



Phase 1 Budget Update

June 16, 2015

Transbay Transit Center

TJPA



- Background
- Current Budget Status
 - Construction awards to date
 - Remaining construction work to be awarded
 - Status of soft costs
 - Risk analysis results
 - Budget adjustment
- Funding Plan
- Next Steps



Background



Phase 1 Budget

(\$millions)

	Budget (July 2013)	Budget Transfers	Adjusted Budget (May 2015 Awards)
TTC Construction*	\$ 933.68	\$ 98.55	\$ 1,032.22
Bus Ramp*	\$ 40.42	\$ 15.80	\$ 56.23
Temp Terminal	\$ 20.65	\$ 0.00	\$ 20.65
Bus Storage*	\$ 15.95	\$ 0.00	\$ 15.95
Utility Relocation	\$ 19.86	\$ 0.98	\$ 20.84
Demolition	\$ 16.48	\$ 0.00	\$ 16.48
CM/GC Costs	\$ 85.65	\$ 1.00	\$ 86.65
Subtotal Construction	\$ 1,132.69	\$ 116.33	\$ 1,249.02
Soft Costs			
Design	\$ 188.45	\$ 0.21	\$ 188.66
Construction Mgmt	\$ 53.83	\$ 0.00	\$ 53.83
Pre-Construction	\$ 31.27	\$ 0.00	\$ 31.27
Art	\$ 2.00	\$ 0.00	\$ 2.00
ROW	\$ 77.68	\$ 0.00	\$ 77.68
PMPC	\$ 101.45	\$ 0.00	\$ 101.45
Admin/Legal/Financial/etc.	\$ 125.65	\$ (1.00)	\$ 124.65
Subtotal Soft Costs	\$ 580.32	\$ (0.79)	\$ 579.53
CM/GC Contingency	\$ 36.40	\$ (9.24)	\$ 27.16
Construction Contingency	\$ 62.45	\$ (24.27)	\$ 38.18
Program Reserve	\$ 87.53	\$ (82.03)	\$ 5.50
Subtotal Reserves	\$ 186.38	\$ (115.54)	\$ 70.84
Total Phase 1 Program	\$ 1,899.40	\$ 0.00	\$ 1,899.40

*Budget includes design contingency and escalation

Assumptions:

- Pricing based on 1st Quarter 2013 market conditions
- Included escalation @ 3.5% per year to midpoint of construction
- Included Value Engineering and Deductive Alternates totaling \$35.8M
- Established \$224.9M in contingencies/reserves, based on FTA Risk Assessment modeling:

– Design Contingency	\$8.2M	} \$186.4M
– Construction Contingency	\$62.5M	
– CM/GC Contingency	\$36.4M	
– Program Reserve	\$87.5M	
– Escalation/Market Recovery	<u>\$30.3M</u>	
	\$224.9M	



**Phase 1 Construction
Estimate Update May 2014
(\$millions)**

	Budget *	CM/GC Estimate	Delta
Upcoming Trade Packages	\$347.92	\$482.74**	(\$134.82)
Design Contingency	\$ 5.73	\$ 9.14	(\$ 3.41)
Escalation	<u>\$ 29.30</u>	<u>\$ 27.50</u>	<u>\$ 1.80</u>
Subtotal - Direct Costs	\$382.95	\$519.38	(\$136.43)
CM/GC Fee	\$ 71.00	\$ 79.43	(\$ 8.43)
CM/GC Contingency	<u>\$ 36.40</u>	<u>\$ 44.93</u>	<u>(\$ 8.54)</u>
Total	\$490.35	\$643.74	(\$153.40)

*As of May 2014

**CM/GC Estimate dated February 24, 2014 – Reconciled with Pelli Clarke Pelli Architects



Mitigation Measures

May 2014

(\$millions)

Rooftop Park elements	\$23.0
Reduce electrical scope	\$ 5.2
Reduce IT scope	\$ 2.0
Redesign glazing systems	\$ 5.8
Remove glass fiber reinforced concrete	\$ 4.3
Provide galvanized painted steel instead of stainless steel	\$ 3.5
Redesign ceilings	\$ 2.0
Redesign Bus Deck barrier (concrete)	\$ 2.6
Other scope reductions	<u>\$ 4.4</u>
Total	\$52.8



Current Budget Status



Phase 1 Budget Update

(\$millions)

Awarded to Date (direct cost)*

Transit Center	\$	877.67
Utility Relocation	\$	20.84
Demolition Old Terminal	\$	15.48
Temporary Terminal	\$	20.65
Bus Ramp	\$	56.23
Total Award through May 2015	\$	990.87

*Amounts include executed change orders

Remaining TTC Construction Awards (direct cost)

Budget	\$ 163.84
CM/GC Estimate/Known Bid Results	\$ (230.82)
Balance	\$ (66.97)
Additional CM/GC Costs	\$ (18.59)
Rooftop Park (above slab elements)	\$ (38.00)
Soft Costs: Construction Management Oversight	\$ (29.00)
Bus Storage	\$ (3.50)
Replenishment of Construction Contingency/Program Reserve*	\$ (79.48)
Various Program Savings	\$ 17.28
Total Additional Budget need	\$ (218.26)

*Amount based on 30% top down (FTA risk model) risk confidence level

Remaining Construction Work to be Awarded

(\$millions)

Future Work to be Awarded		Budgeted Amount	CM/GC Estimate (Feb 2014)	Current Estimate or Bid Result
7.6	Concrete Topping Slabs /Bus Crash Rail/Exp Joints	\$ 9.13	\$ 12.67	\$ 27.68*
8.2R	Exterior Awning Construction (W1)	\$ 33.97	\$ 36.33	\$ 35.26*
8.6R	Metal Ceiling (W-14)	\$ 18.86	\$ 23.17	\$ 28.00*
12.1	Civil/Sitework at Grade/Ground Level Landscaping	\$ 17.84	\$ 19.70	\$ 19.70
16.0	Interiors/Finishes	\$ 20.86	\$ 19.75	\$ 39.03*
17.1	Signage/Graphics/Directory System Construction	\$ 3.47	\$ 3.75	\$ 3.47*
8.11R	Glass Curtain Walls/Skylights/Glass Floors	\$ 35.98		\$ 50.00
TBD	IP NETWORK (award spring 2016)	\$ 16.56		\$ 20.01
TBD	OCS & Traction Control (MUNI)	\$ 5.00		\$ 5.50
TBD	Art Work	\$ 2.18		\$ 2.18
	Total	\$ 163.84		\$ 230.82
	Budget			\$ 163.84
	Balance			\$ 66.97
13.1	Rooftop Park (Landscaping & Hardscaping)			\$ 24.50
TBD	Rooftop Park (MEPs)			\$ 13.50
	Total			\$ 38.00
	Balance			\$ 104.97

*Bids opened or prices from contractors



Soft Costs

(\$millions)

Soft Costs	Adjusted Budget (May 2015)	Revised Budget	Delta
Design	\$ 188.66	\$ 178.28	\$ 10.39
Construction Mgmt.	\$ 53.83	\$ 78.28	\$ (24.45)
Pre-Construction	\$ 31.27	\$ 31.27	\$ 0.00
Art	\$ 2.00	\$ 2.00	\$ 0.00
ROW	\$ 77.68	\$ 77.68	\$ 0.00
PMPC	\$ 101.45	\$ 101.45	\$ 0.00
Admin/Legal/Financial/etc.	\$ 124.64	\$ 122.29	\$ 2.36
Total	\$ 579.54	\$ 591.24	\$ (11.70)



- **Initiated a formal Risk Assessment update with outside consultant from Gardiner & Theobald with FRA and FTA participation as well CMO, CM/GC and Design Team**
- **Assess sufficiency of remaining contingencies and reserve**
- **Recommended levels of contingencies and reserve for remaining project scope**
- **Presented findings to funding partners – FTA, MTC, SFCTA, etc.**



Risk Assessment Processes

1. “Top-Down” approach conforming to Federal Transit Administration risk assessment Oversight Procedure [FTA OP-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



Risk Model Results

Contingencies & Reserve Confidence Level	Bottom Up Risk		Top Down Risk	
30%	\$	197	\$	150
35%	\$	202	\$	165
40%	\$	206	\$	180
45%	\$	210	\$	195
50%	\$	214	\$	212
55%	\$	219	\$	229
60%	\$	224	\$	247
65%	\$	229	\$	267
70%	\$	234	\$	288



Contingencies & Reserve

- **Recommended total Contingencies and Reserve consistent with 30% Confidence Level cost projections**
- **This will replenish the current contingency amount by \$79.48M to a total amount of \$150M**
- **Recommended contingency level constitutes 22% of the cost of the remaining work and 16% of remaining work after all existing exposure is accounted for**
- **Recommended construction contingency level is consistent with CM/GC's assessment and CMO's recommendation**
- **Recommended construction contingency is reasonable given that bidding risk is minimal moving forward, construction is more than 50% complete, foundation work and train box construction is completed, and structural fabrication and erection risks are quantified**

Construction Cost Drivers*

(\$millions)

Packages Awarded since July 2013	Budget	Award Amount	Delta
Logistics (Hoisting & Temp. Facilities)	\$ 20.30	\$ 26.51	\$ (6.21)
Structural Concrete	\$ 35.56	\$ 48.18	\$ (12.63)
Misc. Metals & Metal Stairs	\$ 9.84	\$ 16.77	\$ (6.93)
Metal Panels (W-5, 7, 9, 16A/B, 17, 19)	\$ 14.08	\$ 19.55	\$ (5.47)
Electrical	\$ 54.33	\$ 86.80	\$ (32.47)
Elevators & Escalators	\$ 11.92	\$ 17.08	\$ (5.16)
Bus Ramp	\$ <u>40.42</u>	\$ <u>56.23</u>	\$ <u>(15.80)</u>
Total	\$ 186.46	\$ 271.12	\$ (84.67)

* Costs drivers as a result of active construction market conditions



Draft Phase 1 Budget with Risk Adjustment and Bids Known at 6/16/15 (\$millions)

Phase 1 Budget - 30% Confidence Level	Adjusted Budget (May 2015 Awards)	Revised Budget	Delta
TTC Construction*	\$ 1,032.22	\$ 1,137.20	\$ (104.97)
Bus Ramp*	\$ 56.23	\$ 56.23	\$ 0.00
Temp Terminal	\$ 20.65	\$ 20.65	\$ 0.00
Bus Storage*	\$ 15.95	\$ 19.45	\$ (3.50)
Utility Relocation	\$ 20.84	\$ 20.84	\$ (0.00)
Demolition	\$ 16.48	\$ 16.48	\$ 0.00
CM/GC Costs	\$ 86.65	\$ 105.24	\$ (18.59)
Subtotal Construction	\$ 1,249.02	\$ 1,376.08	\$ (127.06)
Soft Costs			
Design	\$ 188.66	\$ 178.28	\$ 10.39
Construction Mgmt	\$ 53.83	\$ 78.28	\$ (24.45)
Pre-Construction	\$ 31.27	\$ 31.27	\$ 0.00
Art	\$ 2.00	\$ 2.00	\$ 0.00
ROW	\$ 77.68	\$ 77.68	\$ 0.00
PMPC	\$ 101.45	\$ 101.46	\$ (0.01)
Admin/Legal/Financial/etc.	\$ 124.65	\$ 122.29	\$ 2.36
Subtotal Soft Costs	\$ 579.53	\$ 591.24	\$ (11.71)
CM/GC Contingency	\$ 27.16	\$ 34.44	\$ (7.28)
Construction Contingency	\$ 38.18	\$ 86.09	\$ (47.91)
Program Reserve	\$ 5.50	\$ 29.80	\$ (24.30)
Subtotal Contingencies & Reserve	\$ 70.84	\$ 150.33	\$ (79.48)
Total Phase 1 Program	\$ 1,899.40	\$ 2,117.66	\$ (218.25)

*Budget includes design contingency and escalation

Bus Storage

Budget:	15.95M
Update Estimate:	<u>19.45M</u>
Balance:	(\$3.5M)

Schedule

Design: Currently 65%-95% complete

Award: Could be awarded as early as Spring 2016

Construction Complete: Summer 2017

However, Bus Storage can be built after TTC completion with little impact to TTC operations, for a total Phase 1 Budget savings of \$19.45M



Funding



Funding Need with Risk Adjustment and Bids Known at 6/16/15 (\$millions)

Transbay Transit Center

30% Risk

Current Budget	\$	1,899.4
Current Estimate	\$	2,117.7
Amt of Additional Budget	\$	218.3

Mitigation

Bus Storage	\$	(19.5)
Revised Budget Needed	\$	198.8

Revised Budget Total \$ 2,098.2

Phase 1 Funding

Current budget fully funded	\$	1,899.4
Timing of CFD availability during Ph. 1	\$	(20.0)
Parcel F potential minimum bid price	\$	160.0
Total Funding	\$	2,039.4

30% Risk Level budget (mitigated) \$ 2,098.2

New Funding Need \$ 58.8



Sources	Committed Funds	Potential Funds
Land Sales	\$ 510.0	\$ TBD
FRA Grants	\$ 402.7	
TIFIA/Bridge Loan	\$ 171.0	
FTA Grants	\$ 62.4	
FEMA Grants	\$ 0.1	\$ TBD
Regional Measures 1 & 2	\$ 197.4	
AB 1171	\$ 150.0	
San Francisco Prop K	\$ 139.0	
AC Transit Capital Contribution	\$ 39.0	
RTIP	\$ 10.2	
Miscellaneous Local	\$ 12.7	
One Bay Area Grant	\$ 6.0	
San Mateo Sales Tax	\$ 4.5	
Transit Center District Plan (Mello-Roos)	\$ 194.4	\$ TBD
Sponsorship	\$ -	\$ TBD
Total Funds	\$ \$1,899.4	\$ TBD

Any increase to the Phase 1 budget must be fully funded to meet TIFIA/bridge loan lender requirements



Transbay Transit Center

Questions?

