



Citizens Advisory Committee

Tuesday, July 15, 2025



Meeting Purpose/Focus

Emergency Rail Projects *past projects*

- **Cyprus shore** (9/22 – 4/23)
slope secured with ground anchors
- **Casa Romantica** (4/23 – 7/23)
temporary catchment wall built
- **Mariposa Point** (1/24 – 3/24)
temporary catchment wall built
- Remove temporary catchment walls at Casa Romantica and Mariposa Point when appropriate
- Mitigation discussion are ongoing for the Cyprus Shore

Coastal Rail Stabilization Priority Project *immediate needs*

- Address imminent threats to maintain rail operations
- Four reinforcement areas identified as top priority
- Projects include armoring, catchment wall, trail restoration and sand replenishment
- \$305M in state and federal funds secured
- Recent emergency riprap repair was completed on June 7th
- [Project website](#)

Coastal Rail Resiliency Study *short- to mid-term solutions*

- Develop solutions to protect the seven mile of coastal rail infrastructure
- Support the implementation of solutions that positively impact the surrounding community

Solicit public input on:

- **Draft alternative concepts focused on the short- to mid-term (10-30 years) timeframes**

Coastal Rail Long-Term Solutions Study *long-term solutions*

- State-led study
- Develop options for long-term solutions including potential rail line relocation
- Create an action plan for key elements
- Partner with LA-San Diego-San Luis Obispo Rail Corridor Agency (LOSSAN), state, and federal agencies
- Engage key stakeholders

Study History

- Coastal Rail Resiliency Study (CRRS) kicked off in late 2023 to assess existing and future risks, challenges, and potential solutions to protect the rail line.
- Study area includes all seven miles of the coastal rail line in Orange County.
- OCTA held listening sessions in January through May 2024 to gain community, community-based organization, and stakeholder feedback.
- OCTA conducted an Expert Panel in December 2024
- Study has been split into three timeframe concentrations:
 - Immediate (<10 years)
 - **Short- to mid-term (10-30 years) ← today's update**
 - Long-term solutions (30+ years – led by State, timing TBD)



Draft Alternative Concepts (Purpose and Need)

Purpose

- Evaluate and prioritize adaptation strategies and engineering solutions that would maintain railroad operations generally within the existing right-of-way for up to the next 30 years.
- Identify and assess vulnerable locations that are at risk of railroad damage or operational disruptions.
- Minimize future disruptions and closures to improve service reliability.
- Support stewardship of the railroad corridor to implement multi-beneficial solutions that would positively impact the surrounding community.
- Build on the work of others in the region that would help to further protect the rail line.

Need

- A safe and reliable railroad corridor that can support the movement of people, freight, and national military readiness.
- A stable and dependable railroad corridor that is resilient against natural coastal erosion, increasing storm frequency and intensity, and accelerated sea level rise.
- Improved regional and freight operations by mediating continuous bluff failure and landslides that are impacting the railroad tracks.

Draft Alternative Concepts (Goals and Objectives)

- 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 the OCTA ROW
- Develop short-term (ten years) and mid-term (30 years) conceptual alternatives
- Work with adjacent stakeholders to develop a comprehensive coastal capital program with roles and responsibilities beyond the OCTA ROW

OCTA – Orange County Transportation Authority
ROW – Right-of-Way



Draft Alternative Concepts

- Bluffside Concepts
- Beachside Concepts
- Rail Concepts



Draft Alternative Concepts*

Bluffside

1. Catchment walls (block slide debris)
2. Stabilization grading (buttress slide toe)
3. Tieback / soil nail / pin-pile walls (mitigate larger slides)
4. Ground improvement (bluff stabilization)
5. Surface matting & deep-rooted vegetation planting (reduce sediment erosion)
6. Drainage improvement via grading / detention basins / undertrack outlets
7. Deflection walls in tributaries (reduce flood and sedimentation flow rates)
8. Up-gradient cut-off drains (reduce source of water)
9. Hydraulugs (lower hydraulic pressure and slide potential)

Beachside

1. Riprap placement
2. Engineered rock revetment
3. Vertical seawall
4. Hybrid structural solution
5. Beach nourishment with shoreline protection structure (1-4 above)
6. Beach nourishment with sand retention measures & shoreline protection structure (1-4 above)
7. Watershed modifications to increase beach sand supply (implemented by others)
8. No railroad action - monitor regional beach nourishment activities and participate as appropriate

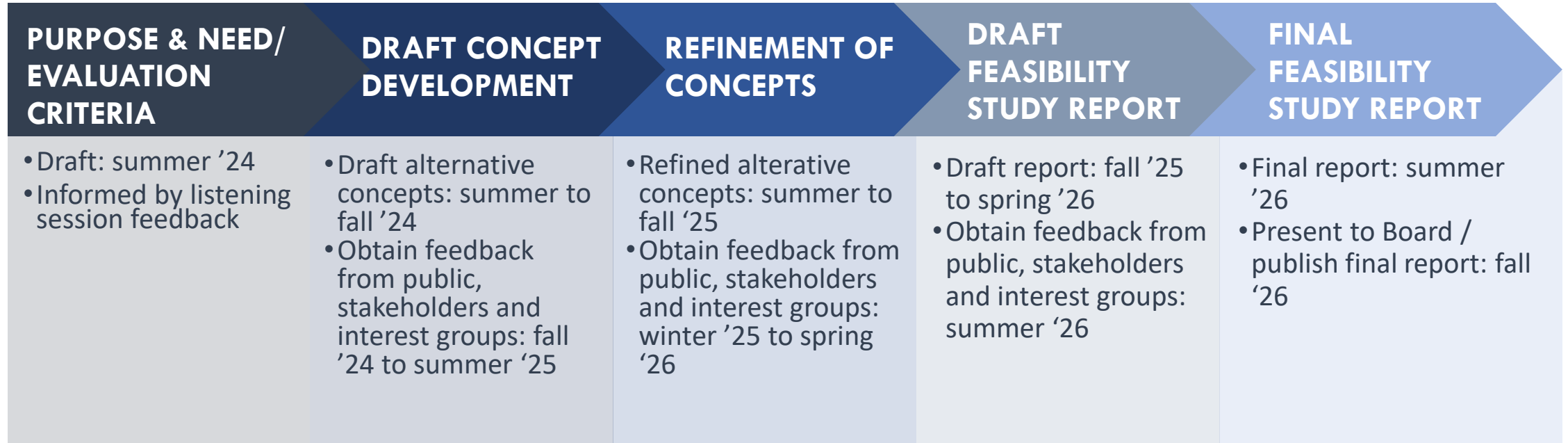
Rail

1. Elevate tracks
2. Alternative materials for critical railroad infrastructure to reduce lifecycle costs
3. Ground improvement (track-bed stabilization)

*No order of preference

*See handout for glossary of terms

Next Steps



We are here

*Subject to change
Board: OCTA Board of Directors

Stay Connected

Chris Boucly

Public Outreach



(714) 560-5326



cboucly@octa.net

Rebekah Soto

Project Manager



(714) 560-5501



rsoto@octa.net

Study website and email:

www.OCTA.net/CRRS

CRRS@octa.net