



Phase 1 Construction Cost Estimate Update

May 13, 2014

Transbay Transit Center

TJPA





Agenda

- Recap of Phase 1 Budget approved by the Board on July 11, 2013
- Construction Cost Estimate Update
- Mitigation Plan
- Status of Contingencies & Reserves
- Bidder Survey
- Contractor Outreach
- Schedule



Board Approved Phase 1 Budget (millions)

Project Costs	Budget
Temporary Terminal	\$25.7
Bus Storage	\$24.8
Demolition	\$16.8
Utility Relocation	\$29.4
Transit Center Design	\$181.9
Transit Center Construction	\$1,107.3
Bus Ramps	\$50.4
ROW Acquisition	\$72.9
ROW Support	\$4.8
Programwide	\$297.9
Program Reserve	\$87.5
TOTAL	\$1,899.4



Phase 1 Construction Budget Breakdown (millions)

	Budget
Transit Center	\$ 895.31
Bus Ramps	\$ 38.69
Bus Storage	\$ 12.48
Utility Relocation	\$ 20.06
Temporary Terminal & Demolition	\$ 37.13
	<i>Subtotal</i> \$1,003.67
<hr/>	
Escalation & Design Contingencies	\$ 38.5
Construction Contingency	\$ 62.5
CM/GC Contingency	\$ 36.4
CM/GC Fee	\$ 71.0
CM/GC Performance and Payment Bond	\$ 8.0
	<i>Total Phase 1 Construction Budget</i> \$1,220.07
<hr/>	
Program Reserve	\$ 87.5
Other Program Costs	\$ 591.83
	<i>Total Phase 1 Program Budget</i> \$1,899.4



Board Approved Phase 1 Budget (millions)

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	\$8.2
– Construction Contingency	\$62.5
– CM/GC Contingency	\$36.4
– Escalation/Market Recovery	\$30.3
– Program Reserve	\$87.5



Phase 1 Construction (millions)

Awarded to Date (direct cost):

Transit Center	\$600.28
Utility Relocations	\$20.06
Demolition Old Terminal	\$16.48
Temporary Terminal	<u>\$20.65</u>
Total	\$657.47

Upcoming Trade Packages* (budget):

Transit Center	\$309.23
Bus Ramps	<u>\$38.69</u>
Total	\$347.92

All amounts exclude CM/GC fee & bonding

*Amounts exclude escalation and all contingencies



Phase 1 Construction

Upcoming Trade Packages (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>\$ 27.5</u>	<u>\$ 1.8</u>
Subtotal - Direct Costs	\$382.95	\$519.38	(\$136.43)
CM/GC Fee	\$ 71	\$ 79.43	(\$ 8.43)
CM/GC Contingency	<u>\$ 36.4</u>	<u>\$ 44.93</u>	<u>(\$ 8.54)</u>
Total	\$490.35	\$643.74	(\$153.40)

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



Budget v. CM/GC Estimate

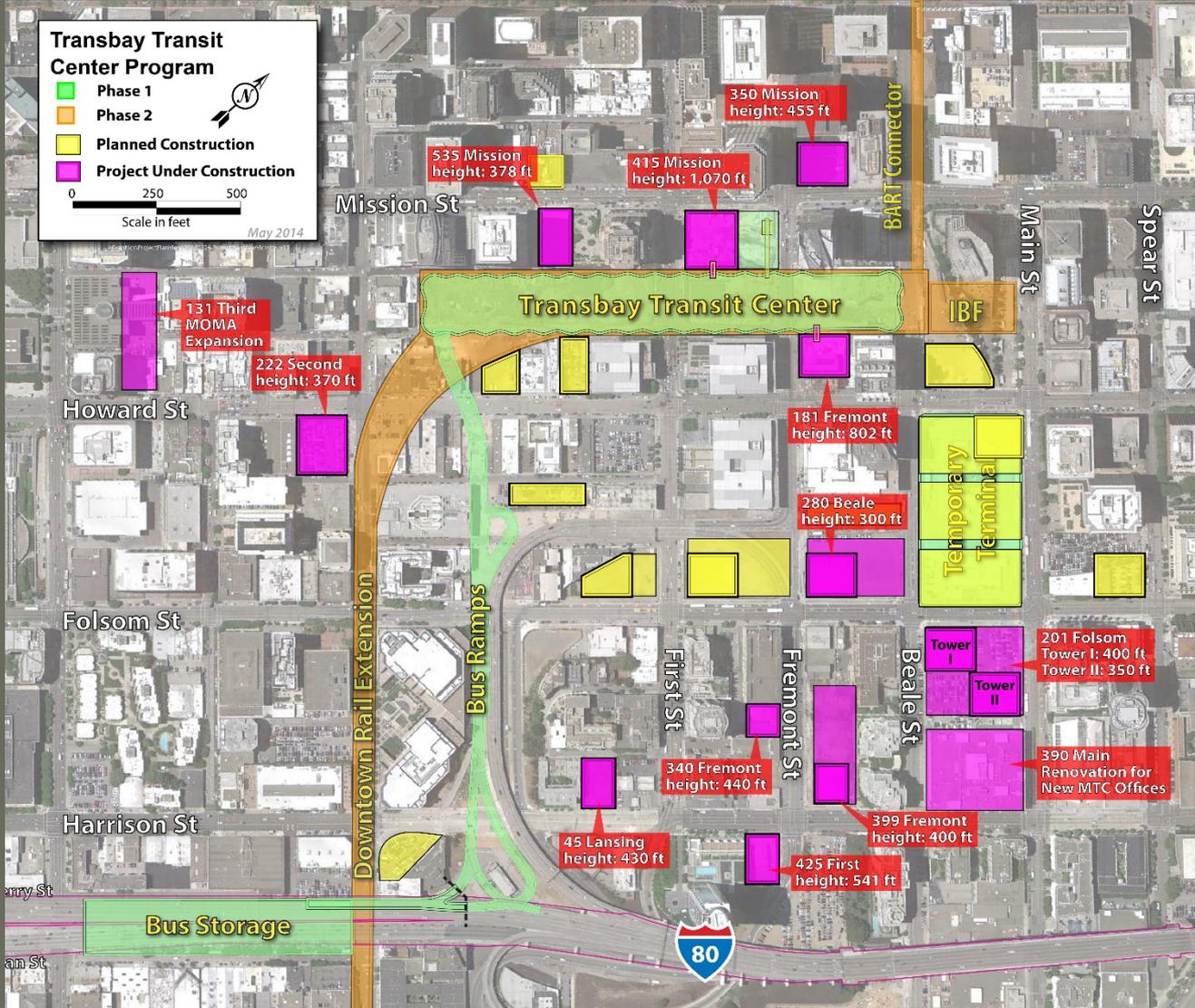
Market Conditions:

- Approved Budget was based on 3.5% escalation
- Escalation from 1st Quarter 2013 to 4th Quarter 2013 was 10.1%
- Market is very active with limited bidder pool
- Intense competition for bidders in S.F. construction market and Transbay District
- Contractors prefer private work vs. public low bid work



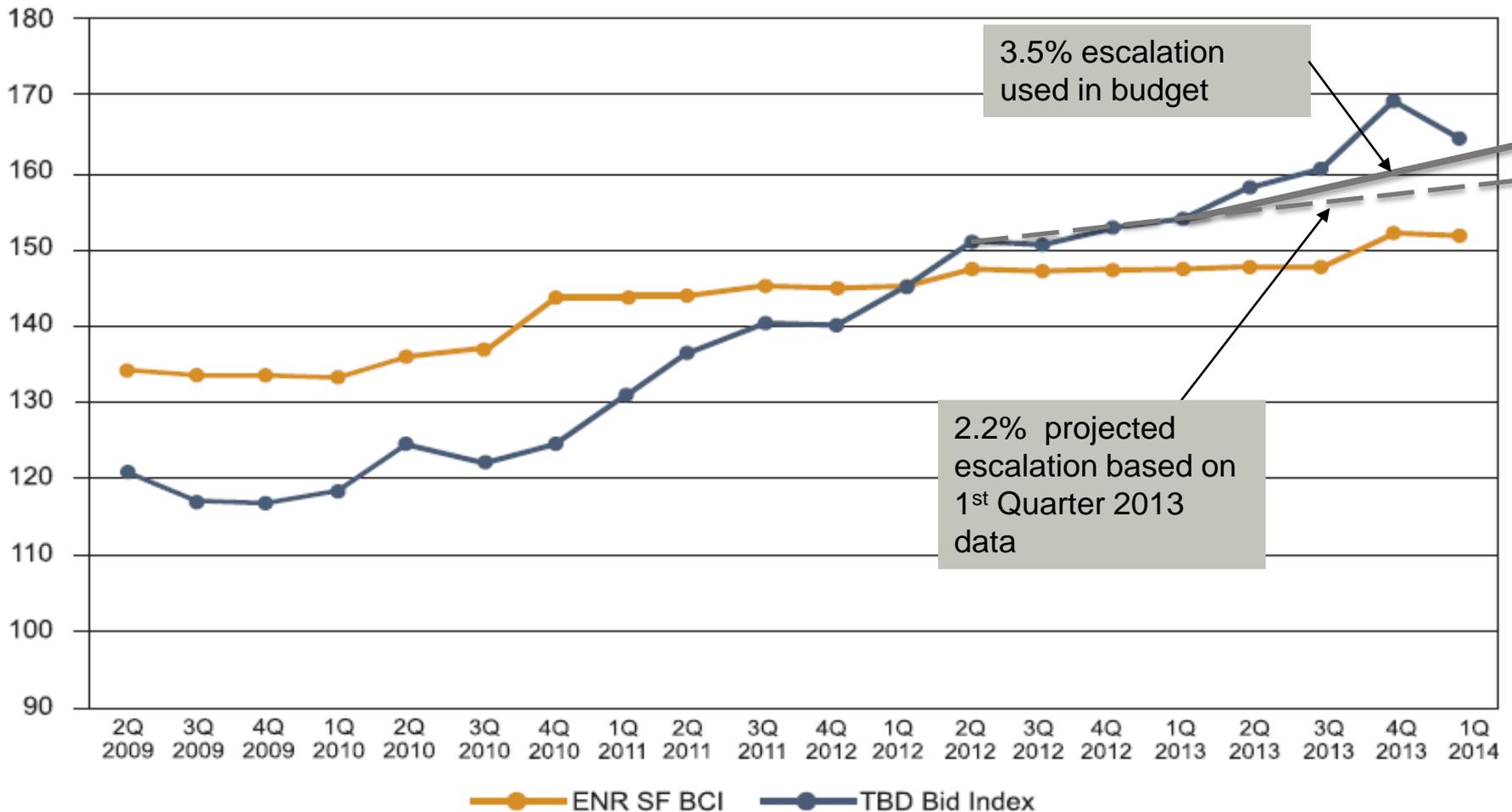
Transbay Transit Center

Transbay District Construction Market Conditions



Current Market Trends SF 1st Quarter 2014

Bid Index





Budget v. CM/GC Estimate

- Approved Budget was based on 95% CDs
- CM/GC's estimate is based on 100% CDs
- Complex and unique designs
- Narrow design tolerances



Mitigation Plan

(millions)

Total Mitigation	\$ 153.4
• Identified mitigation measures	(\$ 52.8)
• CM/GC estimate adjustments	(\$ 5.9)
• Additional mitigation measures	(\$ 5.0)
• Apply Program Reserve	(\$ 59.7)
• Apply Construction Contingency	<u>(\$ 30.0)</u>
Balance	\$0



Mitigation Measures (millions)

Phase 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



Contingencies & Reserves (millions)

	Board Approved Budget July 2013	Current Balance April 2014	Mitigation Plan	Total after Mitigation
Design Contingency	\$8.2	\$8.2	\$3.41	\$11.61
Construction Contingency	\$62.5	\$61.5	(\$30.0)	\$31.5
CM/GC Contingency	\$36.4	\$35.3	\$6.43	\$41.73
Program Reserve	\$87.5	\$74.7	(\$59.7)	\$15.0
Escalation	\$30.3	\$30.3	(\$1.8)	\$28.5
TOTAL	\$224.9	\$210.0	(\$81.66)	\$128.34



Construction Contingency (millions)

Construction Contingency	\$31.5
CM/GC Contingency	<u>\$41.73</u>
Total Contingency	\$73.23

\$73.23M is approximately 7.1% of total construction



Phase 1 Construction Budget Breakdown Comparison

(millions)

	Budget	After Mitigation
Transit Center	\$ 895.31	\$ 967.76
Bus Ramps	\$ 38.69	\$ 56.22
Bus Storage	\$ 12.48	\$ 12.48
Utility Relocation	\$ 20.06	\$ 20.06
Temporary Terminal & Demolition	\$ 37.13	\$ 37.13
Subtotal	\$1,003.67	\$1,093.65
Escalation & Design Contingencies	\$ 38.5	\$ 40.11
Construction Contingency	\$ 62.5	\$ 31.5
CM/GC Contingency	\$ 36.4	\$ 41.73
CM/GC Fee	\$ 71.0	\$ 77.58
CM/GC Performance and Payment Bond	\$ 8.0	\$ 8.0
Total Phase 1 Construction Budget	\$1,220.07	\$1,292.57
Program Reserves	\$ 87.5	\$ 15.0
Other Program Costs	\$ 591.83	\$ 591.83
Total Phase 1 Program Budget	\$1,899.4	\$ 1,899.4



Bidder Survey by Leland Saylor Associates

Findings:

- Changes in market conditions
- Unique, custom designs with narrow tolerances
- Perception of design responsibility
- Perception of responsibility for previous subcontractor's work
- Complexity of subcontractor coordination
- General requirements
- SBE goals difficult to achieve on some packages



Bidder Survey by Leland Saylor Associates

Recommendations:

- Update estimates to capture current market pricing
- Review CDs and bid manual to eliminate perceived design-build responsibility
- Provide flexibility through use of performance specifications
- Minimize narrow design tolerances and/or provide greater flexibility
- Review bid packaging to better match scope to trade
- Review general requirements
- Survey SBE availability for trade packages



Contractor Outreach

- Additional bidder outreach to clarify scope of work for upcoming trade packages
- Streamline Bidding Manual language/clarify language
- Remove constraints on design-build work
- Minimize redesign needed to incorporate value engineering and scope reduction measures
- Subguard
- Continue to streamline payment processing
- Continue aggressive SBE outreach
- Update SBE goals for specialty trade packages based on current SBE availability while maintaining overall goal



Phase 1 Schedule Milestones

- Award of Remaining Trade Packages Complete – April 2015
- Below Grade Structure Complete – September 2015
- Structural Steel Complete – February 2016
- Above Grade Structural Concrete Complete – May 2016
- Bus Operations – October 2017



Upcoming Trade Packages Award Schedule

May – September 2014

- TG18.1** Bus Ramps
- TG05.8** Rooftop Cranes
- TG05.10** Temporary Facilities
- TG14.1** Elevators & Escalators
- TG10.5** Fire Protection and Suppression
- TG07.9** Bollards & Barriers
- TG10.2** Plumbing
- TG10.3** HVAC
- TG10.4** Electrical, Communications, Security & Integrated Networks
- TG07.3** Miscellaneous Metals
- TG07.7** Bus Crash Rail
- TG07.8** Expansion Joints
- TG15.2** Façade Access Equipment



Upcoming Trade Packages Award Schedule

October – December 2014

- TG08.2** Exterior Awning (W-1)
- TG08.1** Glazing/Glass Curtain Walls
- TG15.1** Dock Levelers & Bumpers
- TG13.2** Roofing/Waterproofing
- TG16.1** Drywall/Framing
- TG07.4** Concrete Masonry Unit
- TG07.6** Concrete Topping Slabs
- TG08.9** Roll-up Doors and Grills
- TG13.3** Ground Level Landscaping
- TG16.8** Spray Intumescent Fireproofing
- TG16.2** Tile/Flooring/Base
- TG16.3** Terrazzo
- TG16.4** Carpentry
- TG16.6** Doors/Frames/Hardware



Upcoming Trade Packages Award Schedule

January – April 2015

- TG12.1** Civil/Sitework at Grade
- TG16.5** Paint
- TG16.7** Millwork
- TG17.1** Signage, Graphics, Directory Systems
- TG20.1** Final Cleaning
- TG08.3** Skylights
- TG08.4** Metal Panels
- TG08.7** Glass Floors
- TG08.6** Metal Ceiling

Questions?



201 Mission Street, Suite 2100

San Francisco, CA 94105

www.transbaycenter.org