Del Mar Bluffs The Weak Link in Rail Transportation

EXECUTIVE SUMMARY

The 2018/2019 San Diego County Grand Jury (Grand Jury) studied the economic impact of a potential bluff collapse in Del Mar severe enough to cause a prolonged interruption of railroad service for the transportation of both passengers and freight in and out of San Diego County (County). Such an interruption would have a significant impact of unknown magnitude on San Diego's economy.

The Grand Jury recommends that San Diego Association of Governments (SANDAG) give equal consideration for the needs of passenger and freight service in their five proposed plans for rerouting of the railroads through Del Mar. The Grand Jury also recommends that SANDAG rank the proposed plans for rerouting the railroads through Del Mar to enable the immediate participation of public agencies, environmental groups and the public in the selection process.

BACKGROUND

Between August 2018 and February 2019, six bluff collapses have occurred in a two mile section of the Del Mar Bluffs.¹ Each bluff collapse caused a short-term interruption of passenger service on the railroads. The North County Transit District (NCTD) activated contingency plans and passenger service resumed relatively quickly.

Passenger service on the railroad to and from San Diego and Orange County is the most visible component of the County railroad system. The railway system moves more than 2.7 million passengers on the Amtrak Pacific Surfliner and 4.9 million on Metrolink and COASTER commuter trains. The COASTER commuter trains operate between Oceanside and downtown San Diego with six stops in between. The COASTER serves 1.4 million passengers per year, which averages 118,000 per month². Any reduction of passenger railway service increases the amount of automobile and bus traffic. Commuters would be forced to use alternative transportation, adding to traffic congestion and air pollution. Clearly, due to loss of passenger service and time lost on increased commuting, any prolonged interruption in passenger service would have a considerable impact on San Diego County's economy. However, passenger service disruption is only part of the problem. An overlooked, almost forgotten significant issue with a major bluff collapse would be the blow to the local economy from the loss of rail freight traffic, which largely keeps our ports viable.

¹Associated Press. https://weather.com/news/news/2018-12-17-california-del-mar-cliffs-collapse-train. Retrieved March 4, 2019. Fox5. https://fox5sandiego.com/2019/02/02/bluff-collapse-halts-train-traffic-hours-after-fatal-crash. Retrieved March 5, 2019. www.10news.com/news/local-news/bluff-collapse-halts-train-travel-through-del-mar. Video clip. Retrieved: March 5, 2019

NCTD Transit Operations Quarterly Report April 1, 2018-June 30 2018, pg. 12. https://lfportal.nctd.org/Weblink/0/edoc/118431/Transit%20Operations%20Quarterly%20Report%20Q4-FY18.pdf. Retrieved March 20, 2019

Passenger trains and freight shipments, sharing the same railroad tracks, average more than 50 scheduled trips daily. Freight service, operating mostly at night, is almost invisible to most San Diego County residents. If a disaster occurs, such as a major collapse of portions of the Del Mar Bluffs, closing the railroad system for a prolonged period of time, considerable damage to San Diego's economy would ensue. If a passenger train were to crash or derail due to a severe bluff collapse the loss of human life could be catastrophic. However, this report focuses on another important issue: the significant economic effects of a rail disruption on the transport of freight in and out of San Diego.

METHODOLOGY

In response to a citizen complaint, the Grand Jury researched relevant documents, websites, and interviewed representatives of NCTD, the Unified Port of San Diego and the San Diego Association of Governments to evaluate the economic consequences of a disruption due to a bluff collapse.³

DISCUSSION

The Del Mar Bluffs

SANDAG, San Diego County's regional planning agency, has been leading several projects to stabilize the Del Mar Bluffs since the early 2000s. SANDAG officials consider bluff stabilization one of their top priorities.⁴ SANDAG has:

- Reinforced the bluffs with three-foot-thick concrete and steel columns (soldier piles) dropped into 50-foot holes secured with concrete (approximately 200 by 2019)
- Improved drainage
- Rehabilitated damaged slopes and sea walls
- Employed tie-backs (walls with anchor cables buried into the cliff)

Implemented in 4 Phases, Phase 1 repairs were completed in 2003, Phase 2 in 2007, and Phase 3 in 2009. Phase 4 is scheduled for completion in late 2019.⁵ According to SANDAG, after Phase 4, the bluffs will be stabilized until 2050.⁶ It is estimated that an additional \$70 to \$90 million dollars will be needed over the same period to "keep the bluffs in a condition to run trains on."⁷

³ California Penal Code §929 mandates that reports of the Grand Jury not contain the name of any person or facts leading to the identity of any person who provides information to the Grand Jury.

⁴ https://www.keepsandiegomoving.com/Lossan-Group/Lossan-del-mar-bluffs.aspx

⁵ SANDAG, "Del Mar Bluffs Stabilization, Phase 4 Fact Sheet (Jan 2018)",

https://www.sandag.org/uploads/publicationid/publicationid_2156_23182.pdf. Retrieved: March 5, 2019

⁶ https://www.sandag.org/uploads/publicationid/publicationid 2156 23182.pdf

http://www.keepsandiegomoving.com/Documents/I5-Corridor/I-5.LOSSAN Factsheet.pdf http://www.keepsandiegomoving.com/libraries/lossan-pdfs/dmbstabilizationnctdboard feb 2019

The bluffs erode an average of six inches a year.⁸ However, recent bluff collapses in late 2018 and early 2019 have caused great concern for both the general public and SANDAG. In an article in the San Diego Union Tribune, Bruce Smith, a principal engineer at SANDAG, said, "We didn't think it [cliff erosion] would happen as fast as it's happening now."⁹

One possible solution would be to reroute approximately five miles of track through the Del Mar area. SANDAG has proposed five long range plans to do so. Each of these plans showing alternative routes would improve safety, improve speed for commuters and possibly provide economic benefits due to double tracking and increased freight traffic potential. However, each of the five solutions is complicated, costly and time consuming:

- Complicated because of the numerous public agencies involved, environmental studies and necessary public input
- Expensive, with costs estimated to range between \$2.5 billion and \$3.5 billion (by comparison, SANDAG's total 2019 budget was \$1.3 billion ¹⁰)
- Time consuming because even if studies regarding any one of the five plans were started today, completion would be decades away¹¹

One of the five plans for relocating the railroad tracks off the bluff includes digging a trench under Camino Del Mar using a "cut and cover" design. The other four plans recommend twinbored tunnels ranging in length from 11,600 to 13,400 feet in length along different routes. The tunnels would be up to 270 feet below the surface. Shown is a picture of the five routes.



⁸ Diehl, Phil, "Stabilizing Tracks A Top Priority", San Diego Union Tribune, February 23, 2019. pg. B1

 $^{^{10}}$ SANDAG, Final Program Budget FY 2019. www.sandag.org/uploads/publicationid/FinalFY19Budget.pdf 2018. Retrieved March 20, 2019.

¹¹ http://www.keepsandiegomoving.com/libraries/lossanpdfs/dmb stabilizationctdboardfeb2019.sflb.ashx

The Grand Jury believes that if SANDAG were to choose one of these five plans and rank the remaining four, the lengthy process of selection and approval could begin immediately.

Economic Impact of Freight

News reports and other documents reviewed by the Grand Jury and are referenced below were corroborated in sworn testimony by Port of San Diego and SANDAG officials.

Most citizens are largely unaware of freight traffic and its substantial economic impact to the County. According to SANDAG, in 2012 freight accounted for approximately one billion dollars in goods annually. ¹² Burlington Northern Santa Fe (BNSF) is the major freight operator in San Diego County. BNSF usually runs freight in and out of the city five or more days per week, plus an additional daily vehicle train in both directions. Freight includes vehicles, lumber, lumber products, soda ash, fly ash, cement, liquefied petroleum gas, corn syrup, metal/steel products (primarily aluminum), grain and plastic, ethanol, and aggregate. ¹³ BNSF runs over 30,000 freight cars per year near system capacity. By 2030, with the expected double tracking, the number of freight cars should double. ¹⁴

BNSF gets much of its San Diego freight from maritime connections with the Unified Port of San Diego (PORT). The PORT specializes in break-bulk (non-container cargo) and roll-on/roll-off cargoes. The PORT owns two main marine terminals, the Tenth Avenue Marine Terminal (TAMT) and the National City Marine Terminal (NCMT).

TAMT has 300,000 square feet of on-dock frozen and refrigerated warehousing and several tenants that lease services: the Dole Food Company, considered the "anchor tenant"; Jankovich (bulk marine fuel, supply and delivery); Searles Valley Minerals (minerals such as borax, soda ash); Cemex (concrete and cement) Harborside Refrigerated Services (refrigerated warehouse company) and a specialty bulk-shipper that handles such items as windmill blades. Railroad access for tenants is available. ¹⁵ Dole fruit containers, holding mostly bananas, are discharged, cross-docked, and transported by trucks to northern California, Oregon, and Washington. ¹⁶

NCMT is operated by the Pasha Group through a lease with the PORT that runs until 2040. Pasha has headquarters in San Rafael, California with transportation and logistics interests in Asia, Latin America and throughout the United States. They have seven automobile facilities in the United States, two on the west coast, San Francisco and NCMT. At NCMT, Pasha handles the

¹² http://www.keepsandiegomoving.com/Documents/Lossan/LossanBrochure_FINAL.pdf

¹³ Vantuono, William,"Room for more freight in San Diego?" www.railwayage.com/news/room-for-more-freight-in-san-diego. April 3, 2014. Retrieved: February 26, 2019.

¹⁴ SANDAG, Freight Systems: Lossan Rail Freight Corridor, www.sandag.org/index.asp?classid=13&subclassid=96&projectid=439&fuseaction=projects.detail.2019. Retrieved: February 28, 2019.

¹⁵ Racino, Brad. Port Authority. Inewsource and KPBS. https://inewsource.org/tenth-avenue-marine-terminal-port-san-diego/. Retrieved: March 4, 2019

¹⁶ Vantuono, William. "Room for more freight in San Diego?", www.railwayage.com/news/room-for-more-freight-in-san-diego/. April 3, 2014. Retrieved: February 26, 2019.

import and export of vehicles using BNSF to move automobiles north to Los Angeles and the rest of the country. NCMT is able to hold 143 railcars for automobile loading and unloading on a 200-acre on-dock facility. Handling over five million vehicles since 1990, Pasha processes and transports, through BNSF, approximately ten percent of all the imported cars in the U.S. yearly¹⁷.

To help understand the financial impact of freight traffic to San Diego County, the Pasha Group serves as a good example. The PORT stated in their 2017-2018 Comprehensive Financial Report that the Pasha Group is their second largest customer. Total income from Pasha was \$13.1 million or 7.6% of its total income.¹⁸ As of 2014, Pasha had 200 employees at NCMT.¹⁹

If a major collapse of a section of the Del Mar Bluffs occurs and freight traffic is interrupted for a prolonged period, Pasha must find another method to send their cars north. If Pasha decides to move their operations to another site, the PORT will lose significant income and San Diego will lose jobs. There are other users of freight traffic that move the other commodities listed previously. Very likely, they will all be forced to find alternative solutions to move their goods.

The Grand Jury found that it is difficult to quantify exactly the specific economic impact on the closure of railway service. For instance, statistical information in "Economic Impacts of the San Diego Unified Port District in 2017" does not disaggregate railway data from other industrial or maritime data.²⁰ Therefore, much of the economic impact of railway closure is unknown. The Grand Jury believes the economic impact of railroad freight due to closure does not receive sufficient consideration in SANDAG's overall plans.

FINDINGS

Finding 01: Passenger service on railroads has a significant financial impact on the economy of San Diego County.

Finding 02: The loss of passenger service would have a substantial adverse impact on Interstate 5 traffic as well as surrounding surface streets.

Finding 03: Freight rail traffic has a major financial impact on the economy of San Diego County and the Port of San Diego.

¹⁷ The Pasha Group. Facilities. https://www.pashagroup.com/capabilities/automotive/facilities.Retreived: February 26, 2019.

¹⁸ The Port of San Diego. Port of San Diego Comprehensive Annual Report, Fiscal Years Ended June 30, 2018 and 2017. 2018. pantheonstorage.blob.core.windows.net/administration/2018-cafr-final.pdf. Retrieved: February 28, 2019.

¹⁹ Allen, Mike. Pasha to Acquire Some of Horizon Lines' Assets for \$141.5 Million, *San Diego Business Journal*. https://www.sdbj.com/news/2014/nov/12/pasha-acquire-horizon-lines-1415-million/. November 12, 2014. Retrieved: February 28, 2019.

²⁰ Economic & Planning Systems, Inc. Economic Impacts of the San Diego Unified Port District in 2017. February 28, 2019.

RECOMMENDATIONS

The 2018/2019 San Diego County Grand Jury recommends that the San Diego Association of Governments (SANDAG):

- 19-50: Consider giving equal consideration for the needs of passenger and freight service in their five proposed plans for rerouting of the railroads through Del Mar.
- 19-51: Consider a strategy that involves choosing one plan and rank the other plans for rerouting the railroads through Del Mar to enable the immediate participation of public agencies, environmental groups and the public in the selection and approval process.

REQUIREMENTS AND INSTRUCTIONS

The California Penal Code §933(c) requires any public agency which the Grand Jury has reviewed, and about which it has issued a final report, to comment to the Presiding Judge of the Superior Court on the findings and recommendations pertaining to matters under the control of the agency. Such comment shall be made *no later than 90 days* after the Grand Jury publishes its report (filed with the Clerk of the Court); except that in the case of a report containing findings and recommendations pertaining to a department or agency headed by an <u>elected County official (e.g. District Attorney, Sheriff, etc.)</u>, such comment shall be made *within 60 days* to the Presiding Judge with an information copy sent to the Board of Supervisors.

Furthermore, California Penal Code §933.05(a), (b), (c), details, as follows, the manner in which such comment(s) are to be made:

- (a) As to each grand jury finding, the responding person or entity shall indicate one of the following:
 - (1) The respondent agrees with the finding
 - (2) The respondent disagrees wholly or partially with the finding, in which case the response shall specify the portion of the finding that is disputed and shall include an explanation of the reasons therefor.
- (b) As to each grand jury recommendation, the responding person or entity shall report one of the following actions:
 - (1) The recommendation has been implemented, with a summary regarding the implemented action.
 - (2) The recommendation has not yet been implemented, but will be implemented in the future, with a time frame for implementation.
 - (3) The recommendation requires further analysis, with an explanation and the scope and parameters of an analysis or study, and a time frame for the matter to be prepared for discussion by the officer or head of the agency or department being investigated or reviewed, including the governing body of the public agency when

- applicable. This time frame shall not exceed six months from the date of publication of the grand jury report.
- (4) The recommendation will not be implemented because it is not warranted or is not reasonable, with an explanation therefor.
- (c) If a finding or recommendation of the grand jury addresses budgetary or personnel matters of a county agency or department headed by an elected officer, both the agency or department head and the Board of Supervisors shall respond if requested by the grand jury, but the response of the Board of Supervisors shall address only those budgetary or personnel matters over which it has some decision making authority. The response of the elected agency or department head shall address all aspects of the findings or recommendations affecting his or her agency or department.

Comments to the Presiding Judge of the Superior Court in compliance with the Penal Code §933.05 are required from the:

Responding Agency	Recommendations	<u>Date</u>
SANDAG	19-50, 19-51	9/3/19