

Metropolitan Transportation Commission

Programming and Allocations Committee

December 9, 2015

Agenda Item 5

Subject: Transbay Joint Powers Authority – Cost Review of the Transbay Transit Center Phase 2.

Background: At its July 22nd meeting, the Commission directed staff to perform a project cost and risk review for both phases of the Transbay Transit Center project, and report back to the Commission in ninety days. MTC staff has been working in cooperation with TJPA staff, as well as with staff from the San Francisco County Transportation Authority and the San Francisco Mayor's and Controller's offices, because of the project's significance and complex funding plan that includes funds from numerous sources.

Phase 1 Update

In September, this Committee received an update on Phase 1, which generally consists of the transit center building, bus and pedestrian ramps, and underground train box. Since that time, construction on the project has progressed, and the staffs have continued to discuss the project budget and options for closing the projected shortfall. Additionally, at its November 12th Board meeting, TJPA approved four key items related to the Phase 1 budget:

- The sale of Parcel F to a developer for at least \$165 million,
- The adoption of an Interim Revised Baseline Budget for Phase 1 in the amount of \$2,059,400,000 (an increase of \$160 million),
- The award of the Roof Park Landscaping and Irrigation trade package in the amount of \$32 million, and
- The award of the Metal Ceilings Design-Build Services trade package in the amount of \$24 million.

The sale of Parcel F and corresponding interim budget revision allow for the award of schedule-critical scope of work, which include the two trade packages listed above and the Glass Floors and Signage packages. TJPA staff anticipates a final Revised Baseline Budget for Phase 1 in January 2016. Based on the MTC Phase 1 cost review and an updated risk review by TJPA, the funding partners have agreed to a revised budget of \$2.26 billion, which is an increase of \$360 million over the prior baseline budget.

MTC staff is working with TJPA and City staff to identify potential financing options.

Phase 2 Cost Review

Phase 2 of the project includes the extension of train services from the 4th and King Streets Caltrain terminal and completion of the train terminal at the Transbay Transit Center. The scope of the cost review includes an assessment of Phase 2's scope, cost estimate, and delivery model, including the identification of opportunities and risks, alternatives or identification of a preferred delivery model, and identification of outstanding questions. An overview of the review is in the attached presentation.

Recommendation: This item is for information only.

Attachments: Presentation

Transbay Transit Center Cost Review Phases 1 and 2

Programming and Allocations Committee

December 9, 2015



**METROPOLITAN
TRANSPORTATION
COMMISSION**

Transbay Transit Center Review

- **Determine, with TJPA, budget requirement to successfully deliver Phase 1**
- **Work with TJPA and funding partners on funding and financing strategies to close funding shortfall**
- **Review Phase 2 cost estimate to understand funding needs going forward**
- **Ultimately, ensure successful delivery of both project phases**

Phase 1 Update

- **September MTC cost and risk review suggested that additional budget range would be prudent:**

	(\$ millions)
Approved budget (2013)	\$1,899
Proposed new request (July 2015, TJPA)	\$247
Proposed new total (July 2015, TJPA)	\$2,146
Potential additional exposure (Sept. 2015, MTC)	\$48-244
New Total (Sept. 2015, MTC)	\$2,194-\$2,390

Phase 1 Update

- Latest risk analysis by TJPA provides updated range:

	Budget Needed Above Current \$1.9 B Baseline (\$ millions)		Proposed Revised Budget (\$ millions)	
Confidence Level	Bottom-Up Model	Top-Down Model (FTA)	Bottom-Up Model	Top-Down Model (FTA)
30%	289	257	2,189	2,156
50%	307	316	2,207	2,216
70%	325	390	2,224	2,290

- Based on cost review and updated risk model, recommended/agreed-upon budget addition is \$360 million, for a total budget of \$2.26 billion.

Phase 1 Update

- **Potential Funding Sources:**
 - Parcel F – *sold for minimum of \$165 million*
 - Other options being discussed among funding partners
- **TJPA adopted Interim Revised Budget in November based on Parcel F sale, awarded two schedule-critical trade packages**
- **TJPA received favorable opinion from Caltrans related to eligible use of land sales revenues, which should help with near-term cash flow**

Phase 2 Review

- **Confirm scope of Phase 2**
- **Assess reasonableness of estimated costs**
 - Basis: 2010 Preliminary Engineering Plans and Cost Estimate, adjusted to **\$3.0 billion** (year of expenditure)
 - Focus areas: annual escalation rate, assumed fee/profit, indirect costs, missing items, project contingency, unit rates
- **Provide high-level evaluation of procurement options**

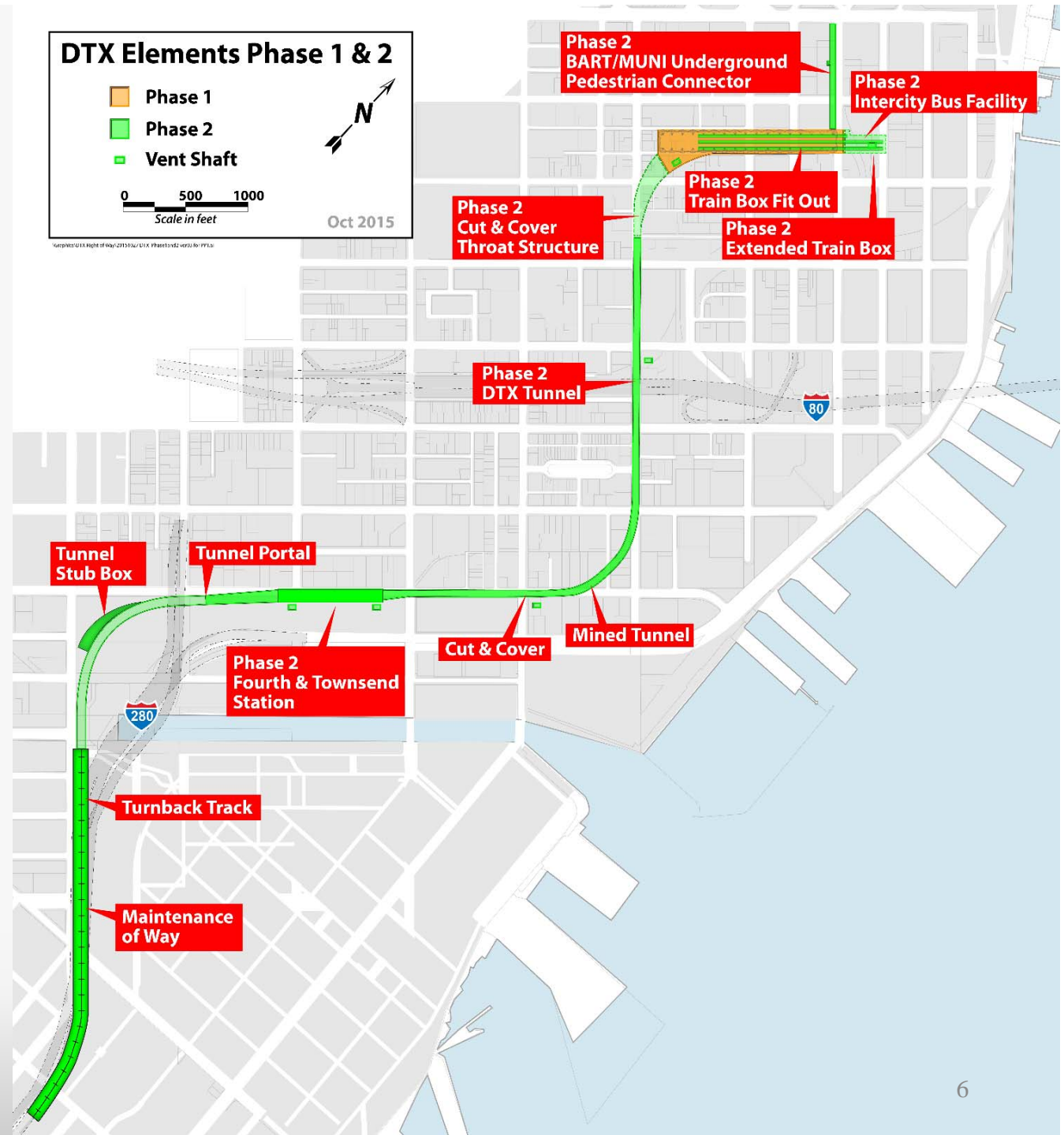
Phase 2

Project Scope:

- **Downtown Extension** (track, tunneling, 4th and Townsend station, utility relocation, systems)
- **Train box fit out**
- **Minor Caltrain Yard modifications**
- ❖ Train box extension
- ❖ Intercity bus facility
- ❖ Tunnel stub box

Included in EIR but not in cost estimate:

- BART/Muni underground connector
- ❖ = New element



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

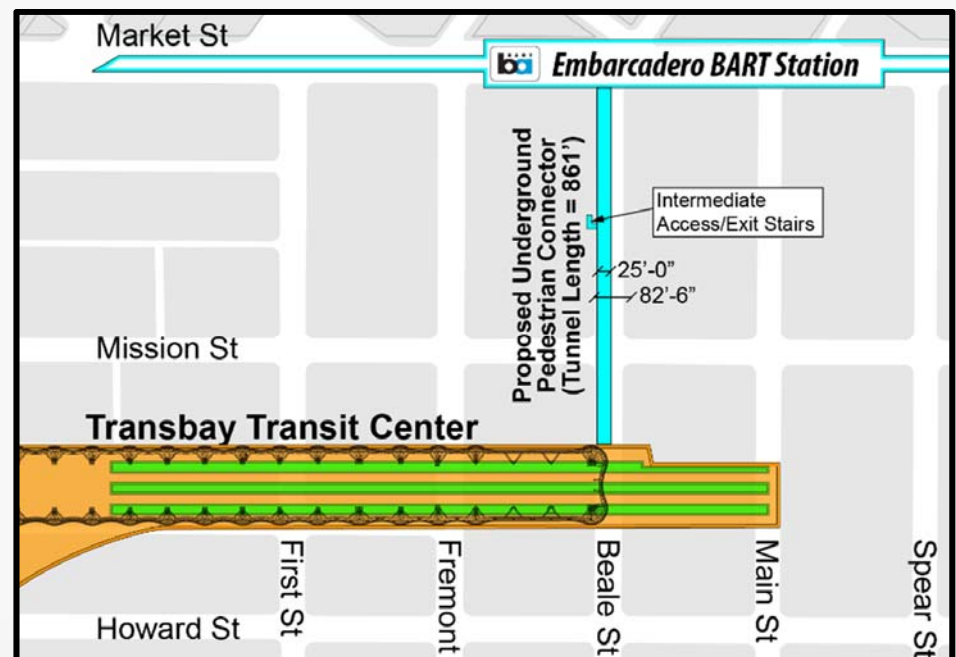
- Current estimate assumes **5%** contractor fee/profit
- Given project complexity and risk, level of competition, and market outlook, bidders are likely to include a higher fee/profit
- Recommended assumed contractor fee/profit: **10%**
- Impact to estimate: **\$100 million**

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

Other Phase 2 Observations

- Perform value engineering/constructability reviews
- Evaluate potential for phasing (e.g., advance utility relocation)
- Engage Caltrain and California High Speed Rail Authority in active scope management
- Include BART/Muni pedestrian connector in program



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
Total Adjustments	\$684
Add BART/Muni Pedestrian Connector	\$120-310
Total Adjusted Estimate	\$3,809-3,999

Project Procurement Models

- **Four main procurement models**
 - Design-Bid-Build
 - Design-Build
 - Construction Manager/ General Contractor
 - Public-Private Partnership (P3)
- **Key variances are in risk allocation, funding streams, and amount of project control by owner**
- **Potential cost savings with design-build and public-private partnership**
- **TJPA currently undertaking study of models for Phase 2**

Next Steps

- **Continue Phase 1 funding discussions, including potential options for financing**
- **Consider role in decision process**
(configuration management board or similar)
- **Review on-going Phase 2 procurement study**