

Attachment 1

Ground Rules for Financial Management of the
Central Subway Project
Revised 04.13.10

1. The Municipal Transportation Agency (MTA) accepts responsibility to hold project scope and costs to the total amount proposed in the baseline budget, which was informed by the risk assessment evaluation of the project completed in April 2009 by the Federal Transit Administration (FTA), the Central Subway Project Team, and the Authority.
2. MTA will implement project control procedures and processes that will allow for the effective forecasting of costs at all levels and categories, and provide monthly forecast updates to the Authority. *(MTA has indicated that it is implementing these procedures and processes in accordance with the FTA-approved Project Management Plan.)*
3. MTA will implement a formal budget transfer (i.e., shifting costs/funds between tasks, contracts and/or contingency) procedure to be used to manage the project contingency. *(MTA has indicated that it has implemented a change control process, Contingency Management Plan and a Configuration Management Board procedure in accordance with FTA required guidelines.)*
4. MTA will obtain concurrence from the Authority for change orders over \$100,000. To the extent possible this will be achieved through the Authority's participation in the Configuration Management Board process for change control, except where superseded by #7 below.
5. MTA will inform the Authority about intended budget transfers and change orders prior to their execution. Budget transfers will occur before the money is spent in the category receiving funds.
6. Budget transfers for public agency staff costs must be justified by a directly related design or construction event (e.g. extension of the construction time, redesign caused by unexpected conditions).
7. MTA understands that some budget transfers may require approval by the Authority Board to amend previously approved Prop K and/or TCRP allocations, while others may be approved administratively by Authority staff. Determination of whether budget transfers require Board approval (e.g. policy level) or may be approved administratively will be consistent with the Authority's existing Prop K amendment procedures.
8. MTA agrees to update the Authority as additional funds are allocated and/or committed (e.g. programmed) to the Central Subway project, and will comply with Prop K policies to delay the expenditure of Prop K funds to the extent possible without putting the project at risk.

Note that on March 23, 2010 Authority staff committed to updating the baseline budget, to be informed by upcoming FTA risk assessment evaluations, at the time when FTA and MTA staff are finalizing negotiations on the Final Funding Grant Agreement.

Attachment 2a
Central Subway Baseline Budget

Phase of Work/ Major Line Item	Start Date	End Date	Duration in months	TOTAL
Planning & Environmental				
Planning/Conceptual Engineering				\$26,764,071
Planning/Conceptual Engineering - Public Agencies				\$23,522,371
Environmental Studies (PA&ED)				\$1,972,000
Subtotal Planning & Environmental				\$52,258,442
Final Design				
Final Design - Package 1 - Contract (Tunnels and Utilities)	01/04/10	08/31/10	8	\$4,983,728
Final Design - Package 1 - Public Agencies (Tunnels and Utilities)				\$1,018,476
Final Design - Package 2 - Contract (Stations)	02/01/10	06/30/11	17	\$31,094,690
Final Design - Package 2 - Public Agencies (Stations)				\$6,323,395
Final Design - Package 3 - Contract (Trackwork and Systems)	03/05/10	06/30/12	28	\$12,000,000
Final Design - Package 3 - Public Agencies (Trackwork and Systems)				\$3,192,185
Final Design - Program Controls Contract	07/01/10	12/31/11	18	\$5,000,000
Subtotal Final Design				\$63,612,474
Design Management				
Design Management: Program Management - Contract - Design Phase	04/06/09	12/31/11	33	\$35,000,000
Design Management: Program Management - Public Agencies	04/06/09	12/31/11	33	\$7,734,713
Design Management: Other Direct Costs	04/06/09	12/31/11	33	\$2,037,889
Design Management: Const. Admin - Legal; Permits & Fee	01/01/10	12/30/11	24	\$4,986,050
Design Management: Insurance - Excess Design Liability	07/01/10	06/30/11	12	\$6,000,000
Subtotal Design Project Management				\$55,758,653
Advanced Construction				
Utilities Moscone Center - Contract 1	01/04/10	12/20/10	12	\$11,249,591
Utilities - Contract 2	11/01/10	12/20/11	14	\$22,228,098
Tunnel Boring Machine Equipment (TBM)	03/01/11	03/31/12	13	\$26,000,000
Construction TBM Launch Box	03/01/11	02/28/12	12	\$38,300,000
Subtotal Advanced Construction				\$97,777,689
Construction				
Design - Package 1 - Construction Support (Tunnels and Utilities)	01/04/10	12/31/13	48	\$1,516,272
Design - Package 1 - Public Agencies (Tunnels and Utilities)				\$986,621
Design - Package 2 - Construction Support (Stations)	11/01/11	04/30/16	54	\$8,855,266
Design - Package 2 - Public Agencies (Stations)				\$6,043,919
Design - Package 3 - Construction Support (Trackwork and Systems)	01/01/12	12/31/18	84	\$8,000,000
Design - Package 3 - Public Agencies (Trackwork and Systems)				\$3,056,363
Program Management - Contract - Construction Phase	01/01/12	12/31/18	84	\$104,000,000
PM - Public Agencies Construction Support	01/01/12	12/31/18	84	\$22,592,486
Other Direct Costs	01/01/12	12/31/17	84	\$5,952,513
Construction Administration-Project Controls Contract	01/01/12	12/31/17	72	\$5,855,281
Const. Admin - Legal; Permits & Fee	01/01/12	12/31/18	84	\$4,986,050
Construction Admin. - Survey, Testing, Investigation	02/01/10	06/30/17	89	\$14,957,556
Construction Admin. - Public Agencies	01/04/10	12/31/18	108	\$27,552,982
Construction- Tunnel	03/05/12	12/31/13	22	\$197,868,469
Union Square/Market Station - UMS	03/05/12	04/30/16	50	\$228,839,932
Chinatown Station - CTS	04/02/12	06/30/16	51	\$182,059,984
Moscone Station - MOS	07/02/12	02/28/16	44	\$118,263,761
Surface, Trackwork & System	01/01/13	12/31/16	48	\$134,291,769
Fare Collection Equipment	07/01/15	06/30/16	12	\$2,400,000
Utility Connection Fees	07/01/15	06/30/16	12	\$14,858,685
Start Up	01/01/18	12/31/18	12	\$22,672,966
Public Art	07/01/15	06/30/16	12	\$14,500,000
Unallocated contingency - Draw down				-\$96,299,620
Unallocated Contingency				\$213,744,194
Subtotal Construction				\$1,247,555,450
Procurement				
Vehicle Procurement	07/01/15	06/30/18	36	\$26,559,876
Right of Way				
Real Estate	07/05/10	12/31/11	18	\$30,000,000
Real Estate Relocation	07/05/11	12/31/14	42	\$4,777,416
Subtotal Right of Way				\$34,777,416
Total Cost by Project Phase				\$1,578,300,000

Attachment 2b
Central Subway
Baseline Budget Contract vs. Public Agency Work

Phase of Work/ Major Line Item	Start Date	End Date	Duration in months	TOTAL
Table 1: Contract Work				
Planning & Environmental				
Planning/Conceptual Engineering				\$26,764,071
Environmental Studies (PA&ED)				\$1,972,000
Subtotal Planning & Environmental				\$28,736,071
Final Design				
Design - Package 1 - Contract (Tunnels and Utilities)	01/04/10	08/31/10	8	\$4,983,728
Design - Package 2 - Contract (Stations)	02/01/10	06/30/11	17	\$31,094,690
Design - Package 3 - Contract (Trackwork and Systems)	03/05/10	06/30/12	28	\$12,000,000
Program Controls Contract	07/01/10	12/31/11	18	\$5,000,000
Subtotal Final Design				\$53,078,418
Design Management				
Program Management - Contract - Design Phase	04/06/09	12/31/11	33	\$35,000,000
Other Direct Costs	04/06/09	12/31/11	-	\$2,037,889
Const. Admin - Legal; Permits & Fee	01/01/10	12/30/11	24	\$4,986,050
Insurance - Excess Design Liability	07/01/10	06/30/11	12	\$6,000,000
Subtotal Design Project Management				\$48,023,939
Advanced Construction				
Utilities Moscone Center - Contract 1	01/04/10	12/20/10	12	\$11,249,591
Utilities - Contract 2	11/01/10	12/20/11	14	\$22,228,098
Tunnel Boring Machine Equipment (TBM)	03/01/11	03/31/12	13	\$26,000,000
Construction TBM Launch Box	03/01/11	02/28/12	12	\$38,300,000
Subtotal Advanced Construction				\$97,777,689
Construction				
Design - Package 1 - Construction Support (Tunnels and Utilities)	01/04/10	12/31/13	48	\$1,516,272
Design - Package 2 - Construction Support (Stations)	11/01/11	04/30/16	54	\$8,855,266
Design - Package 3 - Construction Support (Trackwork and Systems)	01/01/12	12/31/18	84	\$8,000,000
Program Management - Contract - Construction Phase	01/01/12	12/31/18	84	\$104,000,000
Other Direct Costs	01/01/12	12/31/17	84	\$5,952,513
Construction Administration-Project Controls Contract	01/01/12	12/31/17	72	\$5,855,281
Const. Admin - Legal; Permits & Fee	01/01/12	12/31/18	84	\$4,986,050
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Construction- Tunnel	03/05/12	12/31/13	22	\$197,868,469
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Utility Connection Fees	07/01/15	06/30/16	12	\$14,858,685
Start Up	01/01/18	12/31/18	12	\$22,672,966
Public Art	07/01/15	06/30/16	12	\$14,500,000
Unallocated contingency - Draw down				-\$96,299,620
Unallocated Contingency				\$213,744,194
Subtotal Construction				\$1,187,323,079
Procurement				
Vehicle Procurement	07/01/15	06/30/18	36	\$26,559,876
Right of Way				
Real Estate	07/05/10	12/31/11	18	\$30,000,000
Real Estate Relocation	07/05/11	12/31/14	42	\$4,777,416
Subtotal Right of Way				\$34,777,416
TOTAL Contract Work				\$1,476,276,488
Table 2: Public Agency Work				
Planning & Environmental				
Planning/Conceptual Engineering - Public Agencies				\$23,522,371
Subtotal Planning & Environmental				\$23,522,371
Final Design				
Design - Package 1 - Public Agencies (Tunnels and Utilities)				\$1,018,476
Design - Package 2 - Public Agencies (Stations)				\$6,323,395
Design - Package 3 - Public Agencies (Trackwork and Systems)				\$3,192,185
Subtotal Final Design				\$10,534,056
Design Management				
Program Management - Public Agencies	04/06/09	12/31/11	13	\$7,734,713
Subtotal Design Project Management				\$7,734,713
Construction				
Design - Package 1 - Public Agencies (Tunnels and Utilities)				\$986,621
Design - Package 2 - Public Agencies (Stations)				\$6,043,919
Design - Package 3 - Public Agencies (Trackwork and Systems)				\$3,056,363
Project Management - Public Agencies Construction Support	01/01/12	12/31/18	84	\$22,592,486
Construction Admin. - Public Agencies	01/04/10	12/31/18	108	\$27,552,982
Subtotal Construction				\$60,232,371
Total Public Agency Work				\$102,023,512
Table 3: Combined Contract and Public Agency Work				
Central Subway Baseline Budget - CONTRACT WORK			94%	\$1,476,276,488
Central Subway Baseline Budget - PUBLIC AGENCY WORK			6%	\$102,023,512
TOTAL				\$1,578,300,000

Central Subway Project (CSP) Design and Construction Phase Descriptions

CSP Final Design 1

Design Plans, Specifications & Estimates (PS&E)

This is the work to produce the drawings and documents required for construction and to control the cost and schedule of design and the proposed construction.

- Design Contracts
- Program Controls Contract
- Public Agency Design Work

CSP Final Design 2

This is work that to manage, support, coordinate and obtain approval of the designs/construction, and to provide a design office for the combined design staff.

Design Program Management (PM)

- Program Management/Construction Management Contract
- SFMTA Program Management
- Owner Controlled Excess Design Liability Insurance
- Legal, Permits, Fees, surveying, investigations, and Other Direct Costs require Federal Transit Administration (FTA) Final Design Phase

CSP Advanced Construction

This consists of utility relocations, early procurement and specific construction approved by the FTA in a Letter of No Prejudice (LONP). The advance construction opportunity is provided by the FTA as part of the New Starts policy guidelines in order to preserve/reduce overall project costs and schedule.

The purpose of this Phase is to carry out the FTA's guidance to preserve the project budget and schedule and reduce risks to the City and County of San Francisco by expediting procurement on long lead or special order equipment. The opportunity to reduce costs and risks is expanded by the current low bid environment.

Examples of Advanced Construction opportunities, contracts and activity now underway or in development are:

- Utility Relocation contracts that prepare work sites for major construction at station areas, re-route the trolley bus service now on 4th Street, and prepare the work area for the Tunnel Boring Machines and soil transfer area under Hwy 101.
- Acquisition of the two Tunnel Boring Machines (TBM), which are long lead procurements.
- Construction of the Launch Box required for the delivery and assembly of the TBMs.

CSP Construction

This phase includes all major construction activities and begins immediately following the execution of the Full Funding Grant Agreement (FFGA). These activities include:

- Construction Contracts
- Program Management/Construction Management Contract work after FFGA

- SFMTA Program Management for the work after FFGA
- Legal, Permits, Fees, surveying, investigations, and Other Direct Costs after the FFGA.
- Vehicles, arrival and commissioning
- Commissioning and start up

Attachment 3

Central Subway Program March 2010 Baseline Schedule Summary Table

Activity Name	Activity Start Date	Activity Finish Date
Preliminary Engineering	08-Oct-2007	20-May-2009
Final Design	19-May-2009	13-June-2012
Real Estate	27-Nov-2008	31-Dec-2011
Construction	01-May-2010	31-Dec-2018
Start up	2-Jan-2018	27-Dec-2018

Attachment 4
Central Subway Full Funding Plan
Updated: April 2011

Fund Source and Status	Phase: Preliminary Engineering / Environmental	Phase: Final Design	Phase: Right of Way	Phase: Construction & Vehicles	Total
Federal - New Starts					
Allocated	\$36,936,758	\$35,478,726	\$0	\$0	\$72,415,484
Programmed	\$0	\$0	\$0	\$0	\$0
Planned	\$0	\$20,000,000	\$0	\$849,784,516	\$869,784,516
New Starts Total					\$942,200,000
Federal - Congestion Mitigation and Air Quality Improvement (CMAQ)					
Allocated	\$6,025,000	\$12,540,145	\$0	\$4,959,855	\$23,525,000
Programmed	\$0	\$0	\$0	\$17,500,000	\$17,500,000
Planned	\$0	\$0	\$0	\$0	\$0
CMAQ Total					\$41,025,000
State Prop 1B PTMISEA					
Allocated	\$0	\$8,834,306	\$6,498,994	\$5,737,428	\$21,070,728
Programmed	\$0	\$6,409,790	\$28,278,420	\$252,033,062	\$286,721,272
Planned	\$0	\$0	\$0	\$0	\$0
Total Prop 1B PTMISEA					\$307,792,000
State Prop 1B State Local Partnership Program (SLPP)					
Allocated	\$0	\$0	\$0	\$0	\$0
Programmed	\$0	\$0	\$0	\$19,722,000	\$19,722,000
Planned	\$0	\$0	\$0	\$0	\$0
Total Prop 1B SLPP					\$19,722,000
State Prop 1A High Speed Rail Connectivity					
Allocated	\$0	\$0	\$0	\$0	\$0
Programmed	\$0	\$0	\$0	\$61,308,000	\$61,308,000
Planned	\$0	\$0	\$0	\$0	\$0
Total Prop 1A High Speed Rail Connectivity					\$61,308,000
State Transportation Improvement Program (STIP)					
Allocated	\$0	\$0	\$0	\$0	\$0
Programmed	\$0	\$0	\$0	\$68,278,000	\$68,278,000
Planned	\$0	\$0	\$0	\$0	\$0
Total STIP					\$68,278,000
State Traffic Congestion Relief Program (TCRP)					
Allocated	\$5,000,000	\$9,000,000	\$0	\$0	\$14,000,000
Programmed	\$0	\$0	\$0	\$0	\$0
Planned	\$0	\$0	\$0	\$0	\$0
Total TCRP					\$14,000,000
Local Prop K Transportation Sales Tax (Prop K)					
Allocated	\$4,142,132	\$27,418,669	\$0	\$15,479,025	\$47,039,826
Programmed	\$0	\$0	\$0	\$76,935,174	\$76,935,174
Planned	\$0	\$0	\$0	\$0	\$0
Total Prop K					\$123,975,000
Total Project Funding, All Sources					
Allocated	\$52,103,890	\$93,271,846	\$6,498,994	\$26,176,308	\$178,051,038
Programmed	\$0	\$6,409,790	\$28,278,420	\$495,776,236	\$530,464,446
Planned	\$0	\$20,000,000	\$0	\$849,784,516	\$869,784,516
Total Project Funding	\$52,103,890	\$119,681,636	\$34,777,414	\$1,371,737,060	\$1,578,300,000

All non-New Starts funds have been committed to the project.

This funding plan is subject to change based on the Central Subway project schedule and the receipt of funds.