

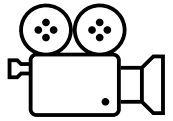


Major Employers & Business Interests Listening Session

February 15, 2024



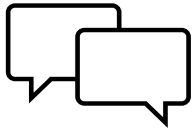
Meeting Format



- This meeting is being recorded for documentation purposes.



- Verbal comments will be received after the presentation during the listening session.



- Written comments and questions can be submitted through the chat.



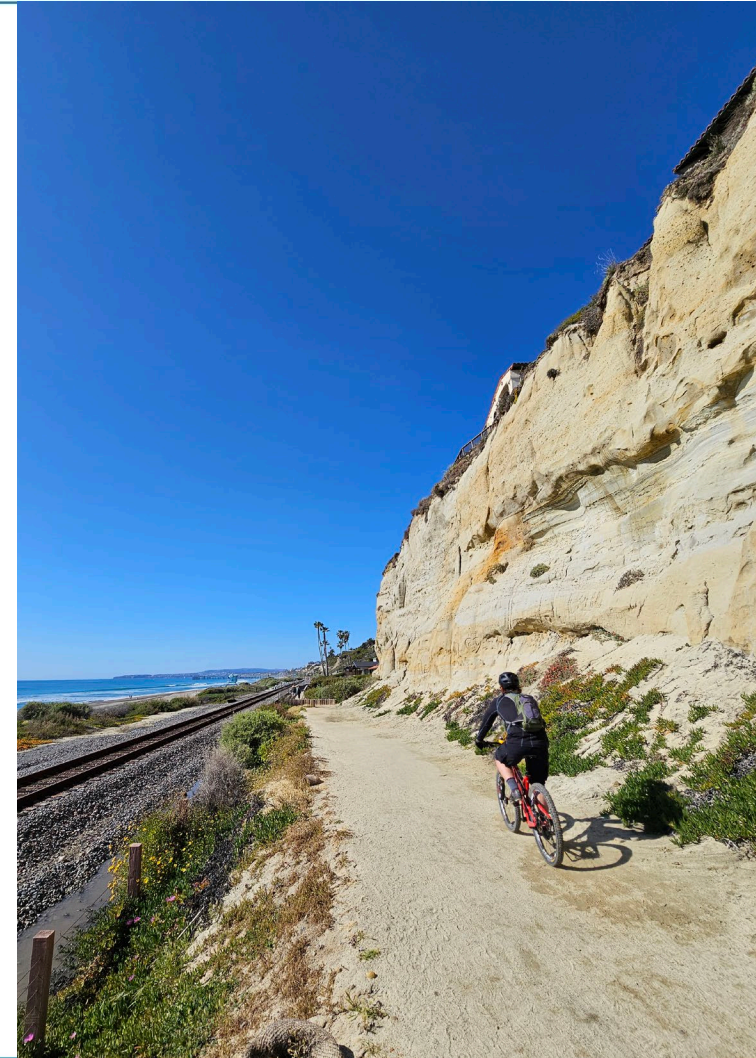
COASTAL RAIL RESILIENCY STUDY

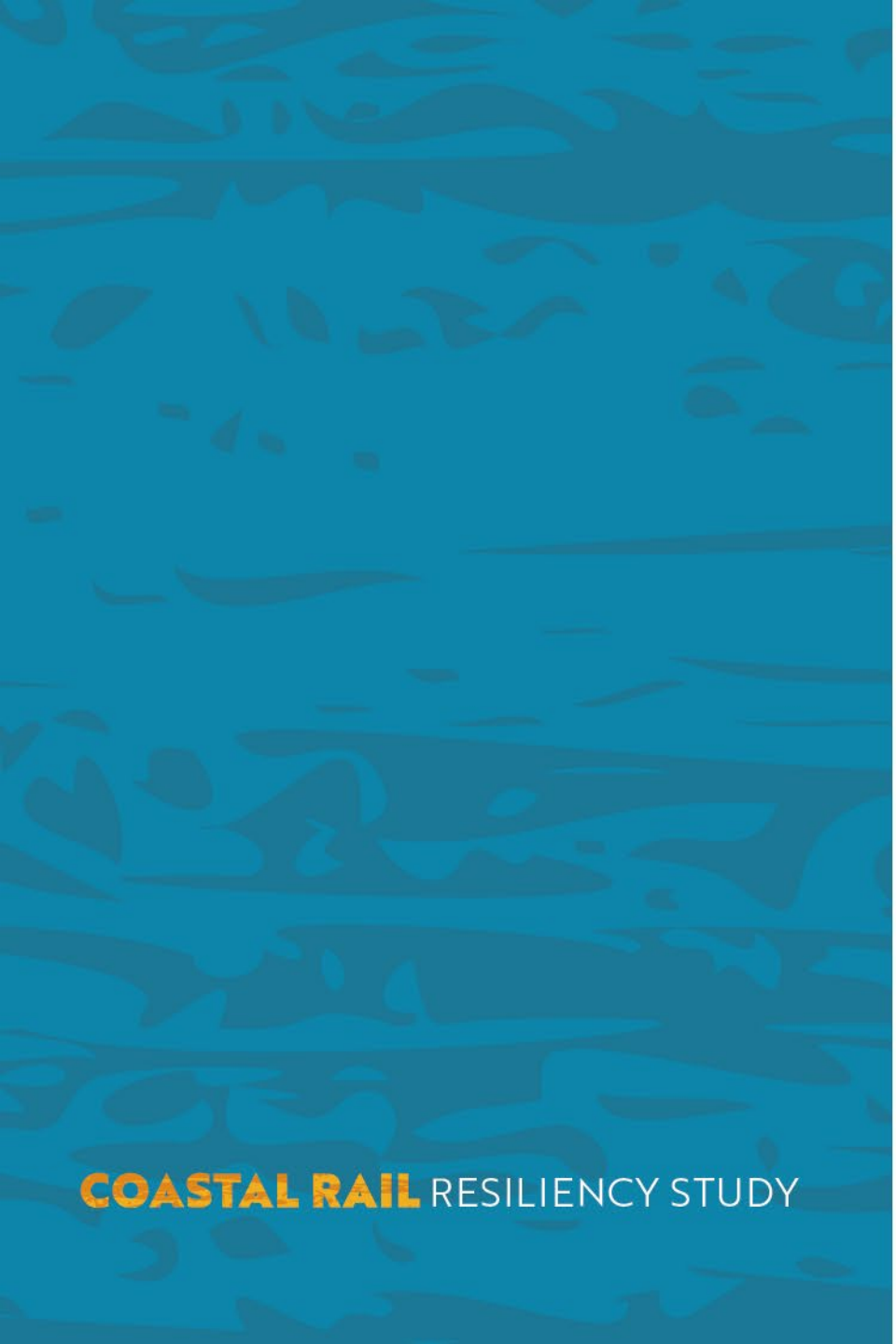
Introductions



Agenda

- History
- Goals and Objectives
 - Short and Mid-term Study
 - Potential Reinforcement Areas
- Study Schedule/Key Milestones
- Study Outreach
- Listening Session
- Next Steps





History



Local Resiliency Activities

PROJECT	ACTIVITY	COST	TIMEFRAME
Cyprus Shore Initial Track Stabilization Project (MP 206.8)	Emergency placement of riprap	\$8 million	September 2021
Cyprus Shore Track Stabilization Project (MP 206.8)	Installation of ground anchors in response to adjacent landslide	\$13.7 million+	October 2022 – August 2023
San Clemente Track Protection Project (MP 204.6)	Installation of temporary barrier wall in response to adjacent landslide	\$6 million	May – July 2023
San Clemente Track Protection Project (MP 204.2)	Removal of debris and other remedial action in response to adjacent landslide	\$TBD	Jan – TBD
San Clemente Shoreline Project (Sand Replenishment) (MP ~204.5 – 205.2)	Project would add 251,000 cubic yards of sand to the beach. Repeated at every 5-6 years interval up to 2 million cubic yards.	\$14.3 (65% federal/ 35% city cost sharing)	Fall 2023/ Winter 2024
San Clemente Nature-Based Coastal Resiliency Project Feasibility Study (community meeting)	This Study builds on the Shoreline Monitoring Program to promote long-term coastal resiliency in San Clemente.	\$570,000 (CCC LCP Grant Round 7)	Ongoing – Summer 2025

MP – Mile Post

MP 206.8 Cyprus Shore Track Stabilization Project



Stabilization Strategy:

- Homes constructed on historic landslide
- Pushing track toward the ocean
- Solution – Installed tieback anchors to stabilize the slope
- Project in close-out stages
- Passenger Rail Operation Resumed April 2023

MP 204.6 San Clemente Track Protection



Stabilization Strategy:

- Installed temporary barrier wall to prevent debris on track
- Removed landslide soil on rail side of wall layout line
- Cleared project site for reinstatement of rail service
- Debris cleared, wall in place and passenger service restored July 2023
- Remove temporary barrier wall after City of San Clemente installs permanent solution

MP 204.2 San Clemente Track Protection



Stabilization Strategy:

- Removal of two damaged spans of the pedestrian bridge
- Grading of the slope, clearing of debris in drainage culvert
- Placement of Visqueen plastic, and other best management practices to prevent surface water infiltration
- Debris cleared, limited freight service restored Jan 29
- As of Jan 30, passenger rail service still suspended

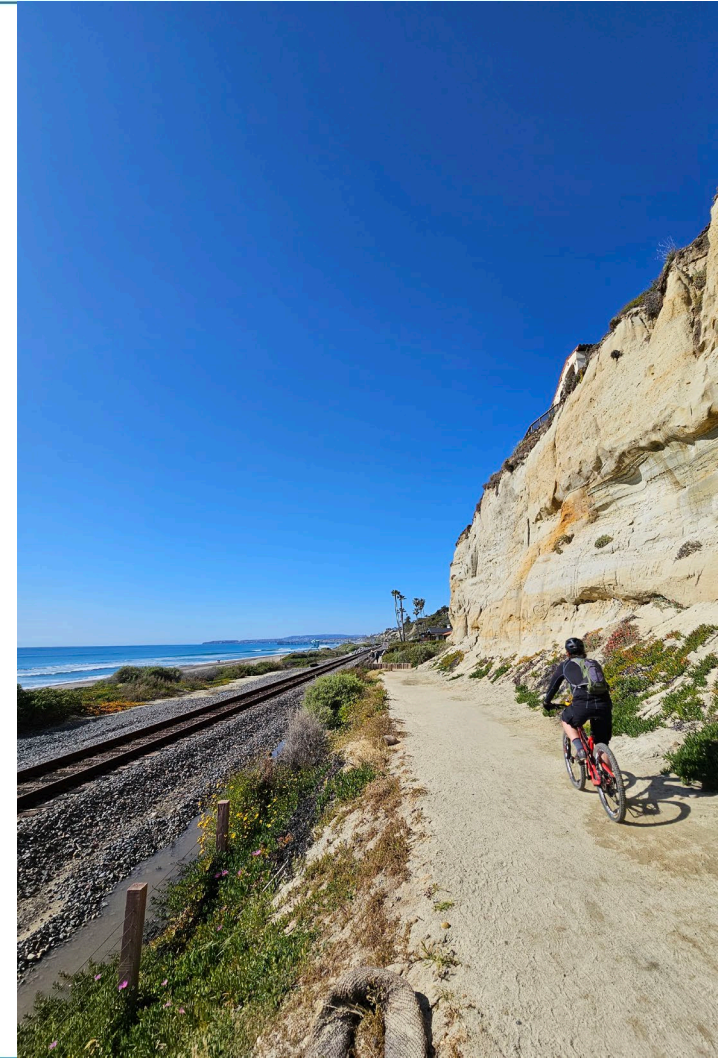


Goals and Objectives



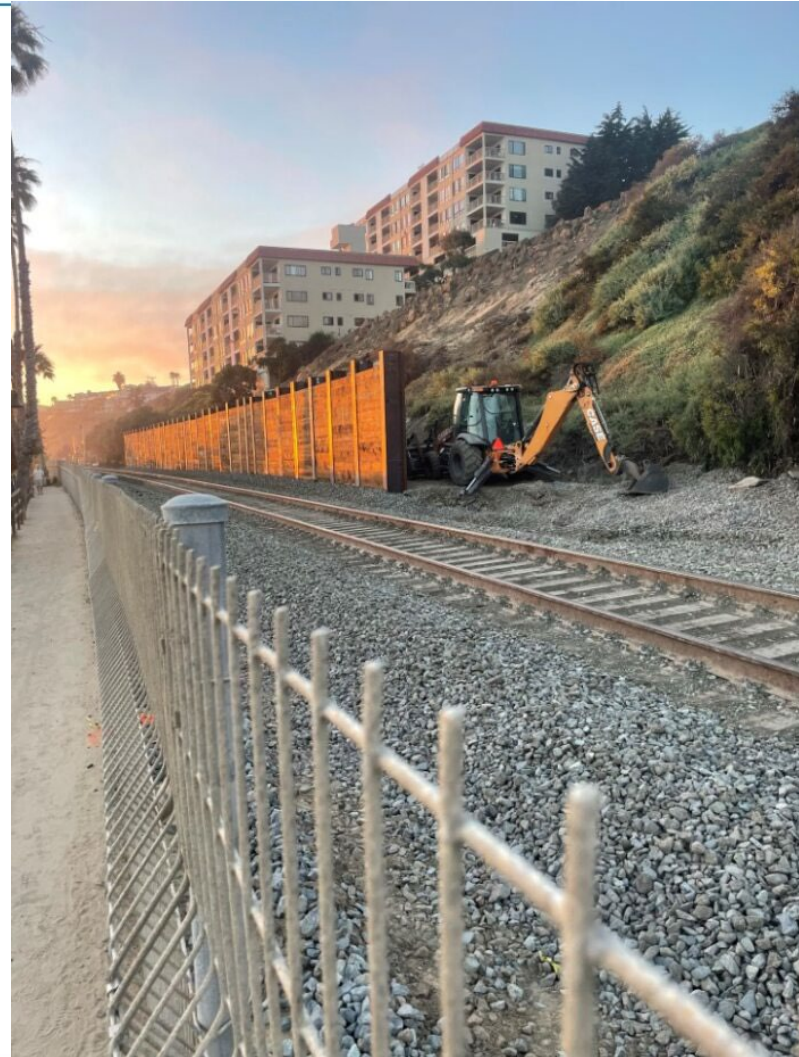
Goals & Objectives for Short- & Mid-term Study

- Continual stakeholder engagement
- Minimize passenger and freight service disruptions
- Protect the railroad in place (up to 30 years)
 - Assess, identify, and develop a program of capital projects within OCTA right-of-way
 - Develop short-term (10 years) and medium-term (30 years) conceptual alternatives
 - Work with adjacent stakeholders to develop a comprehensive coastal capital program with roles and responsibilities beyond the OCTA right-of-way



Goals & Objectives for Initial Assessment

- Conduct an Initial Assessment along OCTA's Coastal Railroad Right-of-Way (MP 200 – MP 207.4)
- Identify activities for immediate action
- Builds on previous efforts to maintain railroad operations
- Identify potential solutions and strategies
- Emergent issues, monitoring, and reinforcement areas

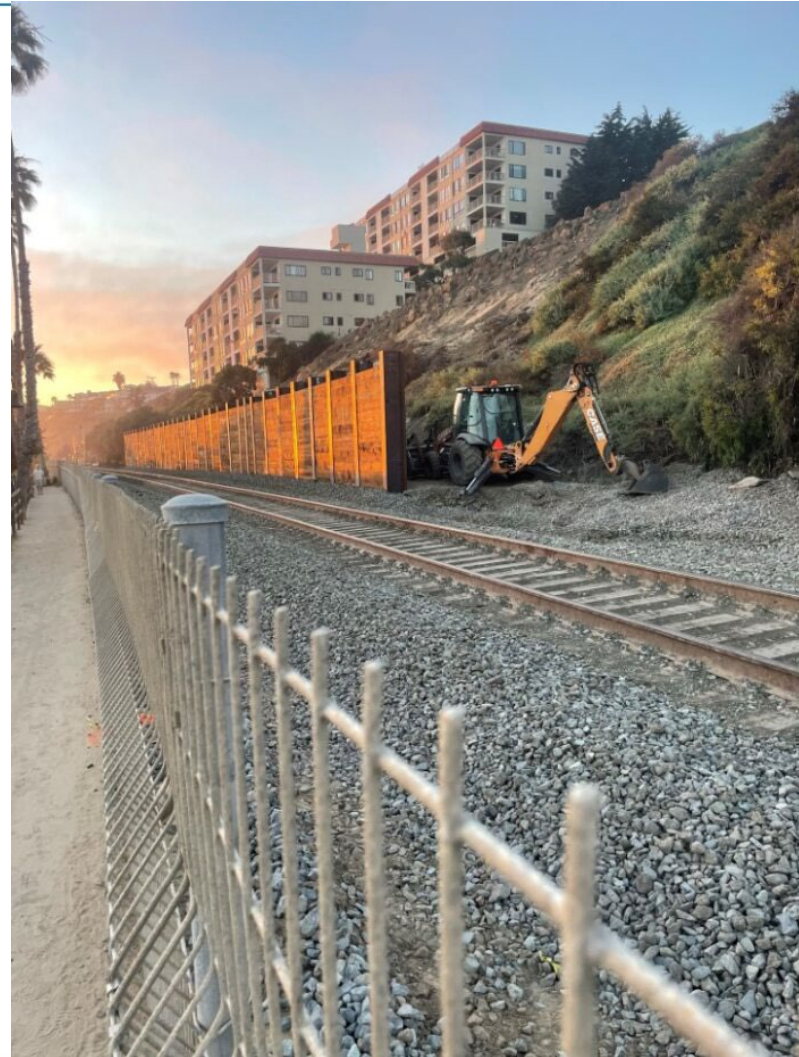




Initial Assessment: Identified Monitoring and Potential Reinforcement Areas

Initial Assessment

- Address Owner/Operators concerns regarding imminent issues affecting the railroad
- Focused on protecting rail operations, track infrastructure, and maintaining railroad service
- Identified Areas of Concern
 - Monitoring Areas
 - Potential Reinforcement Areas
- Identify Next Steps



Summary of Monitoring Areas

Area	Location (MP)	Description	Monitoring (Frequency)
1	200.80 - 201.00	Doheny S - Eroding Beach	Riprap condition and beach erosion (Semi-Annually, Post Storm)
2	202.70	Poche Beach South Shore Pedestrian Underpass and outfall at beach	Beach erosion and scour protection around structures (Quarterly)
3	203.65 - 203.70	North Beach - Potential for undermining of riprap	Riprap condition and beach erosion (Semi-Annually, Post Storm)
4	204.00 – 204.30	Mariposa Pedestrian Bridge	Install sensors to monitor potential track-bed movement (Monthly, post storm post-landslide post-earthquake)
5	204.50	Linda Lane - Stable beach but narrow	Riprap condition and beach erosion (Semi-Annually, Post Storm)
6	206.10	Calafia State Beach - upland erosion sand deposits on tracks	Effectiveness of culvert replacement (Post Storm, King Tides)
7	206.70 – 207.25	Cyprus Shore to County Line	Monitor effectiveness of emergency riprap (Semi-Annually, Post Storm)

Monitoring Areas 1 & 2



Monitoring Area #1
MP 200.80 - 201.00 South Doheny
Beach Erosion



Monitoring Area #2
MP 202.70 Poche Beach Outfall
and Pedestrian Underpass



Monitoring Areas 3, 4 & 5



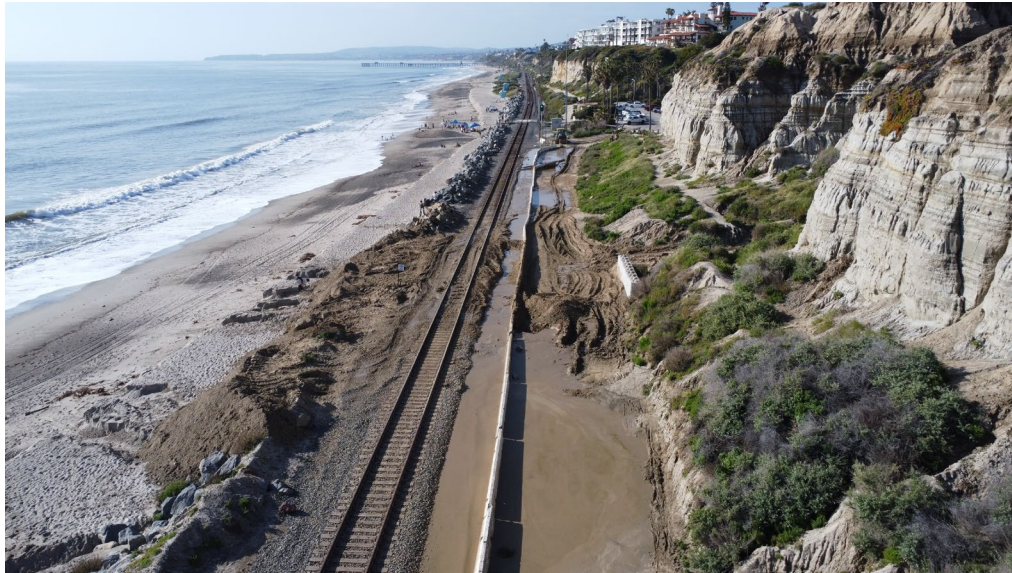
Monitoring Area #3
MP 203.65 - 203.70
North Beach



Monitoring Areas #4, 5
MP 204.00 – 204.30 Mariposa Pedestrian
Bridge, MP 204.50 – Linda Lane



Monitoring Areas 6 & 7



Monitoring Area #6
MP 206.10 Calafia State Beach



Monitoring Area #7
MP 206.70 – 207.25
Cyprus Shore to County Line



Summary of Potential Reinforcement Areas

Area	Location (MP)	Description	Potential Solution(s)*
1	203.80 – 203.90	Erosion Hazard deteriorating	Repair/Augment Riprap
2	204.00 – 204.40	Erosion - no beach at high tide and direct wave attack	Stockpile rock for maintenance
3	204.00- 204.50	Geologic - Major seepage from bluff and poor surface drainage, potential for liquefaction and lateral spreading of track-bed	Build subdrain cut-off for groundwater, catchment structure for slope debris surface drainage control
4	206.00 - 206.67	North end of Cyprus Shore - erosion exposing old riprap	Inspect & construct revetment as needed

*OCTA is participating in discussions about a sand replenishment program with the County of Orange and other stakeholders to protect the railroad and other infrastructure. This effort could be considered on a parallel path with the solutions above, to avoid delay of actions that are needed to ensure continual railroad operations.

Potential Reinforcement Area 1

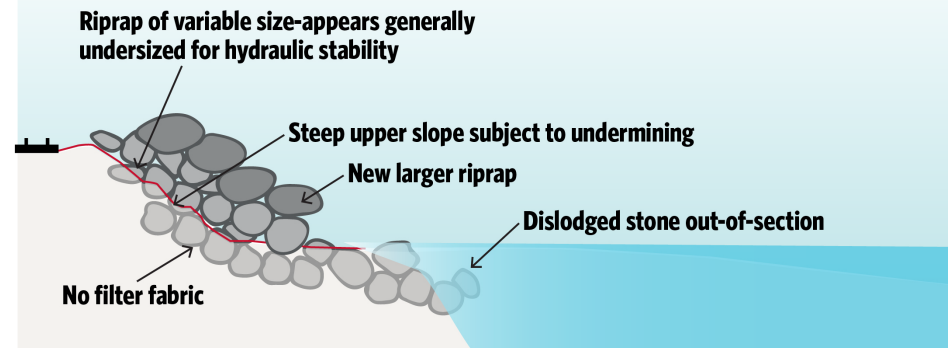
Existing Condition



MP 203.80 – 203.90

Possible Solution

- Stabilize track by repairing/augmenting existing riprap



Potential Reinforcement Area 2

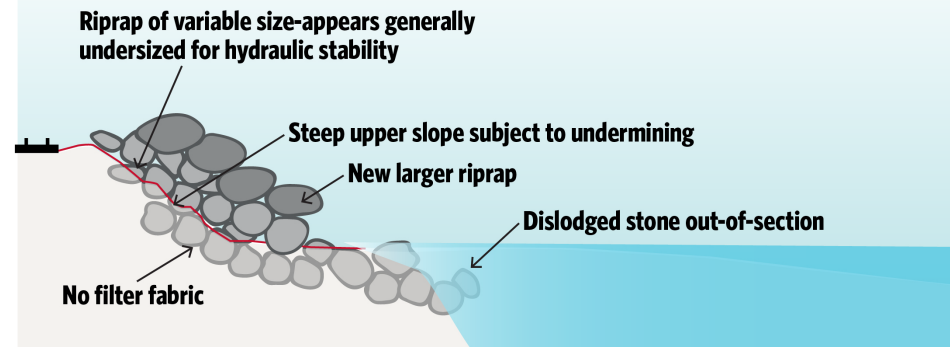
Existing Condition



MP 204.00 – 204.40

Possible Solution

- Reinforce riprap section as needed to stabilize track



Potential Reinforcement Area 3

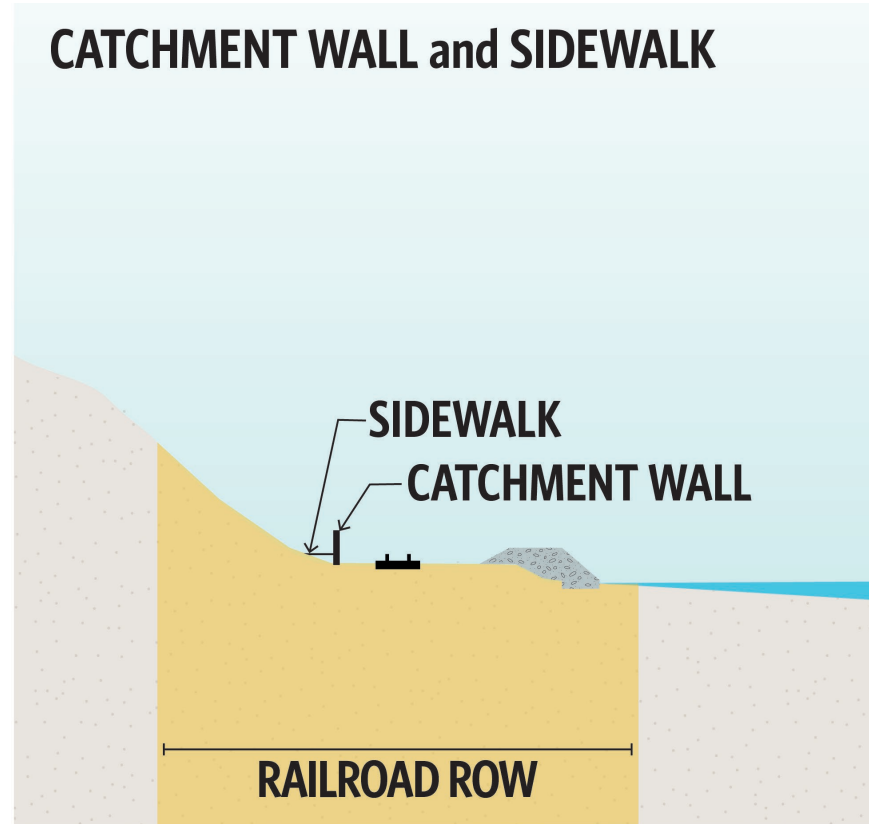
Existing Condition



MP 204.00 – 204.50 – Steep bluffs, potential to impact tracks, poor track side drainage with potential for liquefaction.

Possible Solution

CATCHMENT WALL and SIDEWALK



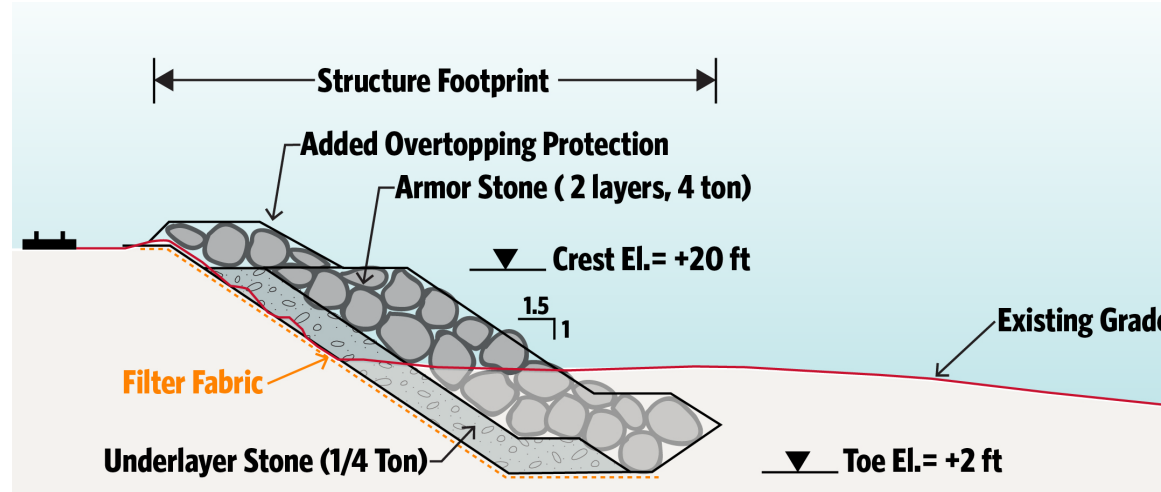
Reinforcement Areas

Potential Reinforcement Area 4

Existing Condition



Possible Solution



MP 206.00 – 206.67 – North End of Cyprus Shore Project – Erosion exposing rock and creating a shelf adjacent to tracks where riprap once existed.

Next Steps for Initial Assessment

- Engagement of Stakeholders (as appropriate)
- Procedures for Emergency Response
- Governance (roles & responsibilities)
 - Develop Implementation Plan
- Regulatory Permitting Strategy
- Stockpiles of Materials needed in emergency





Study Schedule/Key Milestones



Study Milestones

INITIAL ASSESSMENT

- Initiated: Nov '23
- Potential reinforcement areas identified: Dec '23
- Release Report: Feb '24

LISTENING SESSIONS

- Engage with a wide range of stakeholders with unique and diverse backgrounds and needs
- Obtain feedback from stakeholders and interest groups: Winter '24

PURPOSE AND NEED/ EVALUATION CRITERIA

- Draft: Spring '24
 - Informed by Listening Session feedback

INITIAL CONCEPT DEVELOPMENT

- Draft Concepts: Spring to Fall '24
- Obtain feedback from stakeholders and interest groups: Fall '24

REFINEMENT OF CONCEPTS

- Refined Concepts: Spring '25
- Obtain feedback from stakeholders and interest groups: Spring '25

DRAFT FEASIBILITY STUDY REPORT

- Draft Report: Spring '25 – Summer '25
- Obtain feedback from stakeholders and interest groups

FINAL FEASIBILITY STUDY REPORT

- Final Report: Fall '25
- **Present to Board/Publish Final Report: Fall '25**



Study Outreach

COASTAL RAIL RESILIENCY STUDY



Study Outreach

- Listening Sessions
- Draft Concept Outreach
- Draft Plan Outreach
- Support community engagement
 - Feedback loop



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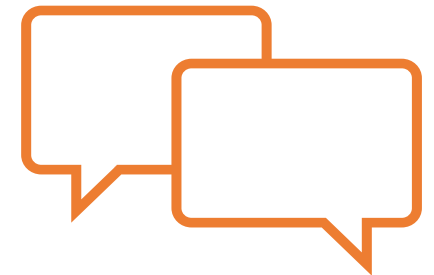
Listening Session

COASTAL RAIL RESILIENCY STUDY



Listening Session – Goals

- Gather collaborative input from key stakeholders in various public and private sectors
- Listening sessions seek to:
 - Identify key stakeholders
 - Share expectation to maintain in-place the existing coastal rail line and minimize passenger and freight service disruptions for up to 30-years
 - Assess vulnerabilities and issues of concerns
 - Identify potential opportunities to further enhance collaboration
 - Document feedback



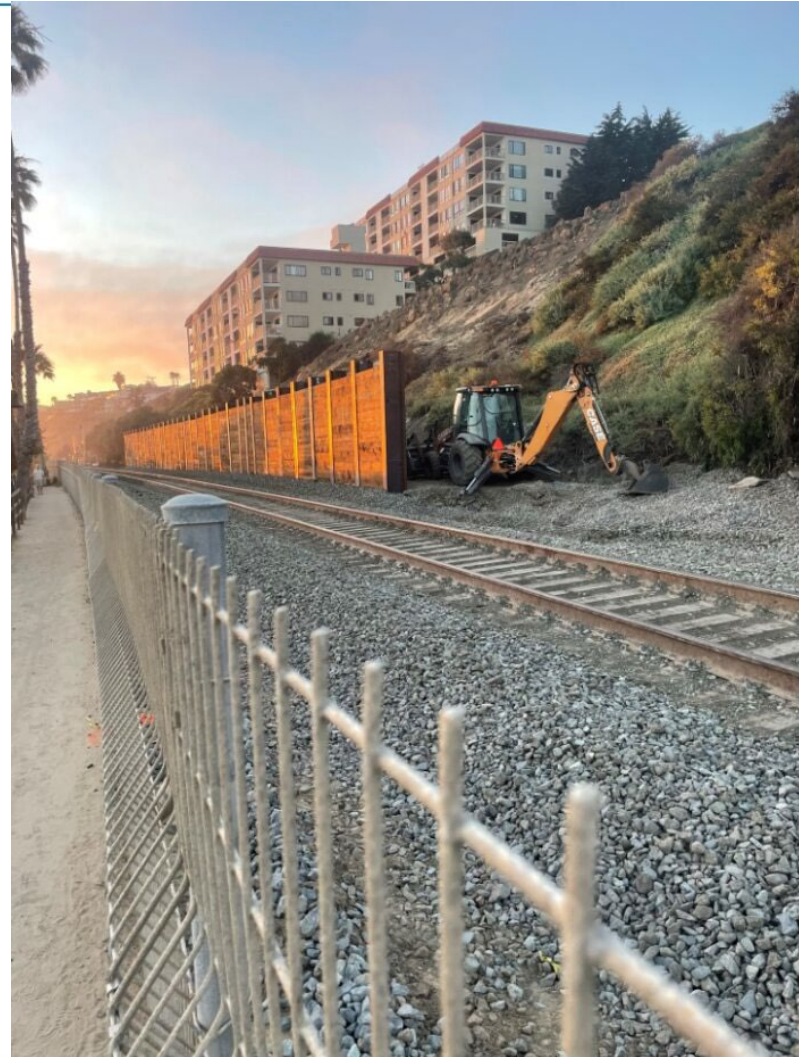
Listening Session – Reinforcement Area Analysis

- Do you have **any comments** relative to the specified potential reinforcement areas?
 - MP 203.80 – 203.90 – #1 Erosion hazard progressing north
 - MP 204.00 – 204.40 – #2 Eroding, no beach at high tide
 - MP 204.00 – 204.50 – #3 Steep riprap may require maintenance; poor drainage; potential for liquefaction
 - MP 206.00 - 206.67 – #4 Erosion exposing old rock, progressing north
- Are you aware of **any other conditions** that should be assessed?

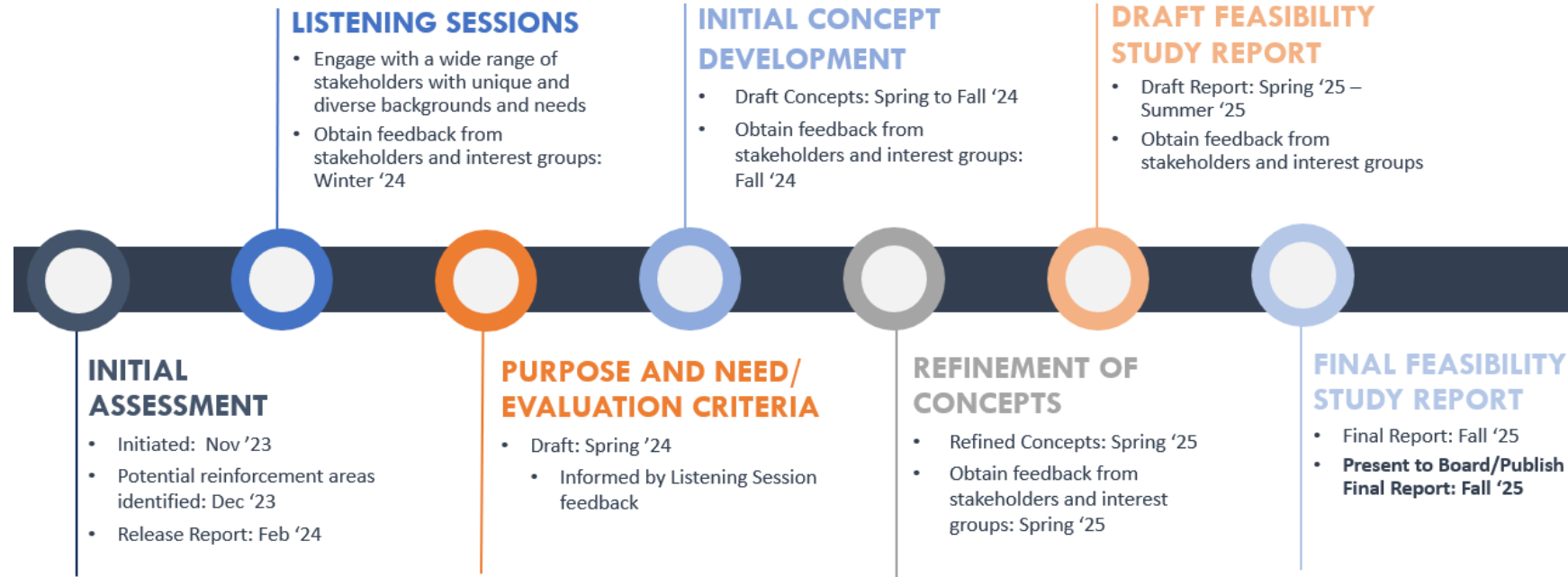


Listening Session – Rail Service Disruptions

- How important is this rail corridor to your business/agency?
- In what ways do you believe the resilience of the rail corridor is important to the economic strength of your business and the broader community?
- How would rail service disruptions affect your business operations, specifically logistics, supply chain management, employee commute, and revenue?
- How can OCTA best communicate progress and findings from the CRRS to your organization and the wider community, ensuring transparency and ongoing engagement?
- What are the most effective ways OCTA can involve your organization and others in the study process to ensure broad stakeholder input and collaboration?
- What other businesses should we engage in this study?

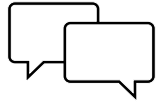


Listening Session – Study Milestones



- Are there any comments or questions on the **schedule and key milestones delivery timeline**?
- Should **others from your organization** be included in the study?

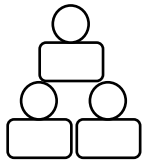
Listening Session – Public Engagement



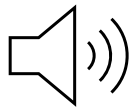
- What **feedback and key themes** have you heard from others?



- Do you have any comments or questions on the **approach to public engagement?**



- Do you have any **lists of stakeholder contacts** that we should include in our notification database?



- Can your organization **provide meeting notification support?**



Next Steps




Next Steps

Timeframe	Listening Sessions	Description
01/18/24	Project Development Team (PDT)	
02/14/24	Stakeholder Working Group (SWG)	Federal, state, regional & local interest groups
02/15/24	Major Employers, Key Destinations & Other Business Interests	Business associations & entertainment
03/06/24	Freight & Goods Movement	Business & transportation interest groups
03/12/24	Emergency Responders	Police departments, fire departments, coast guards & harbor patrol
03/20/24	Coastal & Marine Habitat Community-Based Organizations	Environmental groups
04/03/24	Residential Groups	Homeowner associations (HOAs)
04/11/24	General Public	Virtual meeting
05/10/24	Elected Officials Roundtable	Federal, state, regional & local elected offices
05/30/24	General Public	In-person meeting

Stay Connected

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THANK YOU!

