



Construction Update

July 2015

Transbay Transit Center

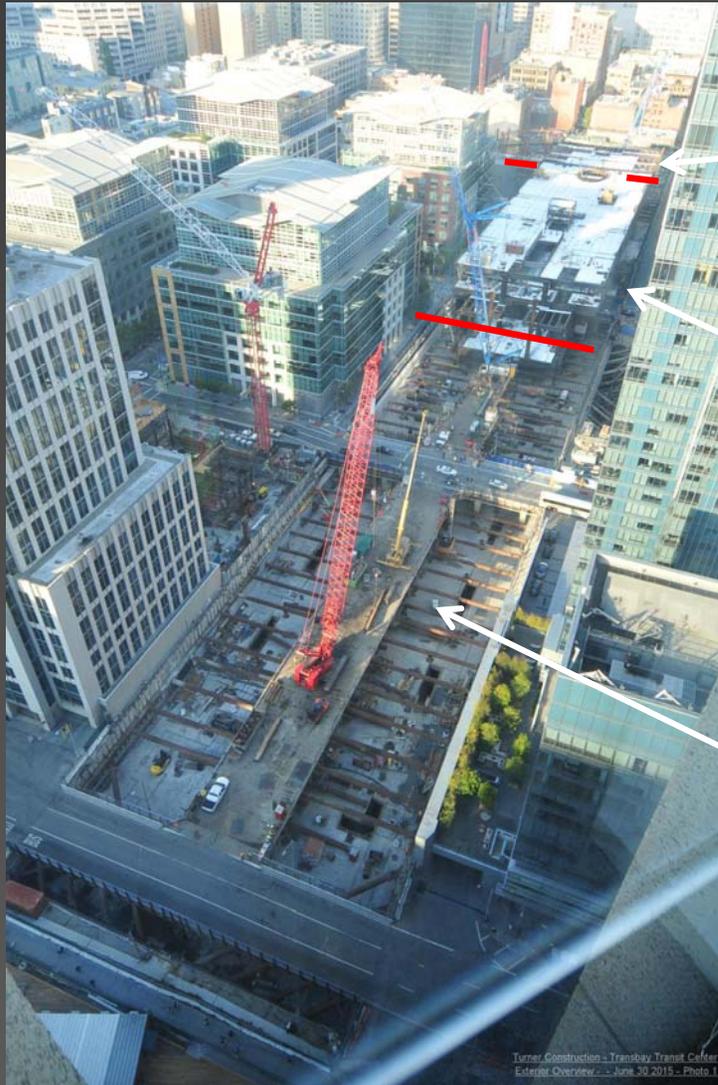
TJPA





Transbay Transit Center

Current Project Overview



Western Zone – Gridlines 1 to 10

Central Zone – Gridlines 10 to 20

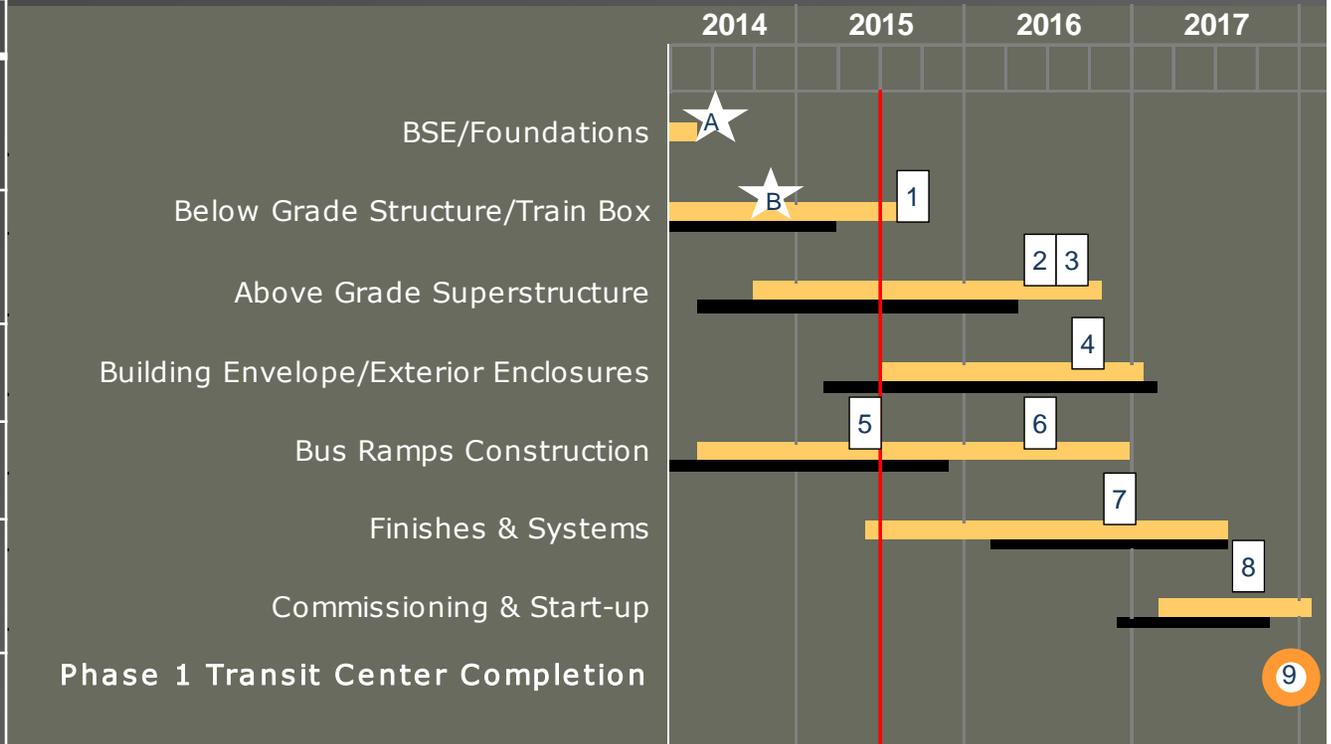
Eastern Zone – Gridlines 20 to 35

Turner Construction - Transbay Transit Center
Exterior Overview - June 30, 2015 - Photo 1



Project Status – Schedule

#	Milestone	Current
1	Complete TG 6.0 Below Grade Concrete	Q3 2015
2	Complete Structural Steel Erection and Welding	Q2 2016
3	Complete Above Grade Concrete	Q3 2016
4	Building Watertight	Q3 2016
5	Complete Bus Ramp Below Grade Concrete	Q2 2015
6	Complete Bus Ramp Viaduct and Cable Stay Bridge	Q2 2016
7	Permanent Power to Building	Q4 2016
8	Building Ready for Bus Driver Training	Q3 2017
9	Substantial Completion	Q4 2017



* The current critical path of the project is as follows; structural steel fabrication and erection.

Current Schedule
 Baseline Schedule

= Completed Work; A) excavation through "rat" slab installation (re-bracing remains). B) mat foundation slabs.



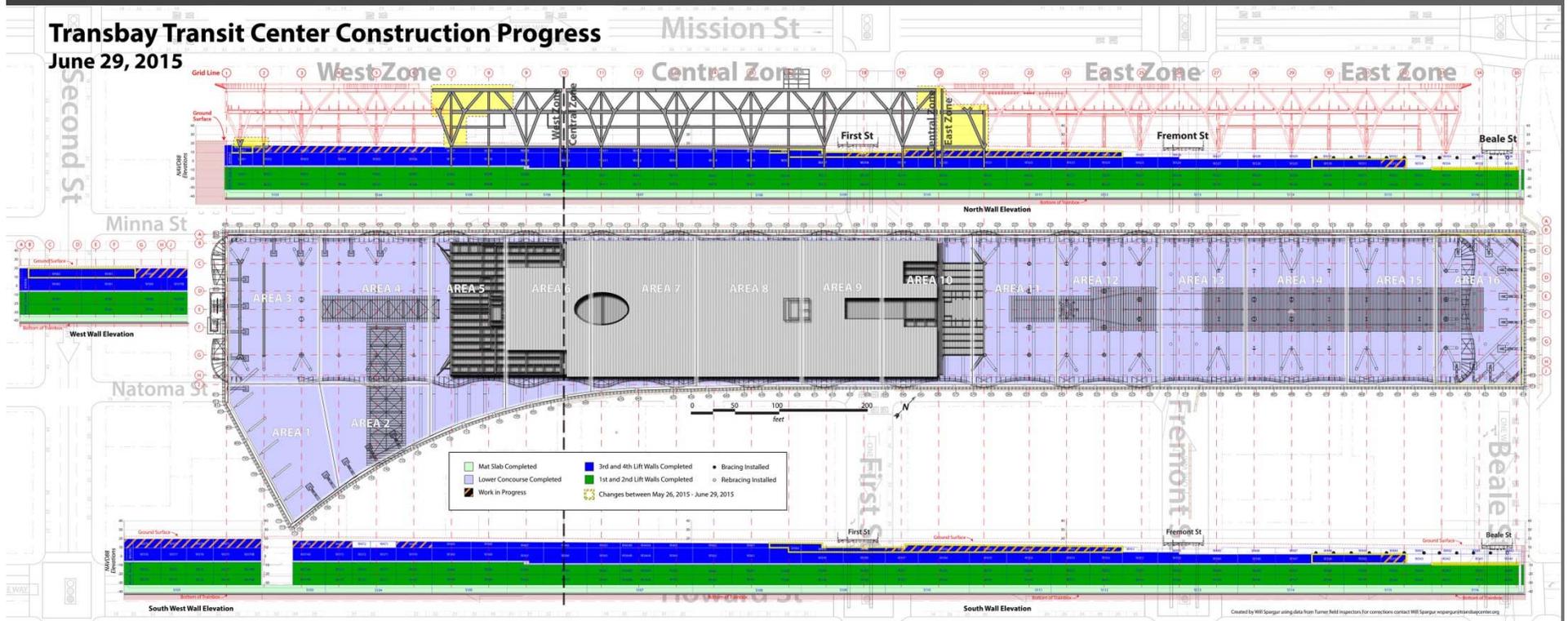
Project Status – Active Milestones

#	Milestone	Planned	Actual / Current
1	Complete TG 6.0 Below Grade Concrete	Q3 2015	Q3 2015
	Milestone Activity Start	March 2013	Jul 17, 2013 (A)
	Milestone Activity Finish	June 2015	September 2015
	Percent Complete as of June 30, 2015	100%	98%
2	Complete Structural Steel Erection and Welding	Q1 2016	Q2 2016
	Milestone Activity Start	July 2014	Oct. 29, 2014 (A)
	Milestone Activity Finish	Dec. 2015	Apr. 2016
	Percent Complete as of June 30, 2015	66%	37%



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Project Status Diagram





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Project Status – Contingency Tracking (\$millions)

Trend	Design Contingency	Construction Contingency	CM/GC Contingency	Program Reserve	Escalation	Total Contingency & Reserve
Baseline Budget Amounts (July 2013)	\$8.2	\$62.5	\$36.4	\$87.5	\$30.3	\$224.9
Contingency Usage Through May 2015	(\$3.5)	(\$24.4)	(\$16.6)	(\$82.0)	(\$13.0)	(\$139.5)
Remaining Baseline Budget Amounts (May 2015)	\$4.7	\$38.1	\$19.8	\$5.5	\$17.3	\$85.4
Structural Steel Change Orders		(\$1.4)				(\$1.4)
Design Build Enclosure Change Orders		(\$0.3)				(\$0.3)
Total Draws/Adds June 2015	0.0	(\$1.7)	0.0	0.0	0.0	(\$1.7)
Remaining Balances	\$4.7	\$36.4	\$19.8	\$5.5	\$17.3	\$83.7



Project Status – Safety Statistics

	2010 / 2011 / 2012	2013	2014	2015 (through June 30 th)
Total Craft Hours by Year	627,744	315,000	375,615	239,527
Number of Recordable Incidents	9	3	13	2
Number of Lost Time Incidents	1	0	4	0
WO Project Annual RIR / National Annual BLS RIR Average / California RIR Average	2.87 / 3.6 / 3.8	1.90 / 3.8 / 4.0	6.92 / tbd / tbd	tbd / tbd / tbd
WO Project Annual LTIR / National Annual BLS LTIR Average / California LTIR Average	0.32 / 1.9 / 1.8	0.00 / 1.8 / 1.7	1.60 / tbd / tbd	tbd / tbd / tbd

NOTES:

RIR = recordable incident rate, LTIR = lost time incident rate.

These rates are calculated as follows: RIR and LTIR = (# of recordable or lost time incidents for the year X 200,000) / actual hours worked.

* BLS is the Bureau of Labor Statistics, U.S. Department of Labor and State of California, it takes these agencies more than 18 months to produce the statistics after year's end.



Period Summary for June 2015

- There was one recordable incident this period. On June 9th an ironworker was struck in the neck by construction material resulting in five stitches.
- There have been over 1,550,000 craft hours completed, excluding demolition, through June 30, 2015. This is an increase of over 40,000 hours since our last construction update.
- Steel fabrication continues in all Structural Steel fabrication shops. For now, Skanska is still taking advantage of seven different fabrication facilities.
- Structural steel has been erected from gridline (GL) 7 to GL 20. Welding and decking is complete from GL 10 to GL 15 and in progress from GL 15 to GL 20. Deck areas have been turned over to follow on trades between GL 10 to GL 15.
- Structural steel erection with Crane #1 continues and is currently in progress eastward from GL 21. Work over First Street was completed, including welding and decking, this month. Crane #2, steel erection now continues from GL 1 toward GL 3.



Period Summary for June 2015

- In the western zone, concrete placement on the vehicle / bike ramp as well as interior partition walls continues.
- In the central zone, the first Train box Lid (eyebrow portion) pour occurred on June 6th between GL 10 and GL14.
- In the western and central zones, 4th lift walls are in progress from GL 1 and GL 25, complete from GL 7 to GL 16.
- In the eastern zone, the 3rd lift wall concrete placement and re-bracing continues.
- MEP trades have begun rough-in work on the metal deck at both the ground level and 2nd level between GL 10 and GL 17.
- Stair installation continues between GL 10 and GL 15.
- On the Bus Ramp / Bridge, falsework installation continues at multiple locations for viaduct and cable stay bridge.



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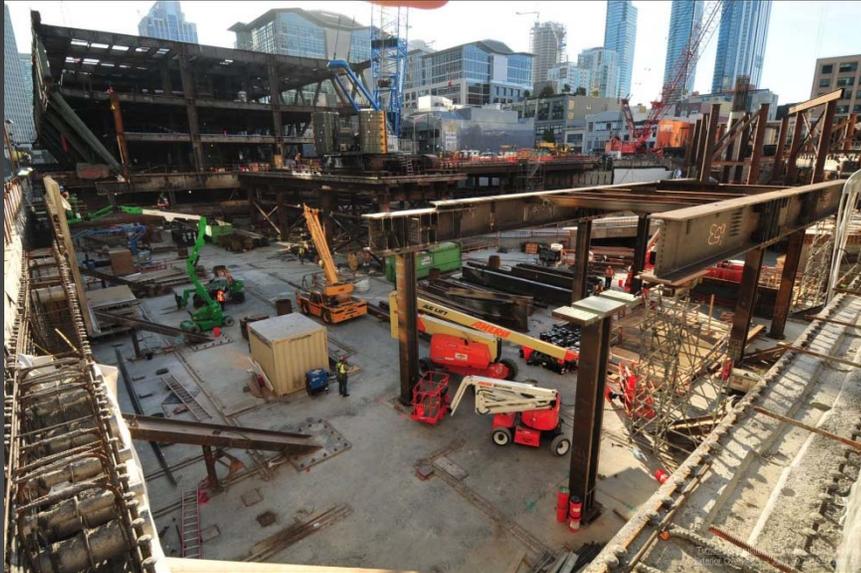
Below Grade Concrete Progress Through June 30, 2015

Steel Erection Zones	1st Lift Walls	1st Lift Walls Poured	1st Lift Walls Percent	2nd Lift Walls	2nd Lift Walls Poured	2nd Lift Walls Percent	3rd Lift Walls	3rd Lift Walls Poured	3rd Lift Walls Percent
Western	35	35	100%	35	35	100%	35	35	100%
Central	20	20	100%	20	20	100%	20	20	100%
Eastern	35	35	100%	35	35	100%	35	22	63%
Total	90	90	100%	90	90	100%	90	77	86%

Steel Erection Zones	Columns	Columns Poured	Columns Percent	Lower Concourse Decks	Lower Concourse Poured	Lower Concourse Percent	4 th Lift Walls	4 th Lift Walls	4 th Lift Walls
Western	62	62	100%	10	10	100%	35	12	35%
Central	48	48	100%	10	10	100%	20	14	70%
Eastern	66	66	100%	16	16	100%	35	0	0%
Total	176	176	100%	36	36	100%	90	26	29%



Western Zone Activity



Above Left : View of west end from northwest corner. GL 1 steel erection in progress.

Above Right: Work proceeding where vehicle and bike ramps exit the building.

Below Right: 4th lift wall placement at west end of project.





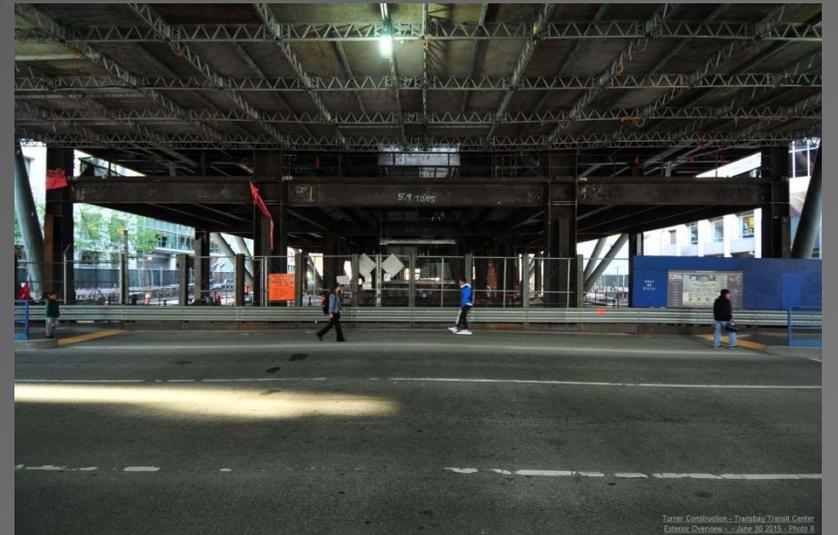
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Central Zone Activity



Above Left and Right: Steel erection continues.

Lower Right: Work platform in place over First Street.





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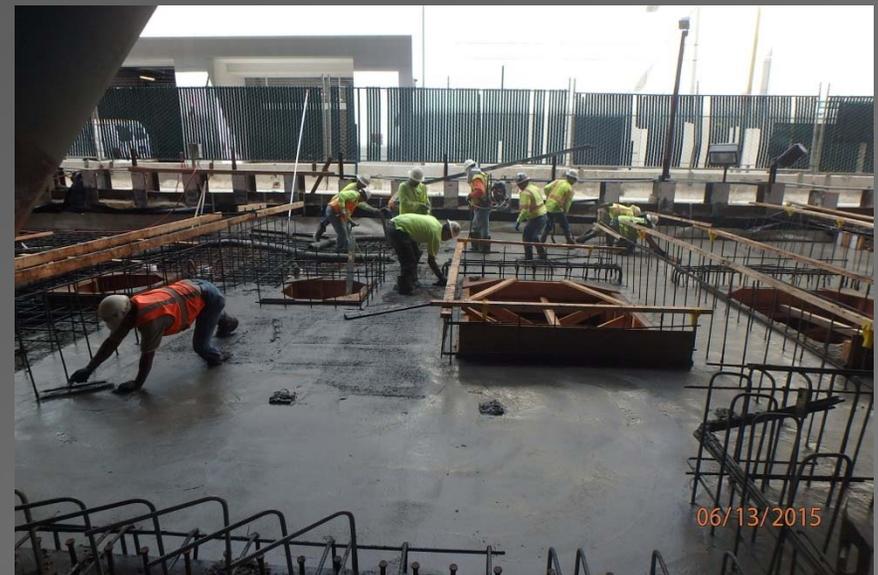
Central Zone Activity



Above: Stair installation continues.

Above Right: Formwork and reinforcing steel for eyebrow (train box lid) pour.

Below Right: Placement of eyebrow concrete.





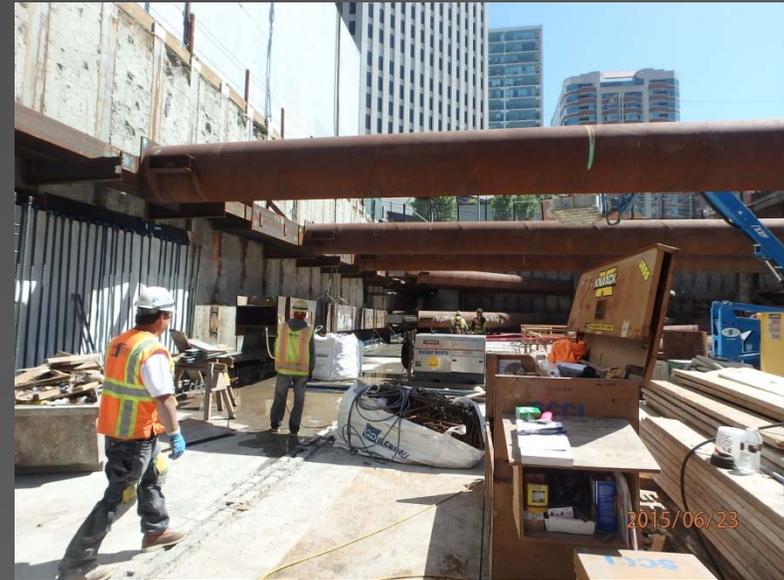
Eastern Zone Activity



Above: Steel erection begins in the eastern zone.

Above Right: Re-bracing in preparation for 3rd lift walls continues.

Below Right: 3rd lift wall work continues.





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Ongoing Structural Steel Fabrication



Above: Pipe column fabrication at Oregon Iron Works (OIW).

Above Right: Transfer girder fabrication at OIW.

Below Right: Trial assembly of upper light column ring at OIW.





Bus Ramp and Bridge as of June 30, 2015

- Current Status
 - All columns have been placed.
 - Cable Stay Bridge saddle materials are in fabrication.
 - Abutments and retaining walls, near Folsom and Harrison Streets, are in progress.
 - Falsework submittals have been completed and approved. Falsework continues at Pylon 9 and Bent 8 as well as inside the Transit Center footprint.
 - Street crossings for falsework are being planned for several weekends in July.





Bus Ramp and Bridge



Above Left and Right: Falsework erection in progress, southside of Folsom Street.



Below Right: Steel falsework columns for cable stay bridge portion of work.





Construction

The Next 90 Days

- Next 30 Days (Jul.)
 - Continue 3rd lift walls and re-bracing in the eastern zone.
 - Continue structural steel fabrication and complete cast node fabrication. Ship final cast nodes.
 - Continue Bus Ramp abutment and viaduct falsework. Place falsework over Folsom, Tehama and Howard Streets.
 - Continue structural steel erection and 4th lift walls in all zones.
 - Continue MEPF Coordination and rough-in for decks in central zone.
 - Continue stair installation.
 - Continue above grade concrete placement.
- Next 60-90 Days (Aug. – Sep.)
 - Complete 3rd lift walls and continue re-bracing work in eastern zones.
 - Continue Bus Ramp and Bridge work falsework, start viaduct soffit installation.
 - Continue structural steel fabrication, delivery and erection in all zones. Start steel erection over Fremont Street.
 - Continue installation of stairs and ladders.
 - Continue superstructure concrete in central and western zones.
 - Continue MEPF deck rough-in of embeds, blockouts and sleeves.



Planned Street Closures

- Planned Weekend Street Closures for Falsework Installation and Steel Erection:
 - For Bus Ramp falsework; Folsom Street closure the weekend of July 10th, 11th and 12th.
 - For Bus Ramp falsework; Tehama Street closure on Tuesday and Wednesday, July 14th and July 15th.
 - For Bus Ramp falsework; Howard Street closure the weekend of July 17th, 18th and 19th.
 - For steel erection over Fremont Street; overnight street closures and overnight work will begin on weekend of August 14th.
- Advanced Planning and Steps Taken to Notify Community Members and Neighbors:
 - Door to Door Outreach and flyers.
 - Email notification.
 - Detailed information is included as part of the 10 day look ahead that is distributed to members of the community.
 - Face to Face meetings and presentations with key neighbors (Blackrock and Millennium).
 - Regular weekly meetings with SFMTA.
 - Information is included as part of Monthly noontime Community Meetings.



Transbay Transit Center

Bay Area Regional Labor Breakdown

	Through June 2015	
Location	Total Hours Completed	Percent of Total
East Bay (Alameda, Contra Costa, Solano)	585,849	38%
North Bay (Marin, Napa, Sonoma)	53,840	3%
South Bay (San Mateo, Santa Clara)	141,405	9%
San Francisco	263,630	17%
Other*	513,162	33%
Totals	1,557,886**	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.



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Bay Area Regional Apprentice Hours Breakdown

	Through June 2015	
Location	Total Hours Completed	Percent of Total
East Bay (Alameda, Contra Costa, Solano)	82,498	31%
North Bay (Marin, Napa, Sonoma)	13,220	5%
South Bay (San Mateo, Santa Clara)	34,390	13%
San Francisco	77,163	29%
Other*	59,163	22%
Totals	266,434*	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.



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Labor Breakdown by Trade through June 2015

Classification	TTC Building and RUP's*
Inspectors – Soils / Material Test	43
Carpenters and Related Trades	241
Cement Mason	79
Electrical – Utility Lineman	28
Electrician	55
Field Surveyor	38
Iron Worker	648
Laborer and Related Trades	753
Operating Engineer	456
Pile Drivers	200
Plumber	27
Roofer and Waterproofor	40
Sheet Metal	5
Teamsters	178
Tile Setters / Finishers	7
Water Well Driller	9
Totals	2,807

* Relocation of Utilities Project



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Questions?

