STAFF REPORT FOR CALENDAR ITEM NO.: 7
FOR THE MEETING OF: July 11, 2013

TRANSBAY JOINT POWERS AUTHORITY

BRIEF DESCRIPTION:

Adoption of a Recommended Revised Baseline Budget for Phase 1 of the Transbay Transit Center Program (Program) in the amount of $1,899,400,000 in year of expenditure (YOE) dollars.

EXPLANATION:

In November 2007, the TJPA Board adopted a Baseline Budget for Phase 1 of the Program in the amount of $1,189,000,000. The budget included the following Program components: (a) right-of-way acquisition; (b) construction of a temporary terminal; (c) demolition of the existing Transbay Terminal and bus ramps; (d) construction of the above-grade bus facilities portion of the new Transit Center and the foundations and other improvements to prepare for future construction of the below-grade train station ("top-down" approach); (e) construction of bus ramps and bus storage; and (f) design and engineering of the above-listed facilities including the full below-grade rail level component of the Transit Center building. The budget excluded construction of the below-grade train box.

In May 2010, the Board adopted a Revised Baseline Budget, Financial Plan, and construction schedule for Phase 1 of the Program in the amount of $1,589,000,000, which incorporated the construction of the train box. On August 11, 2010, the Federal Railroad Administration (FRA) awarded the $400,000,000 American Recovery and Reinvestment Act (ARRA) grant for the train box.

In August 2010, the Temporary Terminal opened for operations and demolition of the former Transbay Terminal commenced. Shoring wall construction began in April 2011, excavation and bracing work has been on-going, and permanent below grade work began in April of this year. The buttress has also been completed this year. This work has been possible due to the early delivery of several major design packages. The 100% construction documents for the remainder of the main building package were delivered to TJPA for review on May 31, 2013. Financially, over 54% of the estimate at completion (EAC) has been committed on contracts and 33% has been spent.

In February 2013, staff presented to the Board a preliminary draft revised baseline budget for Phase 1. There are several key drivers for the recommended increase to the budget. One is a significant increase in activity in the regional construction market over the past 24 months that has influenced competition, contractor margins and mark-ups, and direct pricing for materials and labor. These forces have put pressure on the cost of work yet to be bid and were reflected in the bid results for the substructure and, most recently, the structural steel trade packages. Second is incorporation of design changes necessitated by a Risk and Vulnerability Assessment update that was completed in 2012. The third major cause for the proposed budget increase is resetting contingencies and Program Reserve at prudent levels for the remainder of the project scope. Each of these key causes is discussed in more detail throughout this staff report.

Significant value engineering has already been undertaken to reduce the overall project budget, identify opportunities for cost savings, and provide options or alternates for the future. Two of the largest changes resulting from the recent value engineering efforts were the decision to change the material of the awning from glass to aluminum and to change ceiling material from glass fiber reinforced concrete (GFRC) panels to metal. Other value engineering changes included modifying the fascia at the perimeter of the Park level, revising wall and floor finishes, and simplifying the storefront glazing system. In addition, deductive alternates such as replacing terrazzo floors with polished concrete and deleting the Beale Street lobby enclosure have been incorporated into the design documents. A list of value engineering and deductive alternates developed and implemented just in the last twelve months is presented below; acceptance of each of these items is assumed in the Recommended Revised Baseline Budget for Phase 1. In short, the entire design has been reviewed to identify all possible cost savings opportunities and options for deferral of project components without comprising the functionality of the Transit Center.

Value Engineering (VE) Changes and Deductive Alternates (DA)	Amount of Savings
W-1 awning glass to aluminum (VE)	$17.5M
GFRC ceiling to metal (VE)	$7.0M
Bus deck terrazzo to polished concrete (VE)	$1.5M
Storefront glazing frame system change (VE)	$1.2M
Eliminate graywater system at rooftop park wetland (DA)	$1.1M
W-5 glass wall panels to metal (DA)	$1.1M
Fascia material change (VE)	$1.0M
Delete Beale Street lobby enclosure (DA)	$0.9M
Defer park level café (DA)	$0.7M
Defer second service elevator to Phase 2 (DA)	$0.5M
Simplify sidewalk concrete pattern to monolithic pour (VE)	$0.4M
Modify park path materials (DA)	$0.4M
Elevator enclosure glass to metal (DA)	$0.3M
Eliminate temporary stairs to MEP at train platform (VE)	$0.3M
Eliminate lily pond at west end of rooftop park (VE)	$0.3M
Remove LED lighting/controls soffit pass throughs (DA)	$0.2M
Simplify glass floor in Grand Hall at light column (VE)	$0.2M
Modify lighting system strategies at Bus Deck (DA)	$0.2M
Modify amphitheater (VE)	$0.2M
Substitute paving material at main plaza (DA)	$0.2M
Substitute stone seat walls, stepped areas, curb materials (DA)	$0.2M
Modify backlighting of bus jet fountain (DA)	$0.1M
Light fixture quick connects in lieu of hard wiring (VE)	$0.1M
Provide standard glass balustrade (VE)	$0.1M
Provide standard elevator finishes (VE)	$0.1M
Total	$35.8M

While substantial value engineering and deductive alternates have been identified over the last year, opportunities for additional value engineering and identification of alternates is limited; with the award of the Superstructure Steel package, 61% of the estimated construction cost of the Transit Center will have been awarded and only 39% is left to bid.

As noted above, in recognition of the impending impact of the construction market activity, to address the RVA necessitated design changes, and to replenish project contingencies and

reserves, TJPA staff presented a preliminary draft revised baseline budget to the Board in February 2013. The structural steel bid received in March 2013, however, exceeded the estimates included in the February preliminary draft budget.

After repackaging and rebidding the steel package and conducting a thorough review of the project budget risks and opportunities for value engineering and deductive alternates, staff has prepared a Recommended Revised Baseline Budget of $1,899,400,000. This recommendation adds $310,400,000 to the previously approved Revised Baseline Budget to recognize changes that have occurred since May 2010 in the following four areas:

Replenishment of contingencies and Program Reserve	$114.5M
Steel and other construction costs	$104.1M
Risk & Vulnerability Assessment (RVA) incorporation	$56.8M
Soft and Programwide costs	$35.0M
Total	$310.4M

Within the overall budget, the increases fall into four specific major line items: Transit Center Construction, which includes the steel adjustments and other construction costs, along with replenishment of contingencies and the RVA; Transit Center Design; Programwide, which includes soft and programwide cost adjustments; and Program Reserve.

Contingencies and Program Reserve

The Program Baseline Budget contains various contingences as well as a Program Reserve. The Design Contingency, Construction Contingency, CM/GC Contingency, and Escalation are contained within the construction budget. The Design Contingency is meant to capture scope not reflected in preliminary design drawings and is reduced to $0 as the construction documents are completed. The Construction Contingency is a reserve to fund construction contract changes after award due to unforeseen conditions and other changes. The CM/GC Contingency is a provision of the CM/GC contract and is intended to address coordination issues between trade subcontractors, schedule recovery, and related issues. Any unused CM/GC Contingency will be split 50/50 with the CM/GC at the project end. A provision for Escalation over the course of construction is also included within the construction budget; this line item captures standard inflation over the time period when contracts are awarded. The Program Reserve is an independent budget category, and serves as contingency against all non-construction program budget requirements as well as a safety-net should escalation, claims, or change orders exceed the limits of the contingencies within the construction budget.

The following amounts remain in contingencies and Program Reserve under the May 2010 Baseline Budget:

Design Contingency	$8.2M
Construction Contingency	$33.0M
CM/GC Contingency	$32.1M
Escalation	$15.7M
Program Reserve	$21.4M
Total Contingency Remaining	$110.4M

In February 2013, a preliminary budget was presented that contained the following recommendations for additional contingences and Program Reserve:

Market Recovery Adjustment	$55.4M
Replenish Program Reserve	$25.0M
Replenish Construction Contingency	$25.0M
Schedule Contingency	$5.0M
Total preliminary budget for Contingencies	$110.4M

Notes about the February 2103 preliminary budget:

1. The Market Recovery Adjustment line item presented in the February 2013 preliminary budget was based on Bay Area market conditions, given the significant increase in construction activity in the San Francisco region. It was intended to cover anticipated market premiums in the steel and glazing packages. Since February, staff has reallocated this Market Recovery line item into the construction budget and recommended a corresponding increase in the construction budget for steel and other contract costs, as described in detail below.

2. The Schedule Contingency line item presented in the February 2013 preliminary budget was an independent budget category reserved for extended soft costs if the project were not completed and bus operations did not commence as scheduled. Since February, staff has reassessed this line item and recommended that it be combined with the recommended increase to Program Reserve.

3. The February 2013 preliminary budget also included an increase in Escalation of $14.6M, but the line item was captured as an increase in construction costs, rather than as an increase in contingency. Since February 2013, staff has reallocated the Escalation line item as an independent line item in the contingencies recommendation.

4. The CM/GC contract includes a CM/GC Contingency equal to 4% of Direct Costs, not to exceed $36.4M. In the May 2010 Revised Baseline Budget, TJPA had budgeted for $32.2M, based on planned Direct Costs in that budget. The February 2013 preliminary budget assumed that at least half of the budgeted amount would be spent given that any saved CM/GC contingency is shared 50/50 with the contractor, thus the presentation showed $16.1M in CM/GC Contingency.

Since February 2013, TJPA staff and consultants have spent considerable time continuing to analyze the amount of contingencies and Program Reserve needed at the current stage of the Program. Following the receipt of a single steel bid in March 2013 that significantly exceeded both the engineer's estimate and the amount budgeted for the steel package, a risk review was undertaken in May and June to assess the sufficiency of contingencies and Program Reserve necessary to complete the remaining Phase 1 project scope.

The risk review utilized two approaches to assessing project risk: first a "top down" approach in line with the Federal Transit Administration (FTA) Operating Guidance 40 risk assessment operating guidance methodology, which assigns objective beta factors to project elements based on their characteristics, and the second a "bottom up" Monte Carlo approach using team-identified and assess risks. The use of two approaches substantiates the assessment and is a standard practice that increases confidence in results.

The result of the risk evaluation is a recommendation for total project contingencies and Program Reserve of $224.9M (increase of $114.5M from $110.4 current remaining contingencies and Program Reserve) to ensure completion of the remaining scope of the Program, consistent with the risk models which show that a budget at the 50% confidence level would be between $1,888M and $1,925M. Staff is recommending the following specific adjustments:

Design Contingency	[no replenishment required]
Construction Contingency	$29.5M
CM/GC Contingency	$4.3M
Escalation	$14.6M
Program Reserve	$66.1M
Total Recommended Increases	$114.5M

When combined with the remaining contingencies and Program Reserve, the total contingencies and Program Reserve in the Baseline Budget for Phase 1 would be as follows:

Design Contingency	$8.2M
Construction Contingency (8% of to-go construction budget)	$62.5M
CM/GC Contingency	$36.4M
Escalation	$30.3M
Program Reserve (8.5% of to-go total budget)	$87.5M
Total Contingency Recommendation	$224.9M

Contingencies and Program Reserve together now total 23% of the total cost of construction and 26% of the to-go Program Budget. Once adopted, the revised Baseline Budget for Phase 1 will be the benchmark against which cost performance will be measured.

As noted above, with the award of the Superstructure Steel package, 61% of the estimated construction cost of the Transit Center will have been awarded and only 39% is left to bid. The TJPA's exposure to circumstances that would require drawn down on the contingencies and Program Reserve should likewise be reduced. Nonetheless, staff recommends it is prudent to plan conservatively.

Steel and Other Construction Costs

As noted above, value engineering efforts and deductive alternates have been developed for many of the later construction packages to substantially mitigate the impact of the market recovery on those packages. However, there were limited opportunities to modify the scope of the structural steel package without modifying the volume, form, and programs of the Transit Center. As a result, a budget increase is required to recognize the impact of market activity, which is expected to be largely limited to the steel and glazing packages.

Staff and consultants, including the CM/GC and the construction management oversight consultant, do not believe that market conditions will have as great an impact on other future packages, which are more standardized and lend themselves to higher levels of competition. The potential impact on those packages has largely been mitigated through value engineering changes and the provision of deductive bid alternates. Any increases in these future packages should be covered by budgeted escalation. TJPA has budgeted 3.5% per year in escalation.

Detail regarding the steel package and the rebid process are included in the separate staff report recommending the award of a trade subcontract under the CM/GC contract for the structural steel package, but to summarize, the budget for the steel package was $111.5M and estimates ranged between $110M and $120M. While the package was out to bid, and it became apparent that only one bid might be received and that some of the steel was not readily available domestically, the engineer's estimate was revised upwards to account for Buy America and market conditions. While the engineer's estimate was published at $145M, TJPA projected a budget of $162M in the February 2013 Preliminary Draft Budget, via a $50.8M market recovery adjustment. The single bid received on March 20, at $259M, was $115M over the revised engineer's estimate and $97M over the revised budget recommended at the time.

The new bid, recommended for award at this Board meeting, is $189M. This is $9M, or 5%, over the revised engineer's estimate of $180M, which is an acceptable level of variation. In addition, the cast nodes were awarded in May under a separate $17M purchase order due to the criticality of the steel schedule and the long lead times required for production of the cast nodes. The current bid result, when combined with the value of the cast node purchase order, exceeds the February 2013 preliminary draft revised budget by $43.9M. Other minor adjustments are recommended to the construction budget as well:

Market Recovery and Buy America Adjustment - Steel	$50.8M
Additional adjustments to reflect actual amount of steel bid	$43.9M
Total Steel	$94.7M
Market Recovery Adjustment - Glazing/Other	$4.6M
Misc Other Anticipated Construction Increases	$4.8M
Total Other	$9.4M
Recommended Increases	$104.1M

Risk & Vulnerability Assessment

Per FEMA and DHS and to understand and mitigate the site-specific hazards and threats facing the Transit Center and its related infrastructure, the TJPA undertook a Risk and Vulnerability Assessment (RVA) in 2009 as part of its overall risk management and asset protection program. The 2009 RVA was conducted during the schematic design phase of the Transit Center and was based on the 2008 Concept Validation Report produced by the designer, Pelli Clarke Pelli Architects, Inc. (PCPA).

In 2011, prior to finalizing the Construction Documents, the project team initiated an update of the RVA originally prepared in 2009. The updated RVA, like the 2009 RVA, was a multi-hazard risk assessment considering earthquakes and other natural hazards, technological hazards, and manmade events – including terrorism events. The update was completed in 2012 incorporating the most current government and security industry standards, design strategies, lessons learned and intelligence, and resulted in revised and new Design Guidance Criteria (DGC) to minimize the exposure of the Transit Center to these events. The estimated cost of implementing the DGC is $56.8 million.

Since 2009, a number of circumstances have warranted updating the RVA: the detailed design of the facilities has progressed significantly; changes have been made to the phasing of the overall Program and its components; the operational needs of the transit agencies that will use

the Transit Center have evolved; the requirements of local police, fire, and emergency services have advanced; the threat environment and industry best practices and standards for protective guidance have progressed; and the TJPA plans to seek designation and certification under the Support Anti-terrorism by Fostering Effective Technologies (SAFETY) Act of 2002.

The SAFETY Act eliminates or minimizes tort liability should lawsuits arise after an act of terrorism. The program is operated by the U.S. Department of Homeland Security (DHS) and is certification typically sought by anti-terrorism technology engineers, vendors, and security services, but new building facilities can also apply for certification. The metrics for SAFETY Act approval focus on the provision of protective designs which enhance the survivability of facility operations and occupant life safety. When the TJPA applies, the DHS Directorate of Science and Technology will evaluate the Transit Center's RVA protective design strategies and features, including: perimeter vehicular approach and pedestrian protection; structural robustness; façade and glazing anti-fragmentation performance; arson event management; ballistic weapons attack protection; CBRN detection and mitigation strategies; evacuation, rescue, and recovery (ERR) systems' operational survivability; electronic security counter crime measures, including situational awareness; emergency communications, mass notification, and evacuation planning; and cyber penetration and corruption event management. Staff and the security subject matter experts, including the FEMA and DHS, recommend that the investment in incorporating the RVA recommendations in the design will greatly enhance the safety and security of the facility, and significantly reduce the overall liability of the agency. In addition, incorporation of the recommendations positions TJPA well for future federal funding in this area.

The 2012 RVA update was based on PCPA's Phase 1 95% Construction Documents (CDs) and in-progress drawings for Phase 2 facilities. It includes the following Program components that were not considered in the 2009 RVA: BART/MUNI pedestrian connector, bus storage facility, bus ramps, Fourth & Townsend Street Station, intercity bus facility, and the taxi staging area. Skybridges and an inclined elevator/funicular connecting from private adjacent property to the Transit Center rooftop park were also considered in the RVA update even though they would be privately owned, designed, constructed, operated and controlled, because they provide access into the Transit Center and are physically connected to the structure.

The RVA update considered updated design basis threats (DBTs), granular threat identification, and additional vulnerability mitigation measures, and resulted in revised and new Design Guidance Criteria (DGC). The list of DBTs was expanded from the 2009 RVA list to be consistent with the Interagency Security Committee (ISC) unclassified report, "The Design-Basis Threat (U)," published in 2010, which reflects current information on threat intelligence, terrorist goals, recent attacks, and developing capabilities. New performance criteria for the blast, fire, ballistic weapons, and chemical, biological, radiological, and nuclear (CBRN) design basis threats were also developed.

Design Basis Threats (DBT) were developed, evaluating natural, technological, and manmade hazards based on the ISC report, and threats were ranked using Federal Emergency Management Agency's Risk Management Series Reference Manual to Mitigate Potential Terrorist Attacks Against Buildings (FEMA 426) and FEMA's Risk Assessment: A How-to Guide to Mitigate Potential Terrorist Attacks (FEMA 452), and URS' SecureRisk methodologies. Asset values were determined, vulnerability and consequence was assessed, and mitigation options provided with Rough Orders of Magnitude (ROM) were provided in the form of DGC.

This safety and security evaluation included but was not limited to the following elements:

- Risks and threats posed to safety and security;
- Established design basis threats (DBT);
- All-hazards (natural, man-made, technological, and crime) vulnerability assessment;
- Consequence assessment;
- Resiliency and redundancy of emergency response and recovery operations;
- Proposed protective mitigation measures (to mitigate any potential for loss such as human, property or economic); and
- Prioritized ROMs for capital planning.

TJPA undertook the update with a URS team of subject matter experts (SMEs) preparing the RVA assessing all aspects of the facility and supporting infrastructure including but not limited to: structural engineering, HVAC/MEP, electrical engineering, IT, physical security, egress/access, and surface transportation infrastructure (i.e., rail, bus, and road access, etc.). URS is a nationally recognized security-consulting firm that has provided similar risk assessments for federal, state and local governments, the Department of Defense, and private sector critical infrastructure/key resource clients. The company has extensive experience accomplishing vulnerability assessments, and has worked closely with the DHS FEMA to develop the methodology employed in support of this project. The team is comprised of individuals with expertise in structural, civil, IT/electrical, architectural planning/design, mechanical/HVAC, electronic security, transportation engineering, and law enforcement. Leading the URS team were the following members:

- Denise Sines, Physical Security Specialist, URS
- Dr. Steve Landry, CBRN Specialist, URS
- Dr. Erin Ashley, Fire Protection SME, URS
- Holly Stone, Blast SME, Stone Engineering

In addition, the TJPA engaged a team of industry- renowned SMEs to provide QA/QC and peer review of the RVA process, findings and recommendations, including:

- Robert Ducibella, Security Consultant, Ducibella, Venter & Santore (DVS)
- Philip Santore, Security Consultant, Ducibella, Venter & Santore (DVS)
- Robert Smilowitz, Blast Consultant, Weidlinger Associates (WAI)
- Kevin Morin, Fire Protection Consultant, Code Consultants, Inc. (CCI)

The TJPA, PCPA-led design team, and the RVA team coordinated closely with First Responder and other agencies as key stakeholders throughout the update, including San Francisco Police and Fire Departments (SFPD, SFFD) and California Highway Patrol (CHP), San Francisco Department of Emergency Management (DEM), the Federal BioWatch program, San Francisco Municipal Transportation Agency (SFMTA), BART, Caltrain and the California High Speed Rail Authority (CHSRA).

This analysis has led to a series of recommended DGC that will greatly enhance the safety and security of the Transit Center. Examples of recommended DGC mitigation measures include structural blast performance criteria, perimeter protection systems, egress/access controls, room and wall hardening, HVAC/MEP protection and controls, structural and façade, architectural and interior design, electrical/IT and electronic security systems, CBRN protection strategies, bridge

and ramp protection, fire performance criteria, stair pressurization and tenability, and tunnel and platform protective measures. The recommendations and their associated construction cost impacts are shown below:

Bus, Train & Other Fire Event Management	$0.8M
Vehicular & Pedestrian Perimeter Protection	$10.0M
Radio, Cellular, Mass Notification Communication	$4.5M
Glazing Systems Hazard Management	$2.1M
Structural Seismic, Fire, Explosive Performance	$0.2M
ERR Pathways Survivability	$2.1M
ERR Supporting Systems Resiliency	$17.2M
Situational Awareness & Access Control/Intrusion Detection	$18.3M
CBRN Detection & Mitigation	$1.6M
Total	$56.8M

Soft and Programwide Costs

Budget adjustments are recommended for professional services fees, including design fees for incorporating the additional scope items required to implement the RVA-related changes and out-year costs for construction management oversight and program management team staffing in 2017-2018:

Design Fees	$13.2M
Legal Fees	$7.8M
Construction Management Fees	$6.7M
Program Management Fees	$6.4M
Other Miscellaneous Adjustments	$1.0M
Total	$35.0M

The current design budget is fully utilized by the agreement with PCPA for future base contract services and to address RVA associated design impacts and other changes. Thus it is recommended that the budget be increased to provide for additional design services that are likely to arise in the future from a number of issues including, as possible examples, potential services relating to the later construction document packages (IT, security, electronic signage/graphics, etc.); possible design modifications or additional analysis arising from the Department of Building Inspection's Seismic and Structural Review Committee, code review or other peer reviews; and additional construction administration services arising from extraordinary changes or unforeseen conditions. The agreements for legal, construction management oversight, and program management/program controls are not fixed fee agreements, but task order based, time and materials reimbursement agreements. The recommended increase in the budget for legal fees reflects past and current trends and forecasts for future services including anticipated efforts to rebut contractor claims and support of the Dispute Resolution Board process and is a prudent amount for a project of the scope and scale of the TTC and associated real estate development. The Construction Management Oversight agreement was not yet in place when the original budget was established for these services. The recommended adjustment reflects the rates established in the agreement and the projected staffing plan for oversight services. The original Program Management budget anticipated a higher level of Phase 2 activity which has not materialized and the full burden of Program Management expenses is supported by the Phase 1 budget as a result. The level of Program Management staffing has also been affected by the RVA update and the extended design effort. The recommended increase

reflects past activity and a declining level of support with completion of the design effort. The miscellaneous adjustments are largely related to assemblage of former State-owned parcels for sale, and $1M is a very conservative estimate that is unlikely to materialize in full.

Funding Plan

Numerous steps and the continued support of Board members and our funding partners will be required to ensure that the projected Phase 1 costs are fully funded and that contracts can be certified on schedule. Staff has developed a draft financial plan for the Recommend Revised Baseline Budget using 2013 real estate-based revenue updates and future funding opportunities. The plan includes committed funds reasonably assumed to be available during the Phase 1 schedule, and identifies additional potential funding opportunities.

(in millions, YOE$)	**Committed Funds**	**Net New Funds**	**Potential Funds**
AB 1171	$150		
Regional Measure 1	$54.4		
Regional Measure 2	$143		
San Francisco Prop K	$98	$41	
FRA High Speed Rail (ARRA)	$400		
FRA Rail Relocation	$2.6		
FTA Grants	$62.4		$18.2
TIFIA Loan	$171		$97 - 129
FEMA Grants	$0.1		$3.6
AC Transit Contribution	$39		
RTIP	$28	($18.2)	
Land Sales	$429	$53	$71.1 - 103.1
Miscellaneous Local	$7		
San Mateo Sales Tax	$4.5		
Transit Center District Plan		$28.5	
One Bay Area Grant		$6	
Philanthropic Gifts[1]			TBD
Total Funds	**$1,589 +**	**$110.3 +**	**$200.1 = $1,899.4**

The committed funds for Phase 1 include a variety of grants, land sales proceeds, lease income from acquired right-of-way parcels, and other one-time funds generation opportunities. Long term revenue streams to support the project have been identified, including tax increment funds from the State-owned parcels in the Transbay Redevelopment Area, and Passenger Facility Charges (PFCs) and/or other commitments from transit operators using the Transit Center. These revenue streams have been pledged to repay the executed TIFIA loan in the amount of $171 million for Phase 1.

The potential funds include several new opportunities to be pursued by the TJPA. These include increasing the TIFIA loan, competitive grants such as FTA's TIGER V and FEMA's Transit Security Grant Program, and extending the tax increment collection period beyond 2050 in order to generate additional funding for Phase 2 and thus free up land sales revenues for Phase 1.

[1] TJPA plans to engage the philanthropic community once the superstructure is visible above-grade. Potential revenues include private funding of planned art installations, park elements, and naming rights.

TIFIA

TJPA has requested changes to its existing loan agreement. The first modification would accelerate the use of the loan proceeds from the last two years of the Phase 1 construction period to 2014, in an amount proportional to the amount of completed land sales. This acceleration is required in order for TJPA to certify contracts planned for award in early 2014. The second and third modification requests to TIFIA are to refinance the existing TIFIA loan at a lower rate and increase the loan value by $97-129M. The interest rate on the current loan is 4.57%, whereas current TIFIA loan rates are approximately 3.75%. (The TIFIA interest rate changes daily, based on fluctuations in the Treasury rate.) TIFIA staff has been briefed on these requests and is expecting our official proposal once we receive an investment grade rating from Fitch Ratings (Fitch). TJPA has been providing project updates to Fitch for the past two months and anticipates presenting formally to Fitch the week following this Board meeting. TJPA will be presenting various scenarios to Fitch to determine the most beneficial proposal that will still achieve an investment grade rating.

Other Federal Funds

TJPA has current applications pending with FTA and FEMA for additional funds. A TIGER V application was submitted to fund the bus storage facility in the amount of $18.2M (the amount of RTIP funds unavailable in Phase 1 to fund the facility). Additionally, a $3.6M Transit Security Grant Program (TSGP) application is under review by FEMA for elements of the steel package related to the RVA and preventing progressive collapse of the Transit Center building. TJPA will continue to aggressively monitor and apply for federal, as well as state and local, funding made available in the future.

Land Sales Revenues

To date, bids have been received on three of the six parcels identified for sale during Phase 1 of the project. Parcel T, the future site of the Transbay Tower, closed in March 2013 for $191M. Block 6/7 is scheduled to close in October for $30M. Block 9 is scheduled to close in Summer 2014 for $43.3M.

In 2008, the TJPA's real estate consultants estimated that revenues from the sale of the Transfer Parcels in Phase 1 would be $429 million. An update was conducted earlier this year in light of the changes in market conditions and the opportunity to extend the time period over which land sales may occur for Phase 1 due to the commitment of $400 million in ARRA funds for use in the early stages of construction of the Transit Center. Where the TJPA initially expected to sell several Transfer Parcels in 2009-2012 to finance construction of the Transit Center, the ARRA funding received in August 2010 allowed the TJPA to defer sales of parcels for several years and to take advantage of the anticipated recovery of the San Francisco real estate market following the 2008 downturn.

The analysis included timing and sequencing of the sales of the parcels, potential reprogramming of the properties, and other mechanisms to optimize revenues from Transfer Parcel sales over the period from 2010 to 2015. Projects currently or soon to be underway will be well suited to capitalize on the opportunity between 2012 and 2020 as limited new development has occurred over the past several years. Key opportunities will cater to individuals who want to live and work in the urban core. The Transbay project offers a unique and limited opportunity to deliver thousands of housing units and 2.5 million square feet of commercial space in the heart of

downtown San Francisco. This re-evaluation of real estate values resulted in an updated number, and in its February 2013 proposed budget, TJPA recognized $53M under the "Conservative Appreciation" scenario as net new funding available for Phase 1.

The Redevelopment Area includes a total of seven state-owned parcels to be sold to generate funds for the Transbay Program. Currently, six of the seven parcels are scheduled for sale during the Phase 1 construction period. One of those parcels, Parcel F, would be sold late in the construction period as it is currently being used for staging and serves as the primary access route to the building site. The seventh parcel, Block 4, is currently serving as the Temporary Terminal, and would not be available for sale and development until bus operators are relocated into the new Transit Center. Consequently, Parcel F and Block 4 revenues have traditionally been programmed as Phase 2 revenues.

TJPA is considering options which would accelerate a portion of the more than $125M value of Parcel F and Block 4 into the Phase 1 construction period. Securing a commercial loan, a loan from a funding partner, or implementing some other type of financing mechanism against these land sales proceeds would support the completion of Phase 1. The amount required to be accelerated (currently estimated at $71.1-$103.1) will depend on the TJPA's success in obtaining other funding such as an increased TIFIA loan and competitive grants.

Recognizing the need to continue to pursue full funding of Phase 2, TJPA has initiated discussions with the City and County of San Francisco regarding extending the collection period for tax increment (TI) in the Transbay Redevelopment Area. The Redevelopment Area was approved in 2005, and thus the TI collection period sunsets in 2050. However, TI funds will not begin to flow to the project until FY2014 at the soonest, nearly ten years later than the adoption of the Redevelopment Area. Extending the collection period for another ten years could result in an additional $50-100M in present values (depending upon when needed for Phase 2), exceeding the amount of land sales proceeds projected to be available for Phase 2. Legal analysis is underway to determine the best mechanism for enabling this extension, which could include a ballot proposition and/or state legislation.

Secondary Mitigation Opportunities

As previously discussed, several deductive alternates have been incorporated into later trade packages which will provide the TJPA flexibility to modify the scope awarded in those packages in response to the confirmed cost of earlier bids and reflecting the timing and amount of funds available from real estate transactions or other sources.

As a result, the TJPA can choose to modify the selected finishes or other elements of later bid packages or could decide to defer elements that are not critical to initial occupancy and bus operations until after the opening of the Transit Center, such as bus storage or the completion of the rooftop park if sufficient funds are not available.

Most significantly, however, the proposed revised Phase 1 Budget includes a program reserve of $87.5M, and design, construction, and CM/GC contingencies and escalation of $224.9M. Before deferring scope or exercising deductive alternates, the most important measure to ensure delivery of the project on time and within available funding will be the preservation of these contingencies. While the project team will not be able to control inflation and other external factors for which the contingencies are required, there are other issues which the team can

control or influence. By pursuing measures identified in the budget risk assessment to mitigate identified risks and by continually reviewing and updating potential risks, the project team can mitigate many potential budget impacts. These measures could allow the TJPA to preserve a significant portion of these funds. This cost/contingency management effort will continue throughout the final design and construction and will be the central factor in the TJPA's ability to deliver Phase 1 within the proposed revised budget and the available funding.

Budget Requirement

In order to move forward with pursuing funds (including a modified TIFIA loan) for a complete funding plan, an approved budget is required, as the need for additional funds must be defined. Funding partners including Federal Railroad Administration, Federal Transit Administration, Metropolitan Transportation Commission, and San Francisco County Transportation Authority have been presented with the results of the risk review. While the Board could choose to approve a budget with a lesser amount of contingencies/reserves, this will jeopardize financing discussions with TIFIA and these other funding partners, who will have less confidence in a budget number that does not include a prudent level of contingencies or is based on a number that has less than a 50% chance of occurring per the risk review.

The TJPA Board has previously approved program expenditure budgets based on program funding plans that identified a portion of the funding as anticipated and potential but not committed or allocated. TJPA Staff will not certify contracts if funds are not available. This funding approach is similar to other large infrastructure projects where (a) there is time pressure to complete the project, (b) it is prudent to start construction with most, but not all, of the funds necessary to complete the project committed, and (c) there are promising sources of money to complete the funding. This funding approach also is not unexpected given that the Transbay Project is not an enterprise project that can rely on current revenues as leverage to finance capital costs of the project, or juggle funds between infrastructure projects as other large transit agencies have the capability of doing, and is largely dependent on funding grants from other agencies.

Staff has been highly successful in securing necessary sources of funds over the course of the past decade, despite a significant downturn in the economy and the dissolution of redevelopment agencies. Staff is confident in its ability to meet the budget needs recommended here.

RECOMMENDATION:

Approve the Recommended Revised Baseline Budget for Phase 1, in the amount of $1,899,400,000.

TRANSBAY JOINT POWERS AUTHORITY
BOARD OF DIRECTORS

Resolution No. _____

WHEREAS, The Transbay Joint Powers Authority (TJPA) is a joint powers agency responsible for the planning, design, construction, operation and management of the new Transbay Transit Center Program; and

WHEREAS, In May 2010 the TJPA Board adopted a Revised Baseline Budget for Phase 1 of $1.589 billion and revised the project schedule to reflect a construction duration of approximately seven years; and

WHEREAS, In May and June 2013, TJPA conducted a comprehensive review of the adequacy of contingencies and Program Reserve included in the Revised Baseline Budget for Phase 1, with an ensuing recommendation that an increase in contingencies and Program Reserve totaling $114.5 million is prudent to ensure completion of project scope on schedule; and

WHEREAS, In June 2013 TJPA received steel bids, the lowest of which in combination with the cast nodes production authorized in May 2013 exceeds the amount allocated for steel in the Revised Baseline Budget by $94.7 million, warranting a corresponding increase in the contraction budget, and additional changes to the construction budget are recommended that total $9.4 million; and

WHEREAS, In 2012 TJPA completed a Risk and Vulnerability Assessment update that resulted in design guidance criteria recommendations that if implemented will significantly increase the safety and security of the Program, and position TJPA to manage its liability, for an added $56.8 million to the cost of constructing the Transit Center; and

WHEREAS, Additional changes to soft and programwide cost line items in the budget are recommended, totaling $35.0 million; and

WHEREAS, In light of the foregoing, it is prudent to adopt a Recommended Revised Baseline Budget for Phase 1 of the Transbay Transit Center Program of $1,899.4 million; and

WHEREAS, TJPA has engaged in extensive value engineering and identification of deductive alternates over the life of the project, and in particular over the last year, which have resulted in cost savings opportunities and options, including a W-1 awning system revised from glass to painted aluminum metal panels perforated in the Penrose rhombus tiling pattern, a ceiling system revised from Glass Fiber Reinforced Concrete to metal, and other measures, that are assumed in the Recommended Revised Baseline Budget for Phase 1; and

WHEREAS, The financial plan includes a variety of grants, land sales proceeds, lease income from acquired right-of-way parcels, and other one-time revenue generation opportunities; and

WHEREAS, Public infrastructure projects of the size and complexity of the Transbay Transit Center Program are typically funded from a variety of sources, some of which are based on estimates of future revenue; and

WHEREAS, The actual revenue from each source may vary from the estimates; and

WHEREAS, If reduced revenue is responsible for a projected budget shortfall for construction of the Transbay Transit Center, the TJPA will cover the funding deficit through pursuit of alternative revenue sources, such as TIGER VI, TIGGER, Federal Transportation Bill Reauthorization, TSGP and extended tax increment collection, and/or construction phasing opportunities such as deferral of certain scope; now, therefore, be it

RESOLVED, That the Recommended Revised Baseline Budget for Phase 1 of the Transbay Transit Center Program of $1,899.4 million, including the assumptions on which it is based, is approved.

I hereby certify that the foregoing resolution was adopted by the Transbay Joint Powers Authority Board of Directors at its meeting of July 11, 2013.

_____

Secretary, Transbay Joint Powers Authority

Phase 1 Revised Budget Recommendation

July 11, 2013

Transbay Transit Center

TJPA

Transbay Transit Center

Agenda

- Budget Adjustments
  - Transit Center Construction (Steel, RVA, etc.)
  - Contingencies & Reserve
  - Soft and Programwide Costs
  - Recommended Budget Adjustment
- Funding Plan
- Alternate Budget Scenarios
- Recommended Next Steps

Transbay Transit Center

Budget Adjustments

Transbay Transit Center

Current & Proposed Budgets
(millions)

Project Costs	Current	Proposed
Temporary Terminal	$25.7	$25.7
Bus Storage	$24.7	$24.8
Demolition	$16.8	$16.8
Utility Relocation	$29.5	$29.4
Transit Center Design	$168.7	$181.9
Transit Center Construction[1]	$902.9	$1,107.3
Bus Ramps	$53.6	$50.4
ROW Acquisition	$71.9	$72.9
ROW Support	$4.8	$4.8
Programwide	$268.9	$297.9
Program Reserve	$21.5	$87.5
TOTAL	**$1,589.0**	**$1,899.4**

[1] *Construction budget includes portion of contingencies as well as some construction-related soft costs*

Transbay Transit Center

Proposed Budget Increases

- Transit Center Design
  - *Provide for architectural and engineering additional services*
- Transit Center Construction
  - *Additional scope – RVA*
  - *Increased costs due to market conditions & other factors*
  - *Increased contingencies – Budget Risk Assessment*
- Programwide
  - *Forecast of Construction Management, Program Management, and Legal services*
- Program Reserve
  - *Allowance for potential program risks – Budget Risk Assessment*

Transbay Transit Center

Transit Center Construction

- RVA Update
- Market recovery and other cost impacts
  - Steel Package Impacts
  - Balance of Construction
- Contingencies

Transbay Transit Center

Risk & Vulnerability Assessment Implementation

- Initial Risk and Vulnerability Assessment (RVA) performed on conceptual design in 2009
- Updated in 2011–2012 prior to finalizing construction documents
  - Incorporated the most current government and security industry standards, design strategies, lessons learned and intelligence gathered (DHS/S&T, DHS/BioWatch, DHS/DNDO, DHS/FEMA, NIOSH, DOS, DOD, National Counterterrorism Center, DHS/NCIS, ATF, AASHTO, ASIS, SFPD, SFFD, etc.)
- Insured a multi-disciplinary approach to facility design
  - RVA and security SMEs and designers considered all elements (structure, architecture, landscape, mech/HVAC, electrical, fire protection, lighting, electronic technologies, etc.)
  - Provided official forum for security SME's, design professionals and members of SFPD and SFFD to arrive at balanced solutions
  - Ensured a comprehensive and holistic approach

Transbay Transit Center

Risk & Vulnerability Assessment Focus

- All-hazards vulnerability assessment focused on public safety
  - Natural hazards
    - Earthquake (seismic event, ground subsidence)
    - Wind (gale-force winds, gusts)
    - Flooding (tsunami, surging water, isolated heavy rain events, flash floods)
  - Technological hazards
    - Storing/maintaining chemical, biological, radiological agents and explosives
    - Above- and under-ground storage tanks and pipelines
    - Proximity to surface and air transportation
    - HAZMAT events
  - Manmade event
    - Criminal acts (violent crime or malicious acts of force and violence against persons or property)
    - Fire events (Trains/buses)
    - Cyber (data integrity management, supporting mass notification systems for natural, technological and manmade events to protect public safety)
    - Terrorism (vehicular approach, explosive events, chem/bio agent attack)

Transbay Transit Center

RVA Protective Design

- Significant investments representing significant liability reductions
- Represent best industry standards of practice and care
- Essential to obtain SAFETY Act Designation and Certification
- Assist in the acquisition of additional Federal funding (present and future)
- Security staffing and law enforcement incident response and crime prevention optimized

Transbay Transit Center

Facility Protective Design Categories

Design Category	Estimated Cost (millions)
Bus, Train and Other Fire Event Management	0.8
Vehicular and Pedestrian Perimeter Protection	10.0
Radio, Cellular, and Mass Notification Communications	4.5
Glazing Systems Hazard Management	2.1
Structural Systems Seismic, Fire, & Explosive Performance	0.2
Evacuation, Rescue & Recovery Pathways Survivability	2.1
Evacuation, Rescue & Recovery Supporting Systems Operational Resiliency	17.2
Situational Awareness, Access Control, & Intrusion Detection	18.3
CBRN Detection and Mitigation	1.6
Total	**$56.8**

Transbay Transit Center

Transit Center Construction Costs

- Increased activity in the regional construction market influencing competition, margins, and direct pricing resulting in cost pressure on the scope of construction to be bid
- Reflected in substructure and steel package results
- Value Engineering and deductive alternates developed to substantially mitigate impact of Market Recovery on later packages

Transbay Transit Center

Steel Package

- No significant Value Engineering opportunities within the steel scope while maintaining Transit Center program, volume and form
- Market Recovery had significant impact on foundries interest/ability to pursue total Transit Center scope and directly influenced March single bid
- Limited domestic fabrication capacity for large dimension members and thick wall section steel further increased cost of Structural Steel package

Transbay Transit Center

June 20 Steel Bid Results

- Four Bids Received
- Low Bid of $189,108,000, from the original March bidder
  - When combined with the $17.1M cast node contract, total $206.2M steel package value represents a reduction in excess of $50 million from March bid
- Although essentially consistent with the revised engineers' estimate, the low bid exceeds the earlier estimates and original budget by more than $90 million due to market recovery and Buy America

Transit Center Construction
(millions)

RVA Costs	$56.8
Structural Steel Costs	$94.7
Net Impact on Balance of Construction	$9.4
— *Non-steel market recovery, extended bid package planning, and minor scope changes, net of value engineering*	
Increased Construction-related Contingencies	43.5
— *Design Contingency, Escalation, Construction Contingency, and CM/GC Contingency*	
Proposed Increase in Transit Center Construction Budget	***$204.4***

Transbay Transit Center

Contingencies & Reserve

Transbay Transit Center

Contingencies and Reserve

- Contingencies and reserves are intended to provide for:
  - *Routine and foreseeable, although variable, costs*
  - *Unforeseen costs and issues*
- Many of the costs contingencies are intended to cover are unavoidable or very difficult to control
- Least to most controllable/avoidable
  - Design Contingency
  - Escalation
  - CM/GC Contingency
  - Construction Contingency
  - Program Reserves

  – Included in Transit Center, Bus Storage, and Bus Ramps Construction Budget Line Items

Transbay Transit Center

Budget Risk Assessment

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

Transbay Transit Center

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

Transbay Transit Center

Risk Assessment Elements

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

Transbay Transit Center

Risk Assessment Elements

Identify risks to project cost and schedule:

- Quantify risks including likelihood of occurrence and magnitude of potential impacts
- Rank risks and identify ‘greatest potential risks to project’
- Relate 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 Mths	1 ><3 Mths	3><6 Mths	6><12 Mths	> 12 Mths
Rating	<=3	3.1-9.49		>=9.5	

Significant Risks	
High Risks	7
Medium Risks	15
Low Risks	12
Total	**34**

Transbay Transit Center

Risk Model Results

Confidence Level	Bottom Up Risk ($M)	Top Down Risk ($M)
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

50% Confidence Level cost projections indicate total budget between $1,888M - $1,925M, with contingencies and reserves between $213M - $250M

Transbay Transit Center

Contingencies & Reserves

- Propose total Contingencies and Reserves consistent with 50% Confidence Level cost projections
- Funding partners – MTC, SFCTA, FRA, FTA, etc. – expect budget to reflect realistic contingencies substantiated by analysis (such as Gardiner & Theobald Risk Assessment)
- Lower contingency and reserve amounts would undermine TIFIA Loan modification request

Transbay Transit Center

Proposed Budget Contingencies & Reserves (millions)

Design Contingencies*	$8.2
Construction Contingency*	$62.5
– 8% of remaining construction	
CM/GC Contingency*	$36.4
– Limit under CM/GC Agreement	
Escalation*	$30.3
– 3.5%/year on construction to be bid	
Program Reserves	$87.5
– 8.5% of budget to be committed	
Total Proposed Contingencies and Reserves	***$224.9***

* - Included within the Transit Center, Bus Ramps, and Bus Storage construction budget line items

Transbay Transit Center

Proposed Budget Contingencies & Reserves (millions)

		Increase Above Current Budget
Design Contingencies*	$8.2	–
Construction Contingency*	$62.5	$29.5
– 8% of remaining construction		
CM/GC Contingency*	$36.4	$4.3
– Limit under CM/GC Agreement		
Escalation*	$30.3	$14.6
– 3.5%/year on construction to be bid		
Program Reserves	$87.5	$66.1
– 8.5% of budget to be committed		
Total Proposed Contingencies and Reserves	***$224.9***	***$114.5***

* - Included within the Transit Center, Bus Ramps, and Bus Storage construction budget line items

Transbay Transit Center

Soft and Programwide Costs

Transbay Transit Center

Transit Center Design

- Proposed increase of $13.2M in the budget for architectural and engineering consultant services
- PCPA contract has been previously modified to limit of current budget to incorporate RVA design changes into CDs, and other changes
- Budget increase required to allow for future anticipated and potential additional services including:
  - Additional services relating to later Construction Document packages (IT, security, etc.)
  - Design modifications or additional analysis arising from SSRC, code review or other peer reviews
  - Additional Construction Administration services arising from extraordinary changes or unforeseen conditions

Transbay Transit Center

Programwide Budget Adjustments

- Task Order based, time & materials reimbursement agreements; increases proposed to reflect current trends and forecasts

- Construction Management - $6.7M
  - Reflecting award value of Construction Management contract and projected staffing plans

- Program Management - $6.4M
  - Limited Phase 2 activity places full Program Management burden on Phase 1 budget; costs also effected by RVA and prolonged design effort

- Legal Costs - $7.8M
  - Prudent amount for a project of the scope and scale of TTC and associated real estate development

Transbay Transit Center

Proposed
Budget Adjustment

Transbay Transit Center

Budget Adjustment

- Delivery of Phase 1 Scope within current $1,589M Budget is no longer feasible
  - RVA recommendations, steel costs and other market conditions have exceeded capacity of original contingencies and reserves
  - Exhausted cost reduction and containment opportunities
  - Dramatic changes in Transit Center design would impact ability of the facility to fulfill transit operator program requirements and would result in delay costs that would erode any savings
- Revision of Phase 1 Budget necessary to:
  - Allow implementation of RVA design recommendations
  - Recognize increased costs in market
  - Establish contingencies and reserves which will realistically allow completion of the work
  - Facilitate pursuit of additional funding by quantifying need
  - Pursue TIFIA Loan modification and other new funding before availability of funds impacts construction schedule

Transbay Transit Center

Proposed Budget Adjustments

- 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

Transbay Transit Center

Proposed Phase 1 Budget Adjustments

(millions)

RVA Costs	$56.8	
Steel Bid Results	94.7	
Other Construction Costs	9.4	
Soft and Programwide Costs	35.0	
Sub-Total Direct Costs		*195.9*
Construction Contingency	29.5	
CM/GC Contingency	4.3	
Escalation	14.6	
Program Reserves	66.1	
Sub-Total Contingencies & Reserves		114.5
Proposed Budget Adjustment		*$310.4*
Net New Funding Identified		*($110.3)*
Additional Funding Required		***$200.1***

Transbay Transit Center

Current & Proposed Budgets
(millions)

Project Costs	Current	Proposed
Temporary Terminal	$25.7	$25.7
Bus Storage	$24.7	$24.8
Demolition	$16.8	$16.8
Utility Relocation	$29.5	$29.4
Transit Center Design	$168.7	$181.9
Transit Center Construction	$902.9	$1,107.3
Bus Ramps	$53.6	$50.4
ROW Acquisition	$71.9	$72.9
ROW Support	$4.8	$4.8
Programwide	$268.9	$297.9
Program Reserve	$21.5	$87.5
TOTAL	$1,589.0	$1,899.4*

**** - $110.3 million in Net New Funding identified, resulting in $200.1 million in Additional Funding Required***

Transbay Transit Center

Funding Plan for Proposed Budget Adjustment

Transbay Transit Center

Net New Funding
(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 approved in June 2013 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 Funding
(millions)

Additional Funding 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)
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***	($21.8)
Accelerated Land Sales		
No-interest loan from funding partner based on estimated values of Parcel F and Block 4		($71 - 103)
Total Potential Additional Funding Identified		$189.8 - 253.8

Will continue to apply for all available grants to lower amount needed from loan and/or land sales. Will also seek private philanthropy at appropriate point in construction for park and art projects.

Transbay Transit Center

Phase 2 Funding Plan

Sources (in Millions, YOE $s)	Amounts
SF Prop K	$50
San Mateo Sales Tax	$19
Regional Measure 2	$7
Land Sales **or Alternative**	$185
TIFIA Loan	$377
New Starts*	$650
New Bridge Tolls*	$300
Future High Speed Rail*	$557
New/Augmented Sales Tax*	$350
Joint Dev./Other Local*	$100
Total Revenues	**$2,596**

**Funds identified in draft Regional Transportation Plan (RTP) prepared by MTC*

Additional Alternative Funding Sources

- *Private investor loan with Mello-Roos and/or extended tax increment collection as source of repayment*
- *Ten years of extended tax increment collection could generate $50M - $100M in rough present value numbers depending upon year of expenditure*
- *Mello-Roos District formation underway, with estimates of funding between $350M - $650M (well in excess of $100M identified in RTP for "Joint Development/Other Local")*
- *Above scenarios allow majority of land sales revenues to be used to fully fund Phase 1*

Transbay Transit Center

Alternative Budget Scenarios

Transbay Transit Center

~ $1,850M Scenario

- Implement the recommended budget adjustments with the following modifications:
  - Reduce budget for CM/GC Contingency to 3% of construction value ($9.1M)
  - Reduce budget for Construction Contingency from 8% to 7% of remaining construction ($7.8M)
  - Reduce Program Reserve budget to 6.5% of the remaining budget to be committed ($20.6M)
  - Increase Transit Center Design budget by only $10.7M ($2.5M)
  - Increase Programwide budget by only $25.0M ($10M)
- *Funders will not accept reduced contingencies/reserves*
- *Will impair efforts to modify TIFIA Loan*

Transbay Transit Center

~ $1,800M Scenario

- Reduce reserves and contingencies as described in $1,850M Budget Scenario
- Reduce Program Reserve budget by an additional $10.3M (to 5.5% of the remaining budget to be committed)
- Exclude construction of Park landscaping/finishes (~$20M) and Bus Storage ($20M) from the defined Phase 1 Scope and Budget until independently funded
  - Increase Phase 1 Budget to include Bus Storage and/or completion of the Park if/when specific funding for these contracts are identified
- *Less than a 30% chance of completing the project with this reduced budget per both methodologies in the risk model*
- *Funding partners will not accept reduced contingencies/ reserves*
- *Will impair efforts to modify TIFIA Loan*

Transbay Transit Center

Recommended Next Steps

Transbay Transit Center

Recommended Next Steps

- *Adopt $1,899.4 Million Revised Baseline Budget*
- *Award Structural Steel Package to maintain critical path*
- *Transmit today (7/11/13) Revised Budget to Fitch for Investment Grade Evaluation in order to move forward TIFIA loan modification and receive modification in time to keep project on schedule*
- *Continue to pursue all available grants*