Short, Medium, and Long Term

**Short Term**
- 0-10 years
- Projects in planning or initial design now
- Examples:
  - Sac-Rsv 3rd Track
  - Oakland to San Jose Ph 2

**Medium Term**
- 10-20 years
- Projects on the horizon
- Examples:
  - Alviso double track
  - Incremental Speed increases
  - Salinas Extension

**Long Term**
- 20+ years
- 150 mph, electrified, dedicated corridor
- Examples:
  - A system like Euro/Asian economies today
Principles and Objectives

• The Capitol Corridor should be ...
  – the transit spine
  – seamlessly integrated
  – adapting to the impacts of sea level rise
Capitol Corridor JPA
Climate Change Vulnerability Assessment Project

Sponsoring Agencies

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Project Objectives

• To assess the vulnerabilities of Capitol Corridor physical assets to specific climate change scenarios.
  – Detailed assessment by hotspots along the route

• To understand how climate change will affect neighbors of the Capitol Corridor route.
  – Build foundation for future collaborative resilience and adaptation projects
Impacts on Capitol Corridor

Physical Assets
• Flooded tracks and stations
• Ballast damage and erosion
• Damaged electrical and communication lines

Service and O&M
• Disruption to rail service
• Increased maintenance costs
Point Pinole
Long lengths of tracks are located on the coastline and immediately adjacent to SF Bay waters.

Oakland
Tracks cross very urban areas, and the Maintenance Facility is located in Oakland.

Oakland Coliseum Station
Tracks cross urban areas, and the station is located close to creeks.

Martinez Station
Tracks are adjacent to a coastline park and urban areas, and the station is adjacent to a creek.

Santa Clara/Great America Station
Long lengths of tracks cross wetlands and sloughs.
Vision Plan Principles and Objectives

- The Capitol Corridor should be ...
  - more frequent (15-30 mins peak, 30-60 off-peak)
  - more reliable than even today
  - cleaner and quieter
  - protected from sea level rise
Process

• Focus more detail on Long Term
• This in-progress draft is inclusive of:
  – high level engineering with multimodal connections
  – schedule based on engineering
  – limited cost options comparison

• Final version:
  – ridership analysis
  – order of magnitude cost estimates
  – recommendations to further develop a detailed phasing/implementation strategy (based on travel time targets and cost-effectiveness)
Segments

Sacramento-Auburn: future analysis

- Suisun/Fairfield-Richmond
- Richmond-Oakland
- Oakland-San Jose
- San Jose-Salinas: future analysis
Key Issues by Segment

• San Jose-Oakland:
  – Alignment (speed and capacity)

• Oakland-Richmond:
  – Jack London alignment/configuration
  – Connection to BART/San Francisco
  – Capacity (4-track ROW)

• Richmond-Suisun/Fairfield:
  – Alignment (speed, sea level rise)
  – Reliability (Carquinez Strait crossing)

• Suisun/Fairfield-Sacramento
  – Interaction with freight (speed and capacity)
Oakland

• Trains in middle of street not sustainable
• Posey/Webster Tubes too shallow for subway
• No inexpensive options
Oakland-Richmond
Suisun/Fairfield-Sacramento
In progress: Summary

• Buildout assumes:
  – Complete grade-separation (required > 125 mph)
  – Electrification
  – Dedicated passenger tracks (in widened, purchased or new ROW)
  – Potentially new ROW in tunnels (Franklin Canyon, Jack London, Coliseum, Niles Junction)
  – New BART connection in West Oakland or Jack London

Photo by John H. Gray
Project Next Steps

• Order-of-magnitude cost estimates
• Ridership modeling
• Identifying next step to develop a Vision Implementation Plan where phasing/implementation strategy gets detailed
  – Balancing:
    • Short/Medium term capital planning throwaway costs
    • Travel time targets
    • Ridership markets
    • Cost-effectiveness