

April 14, 2025

To: Members of the Board of Directors

From: Darrell E. Johnson, Chief Executive Officer

Subject: Adopt Resolution No. 2025-025 and Authorize the Chief Executive Officer to Take all Necessary Actions to Address the Emergency Need for Railroad Track Stabilization in the Vicinity of Mile Post 203.83 to 204.40 and 206.10 to 206.70 on the Orange Subdivision

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Overview

The four reinforcement areas identified in the Coastal Rail Resiliency Study adjacent to the Orange County Transportation Authority-owned railroad right-of-way, in the vicinity of Mile Post 203.83 to 204.40 and 206.10 to 206.70 on the Orange Subdivision, have continued to experience coastal erosion and the hillside continues to move incrementally, posing an imminent threat to the railroad corridor and public safety if immediate necessary actions are not taken to mitigate the threat. Measures must be taken immediately to stabilize the track and maintain passenger and freight rail service.

Recommendations

- A. Adopt Resolution No. 2025-025 and authorize the Chief Executive Officer to take all necessary actions to address the emergency need for railroad track stabilization in the vicinity of Mile Post 203.83 to 204.40 and 206.10 to 206.70 on the Orange Subdivision, and to return to the Board of Directors, as required, to report on the status thereof.
- B. Authorize the Chief Executive Officer to take any and all necessary actions in regard to agreements with partner public agencies to address the emergency need for railroad track stabilization in the vicinity of Mile Post 203.83 to 204.40 and 206.10 to 206.70 on the Orange Subdivision.
- C. Amend the Orange County Transportation Authority's Fiscal Year 2024-25 Budget by \$135,000,000, to accommodate the additional budget needed for the Coastal Rail Stabilization Priority Project.

Adopt Resolution No. 2025-025 and Authorize the ChiefPage 2Executive Officer to Take all Necessary Actions to Address theEmergency Need for Railroad Track Stabilization in the Vicinityof Mile Post 203.83 to 204.40 and 206.10 to 206.70 on theOrange Subdivision

Background

The Orange County Transportation Authority (OCTA) owns the Orange Subdivision railroad right-of-way (ROW) between the Fullerton Junction and the San Diego County Line. This rail corridor is part of the Los Angeles – San Diego – San Luis Obispo (LOSSAN) Rail Corridor that hosts both intercity and commuter passenger and freight rail service. The LOSSAN Rail Corridor is of state and national importance and is also designated as a national defense connector line as part of the Strategic Rail Corridor Network by the Department of Defense.

Since 2021, the operations of the LOSSAN Rail Corridor in the City of San Clemente (San Clemente) have been forced to shut down on multiple occasions because of coastal bluff erosion, dry beach loss, revetment loss, and geologic landslide bluff failures. Over the past year, there have been additional landslides, continued hillside instability, and additional beach and railroad embankment erosion that pose imminent risk to the railroad service, life, and property.

The past closures have severed the only rail connection between San Diego County and the rest of the nation, affecting millions of annual passengers and impacting more than \$1 billion in annual freight movement. Additionally, the LOSSAN Rail Corridor plays a crucial role in the nation's Strategic Rail Corridor Network by supporting military logistics, freight movement, and passenger transportation, and ensuring connectivity between key military installations and commercial hubs along the west coast.

OCTA has addressed the ongoing emergencies as they have occurred and has determined that the four reinforcement areas identified in the Coastal Rail Resiliency Study (CRRS) are under imminent threat and require immediate action to prevent loss of property and essential public rail services, as well as for the protection of life and public safety to avoid a catastrophic bluff or shoreline embankment failure. During peak travel periods, a single Amtrak Pacific Surfliner train, which operates on the LOSSAN Rail Corridor, can carry upwards of 900 passengers per trip. The overall LOSSAN Rail Corridor travels through six counties between San Diego and San Luis Obispo. It is the second busiest passenger rail corridor in the United States with 150 daily passenger trains serving 41 stations and carrying eight million passengers annually, and an additional 70 daily freight trains. The Amtrak Pacific Surfliner rail service reduced nearly 45,000 tons of greenhouse gas emissions from its ridership in 2023 alone. This service, plus other passenger rail services along the rail corridor, are included throughout the California Transportation Plan and as a vital component of the State Rail Plan. There is currently \$5 billion of capital investments underway along

Adopt Resolution No. 2025-025 and Authorize the Chief Page 3 Executive Officer to Take all Necessary Actions to Address the Emergency Need for Railroad Track Stabilization in the Vicinity of Mile Post 203.83 to 204.40 and 206.10 to 206.70 on the Orange Subdivision

the corridor which rely on the corridor remaining operational. Additionally, the threatened beachside trail that parallels the railroad ROW below the unstable hillside slopes is traversed by millions of residents and visitors annually.

With each failure of the rail line, costs mount. For the LOSSAN Rail Corridor Agency, which operates the Amtrak Pacific Surfliner on behalf of the State, the closures have resulted in a net loss of \$14 million, which includes emergency bus bridges costing up to \$100,000 per week. OCTA has spent more than \$37 million so far on emergency fixes in the known ancient landslide area. Crucial freight shipments to the regional economy and military logistics have also faced significant delays. The biggest untold cost may be the loss of rail passengers who never return due to the lack of rail service reliability.

Further heightening the emergency nature of this situation are the storms that brought several inches of rain to Orange County in mid-February 2025. These recent atmospheric-river and king tide events mirror those that occurred in the previous three-plus years, which precipitated and are contributing causes to the coastal bluff landslides and coastal ocean intrusion that forced shutdowns of the rail line.

Discussion

As a result of the ongoing imminent threat to the rail line, on March 31, 2025, OCTA submitted an emergency Coastal Development Permit (eCDP) request to the California Coastal Commission, and a Regional General Permit 63 (RGP63) request to the United States Army Corps of Engineers (USACE). The permit requests are to implement emergency measures at the four reinforcement areas identified in the CRRS.

Protective mitigation activities for each reinforcement area will include necessary solutions to alleviate the existing imminent threat to railroad infrastructure and public safety. Below are summary project descriptions for each reinforcement area, including the nature and cause of the emergency and the timing of emergency action work.

Reinforcement Areas 1 and 2 (Mile Post 203.83 to 204.40)

Nature and Cause of the Emergency: The ocean-side railroad embankment in Areas 1 and 2 has faced dry beach loss and rock riprap embankment (riprap) loss due to past storms and continuing erosion. The beach width varies seasonally and is impacted by storms, waves, and king tide events that leave little protection of the rail line by the existing embankment.

Adopt Resolution No. 2025-025 and Authorize the Chief Page 4 Executive Officer to Take all Necessary Actions to Address the Emergency Need for Railroad Track Stabilization in the Vicinity of Mile Post 203.83 to 204.40 and 206.10 to 206.70 on the Orange Subdivision

The purpose of the emergency action is to repair the existing riprap, which has become degraded by toe erosion, loss of stones from the riprap section, and over-steepened sections that do not meet engineering standards for embankment protection. Failure to take emergency action would risk further damage to railroad infrastructure and impacts to rail passenger service, freight service, national security, and life and safety of the pedestrians, passengers, and crew. It is currently estimated that the riprap repair duration is two months.

Reinforcement Area 3 (Mile Post 204.07 to 204.34)

Nature and Cause of the Emergency: Over the past four years, the rail corridor operations have been adversely affected by the processes of coastal bluff erosion. The steep privately-owned bluffs located above the rail corridor between Mile Post 204.00 and Mile Post 204.50 have both active slope failures and high potential for additional slope failures that would likely impact the rail infrastructure. Recent bluff failures at Mile Post 204.2 (Mariposa Pedestrian Bridge), Mile Post 204.6 (Casa Romantica), and reactivation of an ancient landslide at Mile Post 206.8 (Cyprus Shore) have resulted in forced shutdowns of rail operations. To date, monitoring of the temporary debris catchment walls at the Mariposa Pedestrian Bridge and Casa Romantica has demonstrated their effectiveness in protecting the railroad infrastructure. However, mud and debris have continued to amass behind the 12-foot-high temporary wall at Mariposa Pedestrian Bridge protecting the track. Debris is threatening to spill over at spot locations. Installation of a new upslope catchment wall is necessary to prevent debris from toppling over the existing downslope temporary catchment wall. The new catchment wall, once constructed, will allow for the debris to be cleared and temporary catchment wall to be removed.

In addition, three recent landslides have occurred and have been photo documented (two in March 2024 and one in November 2024 through January 2025) and are included in the attached presentation. These landslides are currently being partially retained by the existing damaged pedestrian trail structure. This is the same situation that occurred in January 2024 at the Mariposa Pedestrian Bridge that led to the eventual dislodgement and collapse of two spans of the pedestrian trail structure, resulting in the ultimate closure of the railroad and coastal trail, and subsequent emergency stabilization projects. These recent landslide movements are expected to progress with the potential of unpredictable catastrophic sudden failures, thus posing an imminent threat to the rail corridor and the public if necessary actions are not taken immediately to mitigate the ongoing threat.

Adopt Resolution No. 2025-025 and Authorize the Chief Page 5 Executive Officer to Take all Necessary Actions to Address the Emergency Need for Railroad Track Stabilization in the Vicinity of Mile Post 203.83 to 204.40 and 206.10 to 206.70 on the Orange Subdivision

The emergency action for Area 3 is to install a new catchment wall on the inland side of the rail corridor to prevent further rail disruptions and infrastructure damage, which can lead to unsafe conditions for rail passengers, freight and pedestrians on the trail. The proposed catchment wall will require the removal of the full length of the existing Mariposa Pedestrian Bridge, and construction of the new catchment wall with the reestablishment of the pedestrian trail along the length of the wall. The new catchment wall will protect the railroad, existing underground utilities, and restore coastal access with a pedestrian trail. It is currently estimated that the catchment wall construction duration is eight months.

Reinforcement Area 4 (Mile Post 206.00 to 206.10 and Mile Post 206.42 to 206.70)

Nature and Cause of the Emergency: The railroad embankment in Area 4 has faced dry beach loss and riprap loss due to past storms and continuing erosion. The beach width and depth vary seasonally and are also impacted by storms, waves, and king tide events. This has resulted in erosion of the railroad embankment and the fronting dune and has led to waves overtopping onto the railroad track and track bed. Historically, the beach elevation in this area was six to seven feet higher than current conditions.

Based on observation of existing conditions and modeling of storms and beach erosion, failure to take emergency action will risk further damage to railroad infrastructure and impacts to rail passenger service, freight service, national security, and life and safety of the pedestrians, passengers, and crew.

The emergency action for Area 4 is to reinforce the failing railroad embankment with both a section of engineered shore protection structures and to make repairs to existing riprap to avoid rail service disruptions and infrastructure damage that would lead to unsafe conditions for both passengers and freight rail operations. The emergency repair construction of the emergency engineered shoreline protection structure may take up to eight months to construct.

Sand Nourishment

Approximately 540,000 cubic yards of sand will be imported from an offshore sand source and placed in Areas 1, 2, and 4 as soon as a sand source and delivery means becomes available. The sand source needs to be deemed suitable for volume, granularity, and color, and must obtain the necessary environmental clearances and permits. Offshore sand sources are the most feasible given the large quantity of sand needed for this project. Sand nourishment will work together

Adopt Resolution No. 2025-025 and Authorize the Chief Page 6 Executive Officer to Take all Necessary Actions to Address the Emergency Need for Railroad Track Stabilization in the Vicinity of Mile Post 203.83 to 204.40 and 206.10 to 206.70 on the Orange Subdivision

with the other improvements implemented through emergency actions and provide a first line of protection for the railroad.

OCTA is also supporting San Clemente in identifying additional offshore sand sources closer to San Clemente. Moreover, on March 31, 2025, OCTA released a request for information from firms regarding potential sand transport and delivery solutions, and the best industry practices related to the dredging and placement of sand. OCTA is committed to taking a holistic approach with sand placement as part of the overall solution, and this effort aims to expedite the sand placement process.

The eCDP covers the engineered and sand nourishment components of the project while the RGP63 includes only immediate-action project features related to revetments that are within the USACE's jurisdiction. The sand component will be part of a separate permitting process with the USACE due to required sand source and destination near-shore and off-shore environmental studies, and federal environmental clearance requirements not allowed through the emergency permitting process. Additionally, permits from the California State Lands Commission (CSLC) for work in CSLC jurisdictional areas and from the Regional Water Control Board will be required for certain project components.

Operational Impacts

Work related to the riprap repairs and removal of the existing pedestrian bridge will likely require temporary cessation of passenger rail service. Freight service will likely remain operational at night with minimal disruption. This allows the maximum amount of work to be completed during the planned rail shutdown while trying to minimize the operational impacts to the rail corridor. Once the service resumes after the initial rail shutdown, the remaining work will be completed with railroad flagging protection and minimal impacts to rail services.

Emergency Procurement Approach

Under normal circumstances, OCTA, like most public agencies, is required by the Public Contract Code (PCC) to procure public works projects utilizing a competitive process, which normally includes an invitation for bids and awarding the contract to the lowest responsible, responsive bidder. However, in certain circumstances, the PCC does allow for emergency procurements whereby the requirement for a competitive process is waived and the public agency can authorize the procurement of equipment, services, and supplies to address emergency circumstances without giving notice for bids to let contracts. Adopt Resolution No. 2025-025 and Authorize the Chief Page 7 Executive Officer to Take all Necessary Actions to Address the Emergency Need for Railroad Track Stabilization in the Vicinity of Mile Post 203.83 to 204.40 and 206.10 to 206.70 on the Orange Subdivision

Specifically, PCC Section 22050 provides that a public agency can, by a four-fifths vote of its governing body, authorize the procurement of equipment, services, and supplies to address emergency circumstances. Before taking this action, the governing body is required to make findings, based upon substantial evidence, that the emergency will not permit a delay resulting from a competitive solicitation for bids, and that the action is necessary to respond to the emergency. The governing body can then delegate authority to order any action required to address the emergency.

Once the governing body has made those findings, the authorized individual, in this case the Chief Executive Officer (CEO), can immediately enter into contracts necessary to address emergency circumstances. The CEO is then required by the statute to report to the governing body, at its next regular meeting, and at every regularly scheduled meeting thereafter, the status of the emergency, and the governing body must determine at each meeting by a four-fifths vote that there is a need to continue the emergency action until such time that the emergency no longer exists.

Due to continual failures of the inland bluff and coastal erosion with continual loss of beach and loss of riprap needed to protect the railroad, immediate action must be taken to protect the railroad infrastructure. Failure to act would risk further damage to railroad infrastructure, impacts to rail passenger service, freight service, national security, and life and safety of the pedestrians, passengers, and crew. The current situation requires diligence without delay that would result from existing policies and procedures for solicitation of bids and entry into contracts. Without undertaking this emergency action, the approval processes that would be followed under the traditional permitting and PCC format could subject these areas to multiple winter and tropical storm seasons that could lead to catastrophic track failures. Moreover, emergency action is necessary for the preservation of railroad infrastructure, protection of OCTA property, and to prevent an immediate termination of a critical passenger and freight rail service.

Funding

On December 2, 2024, the OCTA Board of Directors accepted the Federal Railroad Administration (FRA) Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program grant (\$100 million), the Trade Corridor Enhancement Program grant (\$80 million), and the Transit and Intercity Rail Capital Program grant (\$125 million). In order to obligate and use the federal CRISI grant, the project would need to complete the National Environmental Policy Act (NEPA) compliance process. In addition, the California State Transportation Agency (CalSTA) and California Transportation

Adopt Resolution No. 2025-025 and Authorize the Chief Page 8 Executive Officer to Take all Necessary Actions to Address the Emergency Need for Railroad Track Stabilization in the Vicinity of Mile Post 203.83 to 204.40 and 206.10 to 206.70 on the Orange Subdivision

Commission (CTC) require the approved NEPA documentation to confirm the CRISI funds match to the state funds, in order to fully allocate and use the state funds for this project. Without pre-award authority, which also requires NEPA approval, the CRISI grant can only be used for contracts that are awarded and expenditures that follow NEPA approval. Awarding a contract prior to NEPA approval may put the CRISI funds at risk. Given the emergency circumstances, staff is in continued contact with the FRA, CTC, CaISTA, and the California Department of Transportation to identify ways to allocate state funds and obligate federal funds for the project.

Fiscal Impact

An amendment to the OCTA Fiscal Year 2024-25 Budget, Capital Programs Division, Account No. 0018-9084-TR228-0N9, in the amount of \$135,000,000, is being requested to accommodate this project to fund all the necessary contracts and agreements.

Summary

Staff recommends adoption of Resolution No. 2025-025 and authorization for the Chief Executive Officer to take whatever actions are necessary to address the emergency need for railroad track stabilization in the vicinity of Mile Post 203.83 to 204.40 and 206.10 to 206.70 on the Orange Subdivision, and to return to the Board of Directors, as required, to report on the status thereof (Attachment B). Staff also recommends amending the Orange County Transportation Authority Fiscal Year 2024-25 Budget to accommodate funding for the project.

Attachments

- A. Project Location Map
- B. Resolution No. 2025-025

Prepared by:

Jason Lee Project Manager (714) 560-5833

Approved by:

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James G. Beil, P.E. Executive Director, Capital Programs (714) 560-5646