

# RAILS, TRENCHES AND THE FUTURE

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As one of the Del Mar Council liaisons working on efforts to relocate the rail line from the Del Mar bluffs to an inland location, here are key points that my research has confirmed support relocation of the rails off the Del Mar Bluffs to an inland location. Note that I speak only for myself and not for the city of Del Mar or for other council members:

1. **Capacity--the Del Mar Bluffs are the weak link in the system.** The rail corridor currently carries about 50 trains a day, with plans to go to 100 trains per day by 2035. Billions have been, and are being, spent in the corridor to improve service and reduce travel times--new bridges, positive train control, grade separations, station improvements, new engines and equipment, and more including ongoing work to double track (and eventually perhaps triple track) the entire rail line. The Del Mar Bluffs are difficult to impossible to double track for many technical reasons. Even if the bluffs could be double tracked, double tracking across Coast Blvd would require grade separation, and that would require either an unimaginable tunneling under Coast, or more likely elevating the rail above Coast (or a combination of both). Given rail grades cannot be steeper than about 2% (or the trains can't get going) this would require elevated, double tracked rail back probably most of the way to the fairgrounds!

Double tracking the bluffs would also require seawalls along the entire toe of the bluffs (which would accelerate sand loss and beach erosion diminishing our public beach) as well as upper bluff artificial stabilization changing the natural character of the bluffs irreversibly. Whether or not the Coastal Commission and other agencies with jurisdiction would approve such plans is open to serious question. Even if such a strategy were pursued and permitted, the relentless sea and rising sea levels would likely require regular maintenance and this "solution" would not be permanent. The costs for all this are significant and one can question if it would be money well spent. The current work proposed by SANDAG (phase 4 of 6 planned "temporary" stabilizations) is not a permanent fix. One hundred million plus is needed to complete these temporary fixes, yet they are expected to provide safety only until about 2050. Absent relocation of the rail line the Del Mar Bluffs will remain a weak link in the entire system in terms of safety and ongoing maintenance expense, and in terms of service efficiency.

2. **Safety.** Roughly a dozen people per year are killed by trains between Oceanside and San Diego. Some are suicides and some are not. A relatively high incidence of near misses occurs on the Del Mar bluffs. Relocation of the rail lines to an inland tunnel would alleviate problems on the bluffs. If the bluffs failed and a train went off the edge it would be a disaster unprecedented in San Diego, although it would not be the first time as a train went off the bluffs in the 1940's.



1940's train goes off the bluffs in Del Mar

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3. **Beach Access.** The rail line on the Del Mar bluffs does not have a safe, legal crossing between Coast Boulevard and Pensasquitos Lagoon/State Beach. Informal crossing of the rails on the Del Mar Bluffs is an important means of public beach access that has existed for decades. The rail line is a major barrier to public beach access that could be eliminated if the rails were moved inland.

4. **Economic Activity.** Last year I organized a meeting of north coast mayors to meet with representatives of the Port of San Diego to understand the importance of the rail line to the Port. Bottom line, the Port generates about \$8 billion a year in economic activity for the San Diego region,

with much of it dependent on this rail line. The Port expressed concern that the rail line be safe and reliable, and expressed concern over the situation on the bluffs in Del Mar. The Port is in a position to expand which is good for the region, and is spending its own billions on new and improved Port facilities downtown. Port plans depend in large part on safe, reliable, rail service for the long term. There are many other businesses, local, regional, national, and international, that rely on this rail line for the shipment of goods, all at risk of a Del Mar Bluff failure. On the passenger end, this rail corridor is the second busiest in the nation.

**5. Military Use.** The San Diego-LA rail line is designated as a connector line in the national STRACNET (Strategic Rail Corridor Network). Considerable military rail use occurs with the heavy Navy presence downtown and at Miramar, and with Camp Pendleton to the north. A rail line at risk on the bluffs potentially compromises national security. This risk could be eliminated by relocation of the rails to an inland tunnel.

**6. The Trench.** I am skeptical of the trench idea. The trench option will require seawalls, upper bluff treatment, significant grading and excavation of the bluffs, noise and other impacts to neighbors, and grade separation of Coast Blvd facing the same issues noted above. The cost of a trench is currently unknown, but is estimated in the \$300 to \$400 million range. It is a temporary fix good until perhaps 2075 or until the end of the century, still leaving the region with a long-term problem. Hundreds of trains passing in a double tracked trench would present serious issues for neighbors. At the required 55 feet wide (to accommodate double tracking and an access road) the trench would encroach much closer to adjoining homes. On the upside at least some access could be provided across the top of the trench, provided that venting for train exhaust is included.

**7. Tunnel Cost.** Five different tunnel alignments have been evaluated by SANDAG for relocating the rails off the bluffs. The one that makes the most sense to me is the Crest Canyon Higher Speed Alignment estimated at a cost of \$3.015 billion [see, SANDAG Report: CONCEPTUAL ENGINEERING AND ENVIRONMENTAL CONSTRAINTS FOR DOUBLE TRACK ALIGNMENT ALTERNATIVES BETWEEN DEL MAR FAIRGROUNDS AND SORRENTO VALLEY, prepared by HNTB Corp. December 2017]. While 3 billion is a lot of money, it is not so much when the economic value of the rail system is considered. For comparison purposes we are spending more than \$2 billion to bring the trolley from Old Town to UCSD, billions to clean Point Loma sewage for reuse, billions on double tracking and other rail improvements, billions on freeway and roadway improvements. In this context the cost of a rail tunnel may be justifiable given the problems it solves.

**8. The importance of rail service.** Every freight rail car can be one more semi-truck off the freeways. Every passenger on rail can be one more car off the road system. Moving freight and people from the road system to the rail system reduces GHG emissions and reduces road congestion reducing the need for expensive new freeway and road construction. If we are to meet our state mandated GHG and climate goals we need to improve our transportation system, and fixing the Del Mar Bluffs is part of that solution. The cost of building a new freeway, or even of freeway lane additions, can easily dwarf the costs of rail line improvements including a Del Mar tunnel.

**9 Adopted Plans call for the tunnel.** The current 2050 Regional Transportation Plan (RTP) adopted by SANDAG calls for relocation of the rails off the bluffs to an inland tunnel in 2050.

**10. Other Benefits of Rail Relocation.** If the rails were removed from the Del Mar Bluffs, valuable ocean front property would be opened to public use--for trails, biking, etc. Beach access could be provided. Costs for seawalls and stabilization efforts would be avoided. Noise and vibration impacts to neighbors would be eliminated. Economic use of this freed up land would be possible, potentially helping to pay for the relocation. Neighboring properties would experience benefits and increases in value.

1. **Tunneling technology.** Tunneling technology is advancing rapidly, by Elon Musk and others. People whose opinions I respect believe the cost can and will come down significantly. And, the new SANDAG "Grand Vision" includes potentially 100's of miles of high speed tunnels. In that scenario, a Del Mar tunnel would fit nicely.

All these reasons lead me to favor relocation of the rails from the bluffs to an inland location. But, as is often the case, there is another side to consider:

1. **Funding.** While the SANDAG 2050 RTP calls for relocation to a tunnel, there is currently no funding source identified. Many, including some experts in the field, believe funding for a tunnel is a long shot.

2. **TRANSNET.** SANDAG relies on TRANSNET tax revenues as key to its overall funding. Recently, it was discovered that revenues from TRANSNET were significantly over estimated. The amount now expected to be available to the region is billions less than expected. This puts a crunch on SANDAG's ability to pay for its many projects, including the tunnel.

3. **Federal and State Money.** Federal and state money are potentially available for rail projects, including a Del Mar tunnel. However, competition for these funds is stiff and the outcome uncertain. At minimum, local matching funds are needed to be competitive. Typically, the Feds and state want to see service increases for their money. They might argue that a Del Mar tunnel does not really increase service--it just relocates it inland. I would argue this point, but it is an issue.

4. **Interim versus Long Term Solution.** Significant money is being invested in interim stabilization of the bluffs because there is an immediate need to keep the rail line on the bluffs safe. I do not argue that point--we do need to keep the line safe. But, the 6 phase stabilization is temporary. While SANDAG acknowledges it is "in addition to" not "instead of" long term relocation to a tunnel, one can be skeptical. Experience tells us that once the line is deemed safe to 2050, the squeaky wheel is greased, at least for now, and it may be tough to keep the focus on long term relocation.

5. **Unknowns.** Significant environmental, economic (including cost-benefit analysis and alternative analysis), engineering, construction, service planning, and other issues need to be reviewed to properly evaluate any long term solution including relocation to an inland tunnel. Accordingly, and not surprisingly, there are many unknowns and uncertainties. But, based on what I know at this point in time, continuing our plans to relocate the rails off the bluffs to an inland tunnel is the best long term solution.

In my opinion the benefits of relocation to a tunnel far outweigh the downsides, and relocation is far superior to any of the options to try and keep the rails on the bluffs. In the long term we will be glad we relocated the rails, and will regret it if we don't.