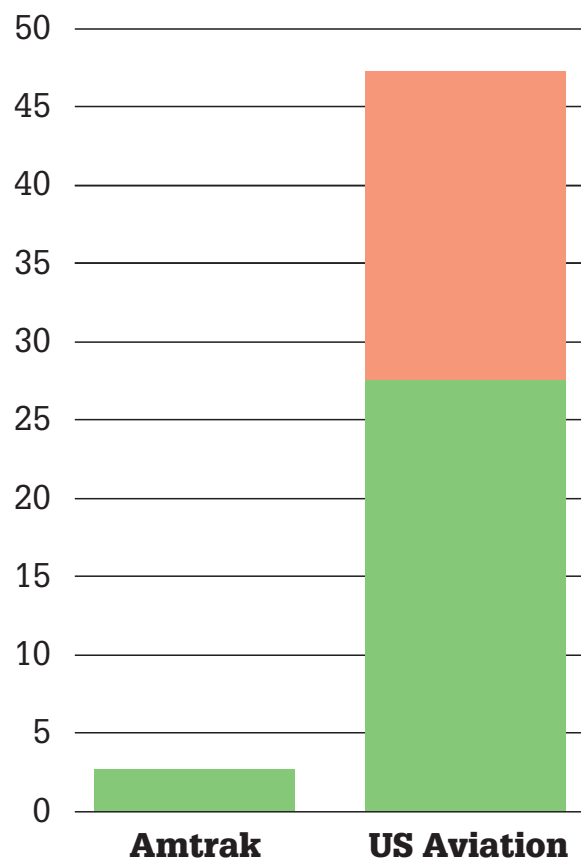
A 31-percent increase in fuel costs meant airlines worldwide may pay \$83 billion this year for fuel, compared with last year's \$63 billion. Industry observers have estimated that U.S. carriers could easily end up more than \$10 billion in the red if the fuel bill rises a similar percentage from \$28 to \$37 billion.

Captain Duane E. Woerth, President of the Air Line Pilots Association, testifying before the U.S. Senate last fall, pointed out that 2005 industry financial projections were based on \$35 per barrel jet fuel, but that \$50 per barrel fuel was the likely reality. As of May 27, jet fuel was trading at \$62 per barrel, after having spiked higher.

The IATA says every \$1 gain in the barrel price of oil produces a \$1 billion loss for airlines worldwide. Woerth cited each \$1 gain in barrel price having a \$450 million negative impact for American carriers. Woerth bemoaned the economic state of the domestic air industry. "Yields continue to deteriorate at an alarming rate, with domestic yields showing no sign of increasing.

Life Support

(Billions) 04&05 Federal Grants & Projected Losses



There is absolutely no pricing power in this industry – we can't even get a fuel surcharge to ease the burden of high oil prices."

Even before recent fuel-price problems, U.S. airline losses exceeded all industry profit since 1960. "The fiction of a profitable air industry has totally collapsed. Individual carriers like Southwest, within the framework of a heavily subsidized industry are profitable, but the industry itself is unsustainable" said TRAC Executive Director Alan C. Miller.

Aviation sucked up federal subsidies of \$13.9 billion in 2004 and \$14 billion in 2005 plus \$9 to \$10 billion in investors' funds each year. "Our government has lost all sense of balance in supporting the different modes of transportation, said Miller. "Congress has ignored huge aviation subsidies while continuing to squeeze Amtrak. Gunn gave Congress major reforms as it requested, but Congress seems to have ignored Amtrak's

very real progress."

Some industry observers have suggested that Mr. Mineta has mounted the Amtrak attack specifically to divert attention from the catastrophic financial failure of America's civil aviation industry on his watch. "When you compare the current economics of air travel and the economics of Amtrak, you really have to question the validity of Mr. Mineta's rhetoric on the subject," said Miller.

Mineta's Amtrak attacks can be seen as a last-ditch effort to prevent a new direction from emerging in national transportation policy, at a time when rising fuel costs have devastated SUV sales, Ford and GM, truckers, the travel industry, far-flung suburban growth, and just about every US industry that depends heavily on petroleum.

Crude futures have hit \$60 per barrel, yet there are few signs that demand will slacken soon enough to save Detroit or the airlines. There is no quick fix for those who pinned their plans for profit on low-priced oil.

Ironically, Mineta's pressure on states to provide Amtrak funds has only made it more obvious that Federal priorities are wrong. After all, the oil market has spoken and it seems to be saying trains are the future.

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COAST OBSERVATIONS

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Rail Division Chief Chosen



In June, Caltrans Director Will Kempton announced the appointment of William D. Bronte as Rail Division Chief. Bronte oversaw the California Car project and other capital programs, and then was Deputy Chief of the Rail Division under Warren Weber, who retired at the beginning of 2005.

Bronte is highly regarded by Caltrans rail staff, who see him as motivated to make the program more cost-effective and responsive to customer needs.

Capitol Update: 2005 Rail Bills

Here is a quick update on the bills TRAC has been following, courtesy of TRAC lobbyist Tyrone Bland:

AJR 18 - Jones/Leslie This Assembly joint resolution would memorialize the Congress of the United States to provide adequate operating and capital funds for Amtrak at specified levels, to preserve and improve the 4 national network Amtrak trains currently serving California and to establish multi-year capital funding dollars available to the states on a matching basis.

Assembly Coauthors: Arambula, Baca, Bass, Berg, Bermudez, Calderon, Canciamilla, Chan, Chavez, Chu, Cohn, Coto, De La Torre, Dymally, Evans, Frommer, Goldberg, Hancock, Houston, Huff, Karnette, Klehs, Koretz, Laird, Leno, Lieber, Liu, Matthews, Montanez, Mullin, Nation, Nava, Negrete McLeod, Nunez, Oropeza, Parra, Pavley, Ridley-Thomas, Ruskin, Saldana, Salinas, Torrico, Umberg, Vargas, and Yee. Senate Coauthors: Senators Ducheny, Kehoe, and Maldonado.

TRAC POSITION: Support

STATUS: Currently in the Senate, on 6/13/2005, read second time, amended, and to third reading on 06/15/2005

AB 1067 - Frommer Existing law provides that it is unlawful for a person to take various actions with the intent to derailing or wrecking a train. A violation is punishable as a felony by life imprisonment without possibility of parole. This bill would provide that a person who unlawfully and with gross negligence places or causes to be placed any

obstruction on a railroad track or who commits another act that proximately results in the damaging or derailing of a train, or injury to passengers or employees, is guilty of a crime. By creating a new crime, the bill would impose a state-mandated local program.

TRAC POSITION: Support

STATUS: Passed the Assembly, referred to Senate Public Safety Committee, hearing 6/28/2005

AB 713 - Torrico Existing law provides for submission of the Safe, Reliable High-Speed Passenger Train Bond Act for the 21st Century to the voters for approval at the November 7, 2006, general election. Subject to voter approval, the act would provide for the issuance of \$9.95 billion of general obligation bonds, \$9 billion of which would be available in conjunction with any available federal funds for planning and construction of a high-speed train system pursuant to the business plan of the High-Speed Rail Authority, and \$950 million of which would be available for capital projects on other passenger rail lines to provide connectivity to the high-speed train system and for capacity enhancements and safety improvements to those lines.

This bill would instead provide for submission at the November 4, 2008, general election and make other related changes.

TRAC POSITION: Monitor

STATUS: Referred to Senate Transportation and Housing Committee on 6/09/2005 for hearing on 6/21/2005

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The voice for a modern
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Amtrak Coliseum Station



Oakland Coliseum finally got direct Amtrak service in June, 26 years after the first funding of the station project. Capitol Corridor staff brought it to the top of the capital priority list and Caltrans Rail staff rescued funding which was about to expire. Nine departures weekdays and twelve departures on weekends will make the stop quite useful, especially for those catching a game, a plane, or a Dublin line BART train. Capitol Corridor plans are for additional services to begin by next year, with extension of several services to San Jose.

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Edmonton Transit supported its trolleybus trunk route by networking crosstown buses to it at main transfer points.



GO Transit combined hourly lakefront rail trunk service with a network of timed hourly bus feeder connections.



Swiss integrated timetables apply to both trains and buses. Paint liveries are often unified to highlight the service coordination.

The Case for Hourly Pulse Service

(continued from Page Three)

Bakker of the University of Alberta, one of its postwar proponents at the Netherlands Railways. In 1962, the city-operated transit system of Edmonton, Alberta adopted the integrated timetable concept with its creation of a trunk and feeder route system. Instead of all bus routes coming downtown, a trolleybus route was designated as a trunk, and was given express status, stopping only at main transfer points. First at Jasper Place, then gradually throughout Edmonton Transit, schedules were coordinated to provide timed connections between routes.

The best known North American implementation of the Integrated Timetable concept began with the 1967 launch of GO Transit, Toronto's regional carrier operated by the Government of Ontario. GO Transit has gradually established a regional network of service based on its hourly Lakefront rail trunk route.

As a key step in creation of this integrated network, in the early 1970's GO Transit took over responsibility for suburban bus services from the Toronto Transit Commission, and reformed the bus service to provide timed connections to meet every train. To better market the service, it adopted a unified fare structure and paint scheme to be used by all bus contractors. GO Transit's success spawned widespread emulation of its equipment and rail service offer, but to date, new North American rail commuter operators have not adopted its most marketable feature, seamless multimodal timed connections throughout a region.

Brian Sullivan and Greg Thompson, who were both involved in Canadian systems which adopted the concept, did much to popularize the adoption of the integrated timetable among western Canadian and various progressive American transit systems. In the United States, the Integrated Timetable has been most widely adopted among smaller transit systems that could not afford more frequent headways than half-hourly. The advantages of a network that does not strand passengers mid-journey are particularly obvious for such systems with sparse frequency.

Slow Adoption of the Concept

"Timed transfer" as the concept is typically referred to in North America because of the 1976 Sullivan article*, has also spread with the implementation of light rail, which can become a mass carrier when it is properly fed by timed bus connections. The Sacramento, California light rail network grew from 11,000 daily riders to 26,000 daily riders in the five years following adoption of timed transfers at six hub stations.

Paradoxically, what began in Europe as a railway operating technique to deal with an undercapitalized rail infrastructure has become so identified with transit marketing in the United States that some operating personnel on American railroads view it as a transit

technique unsuited to railroad operations. The truth is that the integrated timetable makes rail operations more reliable and capital expenditures more cost-effective because it forces regular use of the same sidings.

The only broad adoption of pulse schedules on U.S. railroads was Carl Englund's short-lived 1966 restructuring of New York Central service. Englund claimed, however, that the concept did have earlier American antecedents, including the timed connections at Springfield, Massachusetts and White River Junction, Vermont. At each of these hubs, multiple passenger railroads were able to profitably coordinate to exchange major traffic.

California Rail-Bus Network

From 1980, based on Englund's advice, California began building a statewide rail-bus network dependent upon the integrated timetable concept. At the time, the San Joaquin, a vestige of a service of statewide reach, suffered from lack of Los Angeles and Sacramento connections, and was widely considered a Bay Area to Bakersfield hinterlands train. Addition of Bakersfield-Los Angeles and Stockton-Sacramento bus connections produced a quadrupling of ridership within six years and powered the expansion of the service from one to six trains daily. Much of the new traffic was generated in Southern California, by passengers transferring twice.

The network of buses feeding the San Joaquin trains now extends to Eureka/Arcata, Redding, Reno, Los Vegas, Palm Springs/Indio, and San Diego. It is now well understood by

Caltrans staff that the train depends upon the buses for its success, since the majority of revenue is produced by traffic using these segments. Bakersfield boardings are known to in fact mostly be Southern California traffic.

At the same time, Amtrak schedule managers have resisted the idea that bus connections in Los Angeles are an important source of Surfliner revenue. Reporting techniques have tended to mask the fact that a good share of the 140,000 San Joaquin trips stated to have Los Angeles as an endpoint actually involve Surfliner travel. The longest and most profitable trips use the Surfliners. Only this year has it emerged that bus feeder service is responsible for 15 percent of total Surfliner receipts, compared to about 5 percent for commuter fares.

Likewise, Metrolink-Surfliner transfers, while a daily feature of Southern California travel, are submerged by both systems' accounting methods.

Today: Broken Connections

Unpopularity of integrated timetables among operating personnel eventually led to elimination of much of the through scheduling that for over a decade allowed convenient train-bus-train connections through Bakersfield and Los Angeles. At present, passengers on San Joaquin schedules arriving in Los Angeles endure an average 73 minute wait before the next Surfliner departure, far worse than the average 43 minutes in 1995 and the 40 minutes in 1991. San Joaquin riders would benefit from regularization of the Surfliner schedule.

Amtrak California trains and buses have also had an unfortunate lack of schedule connections with Southern California Regional Rail Authority's Metrolink commuter service. The two organizations' missions focus on two distinctly different types of travel. Amtrak California is aimed at serving longer-distance inter-regional travel, which typically peaks on weekends. Metrolink's network was optimized to serve weekday peak hour commuters.

Delivering on Rail2Rail Promises

Passengers have eagerly responded to even tentative efforts to make the two systems work together. Rail2Rail fares have helped boost commuter traffic, but true seamless integration of service on clock headways could make rail a mainstream mode all day.

The traveling public would be able to seriously consider rail for many more trips if the two networks built upon each other's strengths and coordinated their schedules for compatibility and connectivity. Restructuring service is a big task, but the benefits are huge. Clock headways would add useful travel capacity, provide systematic hourly connections to destinations throughout Southern California, and address the adopted state goals of better mobility, congestion relief and energy efficiency.

Fortuitously, three Southern California routes, Metrolink's San Bernardino and Santa Clarita corridors and Amtrak's Surfliners,

Chaos

Weekday (Non)Connections at Los Angeles as of June 2005

Amtrak Arrival from S.D.	Metrolink Departure to Lancaster	Minutes of L.A. Delay
8:50 am	9:15 am	25
9:50 am	11:42 am	112
10:50 am	11:42 am	52
12:15 pm	1:50 pm	75
1:35 pm	1:50 pm	15
2:40 pm	3:45 pm	65
4:05 pm	5:00 pm	55
5:45 pm	6:30 pm	45
6:45 pm	7:35 pm	50
8:50 pm	9:00 pm	10
11:05 pm		

Note: 10 and 15 minute connections are not protected or guaranteed connections.

*The timed transfer focal point: a refinement in public transport service design. Brian E. Sullivan, UTP Revue, 1/1976



Sacramento's timed bus connections are viewed as key to the success of light rail, given its low population density setting.



Service that runs like clockwork is easier for passengers to understand, especially when departure dots are right on platform clocks.



All Southern California passengers would benefit from network coordination that regularizes and simplifies service.

Southern California Timetables

have concurrently reached ridership levels that could support regular hourly schedules.

The key hanging point is how to share service costs and revenues of the improved network. There are several possible answers. For decades, costs and revenues of "pool trains" between Portland and Seattle were shared by Union Pacific, SP&S and Great Northern. The July transfer of Metrolink's operating contract from Amtrak to Connex suggests that operators may want clearer lines of demarcation.

A possible way to draw such a line would be for Metrolink to drop its lightly-used mid-day trips on the Ventura County Line, and let Amtrak extend Surfliner trips to Chatsworth or Moorpark, as long as Amtrak honors Metrolink fares for the extension segment. Amtrak's lucrative longer-distance trips to Orange and San Diego Counties make revenue per train mile on the Surfliners much higher than Metrolink's midday Ventura line trips.

Such a switch would allow Metrolink to redeploy its freed up sets to provide an hourly midday service between San Bernardino, Los Angeles, and Santa Clarita. The resulting schedules on both routes may actually be easier to dispatch and operate than the current one from the standpoint of meets.

Clock headways allow consistent use of the same sidings, making better use of recent capital improvements to the railroads. They also reduce stress upon dispatching personnel. Instead of each new meet being a new problem, a repeating pattern is created with identical meets six to seven hours in a row. This leads to more reliable operations.

Coordination at the Hub

What would regional hourly service mean

in practice? The largest benefit of regular clock headways is a set of planned and timed cross-platform connections at Los Angeles Union Station. Metrolink and Amtrak would mutually benefit from regularization and alignment of their departures from Los Angeles, especially between the peaks.

The European experience has been that pairing trains multiplies the available city pairs, creating an exponential increase in the market for casual trips by rail, while adding only marginally to train miles.

Imagine the traffic potential if each hour, the same platform at Los Angeles Union Station was shared by a Metrolink Santa Clarita to San Bernardino train on one side and an Amtrak Ventura to San Diego train on the other. Instead of linking 50 to 120 city pairs, as at present, each pair of trains would link three to four hundred city pairs.

Practiced all day in a dependable manner, this arrangement would revolutionize travel in California, making trains a mainstream mode.

Buses Complete the Network

Metrolink, like most North American operators of commuter rail, does not operate feeder motor coaches, but Caltrans has found them to be critical to the economics of its train network. Operating costs average \$2 per mile, but revenues on Southern California routes average over \$5 per mile, due to the effects upon rail trip sales.

It appears both Metrolink and Caltrans would benefit from augmentation of the State's feeder bus network in Southern California and integration of it into the hourly pulse. Bakersfield-Newhall-Van Nuys,

Indio-San Bernardino, and Hemet-Riverside-Claremont, currently operated as part of the San Joaquin feeder network, are good candidates for expansion of service aimed at Southern California destinations.

Where there are missing trains in the hourly network, buses could fill in to provide convenience to passengers. This appears useful for the segments linking Santa Barbara, Lancaster, and Riverside to the network. In other cases, such as Metrolink's Riverside-Pomona-Los Angeles run, the leap to hourly service is probably too big to make with buses.

However, there are other significant inter-city travel markets not currently served which could support buses with expected revenues. These include interconnections from the hourly network to MTA end stations, along with UCLA, Santa Monica, and population centers far from the tracks in western Orange County and eastern Ventura County.

Stretching California Resources

An hourly rail and bus network that spans from Santa Barbara to Palm Springs and Indio, from Bakersfield to Hemet, from Lancaster to San Diego is clearly within our reach.

Sufficient rail equipment and track capacity already exists to operate an hourly network. The market for such service appears robust enough to cover between 50 and 75 percent of the marginal costs of operating additional frequencies, much better than most transit.

All that is missing today is a persuasive public leader who sees the benefits to regional mobility of such a network and who is dedicated to convincing Metrolink, Caltrans, and Amtrak to put aside their differences and work together to make it a reality.



FRA: KEEPING RAIL SAFE & OBSOLETE

by Eric McCaughrin

What if the FAA required that jet aircraft be able to survive crashes into the ground?

Or if the FHWA said automobiles had to survive any head-on crash at 60 mph into a tractor trailer without deformation?

Even if such vehicles could be engineered, they would be far too costly to operate. But for passenger trains, that is precisely what the FRA has been doing.

It is an arcane government agency few have ever heard of. The Federal Railroad Administration (FRA) was created in 1966 to set and enforce railway safety standards. And certainly in terms of safety, the FRA has been wildly successful passenger rail is perhaps the safest mode of transport in the US. But many rail advocates argue that the FRA regulations have not only come at too high a price (by making rail prohibitively expensive) but often are completely nonsensical.

The Acela Fiasco

Amtrak's botched attempt at high-speed train is a good case study of problems caused by the FRA. As originally designed, Acela was supposed to provide high-speed rail service on the Northeast Corridor (NEC) between Boston, New York, and Washington DC with speeds as high as 150 mph.

In order to procure the world's best off-the-shelf train for the least amount of money, Amtrak decided to buy an existing design from a European or Japanese manufacturer, who have decades of experience building and operating high-speed trains. The winner of this competition was a consortium of Bombardier and Alstom (the French TGV builder).

Then, in 1999 with Acela planning fully underway, the FRA pulled the rug out by issuing regulations for high-speed rail service requiring trains to withstand 800,000 pounds of "buffing" force without deformation of the car body's structure. [Ed. Note: "Buffing" is a word rarely used except in relation to impacting railroad cars. The Oxford English Dictionary refers to it as obsolete and cites an 1835 patent application as its example use of the word.] The 800,000 figure is an arbitrary number dating back to the 1920s; since 1999, the FRA mandate was increased to 1 million pounds by "Tier II" rules.

The buffing requirement confounded Bombardier. Train weight is of crucial importance as it affects the amount of track wear, noise, and energy costs. To meet the buffing regulation, the train would have to be significantly bulked-up. The result was a high-speed train nearly twice as heavy as its European counterparts. The Acela has been described variously as a tank-on-wheels and a bank-vault-on-wheels. Indeed, an overweight train like Acela would be banned from the European high-speed rail network.

Because the extra weight put so much strain on the train body (never designed to handle such loads) trainsets suffered excessive wheel wear, cracks in the yaw damper and brake rotors, and other problems which can probably never be completely fixed. The original contract called for trains to run 400,000 miles between equipment failures, but Acela can barely manage 20,000 miles.

SUV Safety Theory

FRA staffers say it is unfair to compare US buffing standards with those in Europe because passenger rail in the US has to contend

with more (and heavier) freight traffic. Like the soccer-Mom who thinks an SUV provides greater safety, the FRA figures collisions are inevitable and heavier is better. And just as an SUV is a hazard to other road users, the same is true with the Acela. Amtrak bitterly complained that the heavier Acela trains would be potentially lethal against lighter commuter trains on the NEC in the event of a collision.

And heavier trains are a lot more expensive to operate, which means higher fares and fewer trains running to fewer places. This in turn means travelers often resort to driving cars, which is 10 to 100 times more dangerous than rail travel. In other words, even if one accepts the premise that the excessive US buffing standards make train travel safer, they may in fact be counterproductive by diverting potential train riders to automobiles, causing many times more highway fatalities.

The TGV builders are famous for the efforts that have gone into weight reduction, in particular their bilevel TGVs which have the lowest weight per passenger of any high speed train.

Commuter Rail

Even when there is little possibility of a passenger train colliding with a freight train, FRA buffing regulations still apply. These days, relatively few freight trains run on the Caltrain line, but Caltrain must still run overweight, fuel-gulping dinosaurs because the line connects to the national rail network.

The situation is particularly absurd when one looks at the Long Island Commuter Railroad (LIRR) in New York City, which has no freight traffic and a modern, automatic train control system to prevent collisions. Technically, it is still a freight railroad subject to FRA rules. Thus, LIRR's new M-7 railcars weigh an astonishing 125,000 lbs – twice the weight of a non-FRA compliant BART car – on the off-chance they might collide with a 100-ton coal car in Manhattan.

Train Safety Around the World

European and Japanese rail operators believe the best way to survive a train accident is to simply not have one in the first place. Their design philosophy is to rely on modern signaling and proper maintenance to prevent collisions and derailments.

There are also smarter, better ways to improve accident survivability than just running heavier trains. One ingenious solution is the articulated cars used by the French TGV and Spanish Talgo. While traditional railcars are joined by a simple coupler, an articulated train physically connects two railcars to the same truck so that they function as a single unit. This not only saves weight (by eliminating one truck per car) but increases the stability of the trainset.

Also, articulations significantly reduce the chances of the train jack-knifing, a safety feature credited with saving lives on a number of occasions.

Implications for California

Assuming California's budget mess can be fixed, the California High Speed Rail Commission (CAHSR) will build a 224 mph Los Angeles-San Francisco rail service. Because it may run on conventional tracks in urban areas, the trains might have to satisfy FRA Tier II rules. Officially, CAHSR has no problem with the rules, but many question how the system could achieve operational self-sufficiency. An Acela-type train would incur prohibitively high track maintenance and electricity costs.

As well, FRA rules could make it more expensive to implement "eBART" type Diesel Multiple Unit (DMU) extensions currently being studied by BART. A DMU is basically a high-tech bus on steel wheels. In Europe there are thousands of low-cost DMUs providing rail service to remote towns and villages, with populations as small as 4000 persons. It would be hard to provide a similar type of service in the US as long as the FRA requires DMUs to lug around tons of dead weight.

In both Europe and Japan, a competitive business exists in the DMU marketplace. But that market is off limits to US transit agencies because the FRA effectively created a trade embargo. A company like Siemens would incur prohibitively high retooling costs to redesign its products for a niche market.

With FRA-compliant cars not widely available, transit agencies wanting to use DMU equipment in the US have had to take extraordinary measures. Sonoma-Marine rail planners, for example, are seriously considering the use of refurbished Budd RDC cars manufactured some 50 years ago!

13 Budd RDC cars were refurbished for use on the "Trinity Rail Express" in Dallas. With modern European and Japanese equipment off-limits, this antiquated 1950's design is nearly all that is available to transit agencies running under FRA rules.

Hills and Curves

In the mountainous West, the FRA mandates make it impossible to run competitive rail service in hilly terrain. The dead weight necessitates low speed and/or excessive fuel consumption when climbing hills. On heavily-used passenger lines, greater weight reduces the amount of safe unbalanced superelevation, i.e. how fast a train can go around curves. Because of the Acela's inability to navigate curves on the New Haven line, a trip on the Acela Express from New York to Boston loses 30 minutes compared to best practice in tilt train usage. Eliminating that 30 minutes by straightening curves would cost on the order of \$1 billion.

The JR Hokkaido series 281 represents industry best practice in tilt DMU. The 3 hours it takes to travel the 200 mile Sapporo-Hakodate route on a line that is one-third curves is a very respectable result. The new 281 reduced journey time by 47 minutes and killed off air service between the two cities. Japan operates the world's lightest and safest trains, but according to the FRA the 281 is unsafe.

Besides writing on energy and environmental issues, Eric McCaughrin is known for his bicycle activism and his film, *Think Big*.



BRIDGE CRACKS SMILE ...OFFICIALS WINK

by Robert Freehling

Welders working on foundations for the viaduct section of the new Bay Bridge have complained to the FBI of exposure to toxic manganese fumes, pressure to rush their work, and flaws in up to 1700 welds. Add to this a hellish 130° working environment, and you can understand why some employees might not be happy. The Feds, Caltrans and the state legislature were unconcerned about working conditions (much to the chagrin of the welders), but they were very interested to find out if there are faulty welds.

Proving claims of poor workmanship is thorny, as the vast majority of welded steel parts are encased in massive concrete, and submerged beneath the waters of San Francisco Bay. If the welds are bad, it could require dismantling years and a billion dollars worth of construction. This would be devastating for a bridge that already costs \$5 billion more than original estimates, and is so beleaguered with difficulties that it appears as far from completion today as when it was first designed.

Enter the Federal Highway Administration (FHWA), which ordered all work to stop in April, about a month after the welding story first appeared in the *Oakland Tribune*. This clearly gave plenty of warning for the contracting group, KFM Joint Venture, to make sure new welds could withstand any scientific scrutiny.

"Independent" inspectors were called in, paid for by FHWA, the lead federal agency in charge of the bridge project. A number of exposed welds were visually examined, many of which were incomplete since work had been stopped in midstream. FHWA then took control of the inspection by selecting welds for lab testing (from ones begun after the *Tribune* article was published), choosing what tests were to be performed, and which were not to be performed. One testing lab (Roy Teal, Inc.) was careful to state in its report the following disclaimer:

"Confirmation of the welding processes used, actual welding parameters, prior quality control, prior quality assurance and prior nondestructive testing was not within the scope of work assigned at this time, and therefore was not done."

With 1700 welds in question, FHWA only picked three welds for lab testing, one

of which was "chosen at random" and never alleged to contain flaws. Another lab reported that representatives from FHWA, Caltrans and even the contractor KFM, followed the sample welds to the lab to witness all tests. No "significant" problems were found; Caltrans, bridge promoters in the legislature, and the *San Francisco Chronicle* were quick to pronounce all 1700 bridge welds "safe."

There are several disturbing cracks in the official story. Workers reported a number of problems including curved fractures in welds, some as long as 20 inches, that they nicknamed "smileys."

Official reports from the labs can hardly be called flat denials of the welders' allegations. John Fisher and Associates describes, in technical language, how "early in 2003, problems developed with the highly restrained joints ... as a result of hydrogen cracking and brittle fracture when the crack extended into the pile or pile sleeve base metal..." He states that these welding flaws were later corrected.

Mayes Engineering reported that at one of the two weld sites (labelled 5D) alleged to be inferior, that the "welds... while meeting ... minimum surface profile requirements showed the poorest surface profile of any weld in the ... footing structure.

Teal's executive summary refers to "a failed PJP (partial joint penetration) groove weld," with "linear indications," meaning magnetic testing showed further flaws in one of the three recently tested welds.

Teal's summary conclusion is far less definitive than Caltrans', vaguely stating "most welds, although incomplete at many locations, generally conformed to the quality requirements."

Workers stated that they were ordered by KFM supervisors to patch over inferior welds so that potential structural problems could not be seen, or even detected magnetically by inspectors. This would amount to fraud on state and federal contracts. While KFM and Caltrans vehemently deny any wrongdoing, it is hard to proceed when the roughly 1700 questionable welds made before the story was widely publicized remain untested.

Fisher reported that the design could withstand some isolated flawed welds, but does not say what would happen if there are many bad welds. And while Teal found "no evidence of major or unacceptable" problems, the report notes that the "conclusions stated herein apply only to those locations specifically designated." That's hardly the clean bill of health state officials and most of the press were claiming. Some flaws may also be invisible to magnetic testing used by the labs, which only "see" a limited depth into the metal; the gold standard is "destructive testing", essentially bending the welds until they break, which was not done.

The published reports raise a number of questions, but in a remarkable exercise of bureaucratic censorship, FHWA has ordered the *Oakland Tribune* not to speak directly with the laboratories. Behind the veil, those who want to push the project forward are clearly covering their tracks, trying to project a confident image as the Bay Bridge project careens from one crisis to the next. To increase public trust, contractor KFM has hired a PR consultant (with a high profile customer list: Michael Moore, Gray Davis, Bill Clinton, etc.) to repair what it sees as the real damage caused by the welding problems. While the "Build the Bridge" crowd at KFM, Caltrans, the *Chronicle*, and the state legislature pretend that the coast is clear, the FBI investigation will continue.

See *Oakland Tribune* Coverage at:
<http://www.insidebayarea.com/baybridgewelds>

Coast Observations

AS A NEW BRENDA light rail car (the first of a 50 car order for the Eastside project under construction) arrived via a super transporter jet, it seemed to signal a new chapter in Los Angeles... NEW MAYOR ANTONIO VILLARAIGOSA, elected with a very aggressive pro-rail agenda that included Red Line subway expansion, is taking over the chairmanship of Metro (formerly MTA). One of the items to watch later this summer will be an updating of Metro's Long Range Plan... MEANWHILE, TUNNEL BORING MACHINES are being lowered in East LA for its subway segment and funding has been approved for Exposition light rail from downtown past USC to Culver City... UP's ANTI-PASSENGER attitude went a step or two worse this spring, as the railroad refused to discuss new Amtrak service Auburn-Reno or Sacramento-Redding... TEHACHAPI LINE rebuilding on the UP will go through the peak of summer traffic, impacting trains on BNSF. There are fears that San Joaquin trains may become even more unreliable this summer. For an advance check on how late trains are running, call 1-800-USA-RAIL and say "train status" and your train number... TRAC HELPED SF'S TRANSBAY TERMINAL project survive a challenge from a developer with competing plans last month. TRAC gathered signatories for an amicus brief filed by the Sierra Club, PCL, RAFT, NARP, Bay Rail Alliance and San Francisco Tomorrow. The trial court's stop-work order was rescinded by the appeals court where the brief was filed... SACRAMENTO LIGHT RAIL continues to expand and change, with a switch of route destinations this month making Watt-I-80 pair with Meadowview and the East Line terminate downtown. Folsom service will be in full test operation by mid-August and work on the Amtrak extension will be in full swing by September. Folsom will begin service October 15 but the start date on the Amtrak extension is still unknown... GARY PATTON OF SANTA CRUZ, a longtime environmental activist, is the new executive director of the Planning and Conservation League, of which TRAC is a member. PCL partnered with TRAC on the 1990 rail initiative. Patton is a supporter of passenger rail... ON JUNE 21, A HOUSE Appropriation Subcommittee confirmed a \$550 million amount for Amtrak in 2006. Amtrak President David Gunn calls that a shutdown level. Gunn said "Regardless of the subcommittee's vote ... I don't believe that rational people-lawmakers governors or simply our regular passengers—want to see passenger rail service shut down, and I continue to hope in the end that reason prevails"... YOUR OPINIONS SAVED AMTRAK IN THE PAST, and can do so again. Please write or send an e-mail to your Senators and Member of Congress NOW to assure you can ride next year to: Hon. _____ House of Representatives, Washington DC 20515 or Sen. _____, Senate Office Building, Washington DC 20510. At www.trainriders.org you can click the flashing blue button that allows you to enter your zip code and get the name of your member of congress, then click to send an e-mail...

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SANTA CRUZ RAIL SERVICE ADVANCES ON 2 WHEELS

by Micah Posner

A new alliance with well organized local bicycle advocacy groups might just get train transportation in Santa Cruz County back on track. At issue is a 32-mile stretch of track with potential from passenger service in the populated spine of the county from north of Santa Cruz to Watsonville/Pajaro. Despite availability of \$11 million in Proposition 116 funds, prior rail service proposals have fallen victim to battles over land use and development. However, in the last few years, a move for a trail next to the tracks has helped get trains back on the agenda.

Ironically, the first public call for a rail trail came in 2000 from a pair of County Supervisors opposed to trains, Jan Beautz and Ellen Pirie. Their public letter called for serious consideration of a rail trail facility for the use of bicyclists and pedestrians in Santa Cruz County. Presumably, the mid-county Supervisors hoped that a trail might some day derail train service.

In 2001, the call for a rail trail was taken up by the newly-formed Friends of the Rail Trail (FORT), motivated and inspired by the Rails to Trails Conservancy and funded by private group including a local organic food store. FORT was convened by Bill LeBon, a longtime local bicycle advocate with ties to the car-free and livable cities movements.

The last thing LeBon wanted was to preclude alternatives to automobile traffic. Thus the Santa Cruz Rail Trail vision quickly became a rail **with** trail idea instead of rails **to** trail, much to the consternation of elitist neighbors in mid-county who had long been trying to get trains out of their backyards. Freight trains continue to run the corridor at least three times a week.

By the end of 2001, Capitola Councilman and rail advocate Dennis Norton created a proposal to run a small recreational rail service from Aptos to Capitola as a way to access Proposition 116 funds for purchase of the rail right of way and to initiate train service. "My motivation was to do a light-weight, very local, commuter/ tourist system—to run it locally and give it the opportunity to expand."

Norton was happily overwhelmed by the support his proposal received, largely organized by bicyclists working with FORT. As someone with an interest in sensible planning, Norton is happy to see the train and trail interests working together. "I think it's a good marriage in that they are very compatible with each other and help finance each other. There is also the link between pedestrians/ bicyclists and the train itself. If you don't use a car you are likely to use a train."

Rails to Trails tapped some excellent resources, including local engineering firm Mesiti-Miller, who volunteered to do some initial survey work on the corridor. Their research showed that the corridor appears to be wide enough for both a train and trail based on studies done by Alta Design and



recently published by USDOT as "Rails-with-Trails: Lessons Learned."

Towards the end of 2002, Norton's proposal to use a non-subsidized tourist trolley as a means of tapping state Proposition 116 funds came under fire by the same anti-rail County Supervisors. After their attempt to kill the project without notice was stopped by invoking the Brown Act, a public hearing was scheduled for March of 2003.

FORT got to work building support for Norton's proposal by distributing 5000 color postcards. The graphic artist donated her time, as did the printer. Postage was paid for by Seascape Resort, which supports both the proposed train and trail. More than 4000 signatures, as well as hundreds of letters and emails were turned in, the biggest response ever for a transportation issue in the county.

More than 150 people showed up for the meeting, exceeding the room's capacity. Supporters sported painter caps with "11 million dollar bills" stuck to them highlighting the available state funds. A performance artist "Governator" questioned the sanity of turning down state money. US and state representatives voiced their support, as did schoolchildren, the elderly, college students, the Sierra Club, bike messengers, and the bicycle retail shop and manufacturers. In a surprise decision, the Commission voted to keep the project alive.

In November 2004, county transportation politics came to a head with the vote on Measure J — a ½ cent tax measure that purported to be for balanced transportation while widening Highway 1 in Santa Cruz County. There was nothing in the tax measure for trains, however, and very little for mass transit as a whole. The measure attempted to attract bicyclists by including \$21 million "for the rail trail." Upon closer examination, nearly all monies raised would have gone towards widening the highway. Friends of the Rail Trail came out against the measure, calling it "a net loss for the trail." The measure, though bankrolled by almost \$100,000 in corporate donations, lost by 24% — receiving 43% of the vote when it required 67%.

The group that coordinated the "No on J campaign" calls itself the Campaign for Sensible Transportation and is an alliance of the local Sierra Club, bicycle groups includ-

ing Friends of the Rail Trail, and citizens for sensible transportation planning. The group firmly supports rail service, and is pushing acquisition of the right of way as a first step towards building a trail and running trains.

In February of this year, Supervisors Beautz and Pirie, facing losing a vote over Norton's trolley, came up with a plan whereby the Commission would apply for the 116 money and start building the rail trail without specifically initiating train service. The idea that these two different projects should not be artificially tied together was seen as a real win for the viability of both projects and Norton and everyone else signed off on the project while being forthright about their continuing support of the train. Within a few weeks, FORT had published an Op Ed piece in the local paper voicing its support for the proposal while vowing to continue to push independently for train service and Norton's trolley won a preliminary vote of support, independent of Proposition 116 funding.

A recent Rail **and** Trail celebration put together by FORT, People Power and Bike Week featured a train ride up to Felton (graciously donated by local recreational rail provider Roaring Camp) and a mass bike ride back down. Train opponents blocked a part of the event that was to occur in mid county by calling Union Pacific with a threat to lie on the tracks. Their actions are being viewed with increasing skepticism by mainstream press as well as the public, who have taken to referring to them as "the Aptos NIMBYs." Rather than unplugging support for the train, prospective purchase of the rail right of way has become a conduit for excitement in the community about both the train and the trail, with cycling organizations at the forefront.

None of this is to say that a true passenger rail service is imminent for Santa Cruz County. Good news is worth reporting however, and with a real chance of buying the right of way on the horizon and a broad coalition forming for the train plus trail, the chances for passenger rail in this part of the state are better than they have been for at least a decade. And while many facets of train transportation remain murky, one thing is abundantly clear: when the train does finally pull into the station, there had better be plenty of room for bicycles.

Micah Posner heads up People Power, a grass roots Santa Cruz bicycle group.

TRAC SPECIAL EVENT IN SAN DIEGO



SAT. JULY 16 1-5pm

LOCATION: Historic National City Depot 922 West 23rd St, National City 2 blocks west off Bay Marina Drive exit of I-5 or VIA TRAIN 1/4 mi. walk west (go under I-5) from 24th St. Trolley stop.

TRAC invites all those interested in better passenger rail for California to attend an open meeting. There will be time to socialize and get to know the TRAC board and talk trains with fellow rail advocates.

Our board also welcomes two very special guests:

1) Linda Culp, Planner with SANDAG and representative on the LOSSAN corridor. Ms. Culp will speak to us about the entire southern coastal rail corridor including: Surfliners, Coasters, Metrolink, Interaction with freight service, and future corridor plans.

2) Patrick Montague, NARP Board Member, speaking on NARP advocacy for 2005 & 2006, Board and DC Staff reorganization, Amtrak's budget crisis, Legislative & local gov't relationships, enhancing state rail partnerships, and business grassroots support. **Photo: San Diego Trolley**