

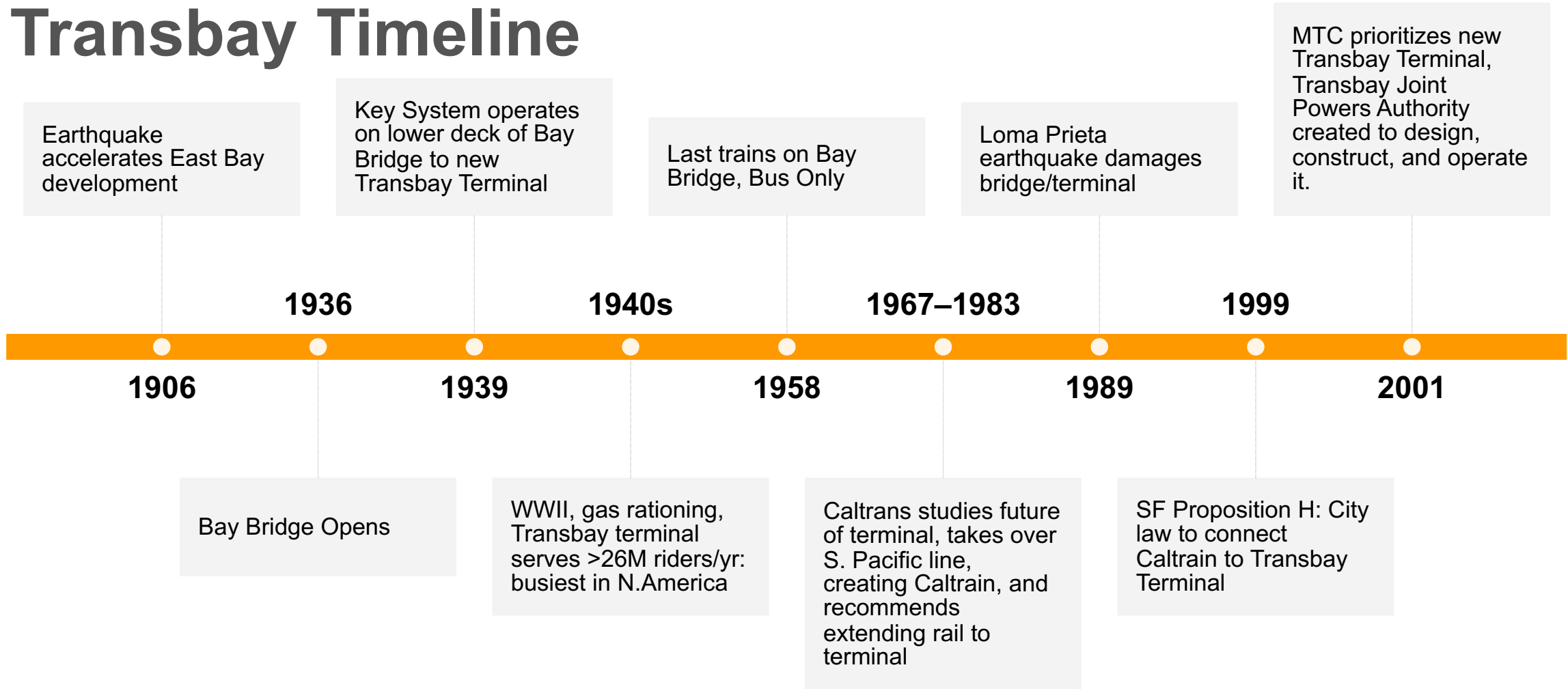
Transbay Program Downtown Rail Extension

BuildOUT California

July 22, 2022



Transbay Timeline



Key System Transit Lines westward "B" train on Bay Bridge, 1955. Photo courtesy of John Harder.





Transbay Joint Powers Authority (TJPA)

- In 1999, City voters approved a ballot measure to extend the northern terminus of Caltrain from south of downtown to a new transit station at the site of what was the existing Transbay Terminal
- TJPA was created under State law in April 2001
- The agency is charged with design, construction and operation of a new transit center and associated facilities
- Joint Powers Authority Member Agencies
 - City & County of San Francisco
 - Alameda-Contra Costa Transit District
 - California High Speed Rail Authority
 - Caltrans (CA State Dept. of Transportation)
 - Peninsula Corridor Joint Powers Board
 - City & County of San Francisco
 - San Mateo County Transit/Caltrain
 - Santa Clara Valley Transportation Authority

Transbay Program

- Replace former Transbay Terminal with a multi-modal Transit Center
- Create a transit-oriented neighborhood featuring housing (35% affordable housing), open space, offices and shops
- Extend Caltrain and California High Speed Rail service into downtown San Francisco





Transbay Project Area (Before)





Transbay Project Area (After)



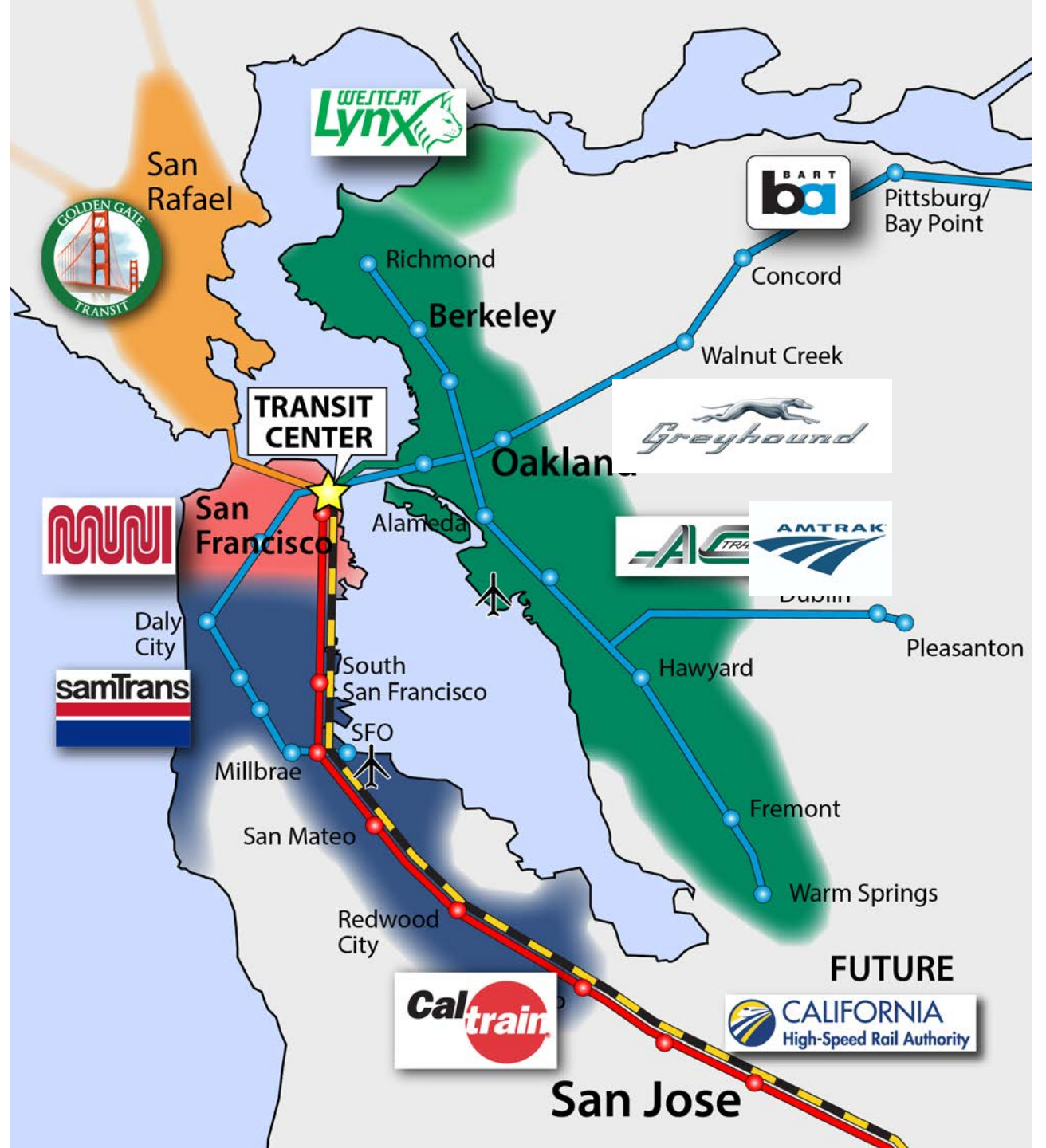
Phase 1 - \$2.25B Transit Center Complete



6 stories in downtown San Francisco. Below grade two-story train box completed with \$400M in ARRA funding.

Transit center currently connects 9 regional and local transit systems, providing job access from the East Bay to the Peninsula and South Bay, and vice versa.

Phase 2 will connect Caltrain and CA High Speed Rail down the peninsula and all the way to Anaheim.



Transit Center

Jobs Across the United States of America

Washington
Thompson Metal, Vancouver
Steel Columns & Transfer Girders
Insulfoam, Puyallup
Insulation
McClellan Iron Works, Everett
Steel Frames

Idaho
Base Line Irrigation, Boise
Irrigation Products

Oregon
Marks Metal Tech, Clackamas
Rolling & Metal Forming
Oregon Sandblasting, Tualatin
Metal Prep & Coating
Oregon Iron Works, Clackamas
Girders, Basket Columns
American Steel, Portland
Supply Steel Plates

California
Gerdau, Napa /San Diego/Long Beach
Reinforcing Bars
XKT Engineering, Vallejo
Cruciform SLRS Vertical Members
Bratton Masonry Inc., Fresno
Masonry
Mageba, San Jose
Pendulum Bearings
ISAT, La Mirada
Seismic Anchors
TWI, Los Angeles
Curtain Wall Steel Frames
Harris Rebar, Livermore
Reinforcing Bars
Pacific Erectors, Rocklin
Metal Wall Panel System
The Herrick Corp, San Bernardino
WF Shape, SLRS Steel Members
DYWIDAG-Systems, Long Beach
Reinforcing Bars/HS Rods
NMI Industrial, Sacramento
Steel for Stairs
Desert Mechanical, Sylmar
HVAC, Plumbing
Mason Industries Inc, Anaheim
Seismic bracing and Isolation

Montana
Microlab, Bozeman
Power Splitter/Couplers
Wyoming
Barold, Colony
Slurry for CIDH Piles

Nevada
Performance Pipe, Reno
Geothermal System
Southwest Specialty,
Las Vegas
Metal Ceilings

Kansas
Bradken, Atchison
Large Steel Shapes
Viega, Wichita
Pipe Fittings



Colorado
Rail Service Corp, Lakewood
Transit Communications Systems
Johns Manville, Denver
Insulation Systems

Arizona
Stinger Bridge & Iron, Coolidge
Cable Stay Steel Plates
Coyote Steel, Fountain Hills
Steel Beams for Falsework
Clayton National, Scottsdale
Fireproofing
Vinyltech Corp, Phoenix
PVC Pipes

North Dakota
GPK Products, Fargo
PVC Pipe Fittings

South Dakota
Daktronics Inc, Brookings
Bus Ramp Changeable Message Signs
Nebraska
G4S Technology, Omaha
Security Systems
Diamond Plastic, Grand Island
PVC Pipe

Missouri
Bradken, St. Joseph
Cast Nodes
Architectural Systems, Monett
Metal Panels
Carboline, St. Louis
Performance Coatings
H.E. Williams, Carthage
Light Mountings
Bull Moose Tube, Chesterfield
Mechanical & Structural Tubing

Utah
Star Seismic, Salt Lake City
Seismic Braced Frames
New Mexico
Insight, Rio Rancho
LED Lighting
Oklahoma
Hilti, Tulsa
Firestop Products, Anchors

Texas
Encore Wire, McKinney
Grounding Cable
VSL, Fort Worth
Cable Stay Bridge
Joy Global, Longview
Special Fabrication
Wyman-Gordon, Houston
Light Column Rings
De Neef, Houston
Waterstops

Louisiana
Bradken, Amite
Steel Shapes, Cast Nodes
Gordon Inc, Bossier City
Metal Ceiling Design
Fiber Soils, Baton Rouge
Landscaping Materials

Mississippi
ARA, Vicksburg
Engineering Services

Minnesota
Innovent, Minneapolis
Indoor Air Handling Unit
Valspar, Minneapolis
Extrusion Coatings
Twin City Hose, Rogers
Flexible Metal Hose
Iowa
EFCO Corp, Des Moines
Concrete Forms
Elco Const., Decorah
Metal Fasteners, Anchors
Viking Pump, Cedar Falls
Pumps

Kentucky
General Cable,
Highland Heights
Electrical Cable
Republic Conduit, Louisville
Electrical Conduit

Tennessee
Grace, Mount Pleasant
Foundation Water Proofing
Typar Geosyns, Old Hickory
Root Control Barriers

Arkansas
Nucor-Yamato, Blytheville
Steel Shapes
GRT Robber Tech, Paragould
Bearing Pads

Florida
Berg Steel Pipe, Panama City
Steel Shapes
Trulite, Tamarac
Laminated Glass
Gunderlin, Hialeah
Elevator Cabs

Illinois
Delta Structures Inc, Addison
Space Frame Design & Fab
Scot Forge, Spring Grove
Forged Pins
Circle Metal Specialties, Alsip
Custom Steel Design & Fab
Allied Tube & Conduit, Harvey
Rigid Steel
Larson Engineering, Chicago
Curtain Wall Engineering

Wisconsin
Wisconsin Centrifugal,
Waukesha
Spun Cast Pipes
Well Pump Co, Cedarburg
Water Heaters/Controls

Alabama
Reliable, Geneva
Louvers
Jay R. Smith Mfg, Montgomery
Landscape Drainage
US Pipe and Foundry Company
Pipes

Georgia
Gardner Metal Sys., Acworth
Curtain Walls
Southwire Co., Carrollton
Flexible Steel Conduit
PNA Construction, Atlanta
Dowel Aligners & Plates
Superior Essex, Atlanta
Fiber Optic Cables
Tencate Miraf, Pendergrass
Mechanical Pads

Michigan
Williams Form Eng, Belmont
Supply HS Rods
Ward Connector, Holland
HVAC Components
Indiana
Crown Corz, Gary
Curtain Walls/Awning
RACO, South Bend
EMT Fittings
Nibco, Elkhart
Flow Control Products
Thermafiber, Wabash
Mineral Wool Insulation

Ohio
Lincoln Electric, Euclid
Welding Wire & Machines
Metal Tek, Sandusky
Spun Cast Pipe
Artco, Hannibal
Steel Plates
The Dyson Corp, Painesville
HS Rods
Picoma Industries, Cambridge
EMT Elbows, Steel Conduit
Columbia Eng. Rubber, Vandalia
Rubber Bellows
ClarkDietrich, West Chester
Steel Framing

New Jersey
Barrett Roofs, Millington
Waterproofing
Sika Corp, Lyndhurst
Waterproofing

Maryland
US Bulletproofing, Hyattsville
Glass Doors
Larsen Products, Jessup
Concrete Bonding Agents
Elsco, Owings Mills
Elevator Roller Guides

Delaware
Evarz Claymont, Claymont
Steel Plates
Virginia
Hapco Pale, Abingdon
Light Poles
Koster, Virginia Beach
Waterproofing

N. Carolina
Schindler, Clinton
Escalators
Nucor, Cofield
Steel Plates
Galvan Ind., Inc, Harrisburg
Grounding Rods
Austin Elec., Yadkinville
Grounding Rods

S. Carolina
Otis, Florence
Escalators
Apollo Valves, Pageland
Valves

Wisconsin
Wisconsin Centrifugal,
Waukesha
Spun Cast Pipes
Well Pump Co, Cedarburg
Water Heaters/Controls

Ohio
Lincoln Electric, Euclid
Welding Wire & Machines
Metal Tek, Sandusky
Spun Cast Pipe
Artco, Hannibal
Steel Plates
The Dyson Corp, Painesville
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Grounding Rods

S. Carolina
Otis, Florence
Escalators
Apollo Valves, Pageland
Valves

Maine
Woods End Labs, Mt Vernon
Analytical Soil Testing
New Hampshire
Burndy, Manchester
Pipe Compression Connections

New York
Hohmann & Barnard, Hauppauge
Waterproofing
Watson Bowman Acme, Amherst
Structural Sealing Joint System
Karp Assoc Inc, Melville
Access Doors
Garlock, Palmyra
Pipe Fittings/Gaskets

Massachusetts
Berry Plastics, Franklin
Waterproofing
Sarnafil, Canton
Waterproofing

Rhode Island
APC, West Kingston
Uninterrupted Power Supply
Connecticut
Bridgeport, Stratford
Electrical Fittings
United Tech. Co., Farmington
Security Systems
Belimo, Danbury
Actuators

West Virginia
American Airworks, Sophia
Breathing Air Systems
Pennsylvania
Ward Mfg, Blossburg
Pipe Fittings
ArcelorMittal, Coatesville
Steel Plates
Chapel Steel, Pottstown
Steel Plates
ESAB, Hanover
Welding Materials
Wheatland Tube Co., Scranton
Conduit Locknuts, Bushings
PPG Industries, Pittsburgh
Industrial Coatings

Total Jobs Created
Local: 13,508* | Beyond SF Bay Area: 10,550
Cities: 500+ | Companies: 900+
Off-site Jobs Created
500 200 100

* Jobs created in the San Francisco Bay Area from demolition of the old Transbay Terminal, construction of the Temporary Terminal, Transit Center and Bus Ramp.

BuildOUT California Involvement

Phase 1

- Robust SBE program added to the Webcor/Obayashi (W/O) contract with an 18% goal that was committed to at the beginning of construction.
- Paul's energy and strong support helped us meet the Phase 1 SBE goal.
- The TJPA was the first public works program in the country to hold an LBGTQ SBE outreach event back in 2013. Lt. Gov. Newsom even attended.

Phase 2

- One way that success of the DTX will be measured is SBE/DBE utilization. On July 14, 2022, the TJPA Board adopted a 17% DBE Participation Level for federal fiscal years 2022-25 and an agency SBE Goal of 20.5%.
- Phase 2 currently estimated at \$5B to construct.
- The Nov 2011 Project Labor Agreement will remain in effect for Phase 2.

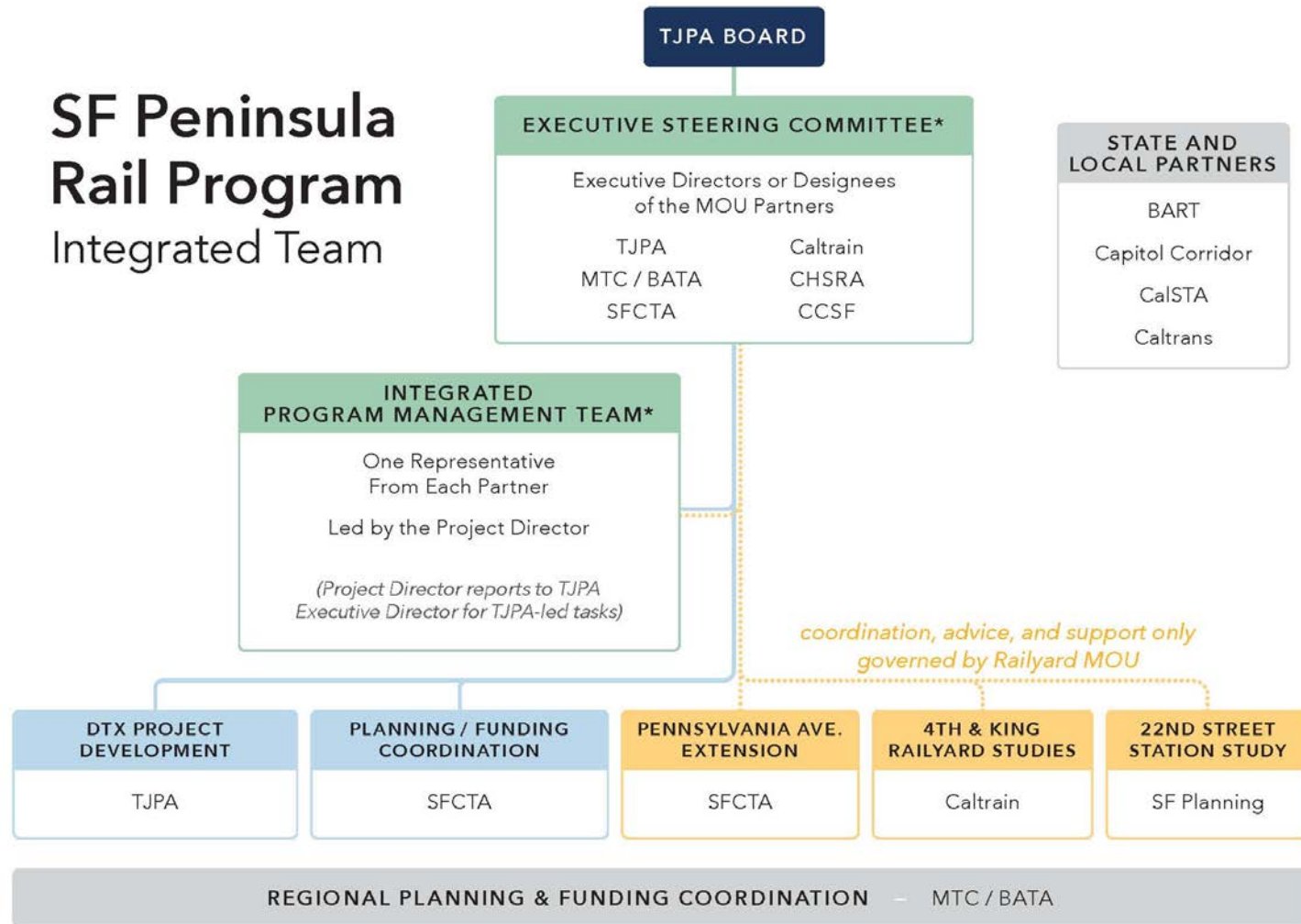
Phase 2: Connecting Downtown SF & Beyond



- Extends Caltrain into regional transit network by providing seamless transfers to nine North and East Bay transit services
- Improves air quality through VMT reduction equivalent to over 19,000 auto trips daily (first year of full operation) eliminating 9.8 million metric tons of CO₂ (over 50-year period)
- Serves as downtown terminal for High-Speed Rail and enables one-seat ride between San Francisco and Los Angeles
- Potential connection to Link21 Project
- A long-standing regional priority reflected in Plan Bay Area 2050

Strengthened Collaboration and Partnership

SF Peninsula Rail Program Integrated Team

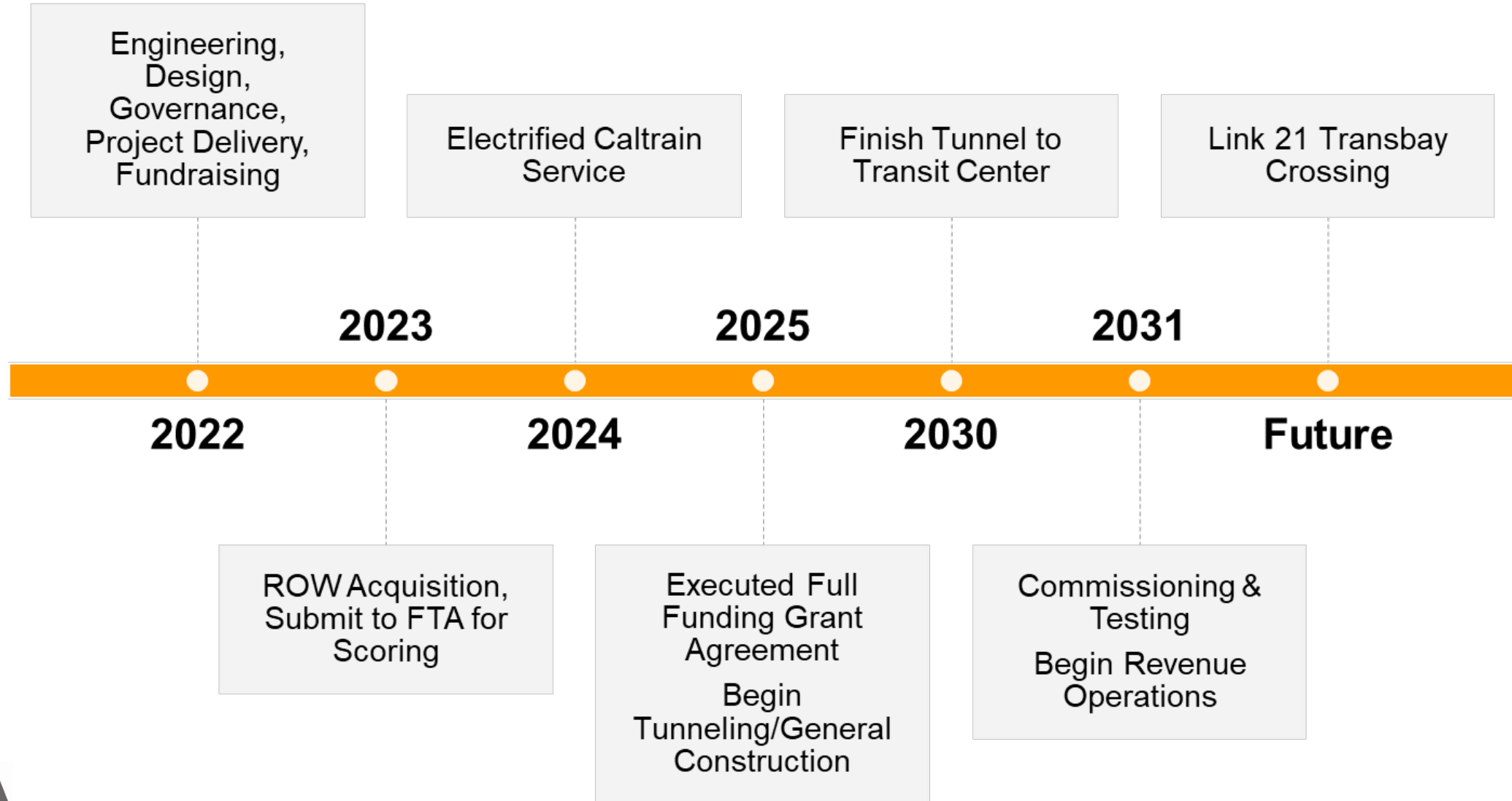


Partner Agencies

- Transbay Joint Powers Authority
- Metropolitan Transportation Commission
- California High Speed Rail Authority
- Peninsula Corridor Joint Powers Board
- City and County of San Francisco
- San Francisco County Transportation Authority

* Consistent with and limited to the Summary Work Program (Attachment 2) defined by the San Francisco Peninsula Rail Program MOU approved by TJPA Board on April 9, 2020

Phase 2 Timeline



Project Elements

Downtown Rail Extension (DTX) Alignment



Train Box Fitout & Train Box Extension





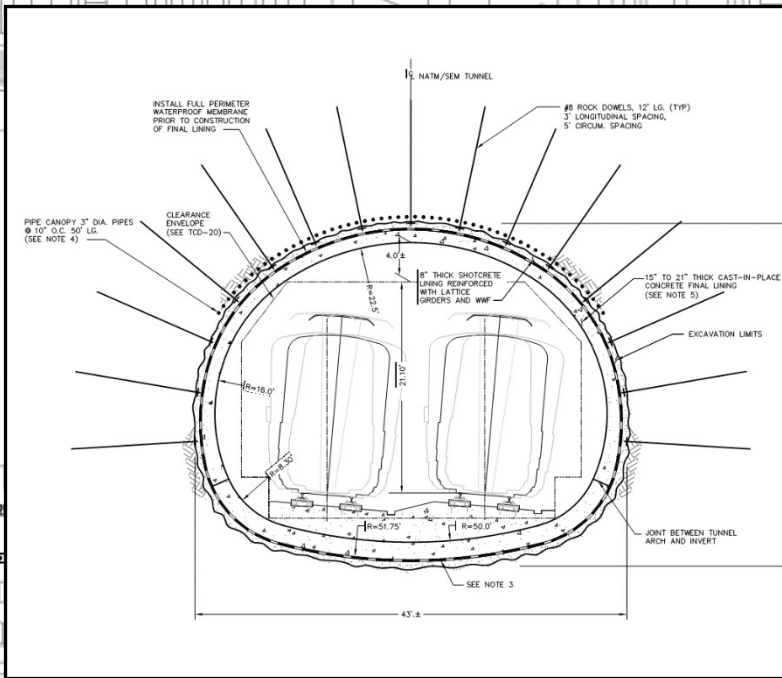
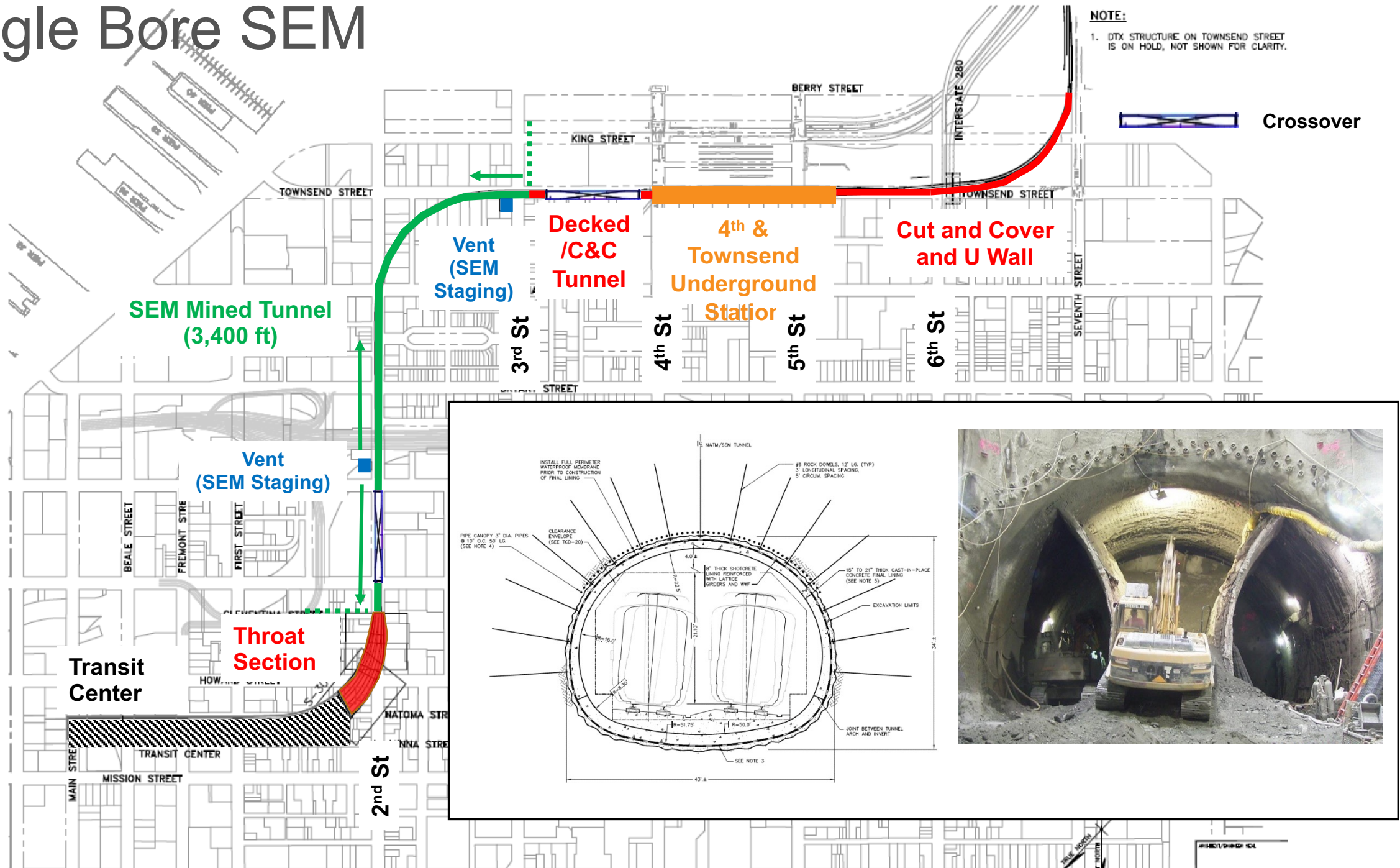
Train Box Fitout

Throat Structure & Mined Tunnel



Single Bore SEM

NOTE:
1. DTX STRUCTURE ON TOWNSEND STREET IS ON HOLD, NOT SHOWN FOR CLARITY.



Crossover

SEM Mined Tunnel (3,400 ft)

Decked /C&C Tunnel

4th & Townsend Underground Station

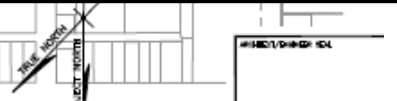
Cut and Cover and U Wall

Vent (SEM Staging)

Throat Section

Transit Center

TRANSIT CENTER

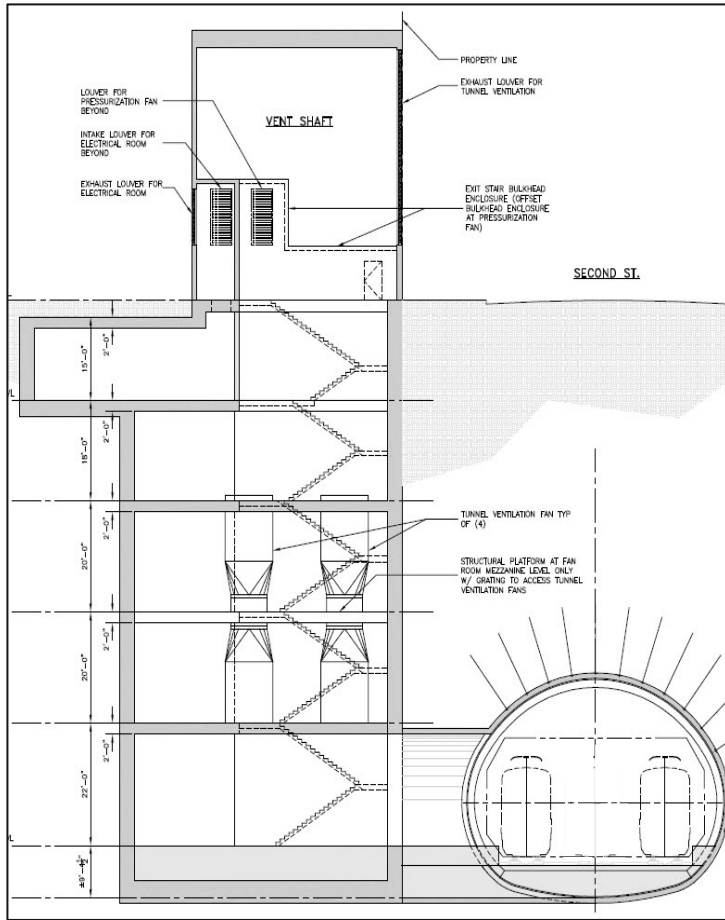


Ventilation & Emergency Exiting Structures



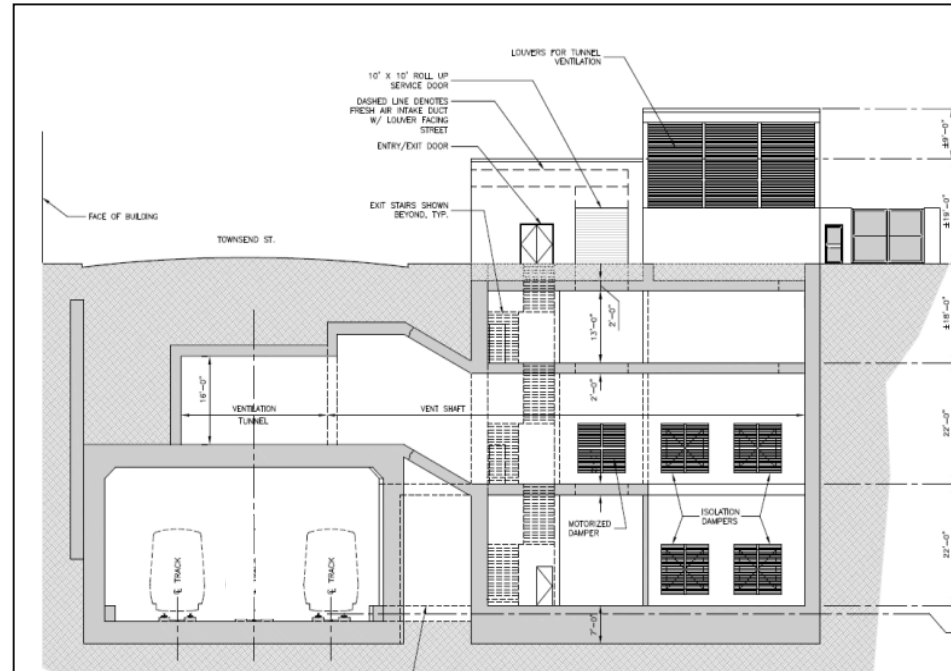
Ventilation & Emergency Exiting Structures

Vent Structure at Second & Harrison



NOT TO SCALE

Vent Structure at Third & Townsend



NOT TO SCALE


** Additional Vent Shafts at the Transit Center and Fourth and Townsend St. Station*

Required by code: NFPA 130

Fourth and Townsend Street Station



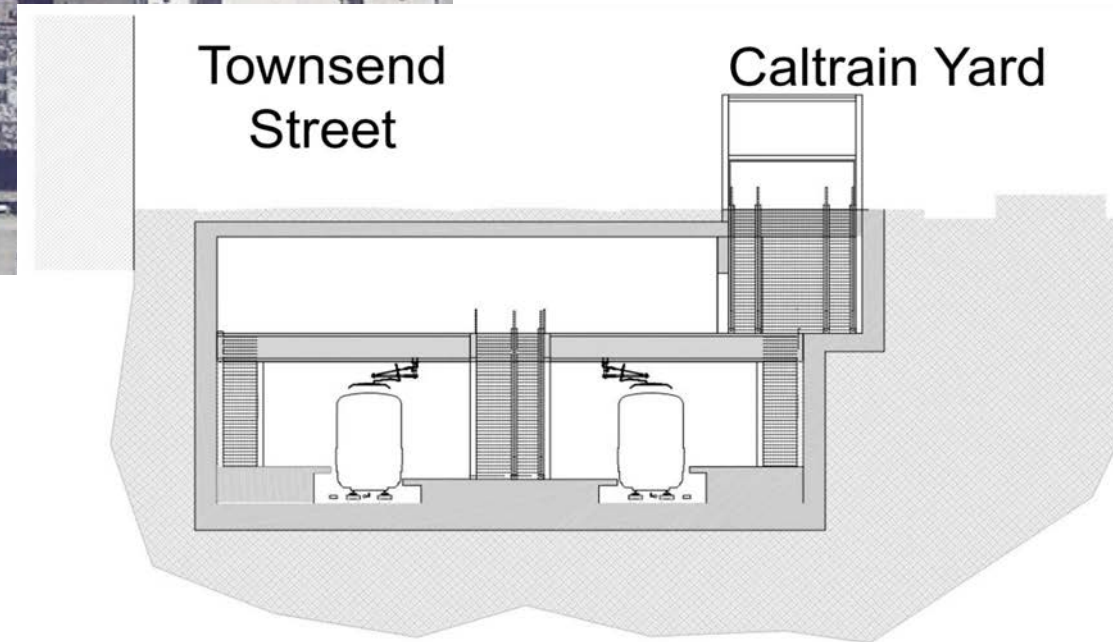
**Transbay Program Phase 2
Downtown Rail Extension**

 Vent Structure

0 500 1000 2000
Scale in feet

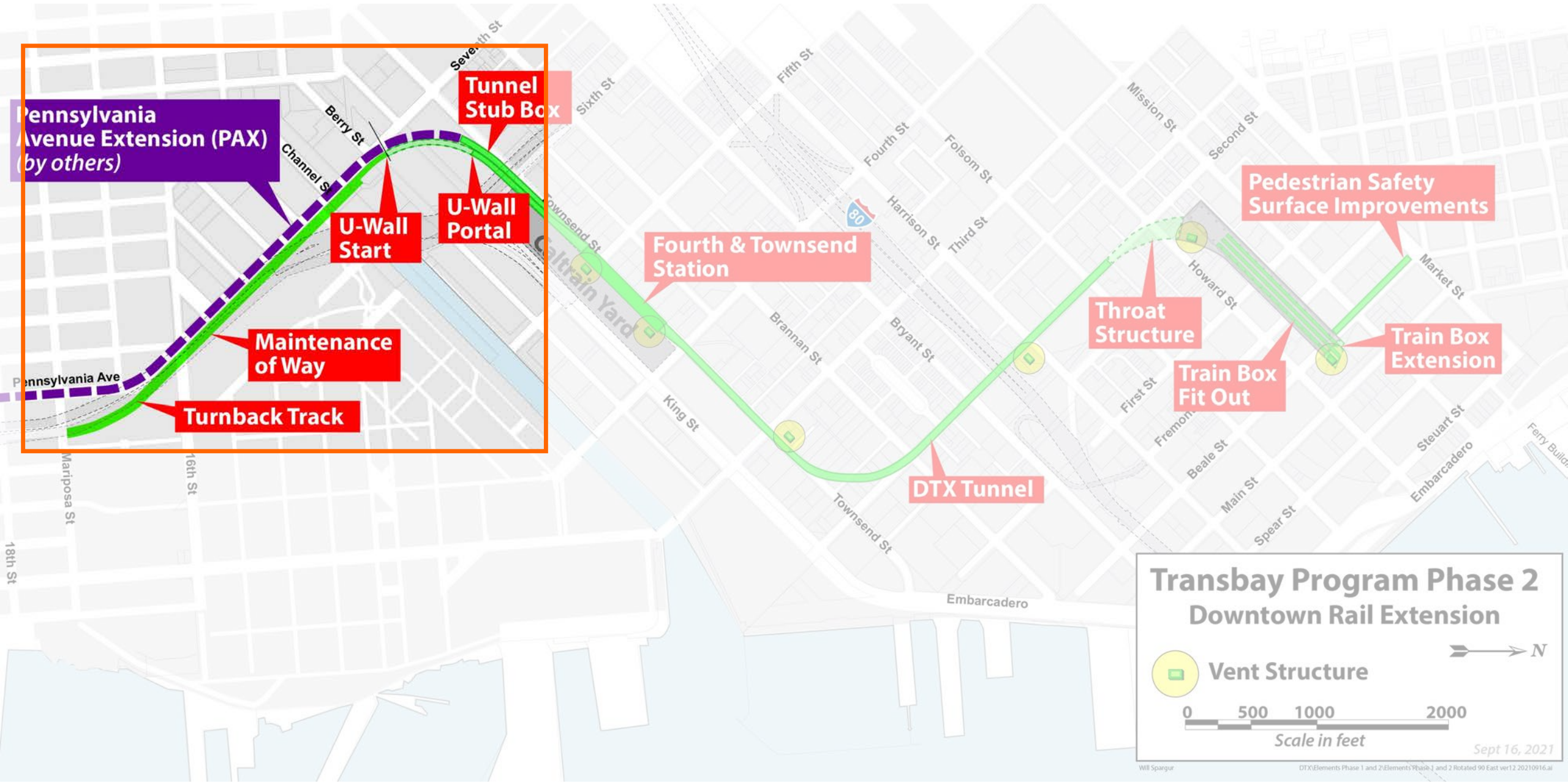
Sept 16, 2021

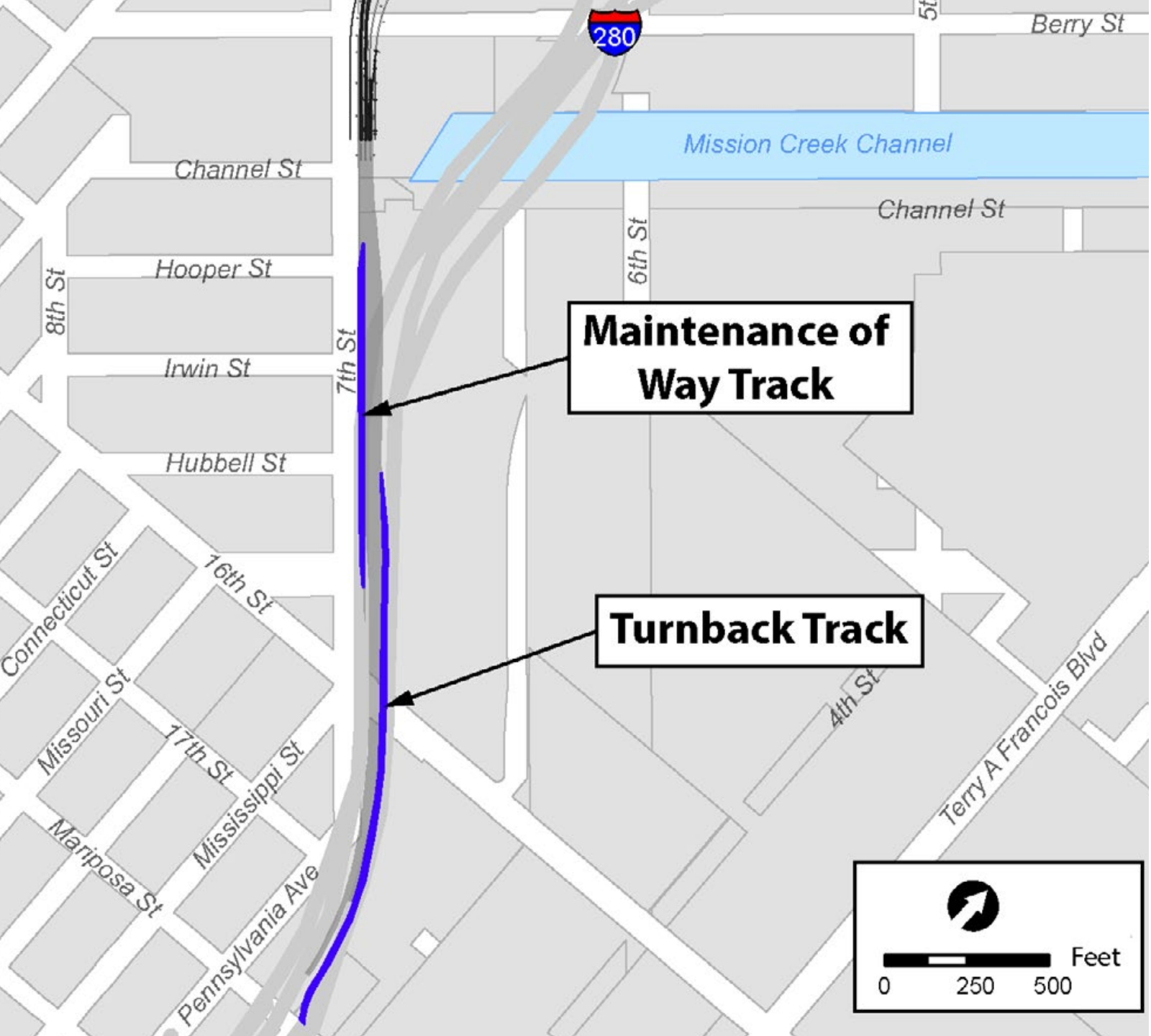
Fourth and Townsend Street Station



Transverse Section – Concept B

U-wall, Tunnel Stub & At-grade Trackwork





Maintenance of Way Track

Turnback Track

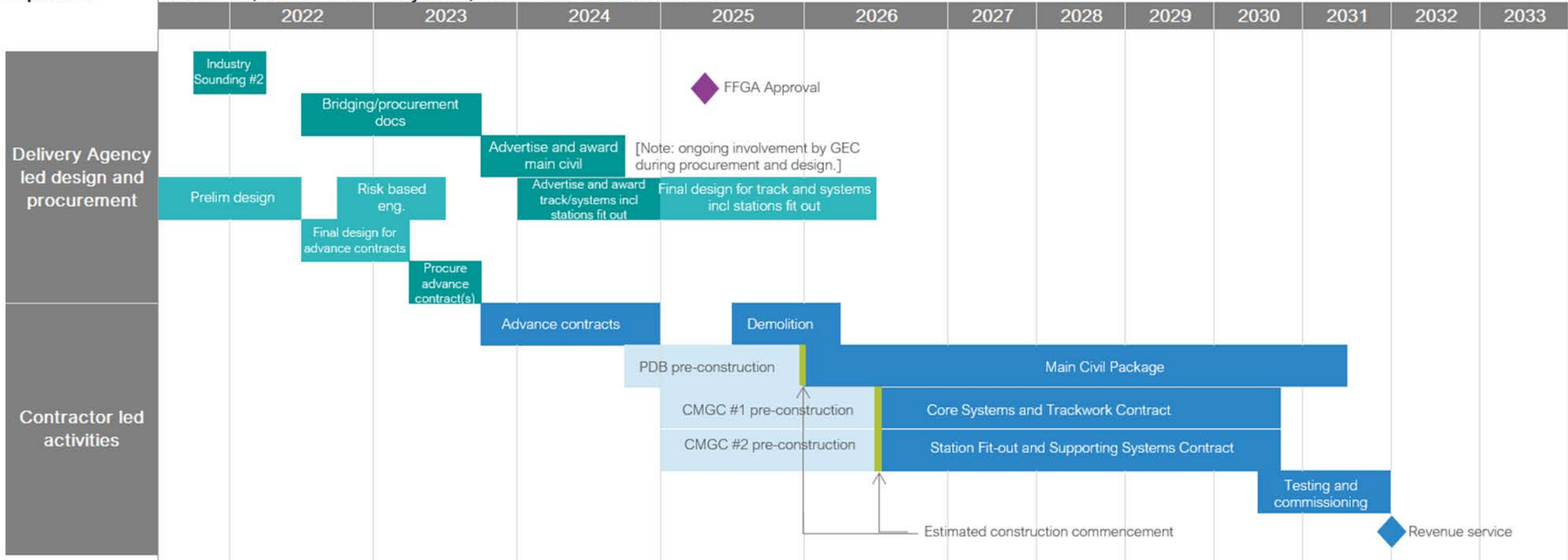
Maintenance-of-Way & Turnback Track



Project Delivery Approach

Option 5

Civil PDB, 2x CMGC for Systems, Track and Station Fit-out



Thank You

Adam Van de Water
Executive Director

Alfonso Rodriguez
Project Director

