



METROPOLITAN
TRANSPORTATION
COMMISSION

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Memorandum

TO: Commission

DATE: July 17, 2013

FR: Executive Director

RE: MTC Resolution No. 3915, Revised — Revisions to Allocation of Regional Measure 1 (RM1) Funds to the Transbay Joint Powers Authority (TJPA)

Background

In January 2013, MTC allocated \$47.8 million in RM1 funds to the Transbay Joint Powers Authority (TJPA) in order to certify the upcoming Structural Steel Superstructure (StSS) contract as well as ancillary logistics contracts. At the time, TJPA planned to use this allocation only for certification of the contract, and issuance of the first Notice to Proceed (NTP) which would cover the preconstruction work and the production of shop drawings. The Commission's allocation included a condition that, in the event the proceeds of the sale of Parcel T generated sufficient revenue to cover the costs of the StSS contract, any remaining RM1 funds would be rescinded and made available for future elements of this project.

At the time of the RM1 allocation, the cost of the StSS contract was expected to be between \$110-\$120 million. However, the actual bid came in 75-80% higher than the engineer's estimate. The TJPA did not accept the bid, and repackaged the contract into three smaller bid packages to generate more competition and hence better prices. The TJPA also revised the engineer's estimate upward to approximately \$200 million based on the previous bids. The latest bids have come in within this range, but are approximately \$95 million greater than the amount budgeted at the time of the Commission's RM1 allocation.

TJPA has also revised the baseline budget of \$1.59 billion to \$1.90 billion to account for increased construction prices due to the region's construction market pressures, incorporation of design changes necessitated by a Risk and Vulnerability Assessment update and resetting of contingencies and program reserve at prudent levels for the remainder of the project scope. The TJPA proposes to fund the \$300 million budget augmentation through: a) net new funds identified (~\$100 million) from increased land sales values, Transit Center impact fees, additional Proposition K funds and the One Bay Area Grant program, and; b) targeted new funds (~\$200 million) from an increase in the TIFIA loan amount, accelerated land sales values and various federal grants. MTC and TJPA staff recently corresponded about the new projected cost for the project; copies of the correspondence and the relevant TJPA budget item are attached.

As a result of the updates to the StSS contract bids and the budget, TJPA is requesting to use the RM1 funds to supplement the land sales proceeds to fully fund the steel subcontract.

Recommended Revisions to Allocation of RM1 funds - Resolution 3915, Revised

In support of the TJPA's request, staff recommends that the Commission approve revisions to the allocation conditions for the \$47.8 million in RM1 funds previously allocated to the TJPA, to reflect updates in the project budget and StSS bids as follows:

- Remove the condition stating that "Once the land sales revenues are available in Spring 2013, MTC will rescind the remaining RM1 funds from this allocation so that they may be used for future elements of this project."
- Add a condition stating that "Allocation and disbursement is contingent upon the execution of a funding agreement between MTC and TJPA for the RM1 Bridge Toll funds. Such agreement shall include the following provisions: TJPA agrees to comply with the provisions of MTC Resolution No 3636, Revised and that any RM1 Bridge Toll funds received under the funding agreement shall be subject to MTC Resolution No. 3636, Revised, unless otherwise stated in the agreement."



Steve Heminger



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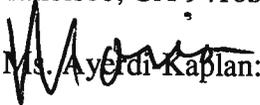
Steve Heminger
Executive Director

Ann Flomer
Deputy Executive Director, Policy

Andrew B. Fremier
Deputy Executive Director, Operations

July 9, 2013

Ms. Maria Ayerdi-Kaplan
Executive Director
Transbay Joint Powers Authority
201 Mission Street, Suite 2100
San Francisco, CA 94105-1880

Dear  Ms. Ayerdi-Kaplan:

Thanks for your letter of July 3rd regarding the recently updated cost estimate for Phase I of the Transbay Transit Center project.

Last week, you proposed that your board revise the cost estimate for the project from \$1,589 million to \$1,899 million – an increase of \$310 million. My understanding is that this revised cost estimate is derived from a budget risk assessment that there is a 50% confidence level the actual project cost will not exceed the revised estimate. By comparison, in order to attain a 70% confidence level that actual costs will not be greater, your revised cost estimate would have to be in the range of \$1,986-1,995 million – an increase of about \$400 million from your baseline budget.

As you know, after learning that your baseline budget was subject to substantial upward cost pressure, MTC staff commissioned an independent cost review by our consultant T.Y. Lin International. The results of that review also suggest that costs could be above the proposed \$1.9 billion budget, pending reconciliation of certain cost items highlighted in the T.Y. Lin review. The TY Lin review also highlighted the need to better understand the project's schedule, risks, and scoping.

The combined effect of these two cost reviews indicates that the project as scoped has a funding need in the range of \$200-400 million, after taking into account the \$110 million in net new revenues that you already have identified from existing sources such as land sales and the Proposition K sales tax. As our staffs have discussed, you hope to secure additional financial assistance from the federal TIFIA program either through a higher loan amount, more favorable terms, or both.

Ms. Ayerdi-Kaplan
July 9, 2013
Page two

MTC has allocated almost \$350 million in bridge toll funds to the new Transbay Transit Center, and is the project's largest single local funder. We have no additional grant funds available for the project at this time. We might be able to consider a construction loan of some kind, but would need adequate security for such a loan which the terms of your existing and future TIFIA assistance might complicate or foreclose. Our staffs have had several productive conversations about various financing options, and we stand ready to continue those discussions toward what I hope will be a successful outcome.

Finally, MTC allocated \$48 million in Regional Measure 1 (RM1) funds to the project in January 2013, with the condition that: "Once the land sales revenues are available in Spring 2013, MTC will rescind the remaining RM1 funds from this allocation so that they may be used for future elements of this project." Since the land sales (Tower) revenues became available in April, we now seek your confirmation either that MTC should proceed to rescind the RM1 funds or that TJPA wishes to retain the RM1 funds on the steel contract. If you now need to apply the RM1 funds to the steel contract, please provide a revised "Initial Project Report" so that we can update the allocation condition at our July 24th Commission meeting. This would allow you to apply the RM1 funds to the main steel contract from that time forward.

In the meantime, please do not hesitate to contact me with any immediate questions or concerns.

Sincerely,


Steve Heminger
Executive Director



TRANSBAY JOINT POWERS AUTHORITY

Maria Ayerdi-Kaplan • Executive Director

July 3, 2013

Steve Heminger
Executive Director
Metropolitan Transportation Commission
101 Eighth Street
Oakland, CA 94607

Dear Steve:

Through TJPA's ongoing updates to MTC detailing our costs as well as our cost mitigation and containment measures, we have revised our proposed Phase 1 budget. I want to thank you once again for the help of your consultant, T.Y. Lin, to assist us with a review of our cost estimates and proposed contingencies/reserves.

On July 1, we presented a Draft Phase 1 Budget Status & Recommendations to the TJPA Board of Directors. I have attached a copy for your review. Based on our Recommended Budget Contingencies and Reserves as well as Phase 1 Budget Adjustments, we have an additional funding requirement of approximately \$70 to \$103 million. A substantial portion of our cost increase flows from the security recommendations made by our updated Risk Vulnerability Assessment and under FEMA those security enhancements must be incorporated into the building design. Likewise we believe that it is prudent to maintain the recommended contingencies and reserves.

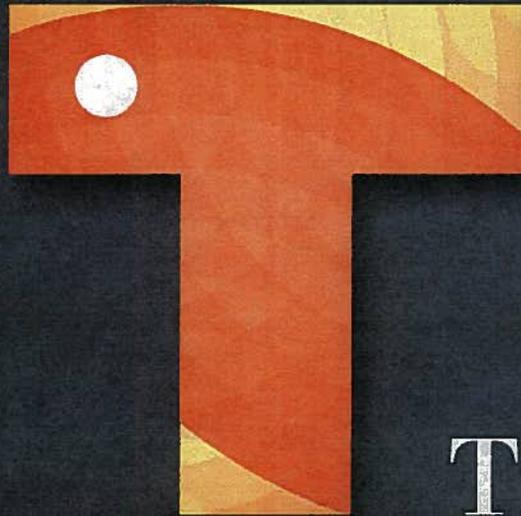
Based on recent meetings with Fitch Ratings, we have a high degree of confidence that we have sufficient tax increment debt capacity to successfully negotiate with TIFIA for a higher loan amount that will cover a significant portion of the needed revenues. However, we need your immediate assistance in assuring our Board and TIFIA that the TJPA has the financial commitment from its funding partners to complete Phase 1 of the Transbay Transit Center.

The Board is looking for support to match revenues to expenditures. I am confident that the TJPA Board would appreciate a letter from you to the TJPA stating your continued support for the project and your willingness to work with us on providing Fitch and TIFIA the assurances they require. A sample draft letter is attached for your use as you like. Once the Board approves a Budget on July 11, I am certain that with our funding partner's assistance TJPA will be able to secure the funds for completion.

Very truly yours,

A handwritten signature in blue ink, consisting of several overlapping loops, representing Maria Ayerdi-Kaplan.

Maria Ayerdi-Kaplan
Executive Director



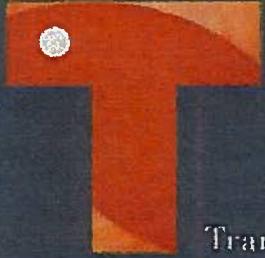
Phase 1 Budget Status & Recommendations

July 1, 2013

Transbay Transit Center

TJPA





Transbay Transit Center

Agenda

- Recap of February/March Budget Discussions
- Developments since March Board meeting
- Budget Adjustment Recommendations
- Funding Strategies
- Next Steps
- Awning Design Update



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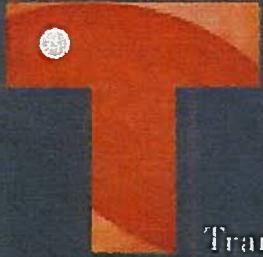
Recap of February/March Budget Discussion



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February/March \$1,589M Budget Status (millions)

Project Costs	May 2010 Baseline	Feb/Mar Status
Temporary Terminal	\$25.3	\$25.7
Bus Storage	\$22.9	\$24.7
Demolition (Exist and Temp Term)	\$16.2	\$16.8
Utility Relocation	\$65.6	\$29.5
Transit Center Building Design	\$143.1	\$168.7
Transit Center Building Construction	\$909.7	\$902.9
Bus Ramps	\$40.2	\$53.6
ROW Acquisition	\$71.9	\$71.9
ROW Support	\$5.3	\$4.8
Programwide	\$243.6	\$268.9
Program Reserve	\$45.2	\$21.5
TOTAL	\$1,589.0	\$1,589.0



Transbay Transit Center

February/March Cost & Budget Pressures

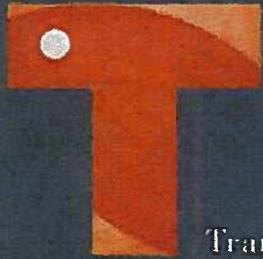
- Increased activity in the regional construction market influencing competition, margins, and direct pricing resulting in cost pressure on the remaining scope of construction
- 2012 Risk and Vulnerability Assessment (RVA) update and IT needs assessment resulted in Design Guidance Criteria (DGC) with associated costs of \$56.8 million
- *Remaining program reserves needed to be increased to address the RVA and market recovery*



Transbay Transit Center

Cost Mitigation and Containment

- Constructability reviews and Value Engineering efforts have generated more than \$100 million cost reductions and savings to help maintain program costs within budget
- The scope of the remaining construction trade packages provides limited opportunity for additional Value Engineering or significant scope reduction
- *Exhausted cost reduction and containment opportunities*



Transbay Transit Center

February/March Preliminary Budget Recommendations

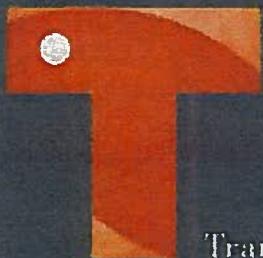
- Increase Transit Center Construction Budget
 - Provide for RVA
 - Acknowledge Market Recovery
- Increase Program Reserves and Contingencies
 - Restore program reserve to originally budgeted amount
 - Include additional reserve for potential schedule impacts
 - Adjust Construction and CM/GC Contingencies
- Increase Transit Center Design and Programwide Budgets
 - Recognize trends in program support costs
 - Increase budget for additional architectural & engineering services



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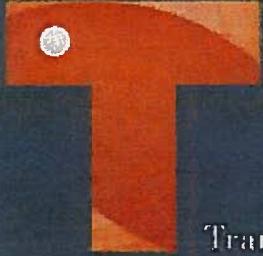
February/March Budget Evaluation (millions)

Project Costs	Baseline	Feb/Mar Status	Tentatively Proposed
Temporary Terminal	\$25.3	\$25.7	\$25.7
Bus Storage	\$22.9	\$24.7	\$24.8
Demolition (Exist and Temp Term)	\$16.2	\$16.8	\$16.8
Utility Relocation	\$65.6	\$29.5	\$29.4
Transit Center Building Design	\$143.1	\$168.7	\$181.9
Transit Center Building Construction	\$909.7	\$902.9	\$1,056.8
Bus Ramps	\$40.2	\$53.6	\$53.7
ROW Acquisition	\$71.9	\$71.9	\$72.9
ROW Support	\$5.3	\$4.8	\$4.8
Programwide	\$243.6	\$268.9	\$290.0
Program Reserve	\$45.2	\$21.5	\$46.5
TOTAL	\$1,589.0	\$1,589.0	\$1,803.3



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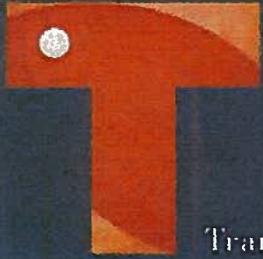
Budget Developments Since February/March



Transbay Transit Center

March Structural Steel Bid

- Five pre-qualified bidders
 - Four steel fabricator/erectors and one general contractor
 - Actively engaged in pre-proposal, QBD processes
 - Market activity contributed to bidder consolidation during process
- Received single bid of \$259 M
 - Pre-qualified fabricator/erectors do not bid, but submit sub-contractor pricing to bidding GC
- Pricing reflected a different assessment of complexity of fabrication, productivity of erection, risks, and other costs



Transbay Transit Center

Repackaging Steel CDs

- Independent procurement of critical cast structural steel nodes approved at May 20th TJPA Board Meeting
 - Cost of steel nodes below original estimate
- Prepared advanced structural steel shop drawings and enhanced support for coordination between cast node foundries, steel fabricators and general contractor
- Allowed contractors to submit pricing for West, Central, and East building sections
- Reviewed plans and specifications to clarify scope, mitigate perceived contractor risks, provide for alternate materials
- Pre-qualified three additional bidders; all general contractors



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June 20 Steel Bid Results

- Four Bids Received
 - Original bidder and three new bidders
 - All bids within a range of 15%; two lowest bids within 2.5%
 - All bidders pursued the entire scope; significant discounts if awarded full scope
- Low Bid of \$189,108,000, from Skanska – the sole bidder in original March bid
 - When combined with the cast node contract value represents a reduction in excess of \$50 million from March bid
- Although consistent with the revised engineers' estimate, the low bid represents an increase of \$43.9 million above the cost anticipated in the February budget evaluation



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Mitigating Re-Bid Schedule Impacts

- Webcor/Obayashi increasing production to keep the start of steel erection on schedule
 - Increasing/extending BSE shifts for certain activities to expedite the remaining excavation work
 - Use additional crews and additional formwork sets on the Below Grade Structure
- CM/GC, working with PMPC and CMO, have identified opportunities in the remaining schedule to mitigate any delays from the steel rebid by advancing shop drawing processes, re-sequencing work
- Continue to explore further opportunity to create float in the schedule through re-sequencing, re-evaluating activity durations, and reviewing schedule logic



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Current Phase 1 Milestones

	<u>February Schedule</u>	<u>Current Schedule</u>
Vacate Terminal/Begin Demolition	Aug 2010	Aug 2010
Begin Shoring Wall Construction	April 2011	April 2011
Complete Excavation	Feb 2014	Mar 2014
Complete Below-Grade Construction	July 2015	Aug 2015
Complete Construction of the Bus Ramps	June 2017	Feb 2017
Complete Superstructure Construction	June 2016	June 2016
Begin Bus Operations	Oct 2017	Oct 2017



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Budget Risk Assessment

- Initiated a formal Budget Risk Assessment with outside consultant from Gardiner & Theobald with FRA participation
- Intended to assess sufficiency of recommended contingencies and reserves for remaining project scope
- Presented findings to funding partners – FTA, MTC, SFCTA, etc. – for review & comment

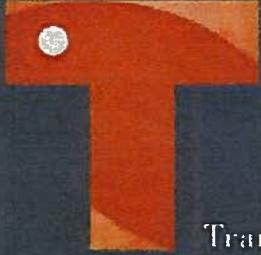


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Risk Assessment Processes

1. “Top-Down” approach conforming to Federal Transit Administration risk assessment Operating Guidance [FTA OG-40, May 2010]
2. “Bottom-Up” approach employing probabilistic Monte-Carlo analysis of team-identified and assessed risks

Use of two approaches substantiates assessment and increases confidence in results



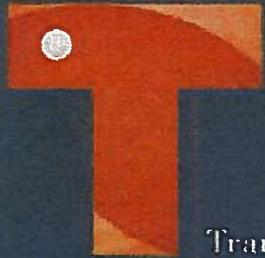
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Step 1 - Set Baseline

Calculate Stripped and Adjusted Base Cost Estimate

- Identify and remove all visible and latent contingencies
- Adjust base costs for:
 - Bids received
 - Agreed change orders and claims
 - Identified trends
 - Estimate of known cost changes (+/-)
 - Market recovery, RVA/IT allocation, etc.

Utilized as basis for both top-down (FTA) and bottom-up model analyses



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Step 2 – Identify Risks

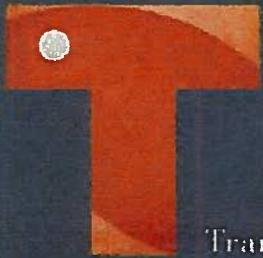
Purpose:

- Quantify risks using a ‘risk matrix’ including likelihood and cost and schedule impacts
- Rank risks and agree ‘greatest potential risks to project’
- Relates uncertainty to baseline estimate and schedule assumptions
- Identification of risk in project delivery cycle

Legend	Low (1)	Med(2)	High(3)	Very High(4)	Significant (5)
Probability	<10%	10>50%	>50%	75%>90%	>90%
Cost	<\$250K	\$250K->\$1M	\$1M->\$3M	\$3M->\$10M	>\$10M
Schedule	<1 Mhs	1>3 Mhs	3>6 Mhs	6>12 Mhs	> 12 Mhs
Rating	<=3	3.1-9.49		>=9.5	

Significant Risks

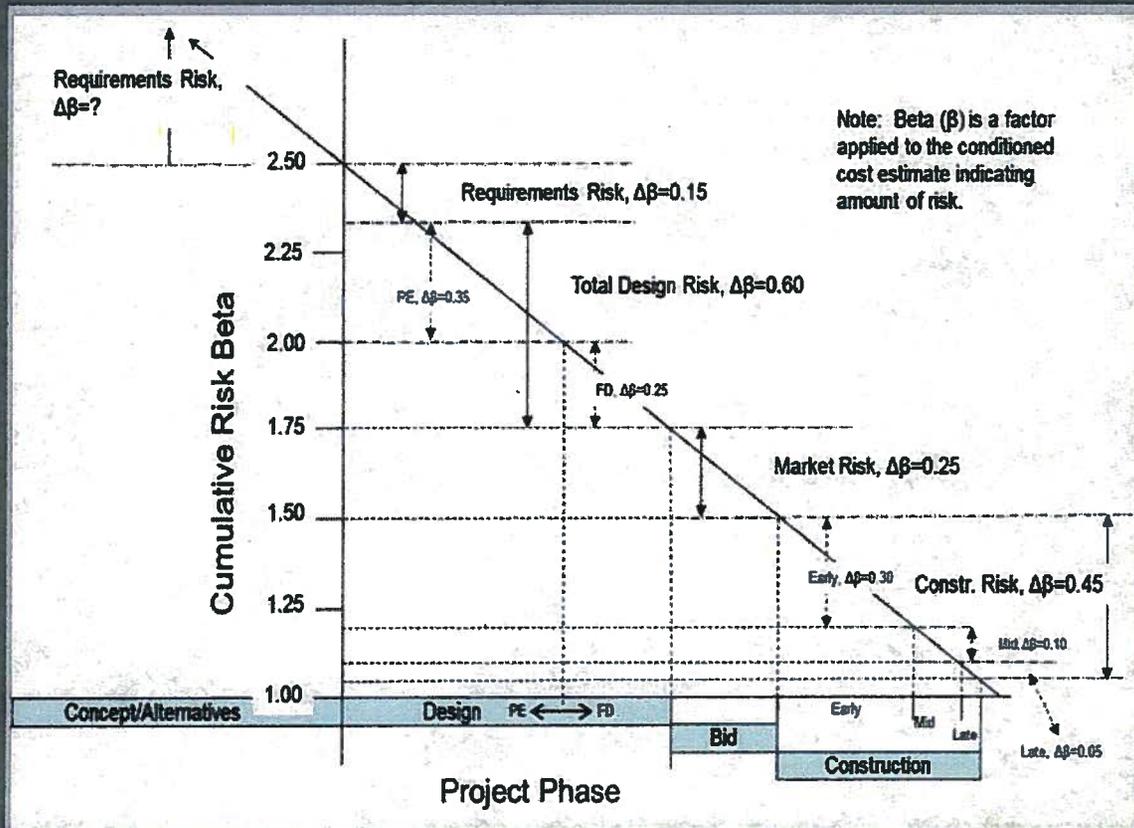
High Risks	7
Medium Risks	15
Low Risks	12
Total	34



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FTA Top-Down Approach

- Produce quantitative analysis by applying risk Beta factors to cost and schedule



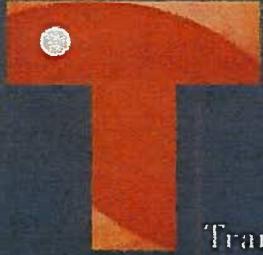
Cost
Beta
model



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Bottom-Up Approach

- Produce quantitative Monte Carlo analysis of identified risks to cost and schedule
 - Estimating Uncertainty (Rates/Quantities/Source)
 - Design development status
 - Market conditions
 - Likelihood of construction change orders
 - Potential for claims
 - Escalation
 - Schedule delay factors



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Risk Model Results

Confidence Level	Bottom Up Risk	Top Down Risk
30%	\$ 1,866	\$ 1,809
35%	\$ 1,881	\$ 1,827
40%	\$ 1,895	\$ 1,847
45%	\$ 1,909	\$ 1,867
50%	\$ 1,925	\$ 1,888
55%	\$ 1,940	\$ 1,910
60%	\$ 1,957	\$ 1,933
65%	\$ 1,974	\$ 1,958
70%	\$ 1,995	\$ 1,986



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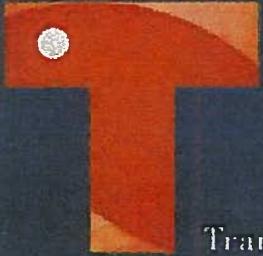
Budget Adjustment Recommendation



Transbay Transit Center

Budget Recommendations

- Increase Transit Center Construction Budget
 - Provide for RVA
 - Recognize Market Recovery
 - Reflect steel bid results
- Increase Contingencies and Program Reserves
 - Increase total contingencies and reserves to \$224.9 million consistent with recommendations of risk management evaluation
 - Increase construction contingencies to 8% of remaining construction
 - Increase program reserve to 8.5% of remaining budget to be committed
 - Adjust CM/GC Contingency
- Increase Transit Center Design and Programwide Budgets
 - Recognize trends in program support costs
 - Increase budget for additional architectural & engineering services

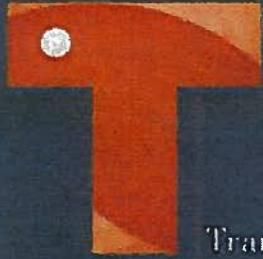


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Recommended Budget Contingencies & Reserves

Program Reserves	87.5
Design Contingencies*	8.2
Escalation*	30.3
Construction Contingency*	62.5
CM/GC Contingency*	36.4
Total Recommended Contingencies and Reserves	\$224.9

* - Escalation and design, construction and CM/GC contingencies are included within construction budget items



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Current Budget Revision Proposal (millions)

Project Costs	Baseline	Current	February Assessment	Proposed Revision
Temporary Terminal	\$25.3	\$25.7	\$25.7	\$25.7
Bus Storage	\$22.9	\$24.7	\$24.8	\$24.8
Demolition	\$16.2	\$16.8	\$16.8	\$16.8
Utility Relocation	\$65.6	\$29.5	\$29.4	\$29.4
Transit Center Design	\$143.1	\$168.7	\$181.9	\$181.9
Transit Center Construction	\$909.7	\$902.9	\$1,056.8	\$1,107.3
Bus Ramps	\$40.2	\$53.6	\$53.7	\$50.4
ROW Acquisition	\$71.9	\$71.9	\$72.9	\$72.9
ROW Support	\$5.3	\$4.8	\$4.8	\$4.8
Programwide	\$243.6	\$268.9	\$290.0	\$297.9
Program Reserve	\$45.2	\$21.5	\$46.5	\$87.5
TOTAL	\$1,589.0	\$1,589.0	\$1,803.3	\$1,899.4

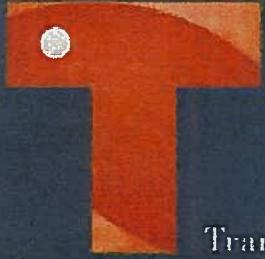
\$110.3 million in Net New Revenue identified, resulting in \$200.1 million in Additional Revenue Required for market recovery, steel bid, RVA, and contingencies



Transbay Transit Center

Recommended Phase 1 Budget Adjustments

RVA Costs	\$56.8	
Market Recovery	55.4	
Steel Bid Results	43.9	
Other Construction Costs	4.8	
Soft and Programwide Costs	35.0	
<i>Sub-Total Direct Costs</i>		195.9
Escalation	14.6	
Construction Contingency	29.5	
CM/GC Contingency	4.3	
Program Reserves	66.1	
<i>Sub-Total Contingencies & Reserves</i>		114.5
<i>Recommended Budget Adjustment</i>		\$310.4
<i>Net New Revenues Identified</i>		(\$110.3)
<i>Additional Funding Required</i>		\$200.1



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Revenue Plan for Proposed Budget Adjustment



Transbay Transit Center

Net New Revenues (millions)

Increased Land Sales Values

Based on 2013 "Conservative Appreciation" update of land values and likely RFP schedule

\$53

Transit Center District Plan Open Space/Impact Fees

Fees for City Park construction included in TCDP Implementation Document

\$28.5

Additional Proposition K funds

SFCTA recalculation of financing costs results in increased funding for projects

\$41

One Bay Area Grant Program

Region's federal STP/CMAQ funds; SFCTA has announced recommended awards for approval in June 2013 including new revenue to TJPA for bike/pedestrian elements

\$6

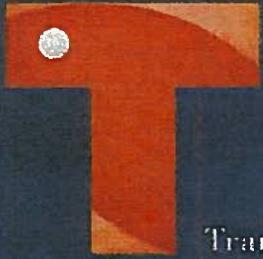
Regional Transportation Improvement Program

No longer available during Phase I schedule based on SFCTA prioritization of other local projects and State gas tax projections

(\$18.2)

Total

\$110.3



Transbay Transit Center

Targeted New Revenues (millions)

Additional Revenue Required

Fully funding contingencies and reserves \$200.1

Increased TIFIA loan amount

Possible with refinance to current interest rates and lowering of debt coverage ratio (\$97-129)

Additional Funding Required

\$70-103

Federal Funding

May include TSGP, TIGER/PRNS, or other grants

Applied for TIGER V for Bus Storage \$18.2

Applied for FY13 TSGP for Steel Connections/Columns \$3.6

Total pending federal applications **\$21.8**

Local/Regional Support

Accelerated Land Sales from Phase 2

No-interest loan from funding partner based on estimated values of Parcel F and Block 4



Transbay Transit Center

Next Steps

- *Bring Phase 1 Budget Recommendation for Board Action – July 11th*
- *Award Structural Steel Package (critical path) – July 11th*
- *Transmit Revised Budget to Fitch for Investment Grade Evaluation in order to move forward TIFIA loan modification – week of July 11th*
- *Issue Bus Ramp Trade Package – July*