



# Overview of MTC Phase 2 Cost Estimate Review

January, 12 2016

## Transbay Transit Center

**TJPA**



- Budget Background
- Cost Estimate
- MTC Cost Review





# Budget Background

# Phase 2 Budget Background

March 2008: TJPA Board approved a budget of \$2.996B

## Budget Assumptions

- Scope:
  - Caltrain Downtown Extension (DTX)
  - Transit Center below grade train box and station (top down)
  - Tail Tracks
- Delivery Method
  - Design Bid Build
- Schedule
  - Construction begins 2011
  - Testing and commissioning 2017
  - Caltrain operations 2018
- Escalation: 4%

# Phase 2 Budget Cost Estimate Summary

Item Description	Program Phase 2		
	TC	DTX	Total
Construction Cost	\$ 474 m	\$1,426 m	\$1,900 m
Construction Contingency	\$ 47.5 m	\$ 142.5 m	\$ 190 m
Subtotal-Construction	\$521.5 m	\$1568.5 m	\$2,090 m
ROW			\$ 209 m
Programwide Costs			\$545 m
Program Reserve			\$ 152 m
<b>Total</b>			<b>\$ 2,996 m</b>

- Estimate prepared in December \$2007

# 2010 Revised Phase 2 Baseline Budget

May 2010: Received \$400M ARRA funding and reallocated the train box scope to Phase 1. **Revised Baseline Budget: \$2.596B**

## Budget Assumptions

- Revised Scope:
  - Caltrain Downtown Extension (DTX)
  - **Transit Center below grade station fit-out only (bottom up)**
  - Tail Tracks
- Delivery Method
  - Design Bid Build
- Schedule
  - Construction begins 2011
  - Testing and commissioning 2017
  - Caltrain operations 2018



# Cost Estimate

# Phase 2 Cost Estimate History

- July 2010: DTX 30% Preliminary Engineering Estimate Completed by Parsons
  - DTX Construction Estimate: \$1.17B
  - Year of Operation: 2017
- June 2012: TTC 50% Construction Drawings Estimate Completed by PCPA
  - Train Box Fit-out including the Intercity Bus Facility Construction Estimate: \$257M
  - Train Box Below Grade Extension Construction Estimate: \$114M
  - Total TTC Phase 2 Construction Estimate: \$371M



# 2013 Combined Phase 2 Cost Estimate Revision

## Major Revisions since the 2008 Budget:

- Deleted Tail Tracks
- Added Train Box Extension and widened existing Throat Structure
- Added Above Grade Intercity Bus Facility
- Added Tunnel Stub Box under the U-wall to accommodate Grade Separation (CCSF Goal)
- TJPA increased contribution to Railyard reconfiguration
- Increased ROW acquisition Budget
- Revise Train Operations date to 2024
- Revise escalation from 4% to 3%

# Phase 2 Cost Estimate Escalation History

2008 Phase 2 budget assumption: 4% escalation

2013 Revised assumption: 3% escalation

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

# Phase 2 Cost Estimate

YEAR OF EXPENDITURE DOLLARS (X\$000)	COST
Construction Cost (DTX& TTC):	\$1,777,802
Design Contingency:	\$206,000
Construction Contingency:	\$141,000
<b>Subtotal Construction:</b>	<b>\$2,124,802</b>
ROW	\$299,874
Programwide Costs	\$397,971
Program Reserve	\$182,085
<b>Total Project Cost</b>	<b>\$3,004,731</b>

- Estimate Date: October 2013
- Delivery Method: DBB
- Year of Operation: 2024



# MTC Cost Review

# MTC Cost Review

Increase escalation: 3%  5%

Increase contractor fee: 5%  10%

Increase project contingency: 23%  27%

Add missing/added scope items:

- Townsend Street traffic decking
- Turnback/MOW tracks
- Temporary utility relocation

Review productivity rates in final design.

## Annual Escalation Rate

- Current estimate assumes **3%** annual escalation rate to year of expenditure
- Caltrans California Highway Construction Cost Index exceeds 3% annual escalation assumptions
- Recommended escalation rate: **5%/year**
- Impact to estimate: **\$433 million**

## Contractor Fee/Profit

- Current estimate assumes **5%** contractor fee/profit
- Given project complexity and risk, level of competition, and market outlook, bidders are likely to include a higher fee/profit
- Recommended assumed contractor fee/profit: **10%**
- Impact to estimate: **\$100 million**

## Other Cost Items

Item	Impact to Estimate (\$ millions)	
Project Contingency	93	Recommend 27% contingency for current design stage (vs. 24% used)
Missing Items	58	Three non-minor items not included in 30% design and estimate, costs should be added
Indirect Costs	—	Rate of 26% used in estimate appears reasonable
Unit Rates/ Schedule	—	Appear reasonable
Labor Productivity	— /TBD	Some assumptions warrant further review due to project location and complexity



## Summary of Potential Adjustments to Phase 2 Cost Estimate

Item	(\$ millions)
TJPA Base Estimate (YOE)	\$3,005
Escalation (using 5%, instead of 3%)	\$433
Fee adjustment (assuming 10%, instead of 5%)	\$100
Contingency (using 27%, instead of 24%)	\$93
Missing items	\$58
<b>Total Adjustments</b>	<b>\$684</b>
Add BART/Muni Pedestrian Connector	\$120-310
<b>Total Adjusted Estimate</b>	<b>\$3,809-3,999</b>

# Questions?



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