DTX Update

November 14, 2013

Transbay Transit Center

TJPA

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Outline

- Purpose & Benefits of the Downtown Rail Extension (DTX)
- 2012-2013 DTX Work Report & Update
- DTX Delivery Options
- 2012 MOU Overview
- DTX P3 Overview
- Next Steps

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Stakeholder Outreach

- Mayor's Office
- San Francisco County Transportation Authority
- Metropolitan Transportation Commission (MTC)
- Caltrain
- California High Speed Rail Authority (CHSRA)
- Friends of Caltrain
- Transbay Citizens Advisory Committee

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Purpose & Benefits of DTX

The DTX extends rail service to downtown San Francisco

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Purpose of DTX

- Extend Caltrain, intercity rail, and high speed rail to downtown San Francisco
  - 1.3 miles from 4th & King Streets to Transbay Transit Center (TTC)
  - 1.95 miles from Mission Bay Drive & 7th Street to Main Street
- Enhance connectivity of Caltrain to other transit systems
- Reduce traffic volumes, vehicle miles traveled, and delays on US 101 and I-280
- Reduce vehicle emissions and improve regional air quality
- Increase property values around TTC
- Accommodate City's plans for I-280 and grade separation

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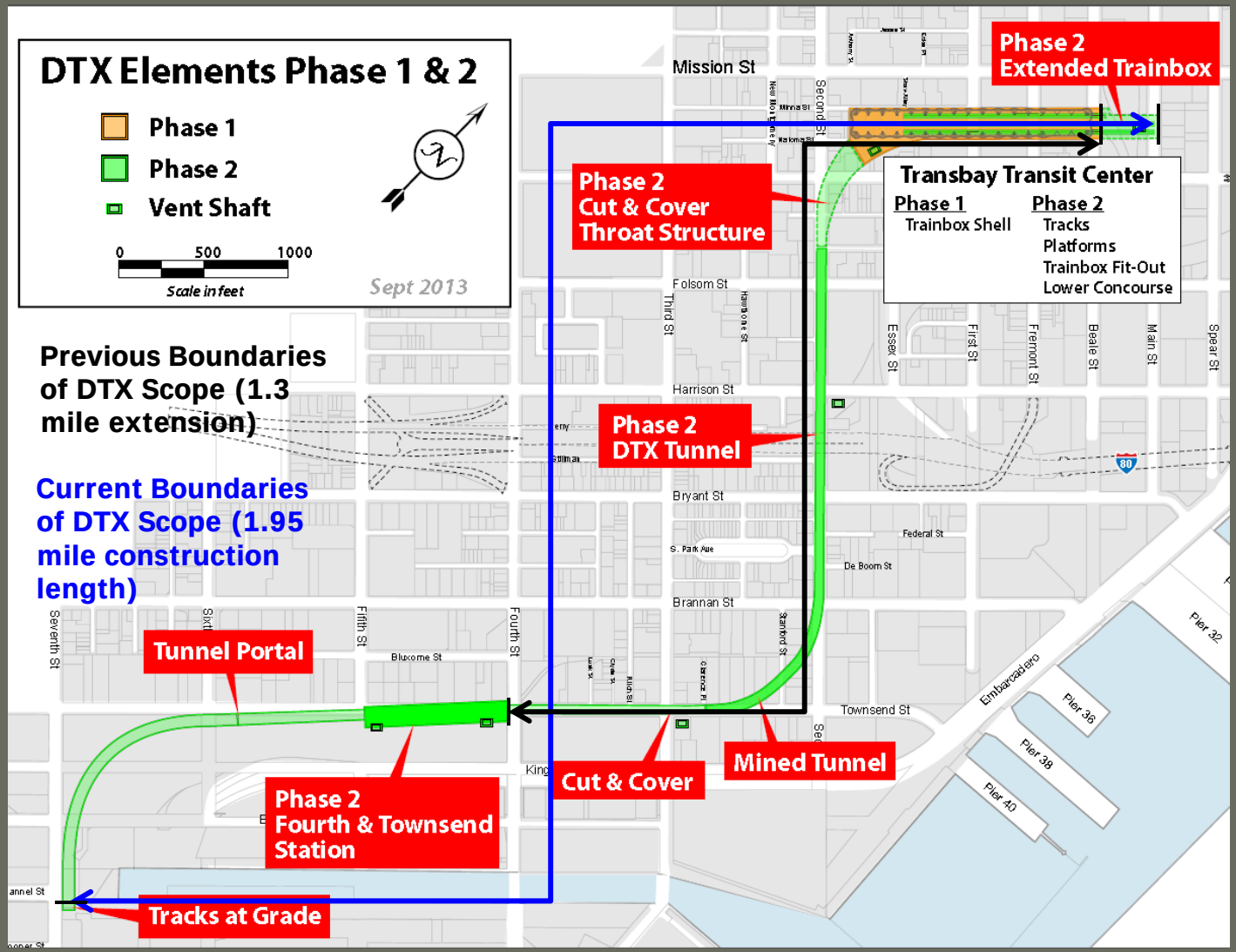
DTX Elements



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Economic Benefits of Transbay Program

- Increases surrounding property values by $3.9 billion
- Generates $87 billion in Gross Regional Product and $52 billion in personal income through 2030
- Creates more than 125,000 jobs directly and indirectly

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Other Benefits of Transbay Program

Transbay Program will improve access to transit for:

- Jobs – 180,000 jobs within ½ mile
- Housing – 8,000 new units in vicinity
- Hotels – new hotel capacity
- Ridership – increase Caltrain riders into SF by more than 50%
- Warriors – improve access to new arena

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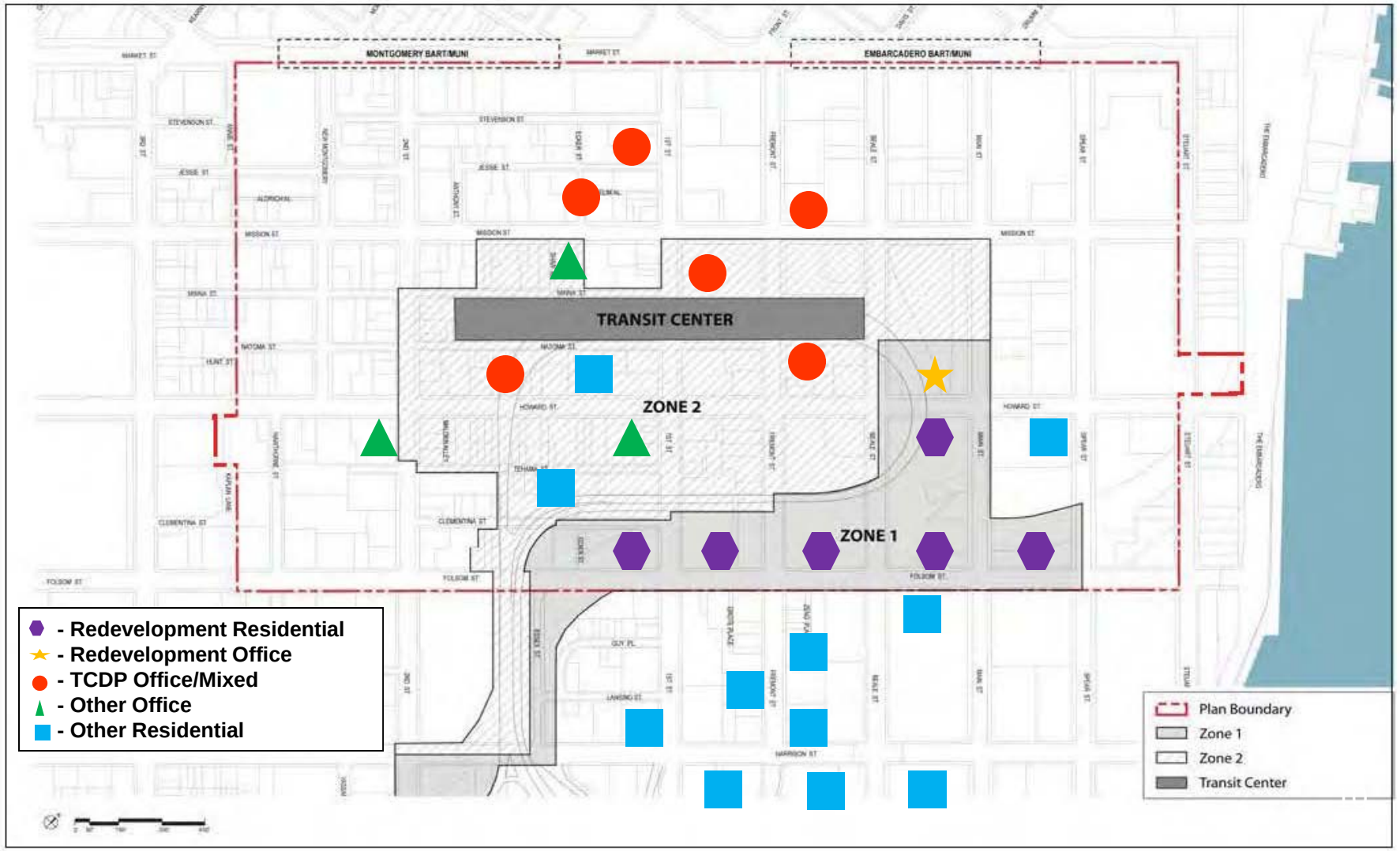
Development Projects Pipeline



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DTX Phase 1
Trainbox Shell

- Trainbox is under construction
- Above-ground bus facility and rooftop park to open in 2017

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DTX Phase 2
Transit Center

Station Fit-out:

- Six tracks
- Three center platforms
- Lower Concourse facilities
- Ventilation shaft

Trainbox Extension:

- Extension of trainbox to accommodate full length high speed rail trains
- Includes ventilation shaft
- Intercity bus facility above

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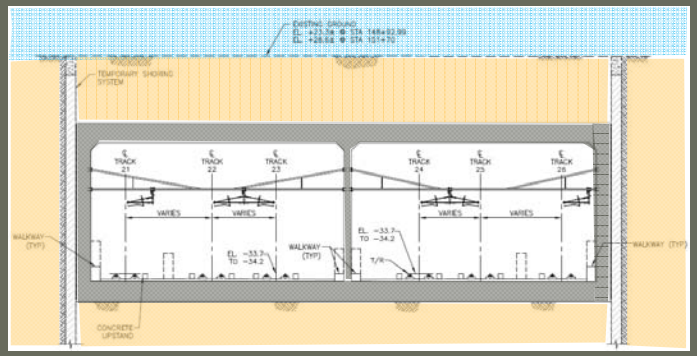
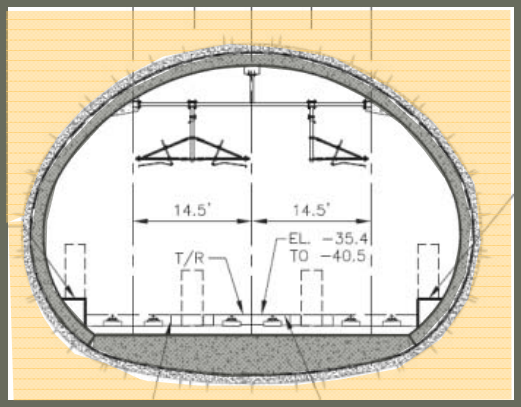
DTX Phase 2 Tunnel

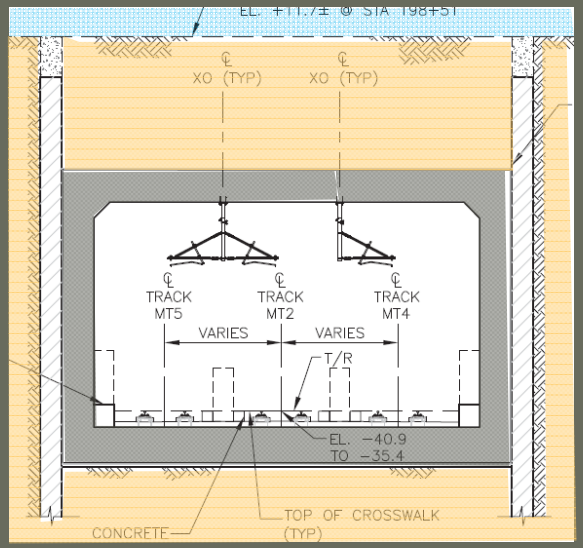
Cut-and-Cover Throat Structure
Narrows from six to three tracks



Mined Tunnel South on 2nd Street (sequential excavation method)
Three tracks



Cut-and-Cover West in Townsend Street
Narrows from three to two tracks



**** Also includes rail systems, trackwork and utility relocations***

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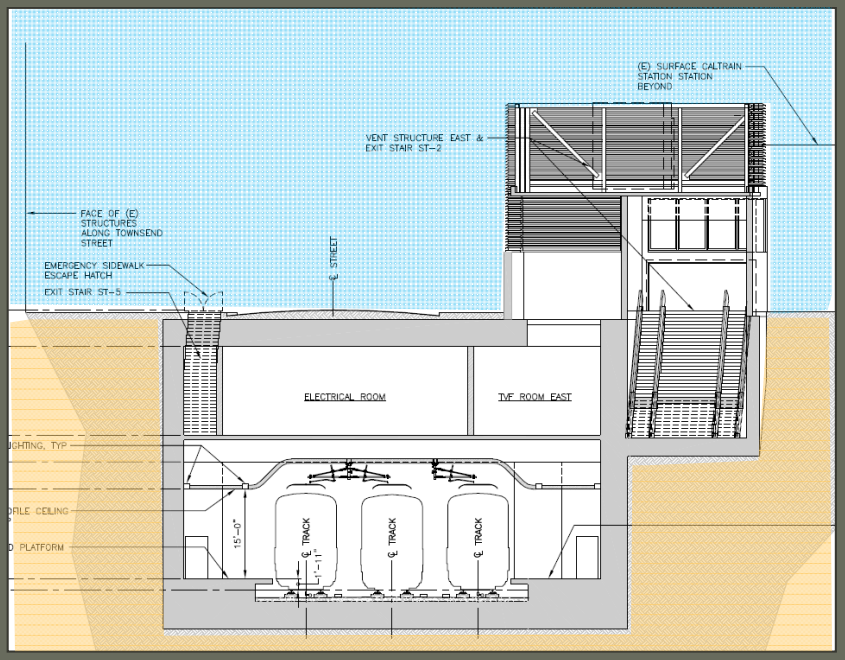
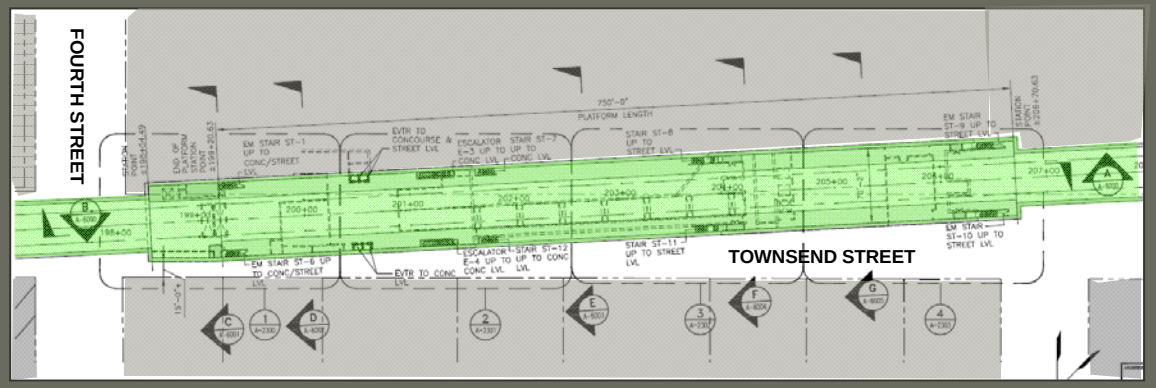
DTX Phase 2
4th & Townsend
Underground Station

- Cut-and-cover structure
- Two side platforms with middle bypass track
- Mezzanine level





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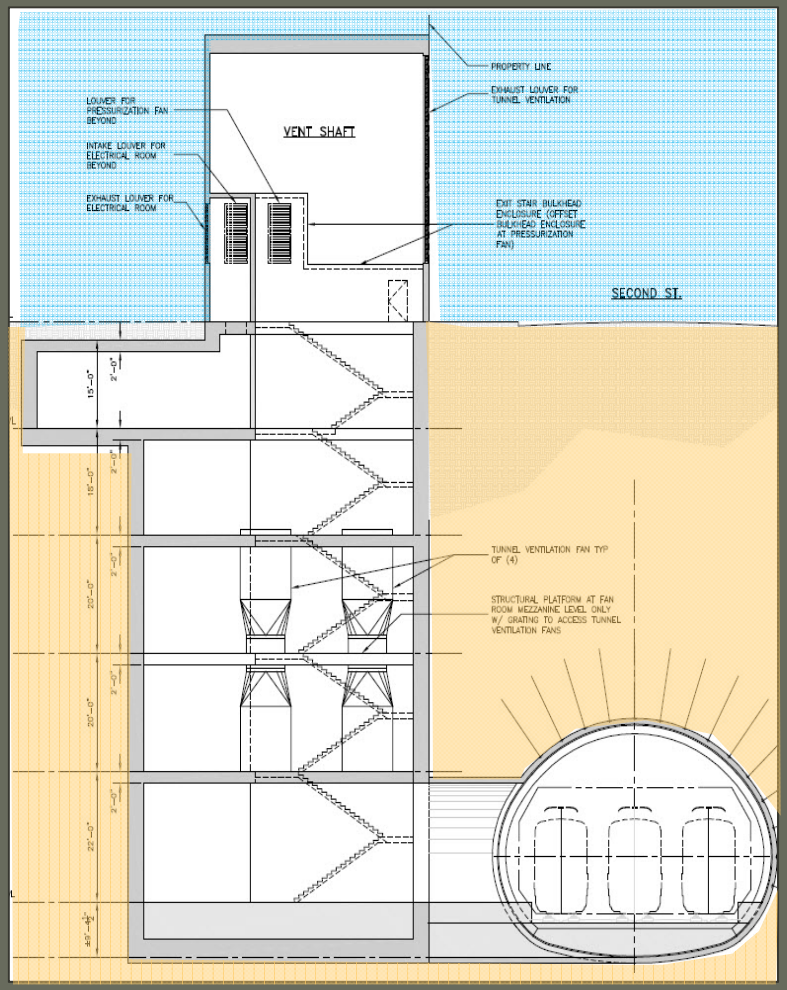
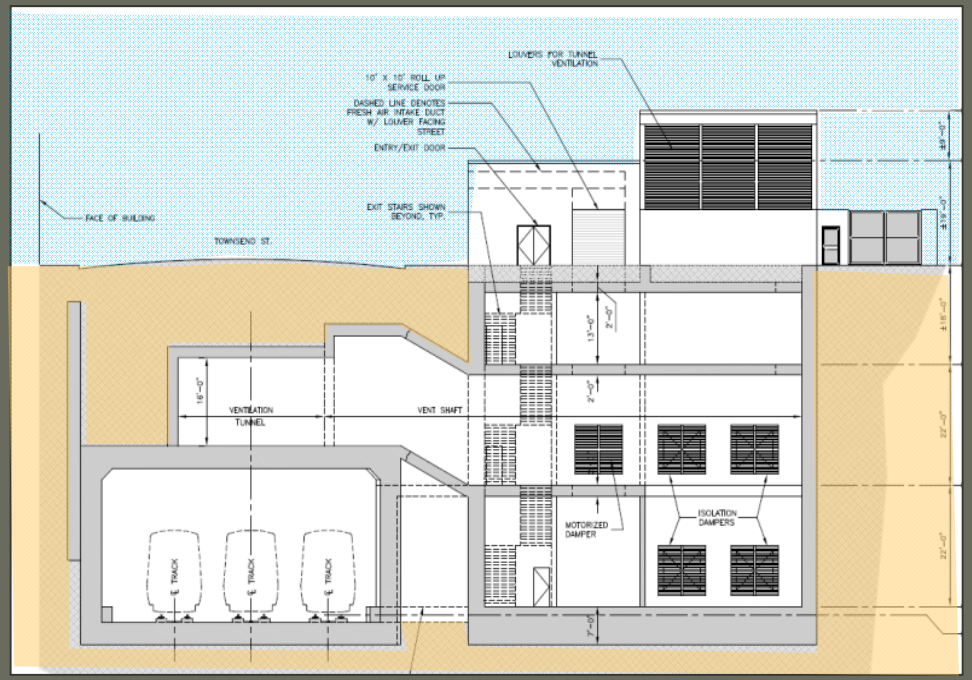
DTX Phase 2
Emergency Exit / Ventilation Structures

Vent Structure at Second & Harrison



Vent Structure at Third & Townsend



**** Additional Vent Shafts at TTC and Fourth & Townsend Station***

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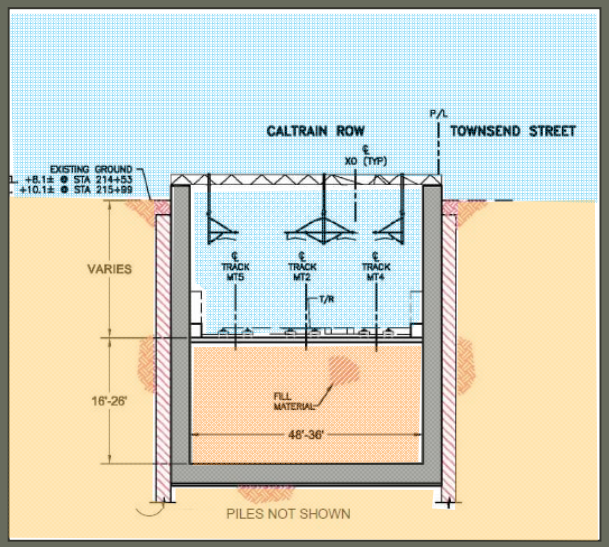
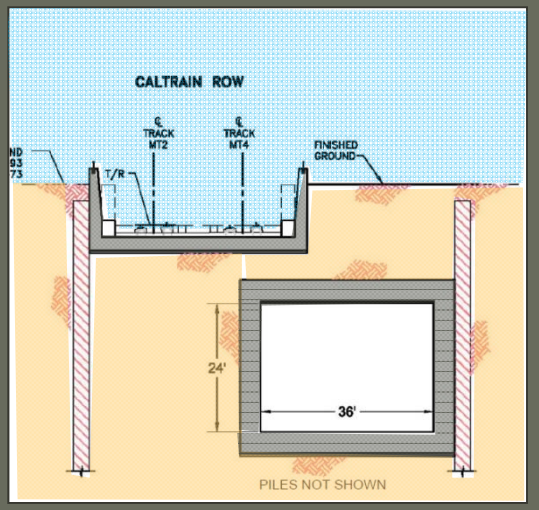
DTX Phase 2
Accommodates Future Grade Separation Tunnel Connection

- DTX alignment accommodates City goal to eliminate existing at-grade crossings south of DTX project limit
- Allows for future tunnel connection with minimum disruption to train operations
- Temporary U-Wall retained-cut structure is built above permanent cut-and-cover tunnel elements
- Construction stays within previously environmentally-cleared envelope





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2012-2013 DTX
Work Report & Update

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Technical Coordination with Caltrain and CHSRA

- Coordination for Federal Railroad Administration (FRA) sign-off documents:
  - Caltrain approved Design Criteria Variance Requests for TTC trackwork
  - TJPA & CHSRA processing Design Variance Requests relating to OCS and platform/track geometry
- Coordinating with Caltrain Electrification environmental team and CHSRA
- Transit Center design team incorporating Caltrain and CHSRA systems requirements
- Provided input for Caltrain Blended System Corridor Capacity Assessment Study

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TJPA Rail Team Activity - 2012

- Transit Center Design Coordination
  - Provided train system requirements for the rail levels of the Transit Center
  - Reviewed Transit Center Construction Document submittals
  - Supported Transit Center and tunnel Fire/Life/Safety reviews
- Updated preliminary engineering plans as appropriate
- Risk and Vulnerability Analysis (RVA)
  - RVA update looked at tunnel, ventilation/emergency egress structures, and 4th & Townsend station
  - Consulted with security team and participated in workshops
  - Reviewed draft Design Guidance Criteria and assessed impacts
- Participated in special studies, adjacent property coordination, external report reviews, etc.

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TJPA Rail Team Activity - 2013

- Obtained final sign-off by CHSRA and Caltrain for modifications to accommodate High Speed Rail
- Conceptual Engineering Design of tunnel connection to future City grade separation project
- Provided technical studies and support for SEIS/EIR
- Provided DTX construction cost estimate and schedule update
- Reviewed and commented on 100% CDs for TTC rail level

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Transbay Supplemental EIS/EIR

- Will evaluate specific, limited changes arising from refined design of DTX and CHSRA and FRA comments
  - Increase in approach track radii
  - Trainbox Extension to Main Street
  - New ventilation/emergency egress structures
- Funded by grant from Federal Transit Administration to evaluate these specific changes
- Schedule
  - Notice of Preparation issued April 2013
  - Public Scoping Meeting May 2013
  - Draft SEIS/EIR expected Spring 2014
  - Final SEIS/EIR expected late 2014/early 2015

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Proposed DTX Budget Revision

2008 TJPA Board approved $2.596B DTX Budget assuming design-bid-build (DBB)

Proposed revision to $3.004B (also assumes DBB) due to:

- Revise escalation from 4% to 3%
- Revise train operations date from 2020 to 2024
- Add $25M for TJPA contribution to railyard reconfiguration
- Add $120M to accommodate City's plan for future grade separation
- Increase ROW acquisition by $105M
- Add train box extension
- Delete tail tracks

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Escalation Assumptions

2008 DTX budget assumption: 4% escalation

2013 Revised assumption: 3% escalation

- CPI 10 year average: 2.4%
- CHSRA: 2% 2013-15; 3% 2016 & beyond
- MTC Plan Bay Area: 2.2%

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DTX Delivery Options

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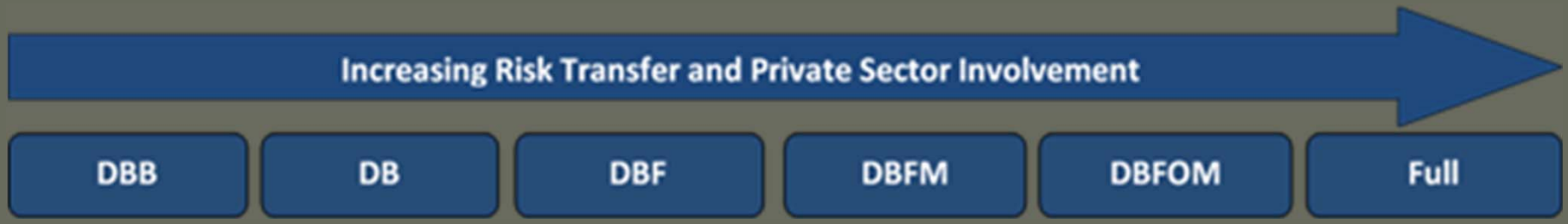
Potential DTX Delivery Options



- Design-Bid-Build (DBB)
- Design-Build (DB)
- Design-Build-Finance-Maintain (DBFM)

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Design-Bid-Build (DBB)

- Project sponsor develops project scope and conceptual plan into full detailed design, then solicits bids for building project according to completed design
- On completion of construction, project sponsor assumes responsibility for permanent operation and maintenance

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Design-Build (DB)

- Project sponsor solicits bids for design and construction under single contract; respondents may form consortia or joint ventures to pool resources and expertise to deliver project
- Similar to DBB, on completion of construction, project sponsor assumes permanent responsibility for operation and maintenance

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Design-Build-Finance-Maintain (DBFM)

- Project sponsor solicits bids for design, construction, financing, and maintenance under single contract to a private developer/contractor, or consortium or joint venture of private developers/contractors under a public-private partnership (P3)
- Unlike DBB and DB, P3 Developer finances construction and assumes responsibility for maintenance over the contract term

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DTX Delivery Options

Design-Bid-Build (DBB) Proposed Budget $3.004B

- Train operations 2024

Design-Build (DB) Budget $2.832B

- 4% less than DBB for design and construction
- 50% less unallocated contingency than DBB
- Train operations 2024

P3/Design-Build-Finance-Maintain (DBFM) Budget $2.584B

- 8% less than DBB for design, construction, and programwide
- 75% less unallocated contingency than DBB
- Train operations 2022

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DTX Projected Budget by Delivery Option

Cost Category	Design-Bid-Build	Design-Build	P3/DBFM
Professional Services [1]	$246,760	$236,890	$227,019
Programwide	$75,400	$75,400	$69,368
Right-of-Way Acquisition	$266,200	$266,200	$266,200
Soft Costs	*$588,360*	*$578,490*	*$562,587*
Construction	$1,641,261	$1,589,648	$1,538,035
Unallocated Contingency	$142,943	$71,472	$35,736
Hard Costs	*$1,784,204*	*$1,661,120*	*$1,573,771*
Escalation	$632,165	$592,626	$447,965
Total DTX Project	**$3,004,729**	**$2,832,235**	**$2,584,323**

All numbers in thousands

[1] ***Includes TTC design for Phase 2, DTX design, construction administration, adjacent properties monitoring, and construction management***

Early DTX delivery significantly reduces escalation costs

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DTX Delivery Schedule

DBB and DB

- 9 year construction duration, start in 2016
- Complete construction Q4 2024

P3/DBFM

- 7 year construction duration, start in 2015
- Complete construction Q2 2022
- P3 developer has incentive to further accelerate construction completion

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2012 MOU Overview

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MOU Overview

- Regional agreement to support implementation of high-speed rail using a blended system on the peninsula corridor with the terminus at the Transbay Transit Center.
- Identifies projects needed to address safety, corridor capacity, operational efficiency, and connectivity for high-speed rail, Caltrain, and freight services:
  - ***DTX***
  - Caltrain Electrification
  - Caltrain Advance Signal System (Positive Train Control)
  - CHSRA San Jose Diridon Station
  - CHSRA Millbrae Station at SFO
  - Caltrain/CHSRA upgrades and track modifications, including potential passing tracks and selected grade separations

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MOU Signatories

Transbay Joint Powers Authority
Metropolitan Transportation Commission
California High Speed Rail Authority
City and County of San Francisco
San Francisco County Transportation Authority
Peninsula Corridor Joint Powers Board
San Mateo County Transportation Authority
Santa Clara Valley Transportation Authority
City of San Jose

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MOU Early Investments

Provides $706 million from statewide high-speed rail for early investments by Caltrain:

- Corridor Electrification Infrastructure Project, including rolling stock needed to operate revenue service

- Advance Signal System (Positive Train Control)

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MOU Benefits Related to DTX

- References MTC Resolution 3434, which includes the DTX as a regional priority for transit expansion.
- Reiterates the Transbay Transit Center as the northern terminus for the statewide high speed rail system utilizing a blended system.
- Commits parties to work towards fully funding the DTX and other projects identified in MOU.
- ***Accompanied by designation of the DTX as a regional New Starts priority by MTC in draft Regional Transportation Plan (RTP).***

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New Starts Funding Plan

DTX Funding Plan from MTC:

New Starts	$ 650,000,000
New Bridge Tolls	$ 300,000,000
Future High Speed Rail	$ 557,000,000
Sales Tax Extensions/ Other Local	$ 350,000,000
Joint Development (Mello-Roos)	$ 100,000,000

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DTX P3 Overview

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Advantages of P3

P3, when compared to DBB and DB, can:

- Accelerate DTX delivery (earlier start and finish)
- Reduce overall costs
- Achieve greater cost and schedule certainty
- Efficiently allocate risk
- Maintain asset quality for life

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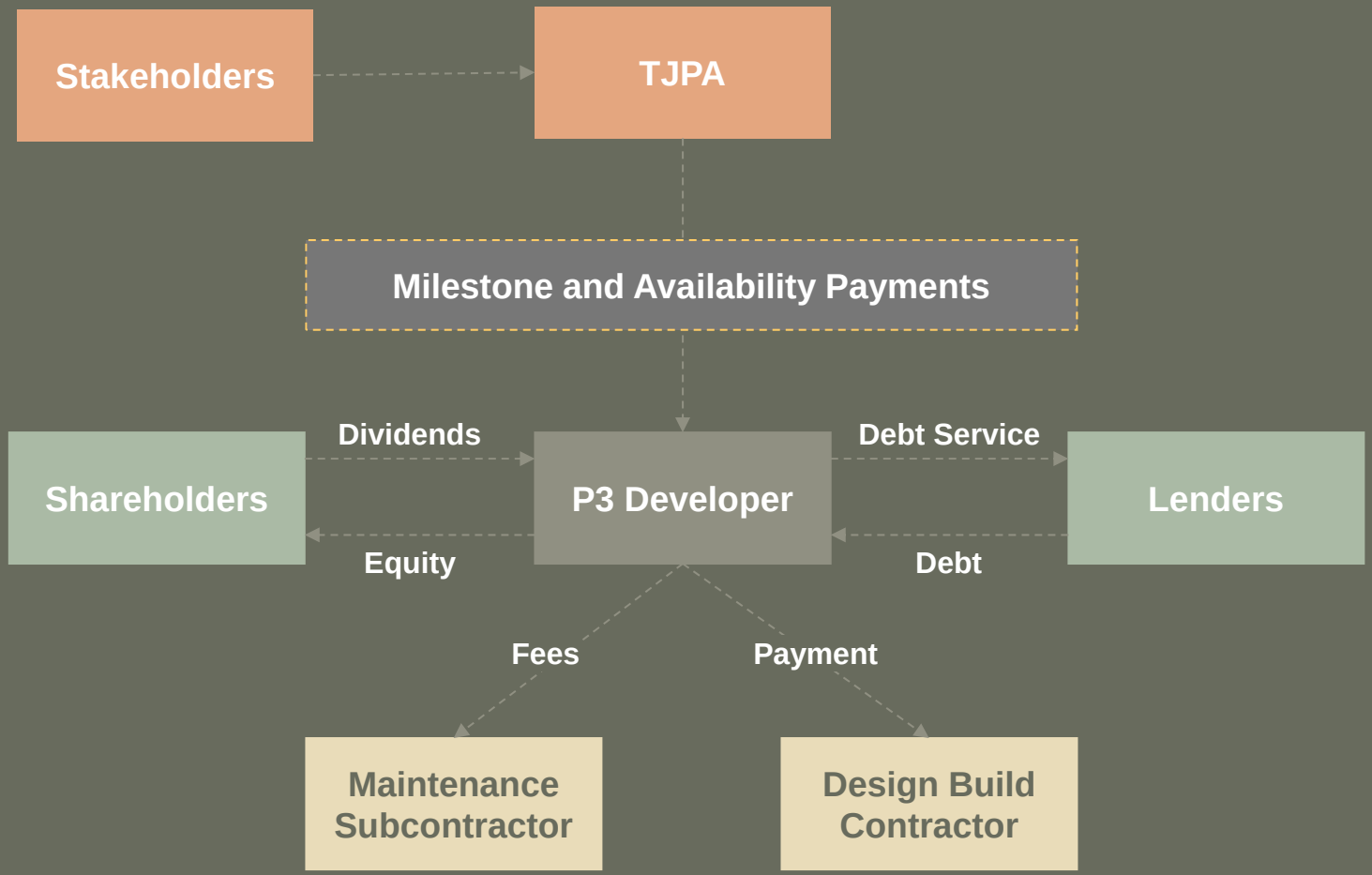
P3 Typical Organizational Structure



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DTX P3 Potential Funding Sources

Funding Sources	YOE *($ millions)*	Status
San Francisco County Sales Tax	$79	Committed
San Mateo County Sales Tax	$19	Committed
Committed MTC/BATA Bridge Tolls	$7	Committed
Land Sales (Parcels F & 4)	$20 - $60	Contingent upon Sales
Tax Increment Extension	$350 - $550	Subject to SF Approval
Tax Increment Residual	$150 - $550	Subject to Federal Approval
FTA New Starts	$650	Subject to Federal Approval
New MTC/BATA Bridge Tolls	$300	Subject to MTC/BATA/Voter Approval
Future California High Speed Rail Funds	$557	Subject to Federal/State Approval
Future San Francisco County Sales Tax	$350	Subject to SF Voters
Mello-Roos Special Assessment	$350 - $450	Subject to SF Approval
Potential Passenger Facility Charges or Maintenance Contribution	$500 - $700	Subject to CHSRA and/or Caltrain Approval
Total	**$3,332 - $4,272**	

- $2.584B ($YOE) DTX P3 project budget
- $3.3B - $4.3B ($YOE) potential funding sources (Milestone Payments) and revenue streams over time (Availability Payments)

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P3 Potential Milestone Payment Funding Sources

- $1.6B - $1.7B potential funding sources available for Milestone Payments
- Milestone Payments paid to the P3 Developer during construction and/or after completion reduce TJPA's obligation for remaining construction costs
- Remainder of DTX P3 project costs ($837M-$977M) will be financed by Availability Payments over time

Funding Sources	YOE *($ millions)*
San Francisco County Sales Tax	$30
Land Sales (Parcel F/Block 4)	$20 - $60
FTA New Starts	$650
Future California High Speed Rail Funds	$557
Mello-Roos Special Assessment	$350 - $450
Total	**$1,607 - $1,747**

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P3 Potential Availability Payments Funding Sources

- $1.65B - $2.45B potential revenue streams to support Availability Payments

- Availability Payments for 35 years after completion

Funding Sources	YOE *($ millions)*
Tax Increment Extension	$350 - $550
Tax Increment Residual	$150 - $550
New MTC/BATA Bridge Tolls	$300
Future San Francisco County Sales Tax	$350
Potential Passenger Facility Charges or Maintenance Contribution	$500 - $700
Total	**$1,650 - $2,450**

Cost Saving P3 Examples in the U.S.

- **East End Crossing (Southern Indiana/Louisville, KY)** - $763 million bid was 23% less than Indiana DOT's estimated $991 million
- **I-595 Corridor Improvements (Florida)** - 1st P3 deal in US; Corridor improvements accelerated by 15 years
- **Port of Miami Tunnel** - Winning P3 DBFOM consortium bid 55% ($657 million) of FDOT estimate ($1.2 billion)
- **Denver FasTracks Eagle P3** – Winning capital cost bid of $2.086 billion almost $300 million less than original estimate
- **Presidio Parkway (SF)** - Winning consortium's DB bid $271.2 million, $202 million less than Caltrans Engineer's estimate; from CTC approval (May 2010) to financial close (June 2012), $327 million reduction in expected lifecycle costs (construction, financing, O&M)

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Next Steps

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Next Steps

- Complete Supplemental EIS/EIR
- Continue to work with stakeholders on P3 viability
- Continue P3 technical, financial and legal due diligence
- Identify creative P3 options

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Identify Creative P3 Options

- Explore Design-Build-Finance-Operate-Maintain
- vs. Design-Build-Finance-Maintain

- P3 joint venture with Caltrain that preserves Caltrain's 2019 electrification goals

- P3 joint venture options with CHSRA

- Pre-Development Agreement option for P3 developers procurement may incentivize DTX acceleration