





## IV. Consent Calendar



- 1. Approve Minutes of the November 15, 2023 Meeting
- 2. Authorize the CCJPA and El Dorado County Transit Authority Bus Service Agreement
- 3. Authorize CCJPA to Enter an Affordable Housing Sustainable Communities (AHSC) Grant for Agnew Siding Capital Funding
- 4. Authorize CCJPA to Contract with HDR for Completion of National Environmental Policy Act (NEPA) Documentation for the Sacramento to Roseville Third Mainline Track (Phase One) Project

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### Item V.1

## **Caltrans District 3 (D3) Mitigation Plan for Capitol Corridor Support**

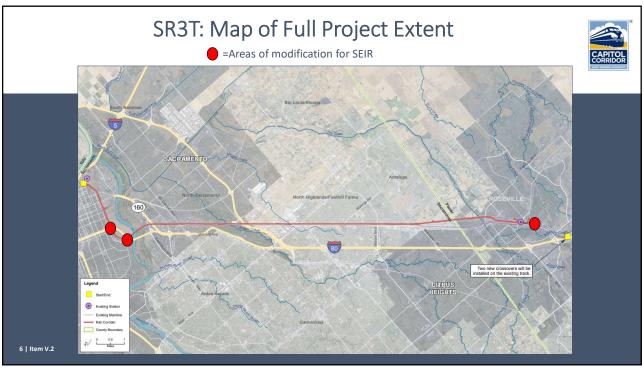
- D3's Managed Lanes will create a VMT increase & CEQA requires mitigation
- D3 sought CCJPA for a suite of potential Capitol Corridor system enhancements as mitigation
  - Fare reductions
  - Go to full service
- Board resolution authorizes CCJPA staff to negotiate a suitable participation in a mitigation plan for Capitol Corridor service

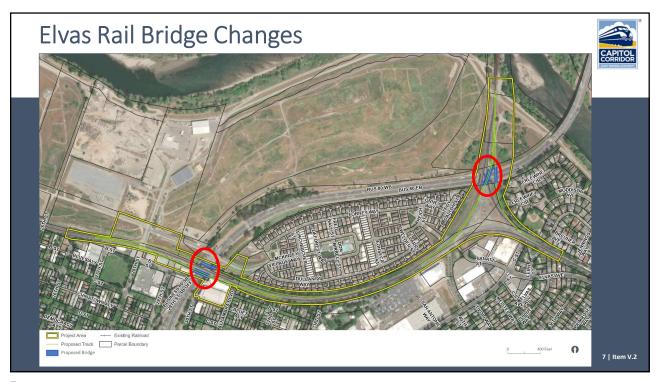


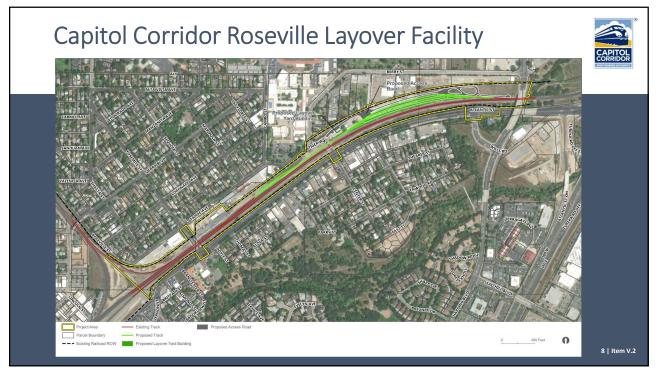
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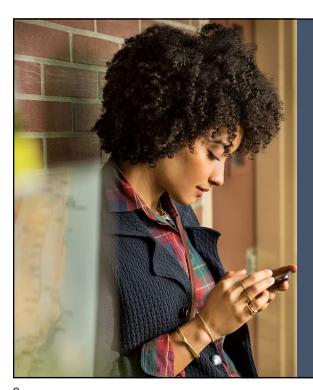
# Ilem V.2 Sacramento to Roseville 3<sup>rd</sup> Main Track: Supplemental EIR (SEIR) SEIR: Supplements the November 2015 fEIR CCIPA Board adopted Two Locations Changed: Elvas Railroad Bridge Crossings Capitol Corridor Layover Yard SEIR decision; prepared to make previously certified EIR adequate as revised CCIPA lead agency for CEQA Comment letters (from agencies) got required responses

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## Environmental Findings under CEQA



- No new significant effects caused by these new project modifications that are not already covered under the mitigation requirements from the original EIR
- As before, CCJPA remains required to establish a mitigation monitoring program, which is required by State CEQA Guidelines Section 15091(d)
  - This would be considered and adopted by the CCJPA Board in conjunction with any project approval.

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## **Actions for CCJPA Board**

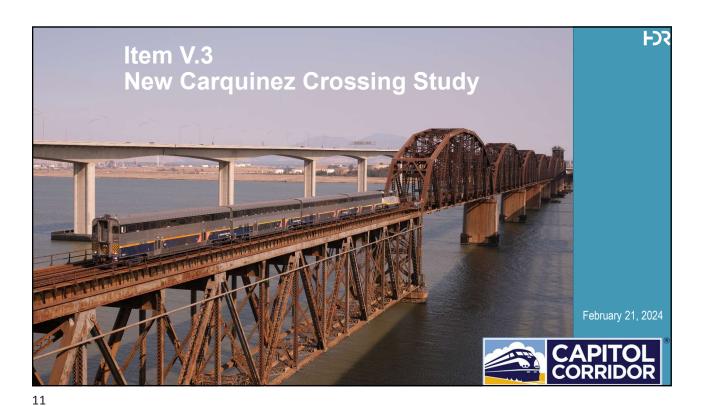
Two ordered actions for the CCJPA Board to comply with CEQA:

- Draft SEIR must first be certified complying with CEQA (thus becoming a Final SEIR - action #1)
- 2. Decision to approve the revised Project as modified in these two new ways (action #2), including, certifying:
  - That the Final SEIR was completed in compliance with CEQA's requirements
  - That it was reviewed and considered by the CCJPA Board
  - That it reflects its independent judgment and analysis.
  - Then, CCJPA would then be required to adopt findings of fact on the disposition of each significant environmental effect.





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## **Presentation Overview**

**Goal:** Update CCJPA Board on Carquinez High-Level Crossing Study status

- I. Study overview Engineering Feasibility Analysis
- II. Review Phase 1 Study (completed 2022) 14 options reduced to 4 options
- III. Update on Phase 2 Study (current phase) Examined 4 options; only one option seems viable

All maps and alignments shown in the presentation are conceptual and for evaluating engineering feasibility only

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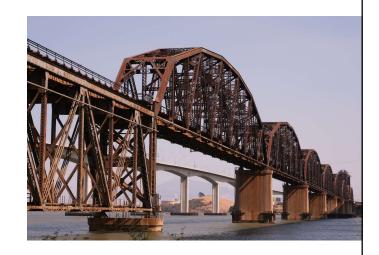
## **Study Overview**

### Challenge:

Bridge "lifts" for marine traffic at Benicia are the 2nd largest source of delay for CCJPA trains. Each lift causes about 20 minutes' delay *and* trains are forced "out of slot".

### **Study Goal:**

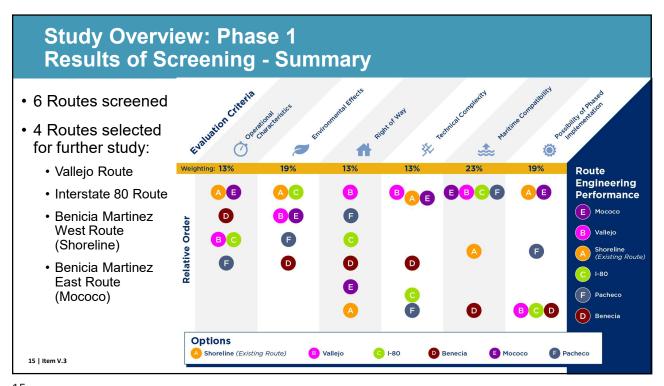
Identify and develop conceptual options for high-level rail bridge that doesn't need to lift for marine traffic.

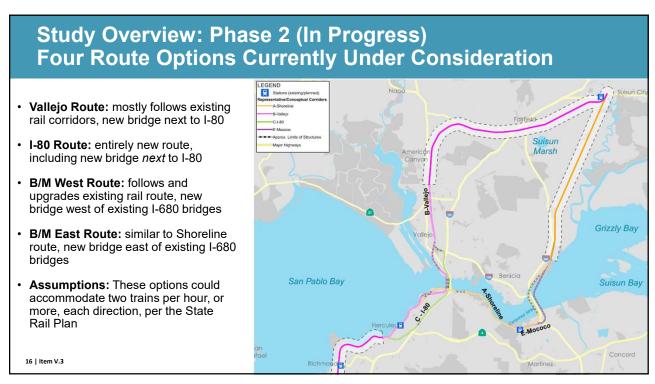


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## Study Overview: Phase 1 14 "Representative Route Options" Initially Considered • Evaluated 14 "Representative Route Options" • First-level screening: narrowed 14 options to 4 remaining options to cover in Phase 2 \*\*San Pablo Bay\*\* Hercules\*\* \*\*San Pablo Bay\*\* \*\*Hercules\*\* \*\*Pilithough \*\*Concord\*\* \*\*Pilithough \*\*Concord\*\* \*\*Pilithough \*\*P





## **Challenges with the Vallejo Options**

- Massive and heavy bridge structure required to clear navigation channels
- Accommodating freight trains would require an additional bridge along the Vallejo shoreline
- Extensive tunneling on both sides with Vallejo side beneath developed areas
- Grade separations (rail above or below roadway) could be extensive and disruptive within Vallejo – even more so including freight

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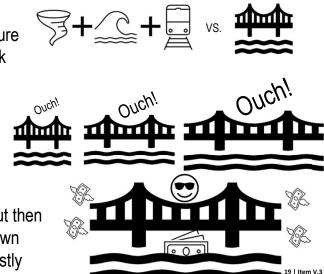
## Challenges with the Vallejo Options: Maritime Navigation and Bridge Design Possible crossing locations dictated by: Navigational requirements Structural constraints for long-span bridges Structural constraints for long-span bridges SECONDARY NAVIGATION OPENING APPROX. 950 WIDE NAVIGATION OPENING PRIMARY NAVIGATION CHANNEL 18 | Item V.3

## **Challenges with the Vallejo Options: Bridge Design: Key Points for Long Span Bridges**

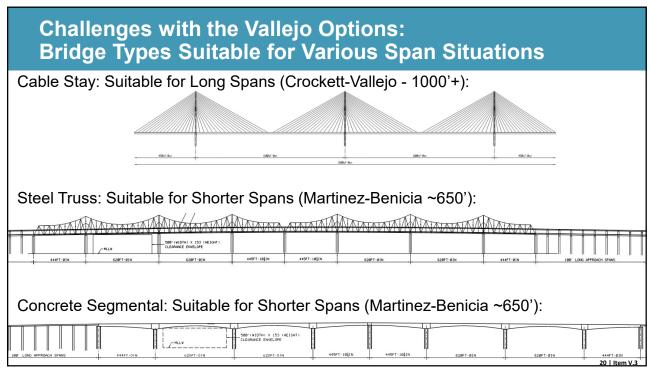
Forces in many directions from wind, wave, and other loadings, including rail infrastructure loads and the trains themselves can all work against a bridge being stable...

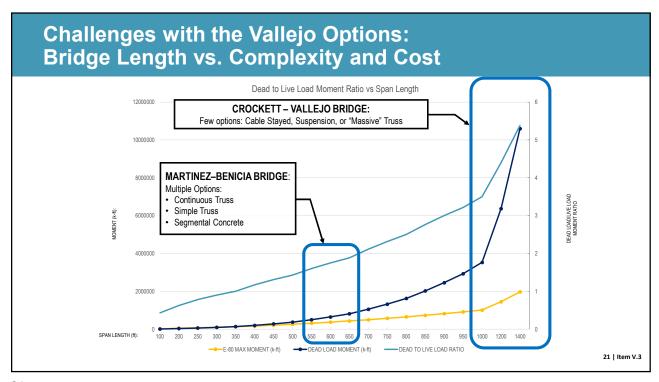
In a squared relationship the farther the stretch between spans needs to be even stronger to resist forces than can work in harmony to make it unstable

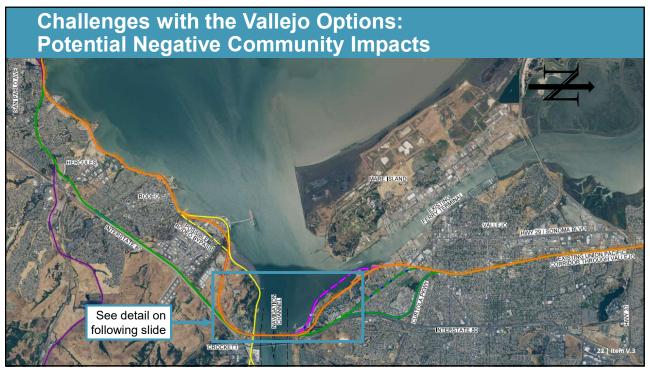
In response - build it bigger, and stronger but then the bridge is even struggling to hold up its own weight...so it gets bigger still...and more costly

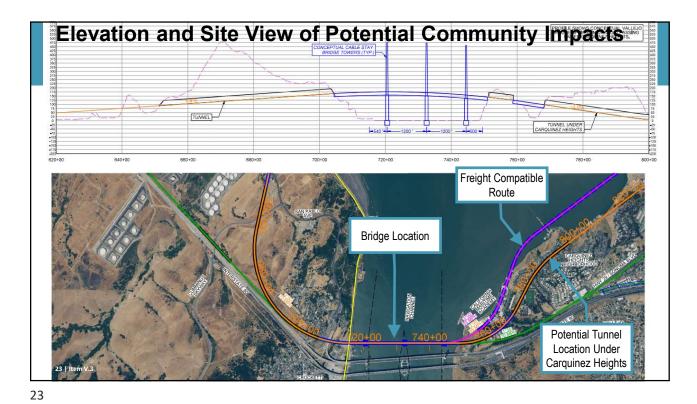


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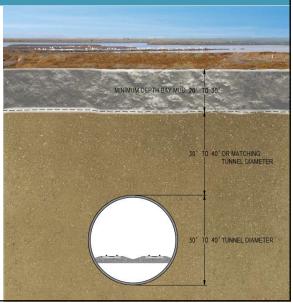




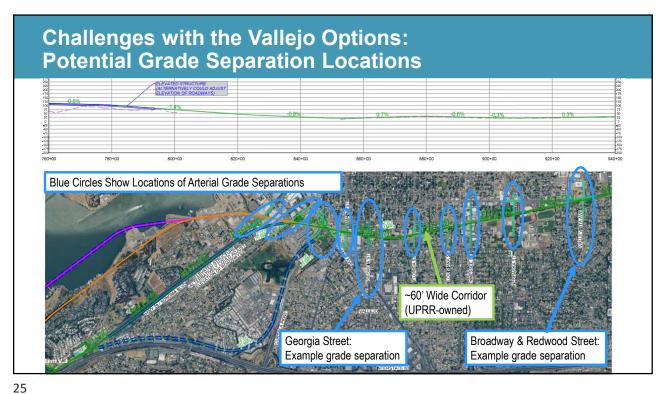
## **Challenges with the Vallejo Options: Carquinez Heights Tunnel Considerations**

Practical Considerations for Tunnels ("Rules of Thumb"):

- To attenuate noise and vibration, need ~ *two* tunnel diameters vertical clearance above tunnel crown.
- Tunnel approaches (less than 1 diameter cover) require open cut or cut-and-cover.



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## **Summary of Challenges with the Vallejo Options**

- √ Massive and heavy bridge structure
- √ Freight accommodation an additional challenge
- ✓ Tunneling impacts in Vallejo
- ✓ Grade separations (rail above or below roadway) are themselves disruptive to communities

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## **Comparison of Benicia-Martinez Options**

- Option west of I-680:
  - Must be built to accommodate width of two navigation channels thus more complex bridge type
  - Is potentially more disruptive to the city of Martinez
  - Potentially has conflicts with freeway infrastructure on the Benicia side of bridge touchdown
- Option east of I-680 could have potential impacts on wetland areas, but does not have as many challenges as the option west of I-680

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## **Makeup of Benicia-Martinez Options**

Two components:

- Improvements to Shoreline corridor common to both options
  - Individual shoreline sections can be implemented independently or bundled together, with or without bridge phase
- New bridge between Martinez & Benicia (West and East Option)



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## **Common Benicia-Martinez Options: Shoreline Focus - Engineering Pros and Cons**

- Pros:
  - Concept of dedicated freight and passenger tracks – add 2 new passenger dedicated tracks
  - Higher speeds via curve re-alignments, Sea Level Rise resiliency, more capacity



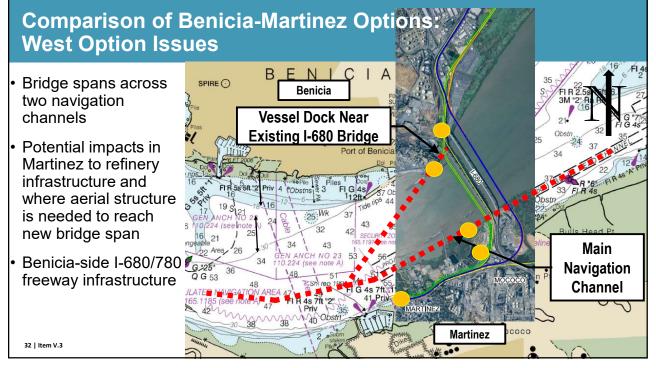
- Cons:
  - Some key "built-infrastructure" community disruptions associated with curve re-alignments
  - · Challenge of stabilization of slopes

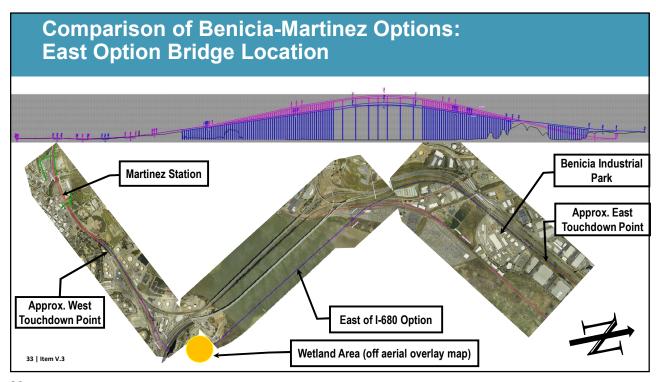
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## Common Benicia-Martinez Options: Potential for Phased Implementation Along Shoreline Potential Independent Project Components Shown in Blue







## Comparison of Benicia-Martinez Options: West and East of I-680 - Summary

- Option west of I-680:
  - (1) Spanning two navigation channels, (2) in Martinez disruptions to refinery and western starting point of new rail bridge, and (3) challenges getting rail through freeway maze in Benicia
- Option east of I-680 potentially avoids many of the challenges noted above but does impact wetlands on the south side
  - Concept allows for 2 freight tracks + 2 passenger tracks
  - Improvements allow speed increase (approx. 70 MPH) and travel time reduction.
  - Minimal impacts in downtown Martinez, 2 grade separations
- Common: Sea level rise resiliency improvements
- Common: Potential to phase implementation into several sub-projects, bundle projects to match available funding (e.g., sea level rise, goods movement, navigational improvement)

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## **Comparing Both Vallejo and Both Benicia/Martinez Crossing Options**

Using a relative scale of 1 (low) to 10 (high) where a low score is best

Issues	Vallejo Route	I-80 Route	B/M West Route	B/M East Route
Bridge Complexity	9	9	2	1
Approaches Complexity	8	TBD (8??)	6	3
Community Impacts	9	TBD (10??)	4	2
Freight Barriers	9	10	3	1
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