



Construction Update

April 2016

Transbay Transit Center

TJPA





Transbay Transit Center

Western Zone
Gridlines 1 to 10

Central Zone
Gridlines 10 to 20

Eastern Zone
Gridlines 20 to 35



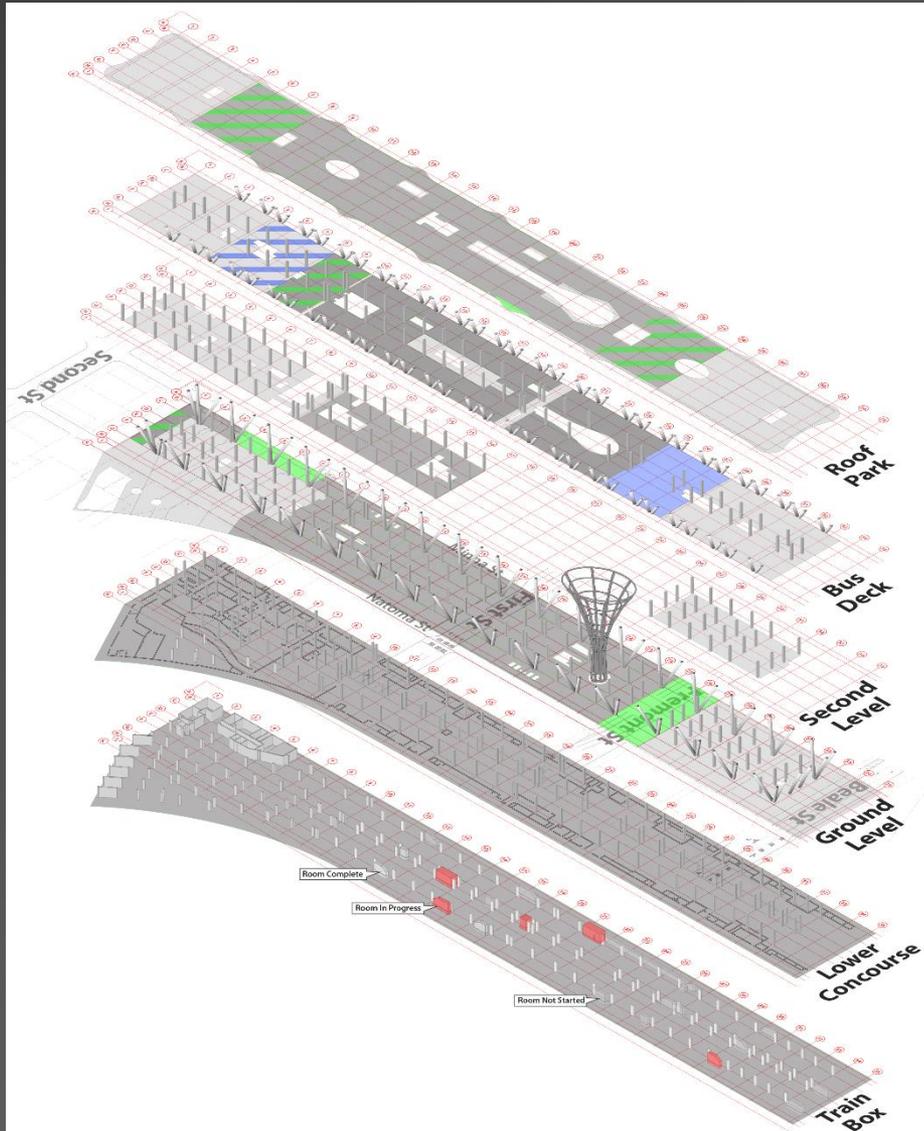
Turner Construction - Transbay Transit Center
Exterior Overview - January 28, 2018 - Photo 1

Project Overview

1. Recent Activity
2. Upcoming Activity
3. Safety & Labor Statistics
4. Budget Overview
5. Contingency Cost
6. Schedule
7. Challenges



Transit Center



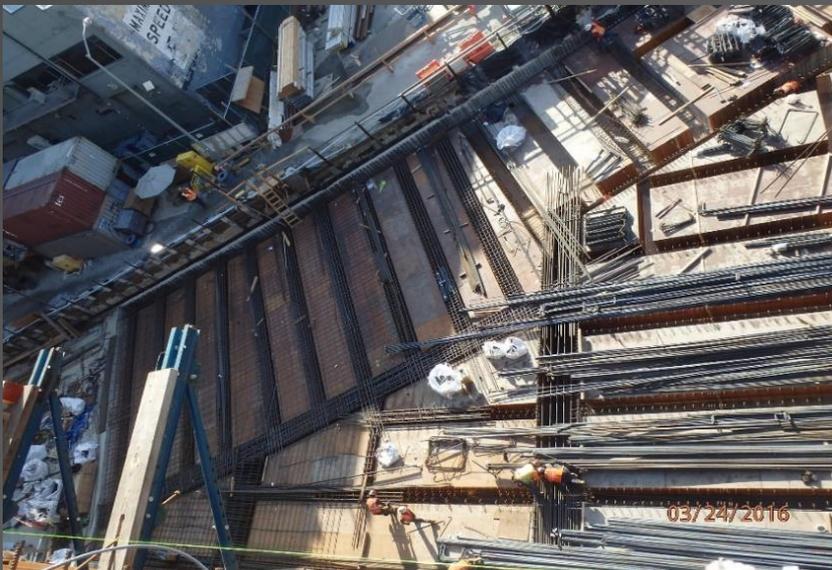
Transbay Transit Center Construction Progress Feb 27, 2016 - Mar 26, 2016

-  **New Work Completed**
Between 2/27/16-3/26/16
-  **Concrete Slab**
-  **Concrete Slab In Progress**
-  **10" Structural Slab**
(Bus Deck Only)
-  **Structural Slab In Progress**
(Bus Deck Only)



Western Zone (GL 1-10)

- Unveiling of the exterior Awning on March 7th.
- Structural Concrete pours for the north Trainbox lid (Eyebrow) were completed on March 17th.
- Rebar and concrete placement for the southwest part of the Trainbox lid and upper decks continues.
- The concrete columns and upper walls for the Vehicle and Bicycle Ramps continues.
- Concrete foundations for Stair 201 (west end) continued.





Central Zone (GL 10-20)

- Spray-Applied Fireproofing continues at all levels.
- Bus Deck crash rail completed.
- Mechanical, Electrical, Plumbing and Fire Sprinkler (MEPF) trades continue with piping and HVAC duct work at all levels.
- Waterproofing of the ground level slab has commenced.
- Stair installation continues (Six of twenty-four stairs complete.)
- Concrete curbs completed on ground floor.



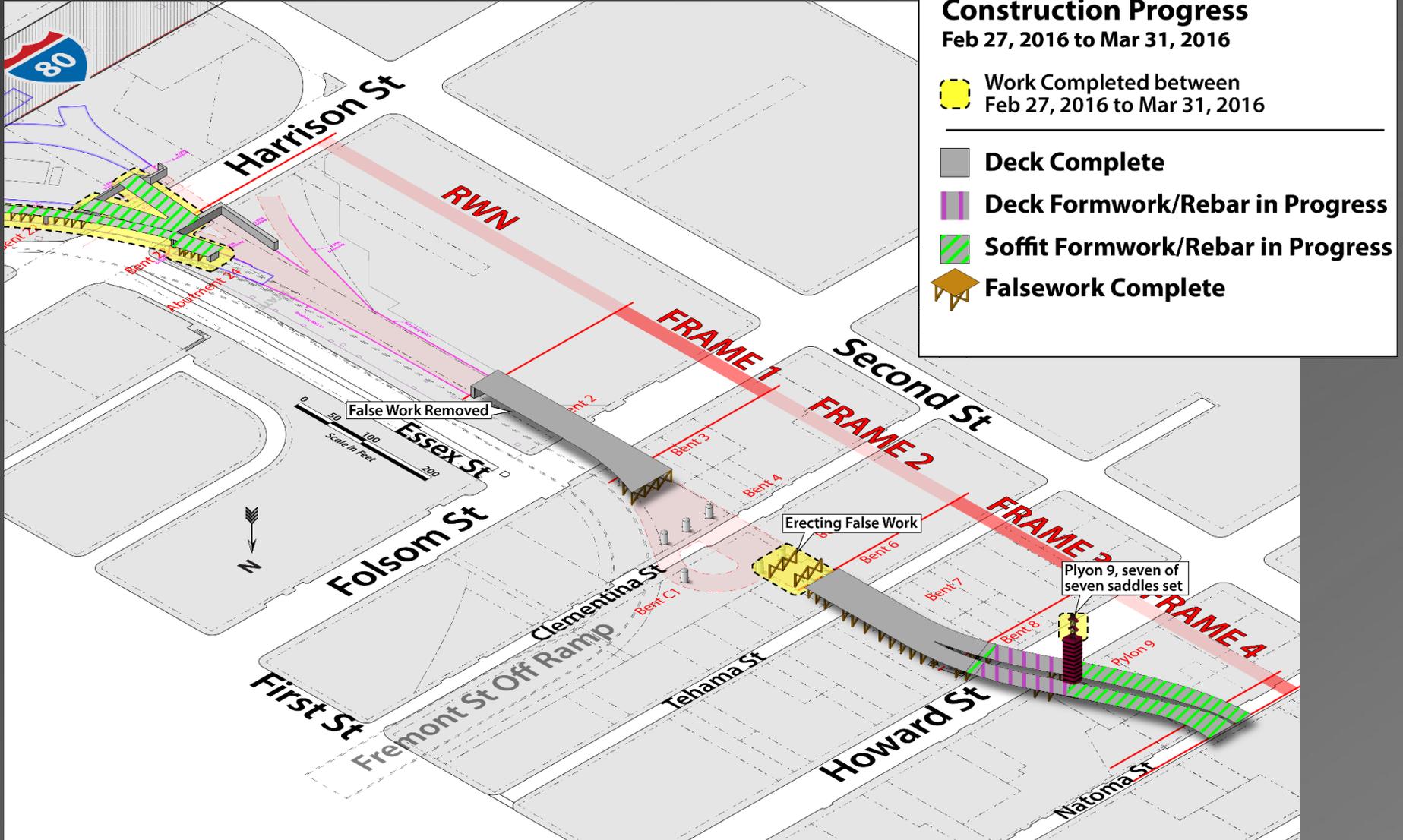


Eastern Zone (GL 20-35)

- Ground Level concrete slab (beneath Fremont Street) poured on March 28th.
- Last 4th lift wall pour was completed in the east on March 28th.
- Structural steel welding and bolting continues. Completion anticipated by end of April.
- Bus Deck crash rail rebar and concrete has commenced.
- Concrete pours for the decks on all levels including the roof perimeter and scallop walls are continuing.



Bus Ramp and Cable Stay Bridge





Bus Ramp Bridge

- Harrison Street rebar and formwork continues for “Right Bridge”.
- Abutment, MSE wall and retaining wall work continues.
- Reinforcing steel for the Cable Stay Bridge (including cable saddles and the formwork of Pylon 9 continues.
- Falsework removal over Folsom Street was completed.
- Falsework erection near Clementina St. including the bus turnaround continued in March.





Central Zone

- Start W1 Exterior Awning and continue the framing installation.
- Continue with MEPF overhead.
- Start Bus Deck and continue Ground level waterproofing.
- Continue waterproofing of Ground Level slabs.



Eastern Zone

- Complete welding of all structural steel and installing metal decking by the end of April.
- Continue rebar placement and concrete deck pours all levels.
- Continue Bus Deck crash rail and rooftop walls



Western Zone

- Continue rebar MEP sleeves and concrete placement on decks.
- Start spray-applied fireproofing.
- Start MEPF overhead rough-in.
- Start electric room wall rebar and concrete and waterproofing.
- Continue offsite utility vaults and ductbank.



Bus Ramp and Bridge

- Pylon 9 final concrete pour.
- Cable Stay Bridge deck south span concrete (Howard Street).
- Install falsework over the Clementina Street overcrossing.
- Install “Left Bridge” falsework over Harrison Street.



Recordable & Lost Time Incidents:

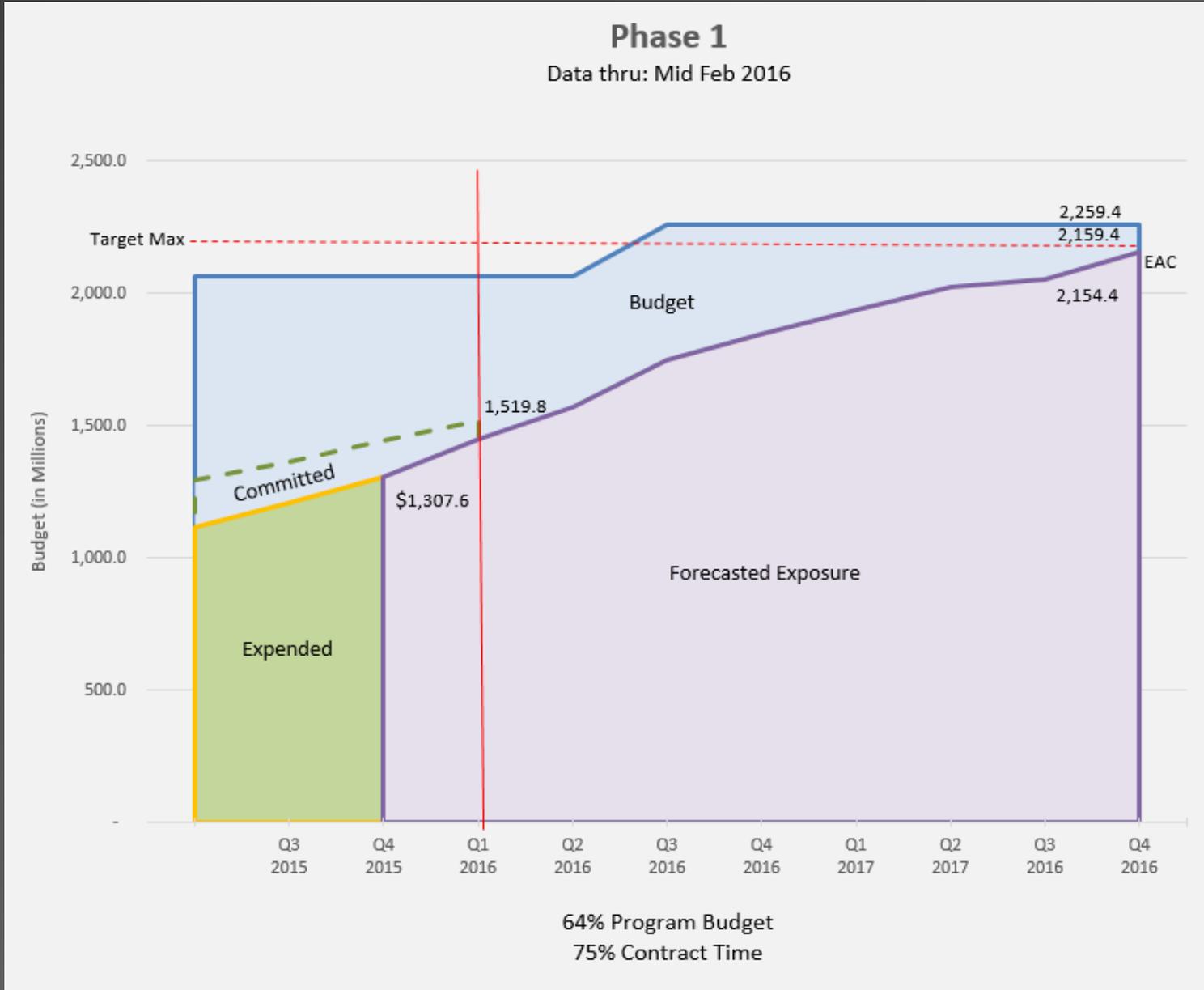
Recordable Incidents in March time period:	3	Lost Time Incidents in March time period:	0
Total Recordable Incidents in 2016:	3	Total Lost Time Incidents in 2016:	0

WOJV Average Recordable Incident Rate Through 2015	4.35	WOJV Average Lost Time Incident Rate Through 2015:	0.75
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Nat'l./ State Average Recordable Incident Rate Through 2015:	3.43	Nat'l./ State Average Lost Time Incident Rate Through 2015:	1.85
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Craft Hours:

Total Transit Center Craft Hours through March 2016:	Increase since last update:	Total 2016 Craft Hours:
2,136,027	62,917	209,700





Contingency Tracking (\$millions)

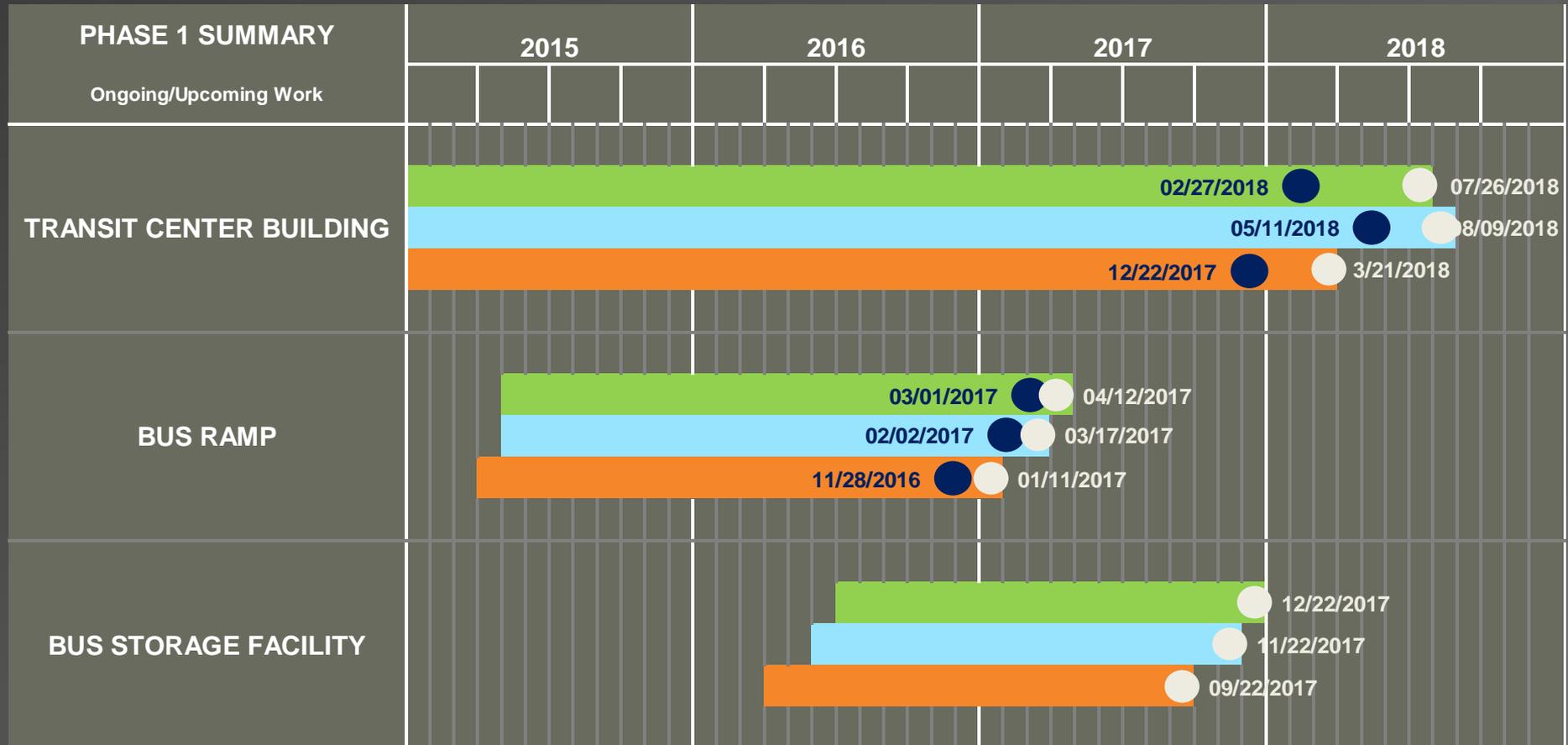
	Construction Contingency	CM/GC Contingency	Program Reserve	Total Contingency & Reserve
Baseline Budget Amounts (Nov 2015)	\$59.5	\$30.7	\$5.0	\$95.1
Contingency Usage Through Feb 2016	(\$9.8)	(\$0.1)	(\$1.1)	(\$11.0)
Remaining Baseline Budget Amounts (Feb 2016)	\$49.7	\$30.6	\$3.9	\$84.1
Total Draws/Adds Mar 2016	(\$2.1)	(\$0.1)	\$0.0	(\$2.2)
Remaining Balances	\$47.6	\$30.5	\$3.9	\$81.9

Uses of Contingency this period

- Miscellaneous Topping Slab, Miscellaneous Metals, and other minor Change Orders to various Trade Packages.

Forecasted Contingency Use

- CM/GC: \$0.2
- Construction: \$1.1
- Program Reserve: \$0



LEGEND

Current Forecast
 Previous Report
 Baseline

Substantial Completion
 Final Completion



LEGEND

- Current Forecast
- Previous Report
- Baseline
- Construction Complete

Schedule

Contractor forecast shows 3 month mitigation since last report.

Mitigation Update

1. Strategic overtime work continues.
2. Early focus on commissioning and close out processes continues.
3. Added emphasis on Submittal review and approvals.
4. CM/GC engagement of subcontractors for schedule forecasting refinement on-going.

Buy America

Compliance efforts.

Mitigation Update

1. Subcontractors advanced many RFI's on Buy America Compliance most of which resolved by clarification rather than modification.
2. Items Resolved
 - Light Fixtures
 - Roof Top Park Paving
3. Items Nearly Resolved
 - BMCS and Fire Alarm

Multi-Trade Influx Onsite

Expected onboarding of many more Trades require sharpened processes.

Mitigation Update

1. Restructured Leadership Team meetings have been effective in resolving elevated issues.
2. Streamlined TJPA design and construction teams processes with added in-field design personnel appears to have reduced protracted issue resolution.

Potential Claims

To date all potential claims submitted to date have been rejected by CM/GC and CMO, lacking merit.

Resolution Update

1. Active review of issues with TJPA and CM/GC legal representatives continues with planned continual Board briefings in upcoming months.
2. Dispute Resolution Advisor (DRA) agreement circulated for signatures and scheduling.

Change Management

AC Transit request for Bus Deck Reconfiguration.

Mitigation Strategy

1. Requested and Received specific design criteria from AC Transit which is being studied by Design Team to minimize potential impacts.
2. Encouraging operational resolution to an operational challenge rather than defaulting to an architectural change.
3. CM/GC advancing work as bought out as not to affect current work flow or schedule.



Person Hours by Local Area

	Through March 2016	
Location	Total Hours Completed	Percent of Total
East Bay (Alameda, Contra Costa, Solano)	920,992	43%
North Bay (Marin, Napa, Sonoma)	77,478	4%
South Bay (San Mateo, Santa Clara)	200,098	9%
San Francisco	333,446	16%
Other*	603,993	28%
Totals	2,136,027**	100%

*Other includes workers from throughout California including the Central Valley as well as workers from out of state who are onsite for specific tasks.

**Total hours are for the Transit Center construction work and do not include the initial Demolition work represented by a total of approximately 55,000 craft hours.

Bay Area Regional Apprentices Hours

	Through March 2016	
Location	Total Hours Completed	Percent of Total
East Bay (Alameda, Contra Costa, Solano)	129,102	32%
North Bay (Marin, Napa, Sonoma)	25,636	6%
South Bay (San Mateo, Santa Clara)	56,265	14%
San Francisco	110,565	28%
Other*	79,005	20%
Totals	373,076*	100%

*Other includes workers from throughout California including the Central Valley as well as workers from out of state who are onsite for specific tasks.

Labor Breakdown by Trade through March 2016

Classification	TTC Building and RUP's
Inspectors – Soils / Material Test	43
Carpenters and Related Trades	382
Cement Mason	104
Electrical – Utility Lineman	30
Electrician	101
Field Surveyor	41
Iron Worker	1029
Laborer and Related Trades	944
Operating Engineer	537
Pile Drivers	236
Plumber	50
Roofer and Waterproofor	40
Sheet Metal	11
Teamsters	192
Tile Setters / Finishers	7
Water Well Driller	9
Bricklayer / Brick Tender	19
Plasters	5
Drywall / Lather	5
Painter	5
Totals	3,790