



# Construction Update

October 2016

## Transbay Transit Center

**TJPA**



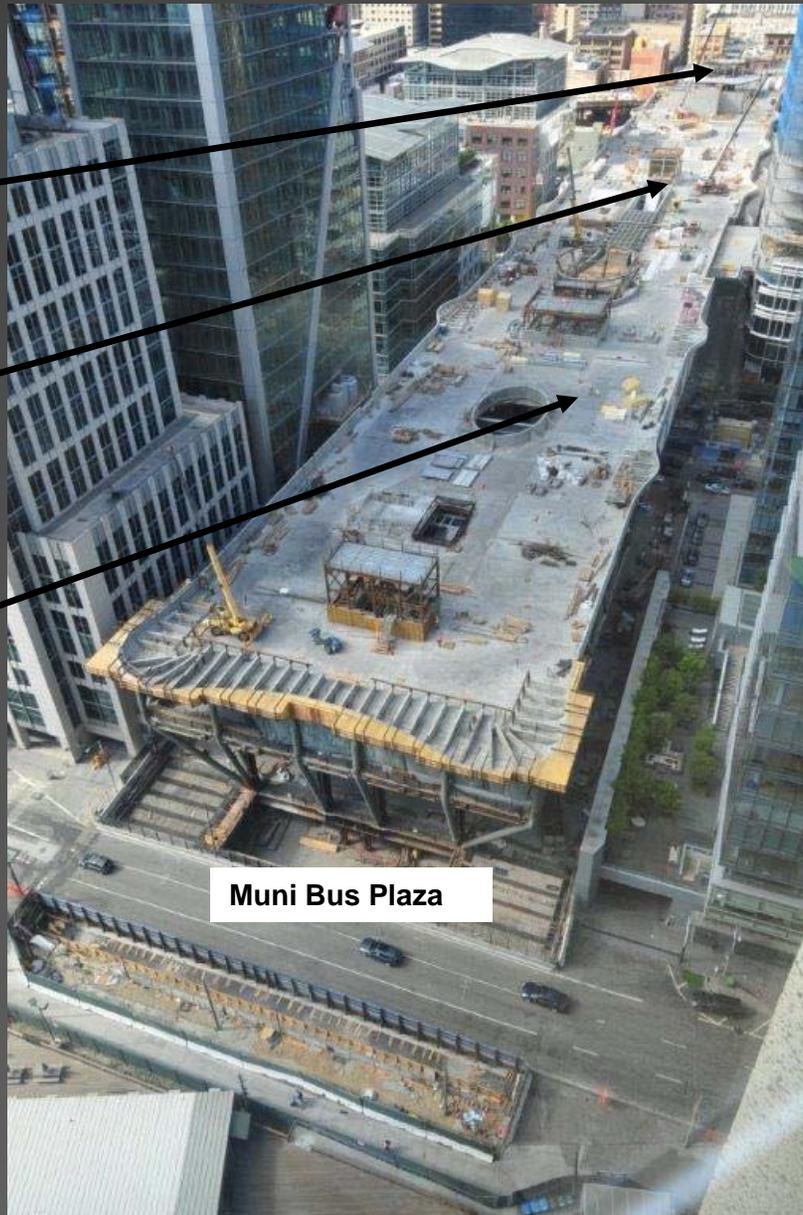


## Transbay Transit Center

Western Zone  
Gridlines 1 to 10

Central Zone  
Gridlines 10 to 20

Eastern Zone  
Gridlines 20 to 35



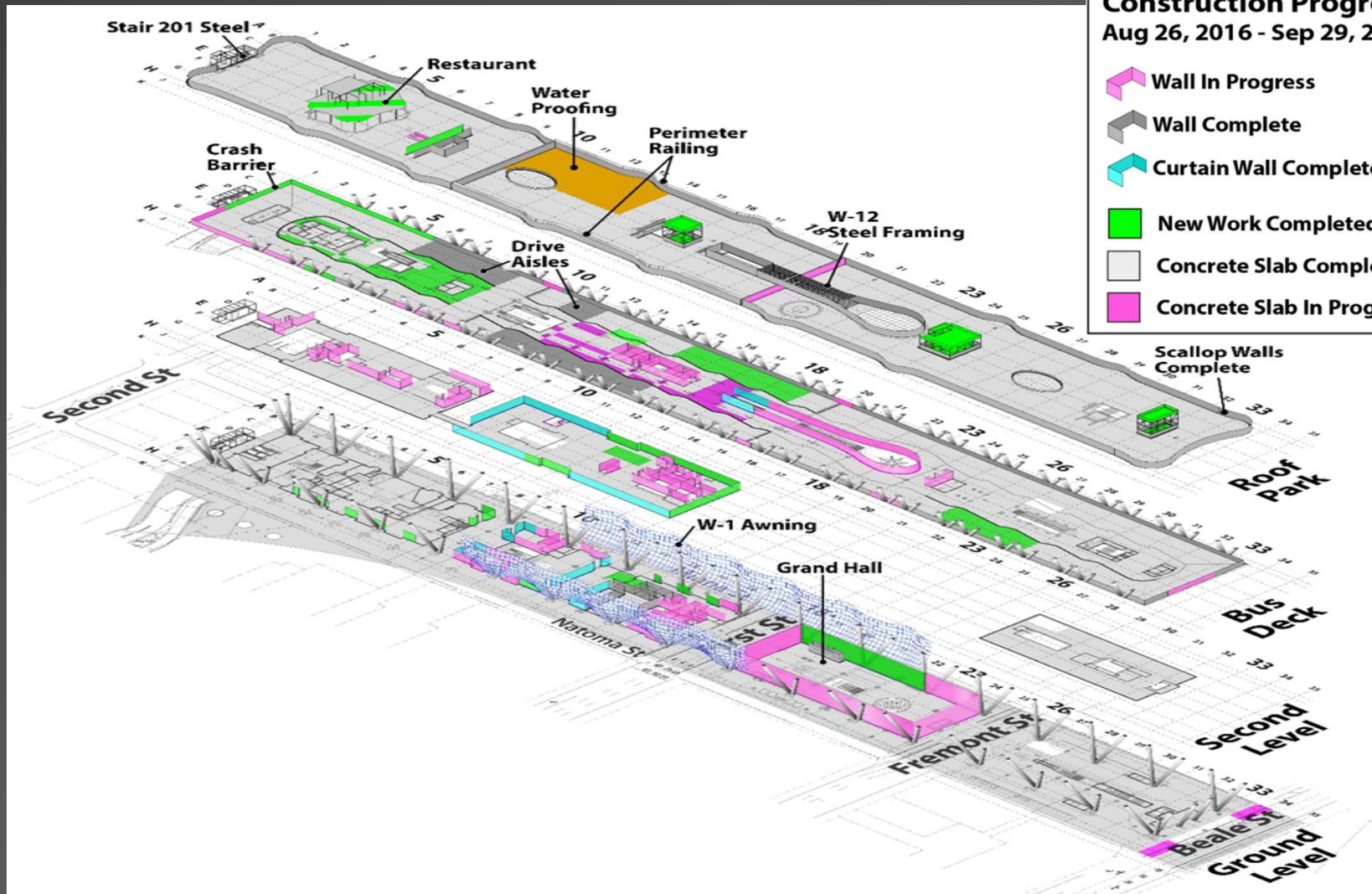
Muni Bus Plaza

# Project Overview

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

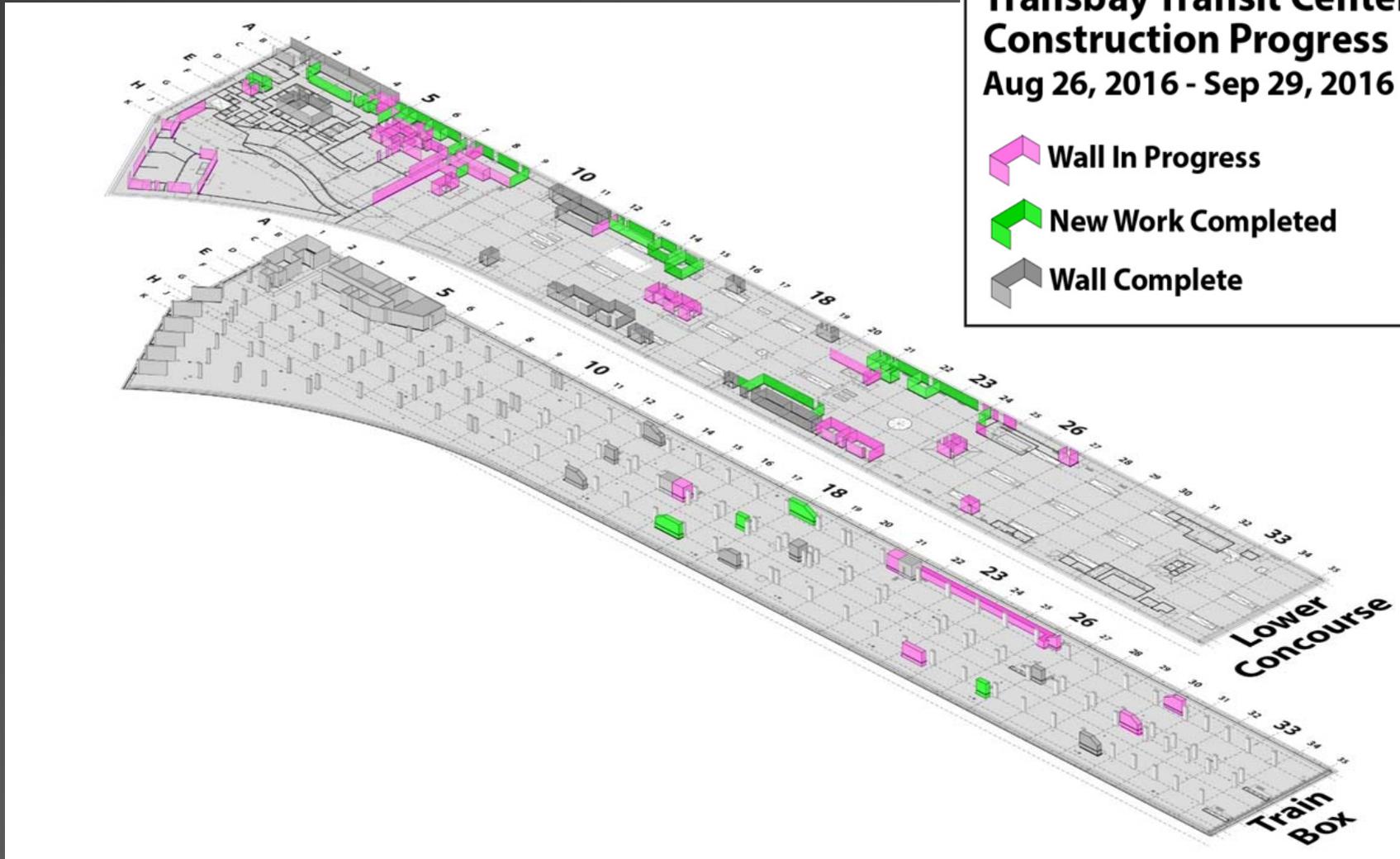


## Transbay Transit Center



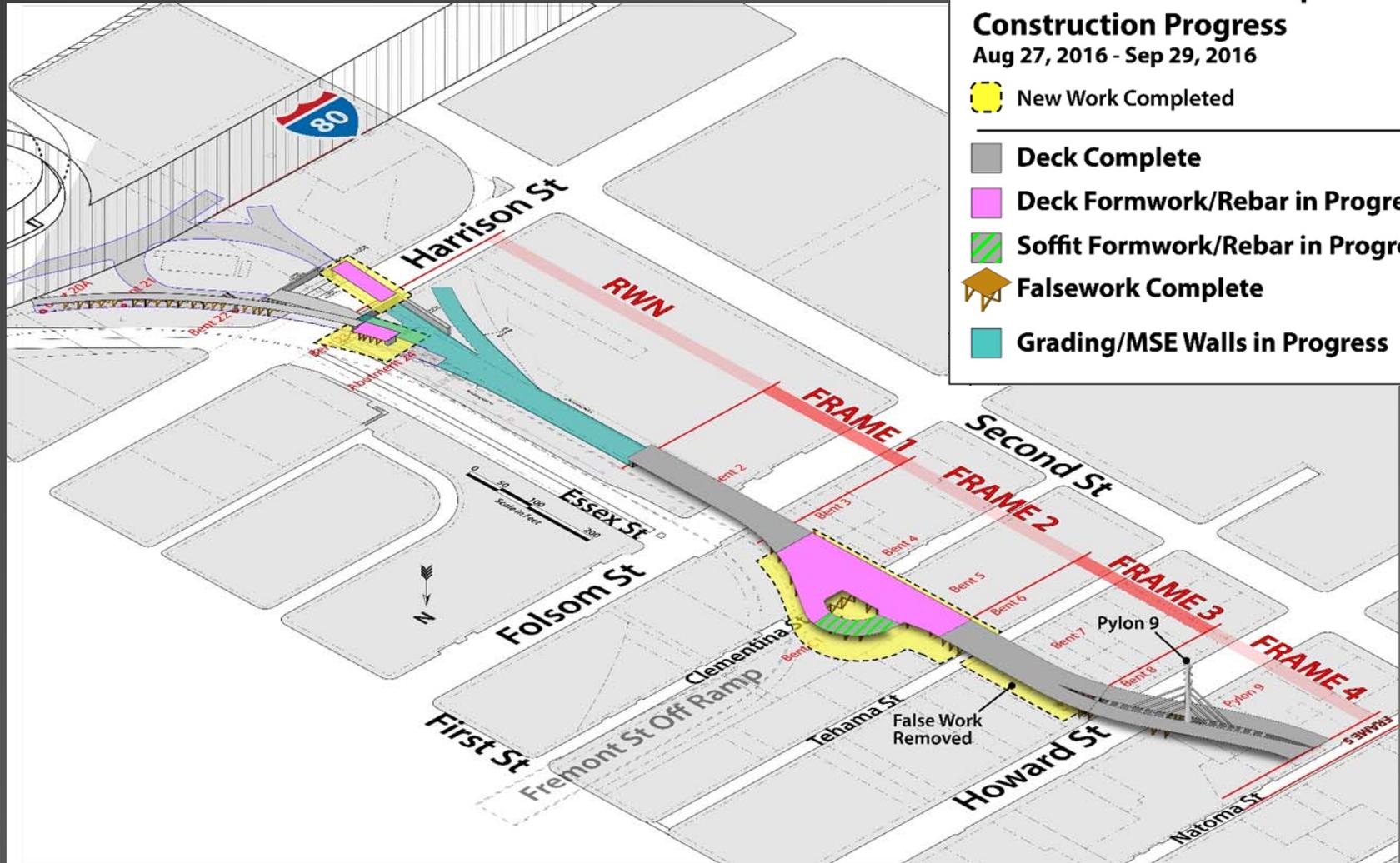


## Transit Center – Trainbox





## Bus Ramp and Cable Stay Bridge

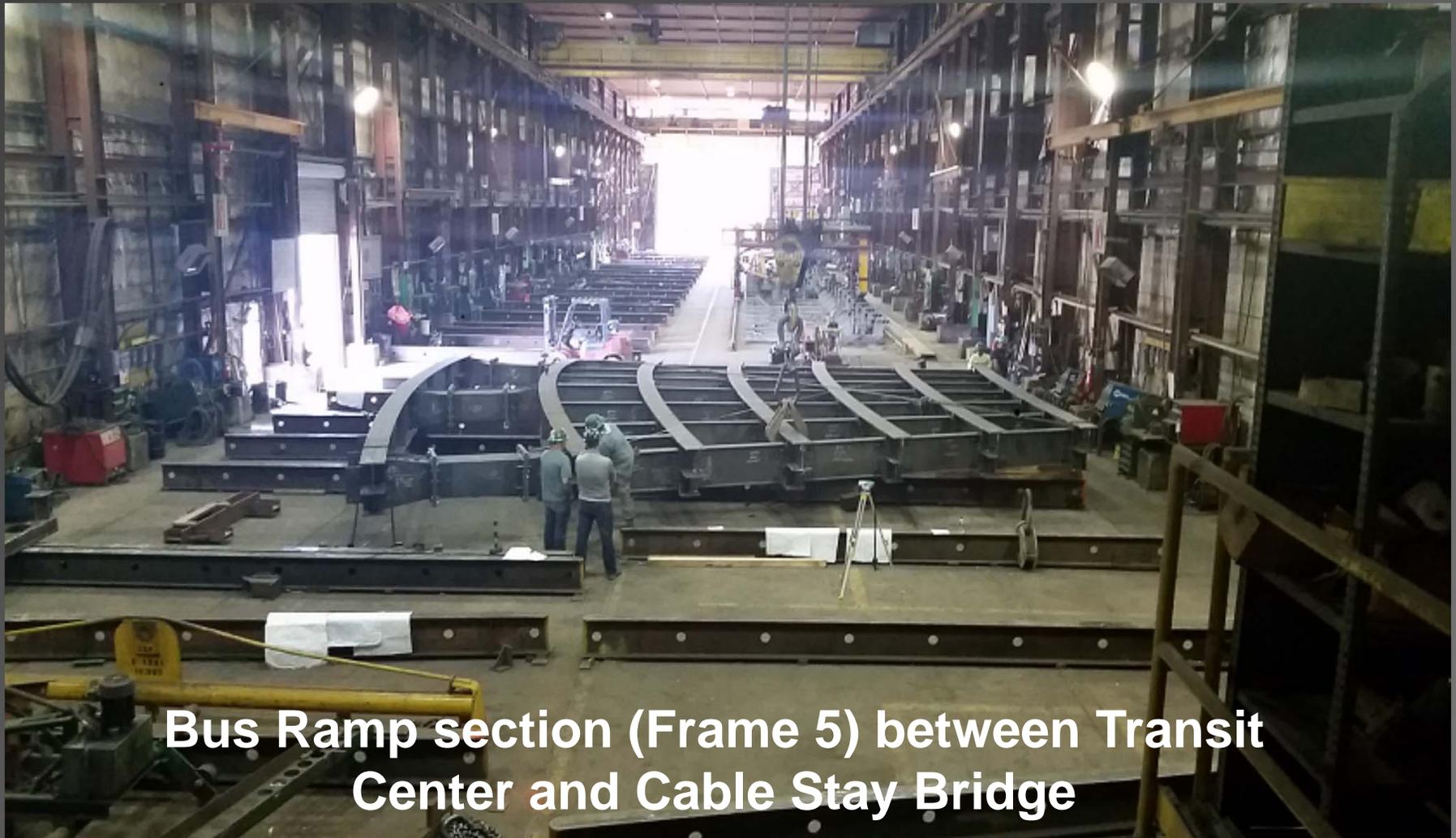




Bus Ramp

Cable Stay Bridge progress





**Bus Ramp section (Frame 5) between Transit Center and Cable Stay Bridge**



### Western Zone (GL 1-10)

- Stair 201 steel structure welding and metal decking continues.
- Rooftop Stair 301 and Elevator rooms concrete nearing completion.
- Bus Deck level waterproofing and bus curbs and drive aisle continue.
- Spray applied fireproofing completed.
- Glass Curtain Wall continues at Ground Level and Level 2.
- Mechanical/Electrical/Plumbing/Fire Sprinkler hangers and systems installation continues all levels.
- Electrical switchgear and transformer rooms being readied for delivery of equipment in October.
- Concrete Masonry Unit (CMU) wall installation in progress.



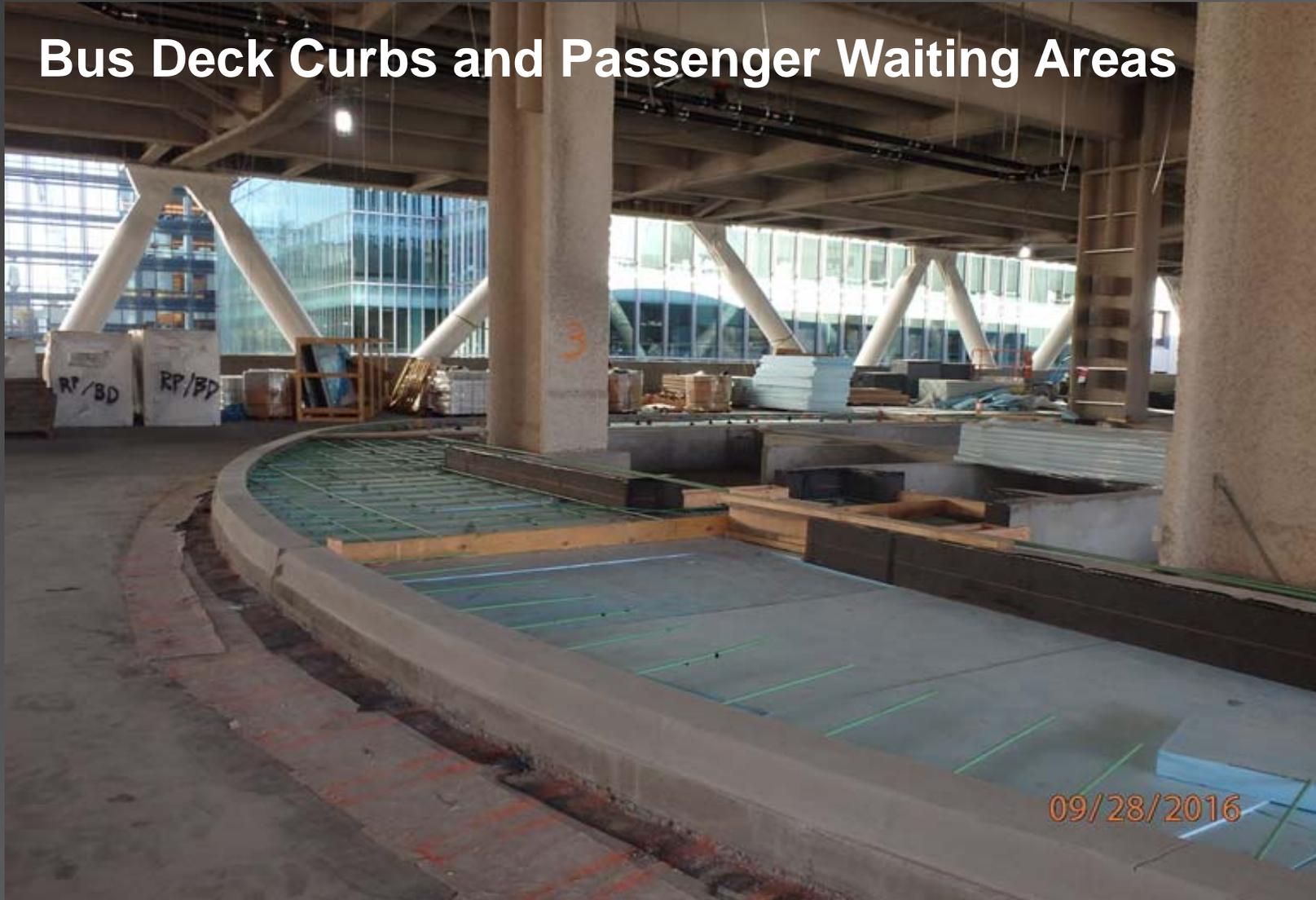
## Central Zone (GL 10-20)

- Rooftop Waterproofing system installed along north side.
- Rooftop W12 Glass Floor framing complete and intumescent fireproof coating started.
- Bus Deck curbs completed with both drive aisle and passenger island concrete continuing.
- Continue with (MEPF) hangers and systems installation all levels.
- Continue with Glass Curtain wall systems installation all levels.
- Electrical switchgear and transformer rooms being readied for delivery of equipment in October.
- Offsite electrical utility manholes and conduit duct banks completed to the Central Zone.





## Bus Deck Curbs and Passenger Waiting Areas





### Eastern Zone (GL 20-35)

- Rooftop concrete scallop and rooftop perimeter walls are now painted.
- Rooftop W12 Glass Floor framing completed and intumescent coatings has started. Oculus W6 Curtain Wall “ring beam” install has started.
- Exterior Awning installation started.
- Bus Deck waterproofing and bus curb concrete placement has started.
- Grand Hall W3 Glass Curtain Wall framing and glazing work continues.
- Spray applied fireproofing completed with only the Muni Bus Plaza ground level fireproofing remaining.
- Lower Concourse MEPF has started beneath the MUNI Bus Plaza.



## Bus Ramp Bridge

- Underground utilities work at Caltrans substation continues.
- Mechanically Stabilized Earth (MSE) walls and retaining wall work continues.
- Rebar and embedded items continue @ Viaduct Frame 2 and Bus Turnaround @ Clementina in readiness for mid October pour.
- Cable Stay Bridge specialty contractor, VSL, completed the installation and stressing of 4 of 7 cables.
- Frame 5 drop-in span offsite fabrication continues.





### Central Zone

- Complete Rooftop Waterproofing north section including the protection slab.
- Continue the Rooftop W12 Glass Floor framing and start W12 glazing.
- Complete the Bus Deck waterproofing.
- Continue with Bus Deck curbs/drive aisle/passenger island concrete.
- Rig & Install Switchgear & Transformers.
- Continue Lower Concourse MEPF.

### Eastern Zone

- Continue Rooftop Glass Floor framing.
- Continue Bus Deck crash rail concrete, waterproof and curb/drive aisle concrete.
- Continue Grand Hall glass curtain wall.
- Complete Spray on Fireproofing.
- Rig & Install Switchgear & Transformers.
- Complete Trainbox steel and concrete pour under Beale St. by end of October.



## Western Zone

- Continue Bus Deck curb and drive aisle concrete.
- Continue Mechanical, Electrical and Plumbing and Fire Sprinklers.
- Continue ground level Trainbox Lid vents and waterproofing (Parcel F).
- Rig & Install Switchgear and Transformers into Electric rooms.



## Bus Ramp and Bridge

- Continue Cable Stay Bridge cable install/stressing finish late October.
- Complete steel drop-in span fabrication and coatings in October.
- Harrison Street “Left Bridge” concrete deck pour October 6.
- Clementina Street bus turnaround stem & soffit concrete placement late October.



## Recordable & Lost Time Incidents:

<b>Recordable Incidents in September time period:</b>	<b>0</b>	<b>Lost Time Incidents in September time period:</b>	<b>0</b>
<b>Total Recordable Incidents in 2016:</b>	<b>8</b>	<b>Total Lost Time Incidents in 2016:</b>	<b>0</b>
<b>WOJV Average Annual Recordable Incident Rate 2011 Through 2015</b>	<b>4.35</b>	<b>WOJV Average Annual Lost Time Incident Rate 2011 Through 2015:</b>	<b>0.75</b>
<b>Nat'l./ State Annual Average Recordable Incident Rate 2011 Through 2015:</b>	<b>3.43</b>	<b>Nat'l./ State Annual Average Lost Time Incident Rate 2011 Through 2015:</b>	<b>1.85</b>

## Craft Hours:

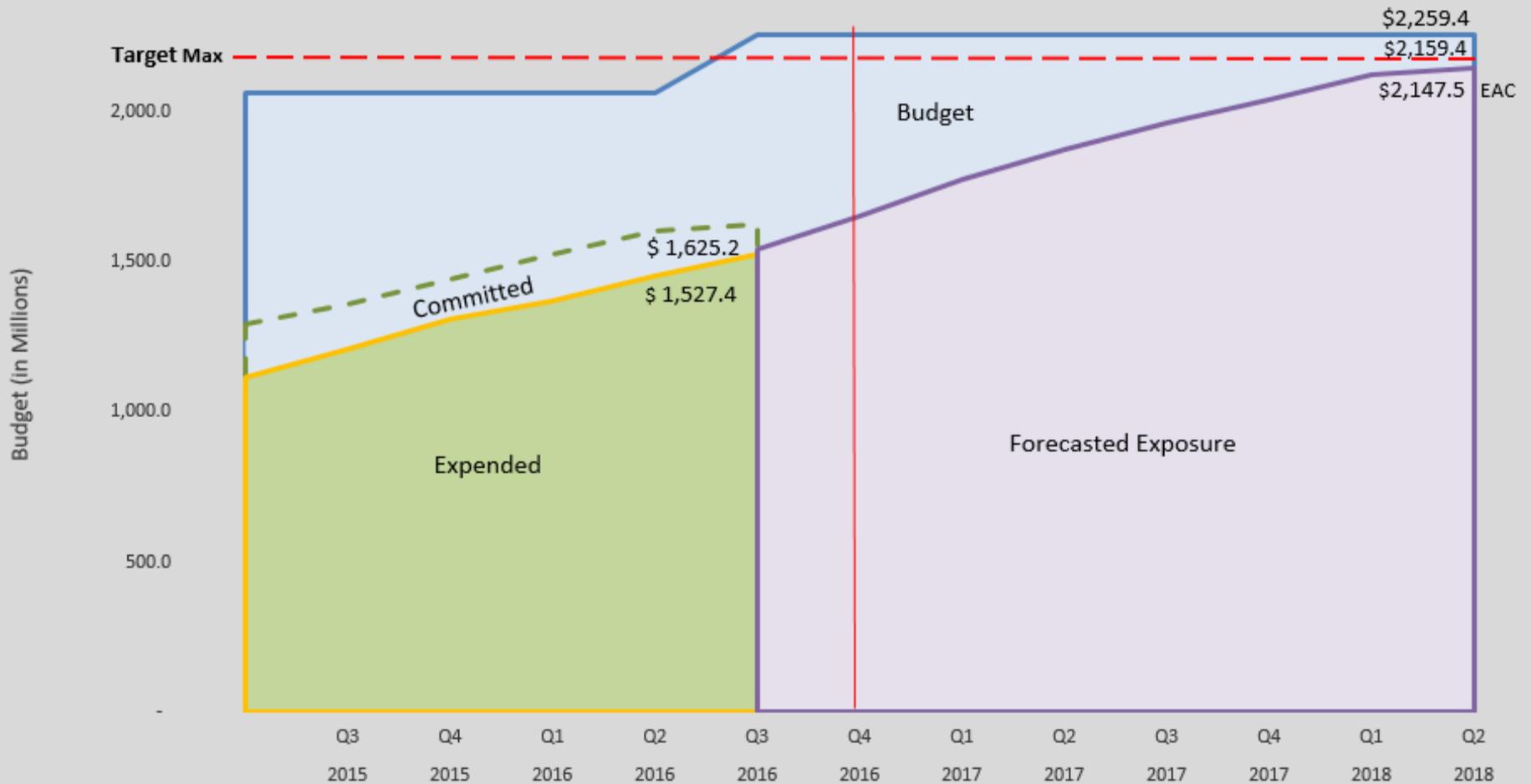
<b>Total Transit Center Craft Hours through Sept. 2016:</b>	<b>Increase since last update:</b>	<b>Total Year 2016 Craft Hours:</b>
<b>2,644,886</b>	<b>108,004</b>	<b>718,559</b>



# Transbay Transit Center

# Budget Overview

## Phase 1 Transbay Transit Center Data thru: August 16



68% Program Budget  
82% Contract Time



## Contingency Tracking (\$millions)

Contingency Tracking	Construction Contingency	CM/GC Contingency	Program Reserve	Total Contingency & Reserve
<b>Baseline Budget Amounts</b>	<b>\$61.8</b>	<b>\$32.5</b>	<b>\$116.9</b>	<b>\$211.3</b>
<b>Contingency Usage Through Aug 2016</b>	<b>(\$11.0)</b>	<b>(\$0.1)</b>	<b>(\$0.0)</b>	<b>(\$11.1)</b>
<b>Remaining Baseline Budget Amounts (Aug 2016)</b>	<b>\$50.8</b>	<b>\$32.4</b>	<b>\$116.9</b>	<b>\$200.2</b>
<b>Total Draws/Addds Sep 2016</b>	<b>(\$0.6)</b>	<b>(\$0.7)</b>	<b>\$8.0</b>	<b>\$6.7</b>
<b>Remaining Balances</b>	<b>\$50.2</b>	<b>\$31.7</b>	<b>\$124.9</b>	<b>\$206.9</b>

### Uses of Contingency this period

- Final Below Grade Package TG6.0 changes, Misc. changes to TG7.2 Superstructure concrete packages.
- Savings from TG27.1 Data Network and Systems Integration bid package award added to Program Reserve.

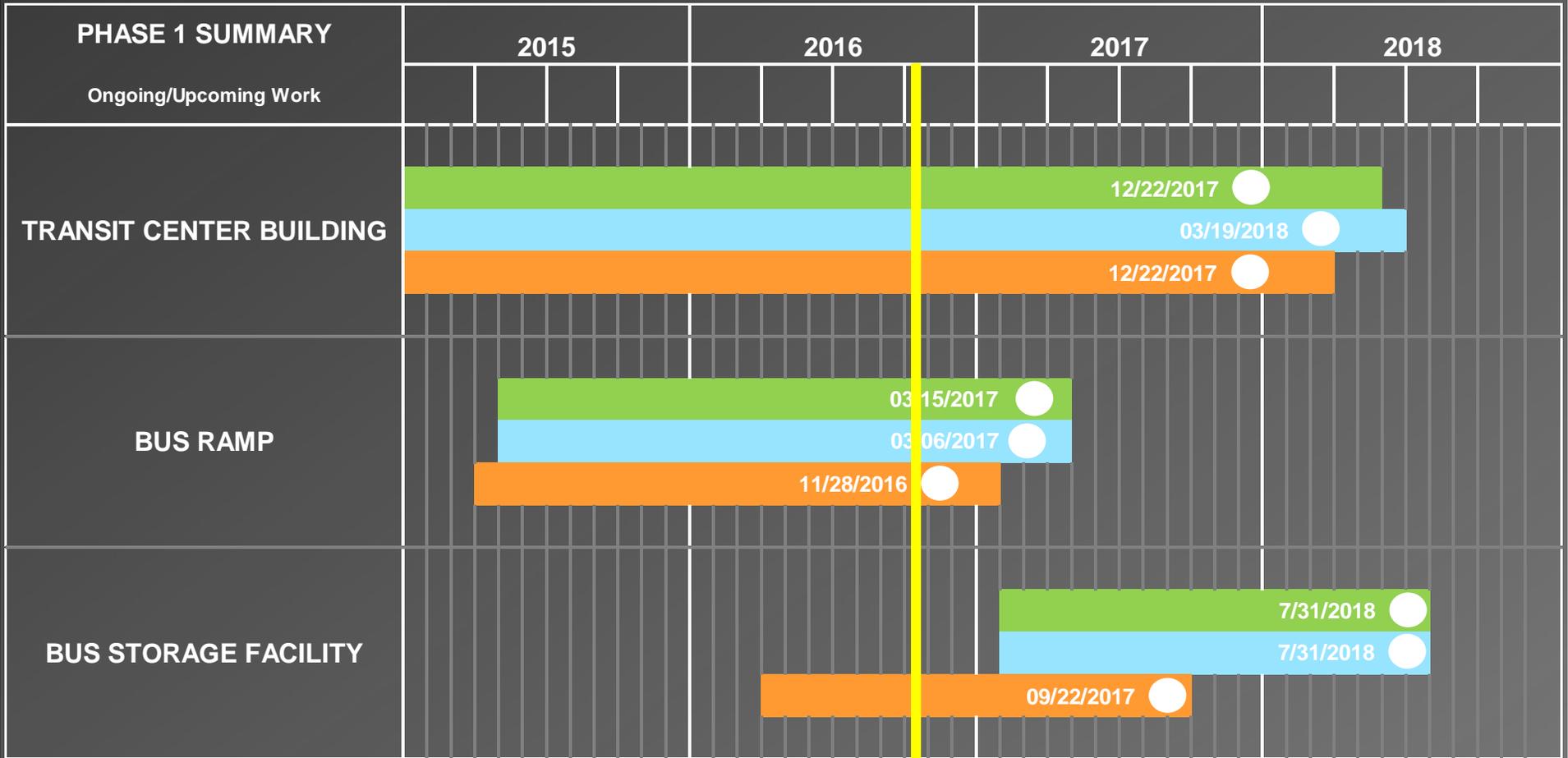
### Forecasted Contingency Use

- CM/GC: \$0.1
- Construction: \$0.2
- Program Reserve: \$0



# Transbay Transit Center

# Schedule



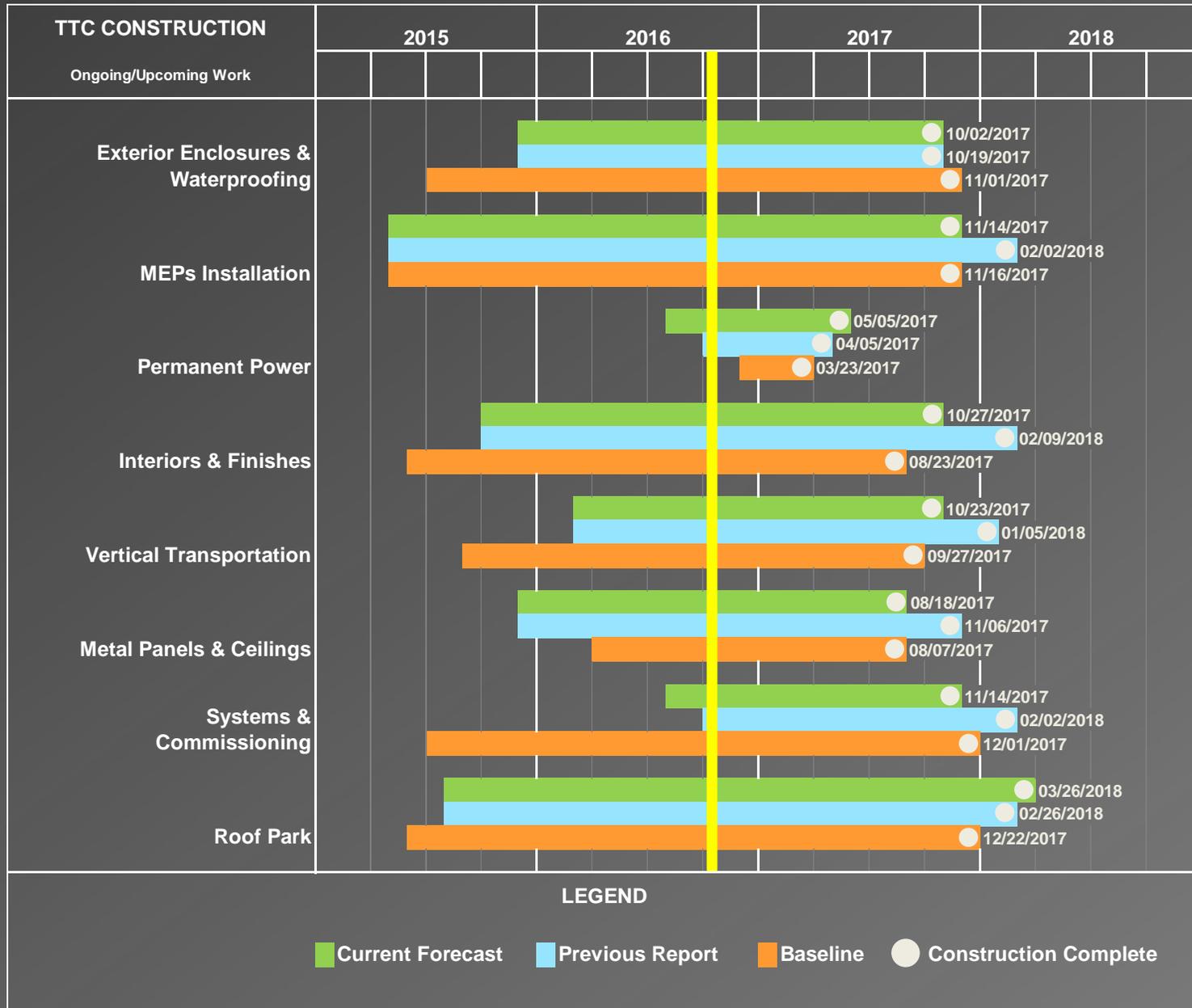
### LEGEND

- Current Forecast
- Previous Report
- Baseline
- Substantial Completion



# Transbay Transit Center

# Schedule





## Schedule

Recovery Schedule presented by CM/GC meeting Contract Substantial Completion

## Mitigation Update

1. Strategic overtime work focused around Grand Hall.
2. Re-sequenced work to support better trade flow relative to Grand Hall critical path.
3. Studying prefabrication of terrazzo design.
4. Recovery Schedule focused on Transit Center delivery with elements of Park Completion to follow during final completion activities.



## Buy America

1. Resolved significant items advancing as planned:
  - Building Management Control System (BMCS)
  - Fire Management System (FMS)
  - Public Address System (PA)
2. Buy America certified bid received and ready to award:
  - Audio Visual Systems (A/V) Trade Package 27.2R
3. Landscaping Contractor's Buy America issues with Park Paving Stone selection and fabrication resolved.

**Mitigation Strategy:** Continue to Monitor throughout Submittal Process



## Change Management

AC Transit Bus Deck Reconfiguration Request

### Mitigation Strategies:

TJPA Interim Executive Director & AC Transit General Manager met:

- Operationalize with As-Planned and As-Built Configuration.
- Develop funding plan for future optimization after operational.
- Committed to timely and engaged Transition Planning through 2017.



## Operational Readiness

### Concerns:

1. Master Lessee Delayed On-Boarding Impact
  - Building Systems Commissioning
  - Building Systems Testing, Training and Hand Off
2. Timely Transit Operator's Transition
  - Route "Sign-On" & Driver Training Schedules
  - Transit Operator's Tenant Improvements, Fixtures, Furniture, & Equipment

### Mitigation Strategies:

1. Master Lessee engagement first quarter 2017 – January preferred
2. Bi-weekly Transition Planning Meetings will continue throughout 2017
3. Schedule Transit Agency Work Sessions for Training, Tenant Improvements, Fixtures, Furniture, & Equipment (FF&E) Planning / Coordination



# Transbay Transit Center

# Questions

