

The Megaproject Landscape

Plan Bay Area 2050 Tier 1 Projects



Megaproject Advancement Policy Commission Workshop
Day 2 Agenda Item 2

Definitions / Terms

- Megaprojects: Generally speaking, a regionally significant project with a total cost of \$1 billion or more
- Committed Funding: Funding that has been secured through a programming or other commitment process. Not subject to competitive award, voter approval, or legislative action
- MAP Submittals: Projects submitted as part of a request for information from MTC in March 2022; Costs/Funding \$ in Year of Expenditure
- Performance: References the Plan Bay Area 2050 Project Performance process - Performance was assessed in three distinct futures to identify investments that are resilient to uncertain future conditions
 - >1 Benefit/Cost; advances equity
 - >0.5 and <1 B/C; even for equity
 - <0.5 B/C; challenges for equity

Caltrain Electrification (PCEP)

Description

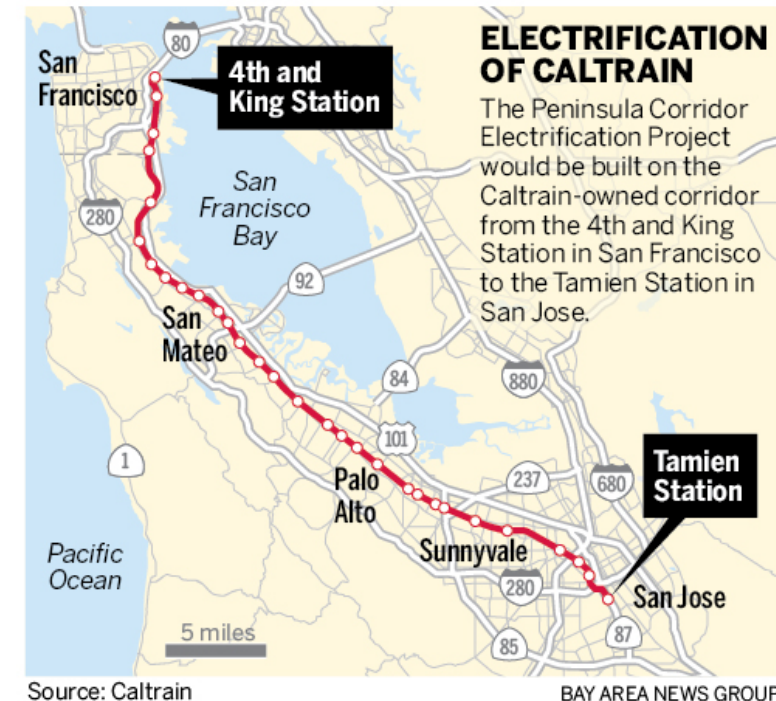
The Caltrain Electrification project will electrify 51 miles of Caltrain service between San Francisco and San Jose, increasing efficiency, capacity, and reliability along the corridor.

Sequencing

Anticipated Opening Year: 2024 (Tier 1)

PBA2050 Performance

No Performance Information - Committed Projects Are Exempt



Caltrain Electrification (PCEP)

Schedule & Funding

Phase	Anticipated Completion Date	Total Cost (\$ millions)	Committed Funding (\$ millions)	Uncommitted Funding Need (\$ millions)
Environmental/ Planning	Completed			
Design	Completed			
Right-of-Way	Completed			
Construction	2024 (Current Phase)	\$2,443	\$2,033	\$410
Total		\$2,443	\$2,033	\$410

- Committed funds cover 83% of total cost
- MAP submittal 23% higher than PBA 2050 cost estimate (includes recently announced cost increase)

BART Transbay Core Capacity Program

Description

The Transbay Corridor Core Capacity Program will allow BART to maximize throughput in the Transbay corridor through new railcars, an upgraded train control system, the Hayward Maintenance Complex (Phase 2), and new traction power substations.

Sequencing

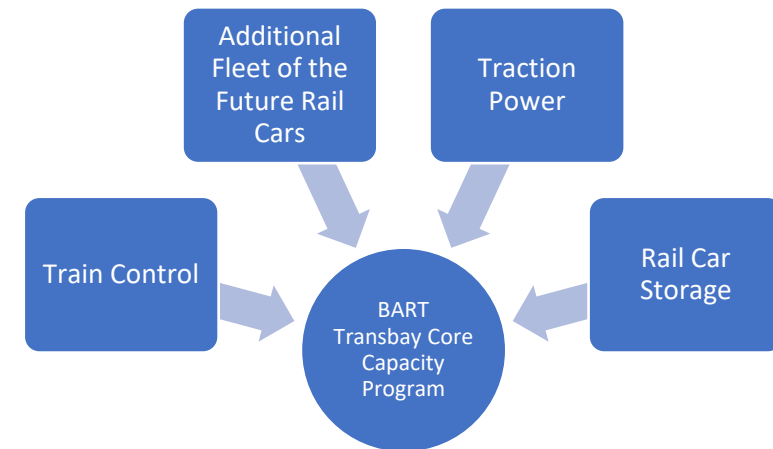
Anticipated Opening Year: 2028 (Tier 1)

PBA2050 Performance

Benefit/Cost

Equity

Guiding Principles



BART Transbay Core Capacity Program

Schedule & Funding

Phase	Anticipated Completion Date	Total Cost (\$ millions)	Committed Funding (\$ millions)	Uncommitted Funding (\$ millions)
Environmental/ Planning	2017 (Completed)	\$25	\$25	
Design	2020 (Completed)	\$59	\$59	
Right-of-Way	N/A	-	-	
Construction	2034 (Current phase)	\$3,741	\$3,177	\$564
Total		\$3,825	\$3,261	\$564

- Committed funds cover 85% of total cost
- MAP submittal 8% higher than PBA 50 cost estimate
- The amount of uncommitted funding remaining to complete construction is a preliminary estimate and will require further analysis and confirmation by BART

BART to Silicon Valley Phase II

Description

The BART to Silicon Valley Phase II project will extend BART service six miles from the Berryessa Transit Center to Santa Clara Caltrain Station, adding four new stations including a new station at San Jose Diridon Station.

Sequencing

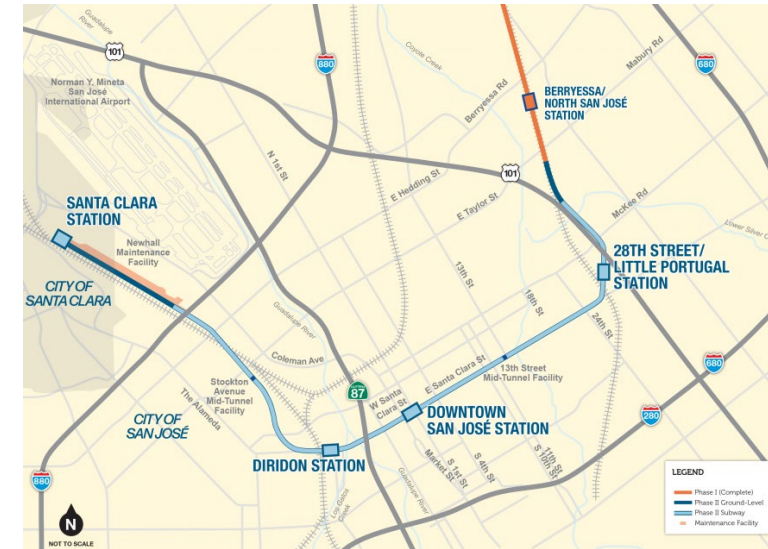
Anticipated Opening Year: 2030 (Tier 1)

PBA2050 Performance

Benefit/Cost

Equity

Guiding Principles



BART to Silicon Valley Phase II

Schedule & Funding

Phase	Anticipated Completion year	Total Cost (\$ millions)	Committed Funding (\$ millions)	Uncommitted Funding (\$ millions)
Environmental/ Planning	2018 (Completed)	\$205	\$205	
Design	2026 (Current phase)	\$505	\$505	
Right-of-Way	2023	\$653	\$653	
Construction	2030	\$5,981	\$2,896	\$3,085
Total		\$7,345	\$4,260	\$3,085

- Committed funds cover 58% of total cost
- For CIG program, FTA risk assessment identified potential cost increase to \$9 billion, 25% higher than VTA's current cost estimate, to cover contingencies. VTA has not yet verified this cost increase.

Caltrain Downtown Extension (DTX)

Description

The Downtown Rail Extension project will extend Caltrain and future California High-Speed Rail service approximately two miles from the existing 4th and King railyard to the Salesforce Transit Center, with a new station at 4th and Townsend.

Sequencing

Anticipated Opening Year: 2031 (Tier 1)

PBA2050 Performance

Benefit/Cost

Equity

Guiding Principles



Caltrain Downtown Extension (DTX)

Schedule & Funding

Phase	Anticipated Completion Date	Total Cost (\$ millions)	Committed Funding (\$ millions)	Uncommitted Funding Need (\$ millions)
Environmental/ Planning	2019 (Completed)			
Design	2025 (Current Phase)	\$136	\$89	\$47
Right-of-Way	2025	\$326	\$107	\$218
Construction	2031	\$4,538	\$639	\$3,899
Total		\$5,000	\$835	\$4,164

- Committed funds cover 17% of total cost
- MAP submittal 27% higher than PBA 2050 cost estimate

Valley Link

Description

The 26-mile initial operating segment of Valley Link project would construct new commuter rail service connecting San Joaquin County to Dublin/Pleasanton BART station, with two additional new Bay Area stations in eastern Alameda County.

Sequencing

Anticipated Opening Year: 2028 (Tier 1)

PBA2050 Performance

Benefit/Cost

Equity

Guiding Principles



Valley Link

Schedule & Funding

Phase	Anticipated Completion Date	Total Cost (\$ millions)	Committed Funding (\$ millions)	Uncommitted Funding (\$ millions)
Environmental/ Planning	2024 (CEQA Completed, NEPA/30% Design ongoing)	\$60	\$60	-
Design	2025	\$128	\$128	-
Right-of-Way	2025	\$160	\$80	\$80
Construction	2027	\$1,516	\$426	\$1,090
Total		\$1,864	\$694	\$1,170

- Committed funds cover 30% of total cost
- MAP submittal only for initial operating segment, at a cost 18% lower than PBA 2050 cost estimate for the Bay Area share of full 42-mile project

Zero Emissions Bus Transition

Description

The Zero Emissions Bus Transition program will support the electrification of the region's bus fleet, reducing emissions in line with state mandates and modernizing the fleet to provide more reliable service.

Sequencing

Anticipated Opening Year: Ongoing (Tiers 1 & 2)

PBA2050 Performance

No Performance Information - Not Modelable



Zero Emissions Bus Transition

- In 2018, the California Air Resources Board adopted the Innovative Clean Transit rule, requiring gradual transition to Zero Emission and all purchases in 2029 and beyond to be ZEB.
- In partnership with transit operators, MTC developing a regional transition strategy focused on cost/funding identification, coordination, and managing risk.
- Strategy to inform funding advocacy for state, federal and other opportunities

Key Takeaways

- Significant cost increases over the years; significant funding gaps remain
- Some projects poised to get over finish line....other barely at the starting gate
- Governance complex for funding, project delivery and long-term operations
- No standard approaches to risk management
- Key Risks:
 - Complex Agreements - Public Agency/Public Agency and Owner/Contractor
 - New Technologies and Innovative Construction Approaches
 - Uncertainty in Operating Funding Plans