

Los Angeles County  
Metropolitan Transportation Authority

# FTA Quarterly Review Briefing Book

March 4, 2020



**Metro**

# **FTA QUARTERLY REVIEW MEETING AGENDA**

**Los Angeles County Metropolitan Transportation Authority**

Wednesday, March 4, 2020 – 9:00 a.m.

William Mulholland Conference Room – 15<sup>th</sup> Floor

## **I. OVERVIEW**

- A. FTA Opening Remarks
- B. Metro Management Overview
- C. Financial Status
- D. Legal Issues
- E. Construction Safety and Security

## **PRESENTER**

Ray Tellis  
Phillip Washington  
Drew Phillips  
Charles Safer  
Kenneth Hernandez

## **II. METRO PLANNING REPORTS**

- A. East San Fernando Valley Transit Corridor
- B. Eastside Transit Corridor Phase 2
- C. West Santa Ana Branch Transit Corridor
- D. Sepulveda Transit Corridor

James de la Loza

## **III. CONSTRUCTION REPORTS**

- A. Program Management Overview
- B. Crenshaw/LAX Transit Project
- C. Regional Connector Transit Project
- D. Westside Purple Line Extension Section 1 Project
- E. Westside Purple Line Extension Section 2 Project
- F. Westside Purple Line Extension Section 3 Project

Richard Clarke  
Stephanie Leslie  
Gary Baker  
James Cohen  
Michael McKenna  
Kimberly Ong

## **IV. FTA ACTION ITEMS**

FTA / PMOC

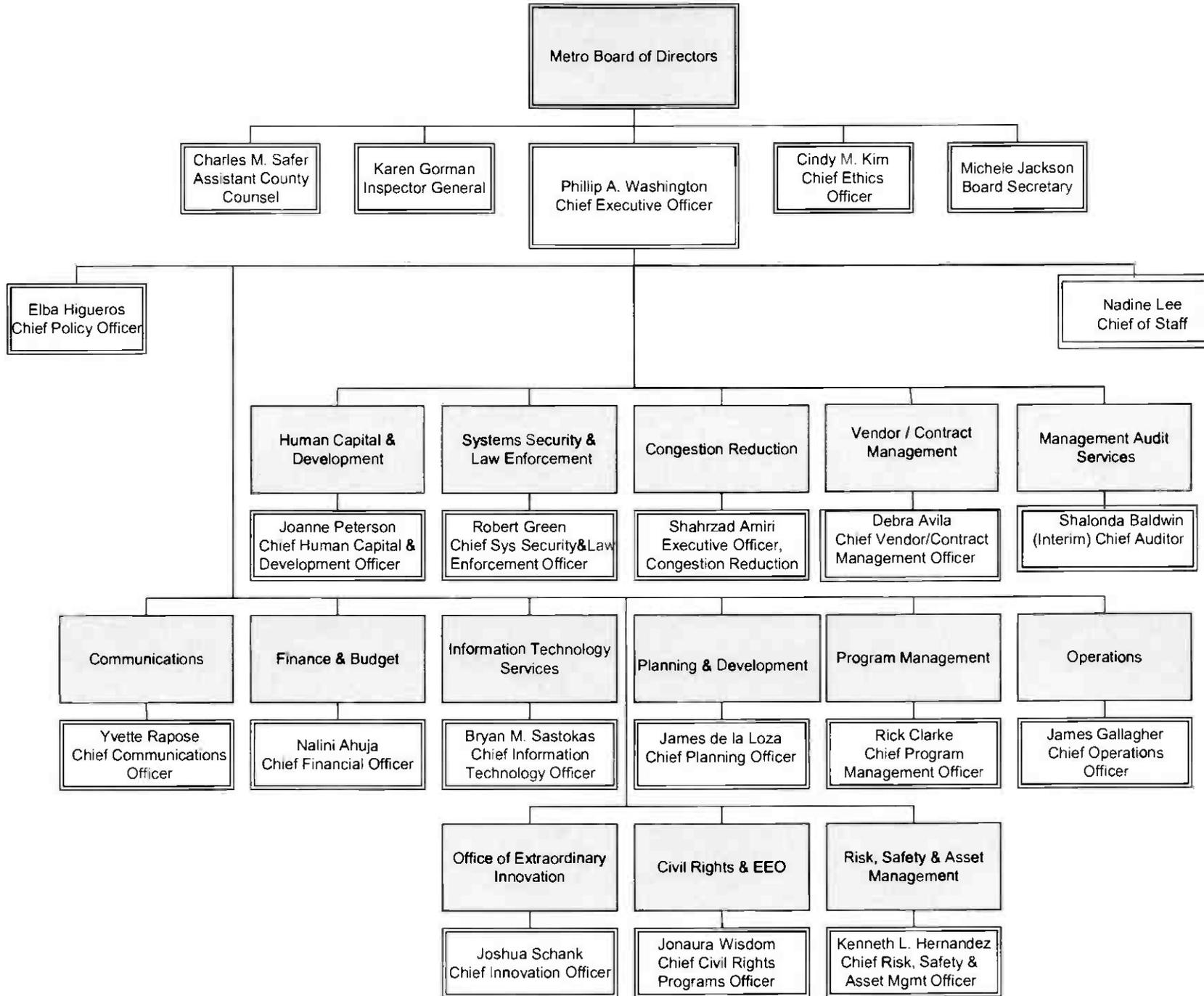
## **PROPOSED SCHEDULE AND LOCATION OF NEXT MEETING**

**Los Angeles County Metropolitan Transportation Authority**

Wednesday, May 27, 2020

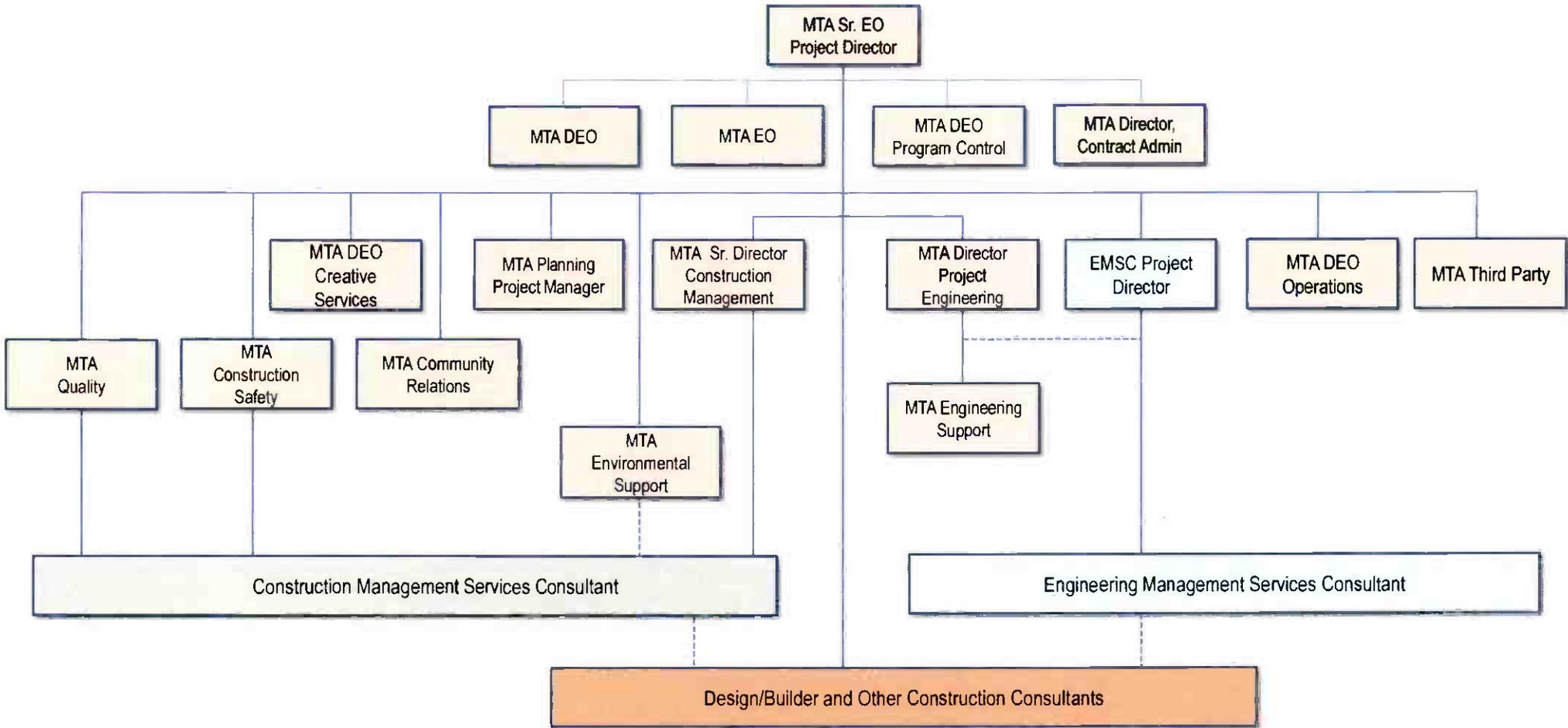
William Mulholland Conference Room - 15<sup>th</sup> Floor

# Metro Organization Chart





**CRENSHAW/LAX TRANSIT PROJECT  
Responsibility and Reporting Matrix**

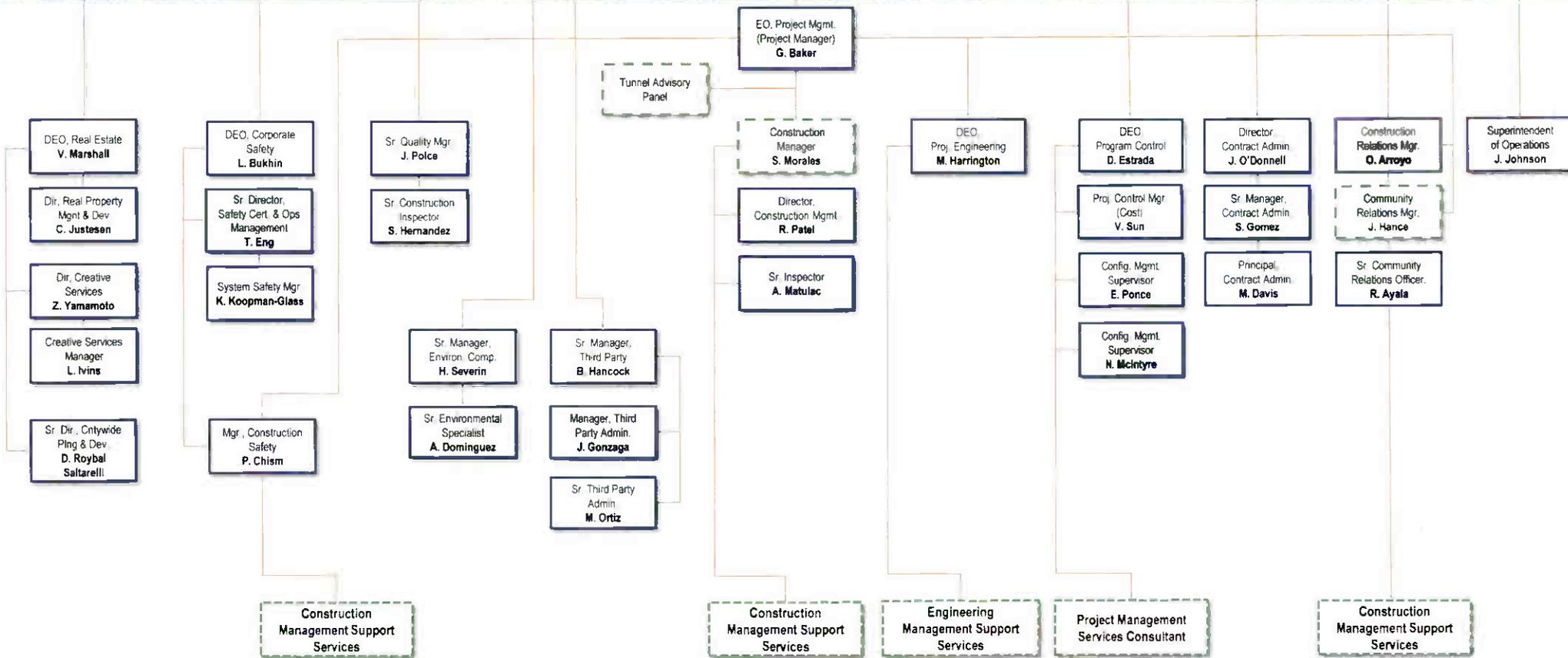


# REGIONAL CONNECTOR TRANSIT PROJECT MATRIX ORGANIZATION

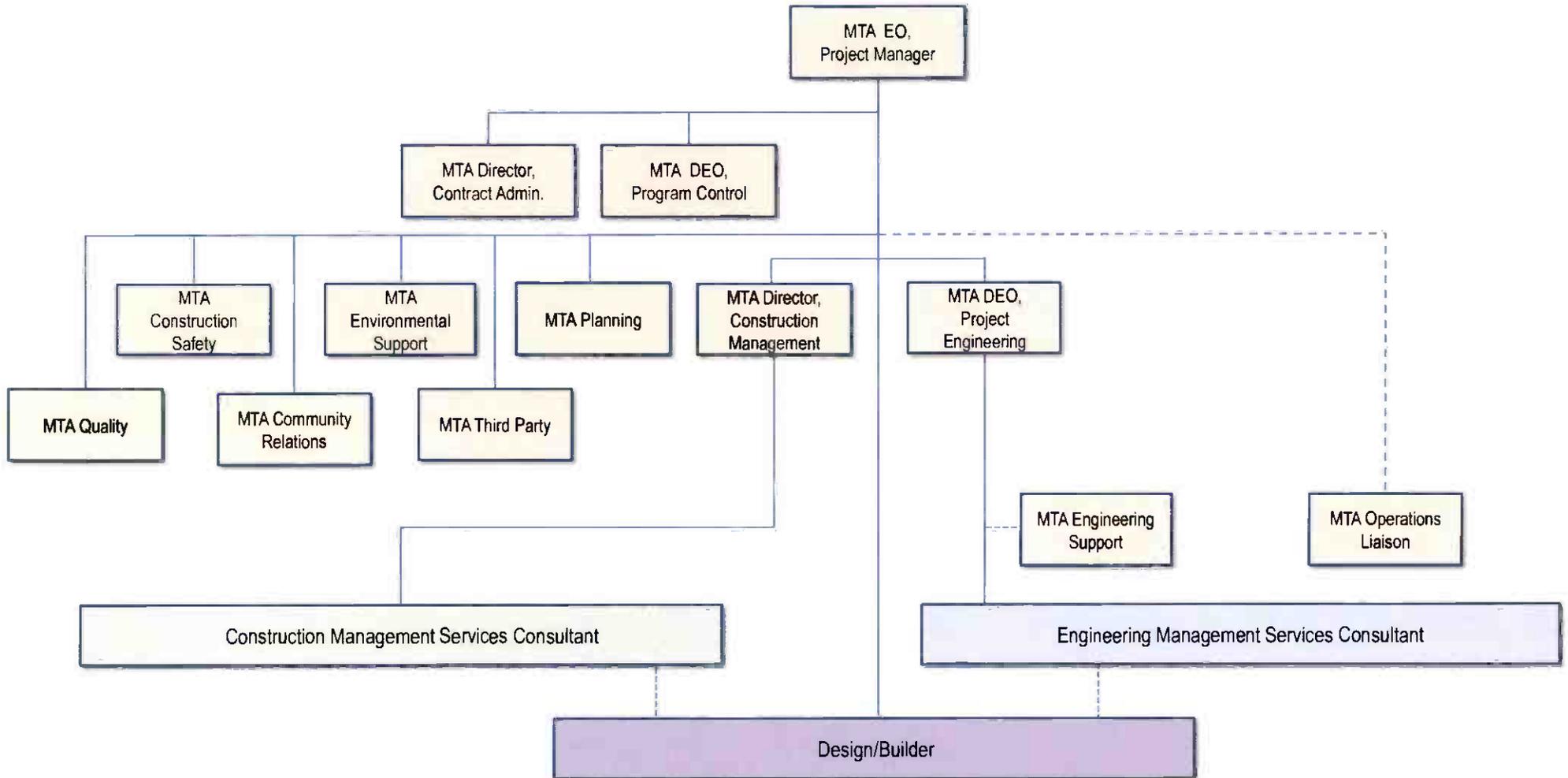
## Metro Executive Management Organization and Staff



## INTEGRATED PROJECT MANAGEMENT TEAM



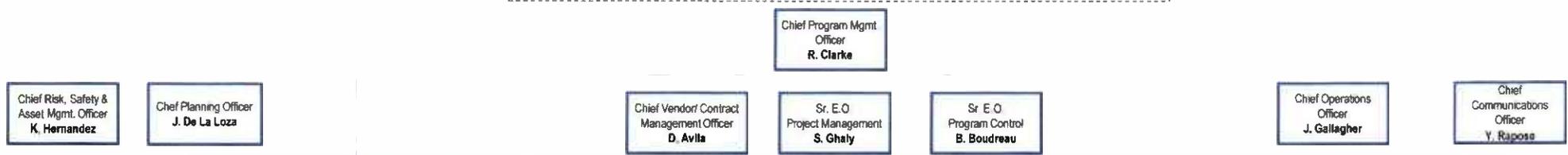
# Regional Connector Transit Project Responsibility and Reporting Matrix



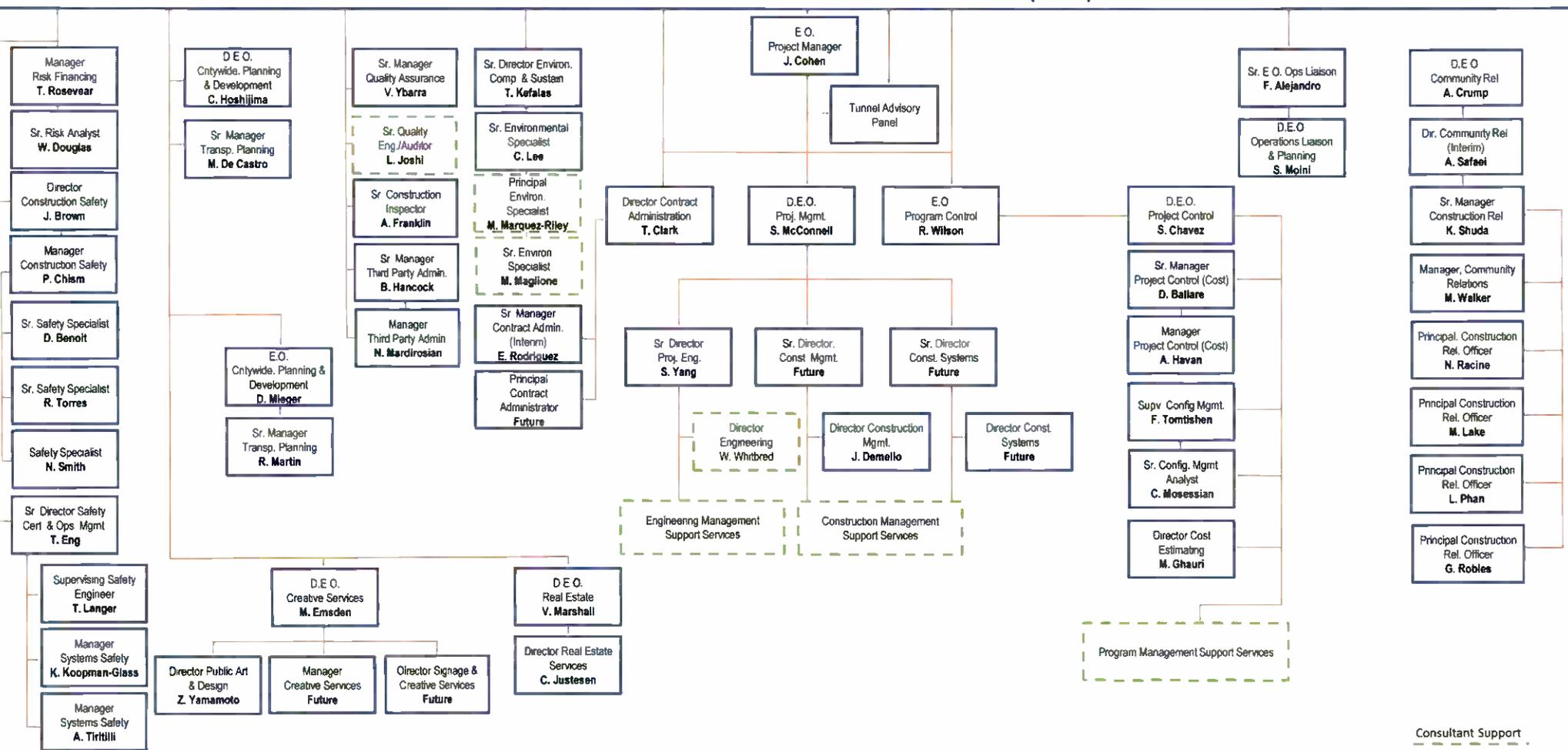
# WESTSIDE PURPLE LINE EXTENSION SECTION 1

## Matrix Organization

### Metro Executive Management Organization and Staff

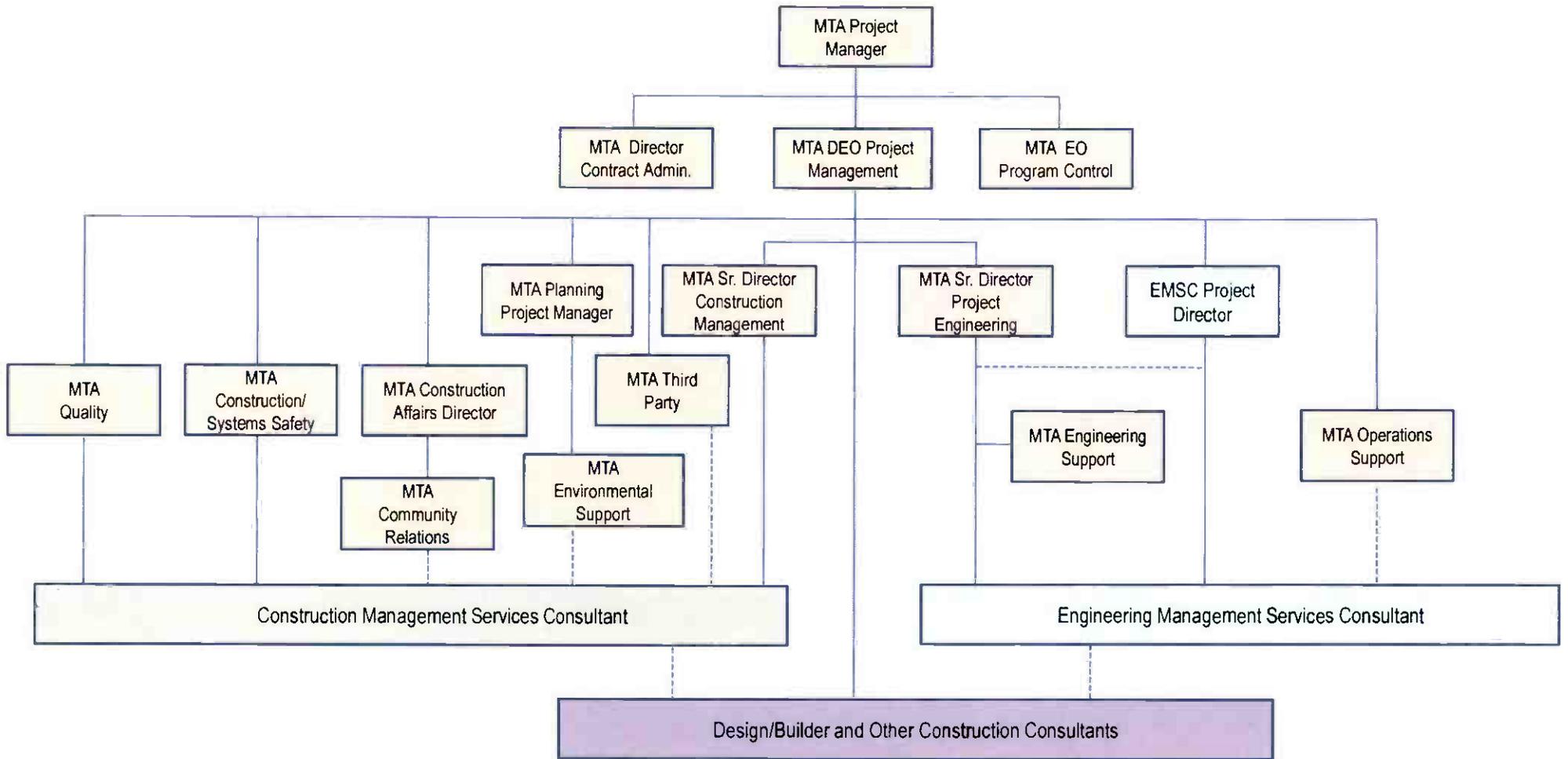


### INTEGRATED PROJECT MANAGEMENT OFFICE TEAM (IPMO)



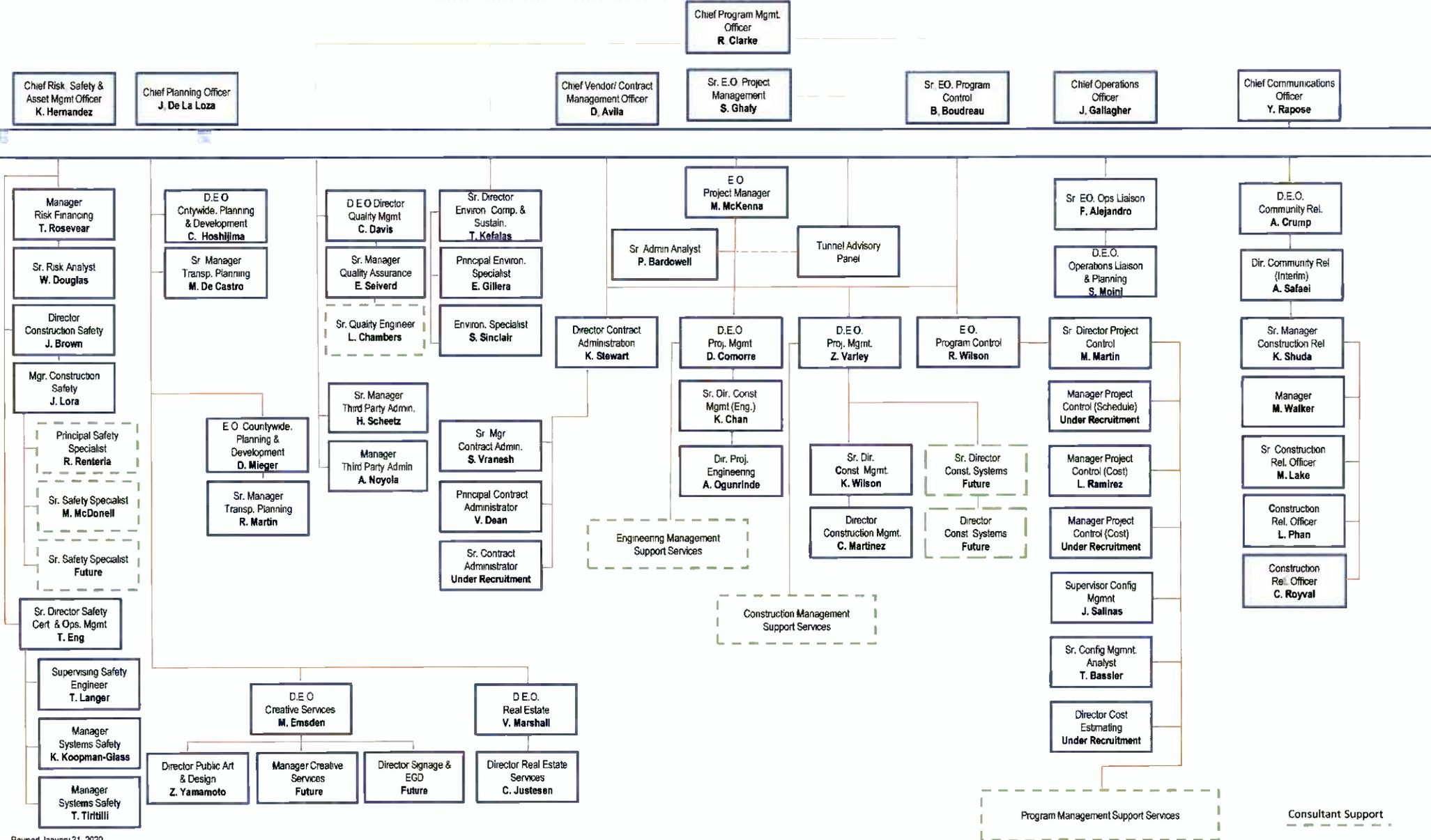
Consultant Support

# Westside Purple Line Extension Section 1 Responsibility and Reporting Matrix

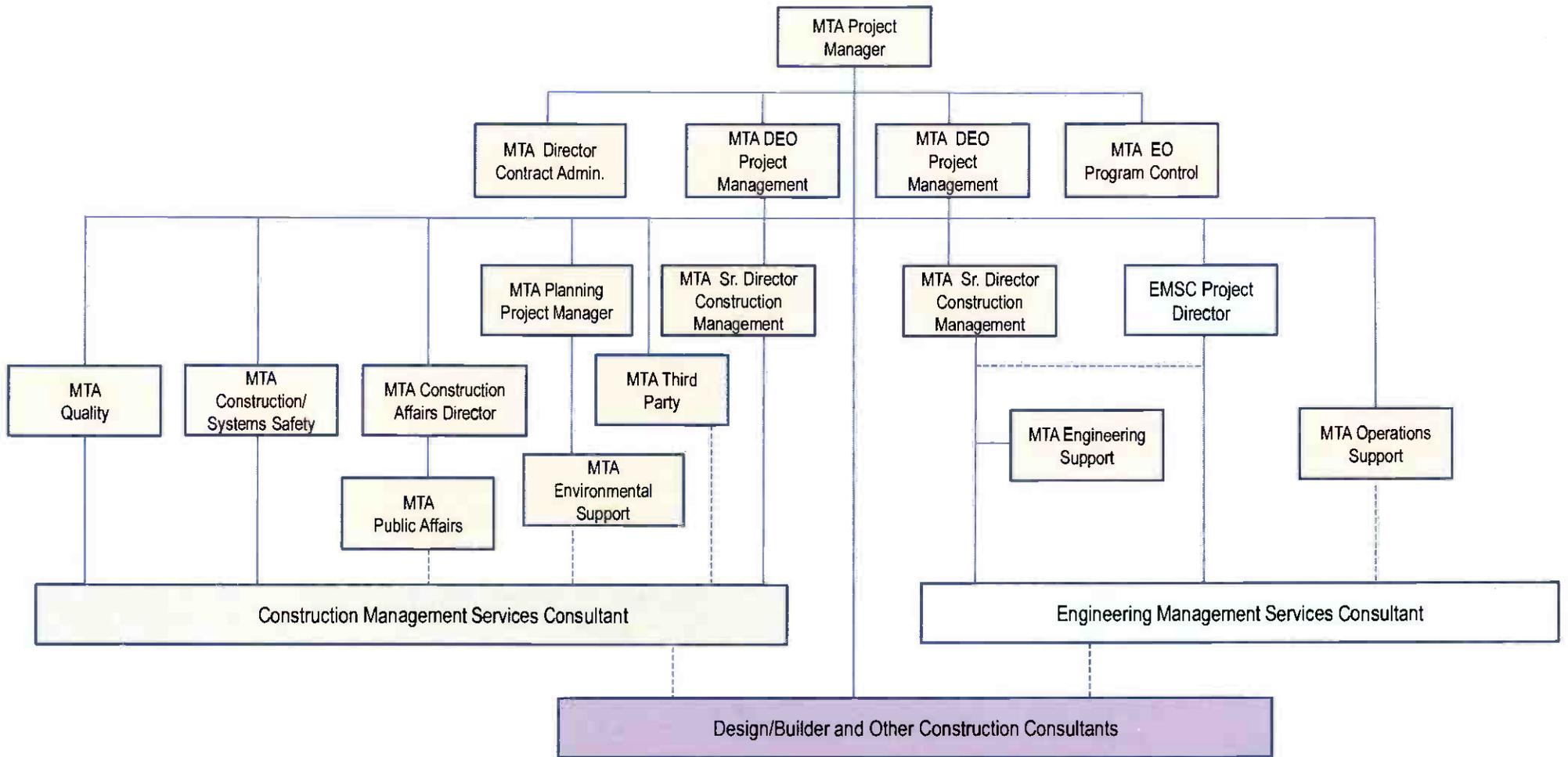


# WESTSIDE PURPLE LINE EXTENSION SECTION 2 Matrix Organization

## Metro Executive Management Organization and Staff

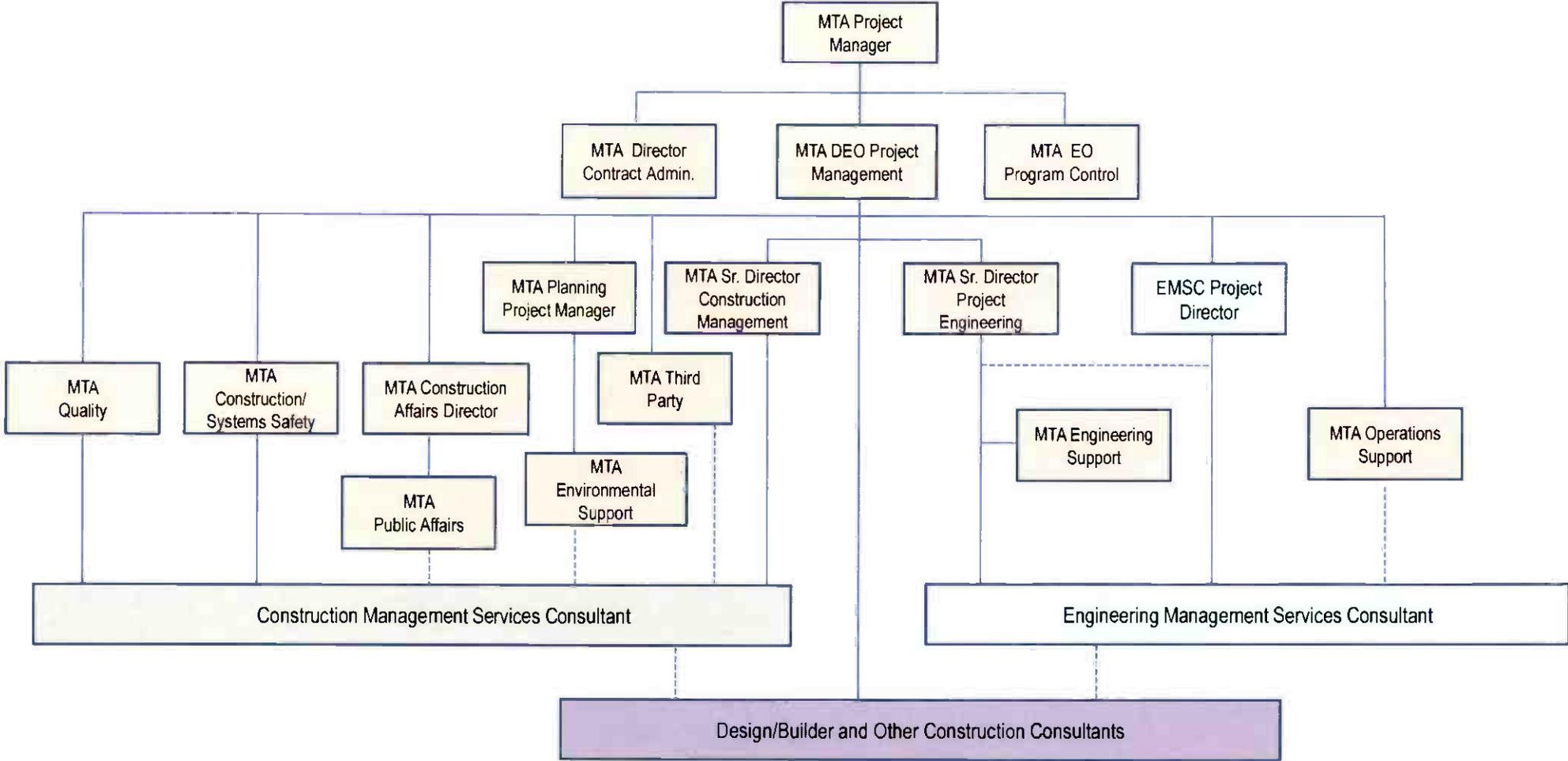


## Westside Purple Line Extension Section 2 Responsibility and Reporting Matrix

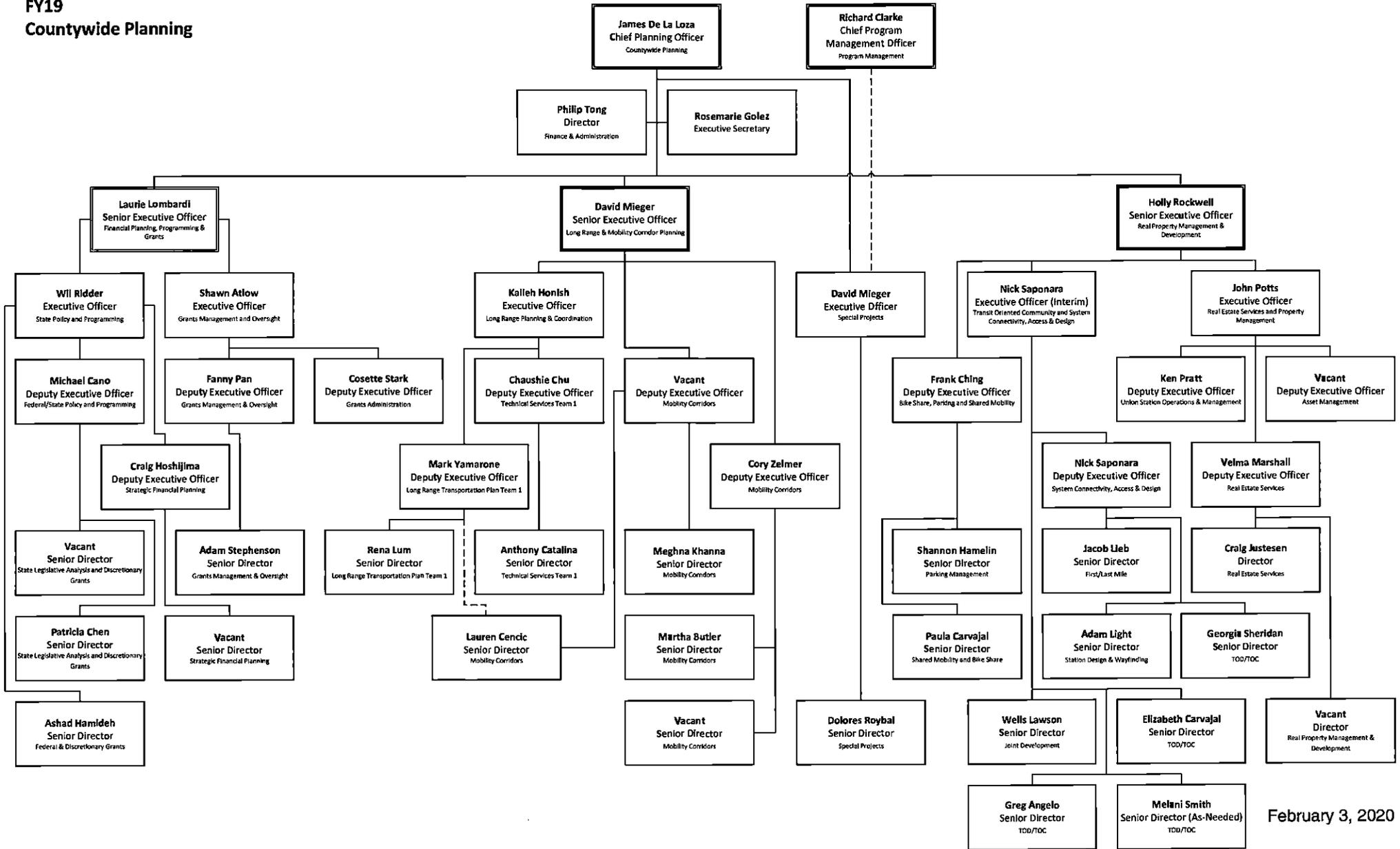




# Westside Purple Line Extension Section 3 Responsibility and Reporting Matrix

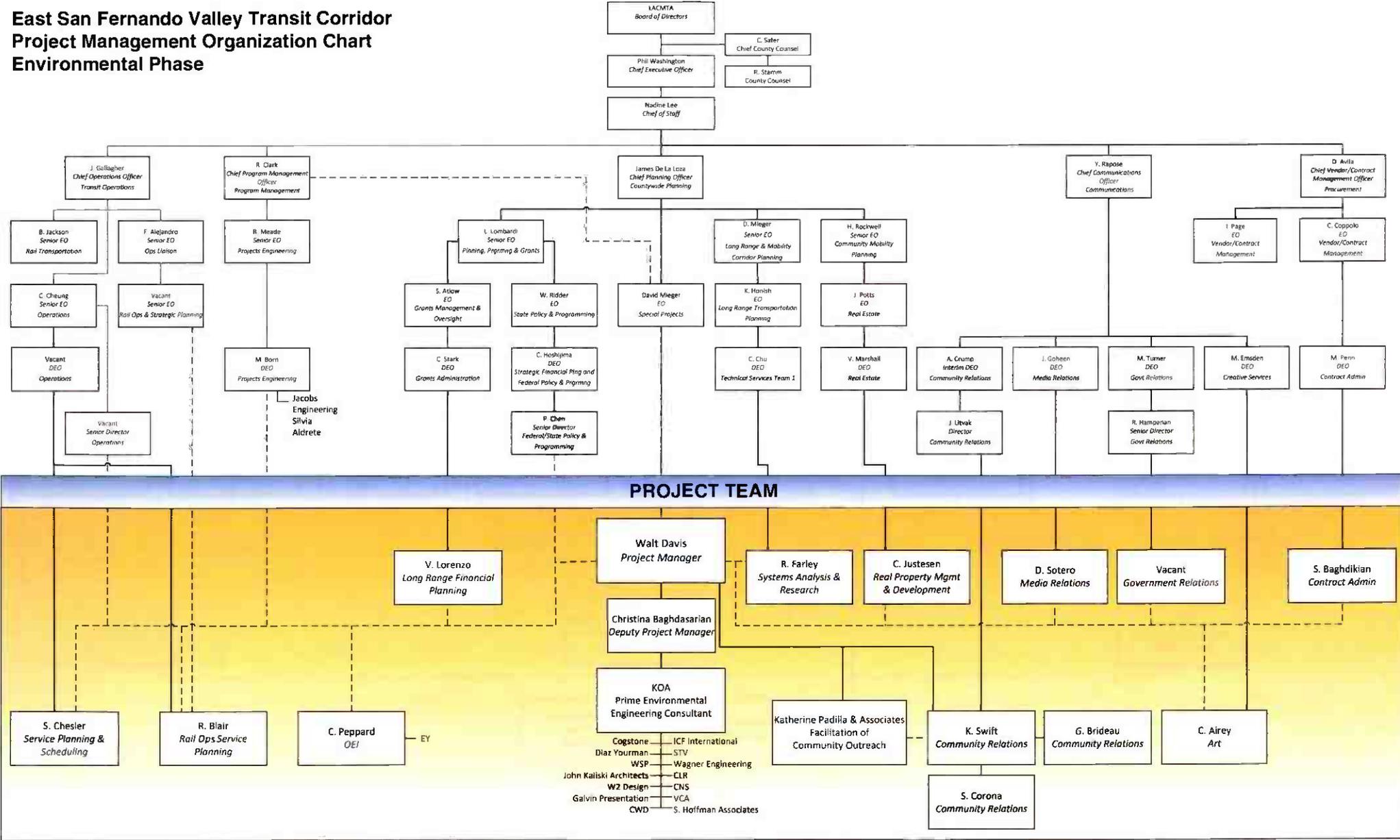


**FY19  
Countywide Planning**



February 3, 2020

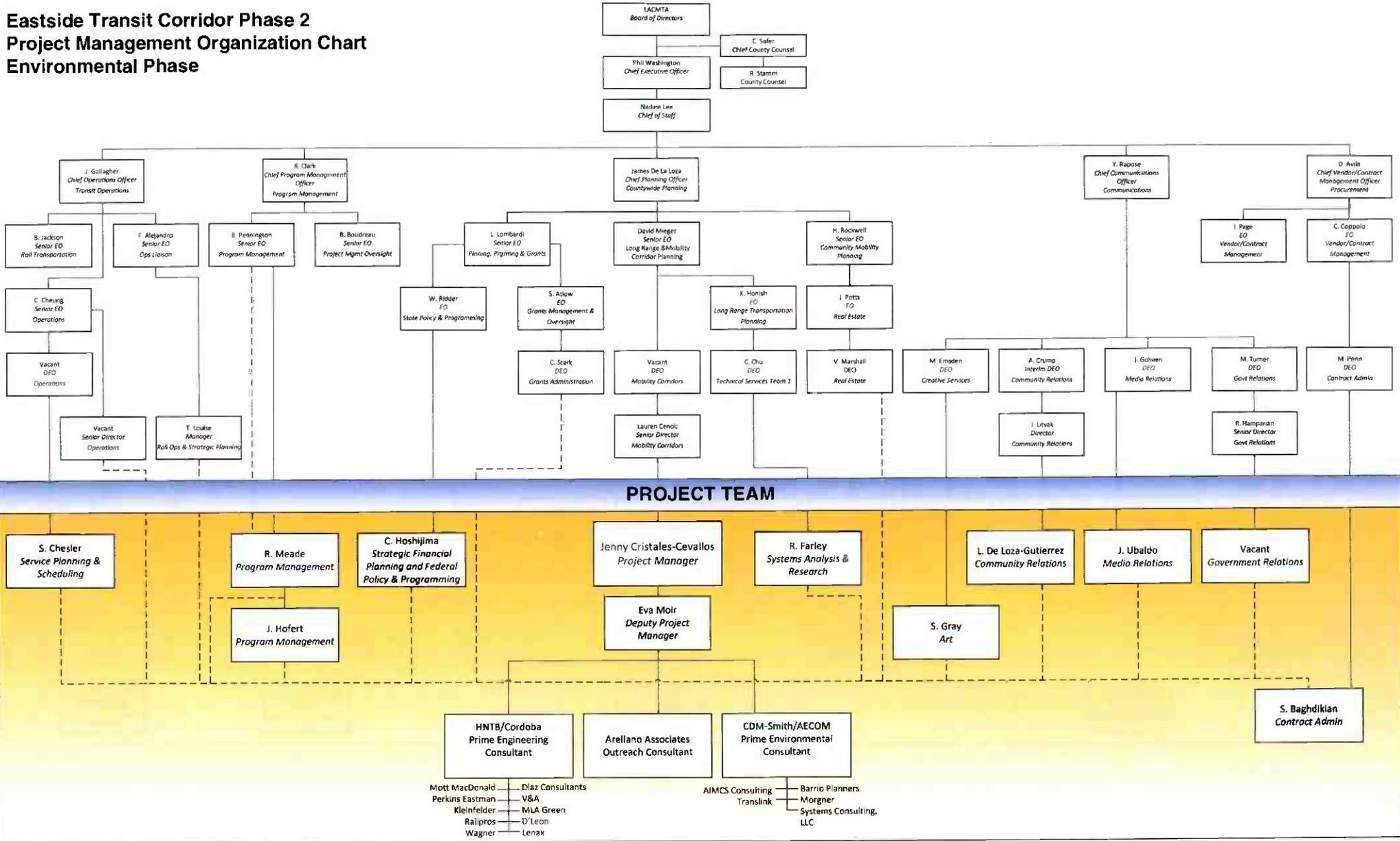
# East San Fernando Valley Transit Corridor Project Management Organization Chart Environmental Phase



February 3, 2020

Legend: ——— Indicates Direct Relationship  
 - - - - - Indicates Coordinated Relationship  
 Yellow Box Project Team

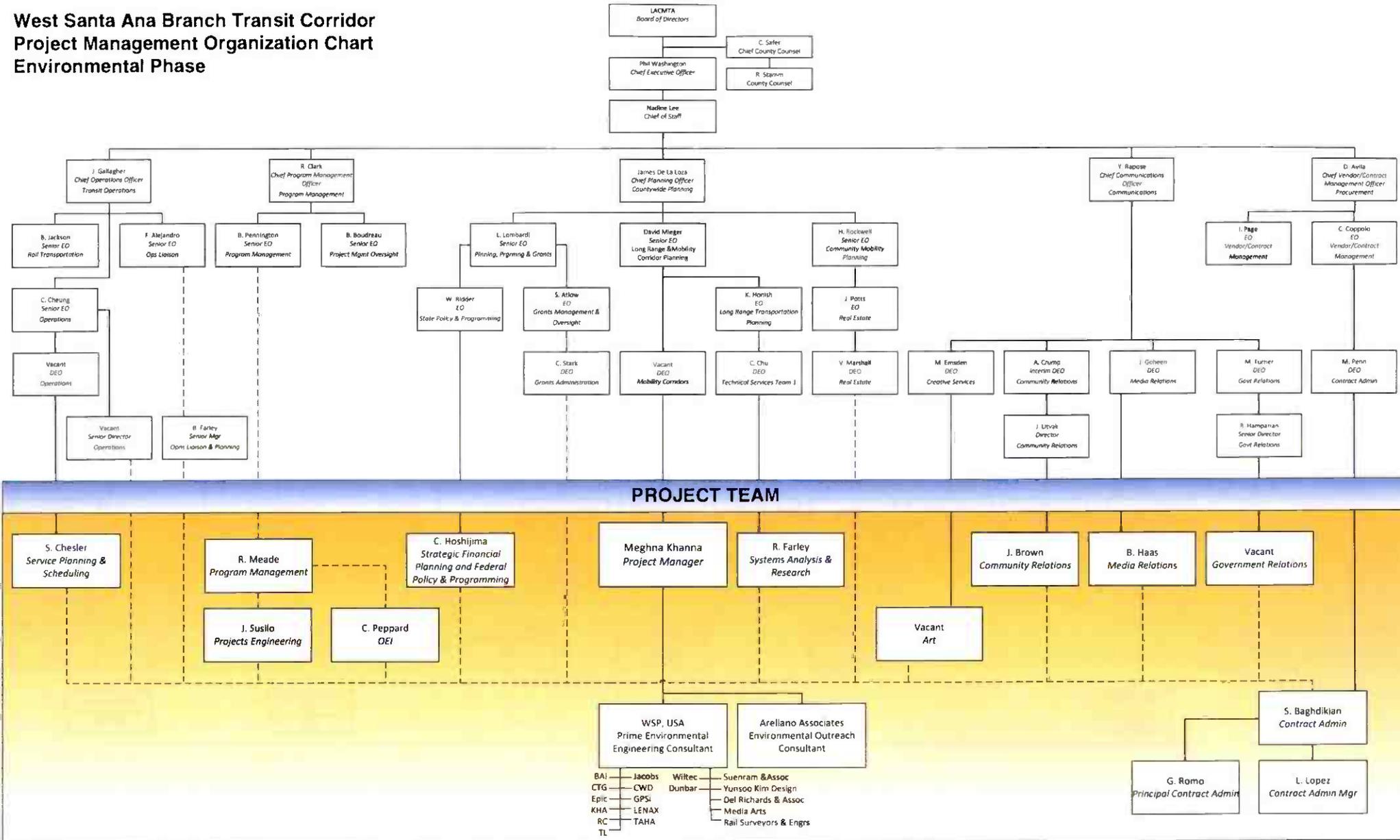
# Eastside Transit Corridor Phase 2 Project Management Organization Chart Environmental Phase



February 3, 2020

Legend: ——— Indicates Direct Relationship  
 - - - - - Indicates Coordinated Relationship  
 [Yellow Box] Project Team

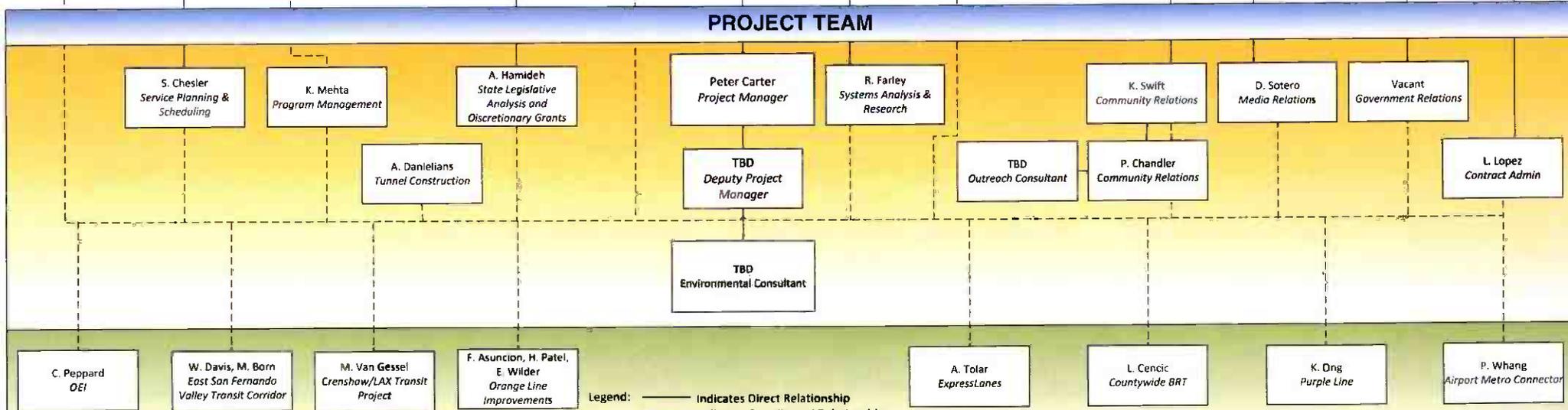
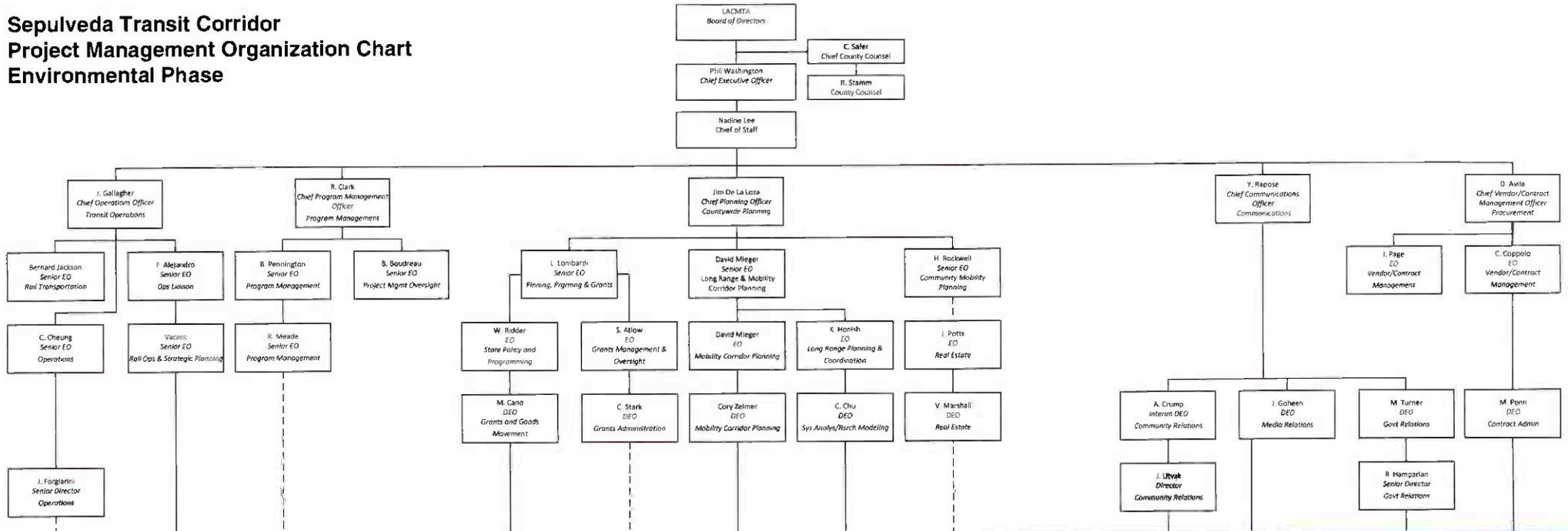
# West Santa Ana Branch Transit Corridor Project Management Organization Chart Environmental Phase



February 3, 2020

Legend: ——— Indicates Direct Relationship  
 - - - - - Indicates Coordinated Relationship  
 [Yellow Box] Project Team

# Sepulveda Transit Corridor Project Management Organization Chart Environmental Phase



February 3, 2020

Legend: — Indicates Direct Relationship  
 - - - Indicates Coordinated Relationship  
 Yellow Box Project Team  
 Light Green Box Related Project/Team

**Los Angeles County Metropolitan Transportation Authority (Metro)  
 State and Federal Legislative Matrix – Board Approved Positions  
 DECEMBER 2019  
 Metro Government Relations**

**STATE LEGISLATION**

<p><a href="#"><u>AB 1112</u></a>  <a href="#"><u>Friedman D</u></a></p> <p>Shared mobility devices:          local regulation.</p>	<p>SENATE 2 YEAR          7/12/2019 - Failed Deadline pursuant          to Rule 61(a)(11). (Last location was          TRANS. on 5/29/2019)(May be acted          upon Jan 2020)</p>	<p>Existing law generally regulates the operation of bicycles, electric bicycles, motorized scooters, and electrically motorized boards. Existing law allows local authorities to regulate the registration, parking, and operation of bicycles and motorized scooters in a manner that does not conflict with state law. This bill would define a “shared mobility device” as a bicycle, electric bicycle, motorized scooter, electrically motorized board, or other similar personal transportation device, that is made available to the public for shared use and transportation, as provided. The bill would require shared mobility devices to include a single unique alphanumeric ID. The bill would allow a local authority to require a shared mobility device provider to provide the local authority with deidentified and aggregated trip data and operational data, including as a condition for operating a shared mobility device program. The bill would prohibit the sharing of individual trip data, except as provided by the Electronic Communications Privacy Act. The bill would allow a local authority to enact reasonable regulations on shared mobility devices and providers within its jurisdiction, including, but not limited to, requiring a shared mobility service provider to obtain a permit. The bill would allow a local authority to ban persons from deploying and offering shared mobility devices for hire on its public right of way, subject to the California Environmental Quality Act. This bill contains other related provisions. <b>Last Amended on 6/19/2019</b></p>	<p>Oppose          Unless          Amended</p>
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DECEMBER 2019  
Metro Government Relations**

<p><a href="#"><u>AB 1262</u></a> <a href="#"><u>O'Donnell D</u></a></p> <p>California Sustainable Freight Action Plan.</p>	<p>ASSEMBLY 2 YEAR 5/17/2019 - Failed Deadline pursuant to Rule 61(a)(5). (Last location was APPR. SUSPENSE FILE on 5/8/2019)(May be acted upon Jan 2020)</p>	<p>Existing law imposes various limitations on the emissions of air contaminants for the control of air pollution from vehicular and nonvehicular sources.Executive Order No. B-32-15 directed the Secretary of Transportation, the Secretary for Environmental Protection, and the Secretary of the Natural Resources Agency to lead other relevant state departments, including the State Air Resources Board, in developing an integrated action plan by July 2016 and to establish targets to improve freight efficiency, transition to zero-emission technologies, and increase the competitiveness of the state’s freight system. The California Sustainable Freight Action Plan was completed in response to Executive Order No. B-32-15.This bill would require, by January 1, 2021, and every 5 years thereafter, the state board, the Department of Transportation, the State Energy Resources Conservation and Development Commission, and the Governor’s Office of Business and Economic Development, in collaboration with relevant stakeholders, to update the California Sustainable Freight Action Plan, as provided. <b>Last Amended on 4/25/2019</b></p>	<p>Support</p>
<p><a href="#"><u>AB 1402</u></a> <a href="#"><u>Petrie-Norris D</u></a></p> <p>Active Transportation Program.</p>	<p>ASSEMBLY 2 YEAR 4/26/2019 - Failed Deadline pursuant to Rule 61(a)(2). (Last location was TRANS. on 3/25/2019)(May be acted upon Jan 2020)</p>	<p>Existing law establishes the Active Transportation Program in the Department of Transportation for the purpose of encouraging increased use of active modes of transportation, such as biking and walking. Existing law requires specified funds for the program to be appropriated to the department in the annual Budget Act and allocated to eligible projects by the California Transportation Commission. Existing law requires the commission to award 50% of available funds to projects statewide, 10% of available funds to projects in small urban and rural regions, and the remaining 40% of available funds to projects by metropolitan planning organizations (MPO), with the funds available for distribution by each MPO based on its relative population. Existing law requires the commission to develop guidelines and procedures, including project selection criteria, for</p>	<p>Oppose Unless Amended</p>

Deferred=bill will be bought up at another time; Chaptered=bill has become law; LA=Last Amended; Enrolled=bill sent to Governor for approval or veto  
Note: "Location" will provide most recent action on the legislation and current position in the legislative process. 2/10/2020  
Bills highlighted in        have been submitted in the current month for Board consideration.

**Los Angeles County Metropolitan Transportation Authority (Metro)  
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<p>the program in consultation with various agencies and interested parties. To ensure that the MPOs have sufficient discretion to develop regional guidelines, existing law authorizes the commission to adopt separate guidelines for the state and the MPOs with regard to project selection criteria. Existing law requires the commission to initially adopt a 2-year program of projects for the program, with subsequent 4-year programs thereafter. This bill would require the department, instead of the commission, to award funds to projects in the statewide and small urban and rural region distribution categories and to adopt a program of projects for those distribution categories. The bill would require that 75% of available funds be awarded to MPO's in urban areas with populations greater than 200,000, in proportion to their relative share of the population, 15% to small urban and rural regions with populations of 200,000 or less, competitively awarded by the department to projects in those regions, and 10% to projects competitively awarded by the department, in consultation with the commission, on a statewide basis. With respect to the funds made available to MPOs, the bill would require the commission to allocate those funds to each MPO as a lump sum for award to projects selected by the applicable MPO. The bill would authorize MPO's to adopt their own guidelines, or use part or all of the guidelines developed by the commission. The bill would also authorize specified county transportation commissions to create their own set of guidelines that govern the funding distribution for their jurisdiction and would require those guidelines to be accepted and incorporated into the MPO guidelines. To the extent the bill imposes additional duties on an MPO, the bill would impose a state-mandated local program. This bill contains other existing laws. <b>Last Amended on 3/26/2019</b></p>
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<p><a href="#">ACA 1</a> <a href="#">Aguiar-Curry D</a></p> <p>Local government financing: affordable housing and public infrastructure: voter approval.</p>	<p>ASSEMBLY THIRD READING 8/19/2019 - Read third time. Refused adoption. Motion to reconsider made by Assembly Member Aguiar-Curry.</p>	<p>(1)The California Constitution prohibits the ad valorem tax rate on real property from exceeding 1% of the full cash value of the property, subject to certain exceptions.This measure would create an additional exception to the 1% limit that would authorize a city, county, city and county, or special district to levy an ad valorem tax to service bonded indebtedness incurred to fund the construction, reconstruction, rehabilitation, or replacement of public infrastructure, affordable housing, or permanent supportive housing, or the acquisition or lease of real property for those purposes, if the proposition proposing that tax is approved by 55% of the voters of the city, county, or city and county, as applicable, and the proposition includes specified accountability requirements. The measure would specify that these provisions apply to any city, county, city and county, or special district measure imposing an ad valorem tax to pay the interest and redemption charges on bonded indebtedness for these purposes that is submitted at the same election as this measure.This bill contains other related provisions and other existing laws. <b>Last Amended on 3/18/2019</b></p>	<p>Support</p>
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<p><a href="#">SB 43</a> <a href="#">Allen D</a></p> <p>Carbon intensity and pricing: retail products.</p>	<p>ASSEMBLY 2 YEAR 7/10/2019 - Failed Deadline pursuant to Rule 61(a)(10). (Last location was REV. &amp; TAX on 6/24/2019)(May be acted upon Jan 2020)</p>	<p>The California Global Warming Solutions Act of 2006 designates the State Air Resources Board as the state agency charged with monitoring and regulating sources of emissions of greenhouse gases. The state board is required to approve a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions level in 1990 to be achieved by 2020 and to ensure that statewide greenhouse gas emissions are reduced to at least 40% below the 1990 level by 2030. This bill would require the state board, no later than January 1, 2022, to submit a report to the Legislature on the findings from a study, as specified, to determine the feasibility and practicality of assessing the carbon intensity of all retail products subject to the tax imposed pursuant to the Sales and Use Tax Law, so that the total carbon equivalent emissions associated with such retail products can be quantified. This bill contains other existing laws. <b>Last Amended on 7/1/2019</b></p>	<p>Work with Author</p>
<p><a href="#">SB 152</a> <a href="#">Beall D</a></p> <p>Active Transportation Program.</p>	<p>SENATE 2 YEAR 5/17/2019 - Failed Deadline pursuant to Rule 61(a)(5). (Last location was APPR. SUSPENSE FILE on 5/13/2019)(May be acted upon Jan 2020)</p>	<p>Existing law establishes the Active Transportation Program in the Department of Transportation for the purpose of encouraging increased use of active modes of transportation, such as biking and walking. Existing law requires specified funds for the program to be appropriated to the department in the annual Budget Act and allocated to eligible projects by the California Transportation Commission. Existing law requires the commission to award 50% of available funds to projects competitively awarded by the commission on a statewide basis, 10% of available funds to projects in small urban and rural regions, and the remaining 40% of available funds to projects selected by metropolitan planning organizations (MPO) in urban areas with populations greater than 200,000, with the available funds distributed to each MPO based on its relative share of the population. Existing law requires the commission to develop guidelines and project selection criteria for the program in consultation with various</p>	<p>Oppose Unless Amended</p>

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		<p>agencies and interested parties. To ensure that MPOs have sufficient discretion to develop regional guidelines, existing law authorizes the commission to adopt separate guidelines for the state and the MPOs with regard to project selection criteria. Existing law requires the commission to initially adopt a 2-year program of projects for the program, with subsequent 4-year programs thereafter. This bill would require that 60% of available funds be awarded to projects selected by MPOs in urban areas with populations greater than 200,000, with the available funds distributed to each MPO based on its relative share of the population, 15% to fund projects in small urban and rural regions, and 25% to projects competitively awarded by the commission on a statewide basis. The bill would require, rather than authorize, the commission to adopt separate guidelines for the MPOs to ensure that they have sufficient discretion to adopt regional guidelines and would not limit those guidelines to project selection criteria. The bill would authorize an MPO to perform its own competitive project selection process in accordance with the regional guidelines adopted by the commission, or to request the commission to perform the competitive project selection process on the MPO's behalf in accordance with guidelines adopted by the commission for the projects awarded in small urban and rural regions and on a statewide basis. With respect to the funds made available to MPOs, the bill would require the commission to allocate those funds as a lump sum to the department for disbursement to each MPO for award to projects selected by the applicable MPO, unless the MPO requests the commission to conduct the competitive selection process on behalf of the MPO. The bill would authorize the commission to authorize the department to allocate a portion of the funds in the small urban and rural and the statewide distribution categories and, if the MPO requests the commission to perform the competitive project selection process on its</p>	
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		behalf, to allocate a portion of those funds. The bill would make the provisions of the bill apply only to the 5th and successive funding cycles of the Active Transportation Program. <b>Last Amended on 4/25/2019</b>	
<b>SB 664</b> <b>Allen D</b>  Electronic toll and transit fare collection systems.	ASSEMBLY 2 YEAR 9/15/2019 - Failed Deadline pursuant to Rule 61(a)(15). (Last location was P. & C.P. on 9/10/2019)(May be acted upon Jan 2020)	(1)Existing law requires the Department of Transportation, in cooperation with the Golden Gate Bridge, Highway and Transportation District and all known entities planning to implement a toll facility, to develop and adopt functional specifications and standards for an automatic vehicle identification system, in compliance with specified objectives, including that a vehicle owner shall not be required to purchase or install more than one device to use on all toll facilities, and generally requires any automatic vehicle identification system purchased or installed after January 1, 1991, to comply with those specifications and standards. Existing law authorizes operators of toll facilities on federal-aid highways engaged in an interoperability program to provide only specified information regarding a vehicle's use of the toll facility. This bill would expand the above-described objective so that a user of a toll facility shall also not be required to purchase or install more than one device to use on all toll facilities. The bill would limit the above-described authorization to those operators engaged in an interstate interoperability program. The bill would assert that these provisions are declarative of existing law. This bill contains other related provisions and other existing laws. <b>Last Amended on 9/10/2019</b>	Support

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FEDERAL		
BILL/AUTHOR	DESCRIPTION	STATUS
<b>H.R. 2164</b>  Representative Julia Brownley (CA)	<b>The Green Bus Act of 2019</b>  This bill would provide funding for the purchase of electric buses and require that purchases using federal funding be restricted to zero-emission buses by 2029.	5/23/19 – Metro Board approved Support position  House – Bill referred to the Committee of Transportation and Infrastructure.
<b>H.R. 1139</b>  U.S. Representative Grace Napolitano (D-El Monte)	<b>THE TRANSIT WORKER AND PEDESTRIAN PROTECTION ACT</b> Would give transit agencies two years to develop a Bus Operations Safety Risk Reduction Program in partnership with their transit workforce, and with oversight from the U.S. Department of Transportation (USDOT).  The bill authorizes \$25 million per year for 5 years to pay for the implementation of these safety improvements as part of their Bus Operations Safety Risk Reduction Programs: <ul style="list-style-type: none"> <li>• Assault mitigation infrastructure and technology, including barriers to prevent assaults on bus operators</li> <li>• De-escalation training for bus operators</li> <li>• Modified bus specifications and retrofits to reduce visibility impairments</li> <li>• Driver assistance technology that reduces accidents</li> <li>• Installation of enhanced bus driver seating to reduce ergonomic injuries</li> </ul>	7/29/18 – Metro Board approves Support Work With Author position for a similar bill  House - Referred to the Subcommittee on Highways and Transit

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**Los Angeles County Metropolitan Transportation Authority (Metro)  
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	This legislation will also require transit agencies to report all assaults on bus drivers to the USDOT's National Transit Database (NTD).	
<b>H.R. 4101/S. 2404</b>  Representative Karen Bass (CA-37) and U.S. Senator Kirsten Gillibrand	<b>Build Local, Hire Local Act</b>  This bill would allow for geographic based hiring to take place on federally funded projects, among other provisions related to U.S. Employment Plan use, and transparency and accountability provisions related to Buy America. The legislation, if approved in its current form, would require the use of Local Hire on all federally funded infrastructure projects, not just projects funded through U.S. Department of Transportation. The bill includes an increase in the required set-aside for SBE and DBE participation for federally funded contracts. The bill also develops new best value procurement standards that give preference to bids that use the U.S. Employment Plan.	9/26/19: Board adopts a Support position
<b>S. 2302</b>  U.S. Senator John Barrasso (R-WY)	<b>America's Transportation Infrastructure Act of 2019</b>  This bill reauthorizes, for a period of five years, the highway title and programs included in the surface transportation authorization bill. The ATIA is largely a bill that builds on the FAST Act – while making very few changes to existing formula funding programs. The bill would provide \$287 billion over five years (\$259 billion for formula programs), which represents an increase of 27% over the FAST Act authorized funding levels. The legislation authorizes over \$6 billion in new competitive grants for shovel ready bridge investments. The legislation provides \$5.5 billion for the Nationally Significant Freight and Highway Projects Program. The bill provides over \$4.9 billion over five years to protect roadways and bridges from natural disasters, such as extreme weather events. The legislation also authorizes \$125 million for a national research program and statewide pilot projects to test road usage fees and other alternatives to the existing 18.4 cent federal gas tax.	9/26/19: Board adopts a Work with Author position

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**COUNTY OF LOS ANGELES  
OFFICE OF THE COUNTY COUNSEL**

**TRANSPORTATION DIVISION  
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LOS ANGELES, CALIFORNIA 90012-2952**

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**MARY C. WICKHAM  
County Counsel**

**January 16, 2020**

**Martia Fox, Esq.  
Regional Counsel, Region IX  
FEDERAL TRANSIT ADMINISTRATION  
90 Seventh Street, Suite 15-300  
San Francisco, CA 94103**

**Re: Quarterly Update on Status of Key Legal Actions**

**Dear Ms. Fox:**

Attached please find the Los Angeles County Metropolitan Transportation Authority's quarterly update as of December 31 2019, on the status of MTA litigation related to federally-funded MTA projects.

If you have any questions, please call (213) 922-2529.

Very truly yours,

**MARY C. WICKHAM  
County Counsel**

By   
**JOANNE NIELSEN  
Principal Deputy County Counsel**

**JKN:rw  
Attachments**

**c: Charles M. Safer  
Ray Tellis  
Cindy Smouse/Terri Slimmer  
Brian Boudreau  
Emma Nogales  
Cosette Stark  
Kathy Banh**

Los Angeles County Metropolitan Transportation Authority  
 Status of Key MTA Litigation Related to Federally-Funded MTA Projects  
 As of December 31, 2019

CASE NAME	CASE NUMBER	GRANT NUMBER	NARRATIVE	CASE STATUS
Beverly Hills Unified School District	2:18-cv-00716	CA-2016-047 TIFA-2017-1003A	Plaintiff alleges that MTA and FTA violated federal law (NEPA, §4(f); §106 and the APA) by issuing the Record of Decision approving the FEIS and FSEIS for the Purple Line Extension Project.	Complaint filed in USDC on 1/26/18. Final Ruling on cross-motions for Summary Judgment will be issued after Court ordered discovery and briefing on single remaining issue, i.e., whether Metro and FTA took a hard look at availability of 1950 Avenue of the Stars for construction staging in Century City.
City of Beverly Hills v. FTA, MTA	2:18-cv-03891	CA-2016-047 TIFA-2017-1003A	This lawsuit is against both MTA and the Federal Transit Administration ("FTA"), and their respective officials. The lawsuit alleges that the Supplemental Environmental Impact Statement issued by FTA in November 2017 for MTA's Purple Line Extension Project, Section 2 fails to comply with the National Environmental Policy Act and with Section 4(f) of the Department of Transportation Act.	Settlement talks are continuing. No court hearings are scheduled. MTA's answer due by 3/30/20.
Today's IV. Inc. v. MTA	BS160846	CA2016-046 CA003-0825 TIFA-2013-1008A	Petitioner alleges that MTA is not maintaining access to the hotel and complying with applicable noise standards in violation of the MMRP.	Trial is set for 3/30/20. Discovery is ongoing. Court's ruling on MTA's motion for judgment on the pleadings expected soon.
Leo Jordan v MTA	BC710101 consolidated with BC686270		This is a personal injury case wherein the plaintiff, a wheelchair passenger, alleged he was travelling on an Access van when the van collided with another vehicle and caused him injuries as a result of the accident. The plaintiff also alleged an ADA violation because the Access van driver failed to properly secure and	MTA tendered this case to Access on 8/17/18 pursuant to the MOU between MTA and Access. Tender was accepted on 9/27/18.  Court consolidated case with BC686270 Terryanne Butler v

CASE NAME	CASE NUMBER	GRANT NUMBER	NARRATIVE	CASE STATUS
			transport him.	Maria Refugio Gomez. LACMTA. Court designated Butler case as lead case. Trial has been continued to 2/10/20; FSC on 1/31/20

**FTA-Funded Excess Real Property and ALAP Parcels  
Utilization Report**

**Period: October 1, 2019 – December 31, 2019**

**Wilshire/Vermont Station (Parcels B2-113 through B2-121; ALAP Parcel B2-118) – NO CHANGE**

These parcels encompass the 5.8-acre Wilshire/Vermont station site and a 1.02-acre site located across Shatto Place from the station site on the northeast corner of Wilshire Boulevard and Shatto Place. All property on the station site that is not used to support Metro rail operations has been sold or ground leased for development through Metro's joint development program. The ground leased portion of this site contains a mixed-use, transit-oriented development operated by Klein Financial and consists of 449 apartments (90 affordable) and approximately 36,000 square feet of retail space. The sold property contains an 800-student LAUSD middle school. The 1.02-acre site, situated across the street from the station site, is currently used as a Metro bus layover facility.

**Temple/Beaudry (ALAP Parcels B-102 and B-103) – NO CHANGE**

This site is currently being used to support Metro bus operations.

**Wilshire/La Brea (ALAP Parcel A2-362) – NO CHANGE**

This site has been turned over to the Westside Subway Project for construction of the Metro Purple Line extension's Wilshire/La Brea station.

**Wilshire/Crenshaw (ALAP Parcels A1-300 and A2-301) – NO CHANGE**

This property has been turned over to the Westside Subway Project to be used for construction staging with respect to the Metro Purple Line extension project.

**Universal City Station (Parcels C3-750 through C3-755, C3-757 through C3-776, C3-778, C3-785, C3-786; ALAP Parcels A4-755, A4-765, A4-767, A4-772, A4-774 and A4-761) – NO CHANGE**

This site is currently being used to house a portion of the Metro Red Line's Universal City station, a bus layover facility and a park-and-ride lot.

**North Hollywood Station & Southwest Corner of Lankershim/Chandler (Parcels C3-806, C3-810, C3-812, C3-813, C3-815, C3-821-1 through C3-821-3, C3-825 and C3-826; ALAP Parcel C4-815) – NO CHANGE**

These parcels encompass 15.6 acres that include the Metro Red Line's North Hollywood station site, its adjoining bus layover facility and park-and-ride lot, and a vacant 1.8-acre lot located on the southwest corner of Lankershim and Chandler

Boulevards. Federal assistance was used to acquire 11.18 acres of this property.

In May 2017, the Metro Board authorized an Exclusive Negotiation Agreement and Planning Document (“ENA”) with developers Trammell Crow Company (“TCLA”). Metro has since been working with TCLA to refine plans for the new transit center to be constructed as part of the project and negotiate terms for a Joint Development Agreement. In October 2019, the Metro Board authorized the extension of the ENA to allow additional time to prepare and submit project entitlement documents, including a Draft Specific Plan.

The development program for the site contemplates 1,000 to 1,200 market rate apartments, 250 to 325 affordable apartments, 300,000 to 400,000 square feet of office space, and 80,000 to 150,000 square feet of retail uses. TCLA has submitted updated conceptual drawings for the project, which are under review by Metro's internal stakeholders. The Developer has initiated community outreach and engagement, starting with a series of breakfast meetings held at the Lankershim Depot in North Hollywood. In October 2018, FTA approved Metro's joint development project request subject to final review of, and concurrence with, the JDA and ground leases.

**Westlake/MacArthur Park Station (ALAP Parcels A1-209, A1-211, A1-220, A1-221/225, A1-222 and A1-224)**

These parcels encompass the 1.8-acre Westlake/MacArthur Park station site, situated between Alvarado Boulevard and Westlake Avenue, and a 1.6-acre site located one block southeast of the station site. These sites were anticipated to house a two-phased, transit-oriented development by McCormack Baron Salazar (“MBS”) known as “Phase A” and “Phase B.”

Phase A of this development - a mixed-use project that includes 90 affordable apartments, 20,000 sq. ft. of retail space and a 233-space parking structure, with 100 preferred parking spaces for transit users - was constructed in May 2012 and has been in operation on the 1.6-acre site since then. Phase A is situated on land ground leased by Metro to development entities created by MBS.

In May 2017, a Joint Development Agreement between Metro and MBS for the development of Phase B expired, leaving it available for development. An unsolicited proposal for this site's development was submitted in December 2017. A proposal evaluation team reviewed this proposal in accordance with Metro's Unsolicited Proposal Policy and Process. The PET recommended the proposal to be advanced to the next stage of consideration. Per FTA requirements and the JD UP Policy, Metro published its interest in the joint development of the site in order to provide adequate opportunity for competing proposals. The posting period has ended, a competing proposal has been received and is currently under review. Once the evaluation is complete, the evaluation committee may recommend to the Metro Board to consider entering into an Exclusive Negotiation Agreement and Planning Document with the selected Proposer.

**Southwest corner of 1<sup>st</sup>/Boyle (Parcels ED-121 through ED-125, ED-191, ED-193 and ED-194) – NO CHANGE**

On March 19, 2015, Metro and a MBS development entity entered into a ground lease for the construction and operation of a mixed-use, transit-oriented development on this 1.5-acre vacant site which is situated across the street from the Metro Gold Line's Mariachi Plaza station. The proposed development is an 80-unit, affordable apartment project with approximately 4,000 square feet of retail space. Construction of the development was substantially completed in June of 2017 and residential move-in was completed in July of 2017. MBS is still seeking a tenant for the project's retail space.

**Mariachi Plaza Station (Parcels ED-130 through ED-132, ED-134 and ED-135)**

These parcels encompass the Metro Gold Line's 1.3-acre Mariachi Plaza station site. In March 2018, Metro and East LA Community Corporation ("ELACC") entered into an Exclusive Negotiation Agreement and Planning Document, which has allowed Metro and ELACC to explore ELACC's proposal to construct and operate a mixed-use development on a portion of the station site. In August 2019, Metro and ELACC amended the Exclusive Negotiation Agreement and Planning Document to extend its term through September 14, 2020. The proposed project contemplates 60 affordable apartments targeted to low income families and young adults; 6,340 square feet of street-level retail facing the plaza; a 6,000 square foot community garden on the southeast corner of Pennsylvania/Bailey; and a 2,035 square foot Mariachi Cultural Center. Since execution of the Exclusive Negotiation Agreement and Planning Document, ELACC has engaged with the community, and worked with Metro to refine the project's scope and design. This process continues. Next steps for ELACC will include working with the City of Los Angeles to obtain project entitlements and environmental clearance, and negotiating/completing a term sheet setting forth the key terms and conditions to be included in a Joint Development Agreement and ground lease with Metro.

**Southeast corner of Pennsylvania/Bailey (Parcel ED-147) – NO CHANGE**

This 0.14-acre vacant lot, situated across Bailey Street from the Mariachi Plaza Station site, is included as part of ELACC's proposed Mariachi Plaza joint development project. (See the update for Mariachi Plaza Station above for details.) ELACC's proposal contemplates developing this parcel into a community garden. During the quarter, this site was leased to a local business for customer parking.

**Soto Station (Parcels ES-548, ES-549, ES-551A, ES-551B and ES-553 through ES-555)**

These parcels encompass the Metro Gold Line's 1.09-acre Soto station site and a 0.29-acre, Metro-owned parcel located across Soto Street from the station. In June 2016, Metro and Bridge Housing Corporation/East LA Community Corporation ("Bridge/ELACC") entered into an Exclusive Negotiation Agreement and Planning Document with respect to the development of these properties. In December 2018 and

December 2019, Metro and Bridge/ELACC extended the term of the Exclusive Negotiation Agreement and Planning Document. This agreement is now scheduled to expire on December 31, 2020. Under the framework of this agreement, and a prior Short Term Exclusive Negotiation Agreement and Planning Document, Bridge/ELACC has continued to work with Metro to refine the project's scope and design with input from community stakeholders. These efforts have led to a proposed mixed-use project, known as Los Lirios, that will be constructed on a portion of 1.09-acre Soto station site and will provide 64 affordable apartments (44 of which will be affordable, to families earning 30-50% of Area Median Income and 20 of which will be supportive housing for the formerly homeless), along with approximately 2,400 square feet of ground floor retail space. In addition, Bridge/ELACC is proposing to rehabilitate the Peabody/Werden Historic Home, which is currently being stored on the 0.29-acre site under a license granted by Metro, to provide community space and other community serving uses. This rehabilitation will be pursued separately from the Los Lirios project since separate funding sources are required to complete the rehabilitation work.

In August 2018, the Los Lirios project was recommended for inclusion in City of Los Angeles Housing and Community Investment Department's affordable housing funding pipeline. This was a major milestone for the project and is key to its financial structure. In May 2019, Bridge/ELACC submitted their entitlements application to the City of Los Angeles for the Los Lirios portion of the project and amended their submittal in July 2019 to address City questions and concerns. Bridge/ELACC anticipates receiving project entitlements, including environmental clearance under the California Environmental Quality Act, in Spring of 2020.

The next steps for Bridge/ELACC include securing other project financing that is not secured via the affordable housing pipeline, and negotiating/completing a term sheet setting forth the key terms and conditions to be included in a Joint Development Agreement and ground lease with Metro.

### **1<sup>st</sup>/Lorena (Parcel EG-409)**

This 1.27-acre site is mostly vacant but does house a traction power substation for the Metro Gold Line. Metro and A Community of Friends ("**ACOF**") are parties to an Exclusive Negotiation Agreement and Planning Document to explore the feasibility of constructing and operating a mixed-use development on this site. This agreement will expire in June 2021. The proposed development contemplates 49 apartments targeting veterans (32 of which will be supportive housing) and approximately 7,500 - 10,000 square feet of retail space. Pre-entitlement community outreach has been completed and the project has been approved by the Boyle Heights Neighborhood Council and the Metro-established Boyle Heights Design Review Advisory Committee.

This project is on hold pending adjudication of an appeal filed by the adjacent property owner with respect to a Superior Court ruling in favor of the City of Los Angeles and ACOF in a lawsuit filed by the adjacent property owner regarding the City of Los Angeles' clearance of the project under the California Environmental Quality Act. The adjacent property owner's appeal was filed in August 2019 and follows their April 2018

lawsuit and April 2016 administrative appeal regarding the City's environmental clearance.

**Cesar E. Chavez/Soto (Parcels EE-220 and EE-272 through EE-274)**

This 1.96-acre site was acquired by Metro for an extension of the Metro Red Line into Boyle Heights, a project that was replaced by the extension of the Metro Gold Line to the Eastside.

In January 2018, Metro and Abode Communities (“**Abode**”) executed a Joint Development Agreement consistent with key terms and conditions approved by the Metro Board in November 2017. Under the purview of this agreement, Abode is advancing the project's design and securing project financing, among other things. Upon completion of these tasks in accordance with the Joint Development Agreement, the parties will execute a ground lease for the construction and operation of the project, which will contain provisions consistent with Metro Board-approved key terms and conditions. Execution of the ground lease is anticipated in mid-2020.

The project is scoped to contain 77 apartments for families earning between 30% and 50% of the area median income and approximately 8,000 square feet of ground floor retail space.

**Cesar E. Chavez/Fickett (Parcels EE-276 through EE-283)**

This 1.56-acre site sits across Matthews Street from the Cesar E. Chavez/Soto site and was also acquired by Metro for an extension of the Metro Red Line into Boyle Heights. In March 2018, Metro and Abode entered into an Exclusive Negotiation Agreement and Planning Document, which has allowed Metro and Abode to explore Abode's proposal to construct and operate a mixed-use development on the site. In August 2019, Metro and Abode amended the Exclusive Negotiation Agreement and Planning Document to extend its term through August 31, 2020. The proposed project contemplates 60 affordable apartments targeted to low income families; a 25,000 square foot community serving grocery store and a 6,500 square foot community park. Since the Exclusive Negotiation Agreement and Planning Document was executed, Abode has refined the project's scope and design, including design changes to address the needs and concerns of potential grocery store operators. Abode has also discussed the viability and operation of the project's proposed community park with Metro and the City of Los Angeles Department of Recreation and Parks and is now looking at other options for the proposed park space given the City's plan to construct and operate a community park just southerly of the project site. Next steps for Abode include a viable option for the project's previously proposed community park space, finalizing the proposed project's conceptual design, launching and leading outreach efforts with the community, working with the City of Los Angeles to obtain project entitlements and environmental clearance, and negotiating/completing a term sheet setting forth the key terms and conditions to be included in a Joint Development Agreement and ground lease with Metro.

Throughout the quarter, Metro leased a portion of this site to a community

organization for parking.

Los Angeles County  
Metropolitan Transportation Authority  
California

# OPERATIONS MONTHLY RAIL PERFORMANCE REPORT

DECEMBER 2019



# METRO RAIL PERFORMANCE – DECEMBER 2019

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## Metro Rail Scorecard Overview

Metro operates heavy rail, the Red and Purple Lines, from Union Station to North Hollywood and Union Station to Wilshire/Western. Data for Red and Purple lines are reported under Metro Red line in this report.

Metro also operates four light rail lines: Blue Line from Downtown to Long Beach, Green Line along the 105 freeway, Gold Line from Azusa to East Los Angeles, and Expo Line from Los Angeles to Santa Monica.

Metro Rail is responsible for the operation of approximately 104 heavy rail cars and 203 light rail cars carrying nearly 110 million passengers each year.

Also included in this report are Key Performance Indicators for Wayside, which is in the process of being developed.

Measurement	FY 2017	FY 2018	FY 2019	FY 2020 Target	FY 2020 YTD	FYTD Status	Oct Month	Nov Month	Dec Month
<b>Systemwide</b>									
On-Time Pullouts	99.61%	99.68%	99.72%	99.80%	99.69%		99.54%	99.93%	99.58%
Mean Miles Between Chargeable Mechanical Failures <sup>3</sup>	22	11	39,034	44,540	36,307		40,179	30,991	31,223
In-Service On-time Performance	100.00%	590.00%	98.81%	99.10%	98.55%		99.04%	97.45%	98.05%
Service Delivery Ratio	2300.00%	3070.00%	99.56%	99.70%	99.69%		99.69%	99.69%	99.60%
Traffic Accidents Per 100,000 Train Miles	16.00	4.00	0.68	0.85	0.76		1.08	0.28	1.23
CPUC Reportable Accidents per 100,000 Train Miles	5.00	3.20	0.29	0.37	0.50		0.93	0.14	0.95
Passenger Accidents per 100,000 Boardings	15.000	8.300	0.014	0.010	0.007		0.000	0.013	0.000
Complaints per 100,000 Boardings	82.00	1.81	1.83	1.10	1.55		1.44	1.80	1.30
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours <sup>1,2</sup>	12.27	11.17	11.43	10.05	13.41		17.95	9.39	18.46
Lost Work Days per 200,000 Exposure Hours <sup>1,2</sup>	733	886	800	821.44	797		622	714	-
OSHA Injuries per 200,000 Exposure Hours <sup>1,2</sup>	8.53	7.61	7.23	6.43	9.51		13.46	8.45	-
<b>Wayside Maintenance &amp; Engineering</b>									
Past-Due Preventive Maintenance - Aging of Outstanding Work Orders	0	0	12	N/A	170	N/A	27	37	80
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	5.35	5.02	5.31	5.40	7.83		0.00	7.56	8.41
Lost Work Days per 200,000 Exposure Hours <sup>1</sup>	194	312	218	296	147		240	216	0
OSHA Injuries per 200,000 Exposure Hours <sup>1</sup>	4.01	4.01	3.84	4.13	6.32		3.29	7.56	0
<b>Blue Line</b>									
On-Time Pullouts	99.60%	99.39%	99.46%	99.50%	99.57%		100.00%	100.00%	99.16%
Mean Miles Between Chargeable Mechanical Failures <sup>3</sup>	15,405	13,772	22,391	22,391	26,144		81,831	15,479	16,500
In-Service On-time Performance	96.44%	97.11%	98.13%	98.80%	97.76%		99.60%	93.14%	94.73%
Service Delivery Ratio	98.54%	98.42%	99.31%	99.40%	99.53%		99.88%	99.64%	98.87%
Traffic Accidents Per 100,000 Train Miles	2.18	1.63	1.05	1.84	2.07		3.33	0.70	3.33
CPUC Reportable Accidents per 100,000 Train Miles	0.71	1.03	0.38	0.40	1.88		3.33	0.70	3.33
Passenger Accidents per 100,000 Boardings	0.046	0.033	0.013	0.010	0.000		0.000	0.000	0.000
Complaints per 100,000 Boardings	1.67	2.22	1.73	1.40	2.85		1.73	4.25	1.96
New Workers' Compensation Indemnity Claims per	16.74	13.95	14.22	11.90	16.99		17.70	11.17	29.84
Lost Work Days per 200,000 Exposure Hours <sup>1</sup>	836	1,016	695	953	1,107		1,179	1,164	-
OSHA Injuries per 200,000 Exposure Hours <sup>1</sup>	10.40	8.10	5.96	5.93	7.20		5.90	11.17	-

<sup>1</sup> There is a One Month lag in reporting this data

<sup>2</sup> Includes Operations, RFS and Wayside

<sup>3</sup> MMBMF for each line is based on Actual Vehicle Revenue Miles since hub miles are not available by the line operated. Vehicles from Division 11 may operate on the Expo or Blue Line.

Green - High probability of achieving the target (on track). Meets Target at 100% or better.

Yellow - Uncertain if the target will be achieved -- slight problems, delays or management issues. Falls below Target 70 - 99%.

Red - High probability that the target will not be achieved -- significant problems and/or delays. Falls below Target >70%.

N/A = Not Available

Measurement	FY 2017	FY 2018	FY 2019	FY 2020 Target	FY 2020 YTD	FYTD Status	Oct Month	Nov Month	Dec Month
<b>Red Line</b>									
On-Time Pullouts	99.95%	99.88%	99.85%	100.00%	99.93%		100.00%	100.00%	100.00%
Mean Miles Between Chargeable Mechanical Failures <sup>3</sup>	104,637	68,407	58,255	94,165	56,456		54,195	93,139	53,627
In-Service On-time Performance	99.39%	99.33%	99.41%	99.70%	99.53%		99.67%	99.67%	99.27%
Service Delivery Ratio	99.72%	99.65%	99.73%	100.00%	99.80%		99.79%	99.84%	99.84%
Traffic Accidents Per 100,000 Train Miles	0.57	0.64	0.57	0.57	0.42		0.00	0.86	0.83
CPUC Reportable Accidents per 100,000 Train Miles	0.14	0.21	0.28	0.21	0.00		0.00	0.00	0.00
Passenger Accidents per 100,000 Boardings	0.004	0.000	0.002	0.000	0.005		0.000	0.000	0.000
Complaints per 100,000 Boardings	1.19	1.16	1.35	0.55	0.73		0.75	0.76	0.76
New Workers' Compensation Indemnity Claims per	12.68	11.80	14.74	10.80	10.29		17.01	15.50	11.08
*Lost Work Days per 200,000 Exposure Hours	992	827	755	809	600		388	593	-
*OSHA Injuries per 200,000 Exposure Hours	7.52	4.99	9.67	3.89	4.50		0.00	5.17	-

<b>Green Line</b>									
On-Time Pullouts	99.69%	99.59%	99.85%	99.70%	99.58%		98.73%	100.00%	100.00%
Mean Miles Between Chargeable Mechanical Failures <sup>3</sup>	16,375	21,614	22,144	22,651	24,311		25,914	24,366	36,105
In-Service On-time Performance	98.69%	98.72%	98.76%	99.00%	98.77%		98.69%	99.08%	99.48%
Service Delivery Ratio	99.61%	99.38%	99.70%	100.00%	99.82%		99.81%	99.81%	99.89%
Traffic Accidents Per 100,000 Train Miles	0.48	0.34	0.25	0.35	0.13		0.00	0.00	0.00
CPUC Reportable Accidents per 100,000 Train Miles	0.07	0.00	0.06	0.40	0.00		0.00	0.00	0.00
Passenger Accidents per 100,000 Boardings	0.048	0.010	0.021	0.010	0.000		0.000	0.000	0.000
Complaints per 100,000 Boardings	2.08	1.69	2.08	1.20	2.00		2.20	1.32	1.17
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	9.14	12.87	6.82	11.52	10.73		8.58	9.67	0.00
*Lost Work Days per 200,000 Exposure Hours	712	984	1,321	930	945		895	808	-
*OSHA Injuries per 200,000 Exposure Hours	6.65	9.84	5.31	8.70	10.83		25.75	0.00	-

<b>Gold Line</b>									
On-Time Pullouts	99.82%	99.84%	99.58%	100.00%	99.69%		100.00%	100.00%	99.13%
Mean Miles Between Chargeable Mechanical Failures <sup>3</sup>	38,427	43,588	40,584	49,281	35,272		32,936	34,327	33,234
In-Service On-time Performance	97.61%	98.19%	98.50%	98.80%	97.38%		98.41%	96.55%	97.82%
Service Delivery Ratio	98.88%	99.07%	99.39%	99.50%	99.58%		99.58%	99.77%	99.59%
Traffic Accidents Per 100,000 Train Miles	0.61	0.55	0.55	0.51	0.55		0.92	0.00	0.47
CPUC Reportable Accidents per 100,000 Train Miles	0.25	0.26	0.25	0.40	0.23		0.46	0.00	0.00
Passenger Accidents per 100,000 Boardings	0.030	0.086	0.044	0.010	0.014		0.000	0.000	0.000
Complaints per 100,000 Boardings	2.77	2.65	2.71	1.80	2.49		2.35	2.28	1.75
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	14.31	14.24	14.15	11.67	21.13		48.90	5.36	23.59
*Lost Work Days per 200,000 Exposure Hours	1,055	1,146	1,391	993	1,692		1,039	989	-
*OSHA Injuries per 200,000 Exposure Hours	9.69	11.87	10.61	8.94	17.60		29.34	10.72	-

<b>Expo Line</b>									
On-Time Pullouts	98.76%	99.71%	99.87%	99.70%	99.64%		99.17%	99.73%	99.87%
Mean Miles Between Chargeable Mechanical Failures <sup>3</sup>	33,402	57,013	93,728	93,278	38,658		44,227	30,998	32,331
In-Service On-time Performance	98.48%	98.72%	98.93%	98.90%	98.78%		98.47%	97.83%	98.49%
Service Delivery Ratio	99.46%	99.54%	99.67%	99.80%	99.70%		99.53%	99.37%	99.81%
Traffic Accidents Per 100,000 Train Miles	1.26	1.78	1.19	1.26	1.20		2.70	0.00	1.74
CPUC Reportable Accidents per 100,000 Train Miles	0.63	1.30	0.56	0.40	1.05		2.70	0.00	1.74
Passenger Accidents per 100,000 Boardings	0.018	0.010	0.010	0.010	0.011		0.000	0.074	0.000
Complaints per 100,000 Boardings	3.68	2.20	2.11	1.40	1.93		1.90	2.08	1.69
New Workers' Compensation Indemnity Claims per	19.26	12.57	16.21	11.84	15.88		20.96	7.25	41.16
*Lost Work Days per 200,000 Exposure Hours	887	1,470	980	1,343	643		244	812	-
*OSHA Injuries per 200,000 Exposure Hours	16.60	9.92	9.73	9.92	12.91		27.95	14.50	-

\* There is One Month lag in reporting this data

<sup>3</sup> MMBMF for each line is based on Actual Vehicle Revenue Miles since hub miles are not available by the line operated.

Vehicles from Division 11 may operate on the Expo or Blue Line.

● Green - High probability of achieving the target (on track). Meets Target at 100% or better.

○ Yellow - Uncertain if the target will be achieved -- slight problems, delays or management issues. Falls below Target 70 - 99%.

● Red - High probability that the target will not be achieved -- significant problems and/or delays. Falls below Target >70%.

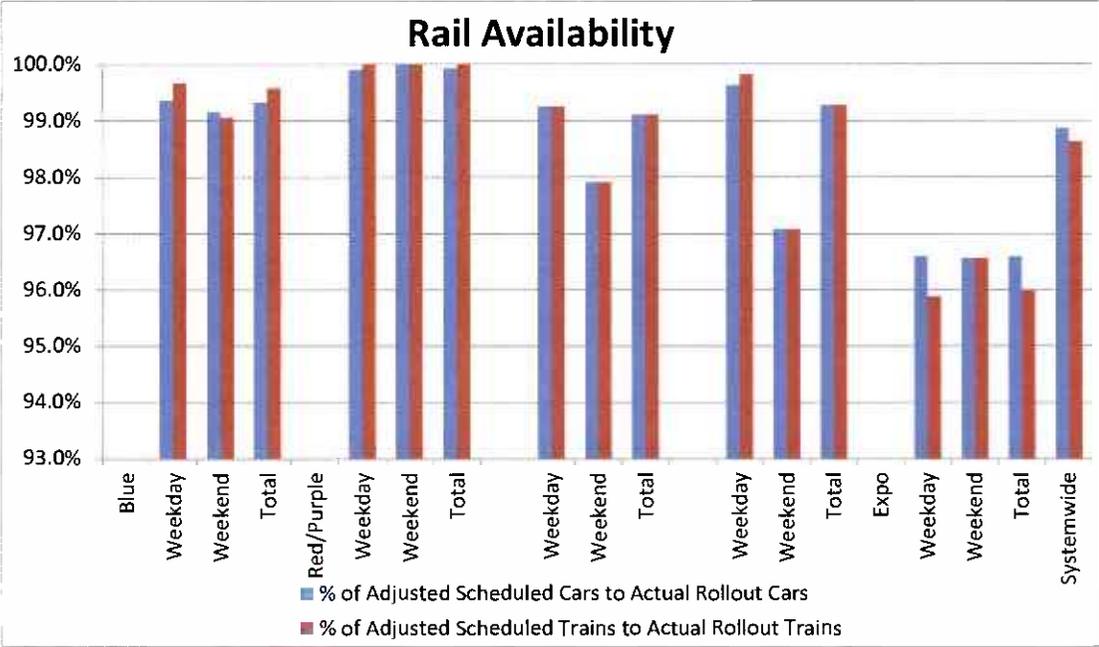
N/A = Not Available

## Vehicle Availability Dec 2019

Day Type	% of Adjusted Scheduled Cars to Actual Rollout Cars	% of Adjusted Scheduled Trains to Actual Rollout Trains
<b>Blue</b>		
Weekday	99.36%	99.67%
Weekend	99.16%	99.07%
<b>Total</b>	<b>99.33%</b>	<b>99.58%</b>
<b>Red/Purple</b>		
Weekday	99.91%	100.00%
Weekend	100.00%	100.00%
<b>Total</b>	<b>99.93%</b>	<b>100.00%</b>
<b>Green</b>		
Weekday	99.26%	99.26%
Weekend	97.92%	97.92%
<b>Total</b>	<b>99.11%</b>	<b>99.11%</b>
<b>Yellow</b>		
Weekday	99.64%	99.82%
Weekend	97.10%	97.10%
<b>Total</b>	<b>99.28%</b>	<b>99.28%</b>
<b>Expo</b>		
Weekday	96.61%	95.89%
Weekend	96.58%	96.58%
<b>Total</b>	<b>96.60%</b>	<b>96.00%</b>
<b>Systemwide</b>	<b>98.87%</b>	<b>98.64%</b>

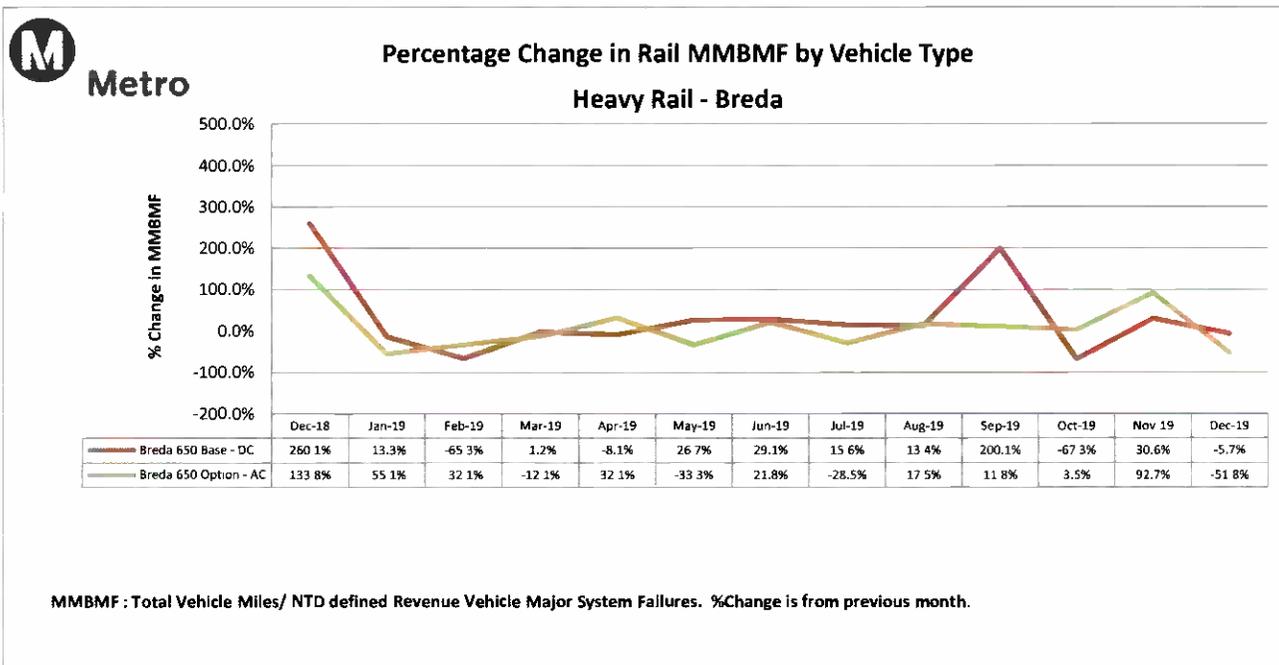
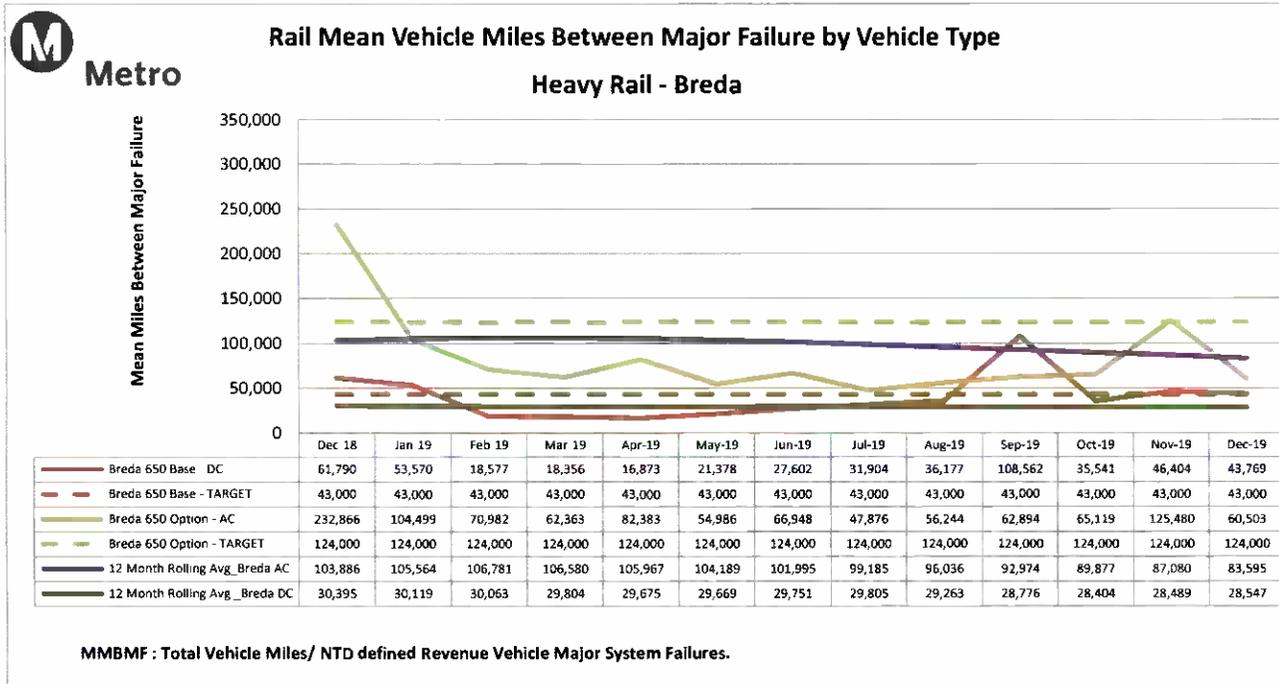
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# METRO RAIL PERFORMANCE – DECEMBER 2019

## Rail Performance by Vehicle Type





Metro

### Rail Mean Vehicle Miles Between Major Failure by Vehicle Type

#### Light Rail - Breda



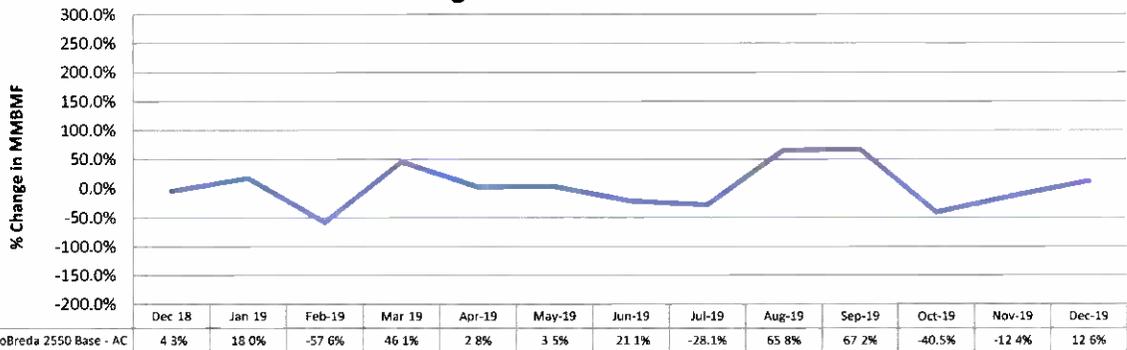
MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.



Metro

### Percentage Change in Rail MMBMF by Vehicle Type

#### Light Rail - Breda

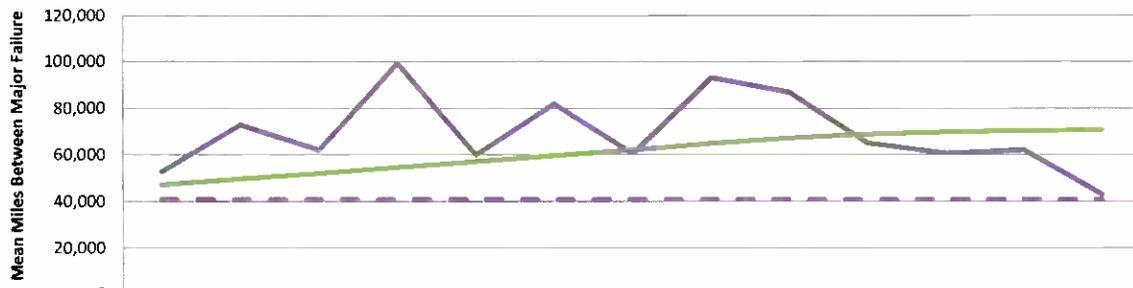


MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures. %Change is from previous month.



Metro

### Rail Mean Vehicle Miles Between Major Failure by Vehicle Type Light Rail - KinkiSharyo



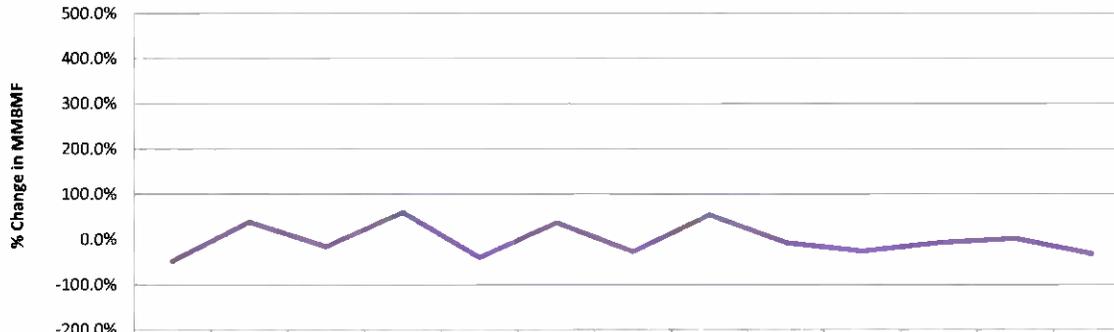
	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
KinkiSharyo P3010 *	52,753	73,160	62,116	99,363	60,035	82,231	60,578	93,288	87,046	65,240	60,618	62,154	43,136
KinkiSharyo P3010 - TARGET	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000
12 Month Rolling Avg Kinkisharyo P3010	47,286	49,760	52,080	54,615	57,102	59,695	62,225	65,092	67,415	68,948	69,915	70,479	70,729

MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.



Metro

### Percentage Change in Rail MMBMF by Vehicle Type Light Rail - KinkiSharyo



	Dec-18	Jan 19	Feb 19	Mar 19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
KinkiSharyo P3010 *	-46.9%	38.7%	-15.1%	60.0%	-39.6%	37.0%	-26.3%	54.0%	-6.7%	-25.1%	-7.1%	2.5%	-30.6%

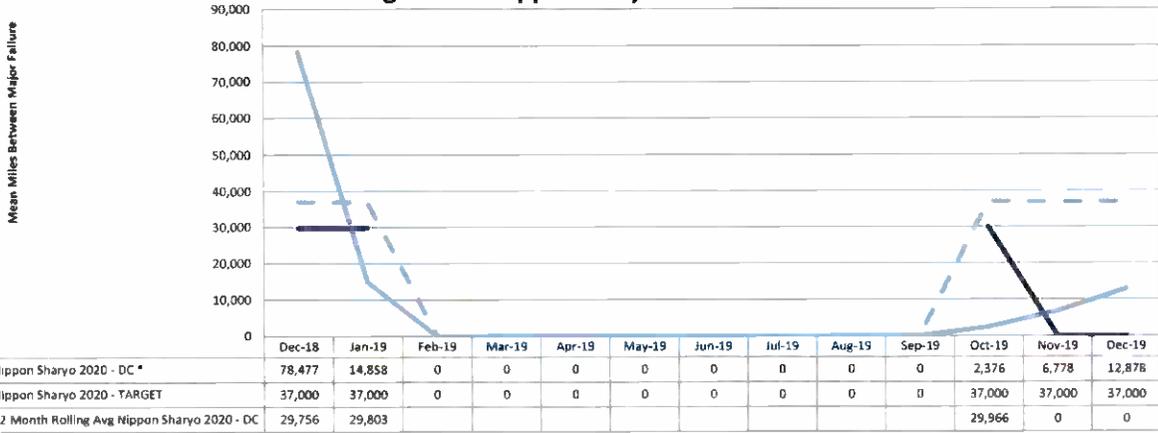
MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures. %Change is from previous month.



Metro

### Rail Mean Vehicle Miles Between Major Failure by Vehicle Type

#### Light Rail - NipponSharyo



\* Nippon Sharyo 2020 Cars did not operate starting in February 2019 to September 2019

\*\* Nippon Sharyo 865 -DC Cars have been retired starting September 2018

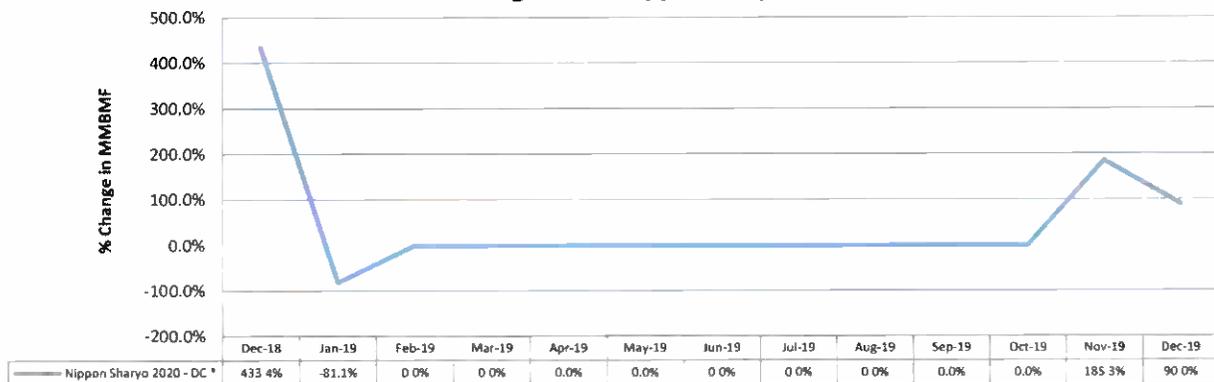
MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.



Metro

### Percentage Change in Rail MMBMF by Vehicle Type

#### Light Rail - NipponSharyo



\* Nippon Sharyo 2020 did not between February 2019 and September 2019

\*\* Nippon Sharyo 865 -DC Cars have been retired starting September 2018

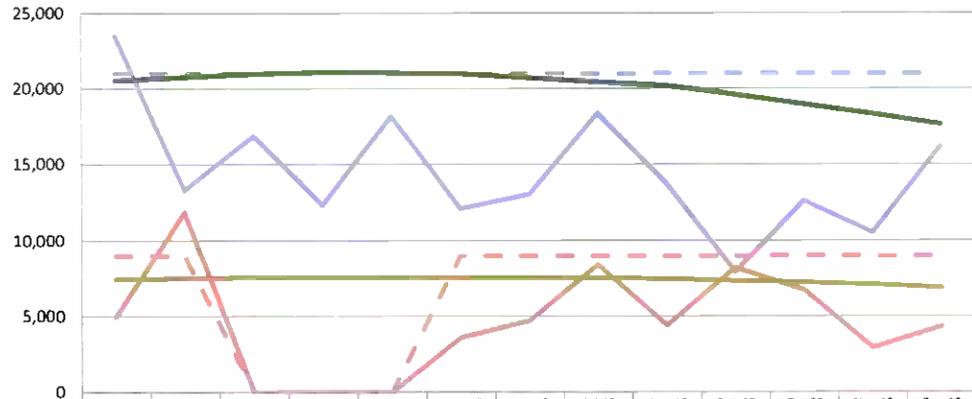
MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures. %Change is from previous month.



Metro

### Rail Mean Vehicle Miles Between Major Failures by Vehicle Type Light Rail - Siemens

Mean Miles Between Major Failure



	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
Siemens 2000 Base - AC	23,455	13,310	16,886	12,338	18,216	12,118	13,056	18,410	13,747	7,953	12,626	10,561	16,202
Siemens 2000 Base - TARGET	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
Siemens 2000 GE/ATP - AC **	4,963	11,882	0	0	0	3,607	4,711	8,422	4,402	8,222	6,736	2,943	4,312
Siemens 2000 GE/ATP - TARGET **	9,000	9,000	0	0	0	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000
12 Month Rolling Avg Siemens 2000 Base - AC	20,547	20,746	20,962	21,085	21,055	20,982	20,708	20,446	20,206	19,619	18,978	18,354	17,661
12 Month Rolling Avg - Siemens 2000 GE/ATP - AC	7,450	7,512	7,573	7,593	7,562	7,567	7,562	7,531	7,458	7,350	7,240	7,093	6,889

\*\* The Siemens 2000 GE/ATP AC cars did not operate starting in February 2019 and resumed in May 2019.

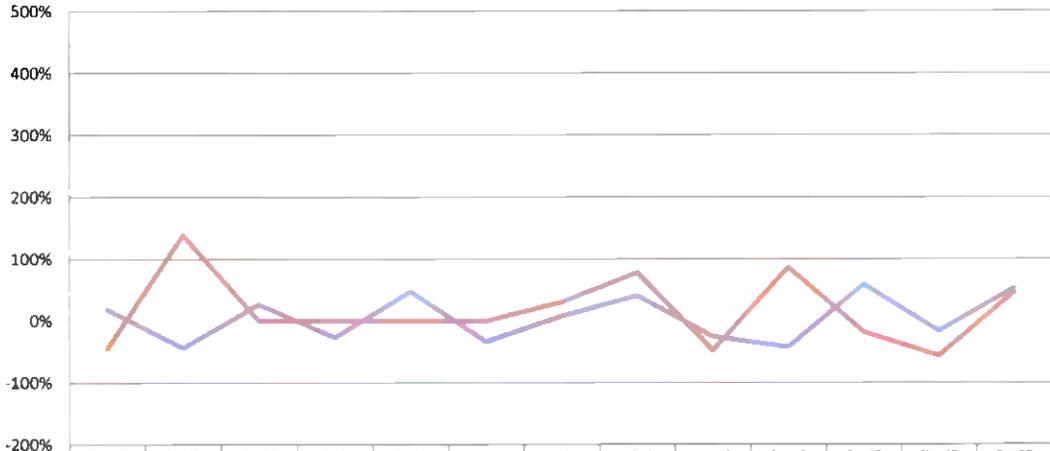
MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.



Metro

### Percentage Change in Rail MMBMF by Vehicle Type Light Rail - Siemens

% Change in MMBMF



	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
Siemens 2000 Base - AC	17.9%	-43.3%	26.9%	-26.9%	47.6%	-33.5%	7.7%	41.0%	-25.3%	-42.1%	58.8%	-16.4%	53.4%
Siemens 2000 GE/ATP - AC **	-44.3%	139.4%	0.0%	0.0%	0.0%	0.0%	30.6%	78.8%	-47.7%	86.8%	-18.1%	-56.3%	46.5%

\*\* The Siemens 2000 GE/ATP AC cars did not operate starting in February 2019.

MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures. %Change is from previous month.

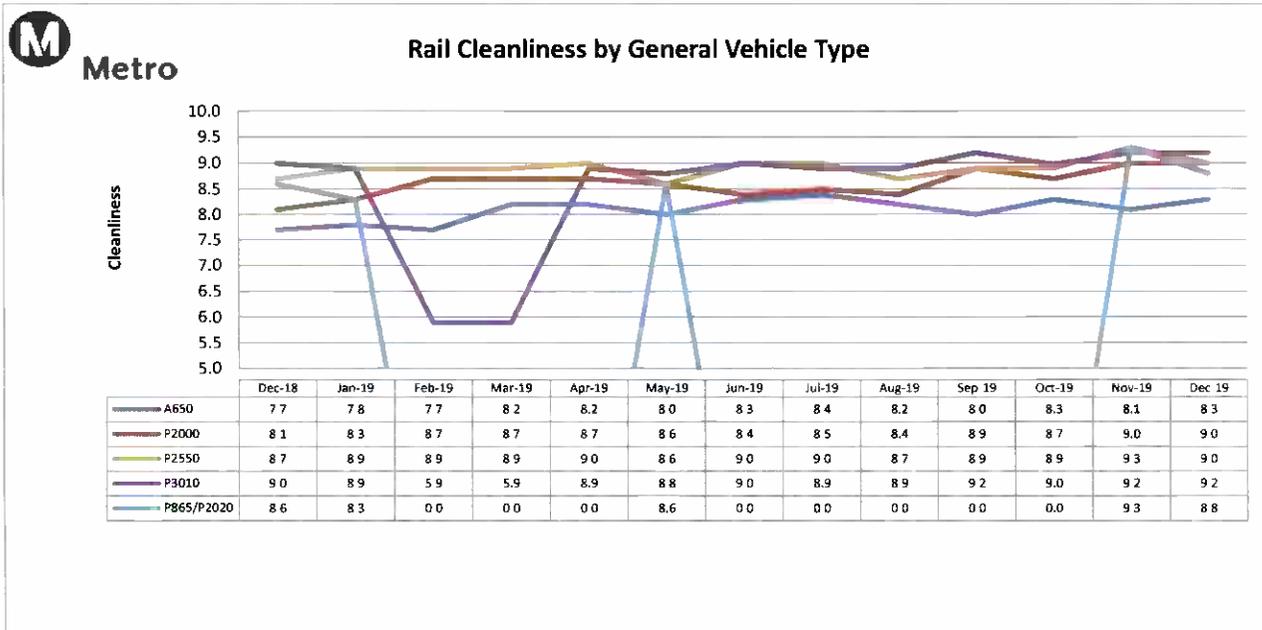
## Mean Miles Between Major Failures

	FY 2019	FY2020 Goal	FY2020 YTD
AnsaldoBreda2550Base - AC	37,825	52,000	29,821
Breda 650 Base - DC	27,616	43,000	45,030
Breda 650 Option - AC	85,062	124,000	63,723
Kinkisharyo P3010	70,566	41,000	63,850
Nippon Sharyo 2020 - DC	21,405	24,000	9,598
Siemens 2000 Base - AC	17,841	21,000	12,758
Siemens 2000 GE/ATP - AC	6,920	9,000	4,537

### Rail Fleet Distribution – December 2019

Number of Rail Vehicle Type by Division	Blue	Red / Purple	Green	Gold	Expo	Total
AnsaldoBreda 2550 Base - AC	0	0	0	50	0	50
Breda 650 Base - DC	0	28	0	0	0	28
Breda 650 Option - AC	0	66	0	0	0	66
KinkiSharyo P3010	54	0	25	47	56	182
Nippon Sharyo 2020 - DC	12	0	0	0	3	15
0	0	0	0	0	0	0
Siemens 2000 Base - AC	7	0	0	0	15	22
Siemens 2000 GE/ATP - AC	0	0	13	0	0	13
<b>TOTALS</b>	<b>73</b>	<b>94</b>	<b>38</b>	<b>97</b>	<b>74</b>	<b>376</b>

## Cleanliness by Vehicle Type Dec 2019

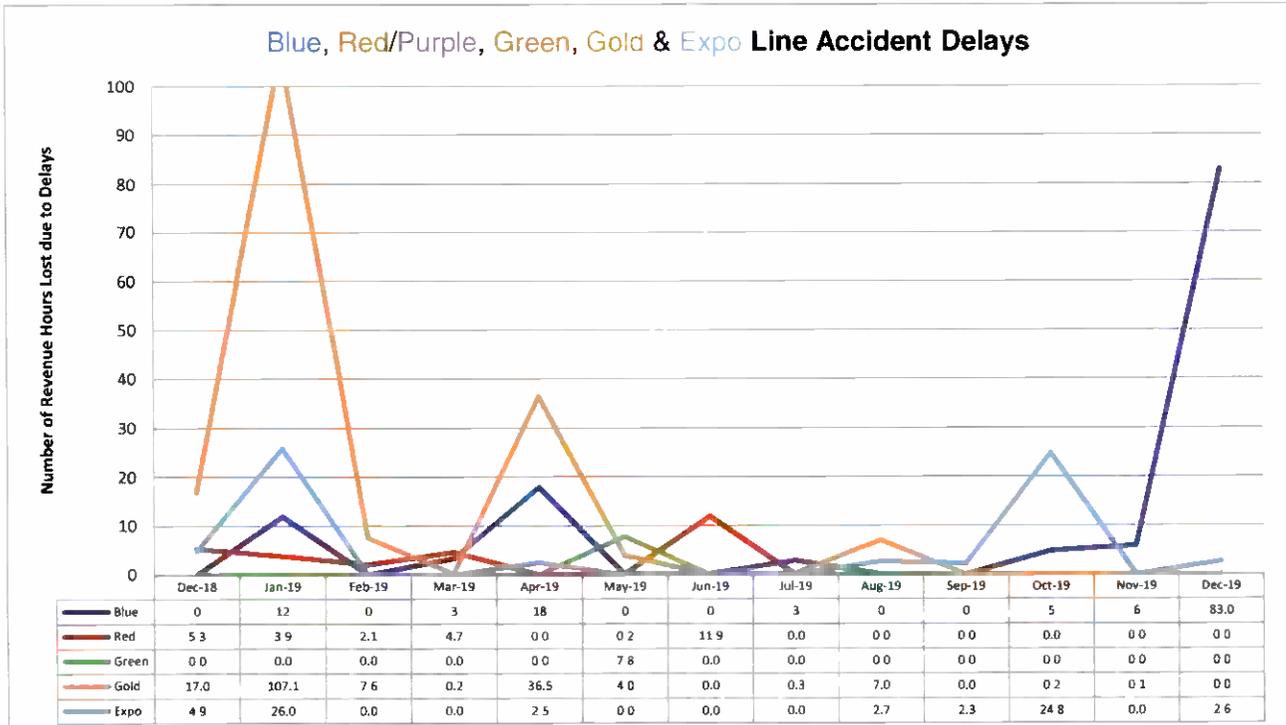


P2020 has only one cleanliness inspection since Jan 2019 due to Blue Line Construction

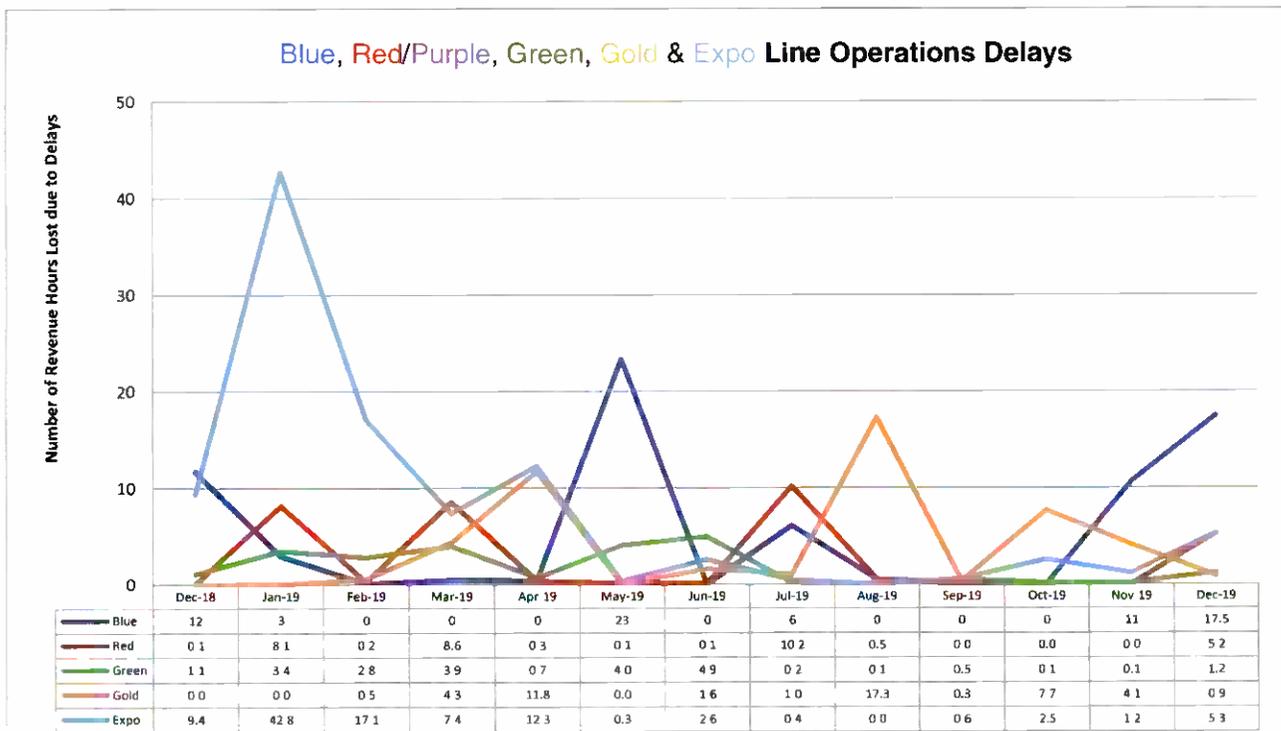
## RAIL DELAYS BY CATEGORY - SYSTEMWIDE

Revenue Hours Lost Related to - ACCIDENTS

Dec 2019

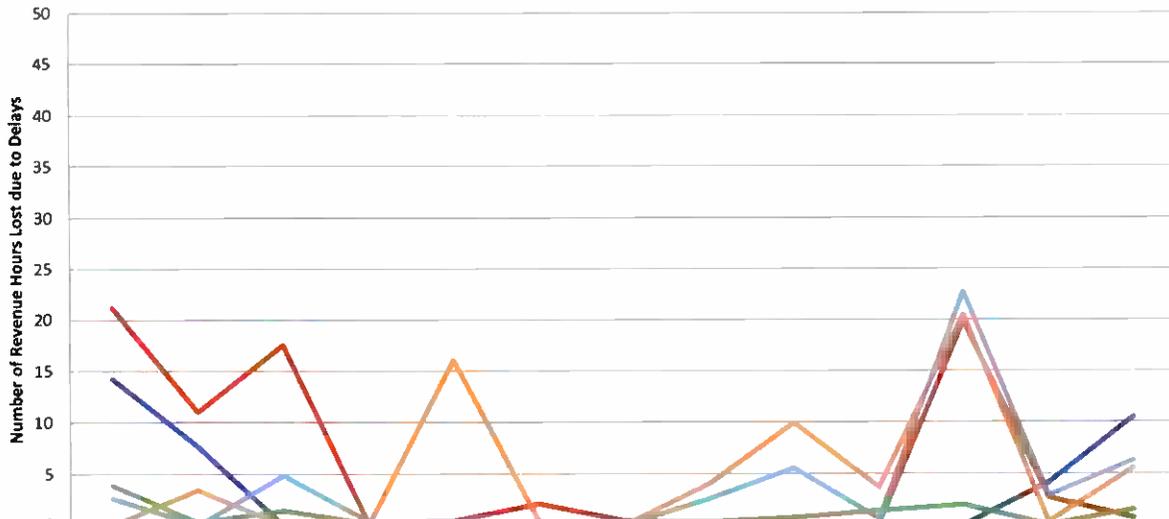


## Revenue Hours Lost Related to - OPERATIONS



### Revenue Hours Lost Related to - OTHER

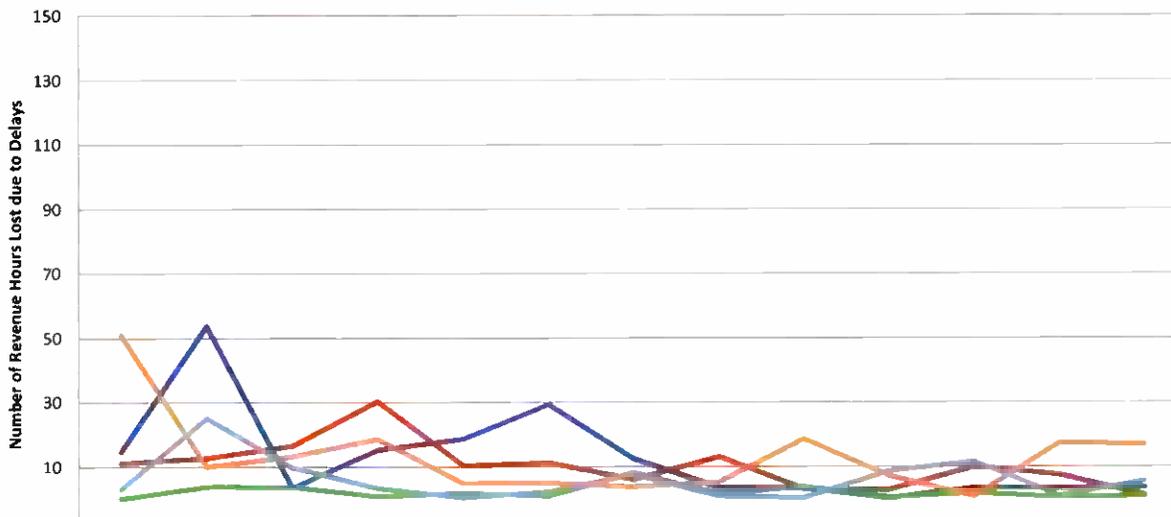
Blue, Red/Purple, Green, Gold & Expo Line Other Delays



	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
Blue	14	8	0	0	0	0	0	0	0	0	0	4	10.5
Red	21.2	11.0	17.6	0.2	0.4	2.1	0.5	0.3	0.0	0.2	19.9	2.7	0.7
Green	3.9	0.3	1.4	0.2	0.1	0.0	0.0	0.3	0.7	1.4	2.0	0.0	1.5
Gold	0.0	3.5	0.0	0.0	16.1	0.4	0.0	4.0	9.9	3.7	20.5	0.3	5.6
Expo	2.6	0.0	4.9	0.4	0.0	0.0	0.0	2.6	5.6	0.6	22.7	2.9	6.3

### Revenue Hours Lost Related to - POLICE & HEALTH

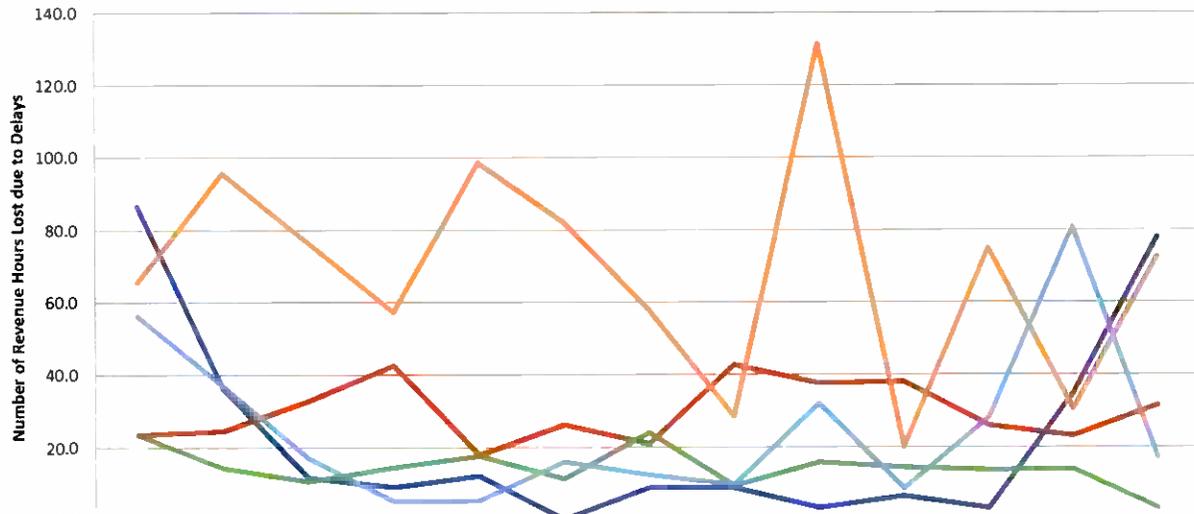
Blue, Red/Purple, Green, Gold & Expo Line Police & Health Delays



	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
Blue	15	54	4	15	19	29	13	4	3	0	4	3	3.7
Red	11.3	12.8	16.7	30.4	10.5	11.4	6.2	13.2	3.1	3.0	10.1	7.6	1.3
Green	0.2	4.0	3.9	0.9	1.9	1.0	8.2	1.6	3.9	0.6	1.9	0.6	0.8
Gold	51.1	10.2	13.4	18.8	4.9	5.1	3.9	5.4	18.7	7.2	0.9	17.5	17.0
Expo	3.3	25.2	9.9	3.4	0.4	2.3	7.7	0.9	0.4	8.7	11.7	1.0	5.6

### Revenue Hours Lost Related to - Vehicle Delays

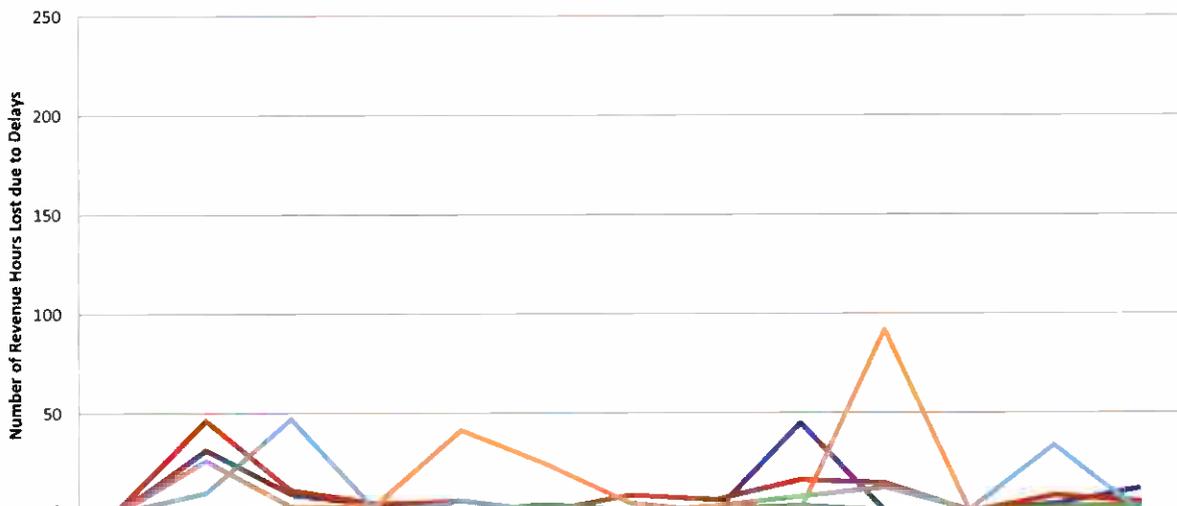
Blue, Red/Purple, Green, Gold & Expo Line Vehicle Delays



	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
Blue	86.7	36.2	11.8	9.3	12.3	0.3	9.1	9.0	3.4	6.6	3.3	35.0	78.0
Red	23.6	24.6	32.8	42.6	18.0	26.3	21.1	42.7	37.6	38.1	26.1	23.2	31.6
Green	23.5	14.5	30.8	14.6	17.7	11.5	24.2	9.6	15.9	14.6	13.8	14.0	3.3
Gold	65.6	95.7	76.7	57.3	98.6	82.4	57.9	28.5	131.4	20.2	75.0	30.5	72.7
Expo	56.2	36.9	17.2	5.2	5.5	16.1	12.6	9.8	32.0	8.8	28.1	80.8	17.3

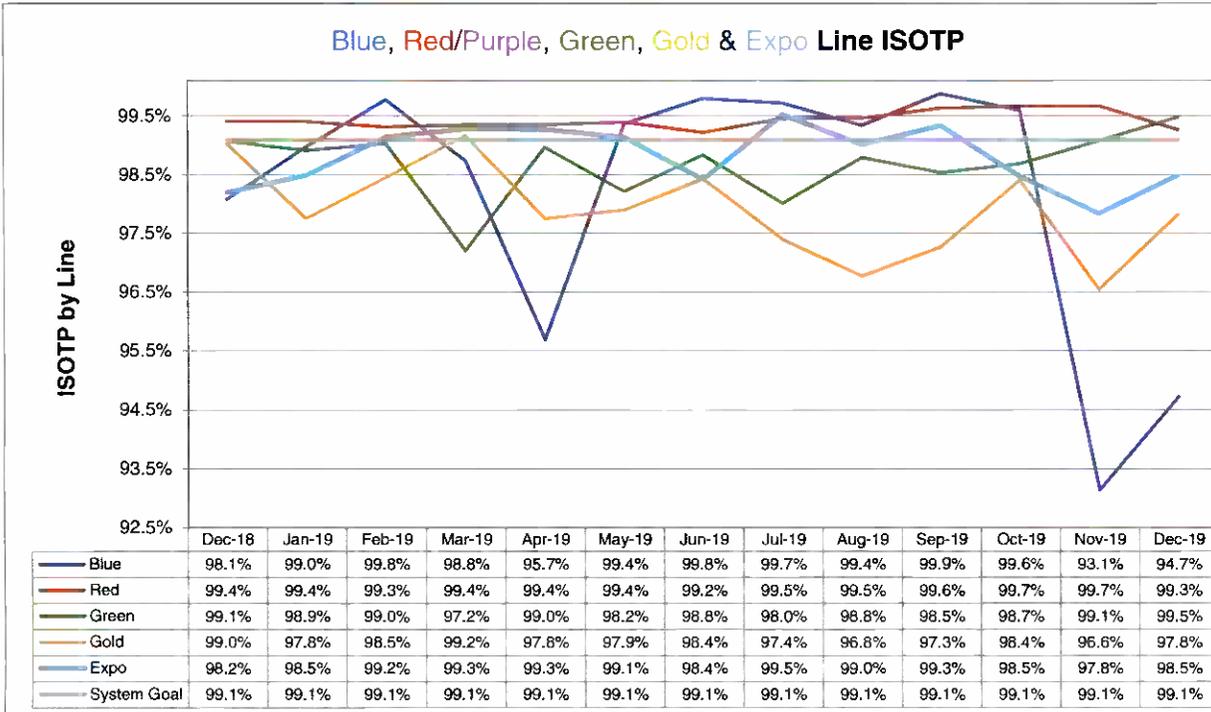
### Revenue Hours Lost Related to - WAYSIDE

Blue, Red/Purple, Green, Gold & Expo Line Wayside Delays

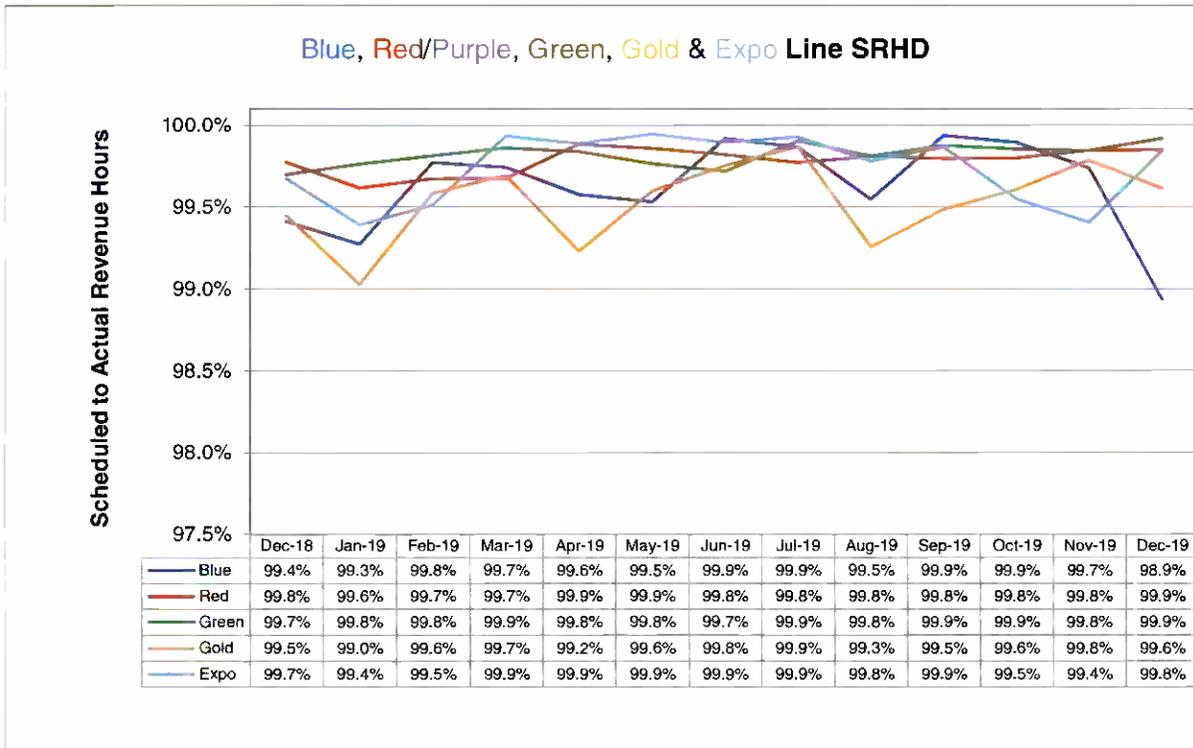


	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
Blue	1	31	9	4	1	1	0	0	45	0	0	4	11.7
Red	2.9	46.2	11.0	4.4	5.6	0.3	8.4	6.0	16.2	14.4	0.0	8.4	5.3
Green	2.2	0.1	2.3	0.9	0.6	3.7	0.6	1.2	2.9	0.6	0.8	2.5	3.6
Gold	0.3	26.0	2.6	3.9	41.5	24.1	4.3	0.0	0.8	91.9	0.3	0.9	0.8
Expo	0.0	9.7	47.0	0.4	5.5	0.6	0.3	2.8	7.7	12.1	0.9	33.6	0.3

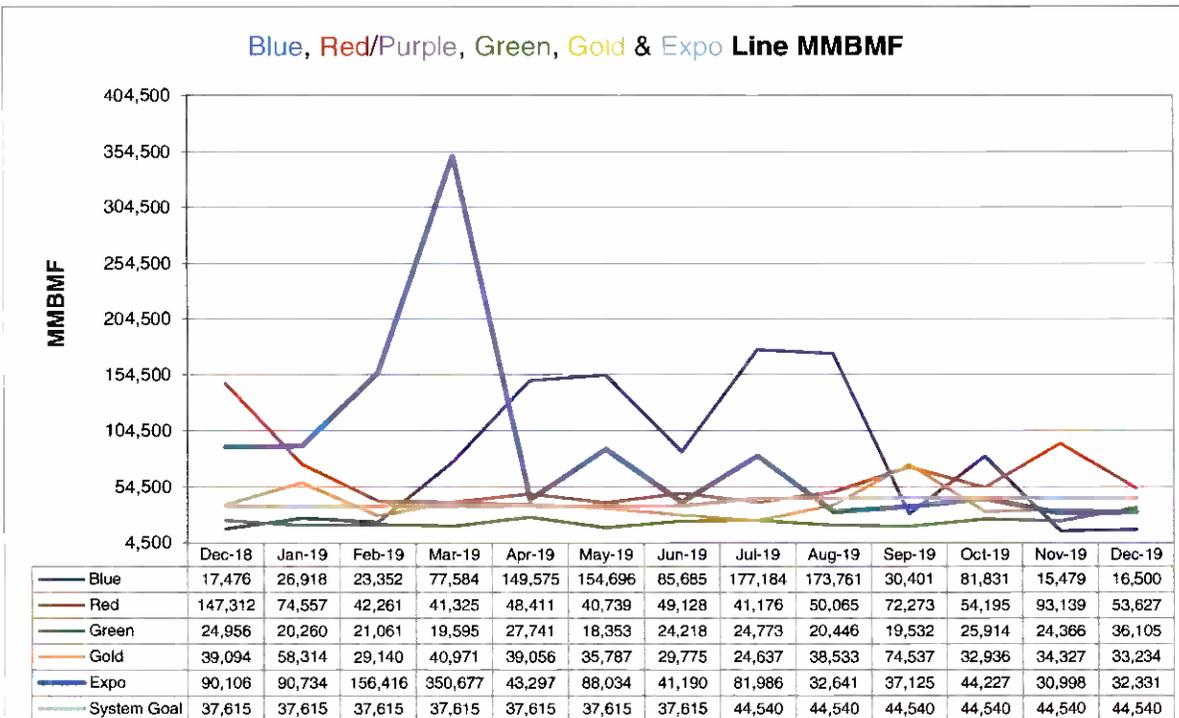
## Rail Service Performance In Service On Time Performance by Line Dec 2019



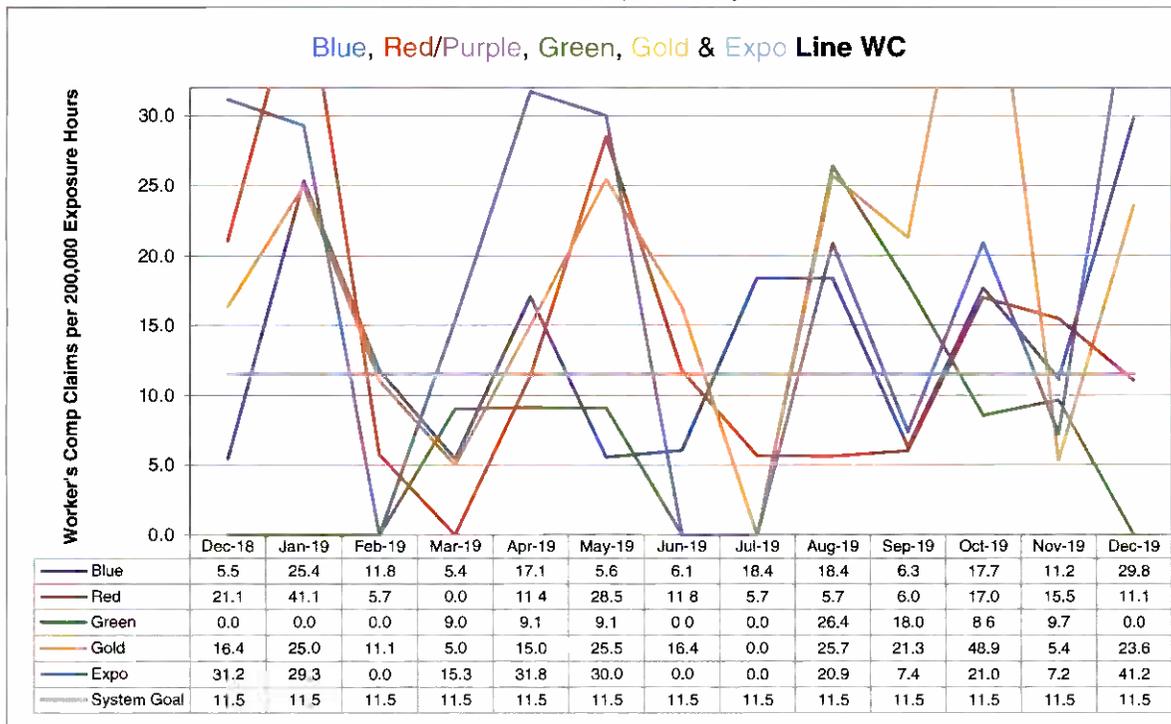
## Ratio of Scheduled to Revenue Hours Delivered by Line



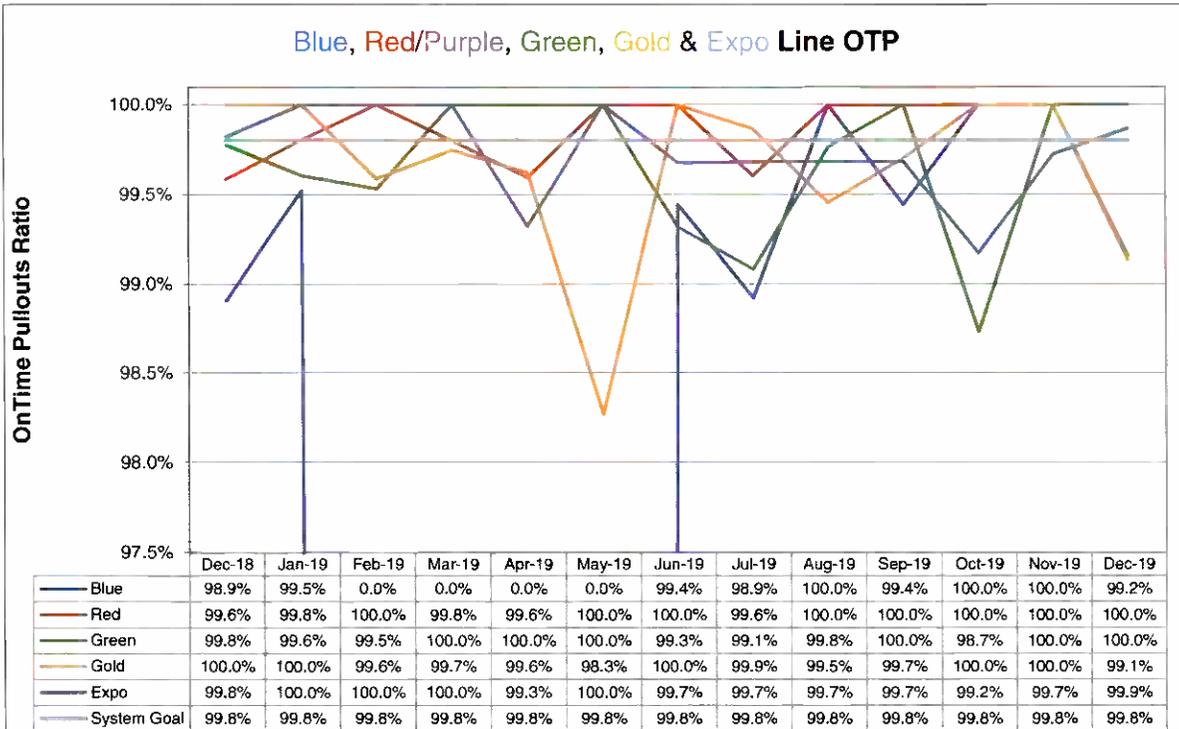
### Mean Miles Between Mechanical Failures by Line



### Workers Comp Claims by Line



### On-Time Pullouts Ratio by Line

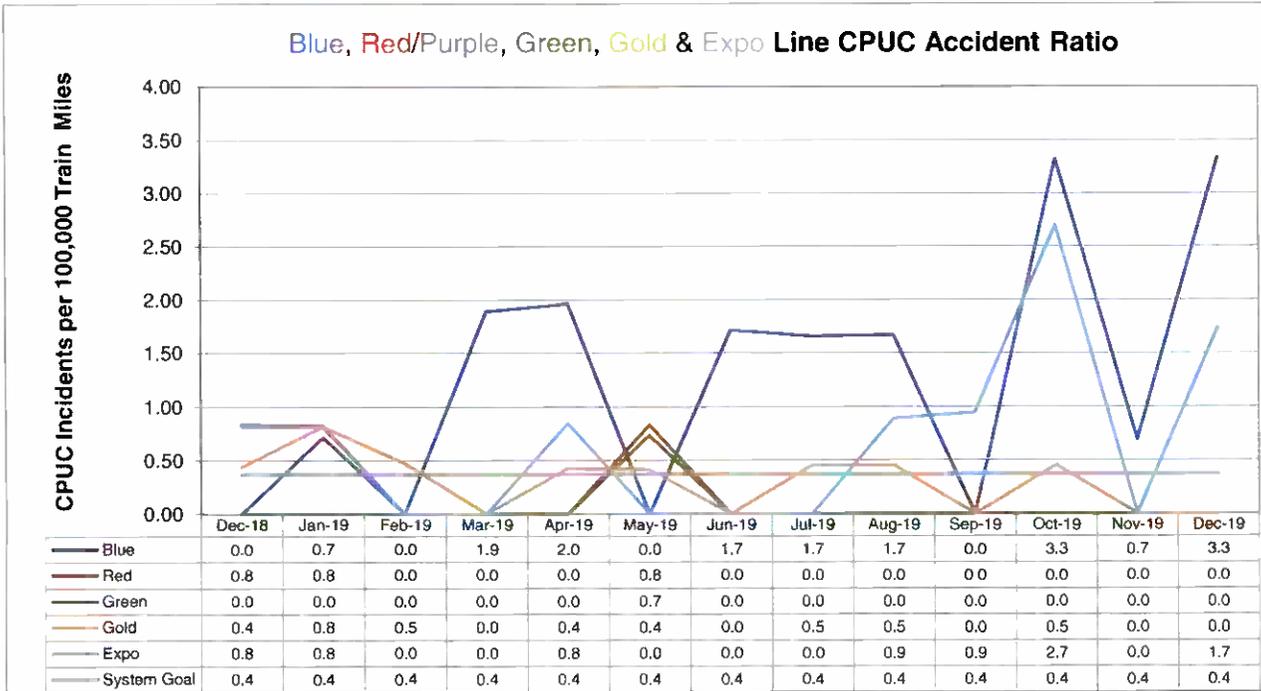


Due to Blue Line Construction, Blue pulled out of EXPO for Feb, Mar, Apr and May 2019.

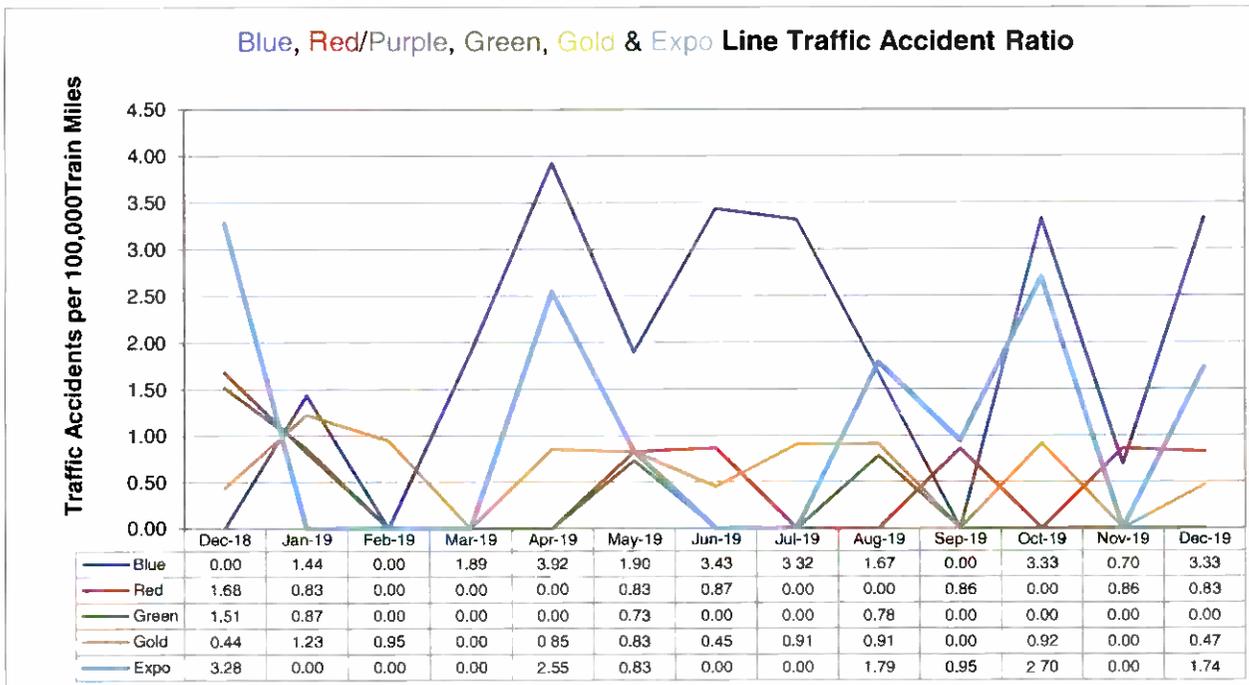
## Rail Safety Performance

### CPUC REPORTABLE INCIDENTS PER 100,000 TRAIN MILES

Dec 2019



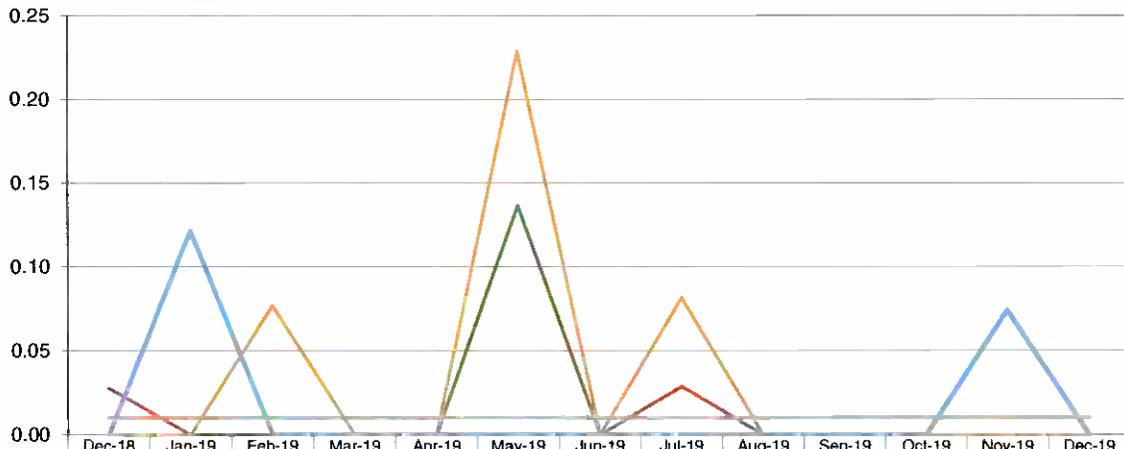
### TRAFFIC ACCIDENTS PER 100,000 TRAIN MILES



### PASSENGER ACCIDENTS PER 100,000 BOARDINGS

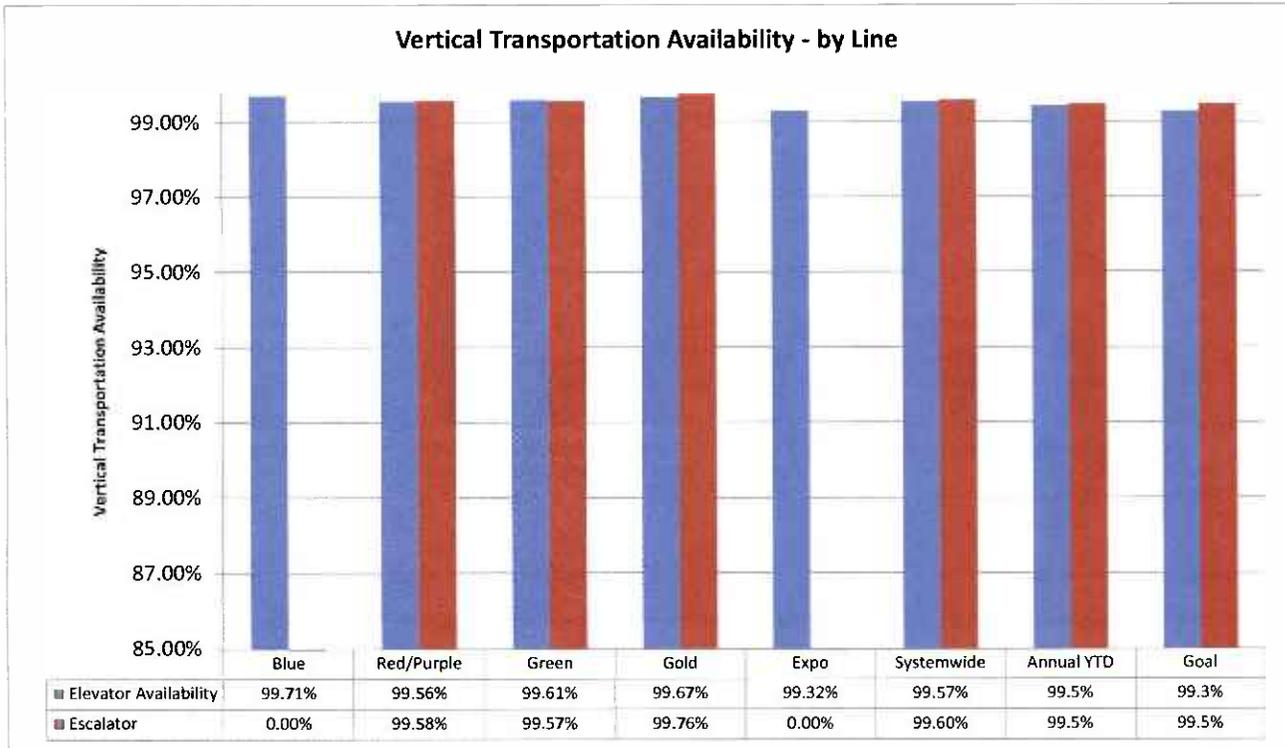
Blue, Red/Purple, Green, Gold & Expo Line Passenger Accident Ratio

Passenger Accidents per 100,000 Boardings



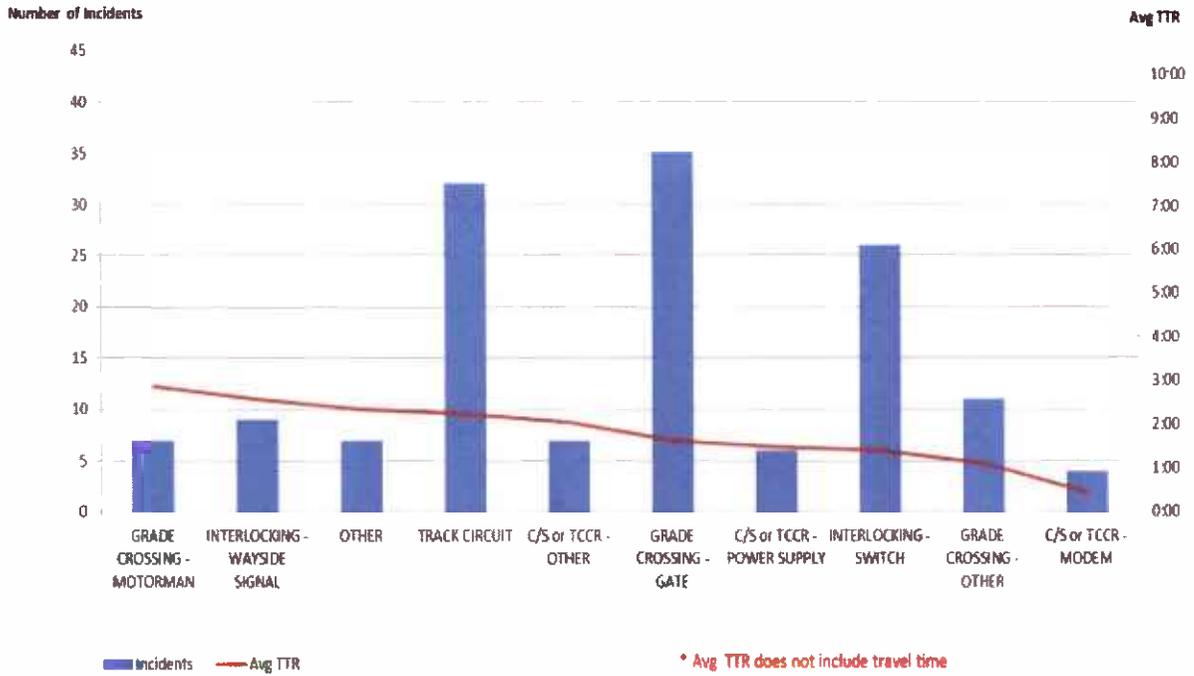
	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
Blue	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Red	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
Green	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gold	0.00	0.00	0.08	0.00	0.00	0.23	0.00	0.08	0.00	0.00	0.00	0.00	0.00
Expo	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00
System Goal	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

## Systemwide Vertical Transportation Availability by Line Dec 2019

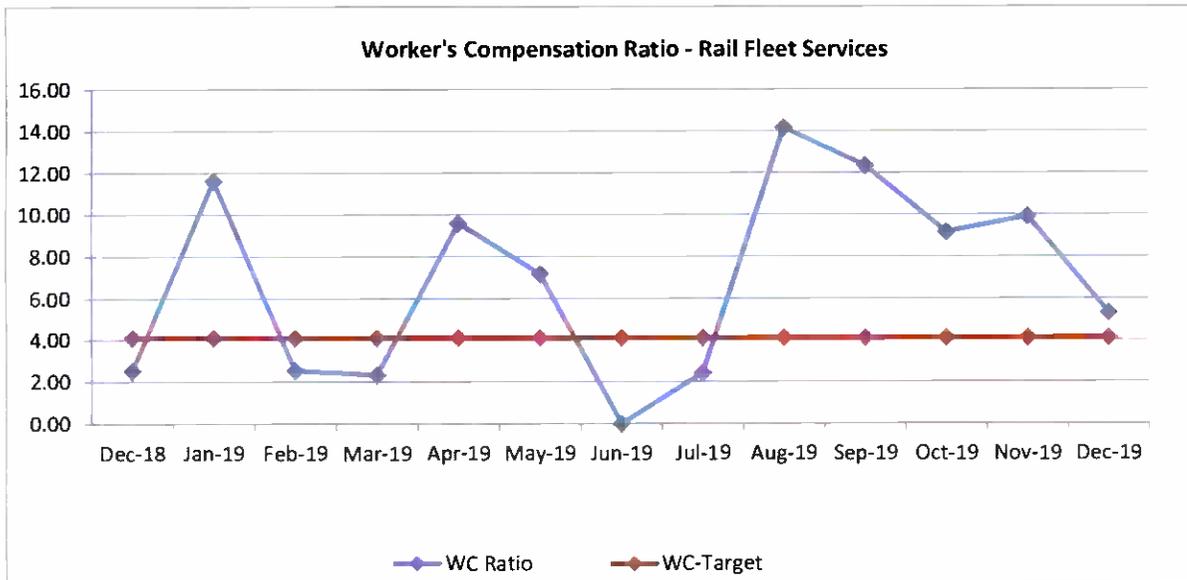
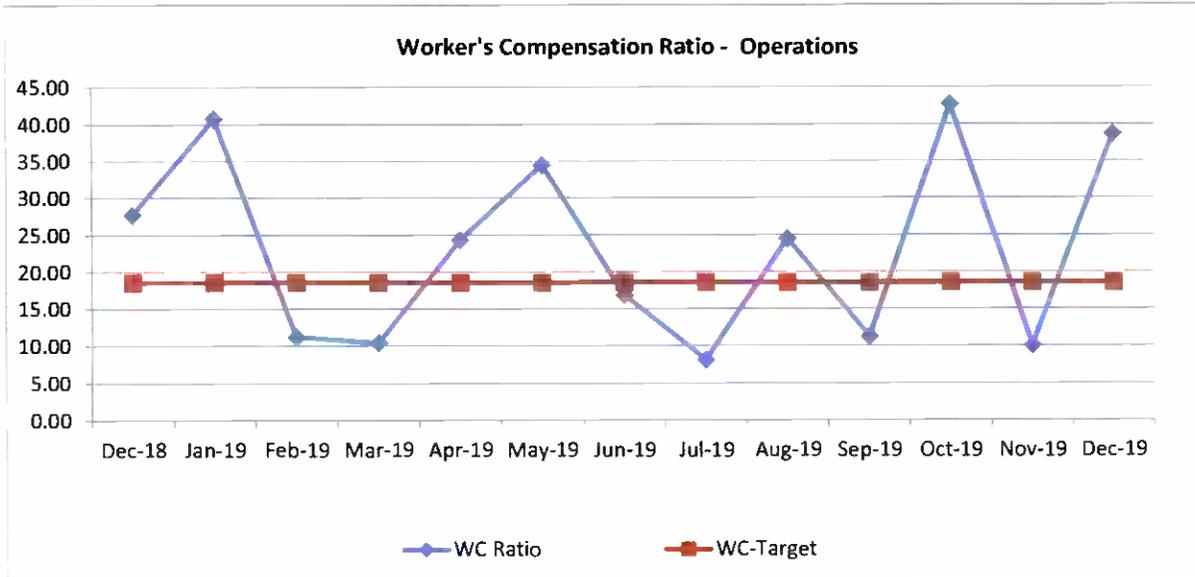


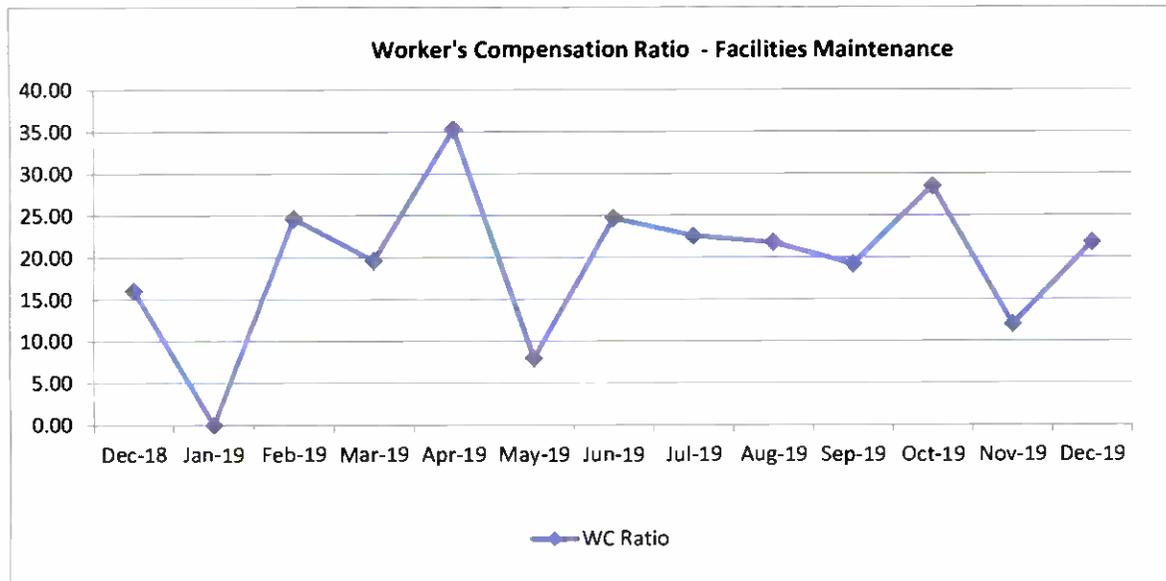
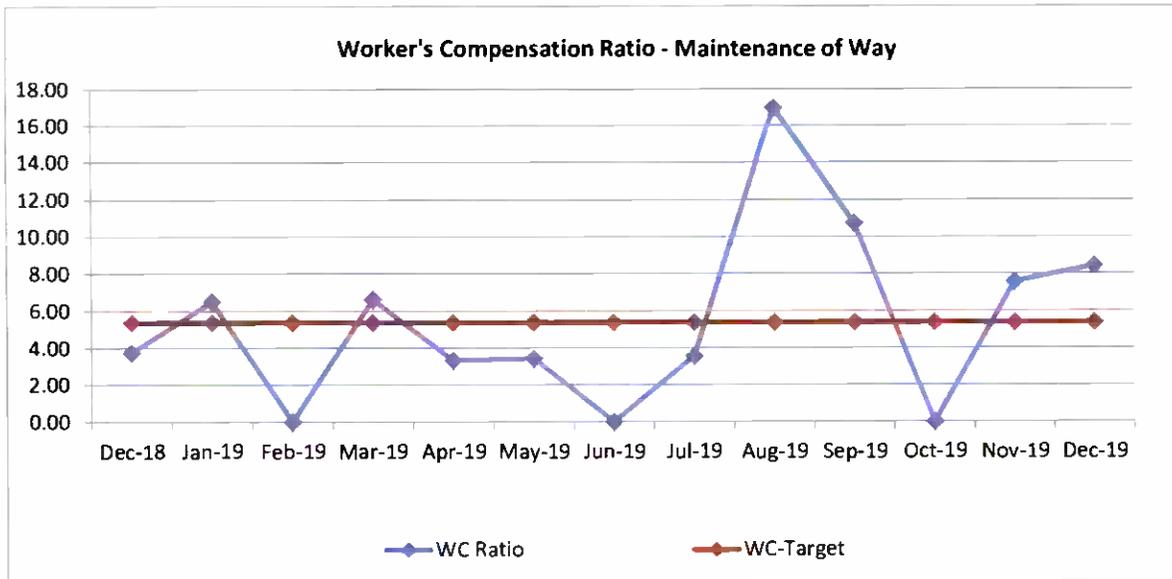
Note: No Escalators at Blue and Expo Lines

**Wayside Signal Maintenance**  
**[Incidents & Avg Time-To-Repair (TTR)]**  
**December 2019**

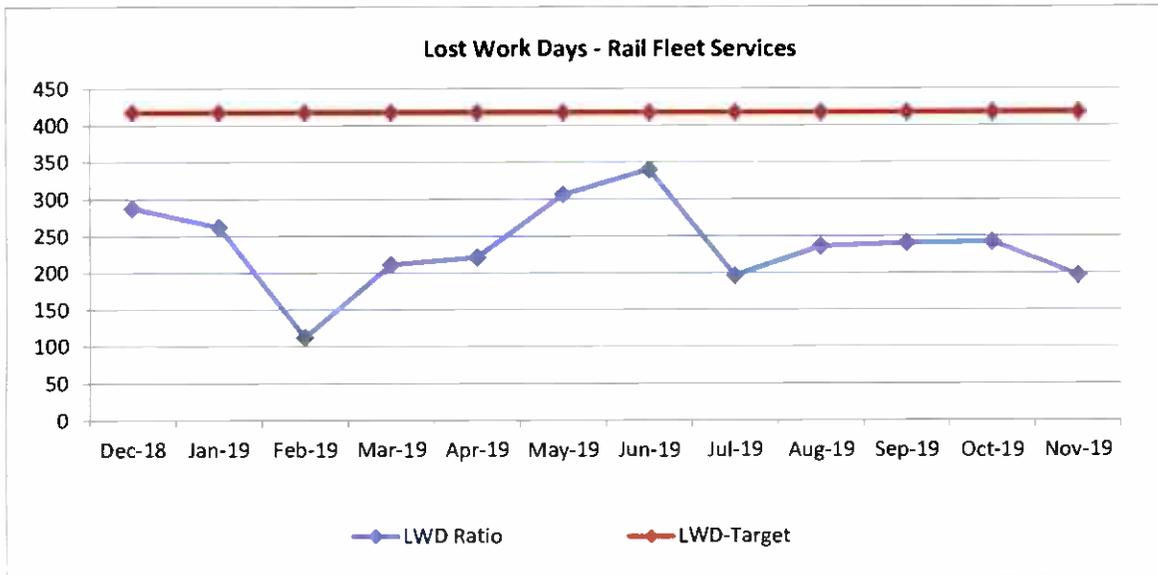
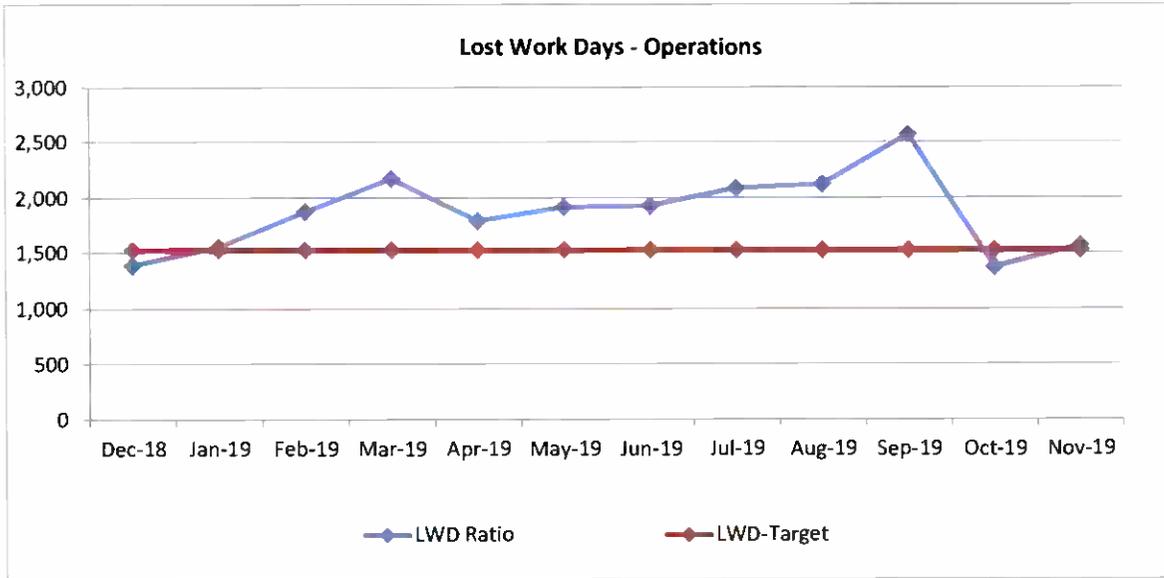


## Administrative Key Performance Indicators Worker's Compensation, Lost Work Days, OSHA Dec 2019

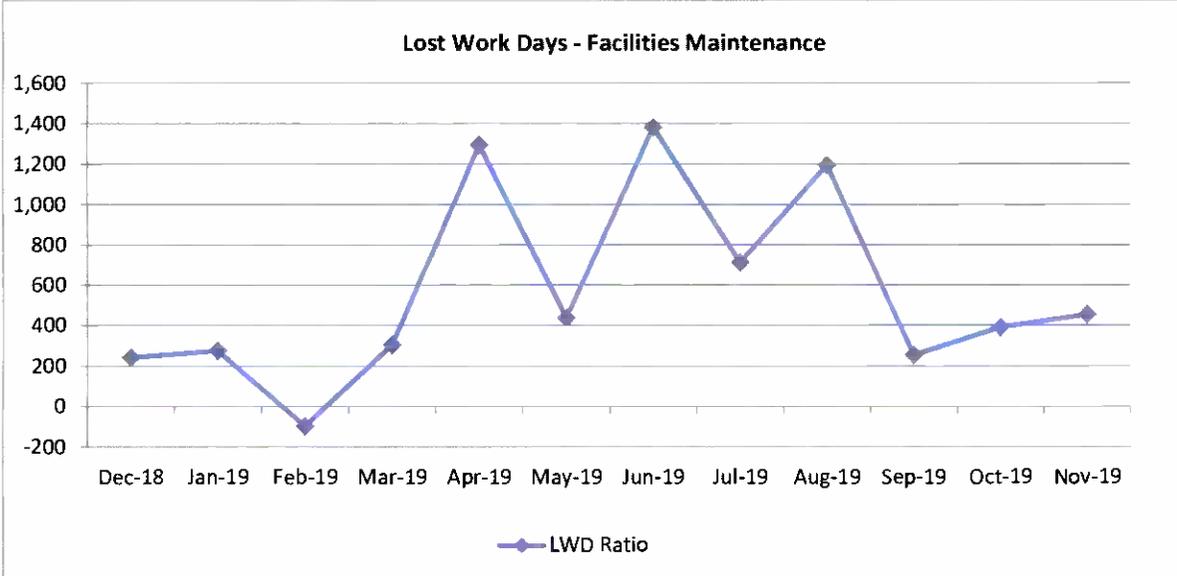
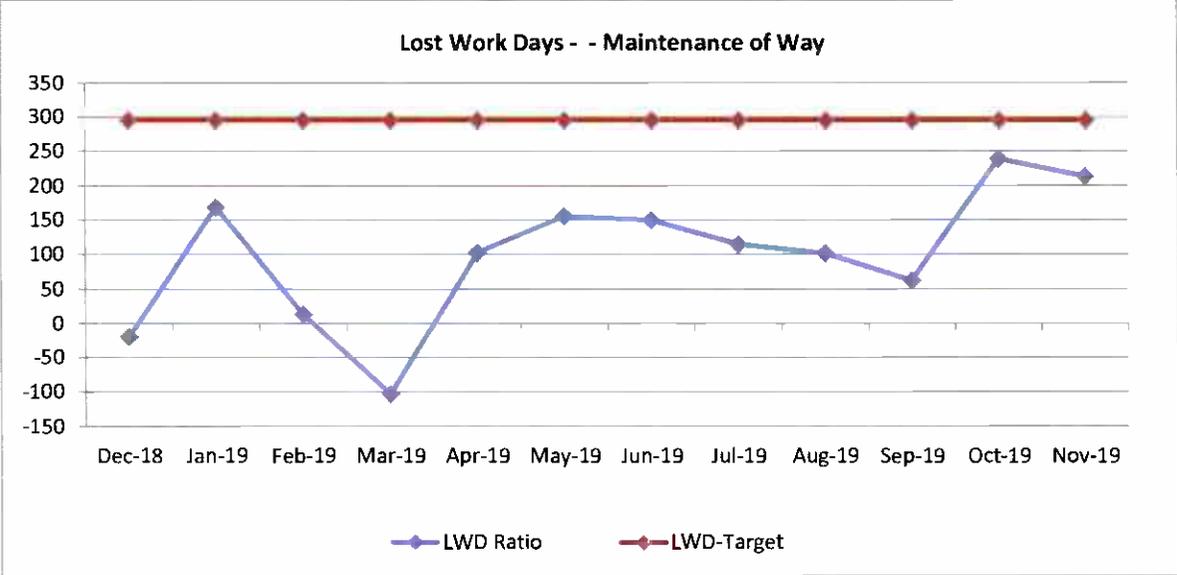




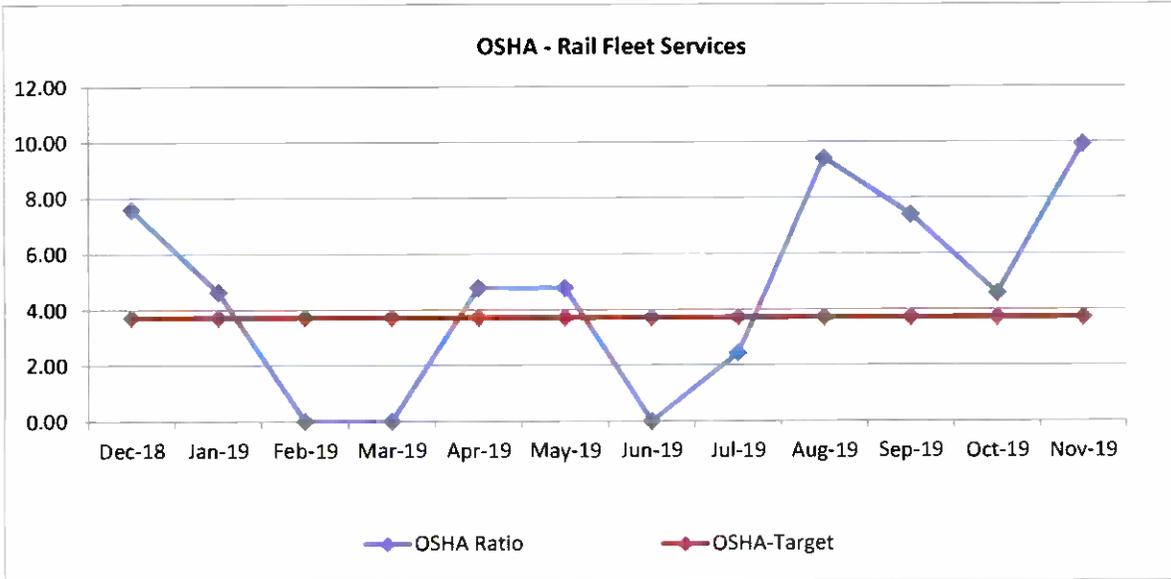
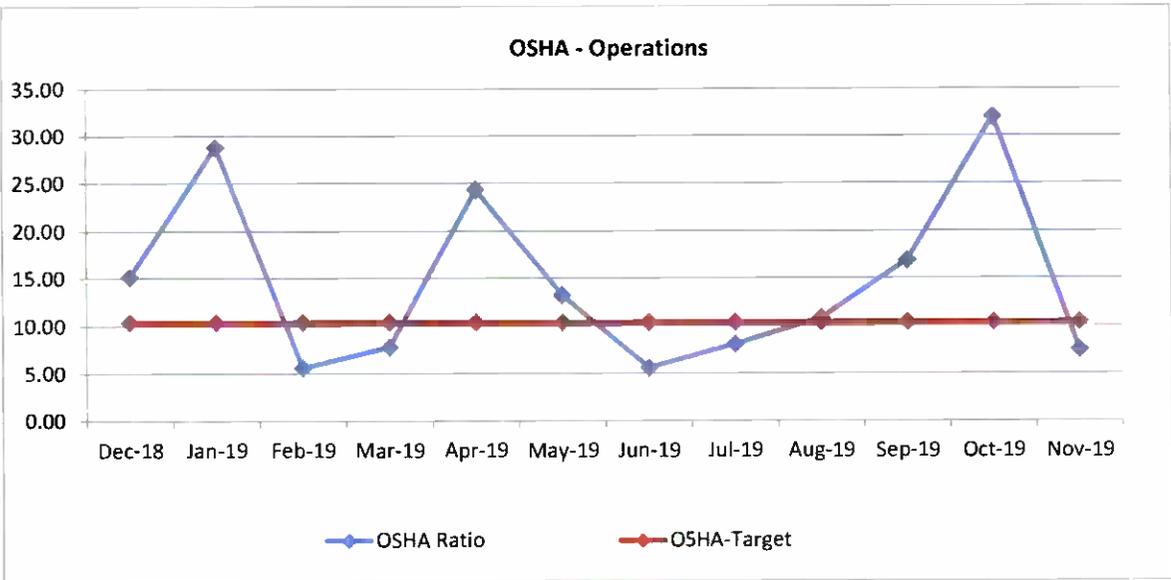
Facilities Maintenance goals to be established.



Note: There is a one month lag in Lost Work Days and OSHA data.



Facilities Maintenance goals to be established.  
 Note: There is a one month lag in Lost Work Days and OSHA data.

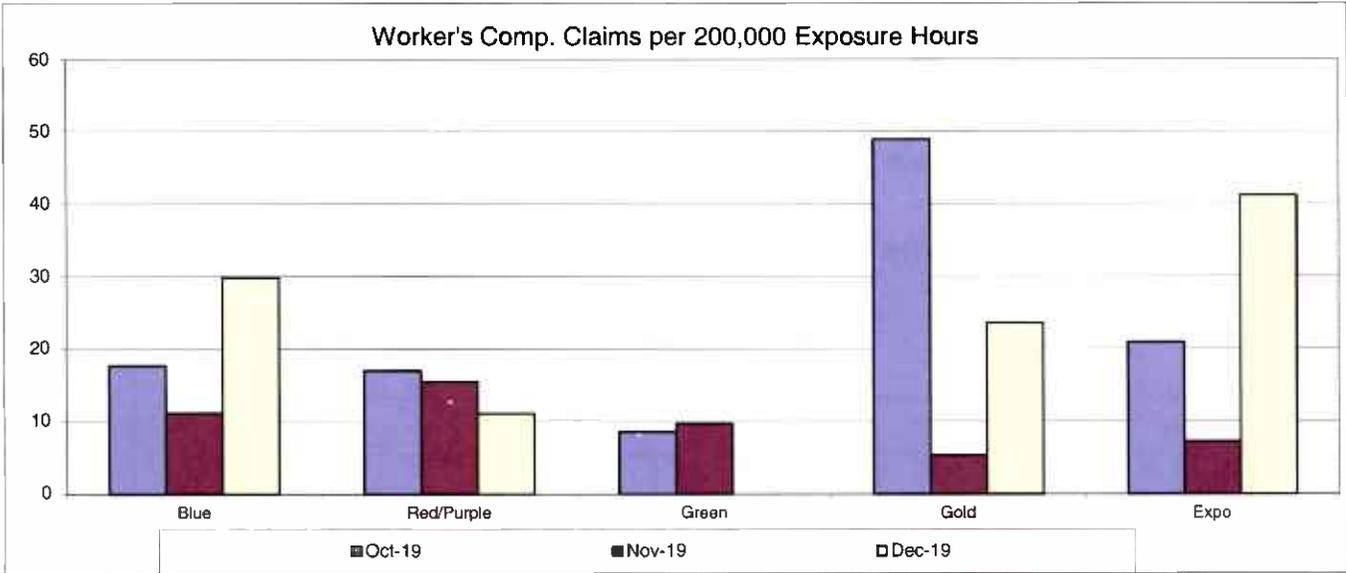


Note: There is a one month lag in Lost Work Days and OSHA data.

**Worker's Comp. Claims**  
**Oct 2019 - Dec 2019**  
**3 Month Comparison**

**Worker's Comp Definition: Number of new reported Workers Compensation Indemnity and Medical claims filed per 200,000 exposure hours. This indicator measures safety.**

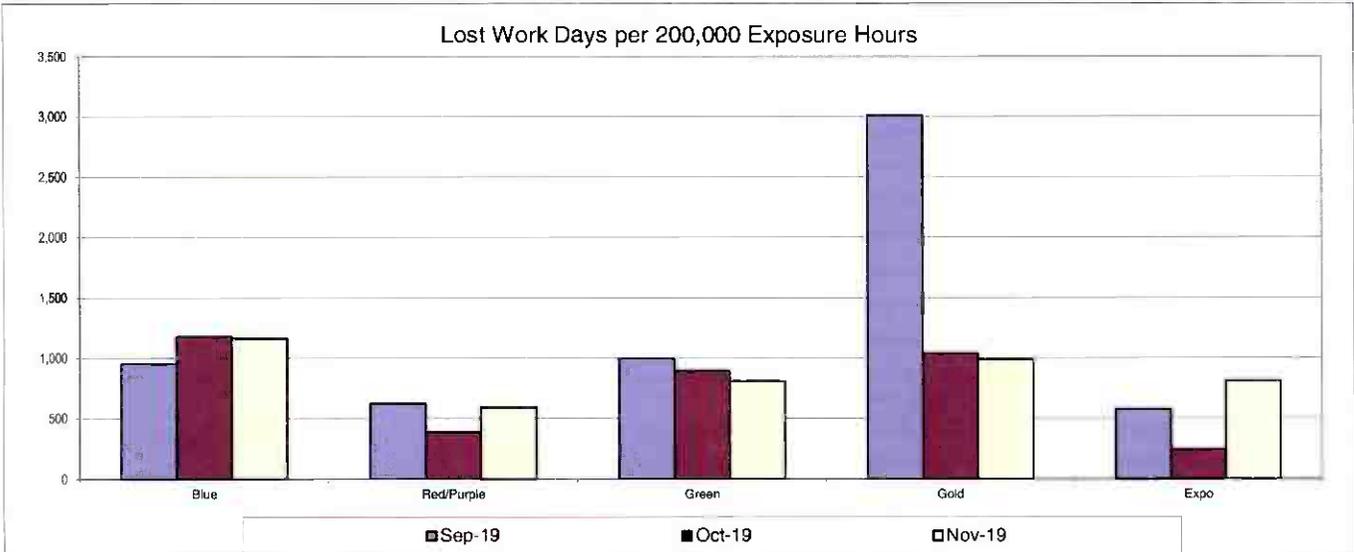
**Calculation:  $\text{New reported Workers' Compensation Indemnity and Medical claims filed per 200,000 Exposure Hours} = \text{New Claims} / (\text{Exposure Hours} / 200,000)$**



**Lost Work Days and OSHA Injuries**  
 Sep 2019 - Nov 2019  
 3 Month Comparison

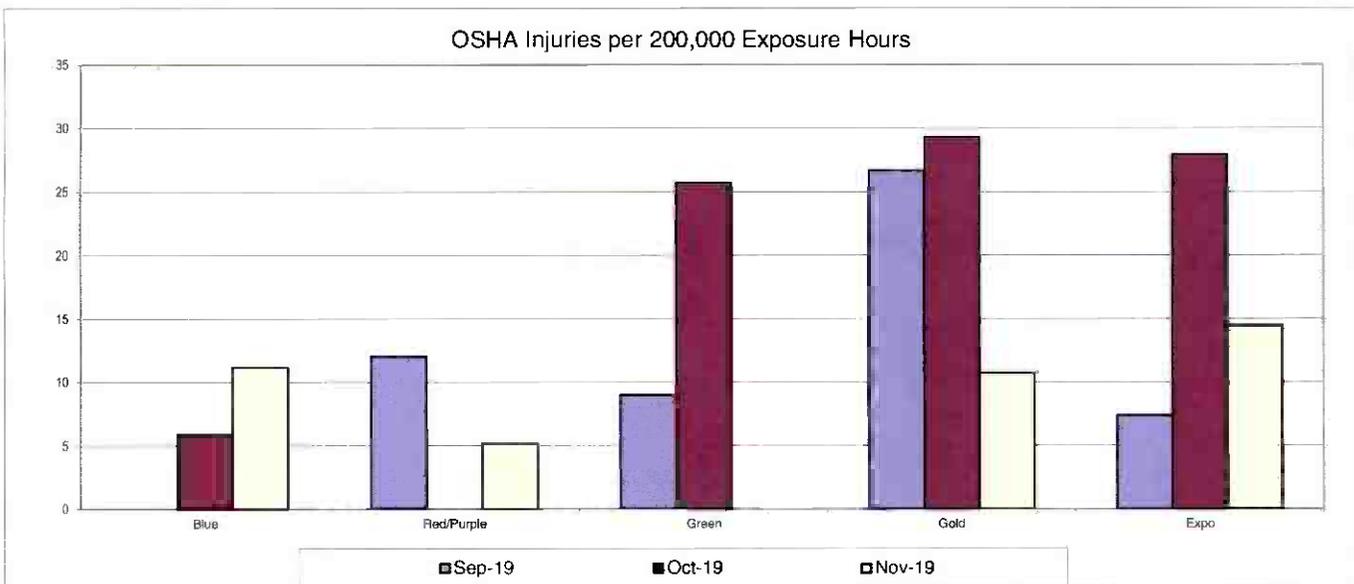
**LWD Definition: Number of paid working days lost due to employees workers' compensation injuries each month per 200,000 exposure hours. This indicator measures use of Transitional Duty Program.**

**Calculation:  $(\text{Total Temporary Disability Benefit Payments} / \text{Estimated TD Benefit Rate}) \times (5/7) / (\text{Number Exposure Hours} / 200,000)$**



**OSHA Definition: Work-related injuries and illnesses that result in: death, loss of consciousness, days away from work, restricted work activity or job transfer, or medical treatment beyond first aid which are filed per 200,000 exposure hours.**

**Calculation:  $\text{New OSHA Injuries filed per 200,000 Exposure Hours} = \text{New Injuries} / (\text{Exposure Hours} / 200,000)$**



Note: There is a one month lag in Lost Work Days and OSHA data.

## BLUE LINE

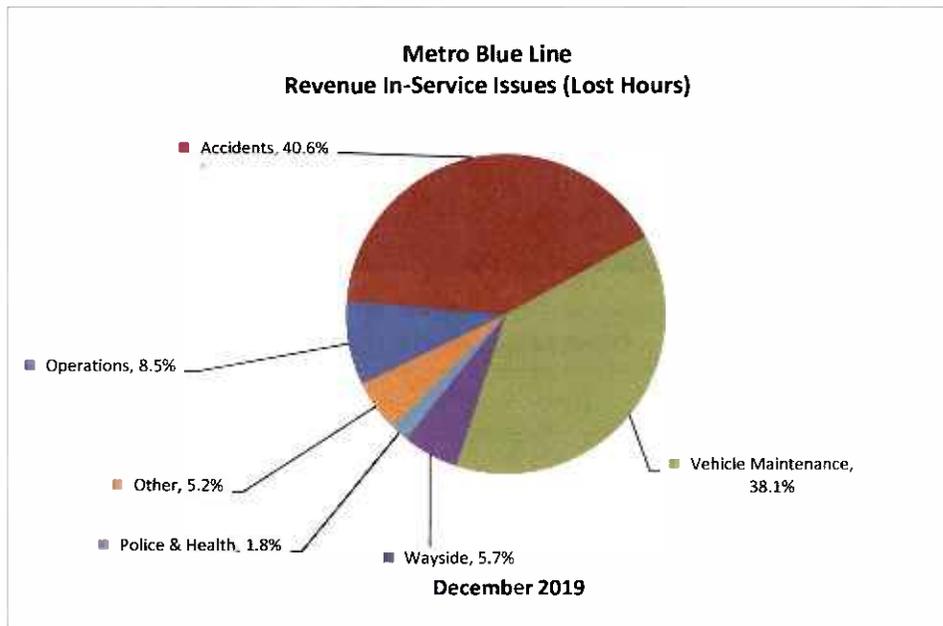
Out of a total of 18,038 hours operated, there were approximately 204 total hours of service delays.

December 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	17,833	98.9%
Cancelled + Delayed Hours	204	1.1%
<b>Total Revenue Hours</b>	<b>18,038</b>	<b>100.0%</b>

Summary of the incidents:	Count	Hours	Percent
Operations	15	17.5	8.5%
Accidents	8	83.0	40.6%
Vehicle Maintenance	24	77.8	38.1%
Wayside	10	11.7	5.7%
Police & Health	7	3.7	1.8%
Other	9	10.7	5.2%
<b>Total</b>	<b>73</b>	<b>204.2</b>	<b>100.0%</b>

\* Data from M3 used to report Service Delays is under review for accuracy

The number of incidents on the following page may differ from the summary count due to some incidents not properly designated as Cancelled or Delayed



December 2019 Blue Line incidents causing delay were as follows:

**Operations Incidents:**

**12/1/2019 11:16:00 AM - Incident# 3233153 (0 lost trips, 12 lost minutes)**

Late relief southbound, Train 110 at Division 11 relief platform.

**12/2/2019 4:10:00 PM - Incident# 3233799 (0 lost trips, 4 lost minutes)**

Due to Manpower issues, R-191 at the Blue Line Yard requested that T-353 must go back to the Yard and not risk of violation.

**12/5/2019 6:34:00 AM - Incident# 3235057 (0 lost trips, 8 lost minutes)**

Train Delay

**12/5/2019 3:40:00 PM - Incident# 3235285 (0 lost trips, 15 lost minutes)**

Expo operator reports doors problems with no movement Pico Station

**12/9/2019 4:16:00 PM - Incident# 3236704 (0 lost trips, 15 lost minutes)**

Schedule Adjustments

**12/10/2019 6:21:00 AM - Incident# 3236970 (0 lost trips, 7 lost minutes)**

Train # 103 experienced door problems at 1st Street Station s/b causing Train # 110 to depart Transit Mall northbound with a 7 minute delay due to schedule M-1080 that has train #110 pulling out of Blue Line Yard after train # 103 s/b

**12/10/2019 12:00:00 PM - Incident# 3237137 (0 lost trips, 14 lost minutes)**

Train Delays for 12-10-19 12:00-20:00

**12/10/2019 4:33:00 PM - Incident# 3237795 (0 lost trips, 11 lost minutes)**

Train 101

NB T-00S

Transit mall

161-163

**12/11/2019 6:09:00 AM - Incident# 3237487 (0 lost trips, 10 lost minutes)**

Trains are consistently and consecutively delayed due to meeting at mainyard interlocking simultaneously, causing the revenue and pull outs to conflict.

**12/16/2019 4:54:00 PM - Incident# 3239837 (0 lost trips, 20 lost minutes)**

Train 110, being operated by train operator T-054 has a delay of approximately twenty (20) minutes

Train 110

T-054

1136-1079

Willow Station, Trk. 2, Southbound

**12/19/2019 6:50:00 AM - Incident# 3241096 (4 lost trips, 605 lost minutes)**

R-208 Yard Control contacted control and stated he had no manpower to pull out train 111.

**12/20/2019 8:15:00 AM - Incident# 3241669 (0 lost trips, 8 lost minutes)**

Instruction Train with students being dispatched onto mainline with limits between 7th METRO to Transit Mall.

**12/22/2019 6:13:00 AM - Incident# 3242428 (0 lost trips, 6 lost minutes)**

Train Operator ( T-115 ) departed late from Transit Mall due to a 10-100.

**12/27/2019 12:01:00 PM - Incident# 3244589 (2 lost trips, 305 lost minutes)**

Yard Control Reported No Manpower for Alpha AF and AN

**12/31/2019 6:52:00 AM - Incident# 3245637 (0 lost trips, 7 lost minutes)**

Train operator departed late from T-Mall

Train 118

T-069

164-160-167

T-Mall, Trk. 2, Northbound

### **Accidents:**

**12/2/2019 10:19:00 AM - Incident# 3233493 (0 lost trips, 12 lost minutes)**

Traffic Accident- MTA not involved

**12/2/2019 6:48:00 PM - Incident# 3233823 (1 lost trip, 152 lost minutes)**

Washington/Main St, Track 1, northbound, Traffic accident Metro not involved blocking Track 1 only.

**12/4/2019 6:43:00 PM - Incident# 3234903 (25 lost trips, 3,829 lost minutes)**

10-72 at Washington Blvd and Central

**12/9/2019 5:52:00 AM - Incident# 3236404 (1 lost trip, 164 lost minutes)**

Train 102 reports a 10-73 at Washington and Hill, Operating LRV 1130A

**12/11/2019 5:38:00 PM - Incident# 3237844 (1 lost trip, 172 lost minutes)**

T-376 on Train 106 cars (1079A)-1136, reports Train vs Pedestrian (10-72) at Artesia Pedestrian Crossing, Track 2, Southbound.

**12/13/2019 5:29:00 PM - Incident# 3238833 (2 lost trips, 327 lost minutes)**

Train VS. Trespasser at Pacific Station. A man fell off the platform at Pacific station.

T-293

Train 105

Cars (1074B)-1072-1098

Pacific Station, track 1, north

**12/17/2019 5:57:00 AM - Incident# 3239982 (0 lost trips, 10 lost minutes)**

Alleged onboard fall

T-102

Train 114

LRV 158-155 (165)

San Pedro Station, Track 1, northbound.

**12/27/2019 1:06:00 AM - Incident# 3244127 (2 lost trips, 311 lost minutes)**

10-73 Gage Grade Crossing.

Train 126

T-253 with student operator T-322

Cars (1081A)-1078

Northbound, Track 1, Gage Grade XING

### **Vehicle Maintenance Incidents:**

**12/4/2019 10:28:00 AM - Incident# 3234655 (0 lost trips, 7 lost minutes) CHARGEABLE**

Dark TOD on LRV 1105B

T-174

Train 101

LRV (1105B) 1080

Del Amo Station, Track 1, northbound.

**12/4/2019 3:13:00 PM - Incident# 3234832 (1 lost trip, 158 lost minutes) CHARGEABLE**

(164)-160-156

Blown Motoring Fuse

NB Del Amo

Train 109

T-115

**12/6/2019 7:06:00 AM - Incident# 3235507 (3 lost trips, 470 lost minutes) CHARGEABLE**

Propulsion Fault, SLC fault and no movement, 0704 hours.

Train 119

T-446

Pacific/3rd Street, Track 1, northbound.

**12/7/2019 9:51:00 AM - Incident# 3235941 (1 lost trip, 116 lost minutes) CHARGEABLE**

T-125 reported friction brakes on car 1081 B

T-125

Tr#111

Cars(1081 B)-1092

Mainyard Interlocking.

Trk#2

**12/10/2019 6:15:00 AM - Incident# 3236981 (0 lost trips, 7 lost minutes) CHARGEABLE**

Operator reports door problems upon arrival to 1st street Station.

Train # 103

T-415

1st Street, track #1, southbound

1074 1122 (1088)

**12/11/2019 7:11:00 AM - Incident# 3237526 (1 lost trip, 170 lost minutes) CHARGEABLE**

Recurring propulsion and dynamic brake faults.

Train#104

T#102

(1106,1085)

Track#1,103rd Street Station,Southbound.

**12/12/2019 4:44:00 AM - Incident# 3237973 (0 lost trips, 7 lost minutes) CHARGEABLE**

Major flats

Train #112 T-433 car#1085 (A and B)-1121-1139

southbound at Metro center.

**12/15/2019 5:45:00 PM - Incident# 3239316 (0 lost trips, 6 lost minutes)**

An Expo train (Train 606) at Pico Station had door issues which caused a delay for the A Line. M3 # 3239315

**12/16/2019 8:23:00 AM - Incident# 3239606 (0 lost trips, 6 lost minutes) CHARGEABLE**

168B overspeed at 5mph.

**12/16/2019 3:23:00 PM - Incident# 3239795 (1 lost trip, 156 lost minutes)**

Train operator reports of a faulty HVAC system and a propulsion fault with a speed restriction.

Train 109

T-236

(1081)1101-1093

Slauson Station, Trk. 1, Northbound

**12/17/2019 4:51:00 PM - Incident# 3240327 (0 lost trips, 6 lost minutes) CHARGEABLE**

(231B)-229-235

Sand Hose Dragging

SB Del Amo

T-236

Train 103

**12/17/2019 5:40:00 PM - Incident# 3240333 (7 lost trips, 1,059 lost minutes) CHARGEABLE**

(1135)-1137-1116

SLC Fault No Movement

NB Willow Station

Train 127

T-308

**12/18/2019 3:40:00 PM - Incident# 3240888 (0 lost trips, 10 lost minutes)**

Operator reports that in car 168A has a broken outside mirror.

T-264

Train 109

Cars (168A)-166-163

Pico Station, track 2, south

**12/19/2019 11:56:00 PM - Incident# 3241595 (0 lost trips, 5 lost minutes) CHARGEABLE**

Train 125

cars 235 and 229

Doors will not open

Southbound

Rosa Parks Station

**12/21/2019 4:12:00 AM - Incident# 3242108 (0 lost trips, lost minutes) CHARGEABLE**

Yard Control reports train #103 late pullout due to no movement in the yard.

T-528

tr#103

Cars(165)-166-164

Blue Line Yard

Southbound

**12/23/2019 1:30:00 AM - Incident# 3242638 (0 lost trips, 20 lost minutes) CHARGEABLE**

Wipers B/O car K1077A

Train 103

T253

(K1077A),K1092, K1073

Del Amo, track 2, southbound

**12/24/2019 5:40:00 AM - Incident# 3243152 (0 lost trips, 6 lost minutes) CHARGEABLE**

ADU blank- No movement 1121B

Train 112

T-259 / T-345 student operator

1078-1108-(1121)

PCH, track 2, Southbound

**12/25/2019 12:40:00 PM - Incident# 3243635 (0 lost trips, 12 lost minutes)**

M-258 reported that the C truck on car 1081 braking is bad.

T-259

Train 104

Cars (1081)-1095

Del Amo, track 2, south

**12/26/2019 6:30:00 AM - Incident# 3243837 (1 lost trip, 151 lost minutes) CHARGEABLE**

Auto Train Protection (Speed Limit) and loose skirt  
(165A)-166-162

Train 113

T-363

Washington, Southbound, Track 2

**12/27/2019 7:01:00 AM - Incident# 3244223 (1 lost trip, 150 lost minutes) CHARGEABLE**

Yard Control reports that train 111 encounter propulsion faults that will not clear at the Yard.

Train 111

T-118

LRV'S 1088-1099

Blueline Yard.

**12/27/2019 7:35:00 AM - Incident# 3244273 (0 lost trips, 5 lost minutes) CHARGEABLE**

Train 103 reporting door problems at Grand Station southbound.

Train 103

T-216

LRV'S ( 165 A) 162-166

Grand Station Track 2, southbound.

**12/27/2019 11:35:00 AM - Incident# 3244156 (13 lost trips, 1,958 lost minutes) CHARGEABLE**

(250)-244-247

Brake Fault/No Movement

SB Wardlow

T-258

Train 104

**12/29/2019 8:05:00 PM - Incident# 3245067 (0 lost trips, 20 lost minutes) CHARGEABLE**

Operator T-149 reported prop faults on consist 230A. A 90 second shutdown was conducted at Compton Station.

Train was replaced at Wardlow Station. Passengers was transferred.

**12/30/2019 3:47:00 PM - Incident# 3245397 (1 lost trip, 163 lost minutes) CHARGEABLE**

Report smoking brake, no movement.

T-549

Train 123

Cars (1084B)-1094-1130

Washington track 1 northbound.

**Wayside Incidents:**

**12/2/2019 8:37:00 AM - Incident# 3233509 (0 lost trips, 10 lost minutes)**

MS-101 will be supporting B&C at various C&S houses.

**12/11/2019 3:52:00 AM - Incident# 3237387 (0 lost trips, 10 lost minutes)**

Switch 21 A/B at 95th Street Interlocking is showing out of correspondence, per SCADA.

**12/15/2019 10:17:00 PM - Incident# 3239384 (0 lost trips, 9 lost minutes)**

Switch 1 at Flower Junction out of correspondence.

**12/17/2019 4:29:00 AM - Incident# 3239954 (0 lost trips, 9 lost minutes)**

San Pedro and Washington TPSS, DC Breaker: Deenergized.

**12/20/2019 9:42:00 PM - Incident# 3242060 (1 lost trip, 150 lost minutes)**

92nd St Interlocking switch 21 does not revert to the reverse switch position. Train 111 lost a trip southbound and transferred passengers on the following train at Firestone Station. 10:37 at 00:010:hours.

**12/23/2019 7:46:00 AM - Incident# 3242817 (0 lost trips, 19 lost minutes)**

AC Breaker: Open at 18th Street Breaker A01

ETS Activation at San Pedro and Washington with breakers open and deenergized tracks.

**12/24/2019 5:38:00 AM - Incident# 3243141 (0 lost trips, lost minutes)**

Artesia 2S: False occupancy

**12/24/2019 2:50:00 PM - Incident# 3243455 (0 lost trips, 12 lost minutes)**

Interlocking: Switch Failure

95th Interlocking, switch 21A and 21B.

**12/26/2019 5:30:00 AM - Incident# 3243800 (1 lost trip, 167 lost minutes)**

ETS: Tripped at Washington South and Slauson North and South.

Washington B04 and B05 opened.

**12/27/2019 3:03:00 PM - Incident# 3244437 (2 lost trips, 313 lost minutes)**

MS-153 Switch 21 Out of Correspondence Compton Interlocking

### **Police & Health Incidents:**

**12/2/2019 12:50:00 AM - Incident# 3233280 (0 lost trips, 3 lost minutes)**

Florence station park-n-ride

Train 108

T-237

Northbound, track 1, Florence station

**12/6/2019 7:37:00 AM - Incident# 3235512 (0 lost trips, 6 lost minutes)**

Train holding by LASD at Compton Station due to robbery suspect on board.

**12/8/2019 9:54:00 PM - Incident# 3236342 (0 lost trips, 3 lost minutes)**

Nude man at Wardlow station  
Train 109  
T-308  
Wardlow,track 2, southbound

**12/11/2019 9:20:00 AM - Incident# 3237622 (0 lost trips, 13 lost minutes)**

Altercation onboard.  
Train#608  
T#100  
(1140A),1103  
Track#2,Pico,Southbound.

**12/17/2019 10:35:00 AM - Incident# 3240144 (0 lost trips, 16 lost minutes)**

119th Street blockade with a construction forklift.

**12/21/2019 7:31:00 AM - Incident# 3242167 (1 lost trip, 168 lost minutes)**

LASD Deputy Ragi reports a patron at the Artesia Station, suspected in committing a felony .

**12/25/2019 5:37:00 AM - Incident# 3243579 (0 lost trips, 12 lost minutes)**

Assault: Two male patrons fighting on board Car 1186.

**Other Incidents:**

**12/13/2019 12:52:00 PM - Incident# 3238745 (0 lost trips, 10 lost minutes)**

Operator T-115 reported that a passenger used the restroom on car 1076.  
T-115  
Train 108  
Cars (1076)-1095  
Slauson, track 1, north

**12/14/2019 4:49:00 AM - Incident# 3238936 (1 lost trip, 121 lost minutes)**

Sick car, (1138).  
Train 102  
T-433  
(1138)-1131  
7th/Metro Center Station, Track 2, southbound.

**12/18/2019 7:40:00 AM - Incident# 3240568 (0 lost trips, 13 lost minutes)**

Doors 7/8 on car 1081 cut out  
Train 103  
T-503  
(1081)-1093-1101  
Tk 2 SB Washington Station

**Unable to Duplicate**

**12/12/2019 5:25:00 PM - Incident# 3238395 (1 lost trip, 158 lost minutes) CHARGEABLE**

T-293 reports a propulsion fault with a speed restriction.

T-293

Tr#124

Cars(229B)-231-235

Northbound Trk#1

Willow Station

**12/2/2019 8:12:00 AM - Incident# 3233458 (0 lost trips, 13 lost minutes)**

T-100 reported that the doors were not opening in car (1135A).

T-100

Train 616

1076-(1135)-1105

Northbound, Track 3

Bundy Station

### **Reset**

**12/3/2019 3:38:00 PM - Incident# 3234248 (0 lost trips, lost minutes)**

(1098)-1123-1095

Prop Fault/Speed Restriction

NB Willowbrook

T-307

Train 123

**12/3/2019 4:59:00 PM - Incident# 3234258 (2 lost trips, 310 lost minutes)**

(1081)-1131-1094

Self applying brakes

SB San Pedro

T-118

Train 107

**12/20/2019 5:15:00 AM - Incident# 3241644 (0 lost trips, 7 lost minutes)**

Train 102 has SLC fault 1136

T-502, Train 102

Track 1, North, Willowbrook

(1136)-1179-1087

### **Other Duplicate**

**12/25/2019 11:59:00 AM - Incident# 3243630 (0 lost trips, 12 lost minutes) CHARGEABLE**

Operator reports that there is a HSCB in car 1095 that is giving her a speed restriction.

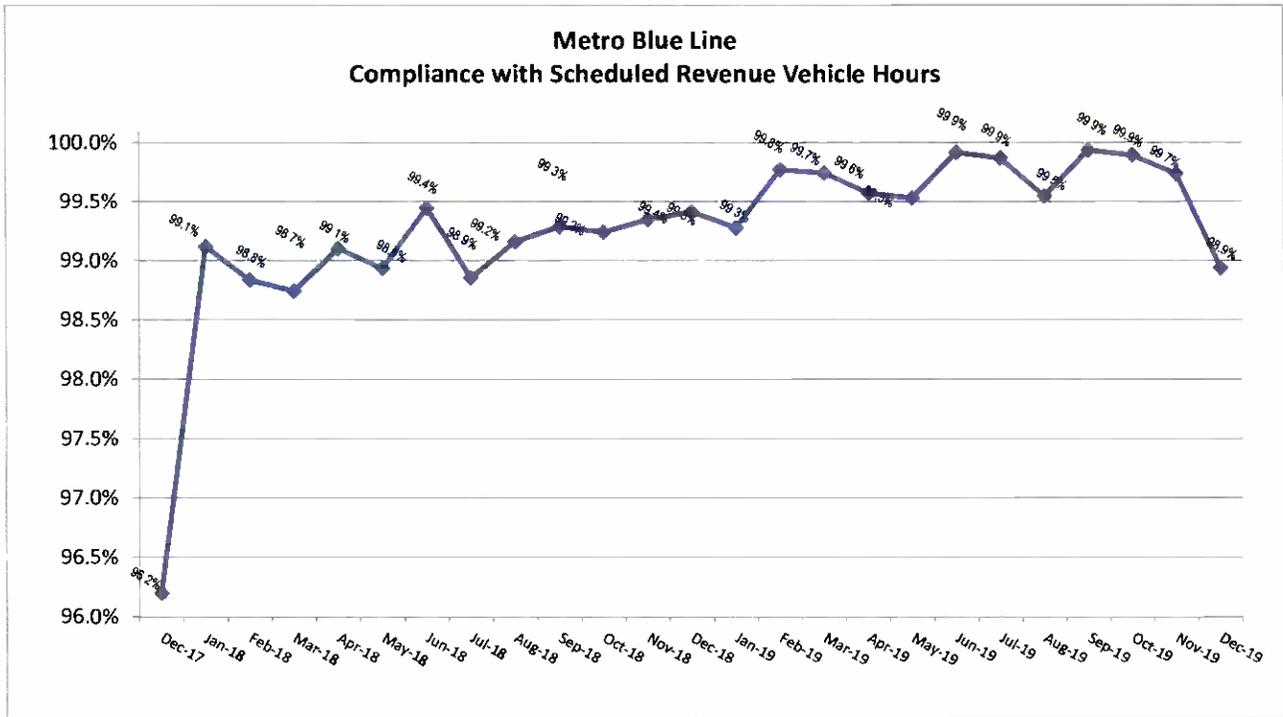
T-259

Train 104

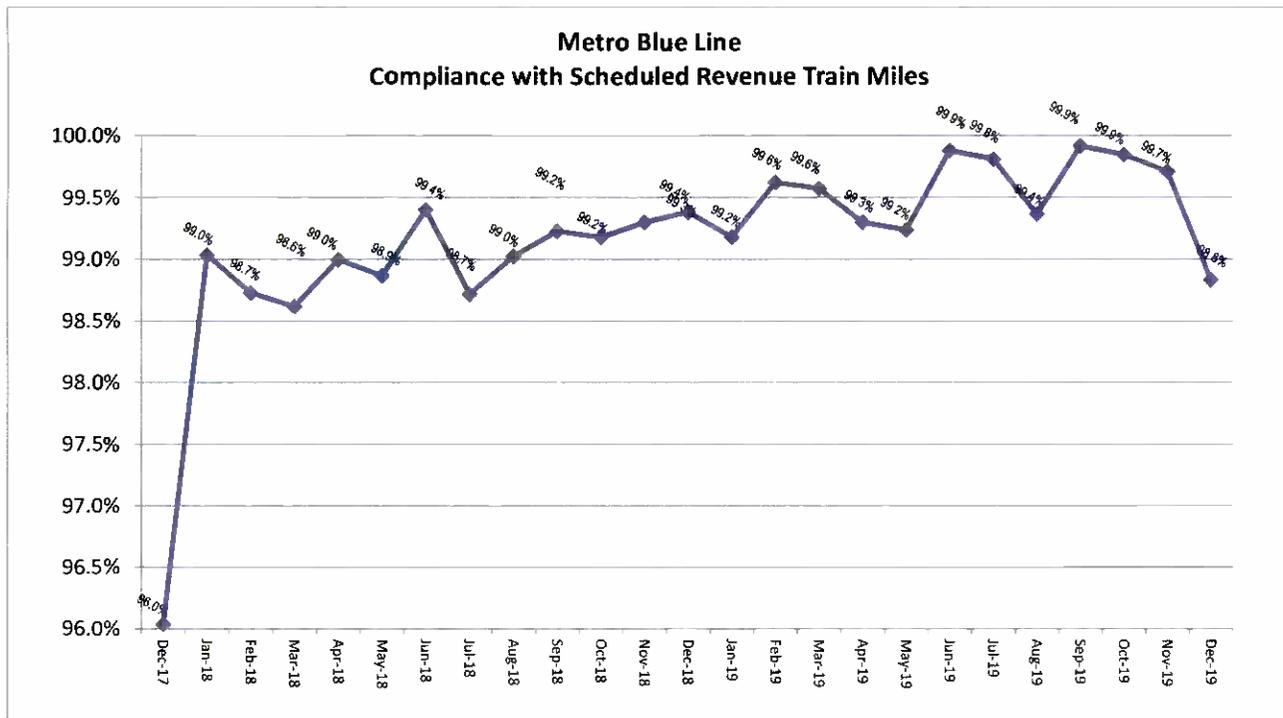
Cars 1081-(1095)

Pico, track 2, south

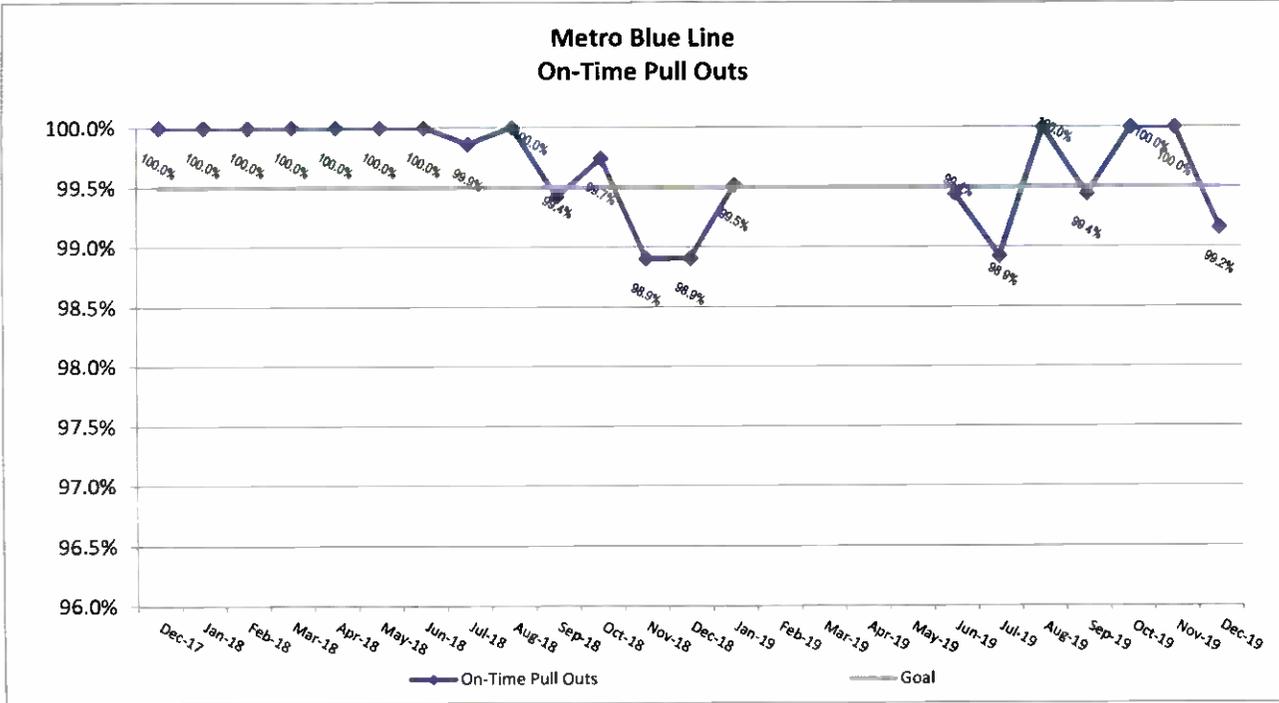
**MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS**  
**COMPLIANCE WITH SCHEDULED VEHICLE HOURS**  
**Dec 2019**



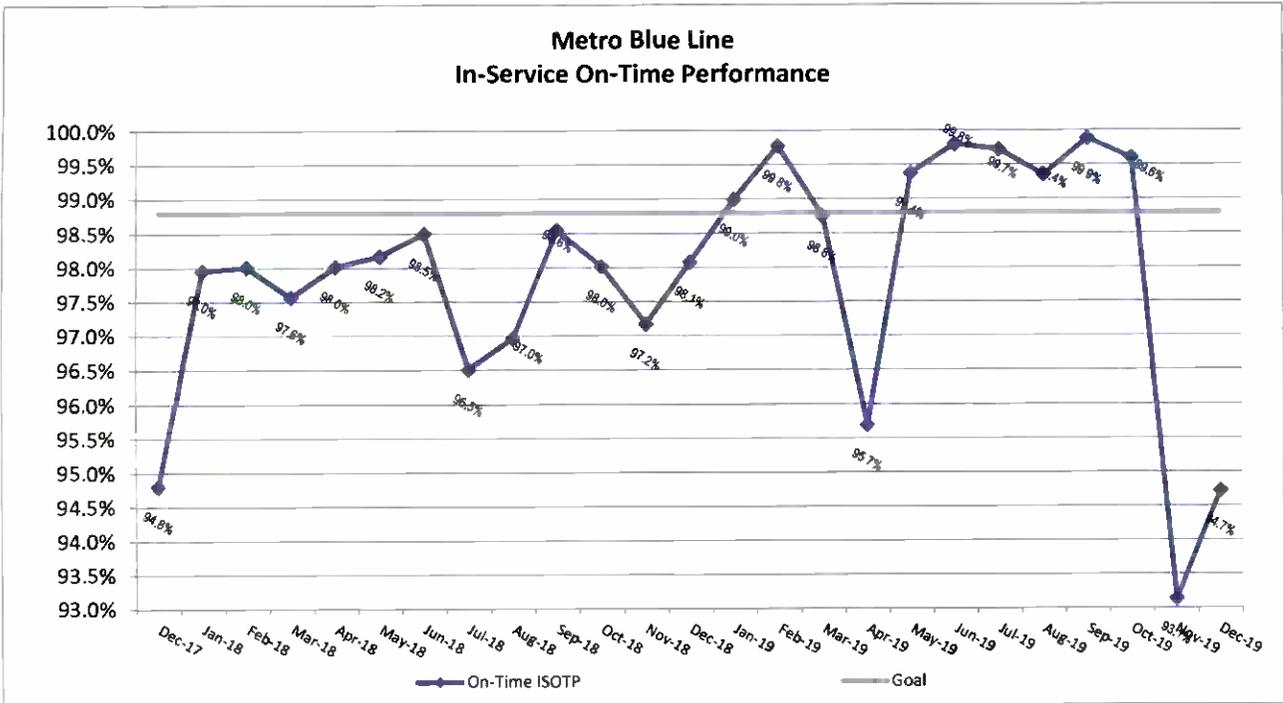
**COMPLIANCE WITH SCHEDULED TRAIN MILES**



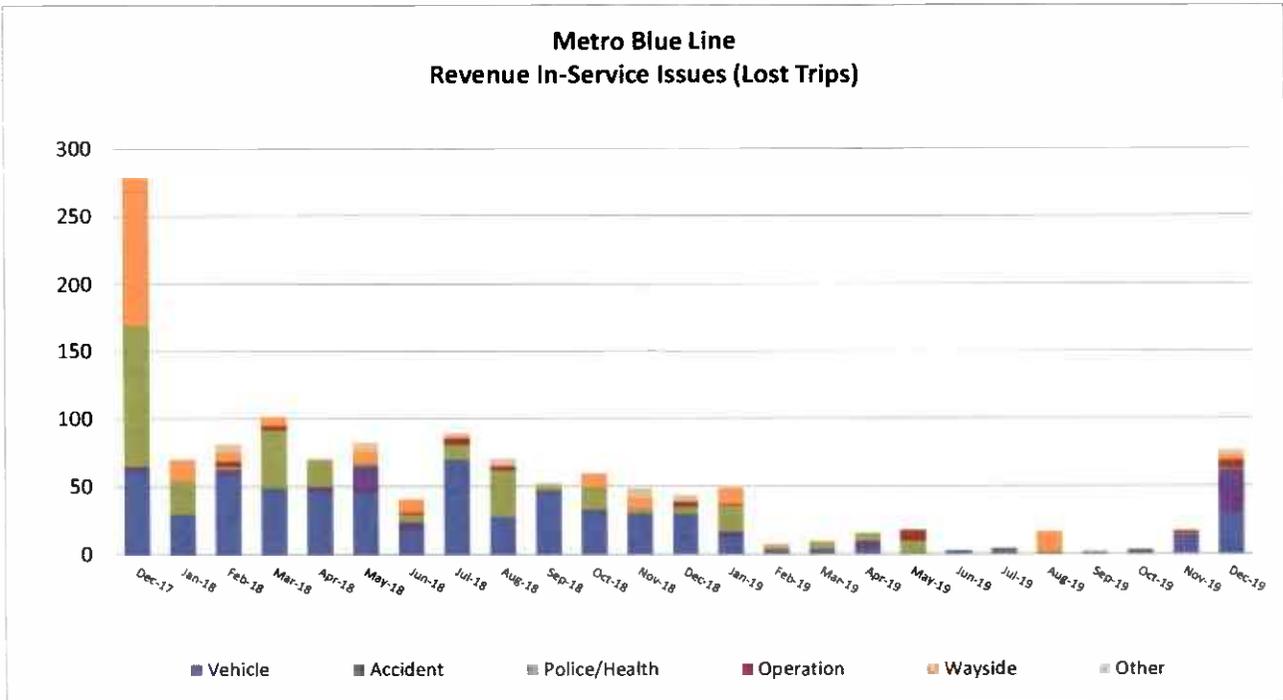
### ON-TIME PULL OUTS



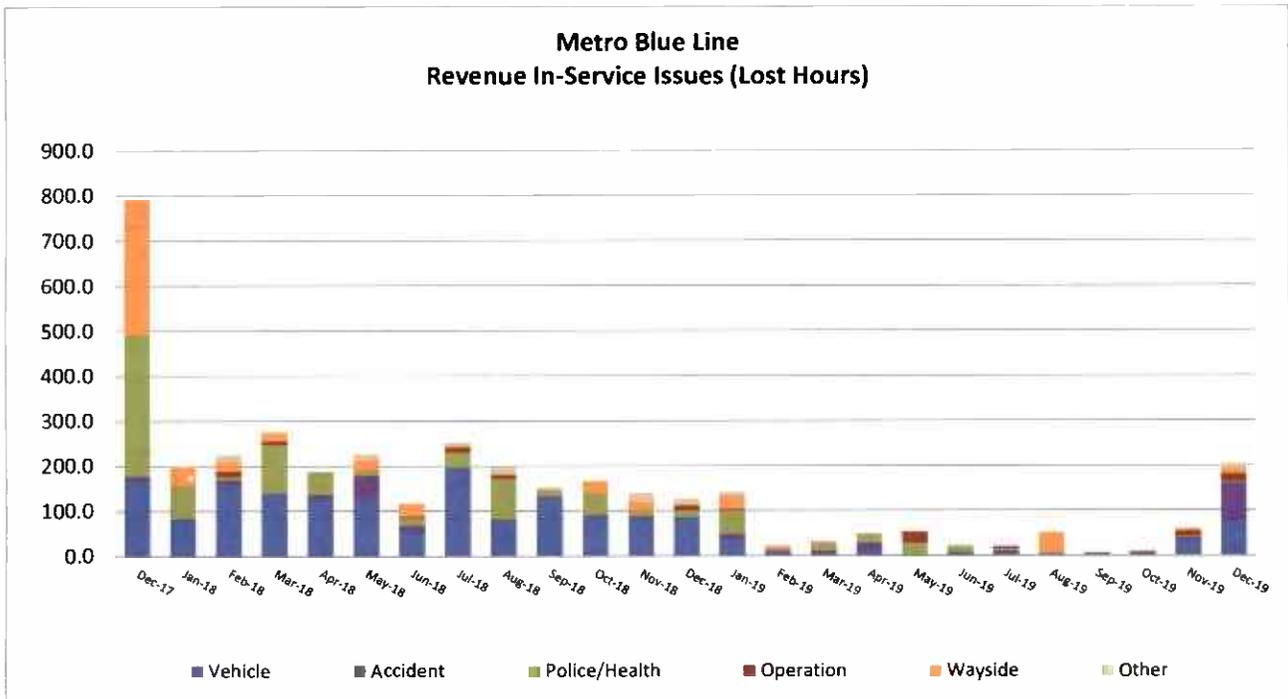
### IN-SERVICE ON-TIME PERFORMANCE CHART



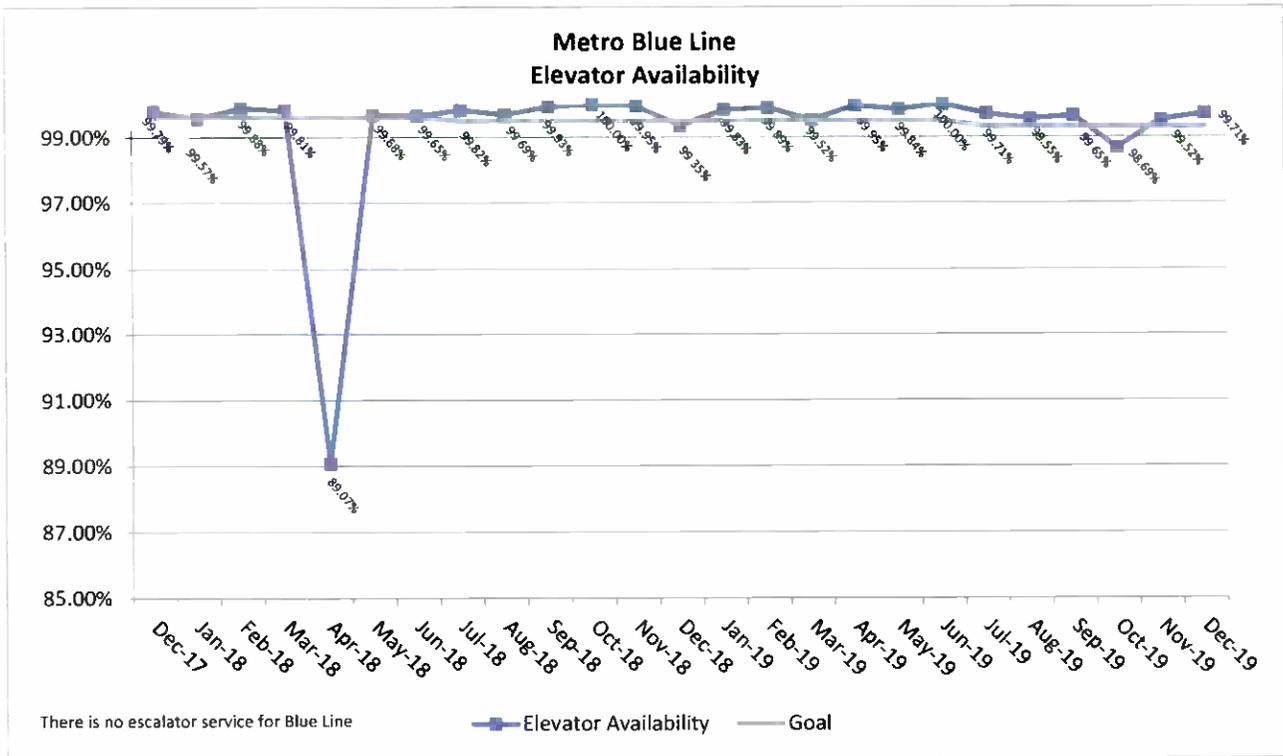
## LOST TRIPS



## LOST HOURS



## VERTICAL TRANSPORTATION AVAILABILITY



## RED LINE

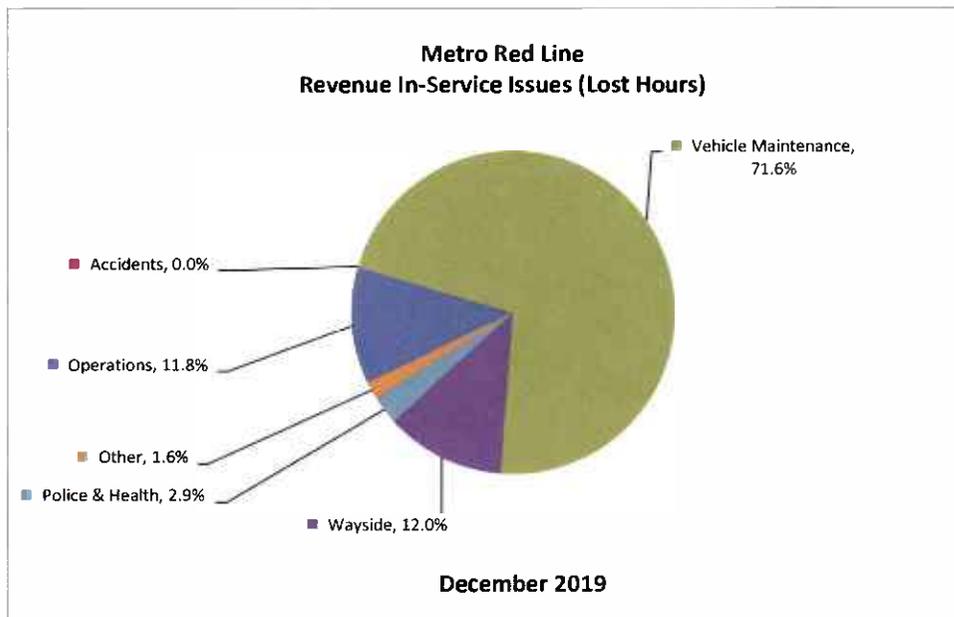
Out of a total of 26,972 hours operated, there were approximately 44 total hours of service delays.

December 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	26,928	99.8%
Cancelled + Delayed Hours	44	0.2%
<b>Total Revenue Hours</b>	<b>26,972</b>	<b>100.0%</b>

Summary of the incidents:	Count	Hours	Percent
Operations	3	5.2	11.8%
Accidents	0	0.0	0.0%
Vehicle Maintenance	12	31.6	71.6%
Wayside	2	5.3	12.0%
Police & Health	6	1.3	2.9%
Other	5	0.7	1.6%
<b>Total</b>	<b>28</b>	<b>44.0</b>	<b>100.0%</b>

\* Data from M3 used to report Service Delays is under review for accuracy

The number of incidents on the following page may differ from the summary count due to some incidents not properly designated as Cancelled or Delayed



## **December 2019 Red Line incidents causing delay were as follows:**

### **Operations Incidents:**

**12/2/2019 2:53:00 PM - Incident# 3233695 (2 lost trips, 298 lost minutes)**

T-15 out sick on the line due to a family emergency. Train 206 loss Wilshire/Western round trip.

**12/8/2019 4:00:00 PM - Incident# 3236274 (0 lost trips, 12 lost minutes)**

Train 202

T-179

Operator utilized berthing bypass from Civic Center to North Hollywood  
(579), 580, 573, 574, 561, 562

**12/16/2019 7:06:00 AM - Incident# 3239469 (0 lost trips, 4 lost minutes)**

Police activity @ Union station

Train 204

591-592/545-546/573-574

T-319

UNion, AL, West

### **Vehicle Maintenance Incidents:**

**12/9/2019 5:43:00 AM - Incident# 3236412 (0 lost trips, 7 lost minutes) CHARGEABLE**

Propulsion failure & Service brake failure indication. Emergency brake self-apply.

Train 206 (589) & (542)

T-271

589-590/541-542

Pershing Square, AR, East

**12/9/2019 6:22:00 AM - Incident# 3236437 (0 lost trips, 5 lost minutes) CHARGEABLE**

Overshoot 2 doors (530) ATO operation

Train 211

T-80

501-502/513-514/521-530

Hollywood/Vine, AL, East

**12/9/2019 6:59:00 PM - Incident# 3236754 (1 lost trip, 149 lost minutes) CHARGEABLE**

T-272

Train 202

Operator reports funny smell. M-339 recommends the consist be out of service upon arrival to Union Station.  
The trip will be cancelled at 1906 hours.

7th Metro AL east

525, 524, 529, (520)

**12/15/2019 2:33:00 PM - Incident# 3239281 (2 lost trips, 320 lost minutes) CHARGEABLE**

Transfer Key 10-22

Train 203

T-015

(525)-524-529-520

Westbound, AR Union station.

**12/16/2019 8:44:00 AM - Incident# 3239541 (2 lost trips, 298 lost minutes) CHARGEABLE**

Train #202 571-572-547-(548) 7th and Metro station AL Eastbound with friction brake EMO was used. Train came to an abrupt stop.

**12/18/2019 10:44:00 PM - Incident# 3241035 (2 lost trips, 309 lost minutes) CHARGEABLE**

T-371 (with student operator T-270) reports friction breaks not releasing, compressor cut out indication with switch in the down position and losing air. Train 219

Cars (591, 592), 545, 546, 535, 536

Vermont/ Sunset AL

**12/19/2019 4:15:00 AM - Incident# 3241074 (0 lost trips, 4 lost minutes)**

Friction brakes not releasing (505)

Train 203

(505)-506-507-510

T-351

YR, Yard limits

**12/19/2019 4:34:00 PM - Incident# 3241509 (1 lost trip, 164 lost minutes) CHARGEABLE**

Friction brakes will not release, consist 579,580(575)576,(543)544.

Pershing Square Station

Train #215, T-15, AR, westbound.

**12/24/2019 10:39:00 AM - Incident# 3243351 (4 lost trips, 617 lost minutes) CHARGEABLE**

Brakes sticking no movement.

Train # 201

T-31

Prior to entering Pershing Square/AL, eastbound

583 584 537 (538)

**12/24/2019 5:07:00 PM - Incident# 3243479 (0 lost trips, 10 lost minutes) CHARGEABLE**

Friction Brakes

Train 215

T-272

563-564-535-(536)-561-562

Westbound, AR CP-04.

**12/24/2019 6:25:00 PM - Incident# 3243494 (0 lost trips, 5 lost minutes) CHARGEABLE**

No Fault - No Movement

Train 201

T-367

591-592-581-582

AR track, Wilshire/Vermont station.

**12/31/2019 6:38:00 AM - Incident# 3245620 (0 lost trips, 5 lost minutes) CHARGEABLE**

Train #203 (547)-548-539-540-535-536 Union Station AR Westbound with propulsion service brake failure

### **Wayside Incidents:**

**12/12/2019 4:25:00 PM - Incident# 3238381 (2 lost trips, 318 lost minutes)**

East AL track deluge activated. AL track de-energized between 7th Metro and Civic Center Station.

**12/25/2019 3:57:00 AM - Incident# 3243572 (0 lost trips, 5 lost minutes)**

CP-57 AL cover board damaged

### **Police & Health Incidents:**

**12/8/2019 9:20:00 AM - Incident# 3236185 (0 lost trips, 17 lost minutes)**

Westlake/MacArthur station trespasser

**12/8/2019 2:53:00 PM - Incident# 3236261 (0 lost trips, 7 lost minutes)**

Contract Security Officer Zimora contacted ROC stating a teenage child was separated from her Mother at 7th Metro Station. The child boarded Train 202 and the Mother was instructed to board Train 205.

**12/8/2019 3:17:00 PM - Incident# 3236264 (0 lost trips, 5 lost minutes)**

CCT R-413 reports he received a call from a patron on the platform at Vermont Sunset Station, stating that there was an individual on the AR track.

**12/15/2019 9:29:00 AM - Incident# 3239230 (0 lost trips, 15 lost minutes)**

General Services

**12/22/2019 5:06:00 PM - Incident# 3242553 (0 lost trips, 10 lost minutes)**

Train 201

T-117

CCTV R-413 reports 3rd party information from a passenger another patron was carrying a gun in his back pack attempting to board car 543.

7th Metro AR west

575, 576, (543), 544

**12/25/2019 11:31:00 PM - Incident# 3243743 (0 lost trips, 6 lost minutes)**

Operator T-367 reports a nude individual on train 208 departing Union.

## **Other Incidents:**

**12/12/2019 6:43:00 PM - Incident# 3238408 (0 lost trips, 7 lost minutes)**

B/O berthing verification car 533

Train 213

T-179

(533)-534-573-574-543-544

Civic Center AR West

**12/9/2019 6:39:00 AM - Incident# 3236455 (0 lost trips, 10 lost minutes)**

Passenger problem: 10 minute delay North Hollywood -Union.

Train 201

537-538/535-536/549-550

T-364

NH, AR, East

## **Unable to Duplicate**

**12/30/2019 12:11:00 AM - Incident# 3245103 (0 lost trips, 13 lost minutes)**

T-447 reports frictions brakes will not release.

Train # 208.

Cars 591, (592), 581, 582, 541, 542

Wilshire/ Western BR

**12/30/2019 11:02:00 PM - Incident# 3245548 (0 lost trips, 20 lost minutes)**

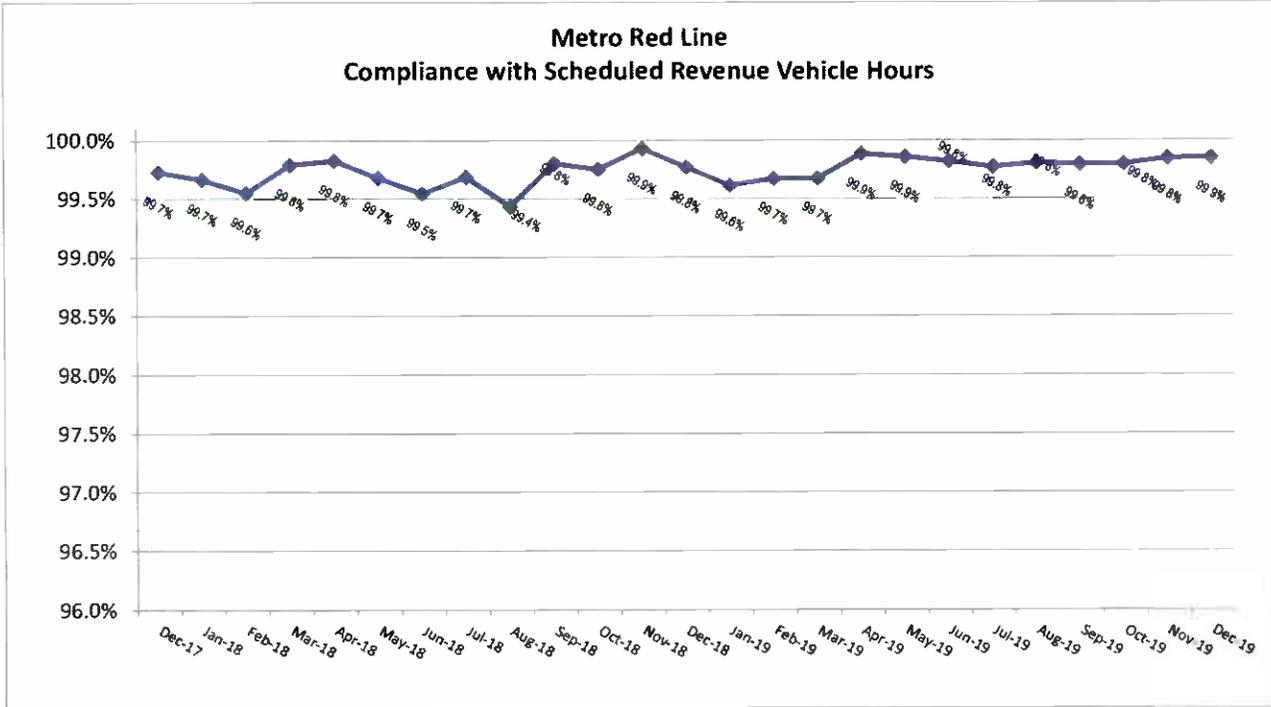
Train 217 (593,594,559,560,549,550) T-272, North Hollywood Station, AR reports car 550 indicates propulsion and service brake fault failure with no movement.

## **Reset**

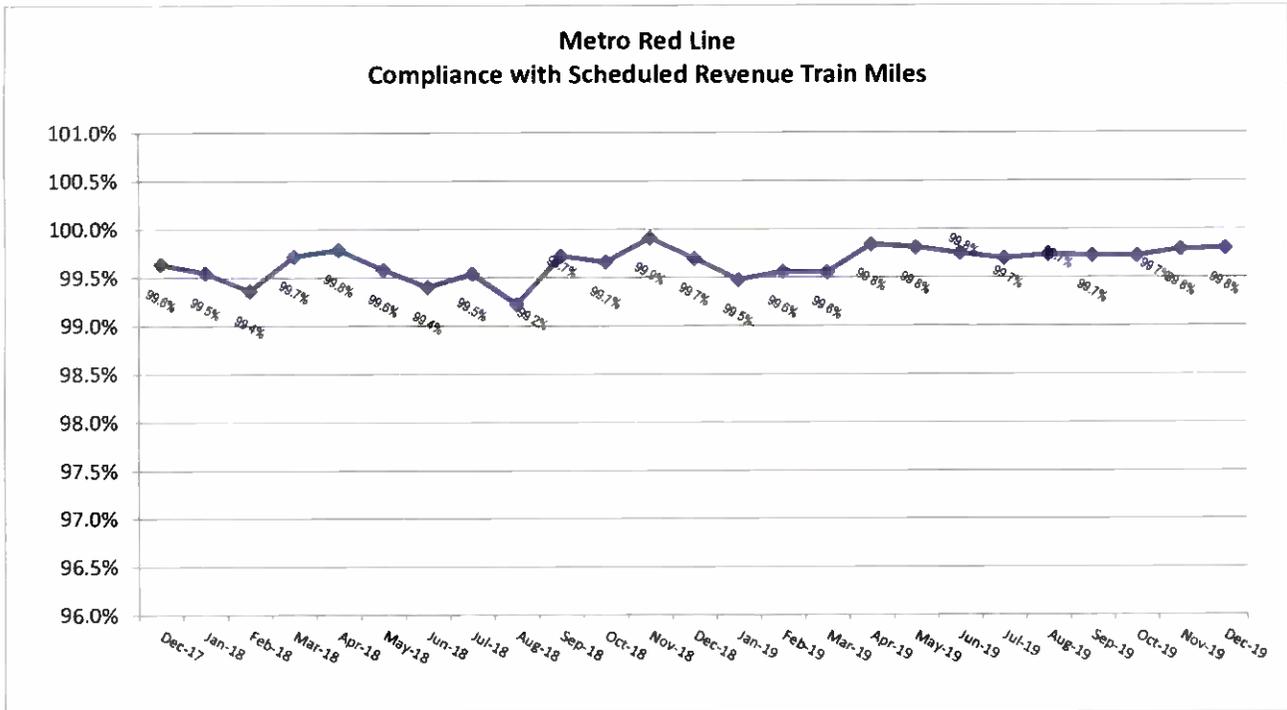
**12/15/2019 11:40:00 AM - Incident# 3239248 (0 lost trips, 10 lost minutes)**

Westlake/Mac Arthur man having epileptic attack on board 203

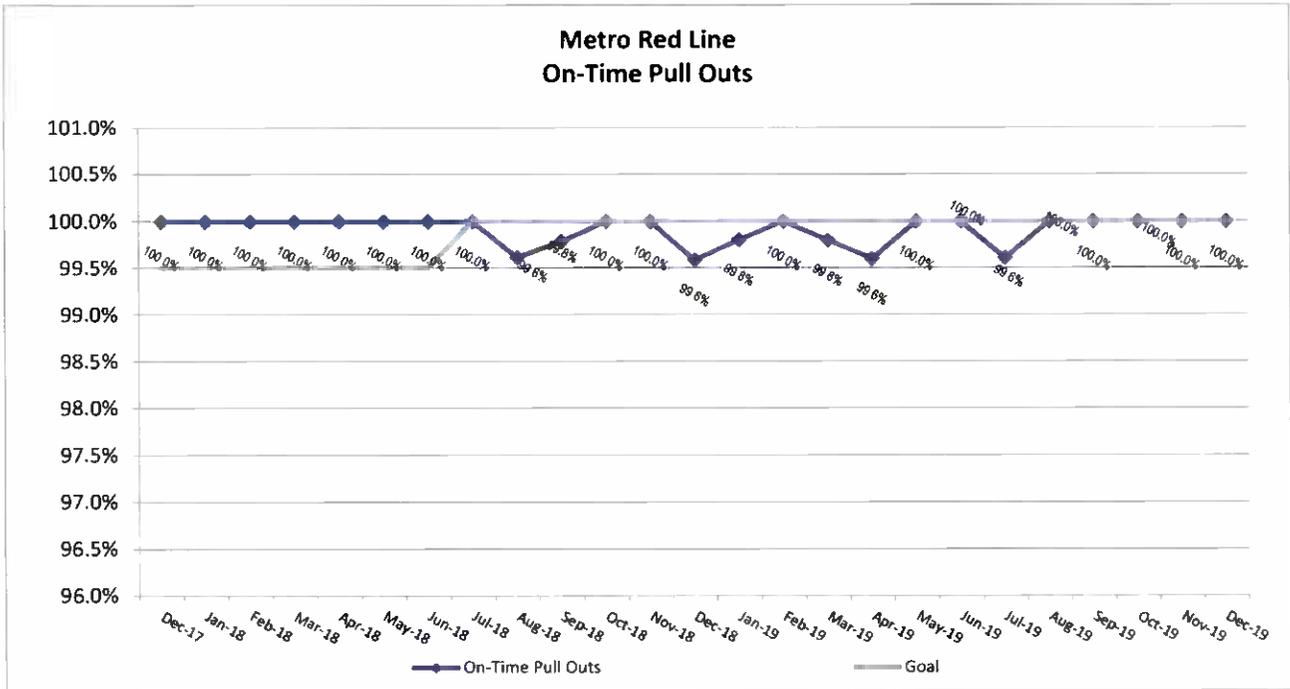
**MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS**  
**COMPLIANCE WITH SCHEDULED VEHICLE HOURS**  
**Dec 2019**



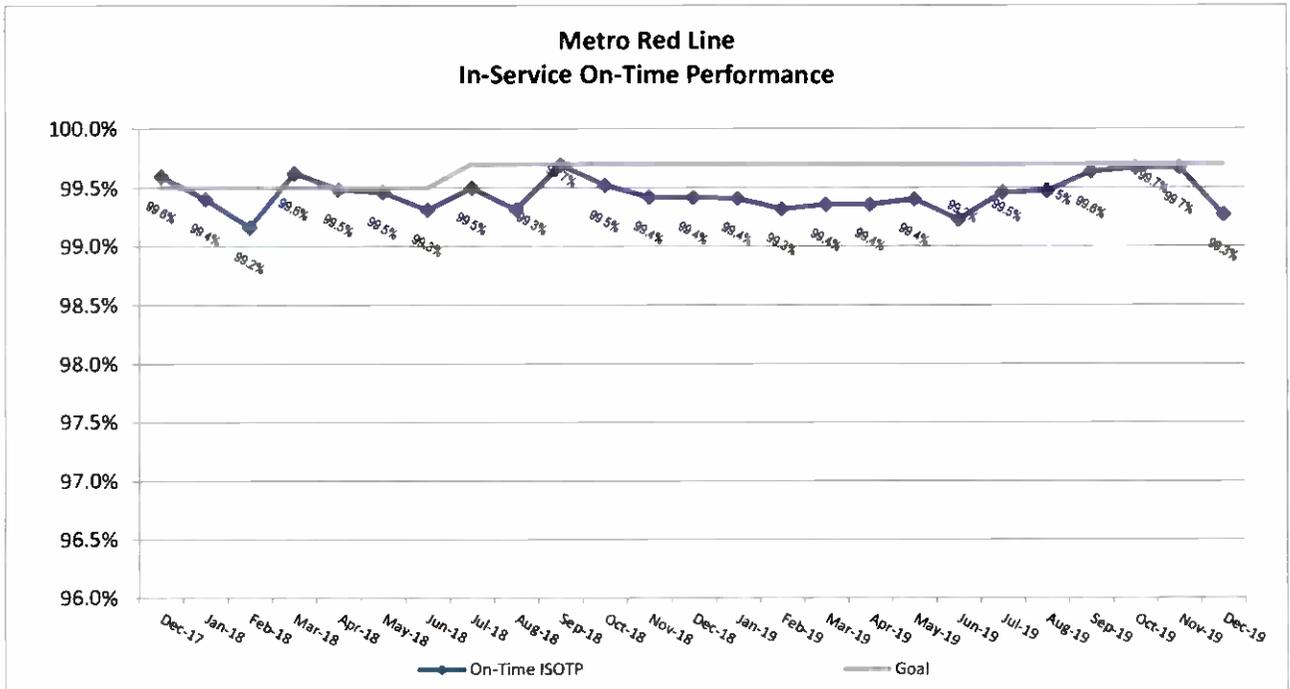
**COMPLIANCE WITH SCHEDULED TRAIN MILES**



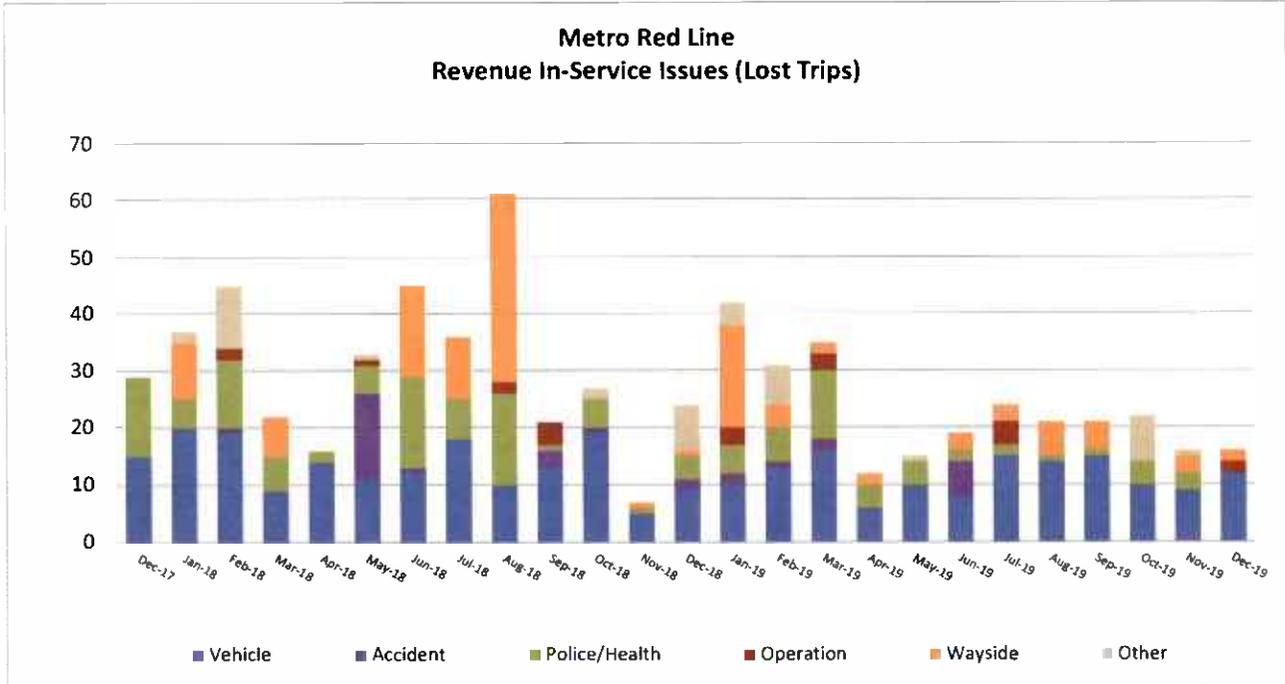
### ON-TIME PULL OUTS



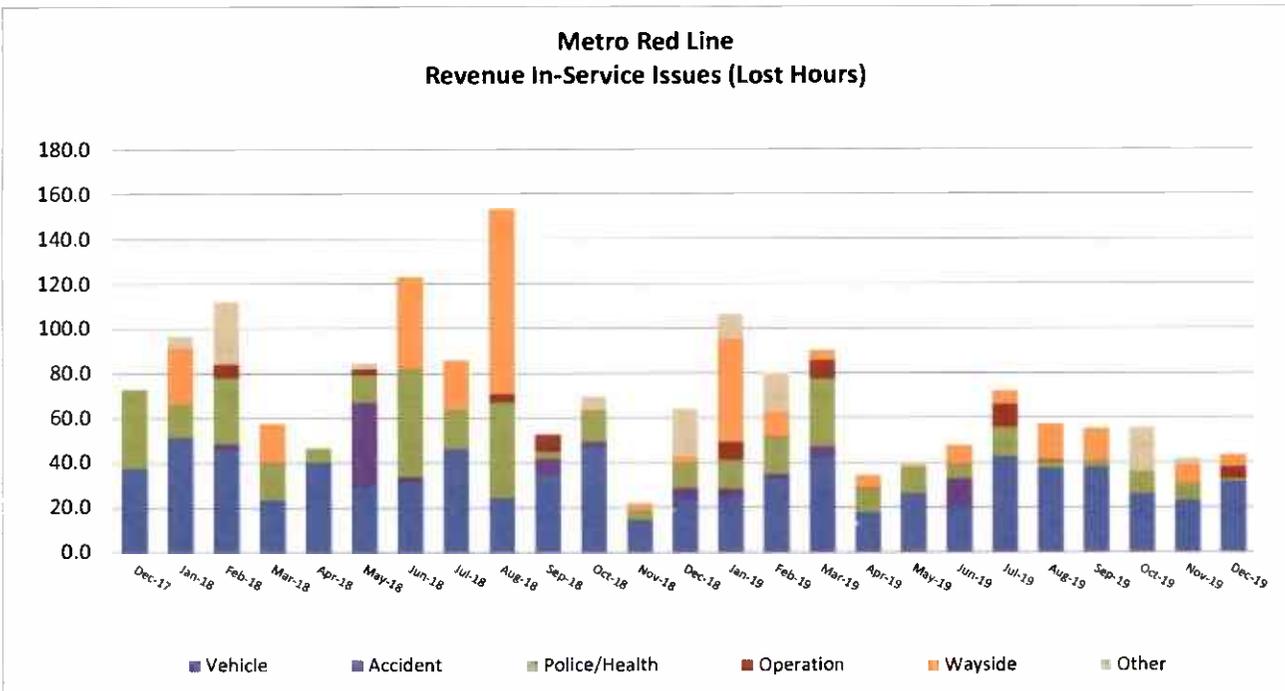
### IN-SERVICE ON-TIME PERFORMANCE



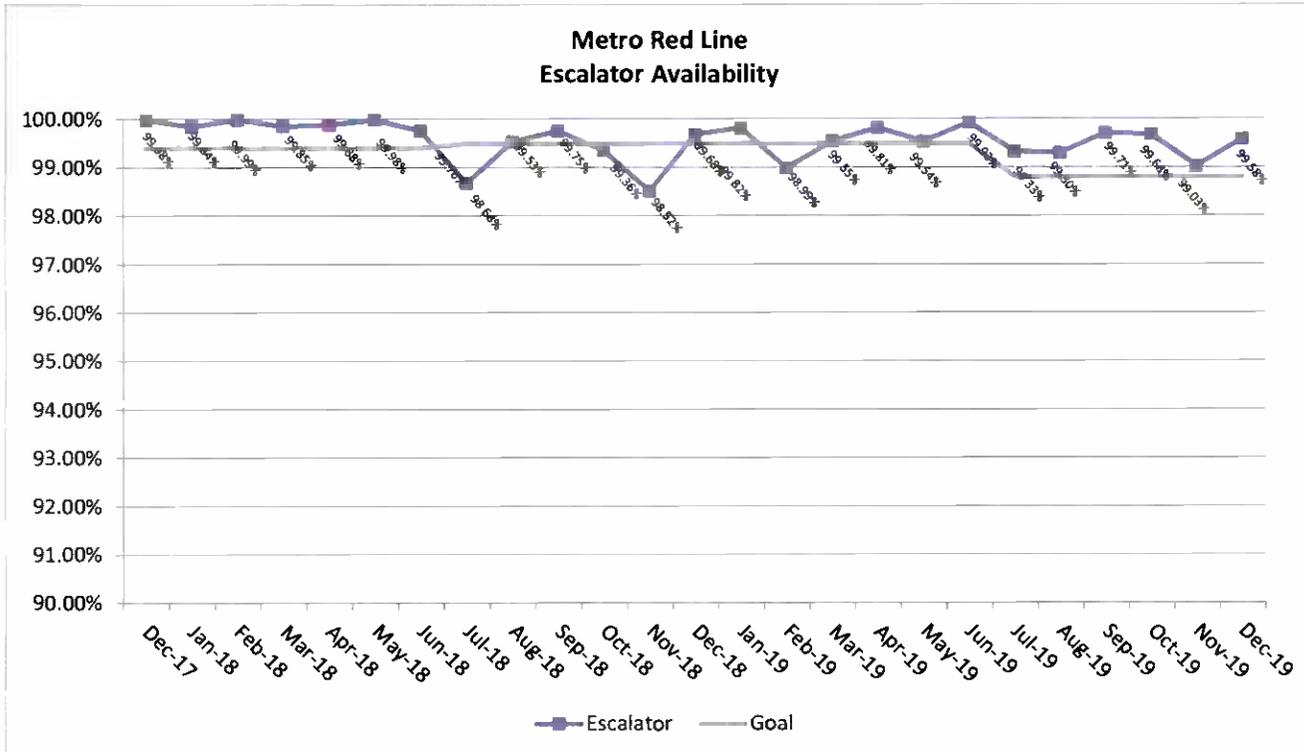
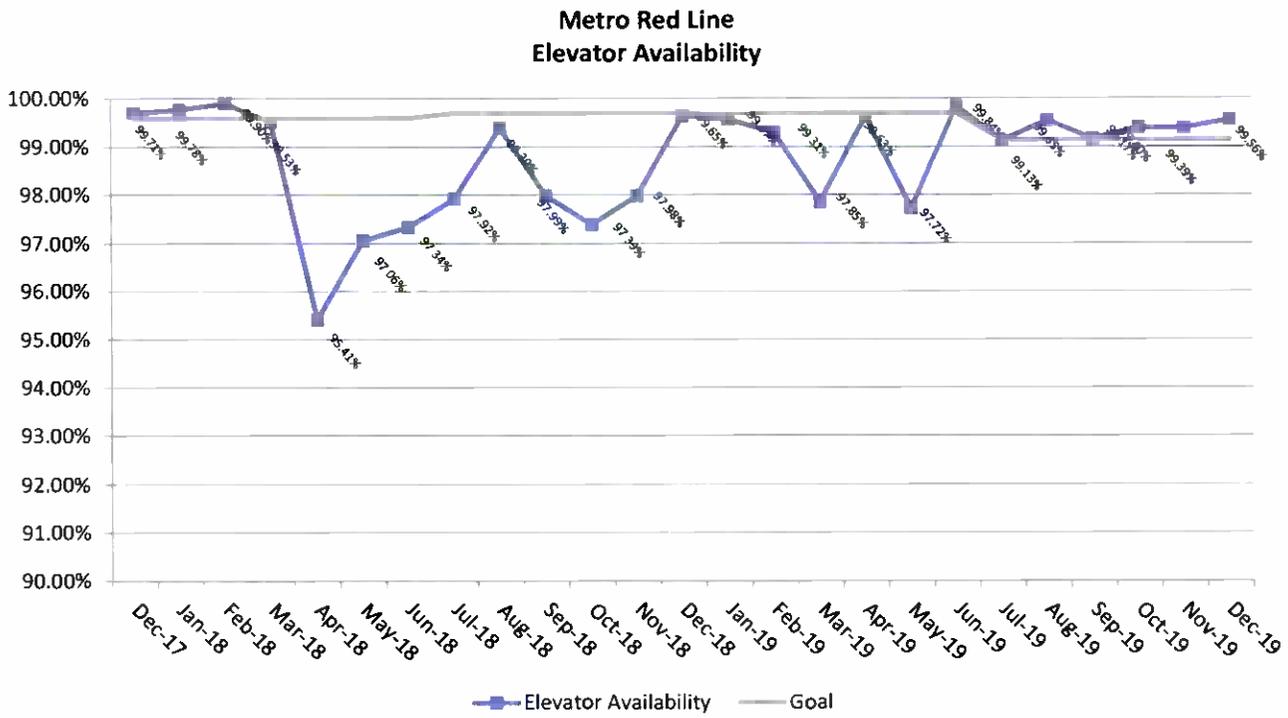
## LOST TRIPS



## LOST HOURS



## VERTICAL TRANSPORTATION AVAILABILITY



## GREEN LINE

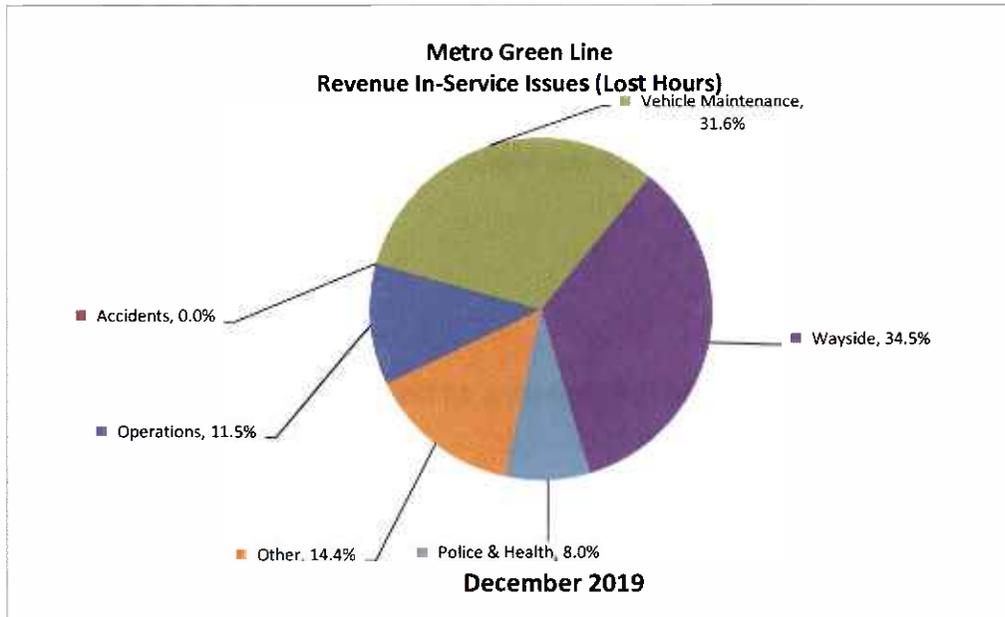
Out of a total of 9,536 hours operated, there were approximately 11 total hours of service delays.

December 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	9,526	99.9%
Cancelled + Delayed Hours	11	0.1%
<b>Total Revenue Hours</b>	<b>9,536</b>	<b>100.0%</b>

Summary of the incidents:	Count	Hours	Percent
Operations	2	1.2	11.5%
Accidents	0	0.0	0.0%
Vehicle Maintenance	10	3.3	31.6%
Wayside	2	3.6	34.5%
Police & Health	4	0.8	8.0%
Other	3	1.5	14.4%
<b>Total</b>	<b>21</b>	<b>10.4</b>	<b>100.0%</b>

\* Data from M3 used to report Service Delays is under review for accuracy

The number of incidents on the following page may differ from the summary count due to some incidents not properly designated as Cancelled or Delayed



## **December 2019 Green Line incidents causing delay were as follows:**

### **Operations Incidents:**

**12/8/2019 6:59:00 PM - Incident# 3236299 (1 lost trip, 68 lost minutes)**

Train 332

T-346

Wilmington Station, Track 2, Eastbound

(206), 209

T-346 reported door problems at Wilmington Station, with no movement.

**12/18/2019 7:01:00 AM - Incident# 3240566 (0 lost trips, 6 lost minutes)**

Train 346 / Operator T-220 / Cars 208, (227A)

Long Beach Station Track 2 Eastbound

Operator reports bypassing the Station by 1 car in MTO Mode.

### **Vehicle Maintenance Incidents:**

**12/2/2019 6:52:00 AM - Incident# 3233371 (1 lost trip, 74 lost minutes) CHARGEABLE**

Prop/ fault, speed restriction.

Train #341.

T-327.

LRV- (227), 206.

Lakewood Station, Track #1, Westbound.

**12/6/2019 4:46:00 AM - Incident# 3235455 (0 lost trips, 3 lost minutes)**

Doors, cars #(1144A)-1146

Train #343

T-136

Norwalk Station, Track #1, Westbound.

**12/6/2019 1:25:00 PM - Incident# 3235678 (0 lost trips, 10 lost minutes) CHARGEABLE**

Car 1146A BO windsheild wiper.

T-266

Train 333

Cars 1144-(1146A)

Douglas Station, Track 2, eastbound.

**12/6/2019 10:41:00 PM - Incident# 3235832 (0 lost trips, 10 lost minutes) CHARGEABLE**

Reports of friction brake faults.

Train # 331

T-83

(207A)-227

Aviation Station, Track #1, EB

**12/10/2019 3:08:00 PM - Incident# 3237222 (1 lost trip, 66 lost minutes) CHARGEABLE**

T-96

Train 332

216 (208A)

Prop. Fault speed restriction

Vermont TK2 Eastbound

**12/13/2019 6:39:00 AM - Incident# 3238593 (0 lost trips, 5 lost minutes) CHARGEABLE**

Train 337 / Operator T-112 / Consist 207-(205)

Mariposa Station Track 1 Westbound, Operator reports the consist bypassed the Station in ATO Mode. Operator reports the proper Route I.D was initiated and displayed on the consist.

**12/16/2019 4:12:00 AM - Incident# 3239401 (0 lost trips, 5 lost minutes) CHARGEABLE**

Propulsion / Dynamic Brakes, cars # 208-(223A)

Train #333

T-055

Marine Station, track #2, Westbound.

**12/22/2019 6:38:00 AM - Incident# 3242434 (0 lost trips, 4 lost minutes)**

Car 216 continuous prop faults

Train 333

T-343

(216)-202

Tk 1 WB Wilmington Station

**12/22/2019 8:33:00 PM - Incident# 3242574 (0 lost trips, 18 lost minutes) CHARGEABLE**

BO windshield wipers on car 1187.

Train 332

T-255

Cars (1187)-1177

Track 2, Hawthorne Station, Eastbound

**12/30/2019 2:21:00 PM - Incident# 3245419 (0 lost trips, 4 lost minutes)**

Auto Train Protection (Speed Limit)

T-184

Cars (2020-227

Marine station eastbound

### **Wayside Incidents:**

**12/4/2019 12:01:00 AM - Incident# 3234363 (3 lost trips, 198 lost minutes)**

All breakers trip and opened at Hawthorne Yard TPSS, Douglas TPSS and EL Segundo TPSS. Unknown cause reasons for the breakers being tripped. Tp-156 was notified and in route to the location of the power outage.

**12/20/2019 8:35:00 AM - Incident# 3241777 (0 lost trips, 20 lost minutes)**

Track Circuit: False Occupancy at Track circuit 7

**Police & Health Incidents:**

**12/9/2019 12:01:00 AM - Incident# 3236360 (0 lost trips, 13 lost minutes)**

African America Male with a gun on board

Train #334, T-83

Car # 227

EB, Wilmington Station, Track #2

**12/10/2019 6:55:00 PM - Incident# 3237303 (0 lost trips, 6 lost minutes)**

Trespasser on the tracks Harbor east.

**12/24/2019 9:09:00 AM - Incident# 3243327 (0 lost trips, 10 lost minutes)**

Dog on Right Of Way between Lakewood Station and Norwalk Station.

**12/29/2019 6:19:00 AM - Incident# 3244911 (0 lost trips, 21 lost minutes)**

Train 331 / Operator T-344 / Consist 207-(209)

Operator requested law enforcement to meet the train for excessive sleepers on board the consist while departing Marine Station.

**Other Incidents:**

**12/23/2019 1:14:00 PM - Incident# 3242909 (0 lost trips, 10 lost minutes)**

RC-121 contacted ROC stating he had to replace a Fujitsu Card at Marine Station and it would not affect Train movement or the ability for ROC to route trains.

**Unable to Duplicate:**

**12/12/2019 3:17:00 PM - Incident# 3238333 (0 lost trips, lost minutes)**

Speed code 8 mph

Train 356

T-327

LRV cars (1174B)-1177

Douglas Station track 2 eastbound

**Reset:**

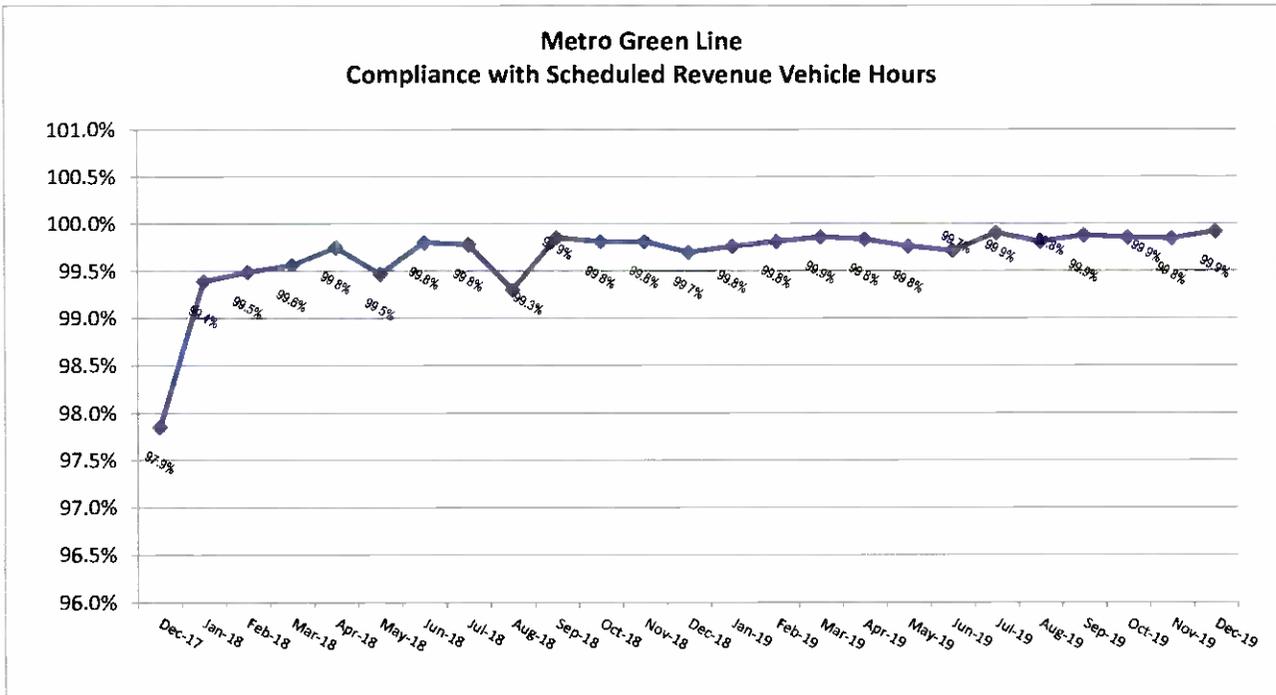
**12/18/2019 8:10:00 AM - Incident# 3240597 (1 lost trip, 82 lost minutes)**

Train 335 / Operator T-168 / Cars 1184-(1193)

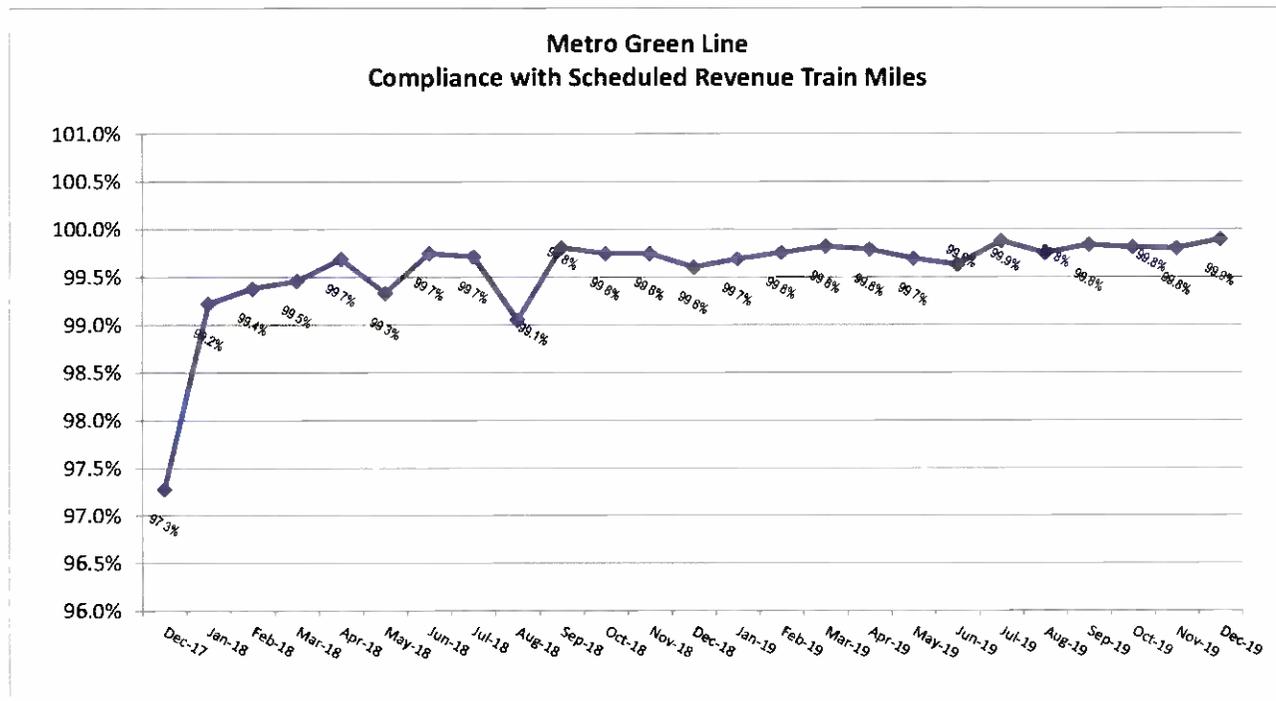
Vermont Station Track 1 Westbound

Operator reports he was unable to open the doors at the Station.

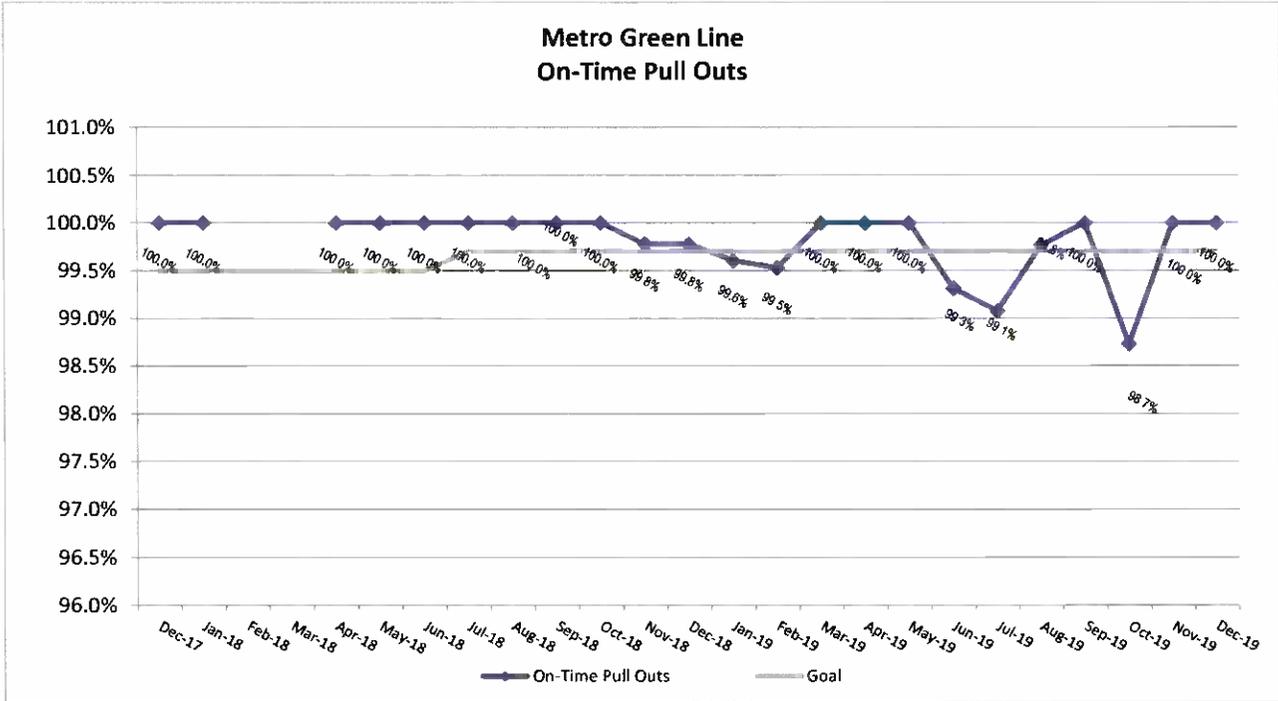
**MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS**  
**COMPLIANCE WITH SCHEDULED VEHICLE HOURS**  
**Dec 2019**



**COMPLIANCE WITH SCHEDULED TRAIN MILES**

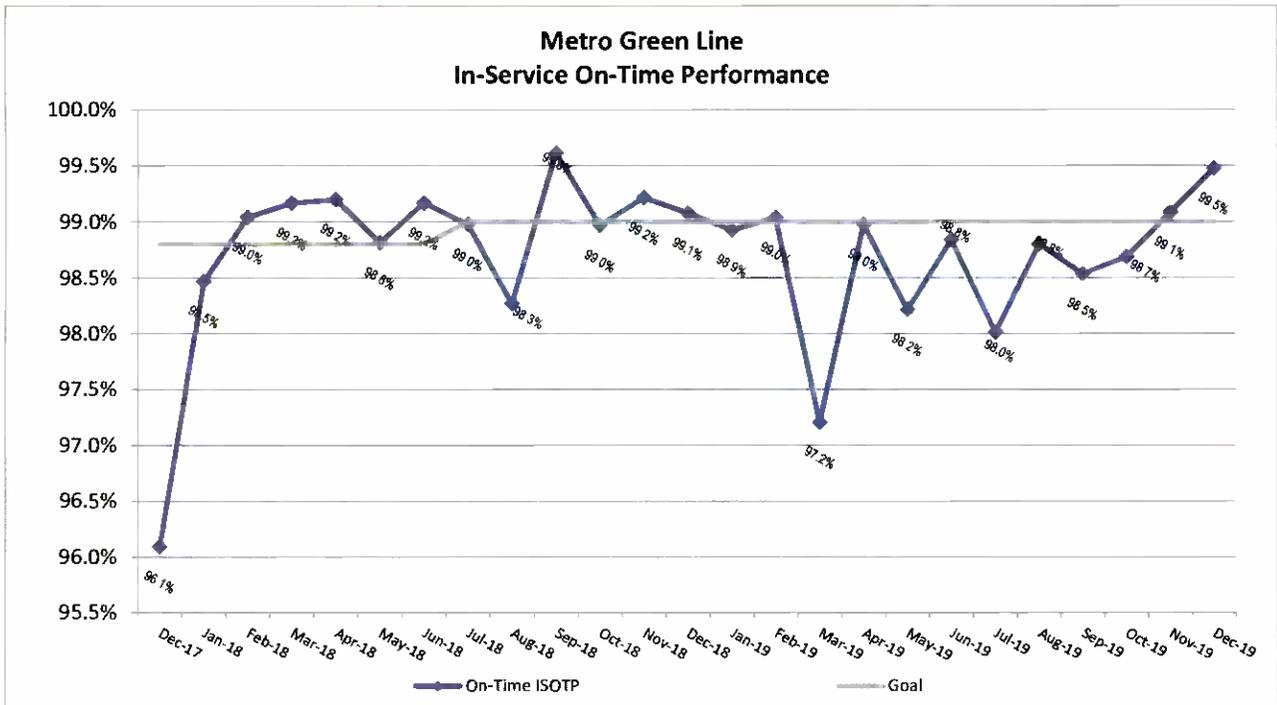


## ON-TIME PULL OUTS



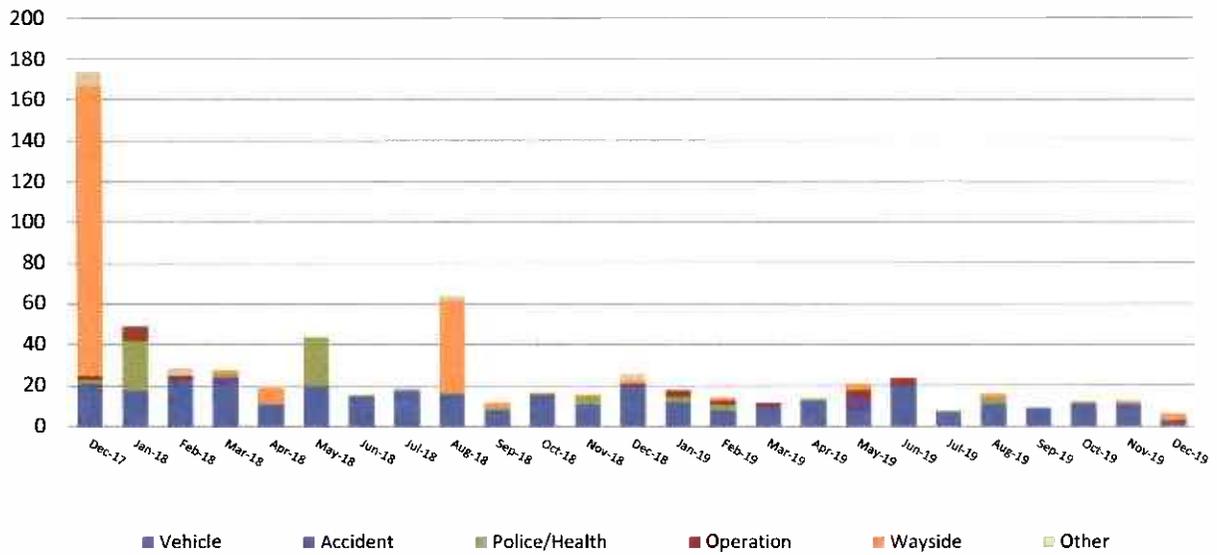
Due to the Crenshaw line link construction in Feb and March 2018, Green Line trains did not pull in or pull out, trains stayed on the tracks.

## IN-SERVICE ON-TIME PERFORMANCE



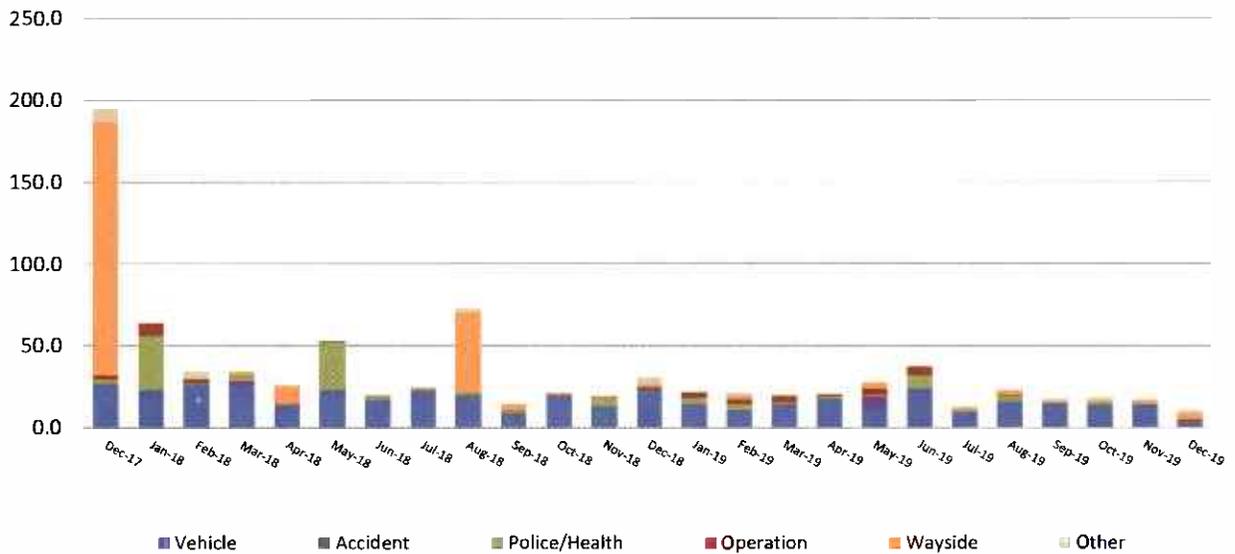
## LOST TRIPS

**Metro Green Line  
Revenue In-Service Issues (Lost Trips)**

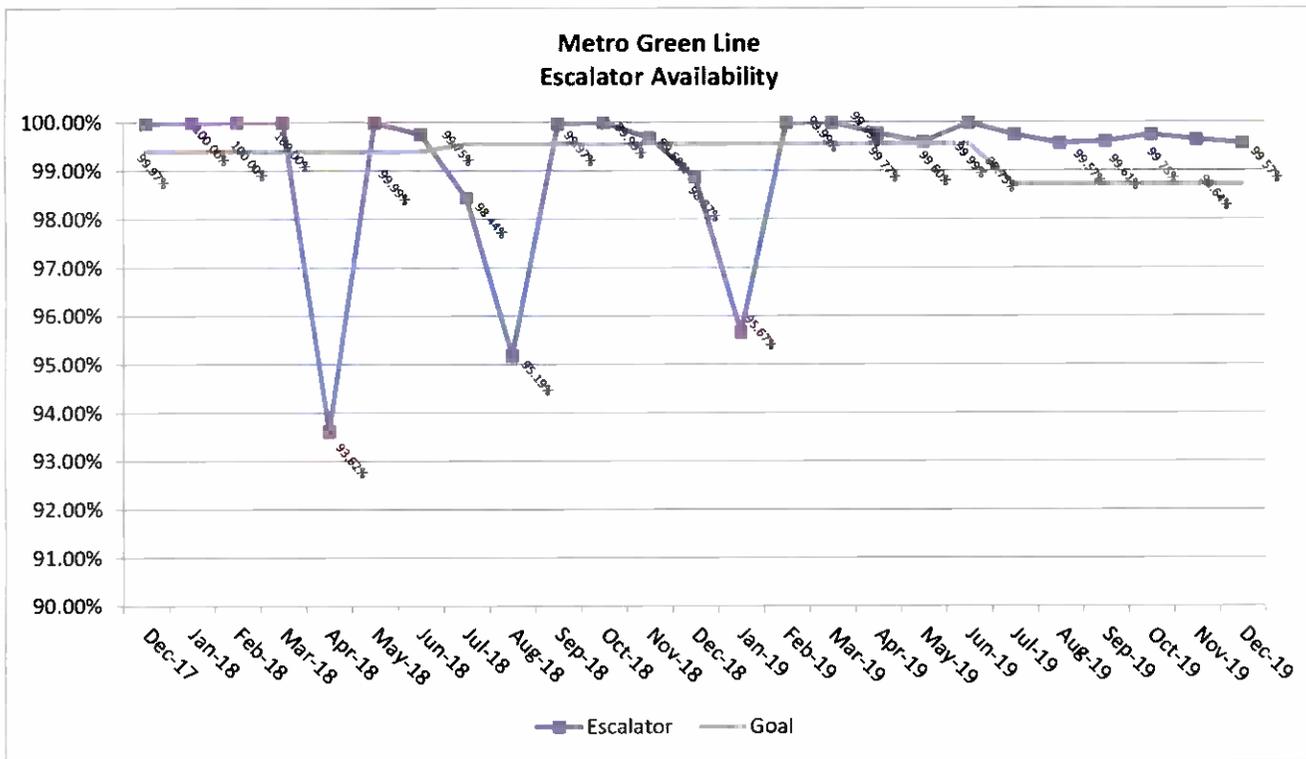
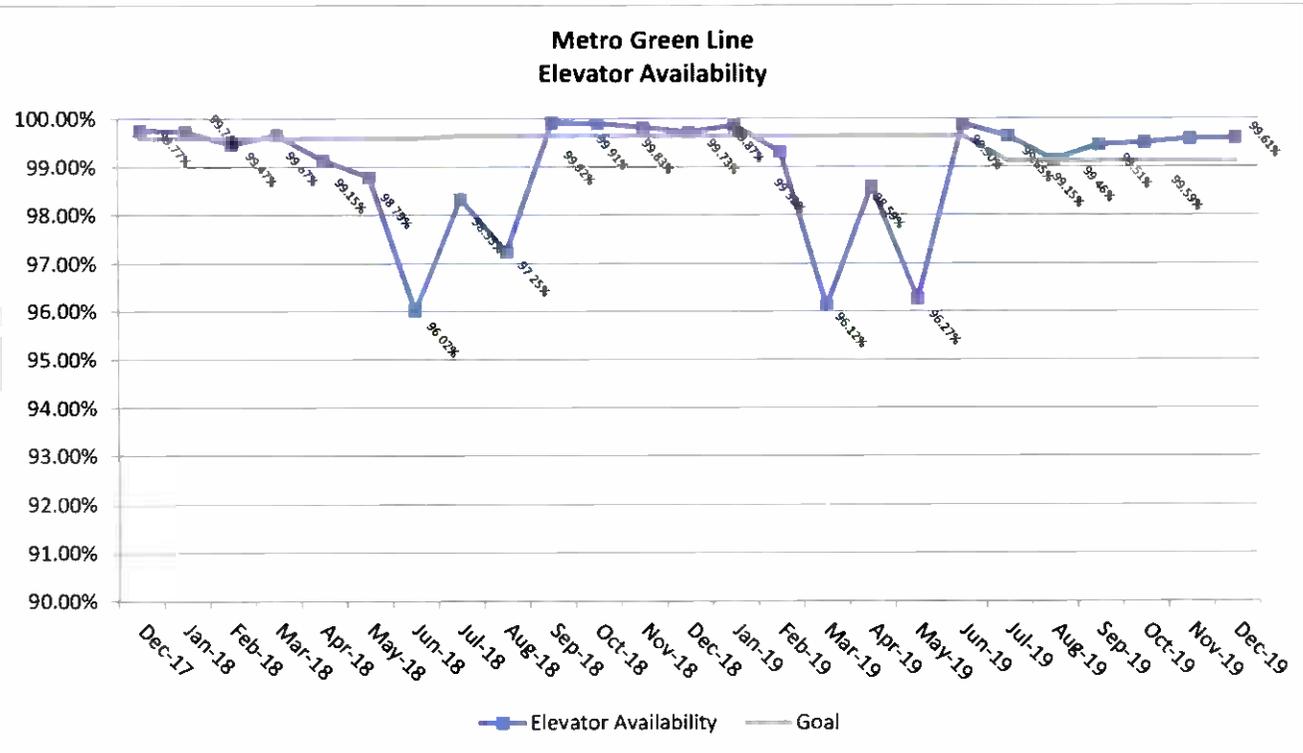


## LOST HOURS

**Metro Green Line  
Revenue In-Service Issues (Lost Hours)**



## VERTICAL TRANSPORTATION AVAILABILITY



## GOLD LINE

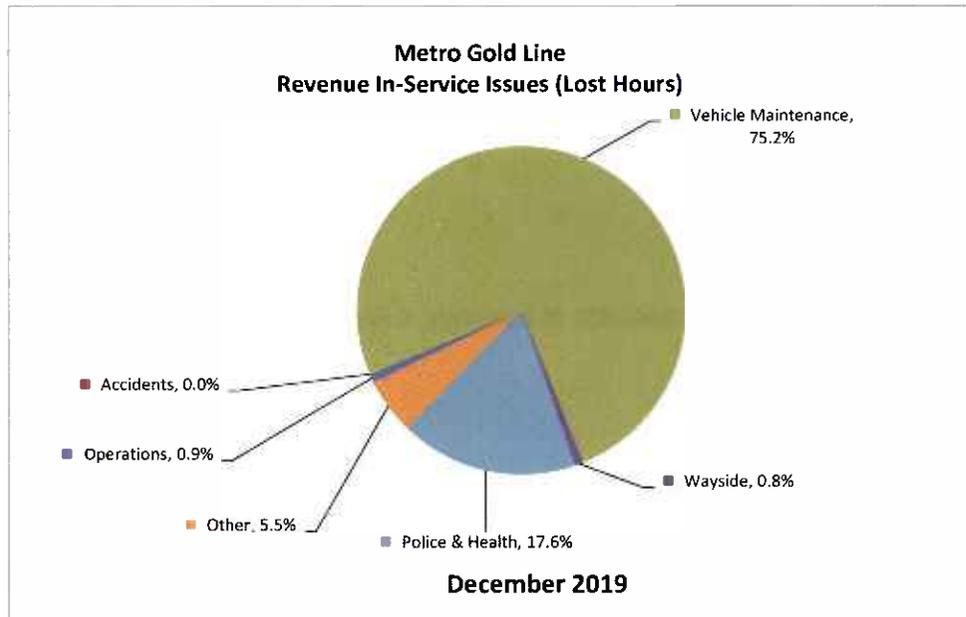
Out of a total of 23,455 hours operated, there were approximately 97 total hours of service delays.

December 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	23,359	99.6%
Cancelled + Delayed Hours	97	0.4%
<b>Total Revenue Hours</b>	<b>23,455</b>	<b>100.0%</b>

Summary of the incidents:	Count	Hours	Percent
Operations	6	0.9	0.9%
Accidents	0	0.0	0.0%
Vehicle Maintenance	16	72.7	75.2%
Wayside	5	0.8	0.8%
Police & Health	10	17.0	17.6%
Other	11	5.3	5.5%
<b>Total</b>	<b>48</b>	<b>96.7</b>	<b>100.0%</b>

\* Data from M3 used to report Service Delays is under review for accuracy

The number of incidents on the following page may differ from the summary count due to some incidents not properly designated as Cancelled or Delayed



## **December 2019 Gold Line incidents causing delay were as follows:**

### **Operations Incidents:**

#### **12/15/2019 7:22:00 AM - Incident# 3239192 (0 lost trips, 5 lost minutes)**

Operator "Alpha Mary" late, notified control at the motorman she was not going to make her pull out at APU on time.

Train # 420

T-283

Motorman relief platform

#### **12/15/2019 12:35:00 PM - Incident# 3239255 (0 lost trips, 12 lost minutes)**

Train 406 arrived at Allen station at 1235 hours. Requested authorization to proceed northbound with any updates.

#### **12/23/2019 7:28:00 PM - Incident# 3243043 (0 lost trips, 12 lost minutes)**

T-304, Train 451(421) took wrong route at 8S Monrovia North IL, Track 2, southbound.

Cars (712A)-714-707.

#### **12/26/2019 4:51:00 AM - Incident# 3243780 (0 lost trips, 13 lost minutes)**

Operator exited cab to remove item impeding track #1, after item was removed, Operator was unable to re-enter cab door and had no spare barrel key.

Train # 413

T-429

Mission/Meridian, track #2,

1010.1110.1055

#### **12/27/2019 3:33:00 PM - Incident# 3244427 (0 lost trips, 6 lost minutes)**

Operator reports no movement.

Train-405

T-301

Cars 1158,1182,1010

Azusa Citrus Station, Track 2, SB

#### **12/30/2019 10:28:00 AM - Incident# 3245290 (0 lost trips, 4 lost minutes)**

Unable to uncouple on both ends per R-111.

Train#407

T#17

(1010),1055,1188

Track#1,Northbound,APU Station.

**Vehicle Maintenance Incidents:**

**12/2/2019 6:07:00 AM - Incident# 3233333 (0 lost trips, 8 lost minutes) CHARGEABLE**

No movement, ATP bypass on car 1191 A/B.

Train#404

T#131

(1191),1172,1104

Track#1,Northbound, Little Tokyo Station.

**12/5/2019 3:00:00 PM - Incident# 3235270 (1 lost trip, 210 lost minutes) CHARGEABLE**

Operator reports a propulsion fault and a speed restriction.

T-83

Train-420

Cars (1011),1185,1178

Arcadia Interlocking, Track 2, SB

**12/6/2019 2:53:00 PM - Incident# 3235777 (0 lost trips, 6 lost minutes) CHARGEABLE**

Operator reports ATP failure.

T-337

Train-420

Cars (728), 703,0722

Monrovia Station, Track 2, SB

**12/10/2019 8:23:00 AM - Incident# 3237033 (0 lost trips, 14 lost minutes) CHARGEABLE**

Train 413 reports of door issue, doors were not opening on intermediate car.

T-452

Train 413

Cars: (1172)-1191-1161

NB Tk-1 Little Tokyo Station

**12/11/2019 7:48:00 PM - Incident# 3237854 (1 lost trip, 211 lost minutes) CHARGEABLE**

Doors will not close

Train 454

T-228

LRV cars 746-749-739

Union Station track 1 northbound

**12/11/2019 9:35:00 PM - Incident# 3237921 (1 lost trip, 211 lost minutes) CHARGEABLE**

Dragging loose track brake & major propulsion 719-B

(719-B) 716 738

Train 454

T-459

Lincoln Cypress tk 2 SB

**12/12/2019 6:32:00 AM - Incident# 3238049 (6 lost trips, 1,264 lost minutes)**

APS fault indications

Train 406

T-120

Cars (1180)-1188-1160

Indiana Track 1 North

**12/12/2019 8:00:00 AM - Incident# 3238063 (1 lost trip, 211 lost minutes) CHARGEABLE**

Propulsion failure with no Movement

Train 453

T-471

Cars (745)-737-738

Duarte Station TRK 1 North

**12/13/2019 7:58:00 AM - Incident# 3238622 (1 lost trip, 213 lost minutes) CHARGEABLE**

LVPS/SLC faults and pantograph issues.

Train#416

T#185

(1180A/B),1161,1178

Track#1,Union Station,Northbound.

**12/13/2019 5:40:00 PM - Incident# 3238847 (1 lost trip, 208 lost minutes) CHARGEABLE**

Operator reports an open HSBC.

T-280

Train-415

Cars (733),705,731

Atlantic Station, Track 1, NB

**12/16/2019 3:05:00 PM - Incident# 3239798 (5 lost trips, 1,002 lost minutes) CHARGEABLE**

Damage shirt

Train 402

T-411

LRV cars (1158)-1009-1110

Highland Park track 2 southbound

**12/17/2019 4:00:00 PM - Incident# 3240299 (1 lost trip, 210 lost minutes) CHARGEABLE**

Cars 711 and 733 recurring Gateway problems.

T-151

Train 414

Cars (711)-735-(733)

SWM Station, Track 2, southbound.

**12/20/2019 2:33:00 PM - Incident# 3241973 (1 lost trip, 208 lost minutes) CHARGEABLE**  
Cars (716-743-739) multiple faults/limited power.  
T-129  
Train 451  
Dalton Ave, Track 1, northbound.

**12/21/2019 1:28:00 PM - Incident# 3242224 (1 lost trip, 156 lost minutes) CHARGEABLE**  
Cars (707-728) friction brakes not releasing.  
T-134  
Train 403  
Ditman Block Signal 2N, Track 1, northbound.

**12/26/2019 5:40:00 AM - Incident# 3243805 (0 lost trips, 10 lost minutes) CHARGEABLE**  
ATP Failure at Highland Park Station.

Train # 452  
T-103  
Highland Park, track #1, northbound  
(719) 738 747

**12/26/2019 11:56:00 AM - Incident# 3244050 (1 lost trip, 224 lost minutes) CHARGEABLE**  
Operator reports a brake problem.  
Train-410  
T-122  
Cars (1111),1158,1166  
Highland Park Station, Track 2, SB

**Wayside Incidents:**

**12/2/2019 1:53:00 PM - Incident# 3233590 (0 lost trips, 6 lost minutes)**  
Track Circuit 718-2 False Occupancy near Allen Station track 2.

**12/5/2019 9:29:00 AM - Incident# 3235100 (0 lost trips, 20 lost minutes)**  
Single track operations for OCS maintenance  
Track 1 from Southwest Museum to Baker Interlockings  
TP-63 with 2 Hi-Rail Vehicles

**12/6/2019 9:36:00 AM - Incident# 3235558 (0 lost trips, 10 lost minutes)**  
OCS Maintenance Repairs.  
TP-063.  
Train #949.  
4AS Baker to 4N South West Museum.  
Track #2.

**12/11/2019 9:39:00 AM - Incident# 3237618 (0 lost trips, 13 lost minutes)**

Track Allocation/Work Permit E-5/Traction Power performing OCS maintenance from Sierra Madre IL to Allen IL, track #1.

High Rail # 949 tandem (2) setting on at Titley access pad

TP-063 EIC

TP-154 Watchperspm

TP-196 Pilot (1)

TP-197 Pilot (2)

**12/31/2019 2:01:00 PM - Incident# 3245842 (0 lost trips, 20 lost minutes)**

Monrovia Yard signaling system down.

**Police & Health Incidents:**

**12/3/2019 10:46:00 PM - Incident# 3234349 (2 lost trips, 397 lost minutes)**

Reports near miss.

Train 402

T-480

(1056B)-1005

1st/Santa Clara, Track 2, SB

**12/6/2019 3:04:00 PM - Incident# 3235781 (0 lost trips, 12 lost minutes)**

Operator reports receiving a PIC activation at Chinatown Station.

T-439

Train-404

Cars 1192,1055,1161

Chinatown Station, Track 1, NB

**12/7/2019 6:08:00 PM - Incident# 3236057 (0 lost trips, lost minutes)**

Train 402 reports of patron exposing himself on the train.

**12/8/2019 6:24:00 PM - Incident# 3236295 (0 lost trips, 7 lost minutes)**

Trespasser

Train 401

T-137

1190-1110

Northbound, Track 1 Lincoln/Cypress station.

**12/9/2019 8:31:00 AM - Incident# 3236489 (0 lost trips, 8 lost minutes)**

verbal altercations aboard trains, cars #(1056)-1015-1162

Train #403

T-098

Sierra Madre Villa, track #2, Southbound.

**12/9/2019 11:39:00 PM - Incident# 3236795 (0 lost trips, 20 lost minutes)**

Reports of altercation aboard train

Train # 401

T-316

(703A)-722

Memorial Park Station, Track 2, SB

**12/21/2019 11:03:00 AM - Incident# 3242202 (1 lost trip, 151 lost minutes)**

On board assault and altercation.

Train#410

T#283

(1160,1011)

Track#2,4S Atlantic Interlocking, Southbound.

**12/26/2019 4:15:00 AM - Incident# 3243786 (0 lost trips, 5 lost minutes)**

Southbound train reported cone on ROW, at Temple Street on track #1.

Train #402

T-9

Temple, track #2, bouththbound

733.708. 735

**12/30/2019 12:54:00 PM - Incident# 3245347 (1 lost trip, 210 lost minutes)**

Altercation at Monrovia Station on Train 451.

T-411

Train 451

Cars: (748)-716

SB Tk-2 Monrovia Station

**12/31/2019 6:17:00 AM - Incident# 3245631 (1 lost trip, 213 lost minutes)**

Train 410 reports track 2 blocked at Freemont/Grevelia with a traffic accident. MTA not involved

### **Other Incidents:**

**12/20/2019 2:36:00 PM - Incident# 3241955 (0 lost trips, 12 lost minutes)**

Male Passanger riding Car 741B sleeping, fell over, complaining of head pain.

**12/22/2019 8:00:00 PM - Incident# 3242568 (0 lost trips, 10 lost minutes)**

Reports of individual requesting medical.

Train 406

T-2

703-730

Little Tokyo Station, Track 1, NB

**12/23/2019 2:38:00 PM - Incident# 3242977 (0 lost trips, 10 lost minutes)**

Medical Emergency on Car 1166B, seizure, unknown male Passanger.

T-267

Train 406

Cars 1124-(1166B), Track 1, Little Tokyo Station.

**12/26/2019 9:18:00 AM - Incident# 3243887 (0 lost trips, 12 lost minutes)**

Operator T-8 reports a door popped open south of Irwindale IL, track #2. Operator exited the cab to secure door, slipping on ballast.

Train # 412/940

T-8

South of Irwindale IL, track #2, s/b

747 738 719

**12/30/2019 4:02:00 PM - Incident# 3245457 (0 lost trips, 6 lost minutes)**

Train 422 reports of sick individula aboard consist.

T-467

Train 422

Cars: 1011-(1125)-1179

NB Tk-1 Highland Park Station.

**12/30/2019 10:42:00 PM - Incident# 3245547 (0 lost trips, 15 lost minutes)**

Train 409 reports someone pulled the emergency T Handle and the train came to a stop. The Train is a few feet short of Chinatown Station

**Reset:**

**12/3/2019 11:06:00 AM - Incident# 3234098 (0 lost trips, 10 lost minutes)**

ATP Failure on car (1188B).

Train#404

T#178

(1188B),1157

Track#1,Atlantic Station,Northbound.

**12/10/2019 11:14:00 PM - Incident# 3237356 (1 lost trip, 221 lost minutes)**

Parking brake does not release and HSCB does not clear.

T-540.

Train 415.

Cars: 725 (733)

APU Citrus Station, Platform 2, S/bound.

**12/20/2019 6:32:00 AM - Incident# 3241674 (0 lost trips, 8 lost minutes)**

Propulsion faults.

Train#451

T#178

739,743,716

Track#1,Southbound,Sierra Madre Station.

**12/23/2019 5:02:00 AM - Incident# 3242690 (0 lost trips, 8 lost minutes)**

Train 407 pullout late due to a ATP Failure, no movement.

Train 407

T-122

LRV'S 1109-1126-1172

Monrovia Yard

**12/27/2019 4:45:00 AM - Incident# 3244146 (0 lost trips, 6 lost minutes) CHARGEABLE**

Trainline only showing one car.

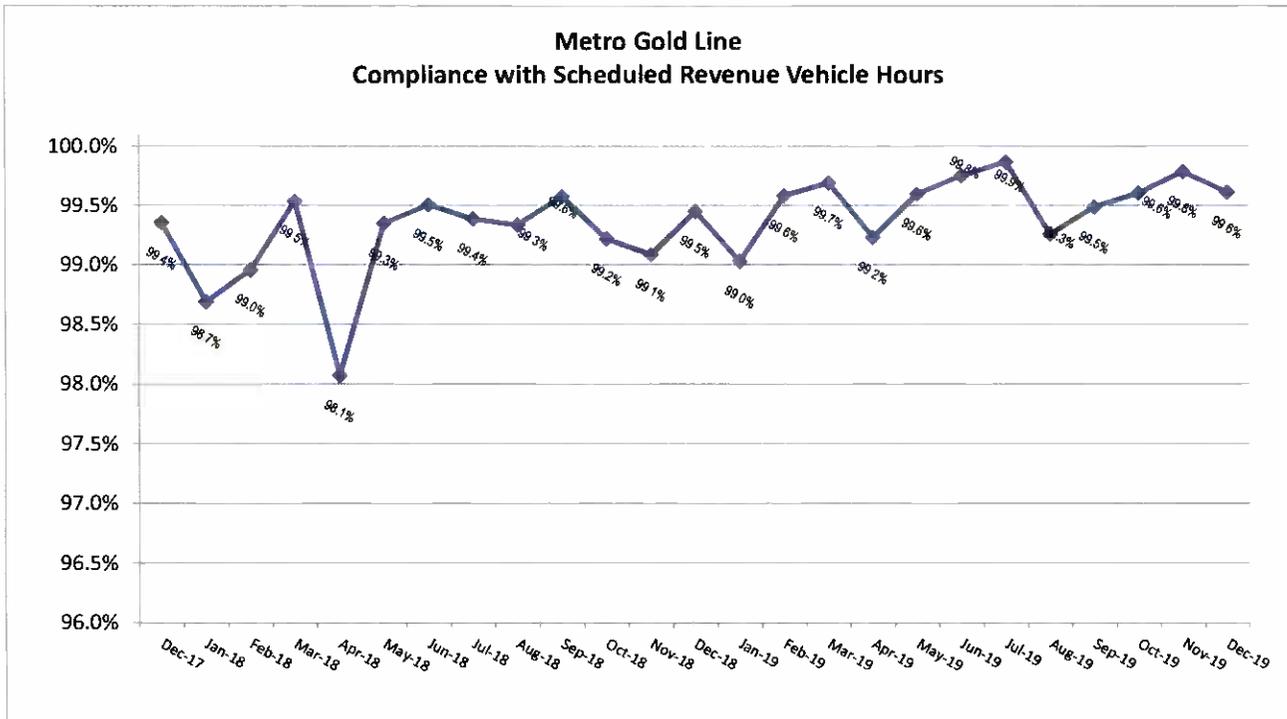
Train #404.

T-028.

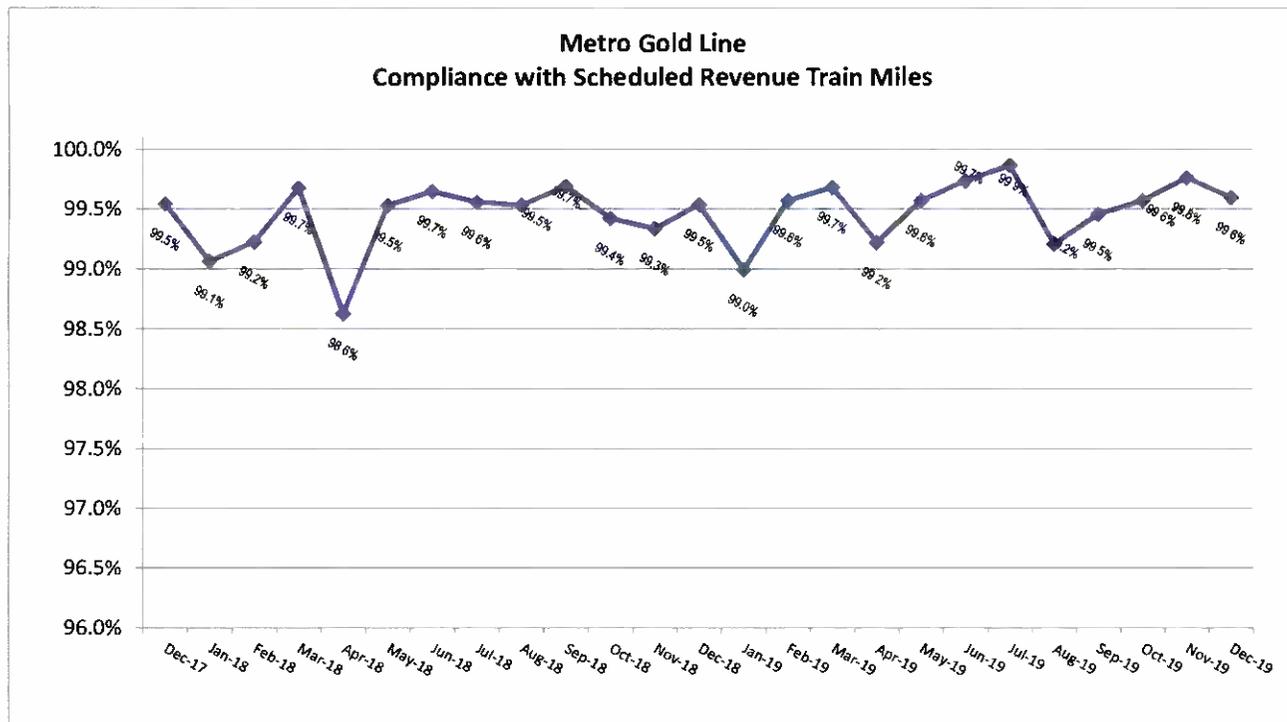
LRV- (1191A), 1189, 1059.

Sierra Madre, Track #2, Southbound.

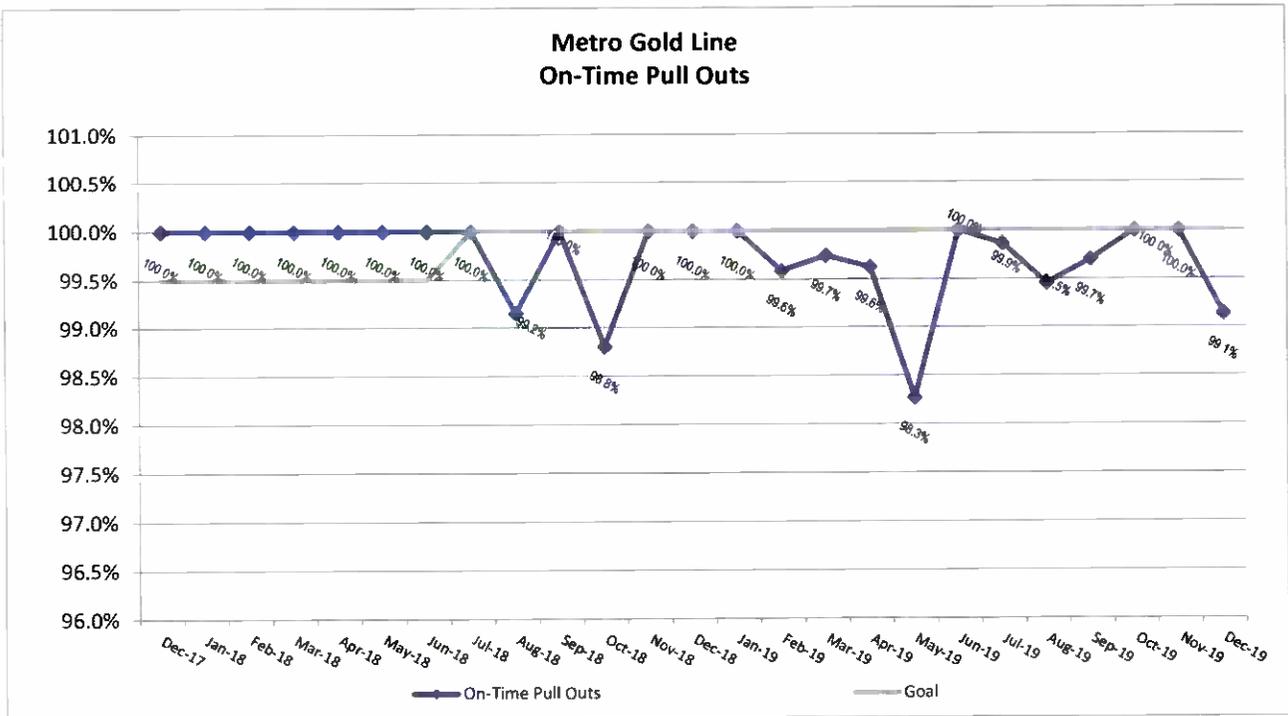
**MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS**  
**COMPLIANCE WITH SCHEDULED VEHICLE HOURS**  
**Dec 2019**



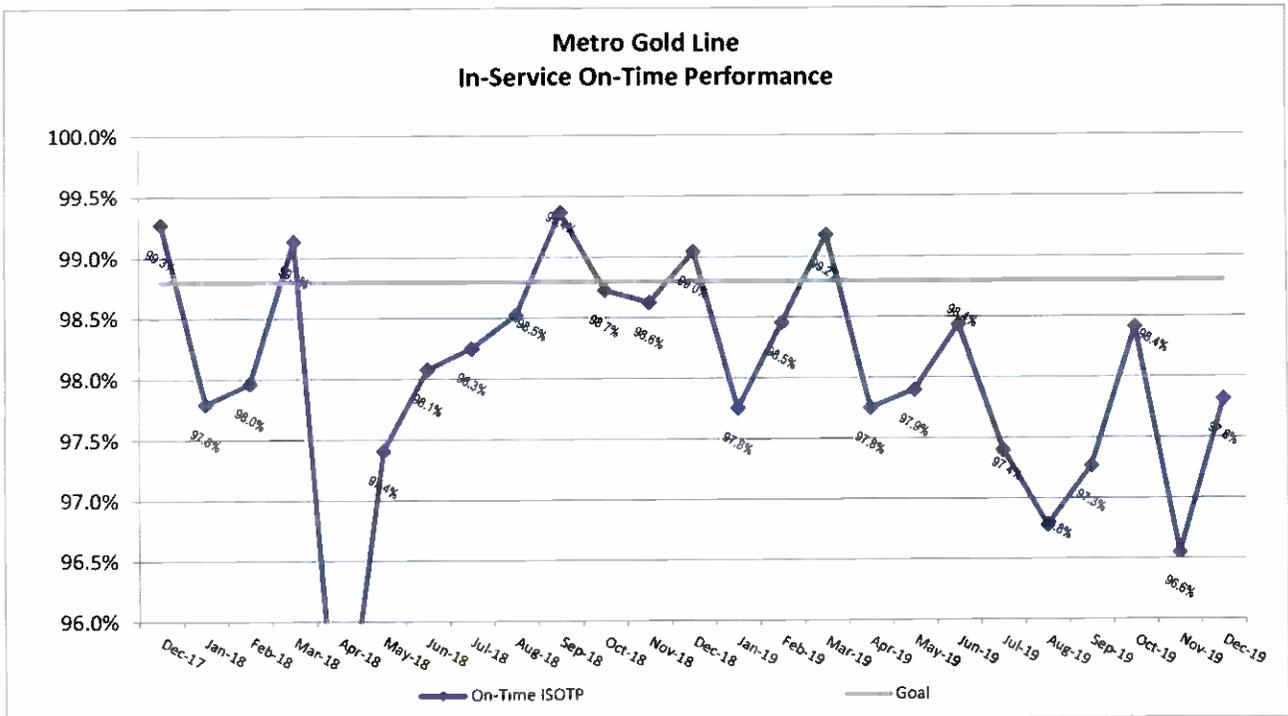
**COMPLIANCE WITH SCHEDULED TRAIN MILES**



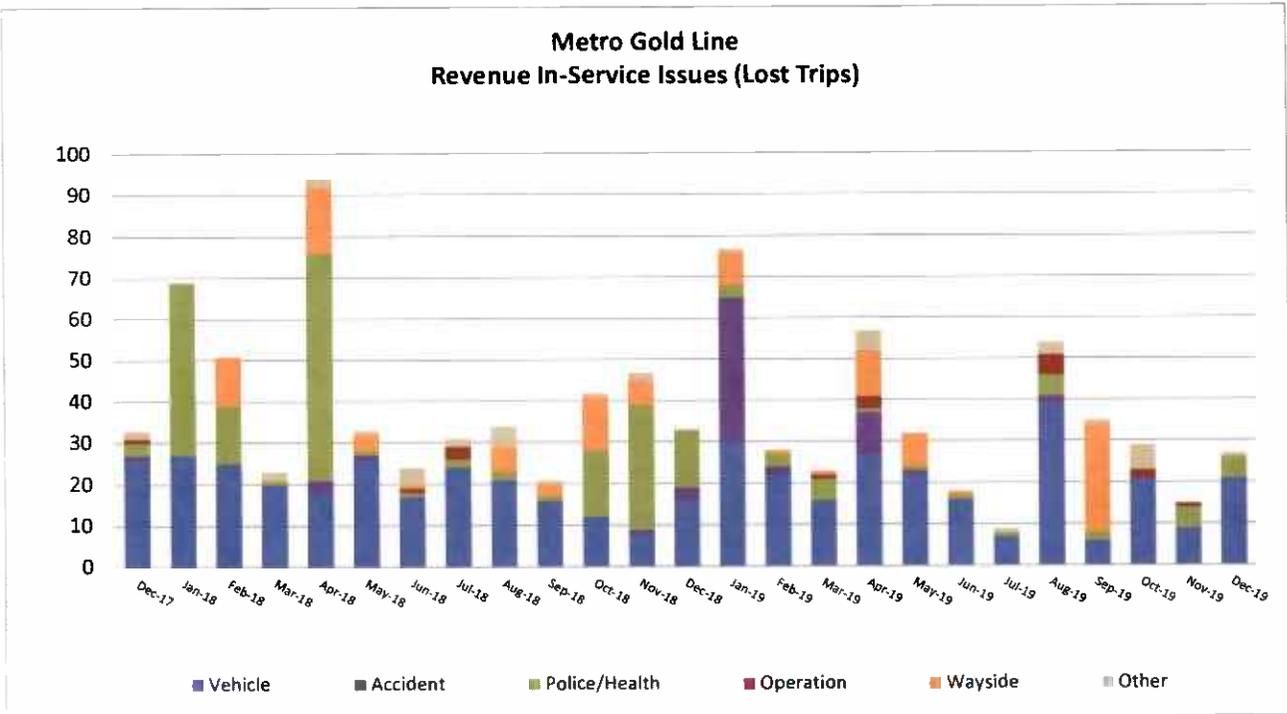
## ON-TIME PULL OUTS



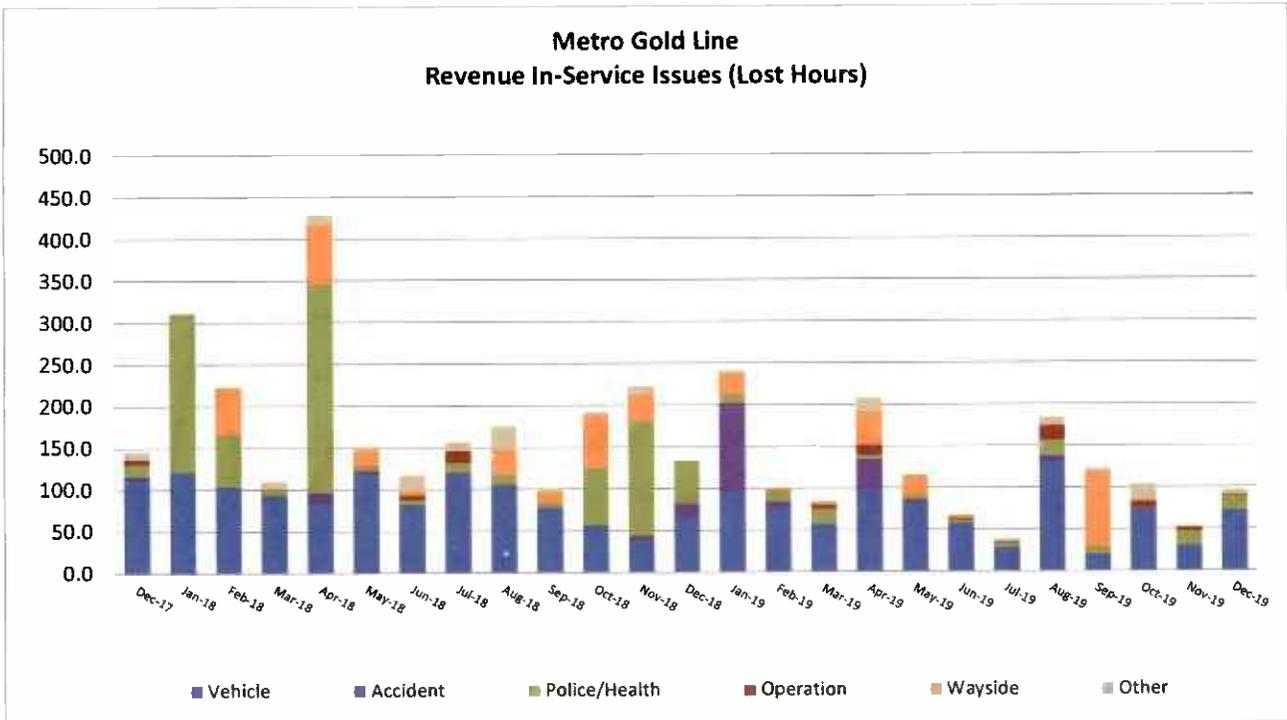
## IN-SERVICE ON-TIME PERFORMANCE



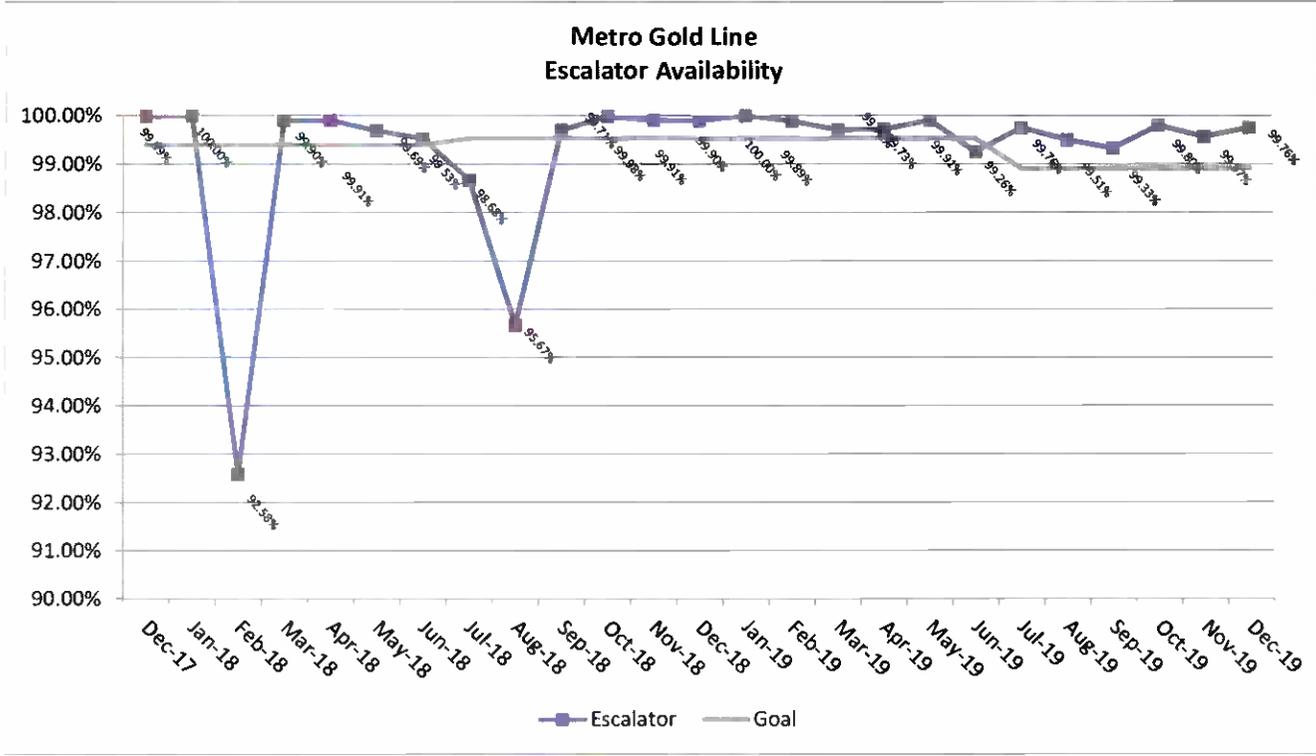
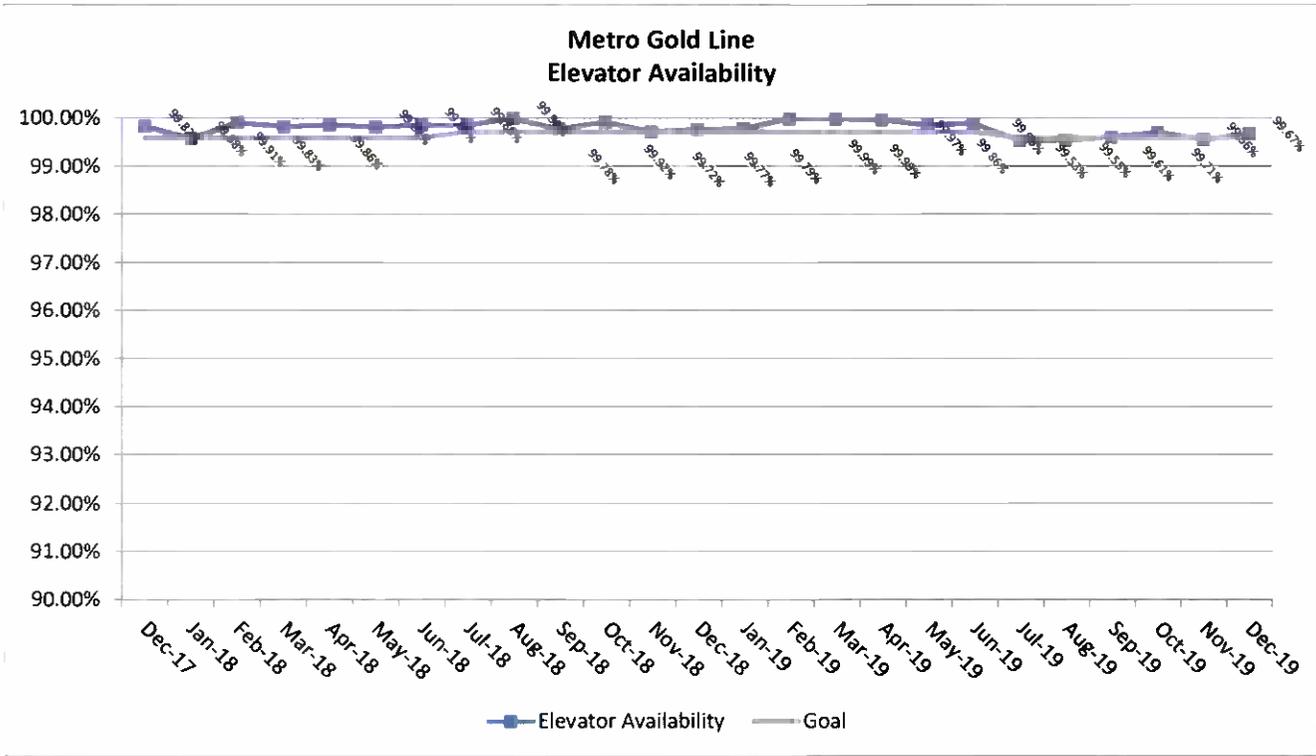
## LOST TRIPS



## LOST HOURS



## VERTICAL TRANSPORTATION AVAILABILITY



## EXPO LINE

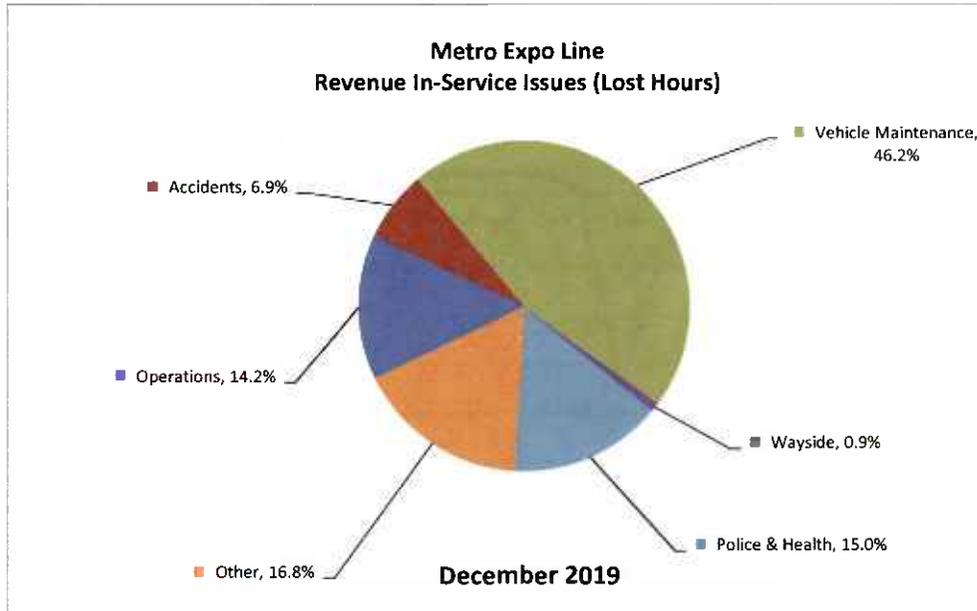
Out of a total of 19,798 hours operated, there were approximately 37 total hours of service delays.

December 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	19,761	99.8%
Cancelled + Delayed Hours	37	0.2%
<b>Total Revenue Hours</b>	<b>19,798</b>	<b>100.0%</b>

Summary of the incidents:	Count	Hours	Percent
Operations	7	5.3	14.2%
Accidents	3	2.6	6.9%
Vehicle Maintenance	12	17.3	46.2%
Wayside	2	0.3	0.9%
Police & Health	8	5.6	15.0%
Other	10	6.3	16.8%
<b>Total</b>	<b>42</b>	<b>37.4</b>	<b>100.0%</b>

\* Data from M3 used to report Service Delays is under review for accuracy

The number of incidents on the following page may differ from the summary count due to some incidents not properly designated as Cancelled or Delayed



## **December 2019 Expo Line incidents causing delay were as follows:**

### **Operations Incidents:**

**12/2/2019 5:12:00 AM - Incident# 3233314 (0 lost trips, 5 lost minutes)**

No Operator, Alpha BD

Train #615

7th and Metro Center, track #1, Southbound.

**12/6/2019 6:24:00 PM - Incident# 3235780 (0 lost trips, 17 lost minutes)**

Expo Train 622 was exchanged with a Blue Line Consist, Operator states he was going sick.

**12/9/2019 6:13:00 AM - Incident# 3236506 (0 lost trips, 8 lost minutes)**

Train turn backs due to a Rail accident on the blue line.

**12/10/2019 6:50:00 AM - Incident# 3236983 (0 lost trips, 8 lost minutes)**

Train 605

T-296

LRV Cars 1049-1069

Train 605 pulled out of Expo Yard on time, but by the time train 605 was approaching the Junction IL it was already experiencing an 7 minute Service delay NB.

**12/12/2019 4:20:00 AM - Incident# 3238033 (2 lost trips, 274 lost minutes)**

Train 610 cancelled due to no manpower.

T-89

Train 610

1053-1003-1001

Expo Yard

**12/16/2019 6:11:00 PM - Incident# 3239849 (0 lost trips, 7 lost minutes)**

Train 627

T-533

SB approaching DTSM

,Operator requested a 10-100 once arriving at the station.

**12/27/2019 6:53:00 AM - Incident# 3244214 (0 lost trips, lost minutes)**

Expo Yard Control reported that train 609 had no movement.

T-29

Train 609

(1036)-1045-1035

Metro Expo Yard Div 14

**Accidents:**

**12/11/2019 12:50:00 AM - Incident# 3237371 (0 lost trips, 20 lost minutes)**

Tresspasser vs.Train ( Patron fell from the platform)

Train #619, T-412

1033A-(1045)

NB, Farmdale Station, Track #3

**12/11/2019 10:46:00 AM - Incident# 3237660 (0 lost trips, 6 lost minutes)**

Train 930

T-472

LRV Cars 1046-1047

Operator reported a Auto Vs Train at 11th Street and Colorado NB departing Downtown Santa Monica

**12/17/2019 5:30:00 PM - Incident# 3240317 (1 lost trip, 157 lost minutes)**

Train 602

T-372 (student) T-29

LRV Cars (1054)-1044-1025

Track 3 NB Lincoln and Colorado

Operator reports of a Auto VS Train on Track 3 NB at Lincoln/Colorado Street.

**Vehicle Maintenance Incidents:**

**12/2/2019 9:57:00 AM - Incident# 3233479 (0 lost trips, 7 lost minutes) CHARGEABLE**

Friction Brakes, cars (1036)-1071-1061

Train #602

T-123

7th and Metro Center, track #2, Southbound.

**12/4/2019 3:58:00 PM - Incident# 3234862 (0 lost trips, 6 lost minutes)**

Out late 6min delay DTSM-26th St

Train 626

T-492

(250)-244-241

Division 14, Southbound to Downtown Santa Monica station.

**12/4/2019 4:08:00 PM - Incident# 3234875 (0 lost trips, 6 lost minutes) CHARGEABLE**

Propulsion / Dynamic Brakes

Train 626

T-492

(250)-244-241

Division 14, Southbound to Downtown Santa Monica station.

**12/5/2019 3:45:00 PM - Incident# 3235292 (2 lost trips, 292 lost minutes) CHARGEABLE**

Train 610

T-29

Pico Station, Southbound, Track 2

(247)-241

T-29 reported no movement on train 610 at Pico Station.

**12/6/2019 6:25:00 AM - Incident# 3235492 (2 lost trips, 268 lost minutes)**

Doors 1 & 2 cut out on car 1045B train 615.

Train 615

T-241

Cars (1045B)-1003-1037

Northbound, Palms Station, Track 3

**12/8/2019 12:01:00 AM - Incident# 3236114 (0 lost trips, 10 lost minutes) CHARGEABLE**

T-303 reported major flats.

**12/9/2019 5:32:00 PM - Incident# 3236749 (1 lost trip, 134 lost minutes)**

Operator reports an SLC fault and a speed restriction

Train-608

T-492

Cars 1019,1052,1040

La Brea Station, Track 4, SB

**12/9/2019 6:54:00 PM - Incident# 3236752 (0 lost trips, 10 lost minutes) CHARGEABLE**

Operator reports a dynamic brake fault

T-546

Train-621

Cars 248,244,241

17th Street Station, Track 3, NB

**12/17/2019 1:25:00 PM - Incident# 3240266 (1 lost trip, 152 lost minutes) CHARGEABLE**

Train 608

T-417

LRV Cars (247)-244-237

SB Vermont Station track 4

Operator reports of all the right side doors on the consist would not open when arriving to the platform.

**12/19/2019 12:54:00 PM - Incident# 3241357 (0 lost trips, 12 lost minutes) CHARGEABLE**

Train 605

T-405

(240), 302, 250

Crenshaw Station, Southbound, Track 4

T-405 reported door problems departing Crenshaw Station.

**12/22/2019 6:34:00 AM - Incident# 3242437 (1 lost trip, 141 lost minutes) CHARGEABLE**

Propulsion fault and speed restriction causing door problems and no movement at Pico Station.

Train 603

T-514

(240)-302-250

Pico Station, Track 2, southbound.

**12/30/2019 12:07:00 PM - Incident# 3245491 (0 lost trips, 9 lost minutes) CHARGEABLE**

Operator reports a re occurring SLC fault with a speed restriction.

Train-603

T-486

Cars (1076B),1101,(1090)

7TH/Metro, Platform 1, SB

**Wayside Incidents:**

**12/7/2019 12:23:00 PM - Incident# 3235841 (0 lost trips, 7 lost minutes)**

Track Allocation

**12/11/2019 2:47:00 PM - Incident# 3237778 (0 lost trips, 13 lost minutes)**

Switches out of correspondence.

Switch 5A/5B

Bundy IL

**Police & Health Incidents:**

**12/1/2019 2:16:00 PM - Incident# 3233196 (1 lost trip, 138 lost minutes)**

Train 606

T-133

1043-1068-1038

Track # Northbound

Operator reports police activity at 17th Street Station.

**12/6/2019 7:22:00 PM - Incident# 3235802 (0 lost trips, 16 lost minutes)**

Train 626

T-311

Track #4 Southbound

Vermont Station

Operator reports a car is stuck on the Right of Way, track 3, Vermont Station.

**12/10/2019 10:48:00 PM - Incident# 3237345 (0 lost trips, 10 lost minutes)**

Person with gun (LAPD Flagged Train Down)

Train 621 TK#3 NB Sepulveda Sta.

T-379

(1038)-1061

**12/13/2019 12:25:00 AM - Incident# 3238443 (0 lost trips, 10 lost minutes)**

Weapon Possession

**12/21/2019 6:47:00 PM - Incident# 3242346 (1 lost trip, 141 lost minutes)**

Train 606

T-379

(1003B)-1054-1066

Vermont Station Track #3

Operator reports an altercation aboard the train.

**12/22/2019 2:10:00 AM - Incident# 3242394 (0 lost trips, lost minutes)**

Blockade/ mp 1.5

Blk Kia stuck in the USC Portal (Trackway)

Track #3, Train # 608, T-469

**12/25/2019 11:59:00 AM - Incident# 3243629 (0 lost trips, 6 lost minutes)**

Trespasser

Train 606

T-108

(1065A)-1036-1045

Northbound, Track 3 Barrington crossing.

**12/26/2019 8:20:00 PM - Incident# 3244085 (0 lost trips, 20 lost minutes)**

Train 606, LRV's (1025A)-1044.

23rd Street Station, Track 4 south.

Police removed verbally aggressive patron.

**Other Incidents:**

**12/12/2019 9:46:00 PM - Incident# 3238440 (0 lost trips, 13 lost minutes)**

Operator T-392 reported a latino male between the years of 18 and 20 years old appears to be intoxicated. Lead car 1035A.

**12/24/2019 7:58:00 PM - Incident# 3243507 (0 lost trips, 12 lost minutes)**

Sick Patron

Train 622 T-423

Track 4 southbound

(1018A)-1061-1063

**Unable To Duplicate:**

**12/2/2019 11:33:00 PM - Incident# 3233869 (0 lost trips, 20 lost minutes)**

Train 621, LRV 1067B & 1049.

7th and Metro Platform 1 south.

No movement and no faults.

**12/3/2019 2:49:00 PM - Incident# 3234211 (0 lost trips, 10 lost minutes)**

Train 610

Track #3 Northbound

T-449

(1018B)-1024-1001

Operator reports SLC fault and propulsion fault

**12/4/2019 7:32:00 PM - Incident# 3234907 (0 lost trips, 6 lost minutes)**

Propulsion / Dynamic Brakes

Train 609

T-243

1060-1019-1068

Southbound, Track 4 La Cienega station.

**12/11/2019 6:52:00 AM - Incident# 3237528 (2 lost trips, 275 lost minutes)**

Train 615

T-204

LRV Cars (244A)-249-240

Track 3 NB Jefferson Station

Operator reported of a door fault on LRV Car 244A

**12/15/2019 5:14:00 PM - Incident# 3239315 (0 lost trips, 12 lost minutes)**

Operator reports a door fault.

Train-606

T-533

Cars 1069,1061,1036

Pico Station, Track 3, NB

**12/26/2019 6:43:00 AM - Incident# 3243841 (0 lost trips, 14 lost minutes) CHARGEABLE**

ATP Failure.

Train #614.

T-100.

LRV- (1065A), 1036, 1045.

7/MC, Southbound, Track #1.

## **Reset**

**12/19/2019 11:19:00 AM - Incident# 3241299 (0 lost trips, 9 lost minutes)**

Operator T-232 working Alpha Baker Victor on schedule Summary M-17 departed Downtown Santa Monica Station northbound 9 minutes late for Train 608.

**12/4/2019 9:37:00 PM - Incident# 3234939 (0 lost trips, 12 lost minutes)**

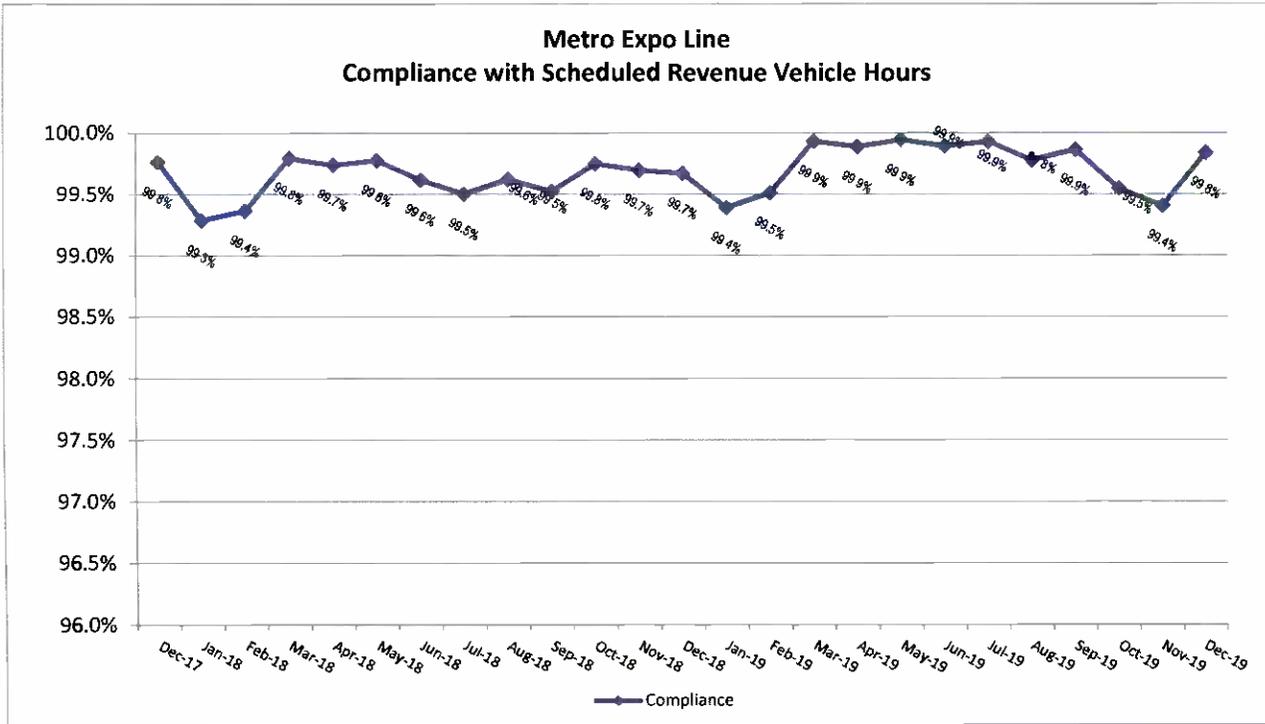
Brake Fault, No Trainline, Prop Fault

Train # 625, T-375

Car # 1003-(1045)

Downtown Santa Monica, Track #3, NB

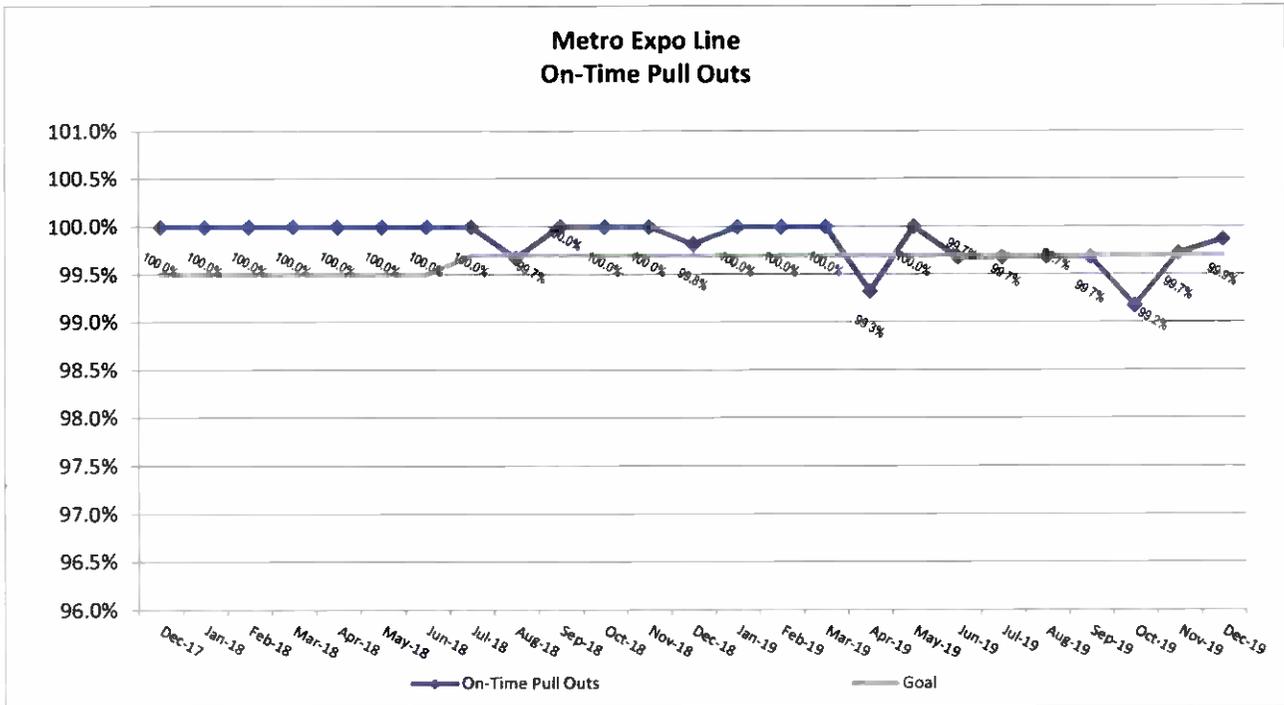
**MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS**  
**COMPLIANCE WITH SCHEDULED VEHICLE HOURS**  
**Dec 2019**



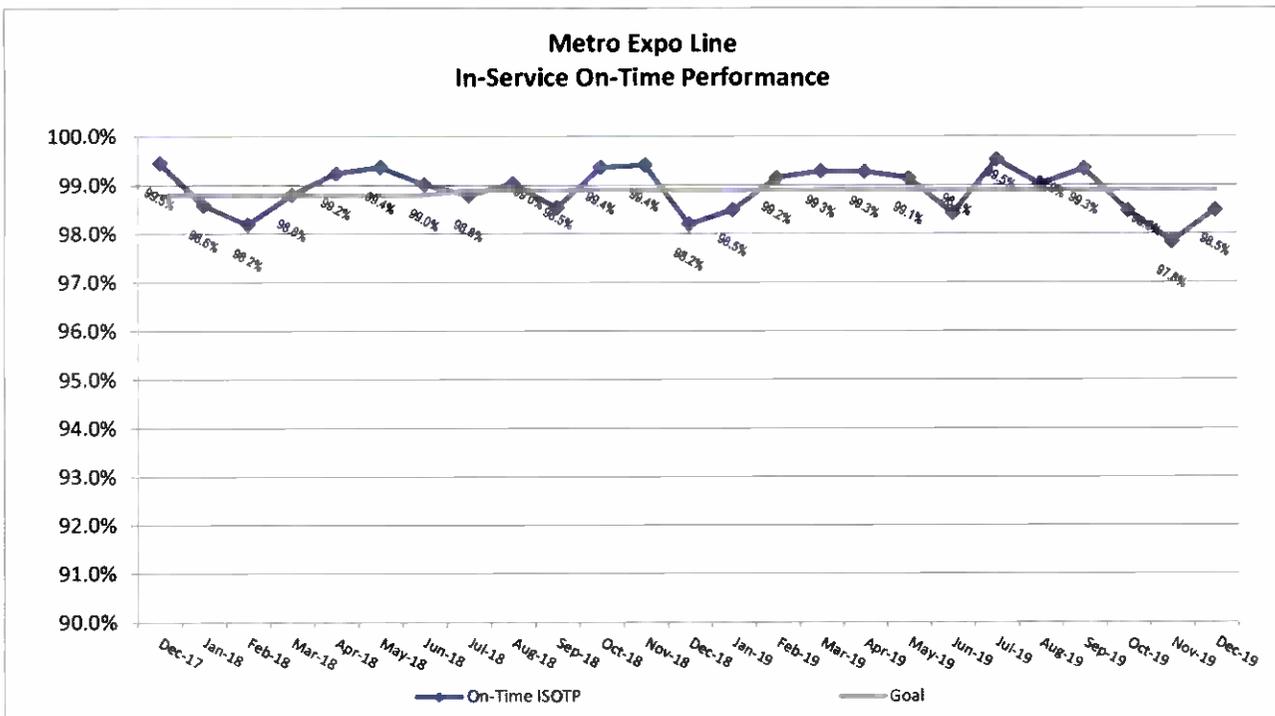
**COMPLIANCE WITH SCHEDULED TRAIN MILES**



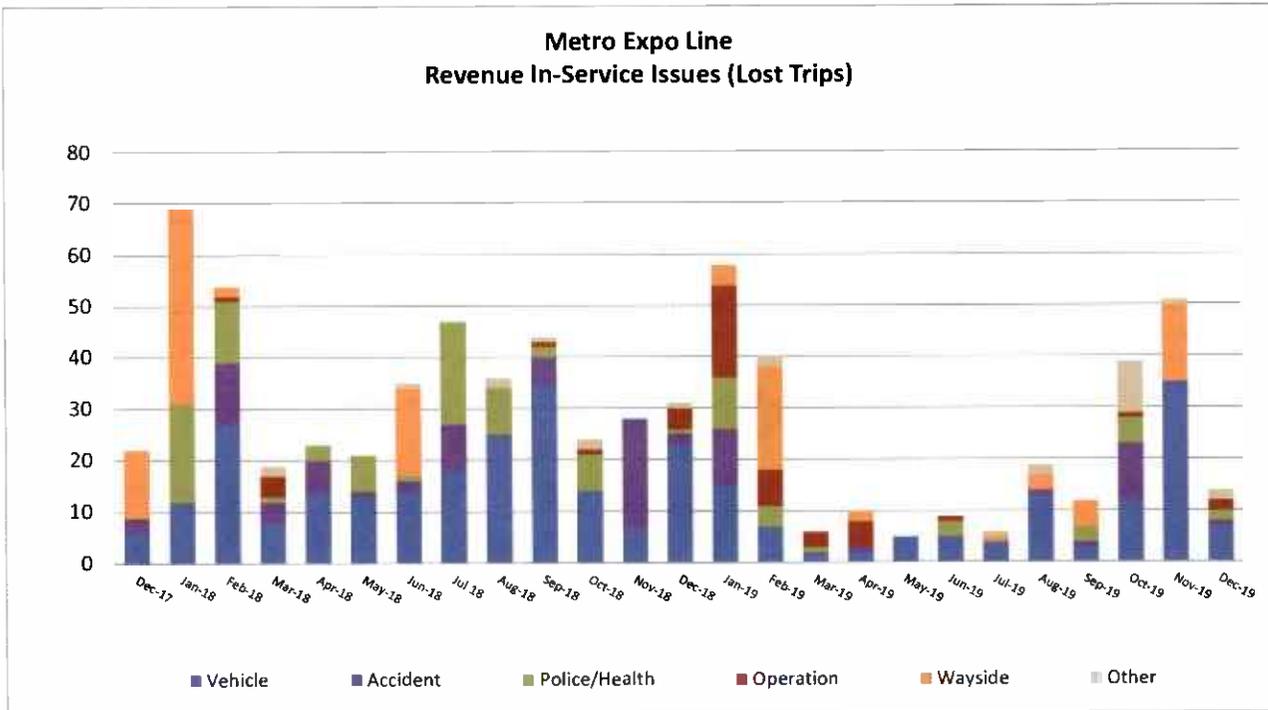
## ON-TIME PULL OUTS



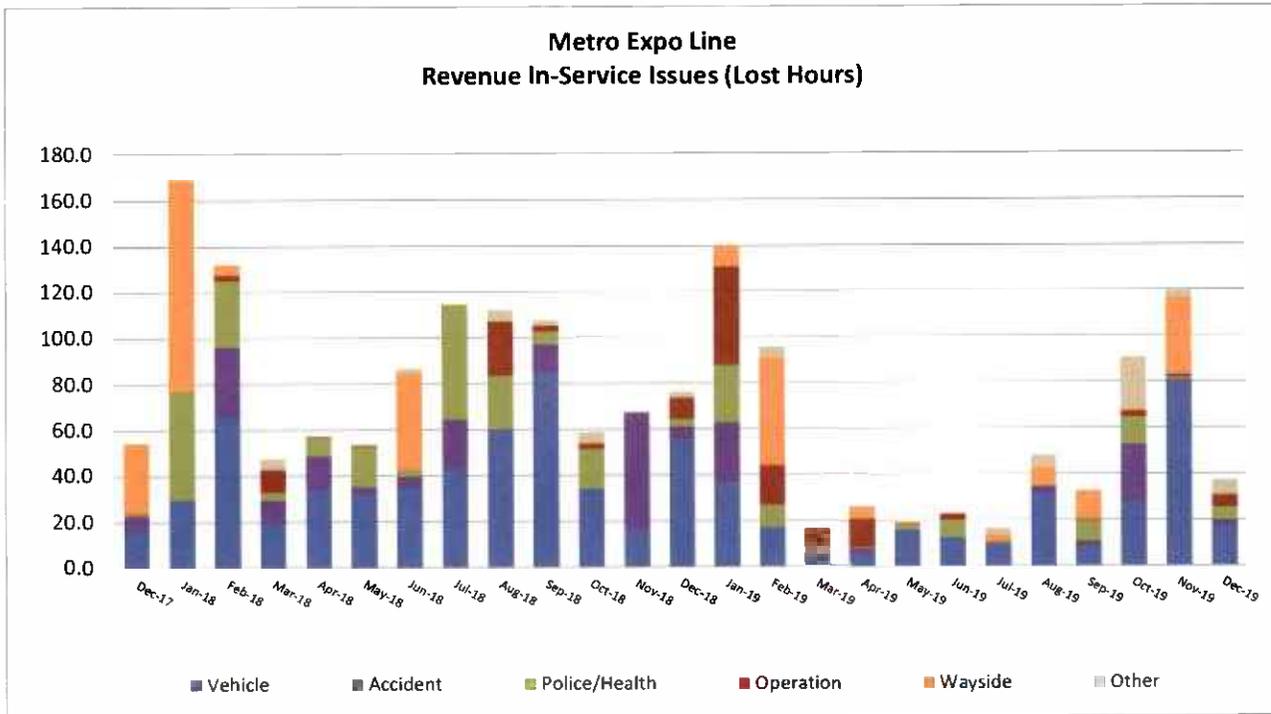
## IN-SERVICE ON-TIME PERFORMANCE



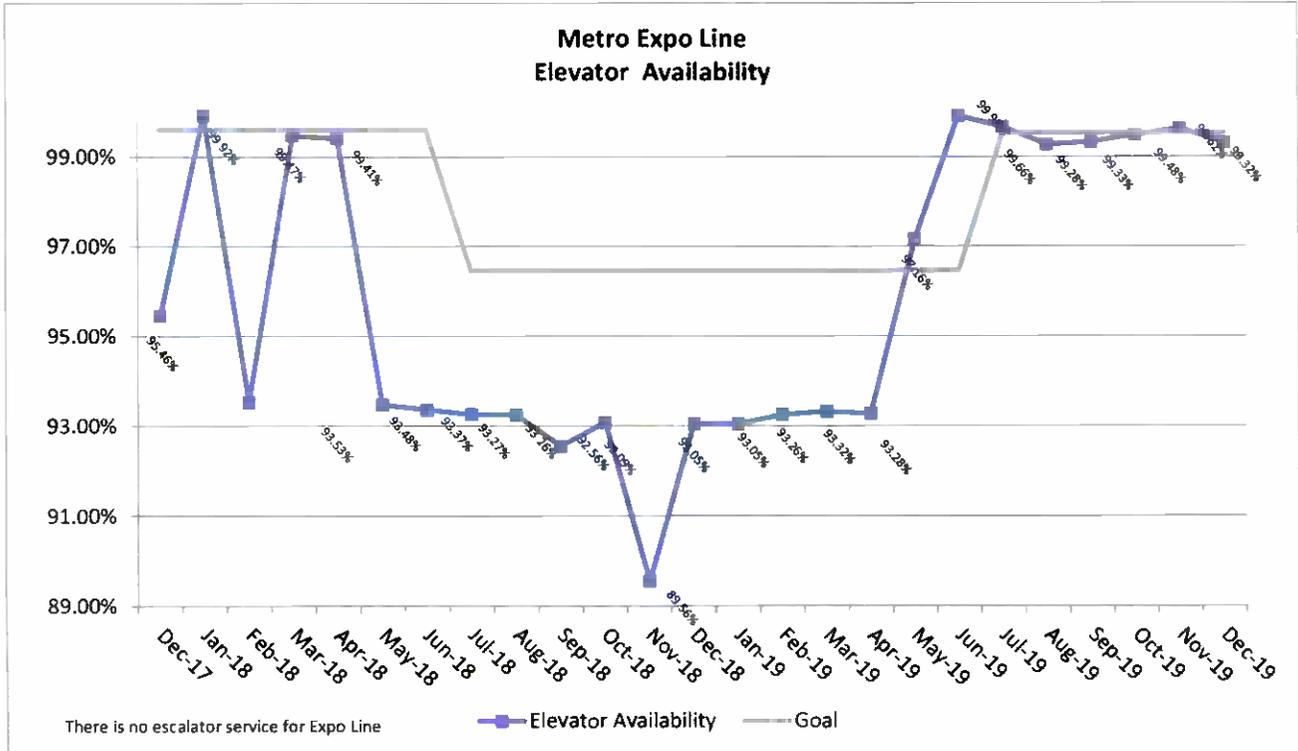
## LOST TRIPS



## LOST HOURS



## VERTICAL TRANSPORTATION AVAILABILITY



Note: An elevator at Culver City Station has been out of service indefinitely.

# Financial Status

## December 2019

FTA Quarterly Review  
February 2020



**Metro**

*Excellence in Service and Support*

# FY20 – Q2 Indicators

- **FY20 actual cash receipts from locally imposed sales tax revenues (PA, PC, MR, MM) totaled \$888.4 M during Q2 of the fiscal year, an increase of 4.3% from FY19Q2.**
- **The County of Los Angeles, State of California, and US unemployment rates have remained relatively steady over the last 6 months.**  
**LA 4.4%, CA 3.9% and US 3.5%**
- **Inflation in the Los Angeles Metropolitan Area remained at 3.0% for the 12 month period ended December '19**
  - **Excluding Food and Energy, core inflation equaled 2.9%**
- **Transit indicators – FY 20 Q2**
  - Ridership versus prior year**
    - Bus: +0.4%**
    - Rail: -15.7% (A Line Dec @75% of pre-shutdown average)**
    - Total: -4.2%**
  - Fare revenues – FY20Q2 – (7.0)% vs FY 19Q2**



**Metro**

# FY20 Q2 – Highlights

- **Board approved the use of a Construction Management/General Contractor (CMGC) project management approach for LINK US.**
  - **First agency use of the process**
- **Approved ordinance changes in order to implement an Occupancy Detection System and Pay-As-You Go (PAY-GO) improvements on the I-10 and I-110 HOT Lanes.**
- **Initiated the “once in a decade” review of the Measure R Sales Tax revenues distributions between Transit and Highway Capital programs.**

# FY20 Q3 – Look Ahead

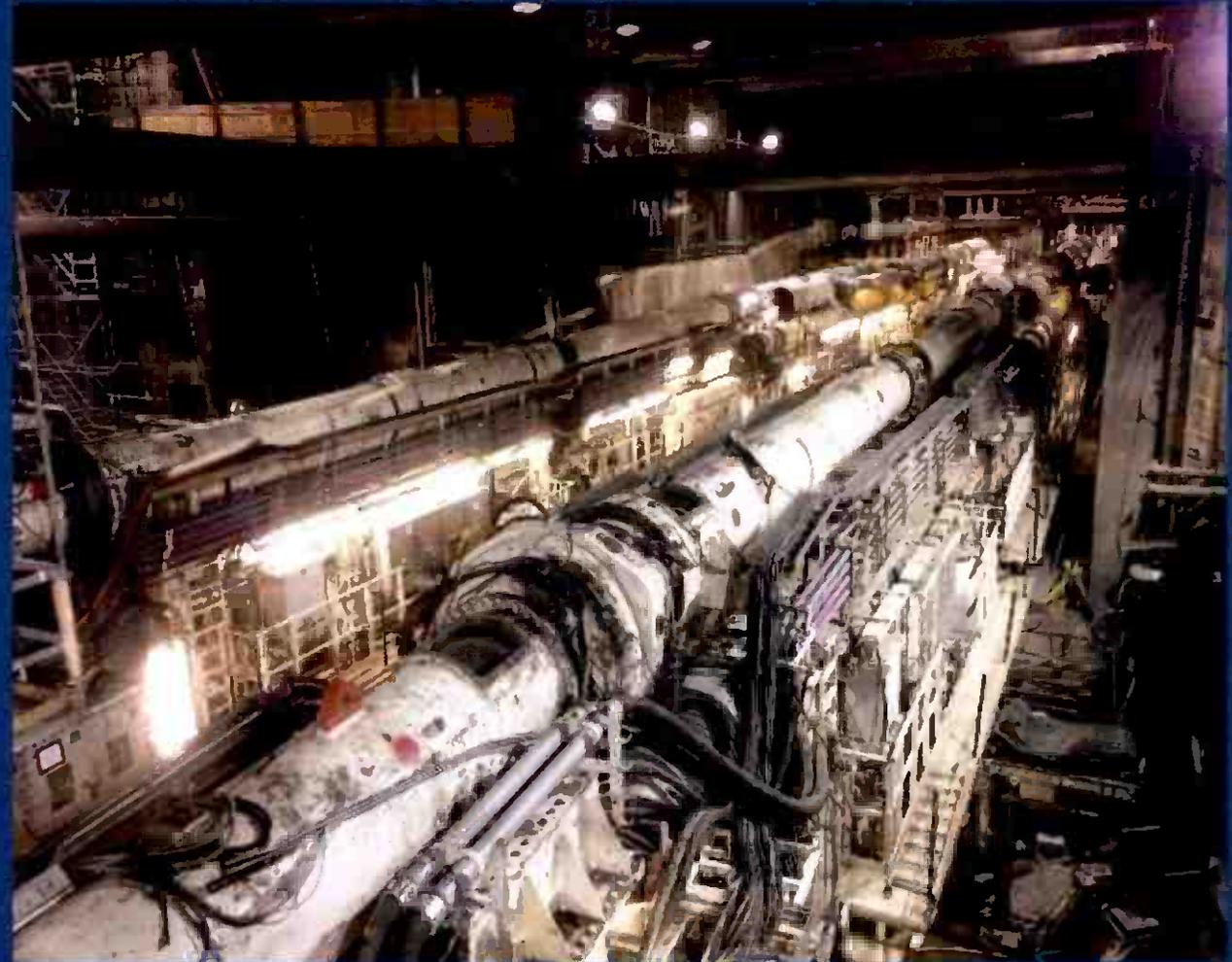
- **Initiate the Public Outreach for the NextGen Draft Transit First Service Plan**
  - The plan has been developed to “reconnect” or realign routes and schedules based on where and when people travel today.
  - Reconnect is estimated to increase ridership by 5% with no additional increase in revenue service hours.
- **Analyze and develop a series of recommendations that would potentially allow Los Angeles County K-12 students free access to transit services.**
  - Phased and Equity Based to address the highest need communities.

Los Angeles County  
Metropolitan Transportation Authority

# METRO CONSTRUCTION SAFETY

## FTA Quarterly Review Meeting

### March 4, 2020



**Metro**

# CONSTRUCTION SAFETY QUARTERLY REPORT

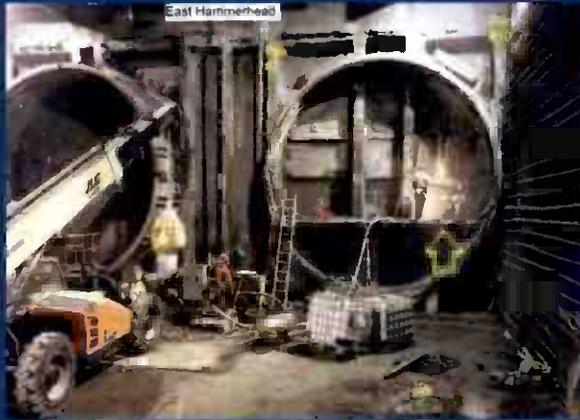


Crenshaw/LAX Transit Project

## CRENSHAW/LAX TRANSIT PROJECT

<input type="checkbox"/> Project-to-Date Total Work Hours:	9,180,478
<input type="checkbox"/> Recordable Injuries as of December 2019:	99
<input type="checkbox"/> Project Rate per 200,000 Labor Hours:	2.15
<input type="checkbox"/> BLS National Heavy Construction Incident Rate:	2.5
<input type="checkbox"/> Total Days Away Cases:	6
<input type="checkbox"/> Total Restrictive Duty Cases:	12.2

# CONSTRUCTION SAFETY QUARTERLY REPORT



Westside Purple Line Extension  
Section 1 Project

## WESTSIDE PURPLE LINE EXTENSION SECTION 1 PROJECT

<input type="checkbox"/> Project to Date Total Work Hours:	4,405,995
<input type="checkbox"/> Recordable Injuries as of December 2019:	29
<input type="checkbox"/> Project Rate per 200,000 Labor Hours:	1.3
<input type="checkbox"/> BLS National Heavy Construction Incident Rate:	2.5
<input type="checkbox"/> Total Days Away Cases:	6



Westside Purple Line Extension  
Section 2 Project

## WESTSIDE PURPLE LINE EXTENSION SECTION 2 PROJECT

<input type="checkbox"/> Project to Date Total Work Hours:	1,036,596
<input type="checkbox"/> Recordable Injuries as of December 2019:	5
<input type="checkbox"/> Project Rate per 200,000 Labor Hours:	.96
<input type="checkbox"/> BLS National Heavy Construction Incident Rate:	2.5
<input type="checkbox"/> Total Days Away Cases:	2

# CONSTRUCTION SAFETY QUARTERLY REPORT



Regional Connector Transit Project

## REGIONAL CONNECTOR TRANSIT PROJECT

<input type="checkbox"/> Project to Date Total Work Hours:	4,310,668
<input type="checkbox"/> Recordable Injuries as of December 2019:	19
<input type="checkbox"/> Project Rate per 200,000 Labor Hours:	.88
<input type="checkbox"/> BLS National Heavy Construction Incident Rate:	2.5
<input type="checkbox"/> Total Days Away Cases:	0

# CONSTRUCTION SAFETY QUARTERLY REPORT



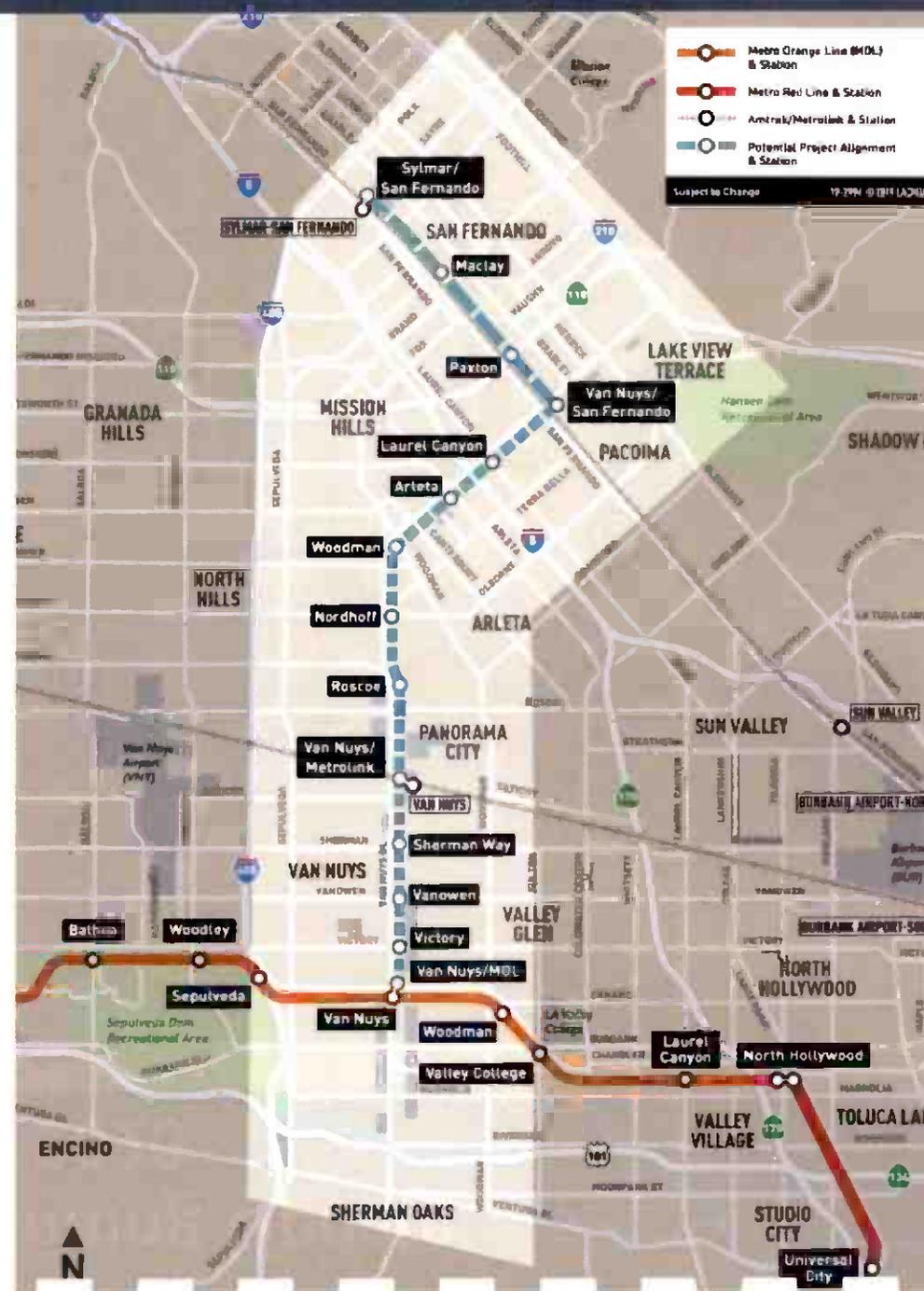
- Conducted monthly All Hands Safety/Security Meetings with the Westside Purple Line Extension Section 1 Project and Regional Connector Transit Project contractors.
- Monitored construction activities on a daily basis including nights and weekends to ensure compliance with contract specifications including Cal/OSHA and CPUC.
- Participated in weekly progress meetings to discuss safety / security and quality related issues and work schedules.



# East San Fernando Valley Transit Corridor

## Project Status

- Camera Ready copy of Final EIS/EIR delivered to FTA for review (January 6)
- Engineering work to support the Design Build (DB) package is advancing in coordination with the Cities of Los Angeles and San Fernando
- Coordinating with Metrolink and freight rail upgrades to the Antelope Valley Line
- First/Last Mile Station Area Plans scheduled for Board consideration in March

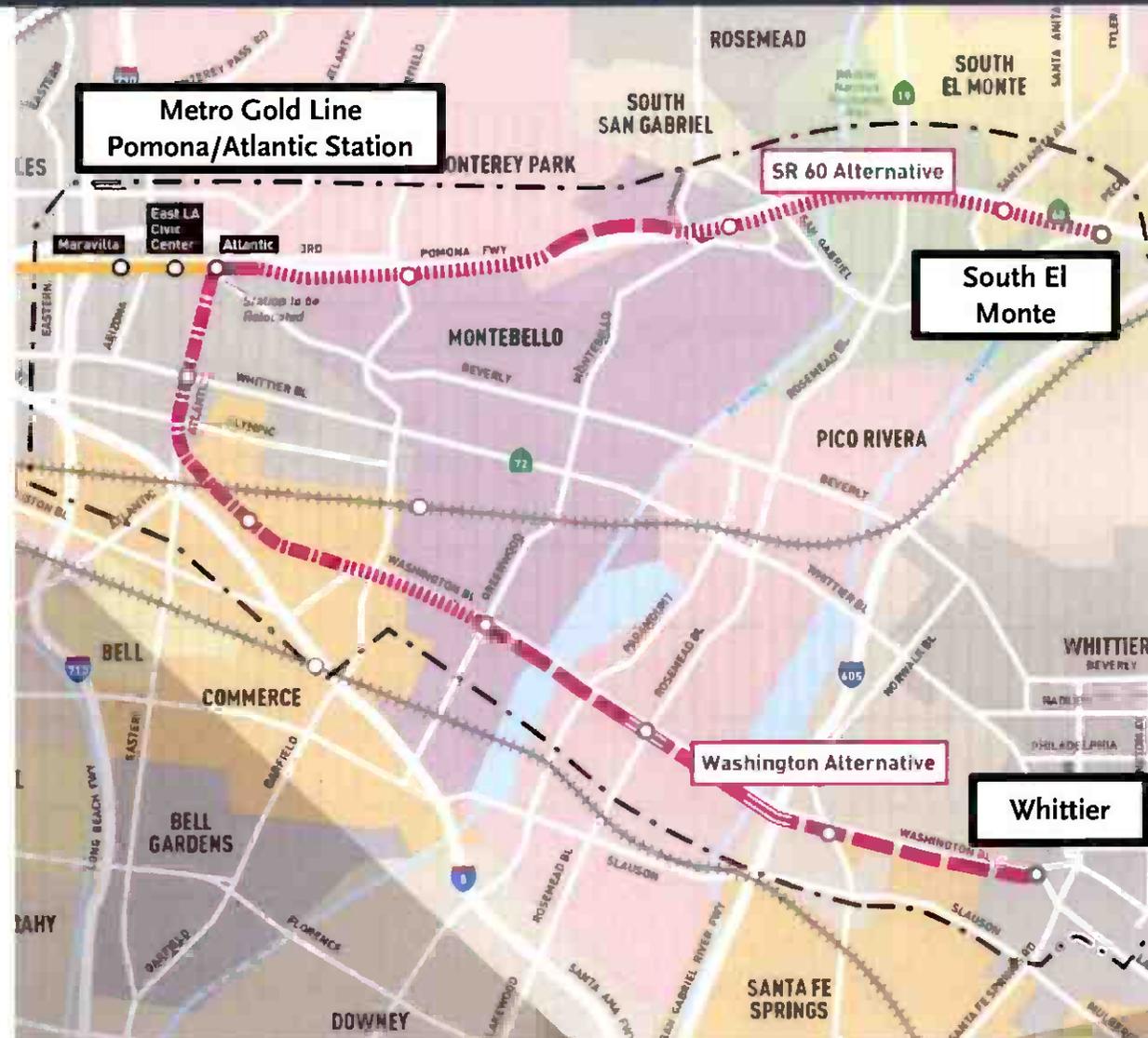




# Eastside Transit Corridor Phase 2

## Study Corridor

Light rail transit corridor extending Gold Line eastward to Whittier and South El Monte



# Eastside Transit Corridor Phase 2

*Washington  
Alternative -  
Commerce/  
Citadel Station  
Concept  
(Underground)*



# Eastside Transit Corridor Phase 2

## Status

- Environmental analysis and advanced conceptual engineering currently underway
- February 2020 – Three community meetings to provide project updates
- Winter 2020 – Special design refinement studies near completion
- February 27, 2020 – Metro Board review:
  - Present preliminary environmental issues and technical findings that could result in the withdrawal of SR 60 and Combined Alternatives
  - Proceed with CEQA-only process for environmental clearance

## Next Steps

- Ongoing key technical meetings with cities, agencies, and stakeholders



# West Santa Ana Branch Transit Corridor

## Study Corridor

19 mile light rail transit corridor connecting southeast LA County to Downtown Los Angeles (DTLA)

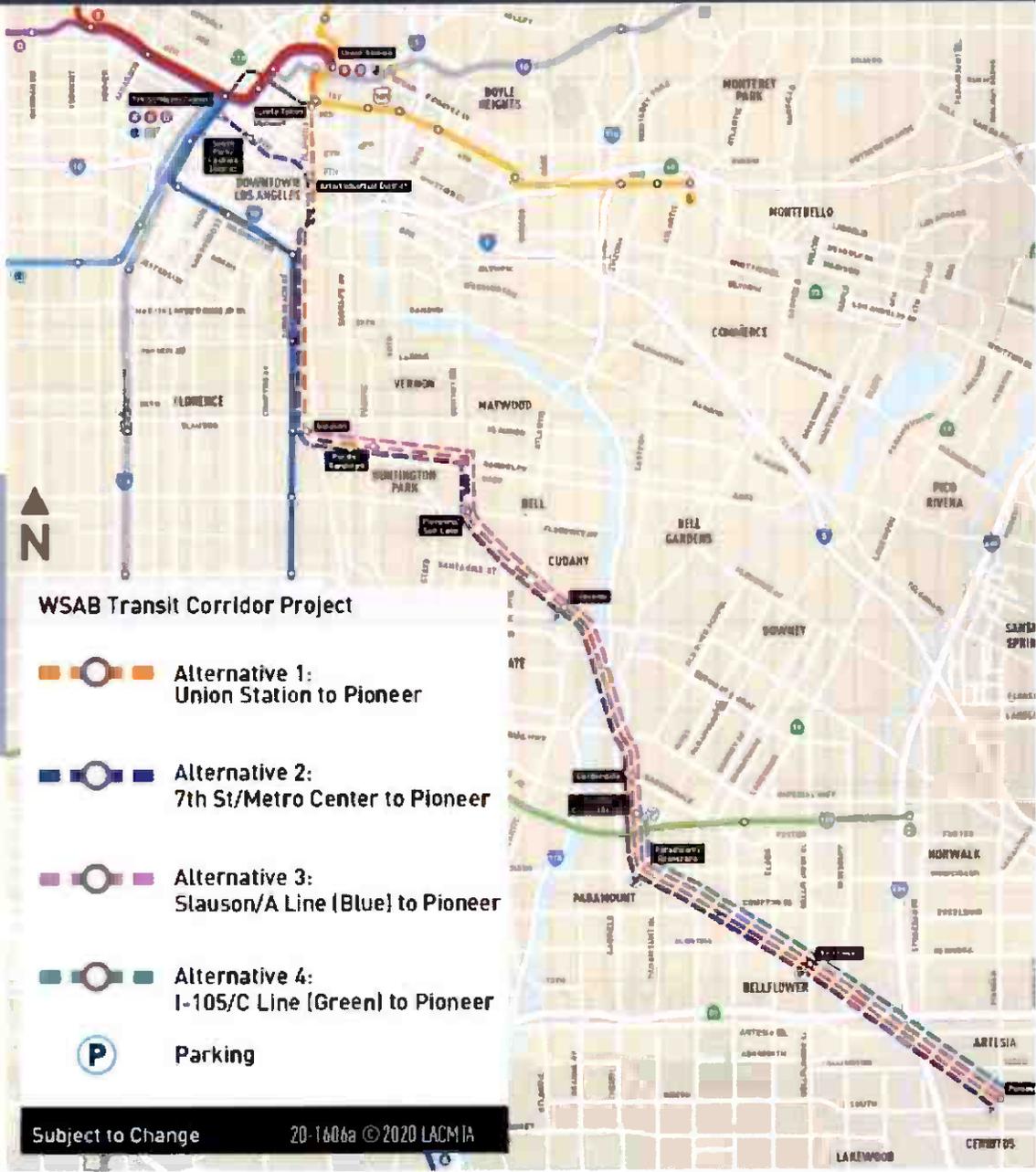
## Four Build Alternatives

- **Alternative 1:**  
Los Angeles Union Station to Pioneer

Design Option 1 (Alternative 1)  
○ Northern terminus behind MWD Building on east side of LAUS, not at LAUS Forecourt

Design Option 2 (Alternative 1)  
○ Adds the Little Tokyo Station

- **Alternative 2:**  
7th St/Metro Center to Pioneer
- **Alternative 3:**  
Slauson/A Line (Blue) to Pioneer
- **Alternative 4:**  
I-105/C Line (Green) to Pioneer







# Sepulveda Transit Corridor

## Study Corridor

- Valley-Westside (Ventura County Metrolink Line to Expo Line)
- Westside-LAX (Expo Line to Crenshaw/LAX Line)

## Measure M

- Identified funding: \$9.5 billion
- Revenue service dates:
  - Valley-Westside, 2033-35
  - Westside-LAX, 2057-59



# Sepulveda Transit Corridor: Valley-Westside

## Sepulveda Transit Corridor Project (alignment options)

-  Aerial
-  Aerial or At Grade
-  Underground
-  Transfer Stations

### Existing Service

-  Existing Metro Expo Line & Station
-  Existing Metro Orange Line & Station
-  Amtrak/Metrolink & Station

### Pre-Construction

-  Purple Line Extension & Station (Section 3)
-  East San Fernando Valley Transit Corridor & Station



HRT 1



HRT 2



HRT 3



MRT 1



# Sepulveda Transit Corridor: Westside-LAX

## Westside-LAX

- Connects the Expo Line to the Crenshaw/LAX Line
- Revenue service dates: 2057-59
- 6 potential alternatives:
  - Heavy Rail or Monorail on I-405
  - Heavy Rail on Sepulveda
  - Heavy Rail on Overland
  - Heavy Rail on Centinela
  - Heavy Rail on Centinela (Bundy)
  - Purple Line Extension



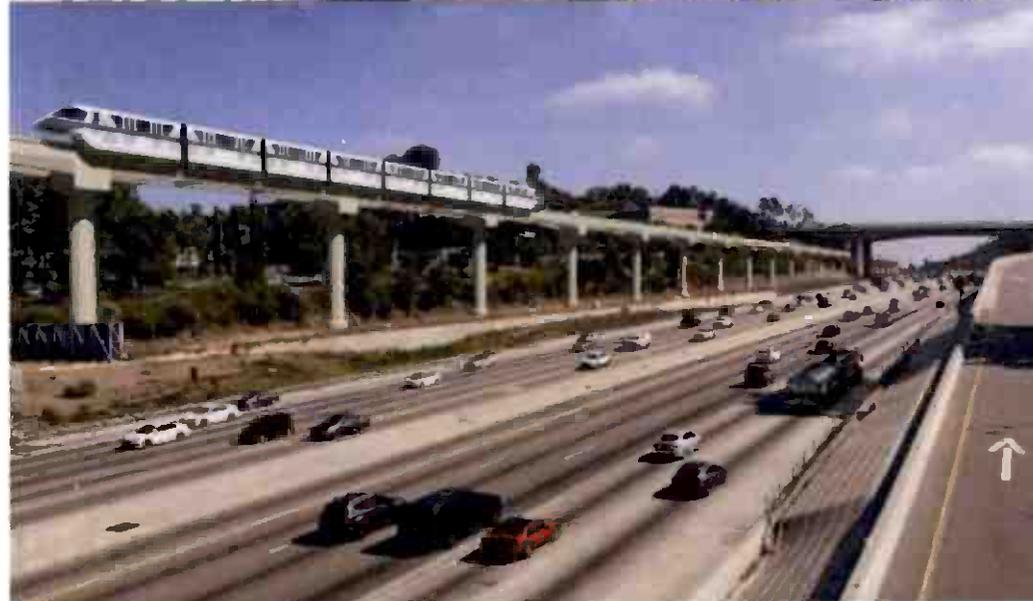
# Sepulveda Transit Corridor

## Project Status

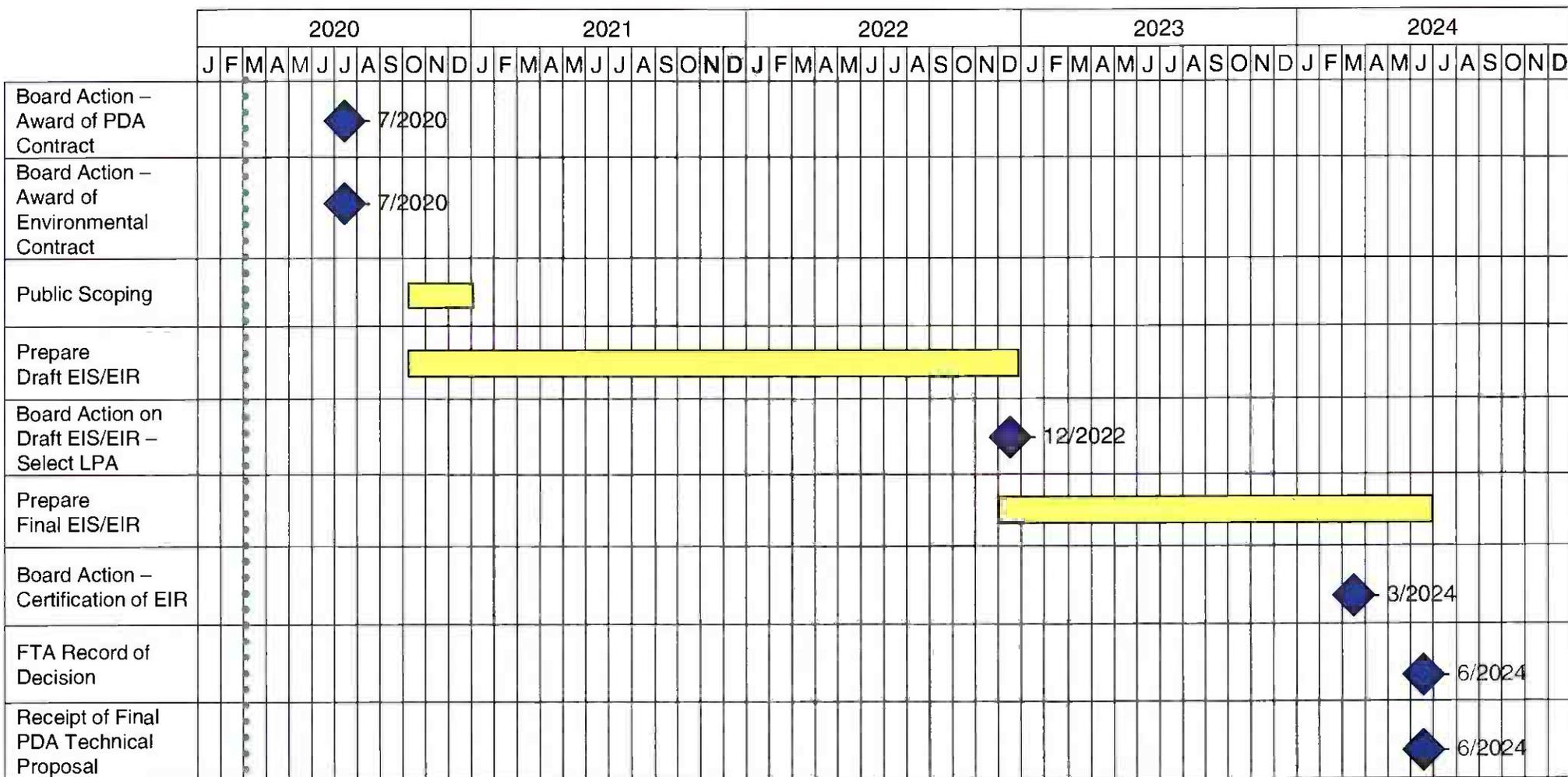
- Through July 2020, procurement continues for environmental and PDA contracts

## Next Steps

- July 2020
  - Award PDA contract(s)
  - Award environmental contract
  - Approve alternatives for environmental review
- Fall 2020 – Begin environmental process



# Sepulveda Transit Corridor Schedule



◆ = Milestone Date

Last Revised: 2/2020



# Milestones

PROJECT		NOI/NOP	Admin Draft to FTA	NOA	LPA	Admin Final to FTA	Anticipated ROD
CEQA/ NEPA	East San Fernando Valley Transit Corridor	Mar-13	Jul-16	Aug-17	Jun-18	Sep-19	Sep-20
	Eastside Transit Corridor Phase 2	Jan-10 <sup>[1]</sup>	Dec-13 <sup>[1]</sup>	Aug-14 <sup>[1]</sup>	Dec-21 <sup>[2]</sup>	Sep-22	TBD
	West Santa Ana Branch Transit Corridor	Jun-17	Aug-19	Feb-21	May-21	Feb-22	May-22
	Sepulveda Transit Corridor	Oct-20	TBD	TBD	TBD	TBD	TBD

[1] Dates for the Original Draft EIS/R

[2] Reinitiated Draft EIS/R

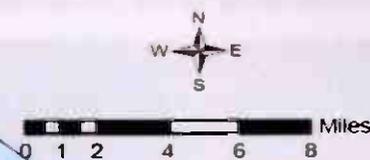
# Metro Rapid System Gap Closure Lines

## Los Angeles Metro BRT Network

### Legend

- Gap Closure Lines
- Metro Rapid Lines
- Metro Orange Line
- Metro Silver Line
- Metro Rail
- Metrolink

Includes 7 Metro Rapid Corridors  
 Total of 126 Miles  
 Total Project Cost \$25.7 Million  
 Note: All Gap Closure Rapid lines are currently operating



# Metro Rapid System Gap Closure Lines

## Transit Signal Priority

### Status

- Completed 123 miles or 97% to date
- Installation of last 3.3 miles in Culver City completed. Following system testing, project closeout in May 2020.



126.3 miles of Transit Signal Priority along 7 Metro Rapid corridors

- Torrance-Long Beach
- Venice
- Atlantic
- Garvey-Chavez
- West Olympic
- South Sepulveda
- San Fernando

# Metro Rapid System Gap Closure Lines Shelter Implementation

## Status

- 150 total station locations
- 113 stations completed in 17 jurisdictions
- 37 remaining stations – construction underway at several locations and scheduled for completion by Spring 2020.



Number of Stations	Agency	Completion Date	Notes
29	City of Torrance	Winter 19/20	Construction underway
8	Culver City	Spring 2020	Construction underway
<b>37</b>	<b>TOTAL</b>		

# Metro Rapid System Gap Closure Lines

## Current Project Budget and Expenditures

Funding Source	Current Budget
Federal Section 5309 Very Small Starts	\$16,700,000
Local Match	\$12,504,301
<b>TOTAL BUDGET</b>	<b>\$29,204,301</b>

Activities	Approved Budget	Current Budget	Expenditures To Date	Forecast to Complete
Transit Signal Priority	\$24,044,301	\$23,121,925	\$19,183,996	\$3,937,929
Shelters	\$ 5,160,000	\$ 5,160,000	\$ 4,580,306	\$579,694
<b>TOTAL</b>	<b>\$29,204,301</b>	<b>\$28,281,925</b>	<b>\$23,764,302</b>	<b>\$4,517,623</b>

# Cesar Chavez Bus Stop Improvements Project

## Status

- Construction began 12/20/2019 and is currently underway
- Construction completion anticipated Summer 2020





# Cesar Chavez Bus Stop Improvements Project

## Current Project Budget and Expenditures

Funding Source	Current Budget
FTA Grant	\$1,668,557
Local Funds	\$417,140
Budget of Original Grant	\$2,085,697
Metro Overmatch Dollars	\$1,444,303
<b>TOTAL BUDGET</b>	<b>\$3,530,000</b>

Original Budget	Current Budget	Expenditures to Date	Forecast to Complete
\$ 2,085,697	\$ 3,530,000	\$ 580,834	\$ 2,949,166

# Crenshaw/LAX Transit Project FTA Quarterly Review – March 4, 2020



# Project Description

- 8.5 miles, 8 stations, 22 LRT vehicles
- Current Budget = \$2,058 million
- Current Forecast = \$2,058 million
- Remaining Unallocated Contingency = 1.4% of Total Project Current Forecast and 17.7% of Total Project Cost-to-Go
- Design/Builder = Walsh-Shea Corridor Constructors
- Contractor Award Date = August 01, 2013
- Current Revenue Service = October 30, 2019
- Forecast Revenue Service = Summer/Fall 2020
- Final Design progress = 100%
- Construction progress = 95%
- Daily Project Transit Trips = 123,576
- Daily New Transit Trips = 31,000
- Federal Funds = \$227.6 million
- Local Funds = \$1,615.2 million
- State Funds = \$215.3 million
- Status = In construction and commenced testing



# Key Project Issues

- Contractor enhanced and strengthened project management team.
- Contractor initiated start of Systems Integration Testing at south end of project.
- Contractor continues critical construction efforts in the north end underground structures.
- Several areas along the alignment require rework by the contractor due to damaged, incomplete or missing components.
- Contractor continues to perform less than planned which is impacting follow-on subcontractor work and creating inefficient performance.
- Working with 3<sup>rd</sup> parties to complete power drops for traction power substations in support of testing systems equipment.
- The estimated jobs created to-date is 24,564 with 0 estimated jobs created last quarter\*.

\* Estimate methodology reference *Construction Impacts of Metro's Measure R Transportation Projects, 2015 Update*, [https://laedc.org/wp-content/uploads/2016/04/Measure-R-Projects-SUMMARY\\_20160304.pdf](https://laedc.org/wp-content/uploads/2016/04/Measure-R-Projects-SUMMARY_20160304.pdf)

# Construction Update Segment A



**GL WYE – Plinth and insert repair work**



**La Brea – Elevation and alignment survey**

# Construction Update Segment B



UG3 – OCR Installation

UG3 – Wiring booster fan



# Construction Update Segment C



**Expo Station – Northbound rail exchange**



**MLK Station - Tunnel**

# Real Estate Acquisition Status

- The contractor has possession of all properties along the alignment needed for the project.
- Metro is working on extending some temporary construction easements due to revised construction schedule.

# Project Cost Status

SCC CODE	DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		CURRENT BUDGET/ FORECAST VARIANCE
			PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
10	GUIDEWAYS	471,335,000	-	450,354,375	-	417,293,686	441,887	409,795,691	-	417,293,686	(33,060,686)
20	STATIONS	153,906,000	-	315,050,000	-	308,067,041	1,714,303	280,608,211	-	308,067,041	(6,982,959)
30	SUPPORT FACILITIES SOUTHWEST YARD	66,073,000	-	71,164,000	-	67,318,266	-	66,072,328	-	67,338,361	(3,825,639)
40	SITWORK/SPECIAL CONDITIONS	235,576,000	-	395,798,361	1,065,383	401,181,279	2,290,283	346,850,426	1,065,383	401,608,303	5,809,942
50	SYSTEMS	125,132,000	-	169,436,000	-	174,966,183	2,067,435	140,053,911	-	174,969,936	5,533,936
<b>CONSTRUCTION SUBTOTAL (10-50)</b>		<b>1,052,622,000</b>	<b>-</b>	<b>1,401,802,736</b>	<b>1,065,383</b>	<b>1,368,826,455</b>	<b>6,513,907</b>	<b>1,243,380,568</b>	<b>1,065,383</b>	<b>1,369,277,328</b>	<b>(32,525,409)</b>
60	RIGHT-OF-WAY	132,294,000	-	127,490,000	13,000	133,736,246	13,052	133,583,573	13,000	133,736,247	6,246,247
70	LRT VEHICLES	87,780,000	-	83,571,544	-	83,571,544	-	81,362,870	-	83,571,544	-
80	PROFESSIONAL SERVICES	273,147,000	-	368,734,466	3,680,439	413,200,047	2,699,010	382,315,504	6,613,036	416,658,091	47,923,629
<b>SUBTOTAL (10-80)</b>		<b>1,545,843,000</b>	<b>-</b>	<b>1,981,598,746</b>	<b>4,758,822</b>	<b>1,999,334,292</b>	<b>9,225,969</b>	<b>1,840,642,515</b>	<b>7,691,419</b>	<b>2,003,243,209</b>	<b>21,644,463</b>
90	UNALLOCATED CONTINGENCY	177,157,000	-	50,401,254	-	-	-	-	(7,691,419)	28,766,791	(21,844,463)
<b>TOTAL PROJECT 865512 (10-100)</b>		<b>1,723,000,000</b>	<b>-</b>	<b>2,032,000,000</b>	<b>4,758,822</b>	<b>1,999,334,292</b>	<b>9,225,969</b>	<b>1,840,642,515</b>	<b>-</b>	<b>2,032,000,000</b>	<b>-</b>
ENVIRONMENTAL/PLANNING - 405512		5,526,150	-	5,526,150	-	5,526,150	-	5,526,150	-	5,526,150	-
ENVIRONMENTAL/PLANNING - 465512		20,473,850	-	20,473,850	-	20,022,881	-	20,022,881	-	20,473,850	-
<b>TOTAL PROJECTS 405512 &amp; 465512 (ENV / PLAN'G)</b>		<b>26,000,000</b>	<b>-</b>	<b>26,000,000</b>	<b>-</b>	<b>25,549,031</b>	<b>-</b>	<b>25,549,031</b>	<b>-</b>	<b>26,000,000</b>	<b>-</b>
<b>TOTAL PROJECTS 405512, 465512 &amp; 865512</b>		<b>1,749,000,000</b>	<b>-</b>	<b>2,058,000,000</b>	<b>4,758,822</b>	<b>2,024,883,323</b>	<b>9,225,969</b>	<b>1,866,191,546</b>	<b>-</b>	<b>2,058,000,000</b>	<b>-</b>

1 Expenditures are Cumulative through December 27, 2019.

2 Expenditures exclude \$6.6 million for State Board of Equalization (SBOE) decision to tax LRT Vehicle deliveries since August 2016. Metro is appealing the decision by the SBOE but paid tax so as not to incur any late fees.

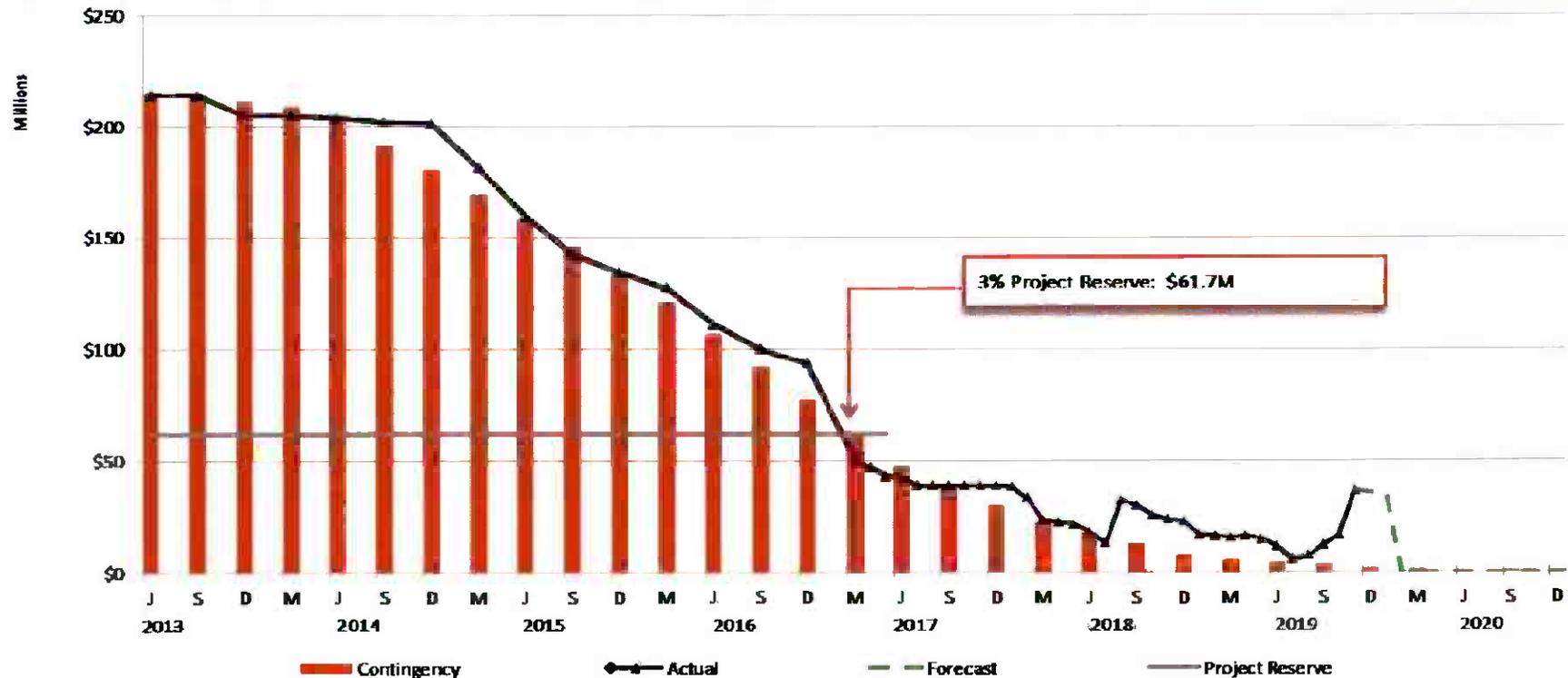
3 Expenditures exclude \$5.5 million for various right-of-way and professional services costs that are being reallocated to other local funding.

# Non-Crenshaw/LAX Transit Project Funded Scope of Work

- The costs shown in the table below are not part of Crenshaw/LAX Transit Project costs but are funded by other Metro projects using the services of the alignment design-builder (Contract C0988)

C0988 NON-CRENSHAW/LAX TRANSIT PROJECT FUNDED SCOPE OF WORK									
DESCRIPTION	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		FORECAST VARIANCE
	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TODATE	
405556 SYSTEMWIDE TRANSIT PLANNING	-	320,035	-	320,035	-	320,035	-	320,035	-
210090/93 FARE GATE PROJECT	-	2,566,226	-	3,066,226	63,100	2,354,226	-	2,566,226	-
210152 CRENSHAW/LAX BUS TRANSFER FACILITY	-	2,200,000	-	2,200,000	89,832	672,831	-	2,200,000	-
460303 AIRPORT METRO CONNECTOR	-	37,914,465	-	37,072,922	-	37,047,674	-	37,914,465	-
500013 C/LAX LAWA SCOPE OF WORK	-	1,575,362	-	581,918	-	545,439	-	1,575,362	-
405522 HIGHWAY PLANNING	-	4,479,724	-	4,479,724	512,540	2,407,072	-	4,479,724	-
TOTAL	-	49,055,812	-	47,720,825	665,472	43,347,277	-	49,055,812	-

# Budget Contingency Drawdown

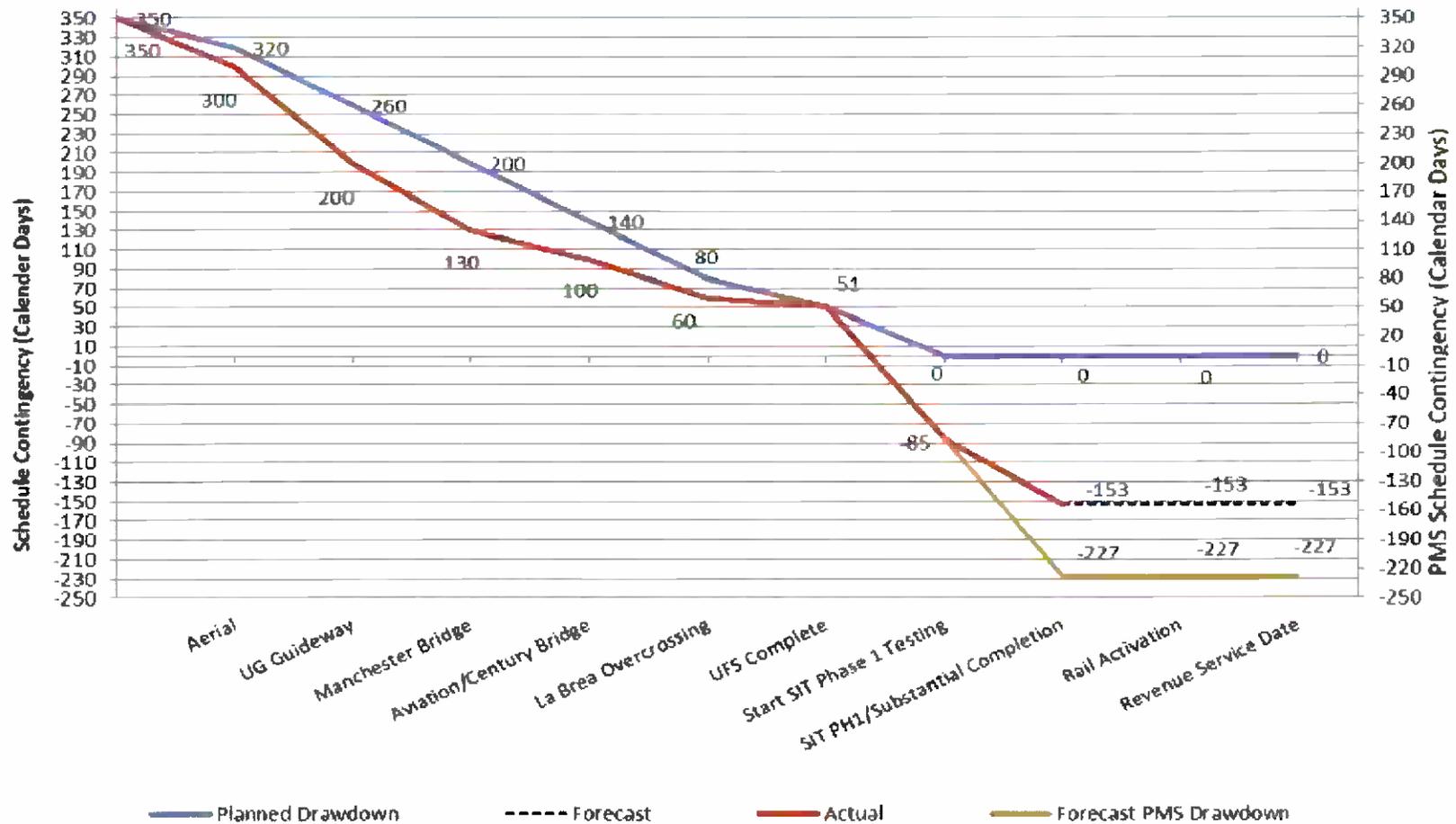


PROJECT COST CONTINGENCY (through 27-Dec-2019)					
UNITS IN DOLLARS					
	Original Contingency	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	173,500,000	(137,051,791)	(7,691,419)	(144,743,210)	28,756,790
Allocated Contingency	40,366,792	(40,366,792)	-	(40,366,792)	-
<b>Total Contingency</b>	<b>213,866,792</b>	<b>(177,418,583)</b>	<b>(7,691,419)</b>	<b>(185,110,002)</b>	<b>28,756,791</b>

# Summary Schedule

Crenshaw/LAX Transit Corridor - Master Schedule December 2019		Crenshaw/LAX Level 1 Schedule						MASTER SCHEDULE DECEMBER 2019		
Activity Name	Finish			2020				2021		
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
<b>Crenshaw/LAX Transit Corridor - Master Schedule</b>	21-Dec-20									21-Dec-20
<b>Milestones &amp; Key Dates</b>	21-Dec-20									21-Dec-20
<b>Program Elements</b>	20-Jul-20									20-Jul-20
865512 - Crenshaw/LAX	28-Oct-20									28-Oct-20
C0990 - Advanced Utility Relocation	27-May-16 A									
C0992 - Concrete Ties and Assembly Items	15-Aug-14 A									
C0992A - Running Rail & Bumping Post	08-May-15 A									
C0988 - Pre-Construction Crenshaw/LAX	12-May-20									12-May-20
C0988 - Construction & Installation	28-Oct-20									28-Oct-20
Sitework	04-May-20									04-May-20
Stations	09-Jun-20									09-Jun-20
Guideway & Track	19-Feb-20									19-Feb-20
System-Wide Components	04-Jun-20									04-Jun-20
Systems	01-Jun-20									01-Jun-20
Testing	25-Jul-20									25-Jul-20
Substantial Completion	25-Jul-20									25-Jul-20
Start Up	28-Oct-20									28-Oct-20
Pre - Revenue Operations	21-Dec-20									21-Dec-20
Revenue Service	21-Dec-20									21-Dec-20
Revenue Service Summer/Fall of 2020	21-Dec-20*									Revenue Service Summer/Fall of 2020 ◆
860003 - Southwestern Yard and Paint Body Shop	30-Jan-19 A									

# Schedule Contingency Drawdown

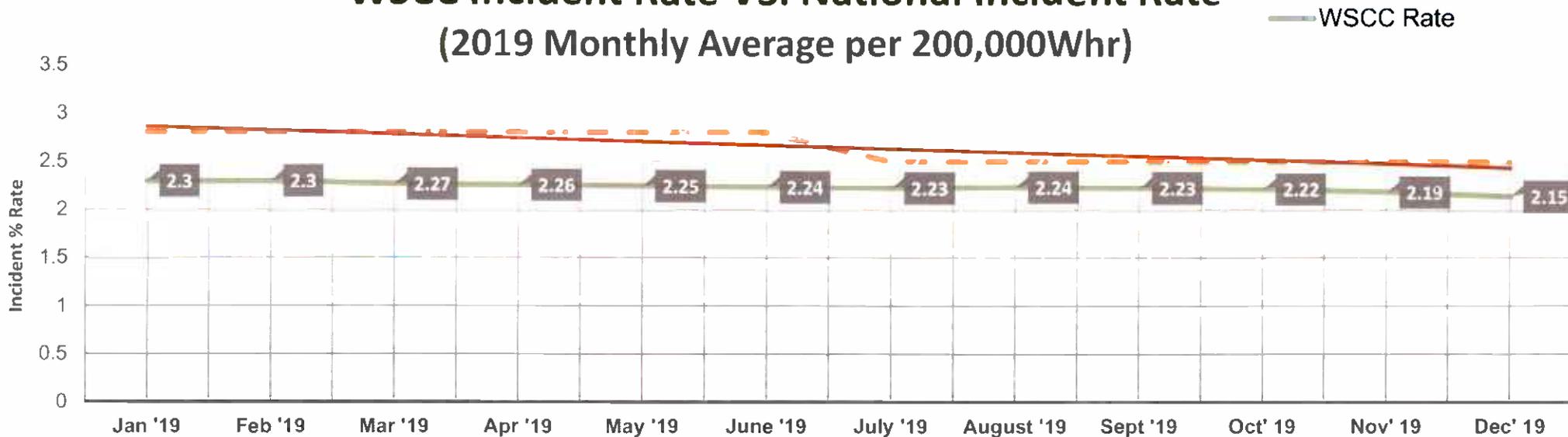


# Top Risks & Mitigations

RISK ID	RISK DESCRIPTION	RISK SCORE	MITIGATION STRATEGIES
124	Main Line testing prior to pre-revenue operations may take longer than expected, resulting in increased Main Line Metro and Consultant costs and potential delay to December 11, 2019 - Substantial Completion.	18	<ol style="list-style-type: none"> <li>1. Prepare appropriate testing schedule and review with operations people.</li> <li>2. Have pre-meetings with test firm presidents to emphasize importance of staffing.</li> <li>3. Testing schedules to be prepared based on previous project startup experience.</li> <li>4. DB submit test plan, Metro review for completeness.</li> <li>5. Monitor completion of factory acceptance testing - FATs.</li> <li>6. Monitor completion of LFATS</li> <li>7. Expedite contractor/vendor turnaround of test results.</li> <li>8. Keep test firms informed of critical schedule needs.</li> <li>9. Final schedule for testing</li> </ol>
359	Extended Overhead or productivity loss claims exposure not covered by cost impacts in individual risks.	18	<ol style="list-style-type: none"> <li>1. Verify the CM is keeping very good documentation</li> <li>2. Respond to all contractor notice of delay to protect Metro interests and clarify negative implications in contractors letters.</li> <li>3. Resolve time impacts at the same time as resolving the direct cost of changes.</li> <li>4. Identify potential critical procurements.</li> </ol>
362	Schedule activities that are critical to completion (Trackwork, OCR/OCS, TPSS and Auxiliary Power Energization, Train Control wiring/testing and Communications equipment installation/wiring/testing, Fire Alarm including Damaged Tunnel Conduits). Including Emergency Fans, and Elevators.	16	<ol style="list-style-type: none"> <li>1. Prepare work-around plans for activities behind schedule.</li> <li>2. Direct contractor to expedite on specific critical scope.</li> <li>3. Identify what scope can be rescheduled for completion after substantial completion</li> </ol>

# Safety Status (Project Specific)

**WSCC Incident Rate VS. National Incident Rate**  
(2019 Monthly Average per 200,000W hr)



## Contract C0988 WSCC

- Completed 167,850 work hours with zero (0) recordable injury for the month of December 2019
- The Crenshaw/LAX Corridor Transit project-to-date work hours are 9,180,479 with ninety-nine (99) recordable incidents
- The project recordable rate is 2.15. The Bureau of Labor Statistics (BLS) average recordable rate per 200,000 work-hours is 2.5

# DBE Participation Status for Design and Construction – Alignment D-B

- DBE Goal – Design 20.00%
- Current DBE Commitment \$25,799,791 20.00%
- Current DBE Participation \$29,667,569 22.15%

26 Design subcontractors have been identified to-date.

- 
- DBE Goal-Construction 20.00%
  - Current DBE Commitment (contract) \$259,865,769 20.00%
  - Current DBE Participation (paid) \$312,883,591 26.73%

339 Construction subcontractors have been identified to-date.

Commitment – Current DBE contract commitment divided by current contract value.  
Participation – Total amount paid to date to DBEs divided by the amount paid to date to the Prime.

# Quality Assurance & Quality Control

- Attended weekly Quality Team Meetings with WSCC Lead Quality personnel and City of Los Angeles Bureau of Contract Administration (ConAd) in attendance.
- WSCC Quality issued one (1) Nonconformance Report (NCR) during this month.
- Metro Quality conducted Exit Interview for after completing the 2019 Annual Quality Audit during this month.
- Metro Quality participated in Readiness Review meeting for Sign Installation.
- Metro Quality participated in Internal Project Review Weekly Meetings. Metro's Independent Testing Lab (ITL) was not scheduled to perform verification inspections and tests during this month.

# Environmental Mitigation Status

- Noise and vibration spot checks continue to be conducted weekly at multiple sensitive locations and at locations of new activities along the project alignment.
- SWPPP inspections of all project areas are conducted weekly by WSCC and spot checks by Metro to observe site conditions and report on performance of stormwater protection Best Management Practices and overall housekeeping.
- EMS and Environmental Compliance Progress meetings were held during this reporting period on 12/4/19 and 2/18/19.
- There were three qualifying rain events during the reporting period on 12/4/2019, 12/23/2019, and 12/26/2019. WSCC prepared a REAP for each rain event and distributed the REAP's to their foremen. Sampling results during the rain events were within the SWPPP's threshold limits.
- No Fugitive dust violations were reported or witnessed during the reporting period.
- There were no Metro observed nighttime noise exceedances during this reporting period.

# Public Outreach Program

- Continued working with WSCC to minimize the impacts of lane and street closures along the Crenshaw/LAX alignment.
- Circulated public notice for project construction activities. The notices are distributed via-email, social media networks and hand delivered to key stakeholders.
- Continued coordination with WSCC to mitigate impacts to businesses and residents along the Crenshaw/LAX alignment.
- Ongoing coordination with WCSS and Metro Bus Operations to plan for bus detour routes to accommodate lane reductions and closures.
- Continued outreach to stakeholders in the LAX area regarding ongoing construction activities.

# Regional Connector Transit Project

FTA Quarterly Review Meeting

March 4, 2019

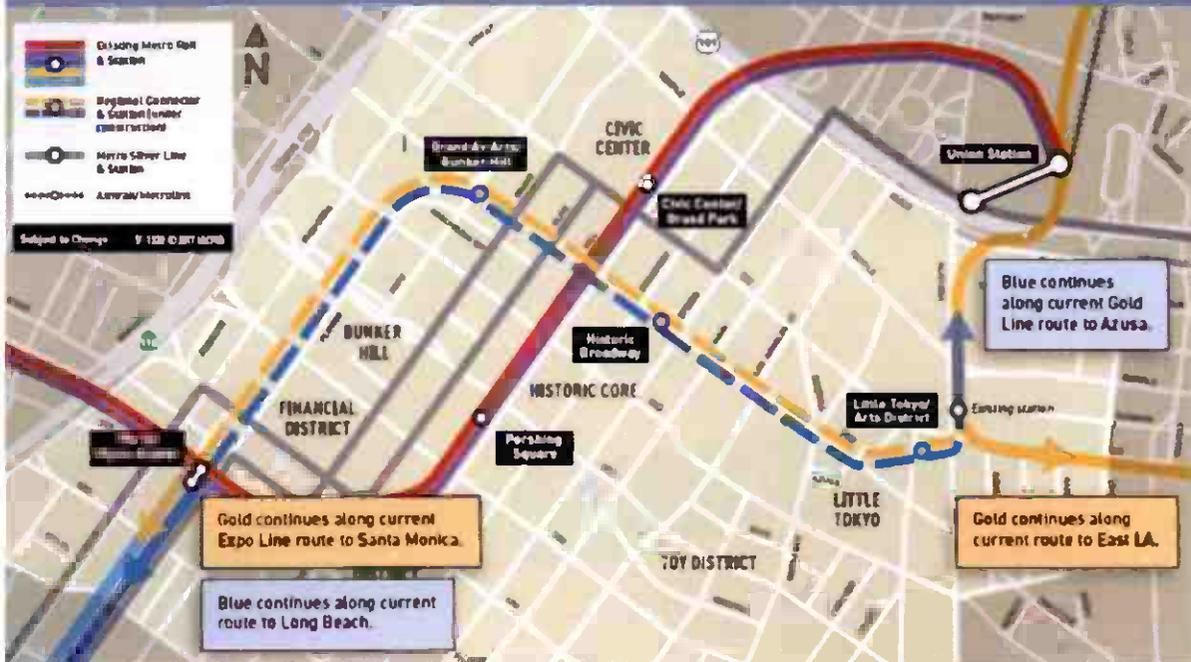
East Los Angeles ↔ Santa Monica

Azusa ↔ Long Beach



Metro

# Project Description



- 1.9 mile Link Connecting Blue & Expo Lines with Gold Line
- 3 New Stations
- 4 Light Rail Vehicles
- 90,000 Daily Project Transit Trips
- 17,700 Daily New Transit Trips

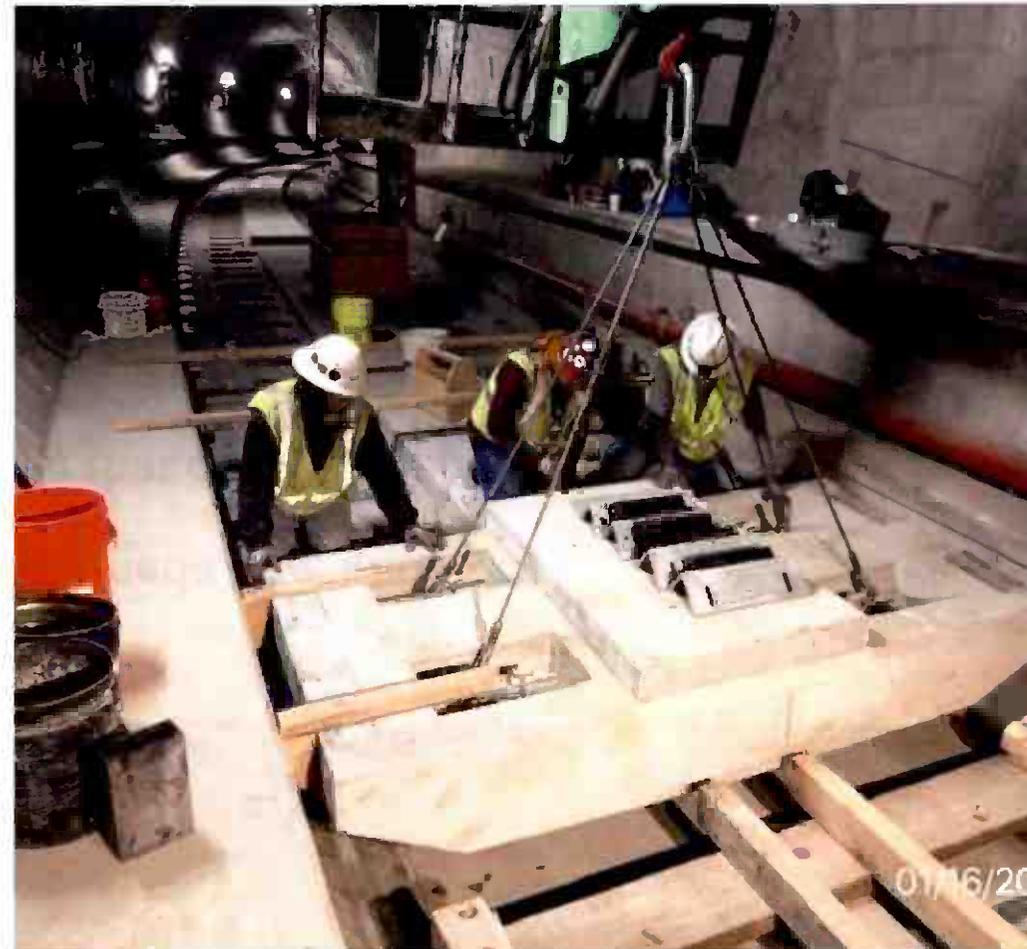
- FFGA Budget – \$1,402.93M
- FFGA Forecast – \$1,670.83M
- FFGA Proposed RSD – 02/2023
- Forecast – Summer/Fall 2022
- FFGA Contingency (Proposed Budget) – 2.45%
- FFGA Contingency (To Go) – 4.66%
- Federal Funds – \$889.41M
- Local Funds – \$880.73M
- Design-Build Contractor: Regional Connector Constructors (RCC)
- Award Amount: \$927.23M
- Status: In Construction
- Overall Project Progress – 62.2%
- Final Design Progress – 100%
- Construction Progress – 60.1%

# Key Project Updates

1. Multi-phase street restoration at 1st/Alameda Wye initiated
2. Earned Value (EV) is lagging - Recognize that construction activity must ramp-up to recover EV pace
3. Project focus remains on station and guideway concrete construction
4. Project staff continues witnessing testing of mechanical/electrical/systems fabricated materials and equipment
5. Estimated Jobs Created to Date as of December 2019 is 13,218 with a Estimated Total Jobs of 20,302\*.

# Construction Update Tunnel

- There have been a total of 214 pre-cast slabs installed in the left tunnel; right tunnel installation scheduled to begin by end of January

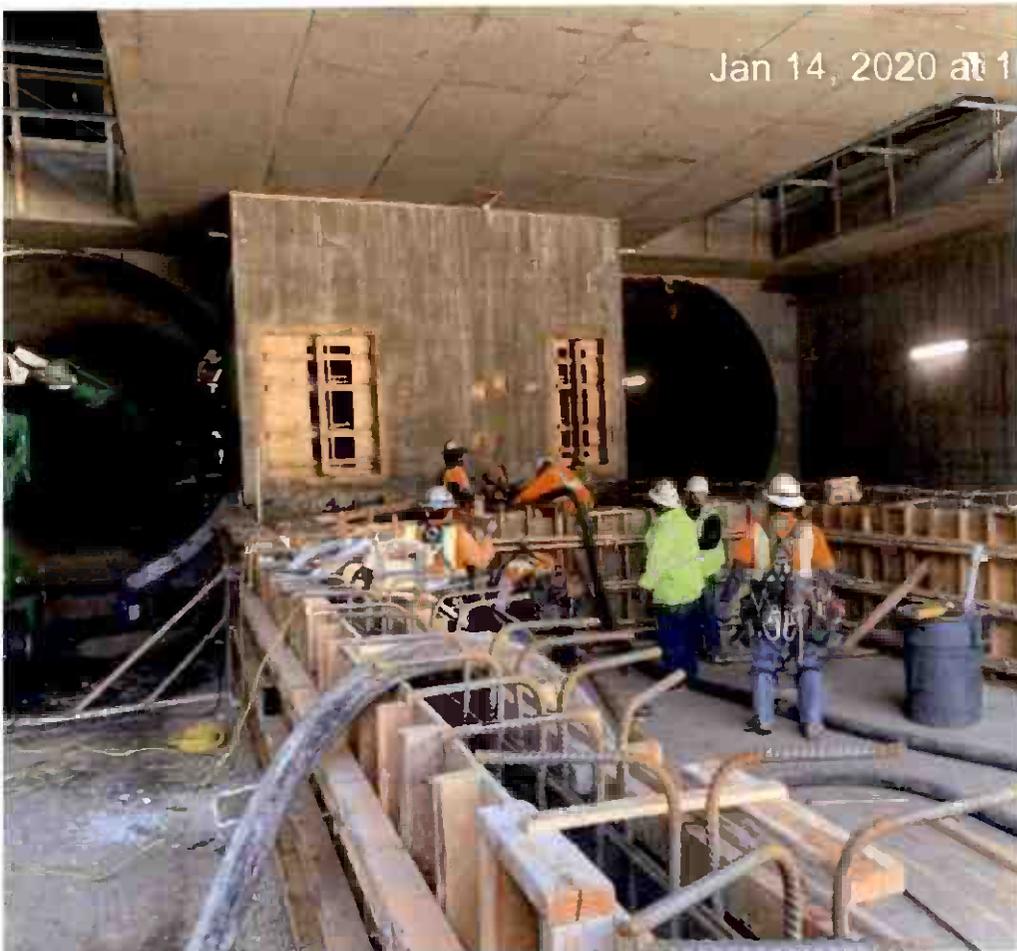


Pre-cast Floating Slab installation

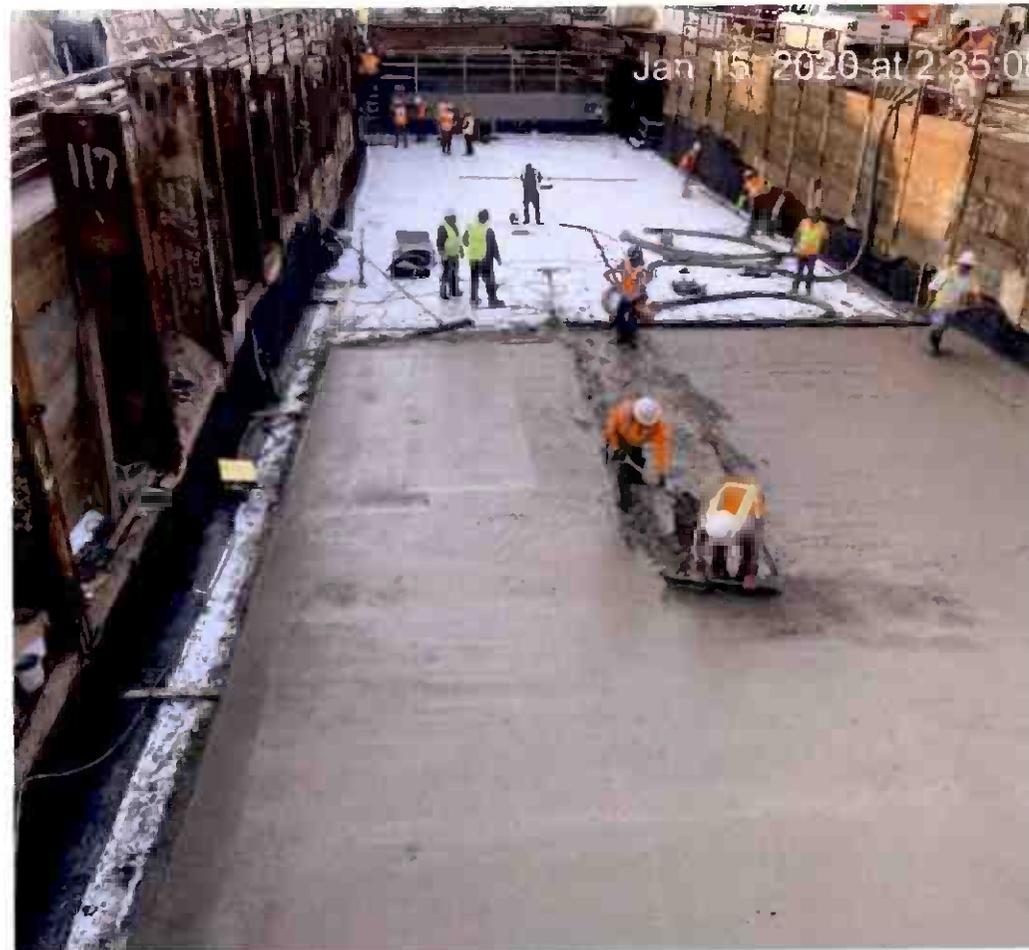
# Construction Update

## Little Tokyo/Arts District Station

- Structural concrete operations continue throughout the area; street restoration underway



Concrete pour for north and south platform wall



Protection slab placement at 1st St Leg 5

# Construction Update Historic Broadway Station



Wall form installation

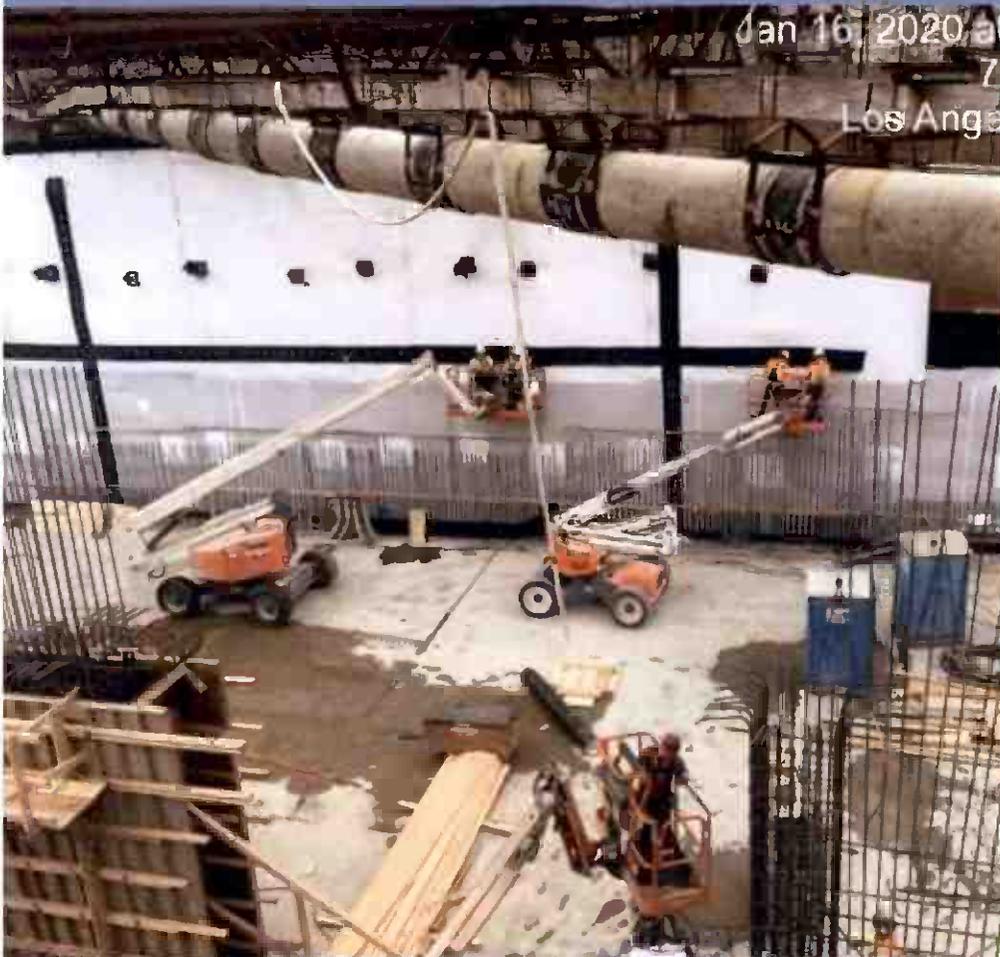


Concrete placement at SEM Cavern plenum

- Structural concrete continues with interior and exterior walls in entrance, concourse and SEM Cavern

# Construction Update

## Grand Av Arts/Bunker Hill Station



Water bar installation at Upper Ancillary Level



Wall forming at Upper Ancillary Level

- Structural concrete walls continue to be erected at multiple levels

# Construction Update Flower Street



Wall form installation



Top mat rebar installation

- Structural concrete for inverts, walls and roofs continue throughout Flower St

# Real Estate Status

- a. Duco Yard TCE (RC-473)
  - LADWP forwarded Purchase Agreement to Metro; Real Estate reviewing final reconciliation
- b. CoLA SSE/TCE Fan Plant (RC-471A)
  - Agreement reached and CoLA has approved the Mangrove agreement; awaiting City Council concurrence
- c. Flower/Hope (RC-SPA 1-4)
  - GK Way vacation accepted and filed
  - Plaza acquisition options being explored by Metro Real Estate

# FFGA Project Cost Status Above the Line

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT (860228)

PERIOD ENDING DEC 2019

DOLLARS IN THOUSANDS

SCC CODE	DESCRIPTION	ORIGINAL FFGA BUDGET	PROPOSED FFGA BUDGET*	COMMITMENTS	EXPENDITURES	PROPOSED FFGA FORECAST AT COMPLETION**	VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	280,622	270,011	247,985	190,163	270,011	0
20	STATIONS, STOPS, TERMINALS, INTERMODAL	354,268	229,110	229,070	89,423	229,560	450
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	0	0	0	0	0	0
40	SITWORK & SPECIAL CONDITIONS	141,785	594,226	569,844	475,073	594,226	0
50	SYSTEMS	69,667	77,767	67,594	18,632	77,767	0
	<b>CONSTRUCTION SUBTOTAL (10-50)</b>	<b>846,343</b>	<b>1,171,114</b>	<b>1,114,494</b>	<b>773,292</b>	<b>1,171,564</b>	<b>450</b>
60	ROW, LAND, EXISTING IMPROVEMENTS	115,889	59,315	52,615	52,599	59,315	0
70	VEHICLES	16,275	16,275	16,275	7,316	16,275	0
80	PROFESSIONAL SERVICES	261,455	367,535	309,011	287,220	368,420	885
	<b>SUBTOTAL (10-80)</b>	<b>1,239,963</b>	<b>1,614,239</b>	<b>1,492,396</b>	<b>1,120,427</b>	<b>1,615,575</b>	<b>1,335</b>
90	UNALLOCATED CONTINGENCY	135,399	42,288	0	0	40,952	-1,335
100	FINANCE CHARGES	27,571	14,301	0	0	14,301	0
	<b>TOTAL PROJECT (10-100)</b>	<b>1,402,932</b>	<b>1,670,828</b>	<b>1,492,396</b>	<b>1,120,427</b>	<b>1,670,828</b>	<b>0</b>

NOTE: TOTAL INCURRED COST TO DATE \$1,131,760,681.

\*PROPOSED FFGA BUDGET UPDATED ON AN ANNUAL BASIS; LAST UPDATED (SEP 2019).

GRANT AMENDMENT TO REFLECT UPDATES PERMITTED ONLY AFTER FFGA AMENDMENT IS APPROVED.

# Project Cost Status

## FFGA – Non-FFGA

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT (860228)  
 PERIOD ENDING DEC 2019  
 DOLLARS IN THOUSANDS

SCC CODE	DESCRIPTION	ORIGINAL FFGA BUDGET	PROPOSED FFGA BUDGET*	COMMITMENTS	EXPENDITURES	PROPOSED FFGA FORECAST AT COMPLETION**	VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	280,622	270,011	247,985	190,163	270,011	0
20	STATIONS, STOPS, TERMINALS, INTERMODAL	354,268	229,110	229,070	89,423	229,560	450
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	0	0	0	0	0	0
40	SITWORK & SPECIAL CONDITIONS	141,785	594,226	569,844	475,073	594,226	0
50	SYSTEMS	69,667	77,767	67,594	18,632	77,767	0
	CONSTRUCTION SUBTOTAL (10-50)	846,343	1,171,114	1,114,494	773,292	1,171,564	450
60	ROW, LAND, EXISTING IMPROVEMENTS	115,889	59,315	52,615	52,599	59,315	0
70	VEHICLES	16,275	16,275	16,275	7,316	16,275	0
80	PROFESSIONAL SERVICES	261,455	367,535	309,011	287,220	368,420	885
	SUBTOTAL (10-80)	1,239,963	1,614,239	1,492,396	1,120,427	1,615,575	1,335
90	UNALLOCATED CONTINGENCY	135,399	42,288	0	0	40,952	-1,335
100	FINANCE CHARGES	27,571	14,301	0	0	14,301	0
	TOTAL PROJECT (10-100)	1,402,932	1,670,828	1,492,396	1,120,427	1,670,828	0

NOTE: TOTAL INCURRED COST TO DATE \$1,131,760,681.

\*PROPOSED FFGA BUDGET UPDATED ON AN ANNUAL BASIS; LAST UPDATED (SEP 2019).

GRANT AMENDMENT TO REFLECT UPDATES PERMITTED ONLY AFTER FFGA AMENDMENT IS APPROVED.

SCC CODE	DESCRIPTION	ORIGINAL NON FFGA NON BUDGET	PROPOSED NON FFGA BUDGET	COMMITMENTS	EXPENDITURES	PROPOSED NON FFGA FORECAST AT COMPLETION	VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS		2,686	5,214	1,132	3,715	1,029
20	STATIONS, STOPS, TERMINALS, INTERMODAL		1,747	725	-729	2,240	493
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS		0	0	0	0	0
40	SITWORK & SPECIAL CONDITIONS		32,605	11,318	5,546	32,605	0
50	SYSTEMS		204	129	19	204	0
	CONSTRUCTION SUBTOTAL (10-50)		37,242	17,386	5,968	38,764	1,522
60	ROW, LAND, EXISTING IMPROVEMENTS		0	0	0	0	0
70	VEHICLES		0	0	0	0	0
80	PROFESSIONAL SERVICES		26,681	15,959	14,146	26,918	237
	SUBTOTAL (10-80)		63,923	33,345	20,114	65,682	1,759
90	UNALLOCATED CONTINGENCY		8,891	0	0	7,132	-1,759
100	FINANCE CHARGES		0	0	0	0	0
	TOTAL NON-FFGA (10-100)		72,814	33,345	20,114	72,814	0
	ENVIRONMENTAL/PLANNING		26,500	26,500	26,063	26,500	0
	TOTAL NON-FFGA (INCL. ENV./PLANNING)		99,314	59,844	45,177	99,314	0

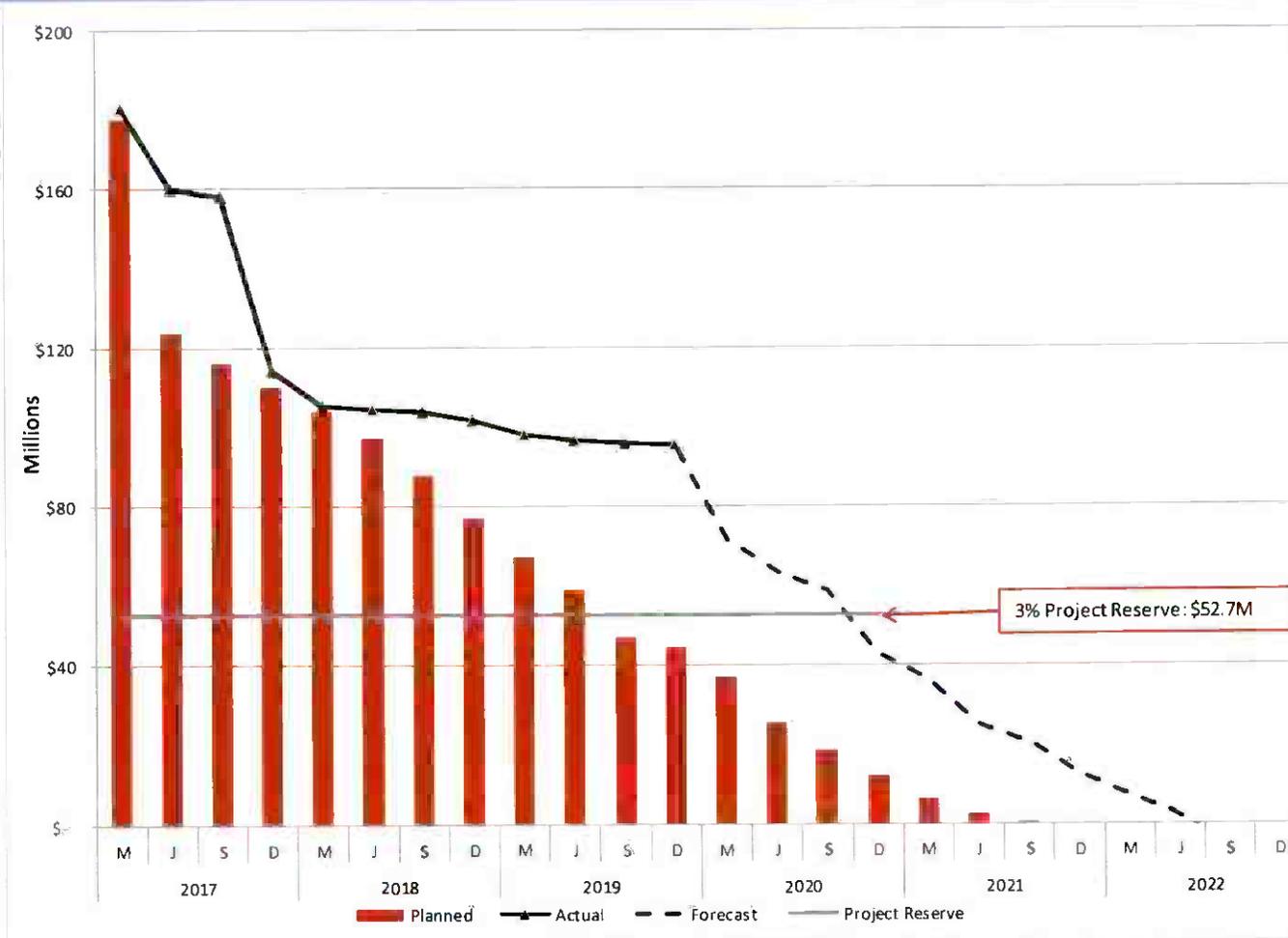
NOTE: TOTAL INCURRED COST TO DATE \$45,805,502.

SCC 10: COMMITMENTS EXCEED PROPOSED NON FFGA BUDGET DUE TO ANTICIPATED CREDIT OF OPTION 10 - OPEN ROOF.

SCC 20: METRO AND TRIBUNE AGREED ON REIMBURSEMENT OF \$1.6 MILLION RELATED TO 2ND/BROADWAY OVERBUILD. NEGATIVE EXPENDITURES REPRESENT INSTALLMENTS

TOTAL PROJECT	1,402,932	1,770,142	1,552,240	1,165,604	1,770,142	0
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# Budget Contingency Drawdown



PROJECT COST CONTINGENCY							
DOLLARS IN THOUSANDS							
	Original Contingency	LOP Contingency	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)	Percentage (%)
Unallocated Contingency	124,919	89,946	(39,836)	(2,026)	(41,862)	48,084	53%
Allocated Contingency	86,345	92,809	(41,281)	1,603	(39,678)	53,131	57%
<b>Total Contingency</b>	<b>211,263</b>	<b>182,754</b>	<b>(81,117)</b>	<b>(423)</b>	<b>(81,540)</b>	<b>101,215</b>	<b>55%</b>

# Schedule Table

	Milestone Date	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20
Complete Station Box Plenum Deck at Little Tokyo / Art District Station	12/27/19 A	⬡					
Complete 1st Street Tunnel / U-Channel Tunnel Roof Deck	01/07/20		⬡				
Complete SEM Interior Walls Concrete	01/13/20		⬡				
Complete Lower Ancillary Level Walls at Grand Ave / Bunker Hill Station	01/16/20		⬡				
Complete West Concourse Station Box Exterior Walls at Historic Broadway Station	01/23/20		⬡				
Complete Fabrication Pre-Cast Floating Slab Sections	02/13/20			⬡			
Complete West Ancillary Tunnel Vent Fan Deck at Little Tokyo / Art District Station	02/18/20			⬡			
Complete SEM Plenum Slab Concrete	03/01/20				⬡		
Complete Wye Cut & Cover Tunnel Temporary Deck Removal	03/08/20				⬡		
Complete Wye Cut & Cover Tunnel Temporary Deck Removal	03/13/20				⬡		
Complete Ancillary Upper Level Exterior Walls at Little Tokyo / Art District Station	04/16/20					⬡	
Complete Upper Ancillary Level Walls at Grand Ave / Bunker Hill Station	05/18/20						⬡

◆ MTA Staff     
 Ⓜ MTA Board Action     
 ⌵ FTA (Federal Transit Administration)     
 ▽ Utility Company

△ Other Agencies     
 □ Contractors     
 ○ Design Consultant     
 ⬡ C0980 D/B Contractor

"A" following date is actual and completed     
 \* New

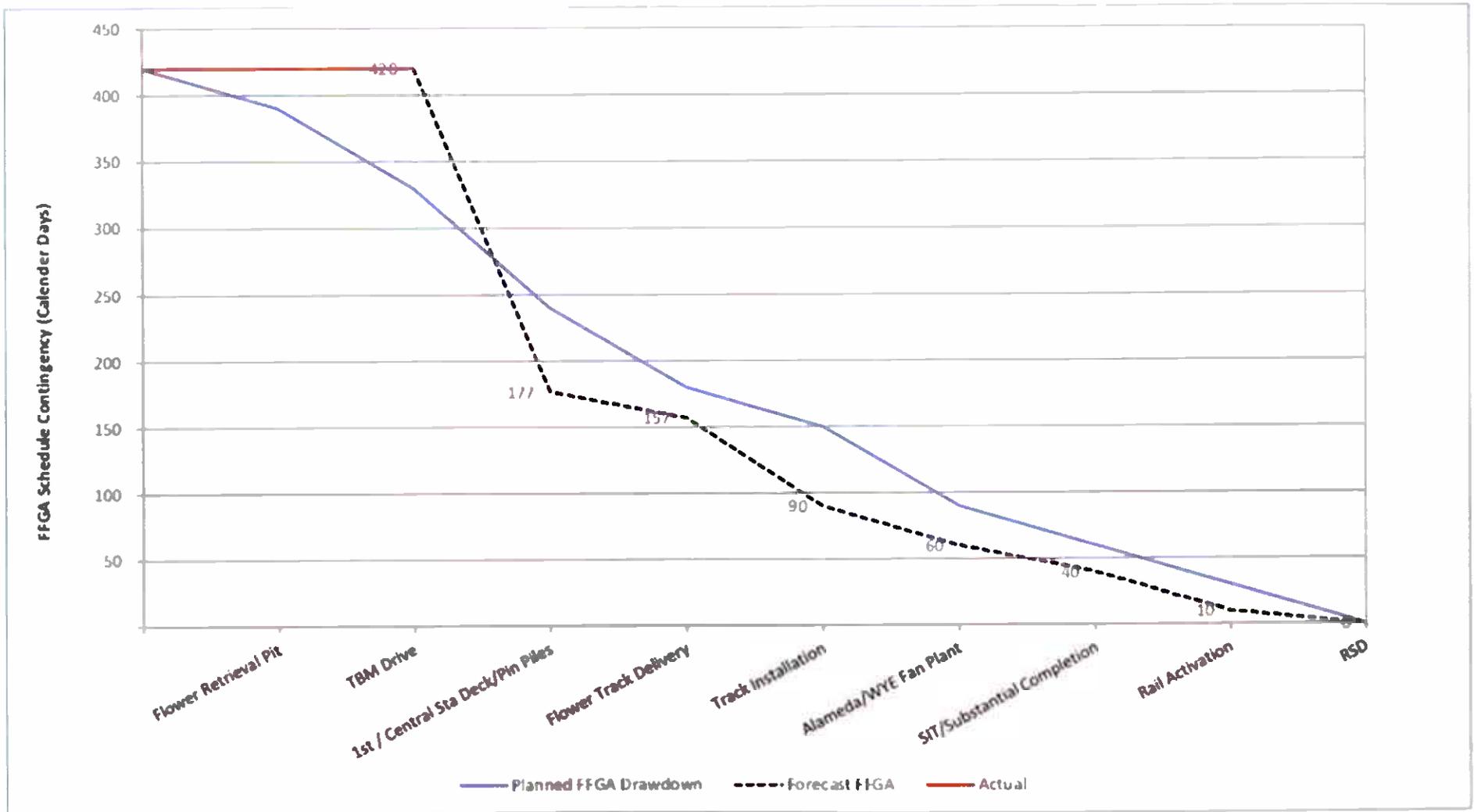
# Summary Schedule

Regional Connector Master Schedule Current (December 2019)		Regional Connector Level 1 Schedule												MASTER SCHEDULE DECEMBER 2019											
Activity ID	Activity Name	Finish	2018			2019				2020				2021				2022				2023			
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1			
	Regional Connector Master Schedule Current (December 2019)	18-Sep-22																							
	<b>Project Planning &amp; Development</b>	29-Jun-12 A																							
	<b>FFGA / TIFIA Loan Approved</b>	20-Feb-14 A																							
	<b>Engineering</b>	17-Oct-19 A																							
	<b>Right of Way</b>																								
	<b>Construction</b>																								
	<b>Utilities (Including 3rd Parties)</b>	20-Apr-21																							
	<b>Guideway &amp; Track</b>	27-Sep-21																							
	<b>SEM</b>	28-Apr-20																							
	<b>Stations</b>	28-Mar-22																							
	<b>Systems</b>	18-Jan-22																							
	<b>Substantial Completion</b>	01-Apr-22																							
	<b>Testing</b>	18-May-22																							
	<b>Pre-Revenue Operations</b>	Summer/Fall 2022																							
	<b>RSD</b>	Summer/Fall 2022																							

 Remaining Work   Milestone	1 of 1 Regional Connector Level 1 Summary Schedule Los Angeles County Metropolitan Transportation Authority	Data Date : 28-Dec-19 Current Date : 22-Jan-20
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# Schedule Contingency Drawdown (Proposed FFGA RSD)

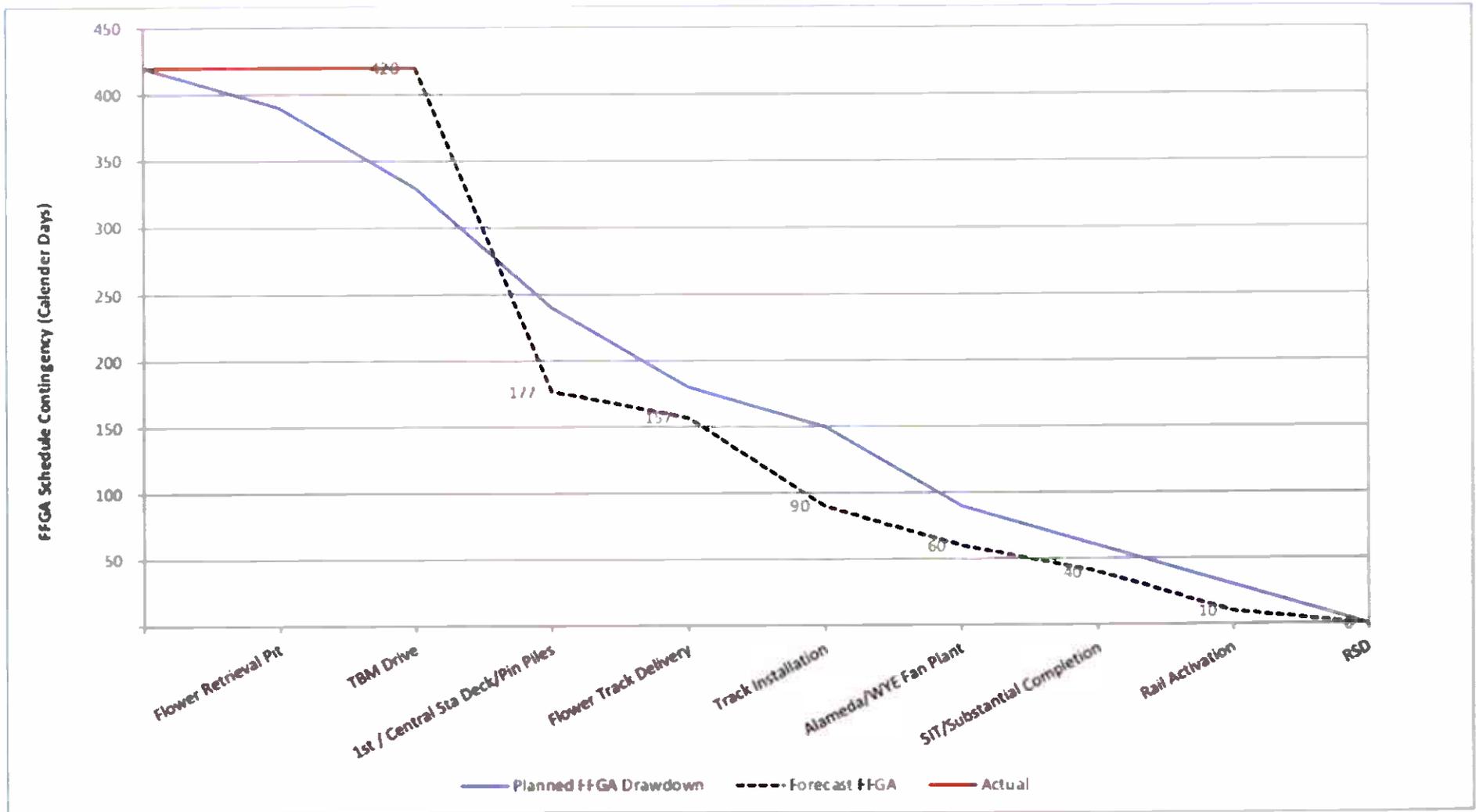


# Top Risks & Mitigations

## January 2020

Risk ID	Risk Description	Risk Score	Action Items
514	Fan Plant final modification negotiated above 12M. Costs shown are above the current forecast.	11	1. Complete technical analysis; outlook February 29.
502	Temple Sewer Line total costs run higher due to offset constructability issues and depth.	10	1. Design alternatives studied and re-submitted to BOE/BOS; qualified approval received. Costs expected to be significantly reduced. Construction timing may push work beyond start of Bus Bridge #3.
304	Unknown obstructions may be encountered during station or cut/cover guideway excavation, or Support of Excavation installation; delays may ensue.	9	1. Familiarize RE Team to potential issues on Alameda.
425	Concrete production issues (quality and resources) impact to schedule at 2nd/Hope threaten timely Substantial Completion.	9	1. Review RCC schedule for viability; address w RCC counterpart and Metro scheduling. 2. Monitor productivity and intensity of field efforts measured through resources applied and short-term schedule targets attained or missed. 3. Develop finishes and systems details to include elevator sequences throughout Project. 4. Assess concrete delays impact on finishes/systems employing resequencing of latter.
506	Across all interfaces with existing LRT lines, cut-over integration challenges exceed allowances in current forecast (excludes Comm). Costs shown are above the current forecast	8	1. Continue to monitor development of post AFC efforts; identify issues and solutions as soon as practical. 2. Establish protocols for each respective discipline to be reviewed – drafts circulated. 3. Efforts underway with target for study completion in Spring 2020.

# Schedule Contingency Drawdown (Proposed FFGA RSD)



# Disadvantaged Business Enterprises

## Contract C0980 Regional Connector Transit Corridor Design-Build (Reporting Data as of December 2019)

Design	<ul style="list-style-type: none"> <li>• DBE Goal</li> <li>• Current DBE Commitment</li> <li>• Current DBE Attainment</li> <li>• Twelve (12) design DBE sub-consultants have been identified to date</li> </ul>	<p>22.63%</p> <p>\$14.5M (22.63%)</p> <p>24.09%</p>
Construction	<ul style="list-style-type: none"> <li>• DBE Goal</li> <li>• Current DBE Commitment</li> <li>• Current DBE Attainment</li> <li>• Ninety-four (94) construction DBE sub-consultants have been identified to date</li> <li>• Increased actual value reflects corrected data input into tracking model</li> </ul>	<p>18%</p> <p>\$194.9M (18%)</p> <p>14.9%</p>

# Quality Assurance & Quality Control

	<b>Cumulative prior period</b>	<b>Recorded this period</b>	<b>Closed this period</b>	<b>Total Remaining</b>
Audits	6	0	0	1
Surveillances	79	5	5	n/a
NCRs (Contractor)	78	7	4	21

(As of December 31, 2019)

# Environmental Mitigation Status

- In December, Metro and the PMOC coordinated review of PMOC comments on the 27th Quarterly Mitigation Monitoring and Reporting Plan. The report covers the months of August 2019 to October 2019.
- On December 3, 2019, Metro notified the FTA and SHPO of one new historic period feature discovery; FTA with concurrence by SHPO determined that the feature did not meet the criteria for eligibility for the National Register of Historic Places.

# Public Outreach and Business Mitigation

## Extensive outreach informs commuter of street closures

- In preparation for street restoration closures at the intersection of 1<sup>st</sup>/Alameda in Little Tokyo, a comprehensive multi-layer public outreach and engagement campaign was implemented to inform the public of planned closures. Public service announcements will continue through summer 2020.

## Business mitigation during street restoration closures

- Metro continues to meet its commitment to support local businesses during construction through *Eat, Shop, Play*, Metro's business marketing and advertisement program. Print, online, bus & rail card posters and banners are being used to promote Little Tokyo businesses throughout the duration of street restoration of 1<sup>st</sup>/Alameda intersection. A 2-hour parking validation program is also in place during the closure.

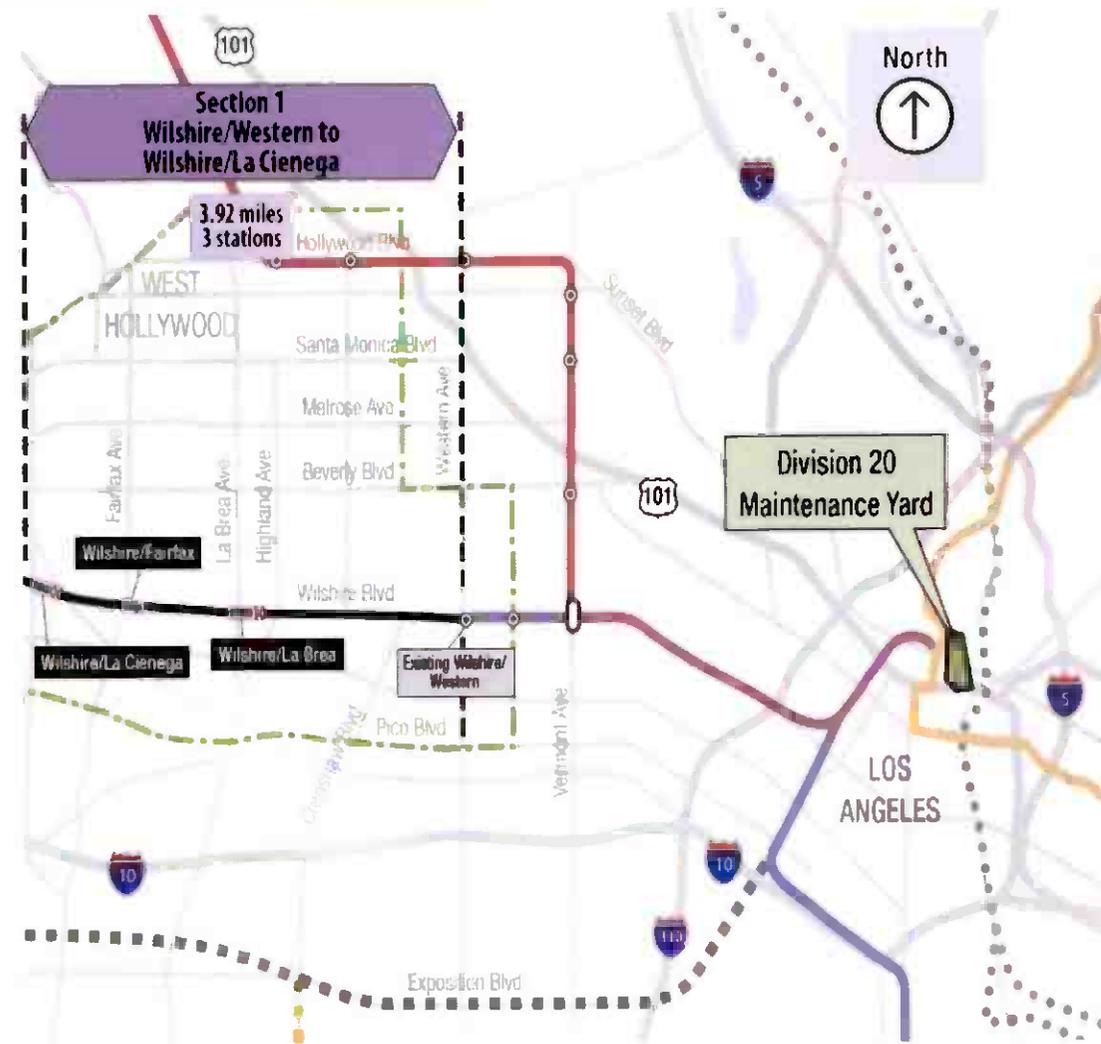


# Westside Purple Line Extension Section 1 FTA Quarterly Review – March 4, 2020



# Westside Purple Line Extension Section 1 Project Description

- The WPLE Section 1 Project is 3.92 miles (Wilshire/Western to Wilshire/La Cienega); Scope of work includes twin-bored tunnels, three (3) new subway stations, and 34 HRVs:
  - Wilshire/La Brea
  - Wilshire/Fairfax
  - Wilshire/La Cienega
- Division 20 Yard Modifications
- FFGA Budget: \$2.82 Billion
- FFGA Forecast: \$3.09 Billion
- FFGA RSD: October 31, 2024
- Forecast RSD: Fall 2023
- Design Progress: 100% (Final Design Complete)
- Construction Progress: 56%
- Daily Project Transit Trips: 33,694
- Daily New Transit Trips: 9,841
- Current Contingency Forecast (SCC 10-80): 5%
- Current Contingency Forecast of Cost-to-Go (SCC 10-80): 13%
- Federal Funds: \$1.26 Billion
- Local Funds: \$1.56 Billion
- Status: All three (3) stations under construction. Tunnel drive (Reach 2) and cross passage construction (Reach 1) is underway.



# Westside Purple Line Extension Section 1

## Key Project Issues

- The current job creation estimates as extrapolated from the Los Angeles Economic Development Corporation (LAEDC) analysis of job impacts are the following:
  - December 2019: 247 estimated jobs
  - Second Quarter of FY 2020: 722 jobs
  - To Date: 17,707 estimated jobs

# Westside Purple Line Extension Section 1 Wilshire/Western TBM Retrieval Shaft

## Current Activities:

- Supporting Reach 1 cross passage construction.
- Phase 1 Cutover.

## Status:

- Commenced Phase 1 Cutover preparation.
- Continued support of Reach 1 cross passage construction.
- Continued maintenance of sump and dewatering pumps.



Phase 1 Cutover Preparation



Lattice Girders for Cross Passage Activities



Set up Traffic Controls at Wilshire/Western Station

# Westside Purple Line Extension Section 1 Wilshire/La Brea Station Update

## Current Activities:

- Reach 2 mining operation; 2<sup>nd</sup> lift exterior wall construction. Roof shoring.

## Status:

- Concrete placement for the exterior wall at the east hammerhead was completed on January 7, 2020; Infill slab concrete placement completed on January 31, 2020.
- 2nd lift exterior wall concrete placement continues.
- Continued assembly of arched roof shoring.



Concrete Placement at 2<sup>nd</sup> Level Walls (High Bay)



Assembly of Roof Shoring



Infill Slab Concrete Placement at North Wall (Platform Level)

# Westside Purple Line Extension Section 1 Wilshire/Fairfax Station Update

## Current Activities:

- Entrance appendage construction.
- Preparation for TBM arrival.

## Status:

- On January 7, 2020, excavation at the entrance appendage commenced.
- Preparations for TBM acceptance at the station continues with tunnel eye, TBM cradle and temporary rail installation.
- TBM arrival anticipated in early March 2020.



Temporary Rail Installation for TBM Arrival



Entrance Appendage Excavation



Installing Shotcrete at Tunnel Eye

# Westside Purple Line Extension Section 1 Wilshire/La Cienega Station Update

## Current Activities:

- Structural concrete preparation and placement.

## Status:

- Station invert concrete placement continues. Rebar installation for the 1st lift walls is scheduled to start in March 2020.
- Maintenance items per the COBH MOA is ongoing.



View of Station Looking West from Block 1



Survey at West Hammerhead



Invert Concrete Placement

# Westside Purple Line Extension Section 1 Tunneling – Tunnel Boring Machines Update

## Current Activities:

- Reach 2 TBM mining.
- Reach 1 cross passage construction.

## Status:

- Reach 2 Mining as of February 2, 2020:
  - TBM #1 (Red) – 1,554 feet or 35%
  - TBM #2 (Purple) – 2,810 feet or 63%
- Excavation at cross passage #10 commenced on January 6, 2020. Excavation at cross passage #11 commenced on February 3, 2020.



Cross Passage 10 Excavation



TBM Launch Thrust Frame at Wilshire/Fairfax Station



Shotcrete Operation at Cross Passage 10

# Westside Purple Line Extension Section 1 Real Estate Acquisition Status

Purple Line Extension Section 1 - Real Estate Status Summary								
Description	Number of Parcels	Certified	Appraisals Completed	Offers Made	Agreements/ Settlements Signed	Relocations		Parcels Available
						Required	Completed	
Full Takes	9	9	9	9	9	109	109	9
Part Takes	6	6	6	6	6	0	0	6
TCE	4	4	4	4	3	0	0	4
<b>Total Parcels</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>18</b>	<b>109</b>	<b>109</b>	<b>19</b>

Metro has possession of all the parcels by either acquisition, possession and use agreements or stipulations. The C1045 contractor has possession of all properties along the alignment needed to construct the Project.

There remains one parcel at the Wilshire/Fairfax Station location in the condemnation phase. Settlement discussions are on-going with the owner.

# Westside Purple Line Extension Section 1 Project Cost Status

PERIOD ENDING DECEMBER 2019

DOLLARS IN THOUSANDS

SCC CODE	DESCRIPTION	APPROVED FFGA BUDGET	PROPOSED FFGA BUDGET*	COMMITMENTS	EXPENDITURES	CURRENT FORECAST**	PROPOSED FFGA BUDGET/ FORECAST VARIANCE
10	GUIDEWAY & TRACK ELEMENTS	565,080	395,023	391,424	220,893	395,023	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	570,051	522,582	490,809	240,565	522,582	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	39,086	40,187	40,196	39,944	40,187	-
40	SITWORK & SPECIAL CONDITIONS	139,820	808,050	786,895	591,730	808,050	-
50	SYSTEMS	123,579	116,993	101,293	29,402	116,993	-
<b>CONSTRUCTION SUBTOTAL (10-50)</b>		<b>1,437,616</b>	<b>1,882,835</b>	<b>1,810,616</b>	<b>1,122,534</b>	<b>1,882,835</b>	<b>-</b>
60	ROW, LAND, EXISTING IMPROVEMENTS	212,475	190,036	190,036	173,718	190,036	-
70	VEHICLES	160,196	108,302	98,118	17,527	108,302	-
80	PROFESSIONAL SERVICES	410,342	507,425	433,775	359,253	507,425	-
<b>SUBTOTAL (10-80)</b>		<b>2,220,629</b>	<b>2,688,597</b>	<b>2,532,544</b>	<b>1,673,032</b>	<b>2,688,597</b>	<b>-</b>
90	UNALLOCATED CONTINGENCY	225,859	70,439	-	-	70,439	-
100	FINANCE CHARGES	375,470	331,065	-	-	331,065	-
<b>TOTAL PROJECT (10-100)</b>		<b>2,821,957</b>	<b>3,090,101</b>	<b>2,532,544</b>	<b>1,673,032</b>	<b>3,090,101</b>	<b>-</b>

NOTE: TOTAL INCURRED COST TO DATE \$1,687,942

\* PROPOSED FFGA BUDGET UPDATED ON AN ANNUAL BASIS, LAST UPDATED MARCH 2018. GRANT AMENDMENT TO REFLECT UPDATES ONLY PERMITTED AFTER FFGA AMENDMENT IS APPROVED.

\*\* CURRENT PROJECT BUDGET LESS CONCURRENT NON-FFGA ACTIVITIES.

# Westside Purple Line Extension Section 1 FFGA / Non-FFGA Cost Status

PERIOD ENDING DECEMBER 2019

DOLLARS IN THOUSANDS

SCC CODE	DESCRIPTION	ORIGINAL FFGA BUDGET	PROPOSED FFGA BUDGET	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	PROPOSED FFGA BUDGET/ FORECAST VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	565,080	395,023	391,424	220,893	395,023	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	570,051	522,582	490,809	240,565	522,582	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	39,086	40,187	40,196	39,944	40,187	-
40	SITWORK & SPECIAL CONDITIONS	139,820	808,050	786,895	591,730	808,050	-
50	SYSTEMS	123,579	116,993	101,293	29,402	116,993	-
	CONSTRUCTION SUBTOTAL (10-50)	1,437,616	1,882,835	1,810,616	1,122,534	1,882,835	-
60	ROW, LAND, EXISTING IMPROVEMENTS	212,475	190,036	190,036	173,718	190,036	-
70	VEHICLES	160,196	108,302	98,118	17,527	108,302	-
80	PROFESSIONAL SERVICES	410,342	507,425	433,775	359,253	507,425	-
	SUBTOTAL (10-80)	2,220,629	2,688,597	2,532,544	1,673,032	2,688,597	-
90	UNALLOCATED CONTINGENCY	225,859	70,439	-	-	70,439	-
100	FINANCE CHARGES	375,470	331,065	-	-	331,065	-
	<b>TOTAL FFGA PROJECT ACTIVITIES (10-100)</b>	<b>2,821,957</b>	<b>3,090,101</b>	<b>2,532,544</b>	<b>1,673,032</b>	<b>3,090,101</b>	-

NOTE: TOTAL INCURRED COST TO DATE \$1,887,942

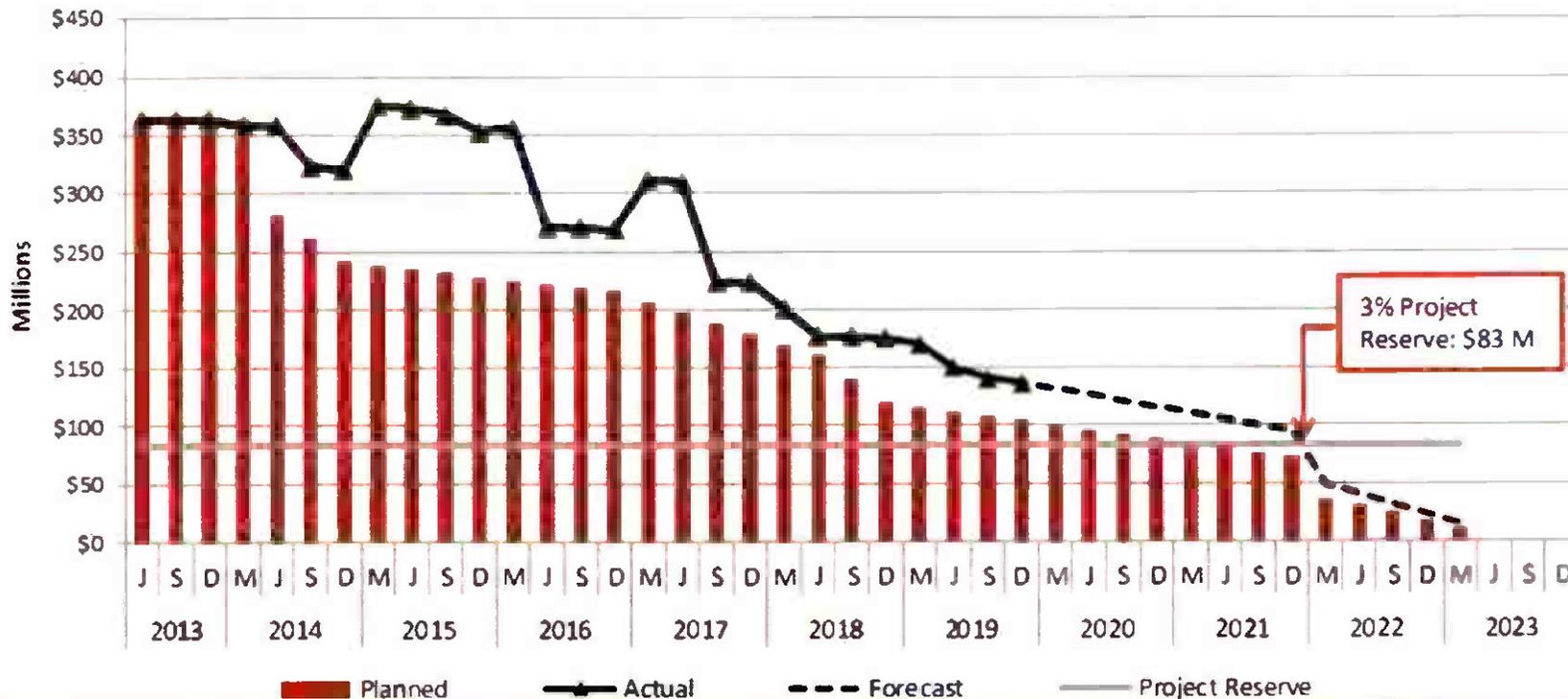
SCC CODE	DESCRIPTION	ORIGINAL NON FFGA BUDGET	CURRENT NON FFGA BUDGET	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	CURRENT NON FFGA BUDGET/ FORECAST VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	-	-	-	-	-	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	-	-	-	-	-	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	2,925	5,073	5,073	5,260	2,335
40	SITWORK & SPECIAL CONDITIONS	-	-	484	484	2,031	2,031
50	SYSTEMS	-	-	-	-	-	-
	CONSTRUCTION SUBTOTAL (10-50)	-	2,925	5,557	5,557	7,291	4,366
60	ROW, LAND, EXISTING IMPROVEMENTS	12,805	12,805	12,945	10,181	12,945	140
70	VEHICLES	-	-	-	-	-	-
80	PROFESSIONAL SERVICES	1,500	3,575	2,993	2,881	3,628	53
	SUBTOTAL (10-80)	14,305	19,305	21,494	18,619	23,864	4,559
90	UNALLOCATED CONTINGENCY	2,000	5,574	-	-	1,015	(4,559)
100	FINANCE CHARGES	-	-	-	-	-	-
	<b>TOTAL CONCURRENT NON-FFGA PROJECT ACTIVITIES (10-100)</b>	<b>16,305</b>	<b>24,879</b>	<b>21,494</b>	<b>18,619</b>	<b>24,879</b>	-
	ENVIRONMENTAL/PLANNING	39,370	39,370	39,370	39,357	39,370	-
	<b>TOTAL NON-FFGA (INCL. ENV./PLANNING)</b>	<b>55,674</b>	<b>64,248</b>	<b>60,864</b>	<b>57,976</b>	<b>64,248</b>	-

NOTE: TOTAL INCURRED COST TO DATE \$57,976

<b>TOTAL PROJECT</b>	<b>2,838,262</b>	<b>3,154,350</b>	<b>2,593,408</b>	<b>1,731,008</b>	<b>3,154,350</b>	-
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NOTE: TOTAL INCURRED COST TO DATE \$1,745,916

# Westside Purple Line Extension Section 1 Budget Contingency Drawdown



PROJECT COST CONTINGENCY					
DOLLARS IN THOUSANDS					
	Original Contingency (Budget)	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	248,592	(177,138)	-	(177,138)	71,454
Allocated Contingency	71,963	(5,648)	(1,215)	(6,863)	65,101
<b>Total Contingency</b>	<b>320,555</b>	<b>(182,786)</b>	<b>(1,215)</b>	<b>(184,001)</b>	<b>136,555</b>

# Westside Purple Line Extension Section Schedule Table

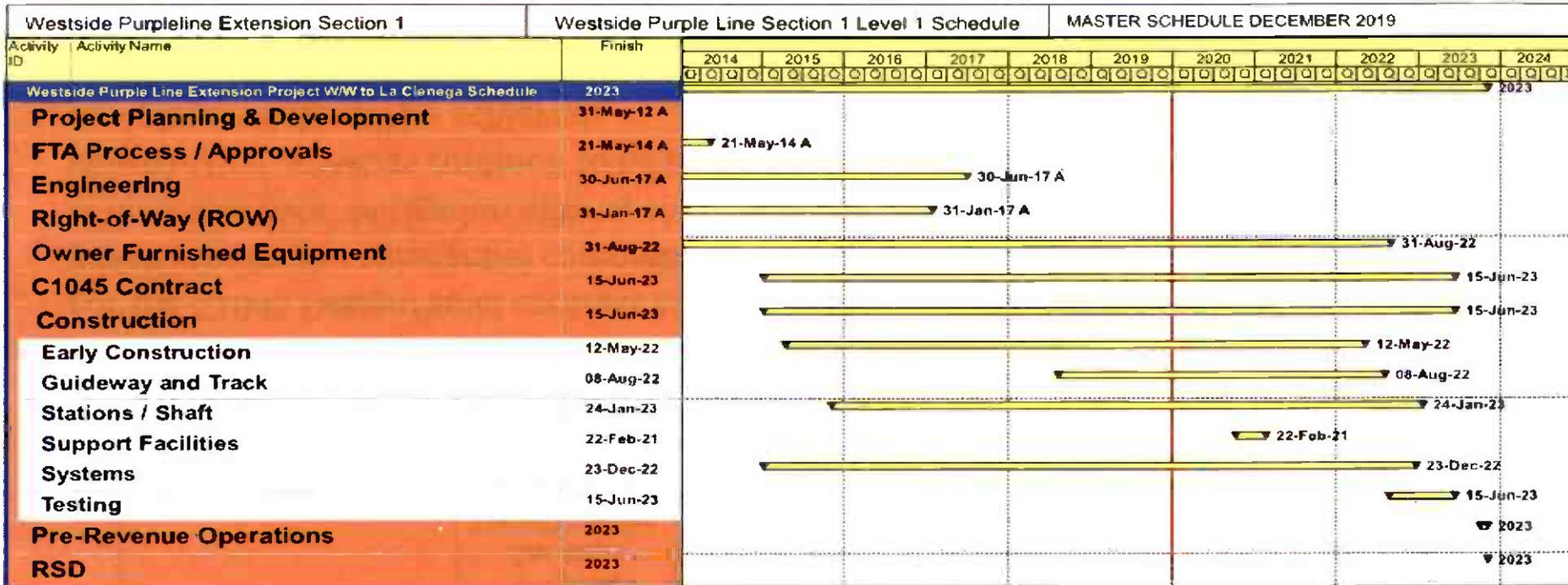
## C1045 Design-Build Contract Schedule Metrics

	Original Contract Date/Duration	Time Extension (CD)	Current Contract Schedule	Forecast (Metro PMS)	Variance CD (Trending)
NTP	01/12/2015				
Substantial Completion	06/9/23	6	08/28/23	06/15/23	-74 days

For the C1045 Design/Build contract Metro has received the December 2019 schedule update, which reports the substantial completion date finishing 74 calendar days after the June 15, 2023 contractual date. Mitigation efforts, along with other planned remedial actions for follow-on construction activities continue to be implemented. It is anticipated that the contractual completion date will be achieved.

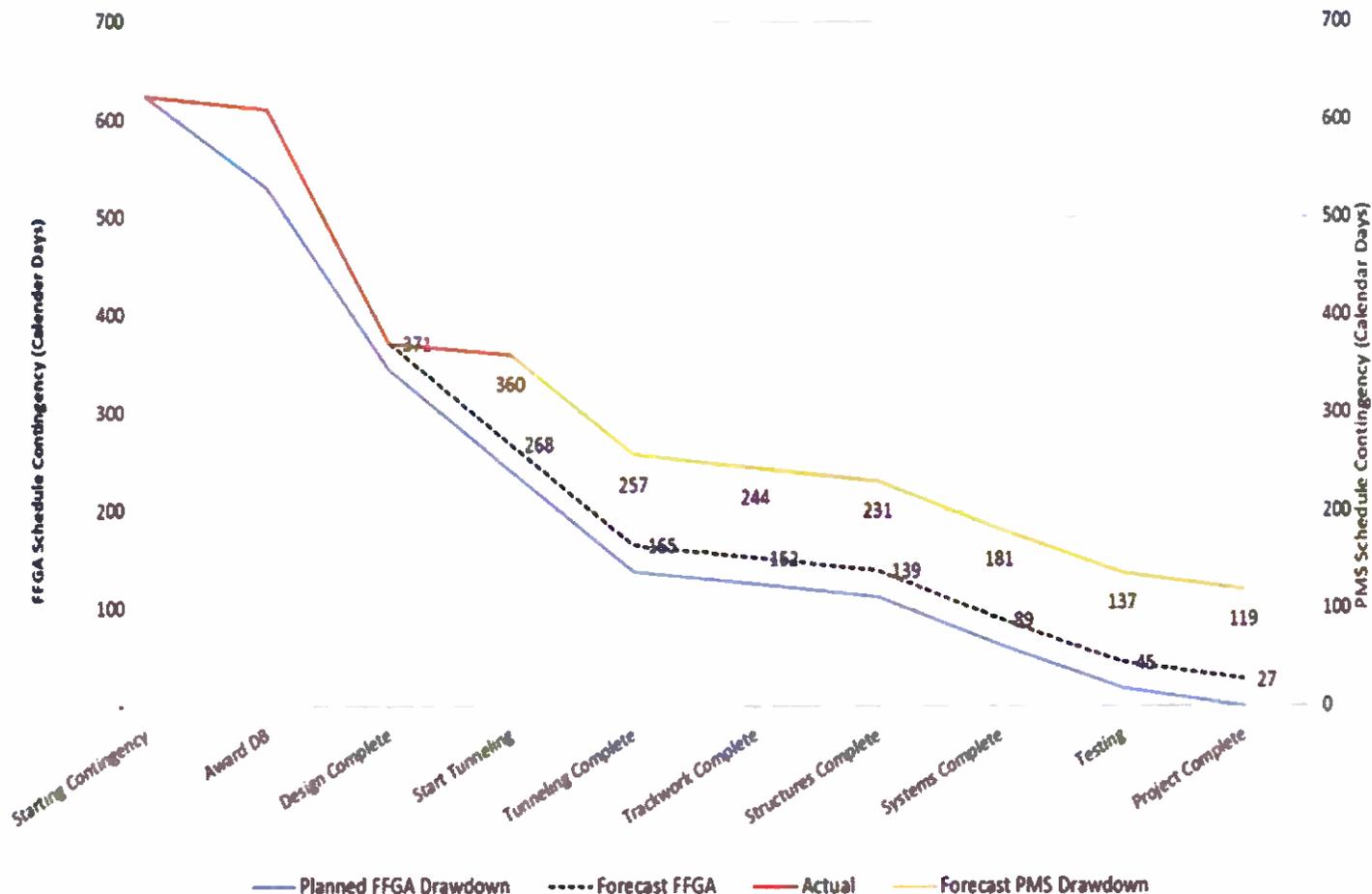
The critical path of the project runs through Reach 1 (Wilshire/La Brea Station to Wilshire/Western Shaft) cross passage construction, tunnel concrete/MEP and trackwork installation along Reach 1, followed by systems, testing and pre-revenue operations.

# Westside Purple Line Extension Section 1 Summary Project Schedule



Remaining Work Milestone	1 of 1 Westside Purpleline Section 1 Level 1 Summary Schedule Los Angeles County Metropolitan Transportation Authority	Data Date : 01-Jan-20 Current Date : 10-Jan-20	Layout: 3* - PLE1 MSRP Level 1 r
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# Westside Purple Line Extension Section 1 Schedule Contingency Drawdown



## Project Schedule Contingency Drawdown Analysis

The project schedule contingency drawdown model provides a dual-axis perspective based upon the FFGA RSD of October 2024 and Metro’s Project Master Schedule (PMS) forecast of fall 2023.

# Westside Purple Line Extension Section 1

## Top Risks & Mitigations

Risk ID	Risk Description	Risk Score	Action Items
633.0	Cost of ROW acquisition exceeds the FFGA SCC Line Item.	15	<ol style="list-style-type: none"> <li>1. Metro's Life of Project Budget includes contingency that covers the increase. The Risk Score will remain as "high" until the \$3.15 billion Life of Project Budget is reconciled with the \$2.82 billion FFGA Budget.</li> <li>2. FTA has approved the property sale. Escrow on the Gale property has closed. Proceeds from the sale have been reflected in FIS (Financial Information System).</li> <li>3. Project cost reconciliation with Real Estate is nearly complete. One parcel at Wilshire/Fairfax remains in the condemnation phase.</li> </ol>
675.0	DBE Participation Goal for Construction. Currently targeted at 17%.	13	<ol style="list-style-type: none"> <li>1. DB Contractor making good faith efforts to meet DBE goals.</li> </ol>
676.0	Subcontractor ability to get the required resources to perform work.	13	<ol style="list-style-type: none"> <li>1. Actively manage schedule and resource needs.</li> </ol>
677.0	Resource (Labor) shortage (Direct and Indirect).	13	<ol style="list-style-type: none"> <li>1. Actively manage schedule and resource needs.</li> </ol>

# Westside Purple Line Extension Section 1 Disadvantaged Business Enterprises

(Reported Data as of November 2019)

<b>DBE Goal – Design</b> The percentage of funds apportioned to Design Contracts	20.25%
<b>Current DBE Commitment Design</b> Total DBE Committed Dollars divided by Total Contract Value for Design	\$13.6 M 20.25%
<b>Current DBE Participation</b> Total amount paid to date to DBEs divided by the amount paid to date to Prime:	\$12.5 M 20.04%

Sixteen (16) Design DBE sub-consultants have been identified to date.

<b>DBE Goal – Construction</b> The percentage of funds apportioned to Construction Contracts	17.00%
<b>Current DBE Commitment Construction</b> Contract commitment divided by current contract value for Construction	\$168.5M 10.55%
<b>Current DBE Participation</b> Total amount paid to date to DBEs divided by the amount paid to date to Prime:	\$130.1M 14.48%

One hundred twenty-six (126) Construction DBE sub-contractors have been identified to date.

# Westside Purple Line Extension Section 1

## Quality Assurance & Quality Control

### **C1045 – Tunnels, Stations, Trackwork, Systems and Systems Integration Testing**

- Reviewed daily inspection reports from the Contractor/Field Technician and CMSSC oversight inspection personnel. Inspections show that the work is predominately compliant.
- Reviewed and provided comments on quality related submittals construction work plan, project specifications, product data and quality manuals.
- Station quality progress:
  - Wilshire/La Brea Station – engaged in oversight activities for construction of second lift walls at the high bay area.
  - Wilshire/Fairfax Station – engaged in oversight activities for construction of first lift walls (rebar placement).
  - Wilshire/La Cienega Station – engaged in oversight activities for construction of invert base slab, rebar placement.

### **C1078 – Division 20 MOW and NRV Building Location 64**

- Project is in final phase of completing punch list items.

# Westside Purple Line Extension Section 1

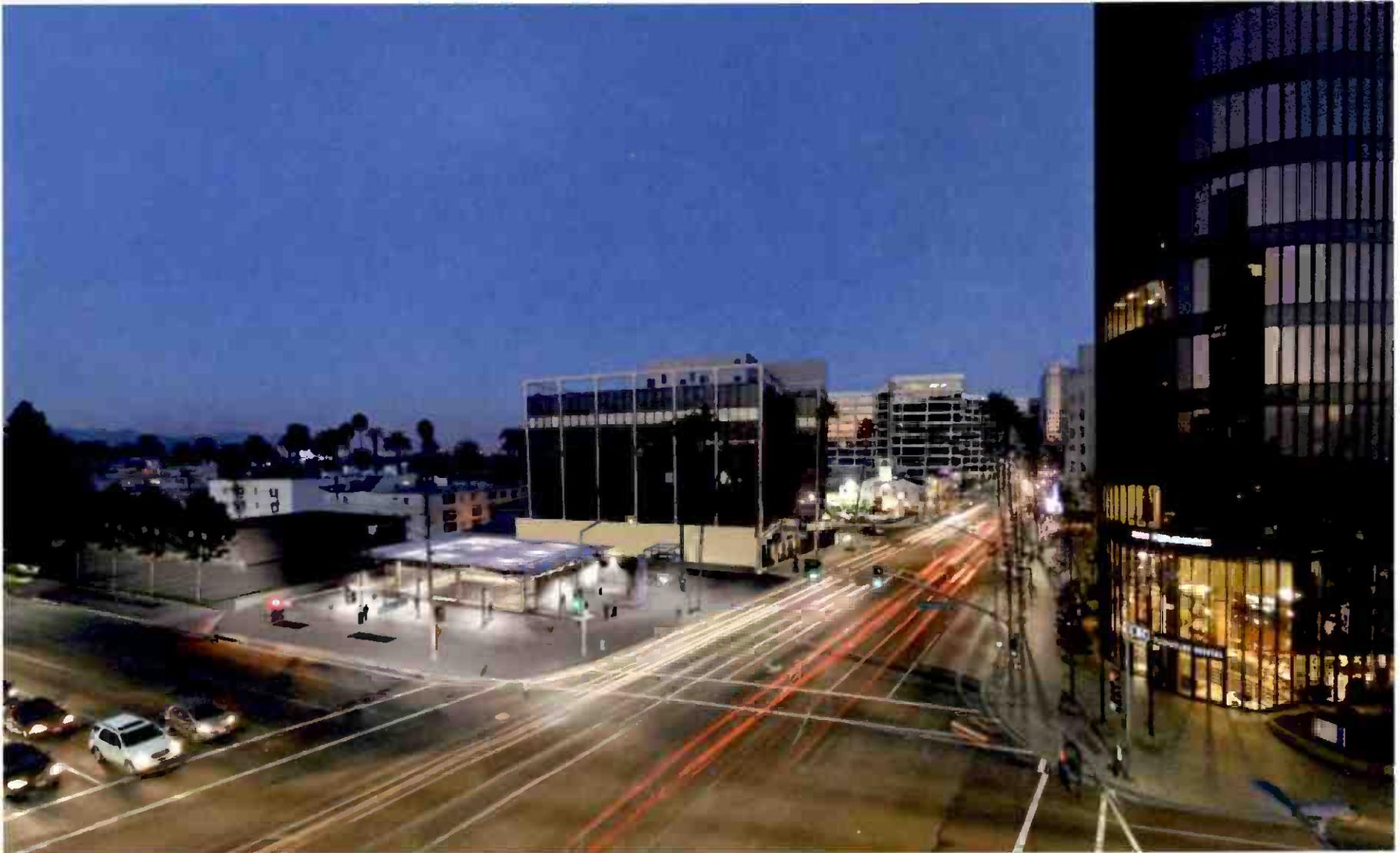
## Environmental Mitigation Status

- Conducted field environmental monitoring and spot inspections for stormwater BMPs, dust, and cultural resources for C1045 and third party work activities.
- Evaluation of impacts to sensitive receptors potentially affected by construction traffic at center muck shaft, appendages, station entrance, and Wilshire/La Cienega Station.
- Worked with City of Beverly Hills staff for City Council approval of parking lot lease.
- Evaluated monitoring requirements and coordinate with paleontological consultant for upcoming cross passage excavation activities.
- Submitted formal request for approval of new assigned Principal Paleontologist to the Natural History Museum in accordance with MOU.

# Westside Purple Line Extension Section 1 Public Outreach Program

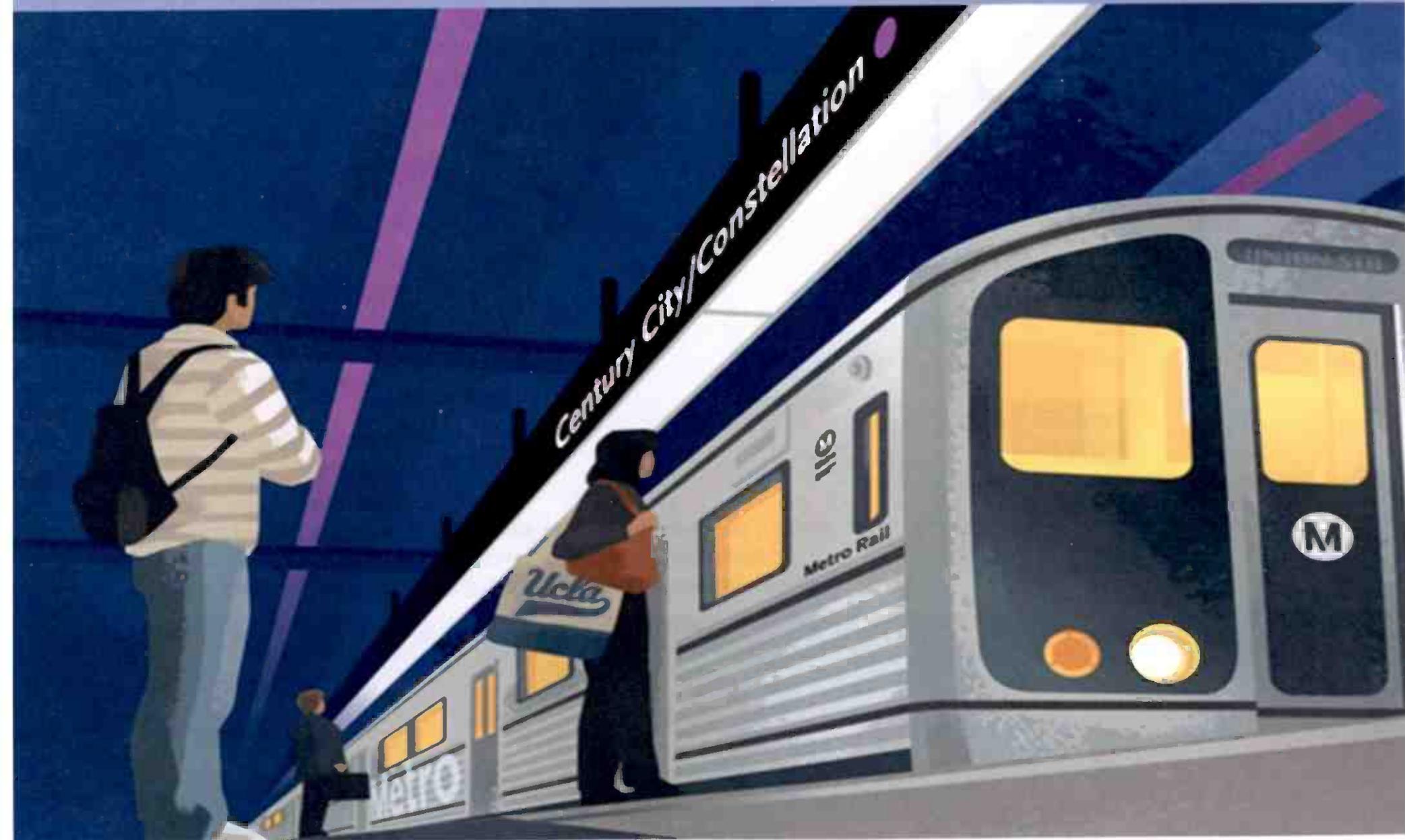
- Held meetings, attended monthly environmental mitigation meetings, and made Project presentations at the following: Beverly Hills City Hall, Elected Officials Deputies, Construction Community Meetings and various stakeholders.
- Continued additional business mitigations including: alternative parking options, business signage, street signs and print ads at no cost to the businesses.
- Continued with the “Eat, Shop, Play Spotlight” campaign to advertise and promote businesses that participate in ESP Wilshire and Beverly Hills.
- Updated website, Facebook, Twitter as needed. Published monthly PLE (Purple Line Extension) newsletter to email list.
- Corresponded with council district offices regarding construction effects on traffic and shared major stakeholder concerns.
- Produced and distributed four (4) construction work notices for construction activities.

# Westside Purple Line Extension Section 1 Questions



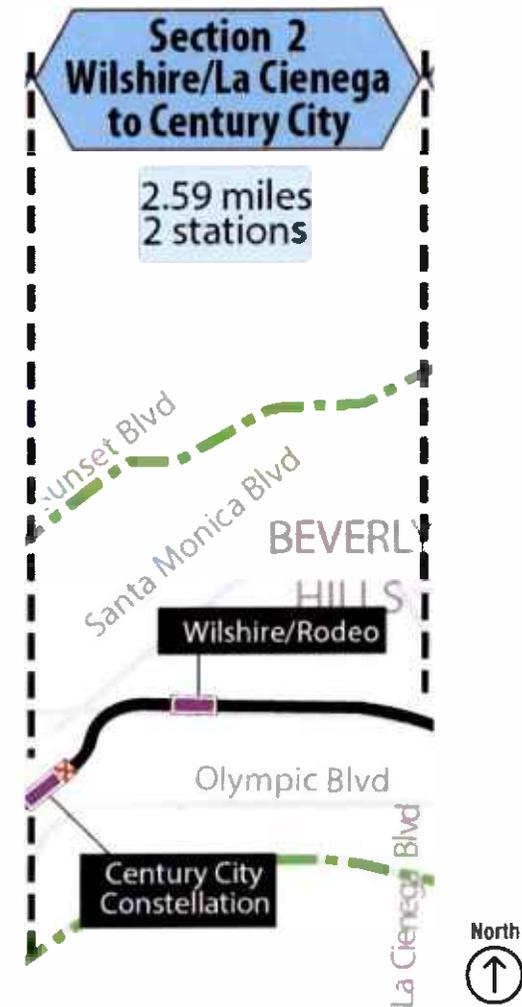
C1045 Design/Build Contract Computer-Generated Rendering of Wilshire/La Cienega Station

Westside Purple Line Extension Section 2 Project  
FTA Quarterly Meeting  
March 4, 2020



# Westside Purple Line Extension Section 2 Project Description

- The WPLE Section 2 Project is a 2.59 mile alignment from the future Wilshire/La Cienega Station to the future Century City Constellation Station. The Project includes 20 heavy rail vehicles, twin-bored tunnels and two (2) new subway stations:
  - Wilshire/Rodeo
  - Century City Constellation
- FFGA Budget: \$2.50 Billion
- FFGA Forecast: \$2.50 Billion
- FFGA RSD: December 31, 2026
- Forecast RSD: Summer 2025
- Design Progress: 97%
- Construction Progress: 25%
- Daily Project Transit Trips: 36,121
- Daily New Transit Trips: 5,350
- Current Contingency Forecast (SCC 10-80): 14%
- Current Contingency Forecast of Cost-to-Go (SCC 10-80): 25%
- Federal Funds: \$1.36 Billion
- Local Funds: \$1.14 Billion
- Status:
  - TBM Launch Box and Tunnel Access Shaft under construction.
  - Wilshire/Rodeo station box pile installation.
  - Third party utility relocations



# Westside Purple Line Extension Section 2 Project

## Key Project Updates

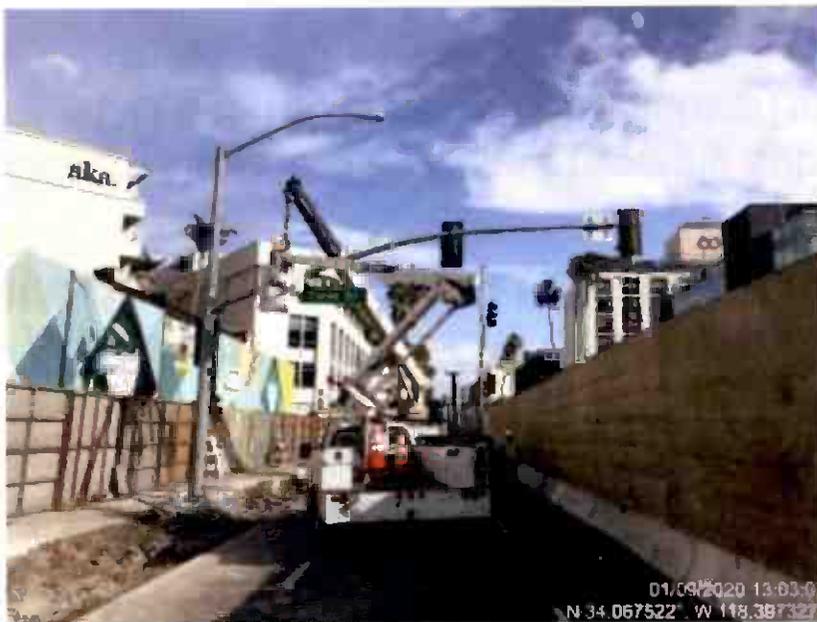
- Negotiations with the City of Beverly Hills (COBH) for a settlement agreement to end the city's lawsuit against FTA and Metro are ongoing.
- Design Update: TPOG has recently submitted the following:
  - DU 3.3-100% design of Wilshire/Rodeo Station Street Restoration Final Utility and Traffic Control.

The current job creation estimates as extrapolated from the Los Angeles Economic Development Corporation (LAEDC) analysis of job impacts is as follows:

- To date: 8,025 estimated jobs
- December 2019: 134 estimated jobs

# Westside Purple Line Extension Section 2 Project Wilshire/Rodeo Station Update

- Remobilization for soldier piling after the Holiday Moratorium began on January 2, 2020.
- Piling for the station box excavation began on October 22, 2019 and thirty-two (32) out of two hundred and ninety (290) piles have been installed as of January 31, 2020.
- Piling activities are forecasted to continue through July 2020.



Remobilization Activities on Wilshire Blvd.

# Westside Purple Line Extension Section 2 Project Century City Constellation Station Update

- Assembly of the TBM's started in December 2019 and is ongoing.
- A motion for prejudgment possession for the subsurface easement under BHHS was granted in Los Angeles Superior Court on December 19, 2019.
- Canopy pipe drilling on the westside of the Tunnel Access Shaft began on November 25, 2019 and is ongoing.
- Tunnel shaft excavation has reached a depth of 64ft and is on hold pending an investigation into potential differing site conditions.
- A request for a seven-month extension of the full street closure of Constellation Blvd (in the vicinity of the TBM Launch Box) was approved by the Board of Public Works on December 16, 2019.
- LADWP cable pulling and splicing is anticipated to be completed prior to the start of piling activities west of the TBM Launch Box.
- 4,022 of 4,055 tunnel rings have been produced as of January 31, 2020.



Tunnel Eyes at the Launch Box



Canopy Pipes at the Tunnel Access Shaft

# Westside Purple Line Extension Section 2 Project Real Estate Status

<b>Real Estate Status Summary</b>									
Description	Number of Parcels	Certified	Appraisals Completed	Offers Made	Agreements Signed	Condemnation Filed	Relocations		Parcels Available
							Required	Completed	
Full Takes	3	3	3	3	1	2	21	21	3
Part Takes	3	3	3	3	2	0	0	0	2
TCE	3	3	3	3	2	1	1	1	3
SSE	23	23	23	23	13	11	3	3	13
Permanent Easements	1	1	0	0	0	0	0	0	0
<b>Total Parcels</b>	<b>33</b>	<b>33</b>	<b>32</b>	<b>32</b>	<b>18</b>	<b>14</b>	<b>25</b>	<b>25</b>	<b>21</b>

- The acquisition for Parcel W-3604 (Pacific Bell) was completed on November 21, 2019.

# Westside Purple Line Extension Section 2 Project FFGA Cost Status

PERIOD ENDING: DECEMBER 2019

DOLLARS IN THOUSANDS

SCC CODE	DESCRIPTION	APPROVED FFGA BUDGET	CURRENT FFGA BUDGET <sup>1</sup>	COMMITMENTS	EXPENDITURES	CURRENT FFGA FORECAST	CURRENT BUDGET / CURRENT FORECAST VARIANCE
10	GUIDEWAY & TRACK ELEMENTS	385,323	321,703	307,960	80,699	321,703	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	517,378	454,245	412,143	38,369	454,245	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	-	-	-	-	-	-
40	SITWORK & SPECIAL CONDITIONS	406,955	564,989	553,604	334,933	564,989	-
50	SYSTEMS	96,734	83,025	68,661	7,775	83,025	-
	<b>CONSTRUCTION SUBTOTAL (10-50)</b>	<b>1,406,389</b>	<b>1,423,962</b>	<b>1,342,368</b>	<b>461,776</b>	<b>1,423,962</b>	<b>-</b>
60	ROW, LAND, EXISTING IMPROVEMENTS	312,422	419,396	274,846	228,462	419,396	-
70	VEHICLES	85,351	42,000	-	-	42,000	-
80	PROFESSIONAL SERVICES	383,941	386,642	257,605	201,712	386,642	-
	<b>SUBTOTAL (10-80)</b>	<b>2,188,104</b>	<b>2,272,000</b>	<b>1,874,820</b>	<b>891,949</b>	<b>2,272,000</b>	<b>-</b>
90	UNALLOCATED CONTINGENCY	222,441	138,545	-	-	138,545	-
100	FINANCE CHARGES	88,695	88,695	-	-	88,695	-
	<b>TOTAL (10-100)</b>	<b>2,499,240</b>	<b>2,499,240</b>	<b>1,874,820</b>	<b>891,949</b>	<b>2,499,240</b>	<b>-</b>

NOTE: TOTAL FFGA INCURRED COST TO DATE \$899,996

EXCLUDES CONCURRENT NON-FFGA PROJECT ACTIVITIES

<sup>1</sup> REFLECTS CURRENT LIFE OF PROJECT (LOP) BUDGET PLUS FINANCE CHARGES

# Westside Purple Line Extension Section 2 Project FFGA / Non-FFGA Cost Status

PERIOD ENDING: DECEMBER 2019  
DOLLARS IN THOUSANDS

SCC CODE	DESCRIPTION	ORIGINAL FFGA BUDGET	CURRENT FFGA BUDGET <sup>1</sup>	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	CURRENT BUDGET / CURRENT FORECAST VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	385,323	321,703	307,960	80,699	321,703	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	517,378	454,245	412,143	38,368	454,245	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-	-
40	SITWORK & SPECIAL CONDITIONS	406,955	564,989	553,604	334,933	564,989	-
50	SYSTEMS	96,734	83,025	68,661	7,775	83,025	-
	CONSTRUCTION SUBTOTAL (10-50)	1,406,389	1,423,962	1,342,368	461,776	1,423,962	-
60	ROW, LAND, EXISTING IMPROVEMENTS	312,422	419,396	274,846	228,462	419,396	-
70	VEHICLES	85,351	42,000	-	-	42,000	-
80	PROFESSIONAL SERVICES	383,941	386,642	257,605	201,712	386,642	-
	SUBTOTAL (10-80)	2,188,104	2,272,000	1,874,820	891,949	2,272,000	-
90	UNALLOCATED CONTINGENCY	222,441	138,545	-	-	138,545	-
100	FINANCE CHARGES	88,695	88,695	-	-	88,695	-
	<b>TOTAL PROJECT (10-100)</b>	<b>2,499,240</b>	<b>2,499,240</b>	<b>1,874,820</b>	<b>891,949</b>	<b>2,499,240</b>	<b>-</b>

NOTE: TOTAL FFGA INCURRED COST TO DATE \$899,996

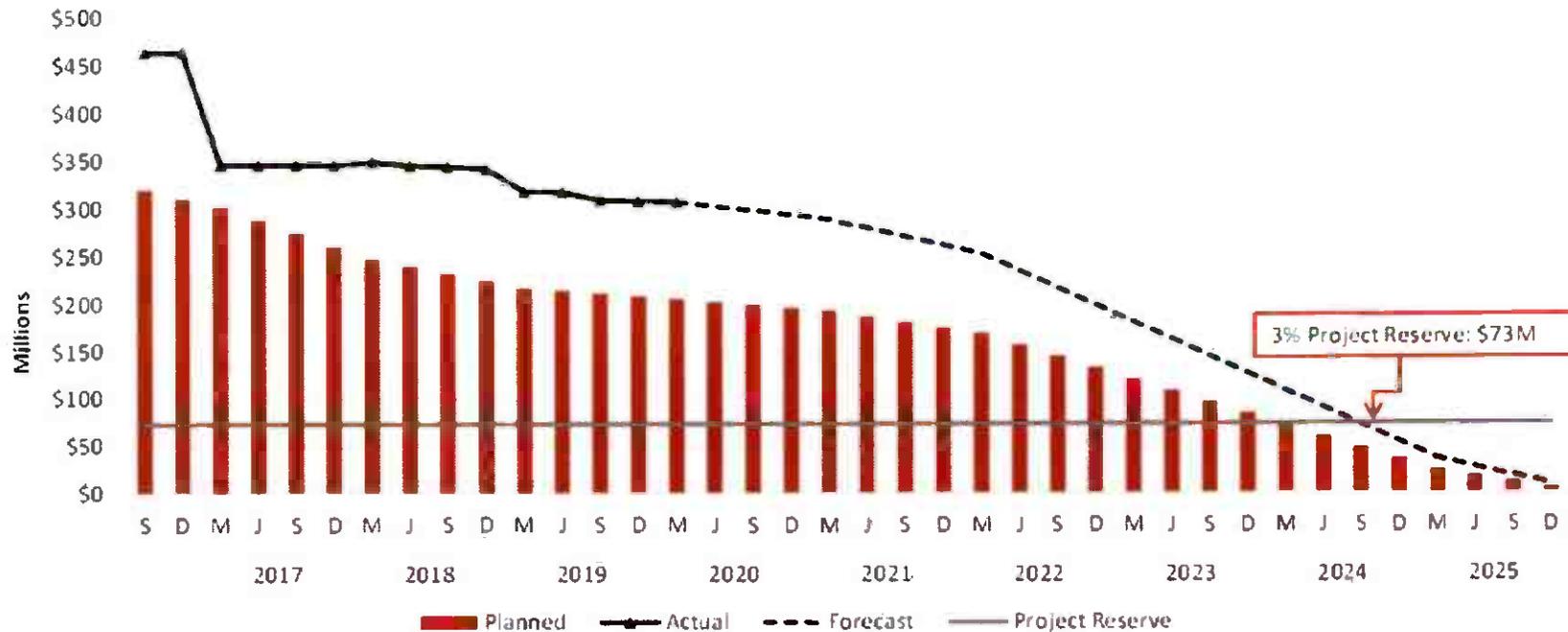
SCC CODE	DESCRIPTION	ORIGINAL NON FFGA BUDGET	CURRENT NON FFGA BUDGET	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	CURRENT NON FFGA BUDGET/ FORECAST VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	-	-	-	-	-	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	-	-	-	-	-	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-	-
40	SITWORK & SPECIAL CONDITIONS	16,175	14,997	8,065	4,715	13,997	(1,000)
50	SYSTEMS	-	-	-	-	-	-
	CONSTRUCTION SUBTOTAL (10-50)	16,175	14,997	8,065	4,715	13,997	(1,000)
60	ROW, LAND, EXISTING IMPROVEMENTS	7,000	7,000	10,678	10,588	10,678	3,678
70	VEHICLES	-	-	-	-	-	-
80	PROFESSIONAL SERVICES	1,400	1,400	675	190	1,400	-
	SUBTOTAL (10-80)	24,575	23,397	19,418	15,493	26,075	2,678
90	UNALLOCATED CONTINGENCY	1,500	2,678	-	-	-	(2,678)
100	FINANCE CHARGES	-	-	-	-	-	-
	<b>TOTAL NON-FFGA (10-100)</b>	<b>26,075</b>	<b>26,075</b>	<b>19,418</b>	<b>15,493</b>	<b>26,075</b>	<b>-</b>
	ENVIRONMENTAL/PLANNING	4,349	4,349	3,957	3,339	4,349	-
	<b>TOTAL NON-FFGA (INCL. ENV./PLANNING)</b>	<b>30,424</b>	<b>30,424</b>	<b>23,375</b>	<b>18,832</b>	<b>30,424</b>	<b>-</b>

NOTE: TOTAL NON-FFGA INCURRED COST TO DATE \$18,832

<b>TOTAL PROJECT</b>	<b>2,529,664</b>	<b>2,529,664</b>	<b>1,898,195</b>	<b>910,781</b>	<b>2,529,664</b>	<b>-</b>
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NOTE: TOTAL INCURRED COST TO DATE \$918,828

# Westside Purple Line Extension Section 2 Project Project Cost Contingency Drawdown



## PROJECT COST CONTINGENCY

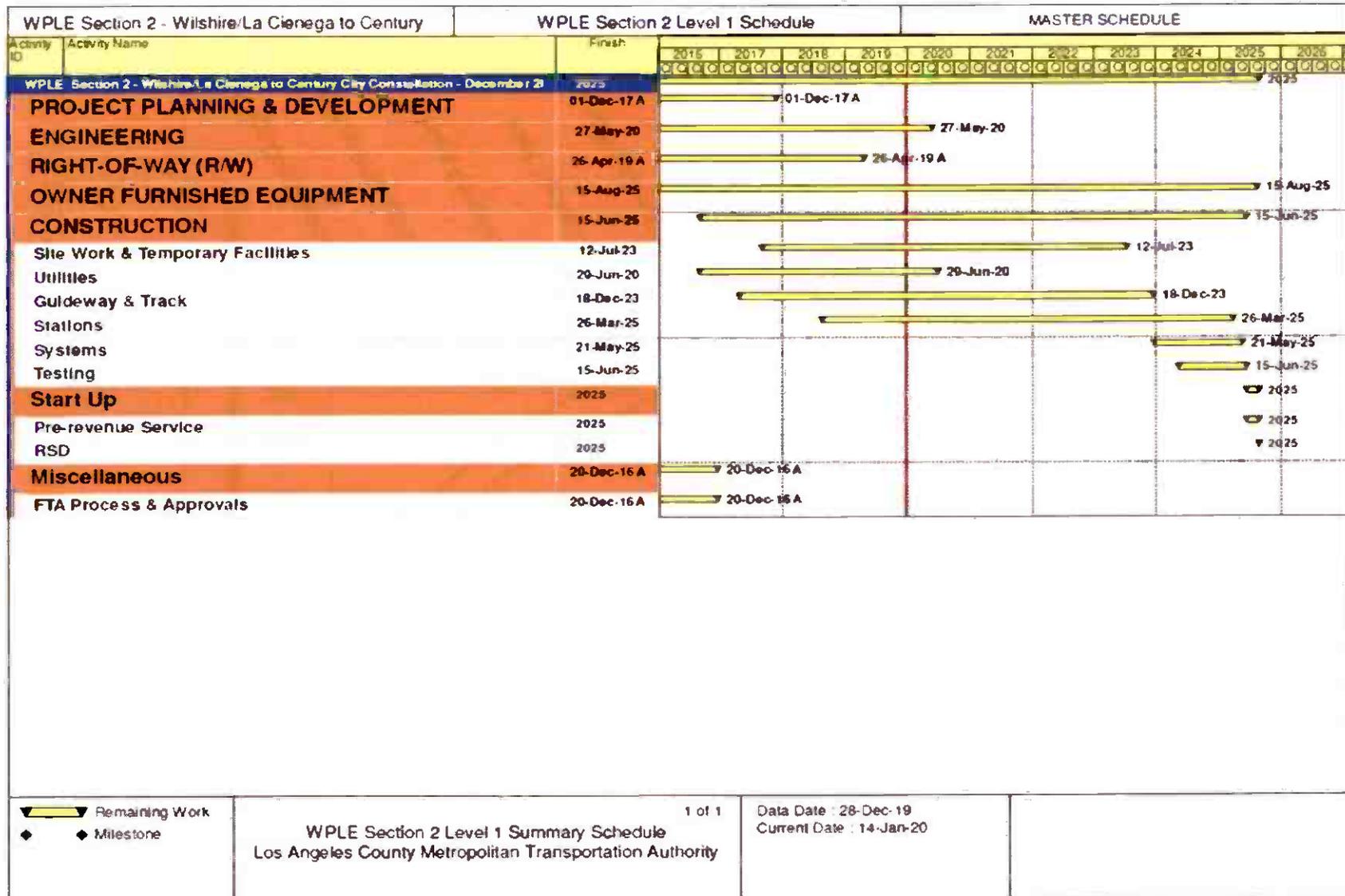
DOLLARS IN THOUSANDS

	Original Contingency (LOP Budget)	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	177,176	(38,632)	-	(38,632)	138,545
Allocated Contingency	168,534	520	(934)	(414)	168,120
<b>Total Contingency</b>	<b>345,710</b>	<b>(38,112)</b>	<b>(934)</b>	<b>(39,045)</b>	<b>306,664</b>

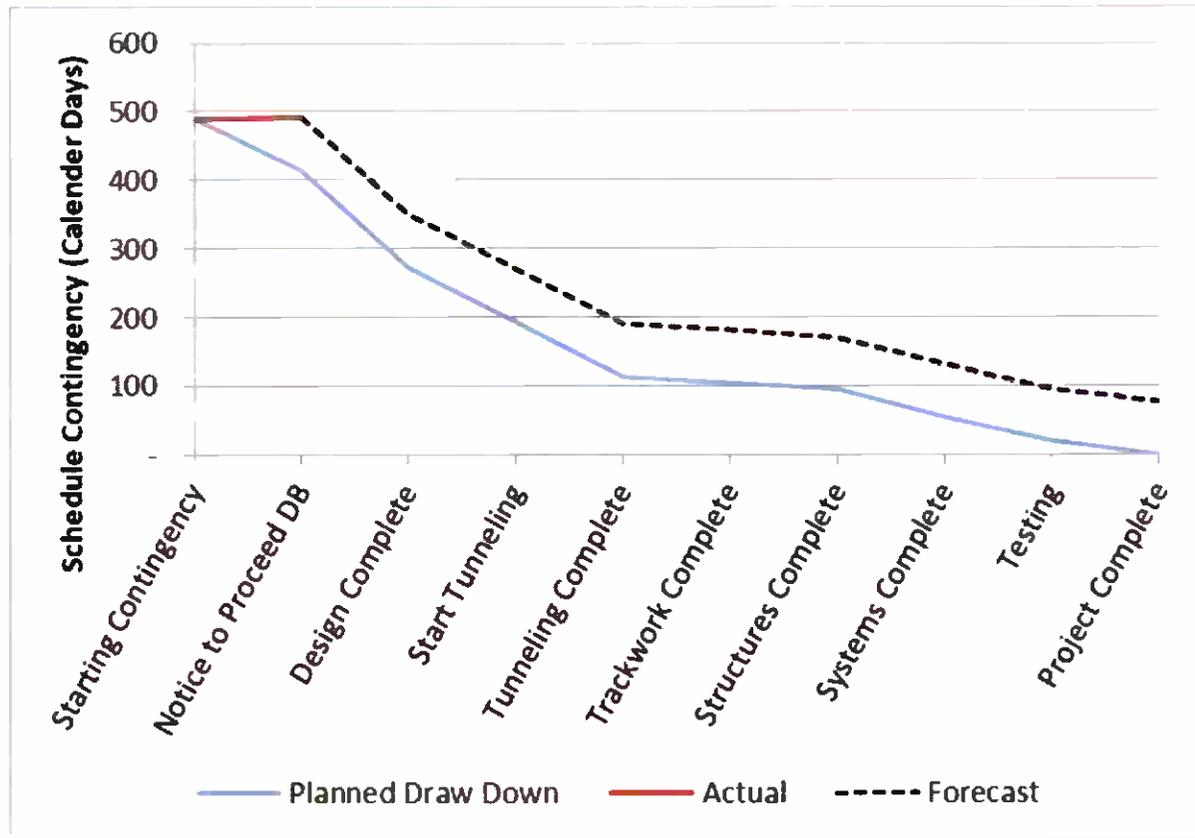
# Westside Purple Line Extension Section 2 Project Schedule Table

	Original Contract Dates	Time Extension	Current Contract	Forecast	Variance CDs
Notice to Proceed	04/26/17A	0	04/26/17A		0
Substantial Completion	05/23/25	0	05/23/25	05/23/25	0

# Westside Purple Line Extension Section 2 Project Summary Project Schedule



# Westside Purple Line Extension Section 2 Project Project Schedule Contingency Drawdown



## Project Schedule Contingency Drawdown Analysis

The project schedule contingency drawdown model provides a dual-axis perspective based upon the FFGA RSD of December 2026 and Metro’s Project Master Schedule (PMS) forecast of 2025.

# Westside Purple Line Extension Section 2 Project Top Risks & Mitigations

Risk ID	Risk Description	Risk Score	Action Items
PLE2-54	Turnover of remaining property to DB contractor is delayed beyond the need dates in the Contractor's current schedule.	15.0	<ol style="list-style-type: none"> <li>1. Metro to complete property acquisition before the need date.</li> <li>2. Building demolition to be part of DB contract. DB Contractor to start work as early as possible.</li> <li>3. Task force to be created to look into issue. Look at utilities and identify potential opportunities, e.g., area(s) where contractor can work given partial access to site.</li> </ol>
PLE2-95	Magnetic anomalies discovered in tunnel alignment.	14.0	<ol style="list-style-type: none"> <li>1. Complete HDD study per approved plan.</li> <li>2. Additional Investigations are required to determine the exact location and nature of the three (3) anomalies.</li> <li>3. If the anomalies are proven to be well casings, follow MMRP Con-53.</li> </ol>
PLE2-23	Utility relocations by 3rd parties delay construction.	12.0	<ol style="list-style-type: none"> <li>1. Work with COLA and COBH and utility owners to expedite obtaining permits, and complete design and construction on schedule.</li> <li>2. Metro is working more closely with DWP to monitor progress and mitigate any potential impacts to the Project schedule.</li> </ol>
PLE2-6	Valuation of properties exceed budget.	12.0	<ol style="list-style-type: none"> <li>1. Current project schedule accounts for additional time required for condemnation.</li> </ol>
PLE2-70	Public protest to the Project causes delays.	12.0	<ol style="list-style-type: none"> <li>1. Continue working collaboratively with the COLA and COBH communities.</li> </ol>

# Westside Purple Line Extension Section 2 Project Race-Conscious Disadvantaged Business Enterprise (DBE) Status

As of November 2019:

<b>DBE Goal – Design</b> The percentage of funds apportioned to Design Contracts	25.31%
<b>Current DBE Commitment Design</b> Total DBE Committed Dollars divided by Total Contract Value for Design	\$16.9M 27.49%
<b>Current DBE Participation</b> Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$17.8M 32.55%

Twenty (20) Design DBE sub-consultants have been identified to date.

<b>DBE Goal – Construction</b> The percentage of funds apportioned to Construction Contracts	17.00%
<b>Current DBE Commitment Construction</b> Contract commitment divided by current contract value for Construction	\$131.8M 10.09%
<b>Current DBE Participation</b> Total amount paid to date to DBEs divided by the amount paid to date to Prime:	\$44.7M 10.87%

Thirty-Three (33) Construction DBE sub-contractors have been identified to date.

# Westside Purple Line Extension Section 2 Project Quality Assurance & Quality Control

- Attended weekly Project staff meetings and progress meetings. Reviewed Daily Inspection Reports at various job locations as well as Twining Independent test laboratory.
- Chaired weekly quality meetings with TPOG Quality Manager for the status, and corrective actions for NCRs issued.
- Drafted Metro, Ninyo and Moore (Metro Laboratory) 2020 surveillances schedule to be discussed with all parties involved.
- Reviewed the following with a disposition for record only:
  - Product data Jacking Frame Concrete Reinforcing Mill Test Reports for Century City Constellation Station TBM Launch Box.
- Reviewed the following with a disposition of approved or approved as noted:
  - Special Segment Liner Mold Shop Drawing Project wide;
  - CWP Dewatering Well Installation for Wilshire/Rodeo Station;
  - CWP Removal of Bracing Level 5 for Century City Constellation Station TBM Launch Box.

# Westside Purple Line Extension Section 2 Project Environmental Status

- Archeological/Paleontological monitoring at the tunnel access shaft continues.
- Participated in various Project coordination meetings and evaluated progress and schedules for environmental compliance and sustainability efforts.
- Provided environmental awareness training as needed for Metro staff and TPOG construction staff.
- Conducted field environmental monitoring and spot check inspections for construction noise and vibration, stormwater and fugitive dust BMPs, and Metro's Green Construction Policy.
- Reviewed and provided responses to various contractor submittals and requests for information related to environmental matters.

# Westside Purple Line Extension Section 2 Project Community Relations Outreach Efforts

- Attended the following meetings: Construction Management, Construction Relations, Third Party Coordination, LADOT, Wilshire/Rodeo Station Construction Coordination, Beverly Hills City Council.
- Conducted project presentations for one-on-one business owner meetings in Century City.
- Produced and distributed five (5) construction work notices including utility work in Century City and monthly look ahead notices for Century City and Beverly Hills.
- Extensive outreach at community meetings and events including distribution of notices door to door, postcard mailings, digital and direct emails and paid advertising.
- Continued efforts for Eat Shop Play and Business Interruption Fund in Century City and Beverly Hills. Updated Facebook/Twitter and website as needed.

# Westside Purple Line Extension Section 2 Project Questions



Wilshire/Rodeo Station

# Westside Purple Line Extension Section 3

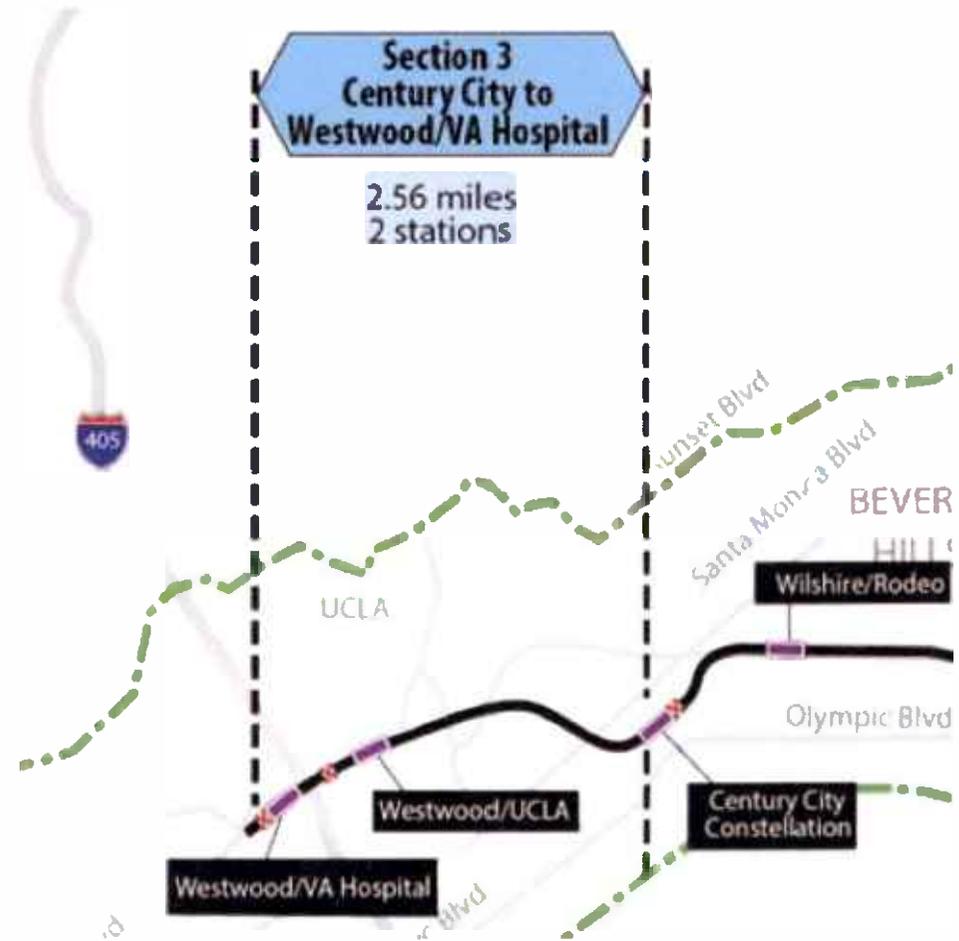
## FTA Quarterly Meeting

### March 4, 2020



# Westside Purple Line Extension Section 3 Project Description

- The WPLE Section 3 Project is a 2.56 mile alignment from the future Century City Constellation Station to the future Westwood/VA Hospital Station. The Project includes 16 heavy rail vehicles, twin-bored tunnels and two (2) new subway stations:
  - Westwood/UCLA
  - Westwood/VA Hospital
- Capital Cost Estimate (Proposed FFGA):
  - \$3.599 Billion
- Revenue Service Date:
  - Proposed FFGA – December 31, 2028
  - Forecast – 2027
- Design Progress: 30%
- Construction Progress: 6 %
- Daily Project Transit Trips: 42,903
- Daily New Transit Trips: 9,386



# Westside Purple Line Extension Section 3

## Key Project Issues

- C1151 Tunnels Contract
  - Surface and subsurface easement acquisitions continue
  - Access Easement Agreement being finalized with the VA
- C1152 Stations, Trackwork, Systems and Testing Contract
  - Station easement acquisitions continue
  - VA Hospital redundant steam tunnel alternate alignment
- The current job creation as extrapolated from the Los Angeles Economic Development Corporation (LAEDC) analysis of job impacts is the following:
  - December 2019: 236 estimated jobs
  - Second Quarter of FY 2020: 967 estimated jobs
  - To Date: 4,287 estimated jobs

# Westside Purple Line Extension Section 3 Design/Construction Update

- C1151 Tunnels
  - Final design is ongoing.
  - Relocation/Removal of palm trees in the Tail Track Exit Shaft (TTES) completed.
  - SCE ductbank construction within LA County continues.
  - Site development of TTES and soundwall installation at the VA site continues.
- C1152 Stations, Trackwork, Systems, and Testing
  - Final design is ongoing.
  - Geotech drilling and survey activities completed at the VA Hospital site.
  - Geotech drilling at Caltrans site to be scheduled.
- C1153 Advanced Utility Relocations
  - Contract closeout in progress.
- Other third party utility relocations
  - Joint trench activities for combining Verizon and Frontier telecommunications are ongoing.
  - Southern California Gas (Sempra Energy) relocation and LADWP (Power) cable pulling are ongoing.



Palm Tree Removal in VA Site



Soundwall Installation at the VA Site

# Westside Purple Line Extension Section 3 Real Estate Acquisition Status

Real Estate Status Summary									
Description	Number of Parcels	Certified	Appraisals Completed	Offers Made	Agreements Signed	Condemnation Filed	Relocations		Parcels Available
							Required	Completed	
Full Takes	0	0	0	0	0	0	0	0	0
Part Takes	2	2	1	1	0	0	0	0	0
TCE	5	4	0	0	0	0	0	0	0
SSE	77	77	1	1	0	0	0	0	0
Permanent Easements	1	1	1	1	0	0	0	0	0
<b>Total Parcels</b>	<b>85</b>	<b>84</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

- Real Estate certifications are progressing, appraisers have been selected and appraisals are under review.
- FKTP access date to VA site for tree removal/relocation granted on December 2, 2019.
- FKTP access date to Tail Track Exit Shaft Area and VA Hospital West Construction Staging Area granted on January 8, 2020.
- TPOG access date to UCLA Lot 36 granted on February 10, 2020.

# Westside Purple Line Extension Section 3 Project Cost Status

PERIOD ENDING DECEMBER 2019

DOLLARS IN THOUSANDS

SCC CODE	DESCRIPTION	LIFE OF PROJECT BUDGET <sup>1</sup>	PROPOSED FFGA BUDGET <sup>2</sup>	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	PROPOSED FFGA BUDGET/ FORECAST VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	490,712	490,712	407,391	35,410	490,712	0
20	STATIONS, STOPS, TERMINALS, INTERMODAL	624,995	624,995	591,735	262	624,995	0
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	0	0	0	0	0	0
40	SITWORK & SPECIAL CONDITIONS	491,805	491,805	648,323	214,034	491,805	0
50	SYSTEMS	130,778	130,778	57,041	0	130,778	0
	<b>CONSTRUCTION SUBTOTAL (10-50)</b>	<b>1,738,291</b>	<b>1,738,291</b>	<b>1,704,490</b>	<b>249,705</b>	<b>1,738,291</b>	<b>0</b>
60	ROW, LAND, EXISTING IMPROVEMENTS	466,874	466,874	127,806	2,458	466,874	0
70	VEHICLES	38,092	38,092	0	0	38,092	0
80	PROFESSIONAL SERVICES	504,493	504,493	219,178	108,052	504,493	0
	<b>SUBTOTAL (10-80)</b>	<b>2,747,750</b>	<b>2,747,750</b>	<b>2,051,474</b>	<b>360,216</b>	<b>2,747,750</b>	<b>0</b>
90	UNALLOCATED CONTINGENCY	464,142	464,142	0	0	464,142	0
100	FINANCE CHARGES	387,375	387,375	0	0	387,375	0
	<b>TOTAL FFGA PROJECT ACTIVITIES (10-100)</b>	<b>3,599,267</b>	<b>3,599,267</b>	<b>2,051,474</b>	<b>360,216</b>	<b>3,599,267</b>	<b>0</b>

NOTE: TOTAL INCURRED FFGA COST TO DATE \$382,553,346

<sup>1</sup> Reflects current Life of Project (LOP) budget plus finance charges.

<sup>2</sup> LOP does not include \$11.7 million Concurrent Non-FFGA activities.

# Westside Purple Line Extension Section 3 FFGA / Non-FFGA Cost Status

PERIOD ENDING DECEMBER 2019

DOLLARS IN THOUSANDS

SCC CODE	DESCRIPTION	LIFE OF PROJECT BUDGET 1	PROPOSED FFGA BUDGET 2	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	PROPOSED FFGA BUDGET/ FORECAST VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	490,712	490,712	407,391	35,410	490,712	0
20	STATIONS STOPS TERMINALS INTERMODAL	524,995	524,995	591,735	252	524,995	0
30	SUPPORT FACILITIES YARDS SHOPS ADMIN BLDGS	0	0	0	0	0	0
40	SITWORK & SPECIAL CONDITIONS	491,805	491,805	548,323	214,034	491,805	0
50	SYSTEMS	130,778	130,778	57,041	0	130,778	0
	<b>CONSTRUCTION SUBTOTAL (10-50)</b>	<b>1,738,291</b>	<b>1,738,291</b>	<b>1,704,490</b>	<b>249,706</b>	<b>1,738,291</b>	<b>0</b>
60	ROW LAND EXISTING IMPROVEMENTS	466,874	466,874	127,806	2,454	466,874	0
70	VEHICLES	38,092	38,092	0	0	38,092	0
80	PROFESSIONAL SERVICES	504,493	504,493	219,178	108,082	504,493	0
	<b>SUBTOTAL (10-80)</b>	<b>2,747,750</b>	<b>2,747,750</b>	<b>2,851,474</b>	<b>360,240</b>	<b>2,747,750</b>	<b>0</b>
90	UNALLOCATED CONTINGENCY	464,142	464,142	0	0	464,142	0
100	FINANCE CHARGES	387,375	387,375	0	0	387,375	0
	<b>TOTAL FFGA PROJECT ACTIVITIES (10-100)</b>	<b>3,509,267</b>	<b>3,509,267</b>	<b>2,851,474</b>	<b>360,240</b>	<b>3,509,267</b>	<b>0</b>

NOTE: TOTAL INCURRED FFGA COST TO DATE \$382,553,346

SCC CODE	DESCRIPTION	ORIGINAL NON-FFGA BUDGET	CURRENT NON-FFGA BUDGET	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	PROPOSED NON-FFGA BUDGET/ FORECAST VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	0	0	0	0	0	0
20	STATIONS STOPS TERMINALS INTERMODAL	0	0	0	0	0	0
30	SUPPORT FACILITIES YARDS SHOPS ADMIN BLDGS	0	0	0	0	0	0
40	SITWORK & SPECIAL CONDITIONS	6,000	6,000	3,520	8	6,000	0
50	SYSTEMS	0	0	0	0	0	0
	<b>CONSTRUCTION SUBTOTAL (10-50)</b>	<b>6,000</b>	<b>6,000</b>	<b>3,520</b>	<b>8</b>	<b>6,000</b>	<b>0</b>
60	ROW LAND EXISTING IMPROVEMENTS	1,000	1,000	0	0	1,000	0
70	VEHICLES	0	0	0	0	0	0
80	PROFESSIONAL SERVICES	3,600	3,600	31	12	3,600	0
	<b>SUBTOTAL (10-80)</b>	<b>4,600</b>	<b>4,600</b>	<b>31</b>	<b>12</b>	<b>4,600</b>	<b>0</b>
90	UNALLOCATED CONTINGENCY	0	0	0	0	0	0
100	FINANCE CHARGES	0	0	0	0	0	0
	<b>TOTAL NON-FFGA (10-100)</b>	<b>10,600</b>	<b>10,600</b>	<b>3,551</b>	<b>19</b>	<b>10,600</b>	<b>0</b>
	ENVIRONMENTAL/PLANNING	1,131	1,131	857	866	1,131	0
	<b>TOTAL NON-FFGA (INCL ENV/PLANNING)</b>	<b>11,731</b>	<b>11,731</b>	<b>4,408</b>	<b>285</b>	<b>11,731</b>	<b>0</b>

NOTE: TOTAL NON-FFGA INCURRED COST TO DATE \$885,195

<b>TOTAL PROJECT</b>	<b>3,610,000</b>	<b>3,610,000</b>	<b>2,855,922</b>	<b>361,181</b>	<b>3,610,000</b>	<b>0</b>
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# Westside Purple Line Extension Section 3 Schedule Table

## C1151 Tunnels

	Original Contract Dates	Time Extension	Current Contract	Forecast	Variance CDs
Notice to Proceed	01/15/19A	0	01/15/19A		0
Substantial Completion	11/15/22	0	11/15/22	11/15/22	0

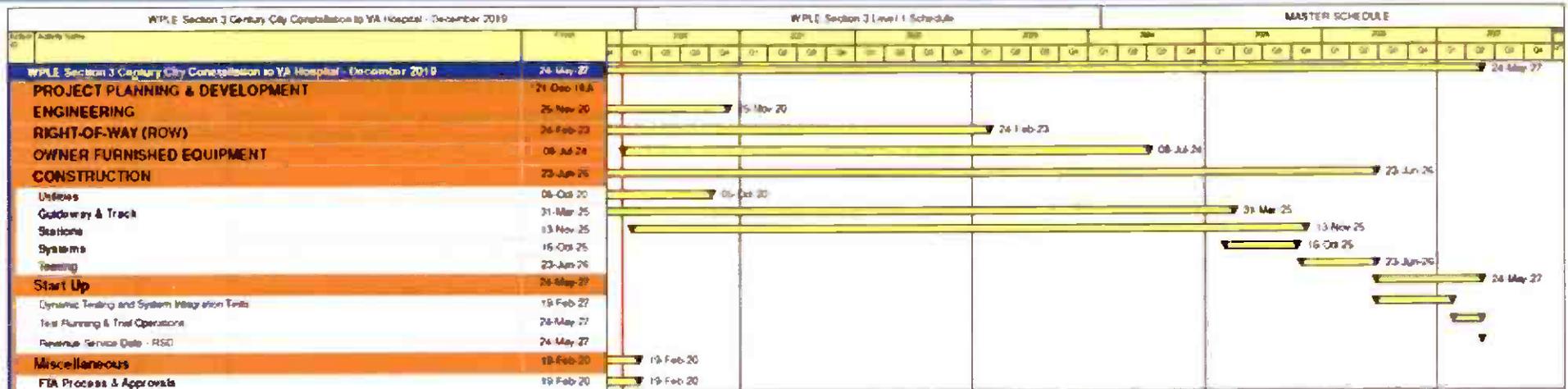
## C1152 Stations, Trackwork, Systems, and Testing

	Original Contract Dates	Time Extension	Current Contract	Forecast	Variance CDs
Notice to Proceed	7/16/19A	0	7/16/19A		0
Substantial Completion	6/09/26	0	6/09/26	6/09/26	0

## C1153 Advanced Utility Relocations

	Original Contract Dates	Time Extension	Current Contract	Forecast	Variance CDs
Notice to Proceed	01/02/18A	0	01/02/18A		0
Substantial Completion	05/07/19	57	06/30/19A		0

# Westside Purple Line Extension Section 3 Summary Schedule



- Remaining Work
- Milestone
- Summary

WPLE Section 3 Level 1 Summary Schedule  
Los Angeles County Metropolitan Transportation Authority

Page 1 of 1

Data Date: 01 Jan 20  
Current Date: 10 Jun 20

# Westside Purple Line Extension Section 3

## Top Risks & Mitigations

Risk	Risk Description	Risk Score	Action Items
701.3	Tariffs potentially impact D/B contractors.	10.5	<ol style="list-style-type: none"> <li>1. Monitor the market trend and assess the potential impact.</li> <li>2. Review contract condition for any escalation clause to allow cost increase.</li> </ol>
287.3	Delays due to obtaining lane closures and peak hour exemptions.	9.0	<ol style="list-style-type: none"> <li>1. Identify temporary bus stop re-locations. Meet with City to identify relocation of stops outside work areas.</li> <li>2. Metro to review bus routes and stop locations.</li> <li>3. Submit the Peak Hour Exemption Request</li> </ol>
657.3	Replacement parking and related activities at VA hospital may impact cost and schedule. Additional parking spaces above and beyond the in-kind parking spaces replacement will be funded by local fund. No cost risk impact on FFGA budget.	9.0	<ol style="list-style-type: none"> <li>1. Include in ROW budget - Complete</li> <li>2. Identify local funding source to meet the additional parking spaces requirement. - closed</li> <li>3. Close coordination with VA on the bus shuttle service and temporary parking area during the design and construction of the replacement parking structure.</li> </ol>
657.4	Establish shuttle service and complete the refurbishment of temporary surface parking lots are critical prior to closing down Lot 42 for station construction	9.0	<ol style="list-style-type: none"> <li>1. Prepare procurement package for shuttle services.</li> <li>2. Initiate CN and request CSP from the Contractor for the refurbishment of the temporary parking lots.</li> </ol>
653.3	Delay of contract turnover from tunnels to stations.	8.0	<ol style="list-style-type: none"> <li>1. Review scope, ROW, procurement methodology, NEPA action, LONP to identify schedule risks. - closed</li> <li>2. Received LONP and 130c documents. - closed</li> <li>3. Review schedule interface between tunnels and stations contracts.</li> <li>4. Setup regular collaboration meeting.</li> </ol>

# Westside Purple Line Extension Section 3

## Disadvantaged Business Enterprises

### Contract C1151

As of November 2019

<b>DBE Goal – Design</b> The percentage of funds apportioned to Design Contracts	11.19%
<b>Current DBE Commitment Design</b> Total DBE Committed Dollars divided by Total Contract Value for Design	\$4.3M 24.01%
<b>Current DBE Participation</b> Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$2.4M 20.61%

Four (4) Design DBE sub-consultants have been identified for Design.

<b>DBE Goal – Construction</b> The percentage of funds apportioned to Construction Contracts	17.10%
<b>Current DBE Commitment Construction</b> Contract commitment divided by current contract value for Construction	\$39.4M 10.05%
<b>Current DBE Participation</b> Total amount paid to date to DBEs divided by the amount paid to date to Prime:	\$5.5M 6.77%

Seventeen (17) Construction DBE sub-contractors have been identified to date.

# Westside Purple Line Extension Section 3

## Disadvantaged Business Enterprises

### Contract C1152

As of November 2019

<b>DBE Goal – Design</b> The percentage of funds apportioned to Design Contracts	19.25%
<b>Current DBE Commitment Design</b> Total DBE Committed Dollars divided by Total Contract Value for Design	\$13.7M 22.33%
<b>Current DBE Participation</b> Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$0.4M 5.06%

Sixteen (16) Design DBE subcontractors have been identified for Design.

<b>DBE Goal – Construction</b> The percentage of funds apportioned to Construction Contracts	21.00%
<b>Current DBE Commitment Construction</b> Contract commitment divided by current contract value for Construction	\$24.8M 1.90%
<b>Current DBE Participation</b> Total amount paid to date to DBEs divided by the amount paid to date to Prime:	\$0.0 0.00%

Two (2) Construction DBE sub-contractors have been identified to date.

# Westside Purple Line Extension Section 3

## Quality Assurance & Quality Control

- Completed FY2019 Metro Audit of C1151 Tunnels. Issued twelve (12) Quality Action Requests (QAR). All issues were closed.
- Issued three (3) construction Non-Conformance Reports (NCR) for SCE temporary power related work. All NCRs were closed.
- Initiated audit of C1151 Tunnels contract to review FKTP's QA/QC records, document control process, and Third Party submittal process.

# Westside Purple Line Extension Section 3

## Environmental Mitigation Status

- Conducted field environmental monitoring and inspections for construction noise, stormwater, fugitive dust BMPs for the Tunnels contract, joint trench, SoCal Gas activities.
- Participated in Tunnels contract coordination meetings. Evaluated progress and schedules for environmental compliance and sustainability efforts.
- Participated in coordination meetings with the Tunnels contractor for groundwater treatment systems.
- Conducted cultural and Native American monitoring in accordance to the VA MOA/HRMDP.
- Participated in meetings for VA Real Estate Access Agreements.

# Westside Purple Line Extension Section 3 Public Outreach Program

- Produced and distributed six (6) construction work notices for advanced utility relocation and work coordinated with SCE and SCG.
- Extensive coordination with major stakeholder groups, homeowners' associations, neighborhood councils and city council districts.
- Continued coordination with UCLA, Westwood Village Improvement Association, Council District 5, and several bus municipalities for the upcoming temporary bus stop relocation at Wilshire/Westwood.

# Patsaouras Plaza Busway Station

FTA Quarterly Review – March 4, 2020



# Patsaouras Plaza Busway Station

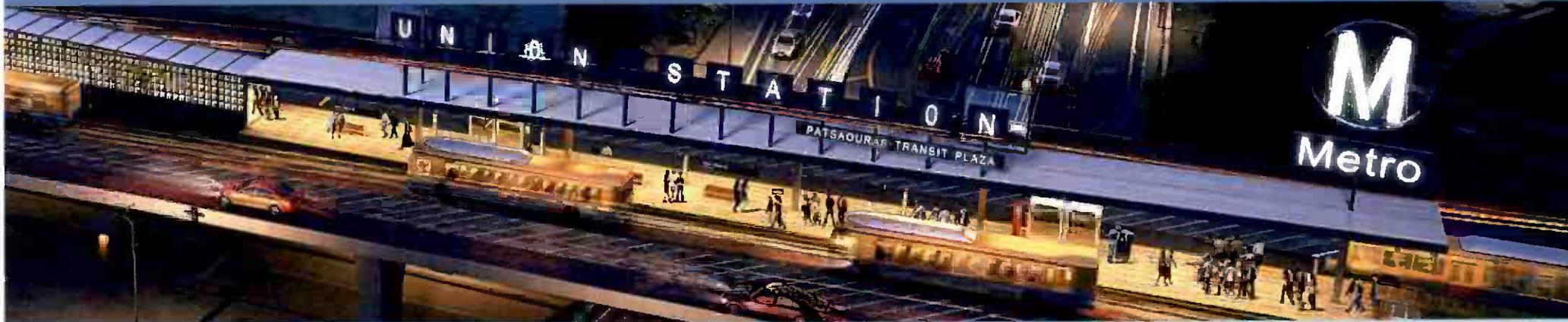
## Project Description



- Relocates patron boarding station currently on North Alameda
- Improves vertical and horizontal pedestrian circulation
- Provides direct connection to Union Station
- Widens existing Caltrans Los Angeles River Busway Bridge
- Will serve Metro, Foothill Transit, and other operators



# Patsaouras Plaza Busway Station Project Budget



ELEMENT CODE	ELEMENT DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	BUDGET / FORECAST VARIANCE
				TO DATE	TO DATE	TO DATE	
C	CONSTRUCTION	19,992,000	31,495,000	29,907,000	25,915,000	31,020,000	(475,000)
S	SPECIAL CONDITIONS	750,000	1,917,000	1,637,000	1,191,000	1,931,000	14,000
R	RIGHT-OF-WAY	-	-	-	-	-	-
P	PROFESSIONAL SERVICES	7,425,000	16,501,000	15,712,000	14,362,000	17,201,000	700,000
PC	PROJECT CONTINGENCY	2,817,000	1,000,000	-	-	761,000	(239,000)
<b>TOTAL PROJECT</b>		<b>30,984,000</b>	<b>50,913,000</b>	<b>47,256,000</b>	<b>41,468,000</b>	<b>50,913,000</b>	<b>-</b>

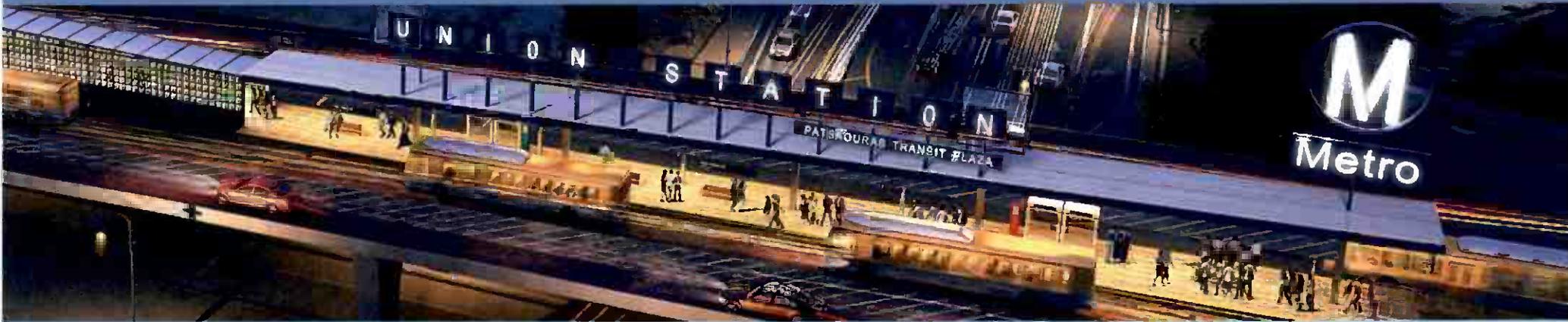


Expenditures through December 31, 2019



# Patsaouras Plaza Busway Station

Issues With Potential to go Above \$100,000



No new items to report, but as previously noted

- Archeological/Paleontological Monitoring  
New modification for 286,000 takes Task Order over \$886,000
- Programmatic Plan to Address Man-Made Buried Objects  
Over \$1,000,000 worth of Task Orders issued



# Patsaouras Plaza Busway Station Project Schedule



C0970 - Union/  
Patsaouras Plaza Station

December 2019 vs. Approved Re-Baseline 2019

14-Jan-20

Activity ID	Activity Name	Orig. Est.	Re-Baseline Start	Re-Baseline Finish	Start	Finish	2017												2018												2019																													
							J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
<b>C0970 - Union/Patsaouras Plaza Station - December 20</b>							1624	29-Feb-14	21-Apr-20	25-Feb-14 A	20-May-20																																																	
<b>Key Milestones</b>							1624	29-Feb-14	21-Apr-20	25-Feb-14 A	20-May-20																																																	
<b>Contract Milestones / Summary</b>							1624	29-Feb-14	21-Apr-20	25-Feb-14 A	20-May-20																																																	
A1000	Contract Award	1	29-Feb-14	25-Feb-14	25-Feb-14 A	25-Feb-14 A																																																						
A1010	Notice to Proceed (NTP)	1	31-Mar-14	31-Mar-14	31-Mar-14 A	31-Mar-14 A																																																						
A1090	Final Design Complete	0		29-Feb-15	29-Feb-16 A	29-Feb-16 A																																																						
A1100	Construction Start	9	03-Jan-17		03-Jan-17 A																																																							
A1080	Substantial Completion	0		21-Apr-20		20-May-20																																																						
<b>Required &amp; Furnishes Permits</b>							48	20-May-14	30-Apr-15	20-May-14 A	30-Apr-15 A																																																	
A1030	Caltrans Encroachment Permit Survey	20	20-May-14	11-Aug-14	20-May-14 A	11-Aug-14 A																																																						
A1040	Caltrans Encroachment Permit Construction	5	03-Oct-14	03-Dec-14	03-Oct-14 A	03-Dec-14 A																																																						
A1030	Caltrans Encroach Permit Pathole	5	15-Aug-14	30-Apr-15	15-Aug-14 A	30-Apr-15 A																																																						
<b>Final Design</b>							985	31-Mar-14	03-Jan-17	31-Mar-14 A	03-Jan-17 A																																																	
A1050	Final Design	250	31-Mar-14	29-Feb-15	31-Mar-14 A	29-Feb-16 A																																																						
A1110	Permits and Traffic Control Plans	5	01-Mar-16	03-Jan-17	01-Mar-16 A	03-Jan-17 A																																																						
<b>Construction</b>							928	03-Jan-17	21-Apr-20	03-Jan-17 A	20-May-20																																																	
A1130	Demolition	5	03-Jan-17	06-Apr-17	03-Jan-17 A	06-Apr-17 A																																																						
A1140	El Monte Busway Bridge Widening: CIDH Utility Polishing and Replacements	5	27-Mar-17	25-Jun-17	27-Mar-17 A	25-Jun-17 A																																																						
A1130	El Monte Busway Bridge Widening: Substructure	5	02-Feb-17	04-Aug-17	02-Feb-17 A	04-Aug-17 A																																																						
A1160	El Monte Busway Bridge Widening: Superstructure	5	26-Apr-17	16-Nov-17	26-Apr-17 A	16-Nov-17 A																																																						
A1180	Roadgate K-Rail on the Bridge	1	20-May-18	20-May-18	20-May-18 A	20-May-18 A																																																						
A1210	DELAY - Construction Suspended - Discovery of Human Bones	5	24-Apr-18	12-May-18	24-Apr-18 A	12-May-18 A																																																						
A1220	Mobile Drilling Contractor (Critical Path)	14	13-May-18	02-Jun-18	13-May-18 A	02-Jun-18 A																																																						
A1070	Pedestrian Over-Crossing Substructure	65	03-Jun-18	23-Aug-18	03-Jun-18 A	23-Aug-18 A																																																						
A1190	Pedestrian Overcrossing Superstructure & Enclosure	160	26-Aug-18	06-Mar-20	26-Aug-18 A	03-Apr-20																																																						
A1060	Construction	253	03-Jan-17	21-Apr-20	03-Jan-17 A	20-May-20																																																						
A1200	Pedestrian Overcrossing Amenities	33	08-Mar-20	21-Apr-20	06-Apr-20	20-May-20																																																						
<b>Project Substantial Completion</b>							22	23-Mar-20	21-Apr-20	21-Apr-20	20-May-20																																																	
A1070	Project Substantial Completion	22	23-Mar-20	21-Apr-20	21-Apr-20	20-May-20																																																						

Contractor's current schedule.



# Patsaouras Plaza Busway Station

## Design/Build Contract C0970 – Top Risks and Mitigations

Risk	Impact	Mitigation
Delay with the fabrication of the elevator	Schedule	Work with OHL to ensure timely submittal of the Elevator Welding Quality Control Plan
Delays due to Cultural Resources at Retaining Wall Drainage System and Austin Vault	Budget/ Schedule	Following procedures established in the Programmatic Plan.

# Patsaouras Plaza Busway Station

## Activities for Next Quarter



- Finish erecting and welding the steel frame of the Pedestrian Bridge
- Finish erecting and welding the steel frame of the Pedestrian Walkway
- Finish pouring the transition slab that connects Pedestrian Bridge to Bus Platform
- Finish rebar work and pour footings of the Austin Vault



# Patsaouras Plaza Busway Station

## Construction Photos



Pouring Pedestrian Bridge



Pedestrian Walkway Rebar



Elevator Platform Poured



Austin Vault Excavation



**Metro**



# Willowbrook/Rosa Parks Station

## FTA Quarterly Review Meeting

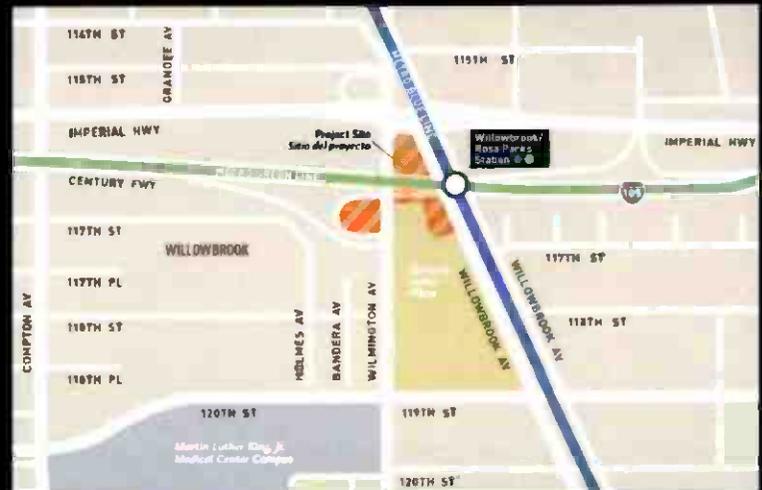
### March 4, 2020



# Willowbrook/Rosa Parks Station

## Project Description

- The Project features the extension of the Blue Line Platform; new pedestrian crossing; multi-purpose plaza; bike mobility hub; transit security facility & customer service center; new pedestrian promenade; bus bays; lighting and signage.
- TIGER Grant No. CA-2016-010-00 (FY2014)
- Grant Execution Date: June 2, 2016
- Project Completion Date: July 15, 2020
- Current Budget: \$66,657,573
- Current Forecast: \$68,604,819
- Design Progress: 99%
- Construction progress: 82%
- Federal Funds: \$10,250,000
- Local Funds: \$58,354,819



Metro

# Willowbrook/Rosa Parks Station

## Major Activities During Reporting Period



- Package A:
  - Customer Service & Security Building (CSSB) and Mobility Hub are substantially complete.
  - Completed punch walk of CSSB.
  - Pedestrian Promenade and Public Plaza at 90% completion.
  - Finish work continuing at the A Line Platform.
- Package B:
  - Issued Change Order Notice to Icon West Inc.
  - Submitted final environmental study to Caltrans for Encroachment Permit.

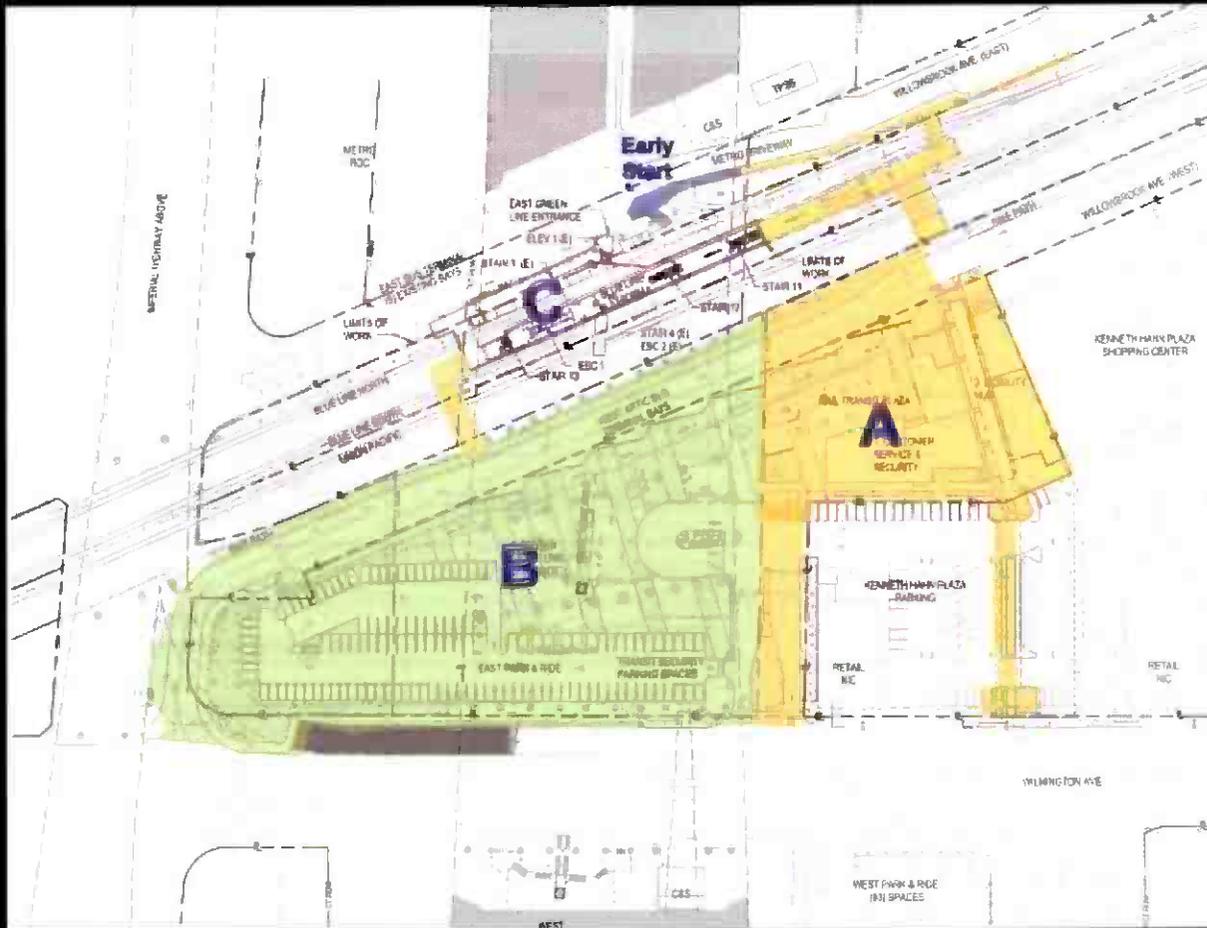
# Willowbrook/Rosa Parks Station

## Project Schedule

MILESTONE	Baseline Date	Current Date
Grant Award	1/17/2014	1/17/2014
Environmental Finding	8/1/2015	8/1/2015
Preliminary Engineering		
30% Design	9/9/2016	9/9/2016
Final Design		
60% Design	11/18/2016	12/29/2016
100% Design	11/30/2016	7/6/2017
Third Party Approval (Caltrans/LACDPW)	3/24/2017	3/24/2017
Completion of Land Transfer	7/1/2016	10/24/2017 A
TIGER Funds 100% Obligated	9/30/2016	6/8/2016
<b>Design Bid Docs/Date: Early Start</b>		
Bid Set Submittal		8/21/2017 A
Contract Award		12/7/2017 A
<b>Construction</b>		
Notice to Proceed		12/20/2017 A
Begin Construction		12/27/2017 A
End of Construction		10/31/2018 A
<b>Design Bid Docs/Date: Package A</b>		
Bid Set Submittal	10/31/2016	11/22/2017
IFB Issue	5/1/2016	1/18/2018 A
Contract Award	9/1/2016	6/5/2018 A
<b>Construction</b>		
Notice to Proceed	10/30/2016	7/30/2018 A
Begin Construction	5/30/2017	8/6/2018 A
Phase 1: End Construction (substantial completion)	10/31/2018	10/31/2019 A
Phase 2: End Construction (substantial completion)	10/31/2018	4/15/2020
<b>Design Bid Docs/Date: Package B</b>		
Change Order Issue		12/19/2019 A
<b>Construction</b>		
Notice to Proceed		3/1/2020
Begin Construction		3/15/2020
End Construction (substantial completion)	10/3/2018	8/15/2020
Project Closeout Date	4/30/2019	6/30/2021

# Willowbrook/Rosa Parks Station

## Project Phasing



Metro

# Willowbrook/Rosa Parks Station

## Project Cost Update

Activity	ORIGINAL GRANT BUDGET	CURRENT BUDGET	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	CURRENT BUDGET / CURRENT FORECAST VARIANCE
Blue Line Improvements (Items 1-5: Platform Extensions, Canopies, Grade Crossing Improvements, new South Entrance, ROW Fencing)	\$4,747,240	\$6,917,022	\$5,331,807	\$ 8,741,118	\$ 5,960,173	(\$956,849.39)
Green Line Improvements (Items 6-9: Vertical Circulation, Lighting & Acoustical Enhancements)	\$14,417,979	\$4,819,652	\$3,715,104	\$ 914,903	\$ 4,152,937	(\$666,714.76)
New Construction (Items 10-13: Civic Plaza, Metro Customer Service Center, Sheriff's Facility, Mobility Hub)	\$16,642,913	\$23,081,773	\$17,791,987	\$ 18,461,769	\$ 19,888,813	(\$3,192,960.10)
Bus and Shelter Improvements (Items 14-16: Improvements to West and East Bus Depots)	\$3,462,904	\$1,745,813	\$1,345,715	\$ 1,346,086	\$ 1,504,310	(\$241,502.74)
Parking Improvements (Items 17-19: Safety enhancement and reconfiguration for both East and West Park & Ride Lots)	\$3,555,068	\$8,123,783	\$0	\$ -	\$ 7,000,000	(\$1,123,783.00)
Circulation Improvements (Items 20-23: Signage, Transit Hall, Pedestrian Promenade, Kiss & Ride Lot)	\$4,844,769	\$4,049,093	\$3,121,139	\$ 2,680,987	\$ 3,488,972	(\$560,120.91)
Site-Wide Improvements (Items 24-26: General Site Work, Landscaping, Artwork)	\$3,236,024	\$3,181,242	\$2,452,178	\$ 4,515,225	\$ 2,741,173	(\$440,069.31)
Preliminary Engineering and Final Design	\$4,281,888	\$5,818,091	\$5,794,075	\$ 3,706,070	\$ 5,818,091	\$0.00
Construction - Agency Labor/Const Mgmt/Other Prof Svc	\$0	\$0	\$6,512,063	\$ 4,814,430	\$ 6,394,500	\$6,394,500
Construction - Third Party	\$0	\$0	\$579,644	\$ 507,729	\$ 787,500	\$787,500
Contingency	\$5,518,878	\$3,978,450	\$5,518,878	\$ -	\$ 3,978,450	\$0.00
Land Transaction	\$4,650,000	\$5,389,800	\$5,996,532	\$ 5,388,800	\$ 5,389,800	\$0.00
Tenant Relocation	\$1,300,000	\$1,500,100	\$0	\$ 541,649	\$ 1,500,100	\$0.00
<b>Total Project Cost</b>	<b>\$66,657,663</b>	<b>\$68,604,819</b>	<b>\$58,159,121</b>	<b>\$51,618,766</b>	<b>\$ 68,604,819</b>	<b>(\$0)</b>

1. Ex penditures cumulativ e through 12/30/2019; TIGER expenditures YTD: \$10,250,000

2. Total Construction Progress percentage: 82%



**Metro**

# Willowbrook/Rosa Parks Station

## Top Risks and Mitigations

### Top Risks and Mitigations

Risk ID	Risk Description	Upr Rating	Upr Rating	Mitigation Strategies
16b	3rd party coordination: - UPRR	M	16	1. Engineering of UPRR ROW portion of ped crossing in progress. Maintenance Agreement sent to UPRR along with funding agreement.
21	Coordination with Operations and other concurrent Blue Line Projects ongoing.	C	10.5	1. Continue ongoing coordination with Operations during phasing plan development and construction. 2. Several components of the Work (Systems and Finishes) still in progress after Station re-opening and will require coordination with Metro Operations to set aside track allocation times to complete the work.
16a	3rd party coordination: - Caltrans - County - LACDA	M	7.5	1. Coordinate the review of Package B with Caltrans – Finalizing last requirements. 2. LACDA funding coordination with award of Package B - Ongoing



**Metro**

# Willowbrook/Rosa Parks Station

## Anticipated Activities for Next Reporting Period

- Package A:
  - Coordinate punch list for exterior of CSSB, Mobility Hub and Public Plaza.
  - Continue finish work on A Line platform.
- Package B:
  - Issue Change Order to Icon West Inc. and begin construction.
  - Receive Encroachment Permit from Caltrans and begin construction.



# Eastside Access Improvements 1<sup>st</sup> and Central Station FTA Quarterly Meeting March 4, 2020



# Eastside Access Improvements Project Segments

**Segment 1 . 1st Street**  
(Los Angeles St. to Mission Rd.)

**Segment 2 . Alameda Esplanade**  
(Commercial St. to 1st St.)

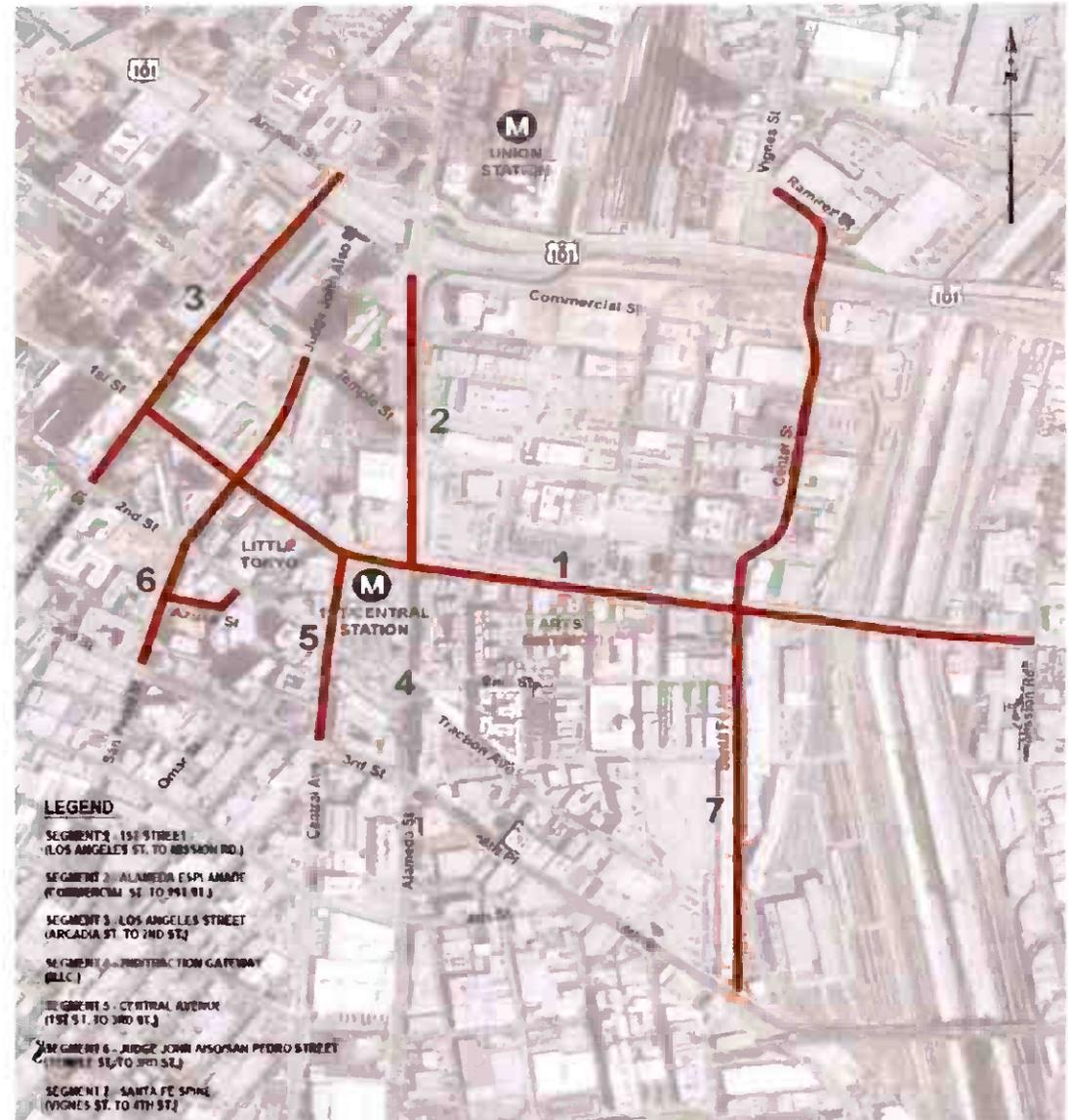
**Segment 3 . Los Angeles Street**  
(Arcadia St. to 2nd St.)

**Segment 4 . 2nd/Traction Gateway**  
(at 2nd/Alameda and Traction)

**Segment 5 . Central Avenue**  
(1st St. to 3rd St.)

**Segment 6 . Judge John Aiso /  
San Pedro Street**  
(Temple St. to 3rd St.)

**Segment 7 . Santa Fe Spine**  
(Vignes St. to 4th St.)



# Eastside Access Improvements

## Project Description

- The Eastside Access Improvement Project (EAIP) is funded by
- TIGER Discretionary Grant funds (Grant # CA-79-0005) which was executed on
- September 22, 2015 with a completion date of June 30, 2020.
  
- EAIP is located in heart of downtown Los Angeles to implement Streetscape,
- Pedestrian Safety and Bicycle Access improvements connecting Little Tokyo and
- surrounding communities with Los Angeles Union Station.
  
- TIGER Budget: \$16.8 Million
- Forecasted Budget: \$22.6 Million Based on 65% Cost Estimate (\*)  
(\* ) Upon Completion of final design cost forecast will be revised
- Design Status: 100% Plan submitted to COLA. Currently under review
- Construction Status: Scheduled to start in end of 2020  
Currently 0% complete

# Eastside Access Improvements

## Preliminary Funding Plan



TIGER - Federal Share

\$11,800,000

TIGER - Local Share

\$5,000,000

Total Funding:

\$16,800,000

# Eastside Access Improvements

## Design-Construction Budget

SEGMENT	ACTIVITY	TIGER GRANT BUDGET	LOCAL FUNDS	TOTAL TIGER + LOCAL	65% DESIGN BUDGET FORECAST	GRANT - FORECAST VARIANCE	EXPENDITURES
1	1st Street: From Los Angeles Street to Mission Road	\$2,940,000	\$1,260,000	\$4,200,000	\$2,408,888	\$531,112	\$0
2	Alameda Esplanade	\$1,330,000	\$570,000	\$1,900,000	\$5,822,470	-\$4,492,470	\$0
3	Los Angeles Street Esplanade: From the Plaza to 2nd Street	\$3,890,000	\$1,610,000	\$5,500,000	\$901,259	\$2,988,741	\$0
4	2nd Traction Street	\$1,050,000	\$450,000	\$1,500,000	\$303,352	\$746,648	\$0
5	Central Avenue: From 1st Street to 3rd Street	\$315,000	\$135,000	\$450,000	\$487,429	-\$172,429	\$0
6	Judge John Aiso/San Pedro Street: From Temple to 3rd Street	\$700,000	\$300,000	\$1,000,000	\$522,438	\$177,562	\$0
7	Santa Fe Spine	\$1,190,000	\$510,000	\$1,700,000	\$4,144,372	-\$2,954,372	\$0
	Funda.Ped. Improvements for the Project	\$385,000	\$165,000	\$550,000	\$401,455	-\$16,455	\$0
	<b>Subtotal:</b>	<b>\$11,800,000</b>	<b>\$5,000,000</b>	<b>\$16,800,000</b>	<b>\$14,991,662</b>	<b>-\$3,191,662</b>	<b>\$0</b>
	Professional Services - Design	N/A			\$2,960,492		\$2,939,827
	Professional Services - Construction				\$390,000		
	Third Party - Design	N/A			\$900,000		\$749,248
	Third Party - Construction				\$500,000		
	Metro Project Labor - Design	N/A			\$500,000		\$0
	Metro Project Labor - Construction				\$2,500,000		
	<b>Total Project Cost:</b>	<b>\$11,800,000</b>			<b>\$22,742,154</b>	<b>-\$10,942,154</b>	<b>\$3,689,075</b>

1/28/2020

**Notes:**

Expenditures cumulative through January 30, 2019

Current Budget is based on median 65% Cost estimate

Design Contingency, GC, Bonds & Insurance, Profit & OH, Escalation , and Traffic Control included in the Segment Costs

# Eastside Access Improvements Project Schedule

MILESTONE	BASELINE DATE	RE-BASELINE	RE-BASELINE	February '20 UPDATE	February '20 UPDATE
				START	FINISH
Grant Award	21-Sep-15	21-Sep-15			
Design (AFC Plan Approval)					
Start Date:	30-Sep-15	8-Mar-16		8-Mar-16	9-Apr-20
End Date:	30-Sep-16	30-Jun-19			
Procurement:					
IFB Issue:	6-Aug-19	6-Aug-19		17-Jul-20	14-Sep-20
Bid Opening:	3-Oct-19	3-Oct-19		15-Sep-20	
NTP:	12-Mar-20	12-Mar-20		17-Mar-21	
Owner Developed Construction Schedule		START	END	START	END
Submittals		13-Mar-20	13-Apr-20	18-Mar-21	16-Apr-21
Segment 1		14-Apr-20	2-Jun-20	19-Apr-21	07-Jun-21
Segment 2 (Note 1)		6-Jul-21	10-Jan-22	1-Apr-22	15-Nov-22
Segment 3		12-May-20	16-Oct-20	17-May-21	21-Oct-21
Segment 4		3-Jun-20	3-Aug-20	08-Jun-21	06-Aug-21
Segment 5		4-Aug-20	7-Dec-20	17-May-21	14-Oct-21
Segment 6		28-Apr-20	17-Sep-20	03-May-21	22-Sep-21
Segment 7		27-May-20	27-Apr-21	19-Apr-21	12-Jan-22
Punch List for all Segments (except Seg 2)				08-Jun-21	03-Feb-22
Punch List for Segment 2 (Note 2)		11-Jan-22	8-Feb-22	16-Nov-22	15-Dec-22
Project Close-Out:		9-Feb-22	30-Dec-22	16-Dec-22	06-Nov-23

2/5/2020

**NOTES:**

- (1) AFC approval process for EAIP has been delayed because of it's dependency on AFC plans for Regional Connector, Div 20, and other overlapping projects.
- (2) Start of construction for Segment 2 is projected based on completion of Regional Connector construction in April 2022
- (3) It is anticipated that Punch list for individual segments will be completed immediately after construction completion of each segment

# Eastside Access Improvements Risk Register

Score	Low (1)	Med (2)	High (3)	Very High (4)	Significant (5)	Risk Score P*(C+T)/2
Probability (P)	< 10%	10-50%	50-70%	75-90%	> 90%	>= 3
Cost Impact (C)	< \$250K	\$250K - \$1M	\$1 - 3M	\$3 - 10M	> \$10M	3 - 10
Time Impact (T)	< 1 Mth	1 - 3 Mths	3 - 6 Mths	6 - 12 Mths	> 12 Mths	<= 3

## Risk Register by SCC

Eastside Access Improvements Project

Register Version: Sept 2019

Risk ID	Risk Description	Identification				Assessment				Management			Most Recent Comments	
		SCC	Status	Risk Category	Prob.	Cost	Time	Risk Score	Mitigation Strategy	Risk Owner	Action Items	Action by Date	Review Comments	
ESIP-001	Initial Grant Budget shortfall due to forecasted cost increase	00	Active		3	4	1	12	Mitigate	Metro	1. Make to identify additional funding sources for Board approval 2. Finalize funding sources based on LOP	1. 04/15/2020 2. 11/01/2020	7/8/2019 - Full action on additional funding will not be taken until the scoring in late Fall 2020 9/29/2019 - Action by Date 1, modified 10/29/2019 - Estimate will be determined after 100% plans and bids are received 11/20/2019 - 100% plans expected to be ready by beginning Q2. Cost will be finalized after plans are complete	
ESIP-002	RCC Change Order could exceed allocated budget	00	Active		4	2	1	8	Mitigate	Metro	1. EAP to coordinate with RC prior to confirming the bid	1. 04/30/2020	5/7/2019 - Awaiting contractor response on CM 7/8/2019 - Still awaiting contractor response 10/29/2019 - RCC will not submit proposal until after 100% plans are complete 11/20/2019 - Action Date modified	
ESIP-008	Segment 2 Construction delays could extend the project schedule	10	Active		5	2	3	15	Mitigate	Metro	1. PM to coordinate with RC on Project process	1. Ongoing	7/8/2019 - Construction start will be April 22 8/29/2019 - Risk Description modified. Project to confirm with FTA what will occur if the \$11M TIGER Grant is unspent by 09/2021 10/28/2019 - OST will determine what happens to unspent funds, not FTA 11/20/2019 - FTA funds will be partly used for Segment 2 ductbank relocation expected in March-July 2020	
ESIP-009	Metro procurement process for construction could delay contract award	00	Active		7	1	2	9	Mitigate	Metro	1. Metro to finalize scope and technical specification	1. 04/30/2020	5/21/2019 - Process for requalification initiated as of 5/20. This will trigger assignments of CA. 7/8/2019 - Action Date added 10/29/2019 - PM to assign Henry CA and planning to begin procurement process in all areas 11/20/2019 - Preparation for procurement process is advancing Metro project team in process of preparing procurement documentation. Technical specifications are complete and under COLA review. New Action and Date added.	
ESIP-011	Unanticipated utility work could delay project and increase cost	40	Active		4	1	2	6	Accept	Metro	1. Revert design during construction	1. 04/30/2020	7/8/2019 - Full impact to be determined at start of construction in August 2021 8/29/2019 - Most of the unforeseen utilities are expected in Segment 2. Project will be postponed. 10/8/2019 - Postponing still planned for all required areas throughout the entire project 11/20/2019 - Ductbank relocation addressed in Risk ESIP-005 Ductbank relocation expected in March-July 2020	
ESIP-015	Lack of bidders delays project and increases cost	00	Active		3	3	3	9	Mitigate	Metro			12/25/2018 - Construction outreach workshop will be conducted upon completion of 100% design plans to gauge the responses from the contractors 5/7/2019 - Contact with four potential bidders 11/20/2019 - After plans are complete Metro may conduct construction estimates	
ESIP-016	COLA requirements may add additional scope	00	Active		2	3	2	5	Mitigate	Metro	1. Elevate situation to senior management when necessary 2. Conduct over the shoulder reviews with COLA	1. Ongoing 2. Ongoing	7/8/2019 - Metro Senior Management and COLA Senior Management working to resolve. Scope determination will be confirmed upon AFC approval 8/29/2019 - Metro Senior Management and COLA Senior Management met over at trees. Resolution is in the works with proposal for Metro to only maintain bioswales in perpetuity and the trees for three (3) year period of landscape establishment. 10/29/2019 - Process aligning with COLA, no additional scope changes from COLA are anticipated 11/20/2019 - Scope finally established	
ESIP-017	Reevaluation of O&M responsibility with COLA for the Alameda easement could result in delay of the project or rejection of final plans (AFC) by COLA	40	Closed		2	3	2	5	Mitigate	Metro			7/8/2019 - Metro Senior Management and COLA Senior Management working to resolve 8/29/2019 - Metro Senior Management and COLA Senior Management met several times. Resolution is in the works. This issue has been deleted from plan approval. All property will be transferred to City. Probability decreased from 4 to 2. Cost decreased from 3 to 1. Time decreased from 4 to 2. 10/29/2019 - Hearing completion of negotiation with COLA on O&M responsibility 11/20/2019 - Risk to be closed. BOE and Metro has signed agreed concerning O&M responsibility	
ESIP-018	Delay in plan approval by COLA due to requirement for prior design approval of easement (RC and Div 20) projects	00	Active		2	2	3	5	Mitigate	Metro	1. Work closely with overlapping project teams	1. Ongoing	7/14/2019 - Probability increased from 3 to 5 8/29/2019 - Metro Senior Management and COLA Senior Management met several times. Metro proposal to City will be to approve EAP over-let test and Bypass RC and Div 20 components approved as additions 10/29/2019 - Hearing completion of design review with COLA. Probability decreased from 5 to 3. Mitigation Strategy moved from Accept to Mitigate 11/20/2019 - Metro submitted Pre-AFC plans on December 27, 2019. Approval process is progressing	
ESIP-019	Third party involvement (i.e. LA Com Admin) could increase costs and delay construction acceptance	00	Active		3	2	3	6	Mitigate	Metro	1. Monitor once construction begins	1. 07/01/2020	6/20/2019 - Risk added 10/29/2019 - Risk Description clarified to include LA Construction Administration	
ESIP-020	Project may not be able to utilize all TIGER Grant Funds prior to 09/2021	10	Active		5	4	1	19	Mitigate	Metro	1. Metro get approval from OST to bill design costs against TIGER Grant	1. 04/30/2020	10/28/2019 - Risk added 11/20/2019 - FTA funds will be partly used for Segment 2 ductbank relocation expected in March-July 2020. Metro prepared initial projections of cash flow. Action Date modified	

# Eastside Access Improvements

## Current Quarter Update

### **Major Activities During Last Quarter (Jan '20 – Mar'20)**

#### **Design Development**

- Incorporate City Comments on Pre-AFC Plans and Update AFC plans for submittal
- Resolution Meetings with City Bureaus
- R-Permit Applications submitted

#### **Other activities:**

- Coordinate with Overlapping Projects

# Eastside Access Improvements

## Activities for Next Quarter

### Major Activities Planned During January '20 to March '20

#### Design Development

- Pre-AFC Plans comments resolution and approval
- Coordinate with overlapping projects to prepare AFC plans
- Complete Approved For Construction (AFC) Plans

#### Other:

- Meet with City of Los Angeles (COLA) officials and Community leaders
- Meet with Department of Water & Power (DWP) for Power and Water design
- Real Estate and Maintenance Responsibilities agreements with COLA
- Meet with Local Community leaders

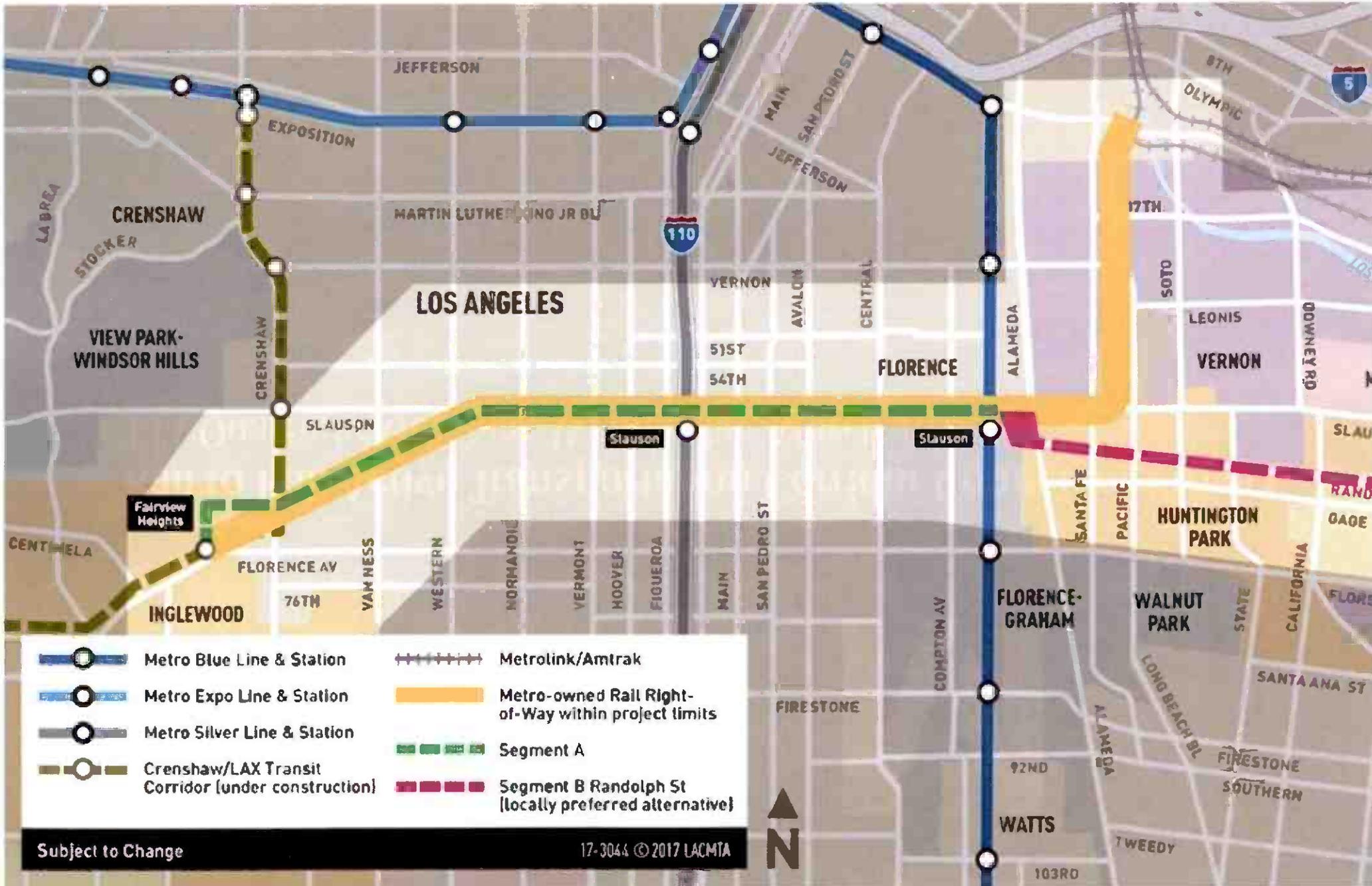


**Rail to Rail Active Transportation Corridor Connector Project**  
FTA Quarterly Meeting - Wednesday, March 4, 2020



**Metro**

# Rail to Rail Active Transportation Corridor Connect

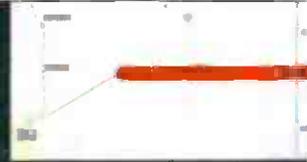


# **RAIL TO RAIL ACTIVE TRANSPORTATION CORRIDOR CONNECTOR PROJECT**

## **Project Information Summary**

- **Active Transportation Corridor (ATC) connects Fairview Height Station and Blue Line Station**
- **The overall Length is approximately 5.6 miles including Metro Right of way and City/County Intersections**
- **Demolition/Removal of abandoned Harbor Subdivision tracks and appurtenance, and UPRR Track Modifications**
- **Soil Treatment**
- **ATC consists of 2-way Class I, II, and III Bike Paths and Pedestrian Walkway**
- **Amenities include: Landscaping, Trees, Lights, Security Cameras, Street Furniture, Mixing Zones, and way-Finding Signage**
- **Modifications to City/County owned Intersections typically include crosswalks, striping, curb and curb corner treatment, signage, street light and signal modifications, etc. as required**

# Slauson Corridor Design Concept



## Mid-block Concept (Typical 30' ROW)

- Asphalt paved walkway and 2-way bike path
- Lighting (spaced every 60')
- Fencing at ROW edge where needed (Metro standard panelized)
- Furnishings & signage
- Bioswales for stormwater run-off treatment with low fencing at edge
- Shade trees
- Diversity of trees/plant species
- Boulders and low, drought tolerant landscape in street buffer



Existing photo of Slauson west of San Pedro (Note: Metro ROW ends 10' from building face in ballast area)



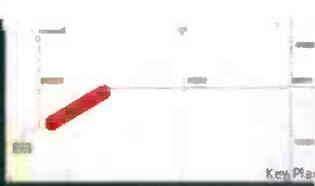
Examples of bioswale on pedestrian path (Woodman Ave) and between bikeway & thoroughfare (Queens Plaza Bikeway, NY)



Metro LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY  
ACTIVE TRANSPORTATION RAIL TO RIVER CORRIDOR – SEGMENT A

CITYWORKS DESIGN TEAM  
| TYP - 1

# Hyde Park / Chesterfield Square Segment



## Mid-block Concept (Typical 30' ROW)

This design concept focuses on safety/security concerns between Slauson and 11th Avenues where private properties abut Metro's ROW. Given the narrow ROW, the walk and bike paths are separated with a stormwater treatment median (bioswale). The layout addresses visibility concerns by limiting trees, and discourages encampments by minimizing landscaped areas. The separated walk and bike paths would meet at regular intervals. Features include:

- Asphalt paved walkway and bike path
- Lighting (spaced every 75') with ability to integrate cameras and emergency telephones on pole
- Fencing at ROW edge where needed (Metro standard panelized)
- Trees at access points
- Low, drought tolerant plants and decomposed granite
- Drain to center buffer with bioswale
- Vines where appropriate (not in front of murals)

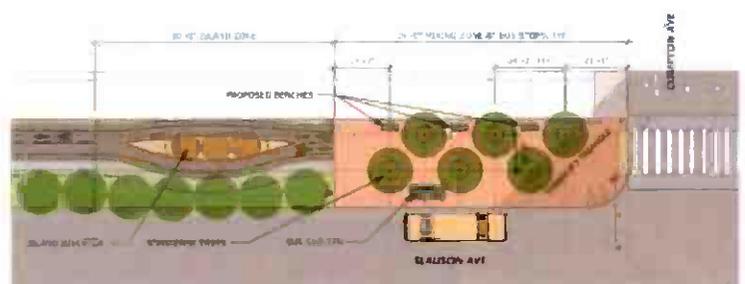


Before photo of Metro ROW at Hyde Park / Chesterfield Square segment



# Mixing Zones

## Slauson Corridor Concept at Bus Stop



Concept plan at bus stop mixing zones



Existing photo of Slauson/Compton intersection



Example of diverter planted with drought tolerant flax



Example of street bond graphic (Auckland, NZ)

# **RAIL TO RAIL ACTIVE TRANSPORTATION CORRIDOR CONNECTOR PROJECT**

## **Projected Milestones**

### **D-B-B Project Delivery:**

- AFC Design: July 2020**
- Procurement Complete: May 2021**
- NTP to Contractor: July 2021**
- Construction Start: August 2021**
- Substantial Completion: February 2024**
- Project Close-Out: September 2024**

# **RAIL TO RAIL ACTIVE TRANSPORTATION CORRIDOR CONNECTOR PROJECT**

## **October – December 2019 Key Activities**

- **Advance Design on Metro right of way to 95% level**
- **Advance Design on City and County right of way to 90% level**
- **Advance southside curb improvement Design to 90%**
- **Likely to eliminate “Raised Crosswalk” per COLA discussions**
- **Terms of BNSF Agreement finalized**
- **Soil Treatment Contractor Scope of Work under development**
- **Coordination with Metro Real Estate Department ongoing**

# RAIL TO RAIL ACTIVE TRANSPORTATION CORRIDOR CONNECTOR PROJECT

## Funding and ROM Budget

### Funding:

• TIGER:	\$15,000,000
• ATP:	\$8,326,000
• SB848 Grant:	\$8,000,000
• Local:	\$30,800,000 (*)
<b>Total Funding:</b>	<b><u>\$62,126,000</u></b>

### ROM LOP Budget:

• Consultants:	\$7,000,000
• Soft Costs:	\$26,000,000
• Soil Treatment:	\$10,000,000
• Construction:	\$87,925,000(**)
• Contingency:	\$8,792,500
<b><u>Projected LOP Total:</u></b>	<b><u>\$139,717,500</u></b>

*(\*) Local Contribution Amount to be increased based on the LOP estimate*

*(\*\*) Based on 90% Design, Estimate to be completed based on Approved For Construction (AFC) plans*



Thank you



Metro

# Division 20 Portal Widening and Turnback Facility

FTA Project Briefing



# Project Introduction

To Union Station

Safety: 405 days without Lost Time Incident

Project includes: early demolition and utility work, widening of the heavy rail tunnel portal south of the US-101 freeway, new turnback tracks and expansion/reconfiguration of train car storage tracks to improve service at Union Station and throughout the Metro Red/Purple Line system.

Major scope elements:

- Complete building demolition
- Red/Purple Line Portal Widening and Reconstruction
- Installation of underground conduits and manhole structures
- Earthwork/Grading, Paving, Soil Stockpiling, hauling
- Special Trackwork & Storage Track/Rail installation
- Structural/Bridge work

# Funding and Procurement:

## Uses of Funds

- Construction and Real Estate (Real Estate 12.7%) 77.3%
- Professional Services 11.0%
- Contingency 11.7%

## Sources of Funds

- TIRCP \$69.2 m 08.6%
  - SB1 \$50.0 m 06.2%
  - Measure R \$682.6 m 85.1%
- Total \$801.8 m

## Procurement

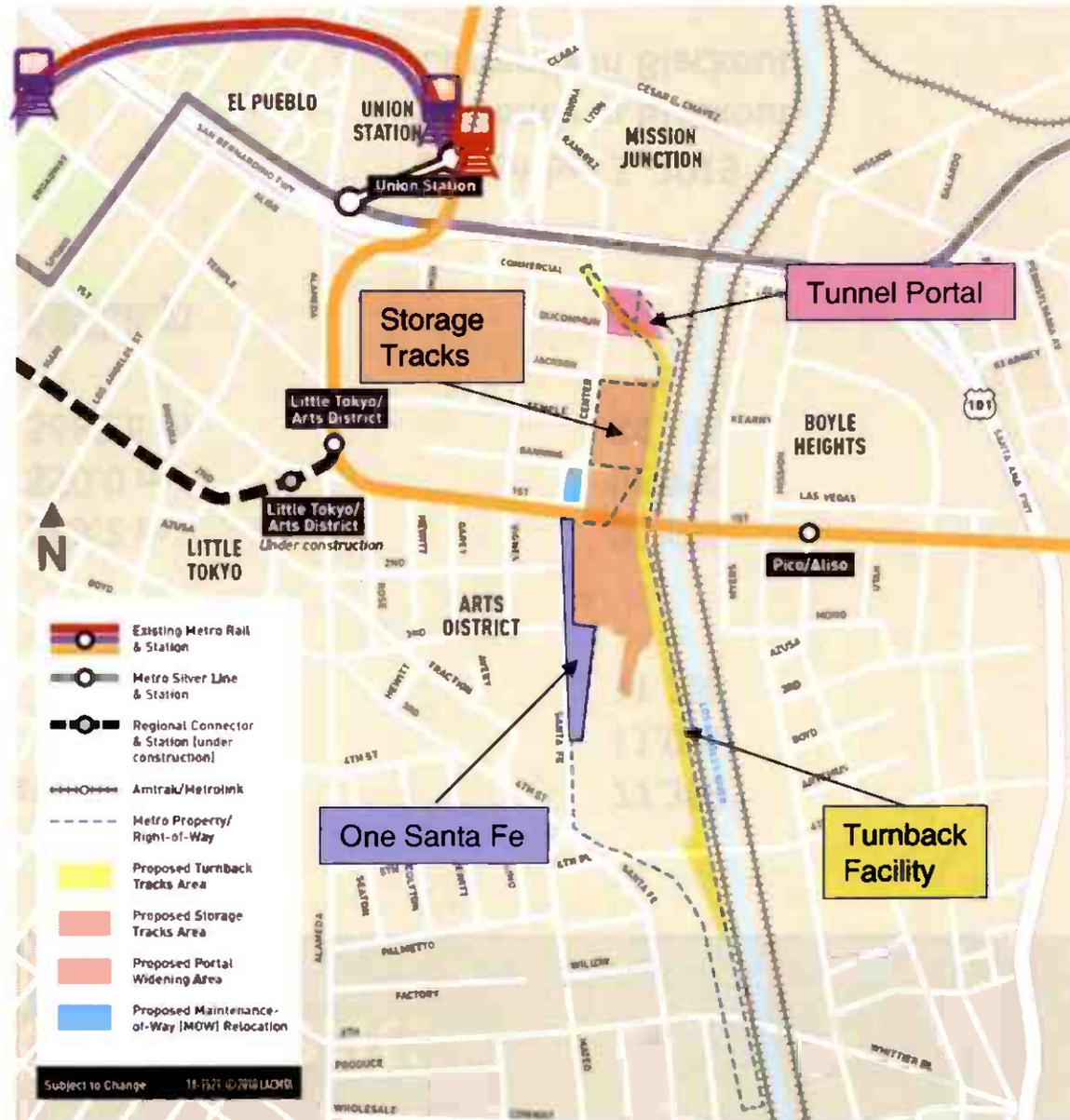
- Board LOP Decision December 5, 2019
- Award Currently in Blackout
- Notice to Proceed Currently in Blackout



**Metro**

# Major Activities During Reporting Period

- C1180: Early Demolition
- C1184: Procurement of TPSS Station and Emergency Power Generator
- C1193: Installation of Ductbanks and Demolition of Building 61A
- C1136: Portal Widening and Turnback



Exact location of turnback tracks and storage tracks to be determined.

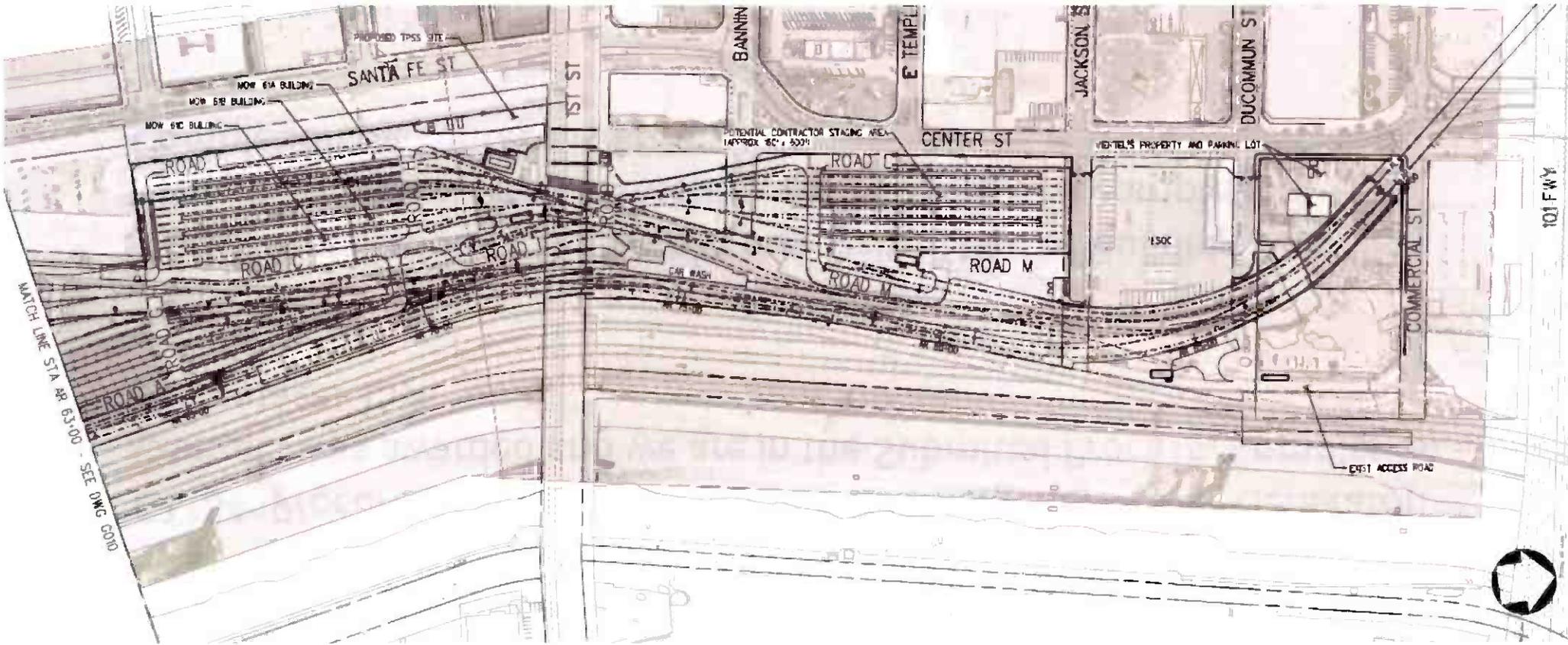
# What has happened so far

- C1180: Early Demolition: Major demolition of the ADCO, Viertel and Pickle Works Sites is complete
- C1184: Procurement of TPSS Station and Emergency Power Generator: Contract was awarded and we are in the Submittal Process. Completion percentage: 15%
- C1193: Installation of Ductbanks and Demolition of Building 61A: Advancing several lines (demolition of Building 61A complete). Completion percentage is 80%
- C1136: Portal Widening and Turnback: Metro received bids and the contract is scheduled for NTP early 2020



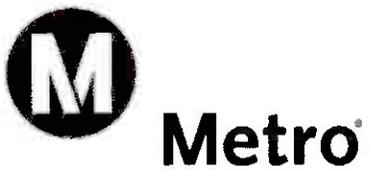
**Metro**

# Partial Plan View C1136:



**Metro**

# C1180 Abatement, Demolition, & Site Clearing<sup>®</sup>



# C1180 Abatement, Demolition, & Site Clearing



Metro

# Project Top Risks

- Unknown Conditions and Underground Utilities
- Coordination with Active Rail Yard
- Multiple Cutovers throughout Project
- Adjacent Projects Coordination
- DWP – Power – scheduling crews for power drop
- Procurement of Long Lead Items:
  - Very Large TPSS Station
  - 60+ turnouts
  - Continuous Welded Rail
  - Signal Materials

# Anticipated Activities for Next Reporting Period

## First Quarter 2020

- Mobilization of C1136 Contractor
- Continue the procurement of the TPSS and Emergency Generator
- Completion of Early Ductbanks



Exact location of turnback tracks and storage tracks to be determined.

# Construction Progress Photos



**Metro**

# Project Website

## Division 20 Portal Widening & Turnback Facility Project

[Overview](#) [Project Timeline](#) [Project Map](#) [Construction Notices](#) [The Source](#)

For construction-related inquiries and complaints, please call 213.922.1111 or email [div20portalwidening@metro.net](mailto:div20portalwidening@metro.net)

[Sign up to receive email alerts on upcoming construction activities](#)

### Construction Notices

Get construction updates on [Twitter](#)

Start Date	Notice Brief	More Info
06/18/2019	<b>Construction Staging Activities on Center St</b> Area: 1001 E. 1st St. on Center St, south of Banning St Beginning June 18, 2019, Metro Contractors will begin utilizing the site of the former Citizens Warehouse/Lysle Storage Company Building, located on Center St, south of Banning St as a temporary parking area. The temporary parking area will be used to store construction vehicles during ongoing project construction efforts	<a href="#">HTML</a> <a href="#">PDF</a>
02/19/2019	<b>Division 20 Portal Widening and Turnback Facility Project: Abatement and Demolition of Structures, Arts District</b> Area: On Center St between Commercial St. and Ducommun St. Metro Contractors will begin abatement and demolition activities at the Viertel's Central Division Facility, located at 500 N. Center St between Commercial St and Ducommun St.	<a href="#">HTML</a> <a href="#">PDF</a>

#### Stay Connected

Receive email alerts and follow us on the web.



#### Contact Us

Project Hotline: [213.922.1111](tel:2139221111)

Project Email:

[div20portalwidening@metro.net](mailto:div20portalwidening@metro.net)

Michael Cortez, Manager of Community Relations

213-418-3423

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# P3010 Light Rail Vehicle Acquisition FTA/PMOC Quarterly – January 2020



Reporting Month: October 2019-December 2019  
Presentation Date: January 2020

# Key Project Issues

“The intermittent unreliability of the vehicle on-board communication systems has not yet been resolved. Kinkisharyo (KI) has begun the redesign of the system using a new communication system vendor. The current forecast indicates the redesign completion with qualification test by January 2020. Once the new solution is validated and qualified, fleet-wide implementation of the new communication system would begin. As a result, no P3010 vehicles as of today, have received Final Acceptance status.

Understanding the criticality of the need, though the system does not have any safety impacts, several Service Bulletins have been issued to Metro’s Operations in the effort to mitigate potential disruption to passengers during revenue service. Our team continue to monitor the re-design progress with KI and TOA and keep our customers informed.

# Project Updates

- The resume of vehicle delivery (of the last 50 cars) was agreed once the identified open engineering items are resolved and the last 50 cars can be shipped in final configuration.
- 0 Cars shipped for revenue service during the reporting period; 185 Cars shipped total as of the end of the reporting period.
- 3 Cars shipped to Metro facilities for storage purposes; 13 Cars total shipped for storage purposes.
- 0 Cars Conditionally Accepted; 185 Cars Conditionally Accepted total.
- 47 Cars in Revenue Service at the Gold/Foothill Extension Line; 138 Cars in Expo, Blue, Green Lines.
- Car 1235 is the latest Car in the Final Assembly line.

# Project Cost Status (Base Order)

DOLLARS IN THOUSANDS

DESCRIPTION	APPROVED BUDGET	CURRENT BUDGET	COMMITMENTS	EXPENDITURES	FORECAST TO COMPLETION	VARIANCE
BASE ORDER - 78 LRV'S	\$263,211,780.00	\$263,211,780.00	\$263,211,780.00	\$243,960,100.00	\$19,251,680.00	\$0.00
SPARE PARTS	\$19,911,594.00	\$19,911,594.00	\$19,911,594.00	\$18,095,991.00	\$1,815,603.00	\$0.00
SPECIAL TOOLS	\$819,258.00	\$819,258.00	\$819,258.00	\$0.00	\$819,258.00	\$0.00
DIAGNOSTIC TEST EQUIPMENT	\$2,683,041.00	\$2,683,041.00	\$2,683,041.00	\$0.00	\$2,683,041.00	\$0.00
TRAINING	\$1,366,776.00	\$1,366,776.00	\$1,366,776.00	\$129,844.00	\$1,236,932.00	\$0.00
MANUALS	\$675,512.00	\$675,512.00	\$675,512.00	\$0.000	\$675,512.00	\$0.00
PERFORMANCE BOND	\$8,714,500.00	\$8,714,500.00	\$8,714,500.00	\$8,714,500.00	\$0.00	\$0.00
ON-SITE ENGINEER	\$1,679,366.00	\$1,679,366.00	\$1,679,366.00	\$1,595,398.00	\$83,968.00	\$0.00
<b>VEHICLE SUB-TOTAL</b>	<b>\$299,061,827.00</b>	<b>\$299,061,827.00</b>	<b>\$299,061,827.00</b>	<b>\$272,495,834.00</b>	<b>\$26,565,993.00</b>	<b>\$0.00</b>
<b>APPROVED MODIFICATIONS SUB-TOTAL</b>	<b>\$5,373,918.00</b>	<b>\$7,055,343.00</b>	<b>\$7,055,343.00</b>	<b>\$7,055,343.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>CONTINGENCY SUB-TOTAL</b>	<b>\$10,704,091.00</b>	<b>\$9,022,666.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$9,022,666.00</b>	<b>\$0.00</b>
<b>VEHICLE TOTAL</b>	<b>\$315,139,836.00</b>	<b>\$315,139,836.00</b>	<b>\$306,117,170.00</b>	<b>\$279,551,177.00</b>	<b>\$35,588,659.00</b>	<b>\$0.00</b>
<b>PROFESSIONAL SERVICES (ELEMENT A)</b>	<b>\$21,208,749.00</b>	<b>\$21,208,749.00</b>	<b>\$21,208,749.00</b>	<b>\$20,154,387.00</b>	<b>\$1,054,362.00</b>	<b>\$0.00</b>
<b>PROFESSIONAL SERVICES (ELEMENT B)</b>	<b>\$8,378,885.00</b>	<b>\$8,378,885.00</b>	<b>\$8,378,885.00</b>	<b>\$4,195,982.00</b>	<b>\$4,182,903.00</b>	<b>\$0.00</b>
<b>PROFESSIONAL SERVICES SUB-TOTAL</b>	<b>\$29,587,634.00</b>	<b>\$29,587,634.00</b>	<b>\$29,587,634.00</b>	<b>\$24,350,369.00</b>	<b>\$5,237,265.00</b>	<b>\$0.00</b>

Notes:

- The MTA Administration Budget of \$5,886,472.00 is not included in the chart above.
- P3010 Life Of Project (LOP) TOTAL (Base Buy, Options #1 & #4 and Options #2 & #3, and MTA Administration budget) is \$972 Million

Reporting Month: October 2019 – December 2019

Presentation Date: January 2020

# Project Cost Status (Options #1 and #4)

DOLLARS IN THOUSANDS

DESCRIPTION	APPROVED BUDGET	CURRENT BUDGET	COMMITMENTS	EXPENDITURES	FORECAST TO COMPLETION	VARIANCE
Options 1 & 4 - 97 LRVs	\$323,798,891.00	\$323,798,891.00	\$323,798,891.00	\$307,631,472.00	\$16,167,419.00	\$0.00
SPARE PARTS	\$27,332,000.00	\$27,332,000.00	\$27,332,000.00	\$16,365,374.00	\$10,966,626.00	\$0.00
SPECIAL TOOLS	\$943,789.00	\$943,789.00	\$943,789.00	\$0.00	\$943,789.00	\$0.00
DIAGNOSTIC TEST EQUIPMENT	\$2,080,181.00	\$2,080,181.00	\$2,080,181.00	\$0.00	\$2,080,181.00	\$0.00
TRAINING	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MANUALS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PERFORMANCE BOND	\$12,166,783.00	\$12,166,783.00	\$12,166,783.00	\$12,166,783.00	\$0.00	\$0.00
ON-SITE ENGINEER	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>VEHICLE SUB-TOTAL</b>	<b>\$366,321,644.00</b>	<b>\$366,321,644.00</b>	<b>\$366,321,644.00</b>	<b>\$336,163,628.00</b>	<b>\$30,158,016.00</b>	<b>\$0.00</b>
<b>CONTINGENCY SUB-TOTAL</b>	<b>\$18,604,375.00</b>	<b>\$18,604,375.00</b>	<b>\$13,655,283.00</b>	<b>\$13,655,283.00</b>	<b>\$4,949,092.00</b>	<b>\$0.00</b>
<b>VEHICLE TOTAL</b>	<b>\$384,926,019.00</b>	<b>\$384,926,019.00</b>	<b>\$379,976,927.00</b>	<b>\$349,818,911.00</b>	<b>\$35,107,108.00</b>	<b>\$0.00</b>

Notes:

- The MTA Administration Budget of \$3,048,674.00 is not included in the chart above.
- P3010 Life Of Project (LOP) TOTAL (Base Buy, Options #1 & #4 and Options #2 & #3, and MTA Administration Budget) is \$972 Million

Reporting Month: October 2019 – December 2019

Presentation Date: January 2020

# Project Cost Status (Options #2 and #3)

DOLLARS IN THOUSANDS

DESCRIPTION	APPROVED BUDGET	CURRENT BUDGET	COMMITMENTS	EXPENDITURES	FORECAST TO COMPLETION	VARIANCE
Options 2 & 3 - 60 LRVs	\$214,370,374.00	\$211,235,977.00	\$211,235,977.00	\$86,902,242.00	\$124,333,735.00	\$0.00
SPARE PARTS	\$15,821,024.00	\$15,589,699.00	\$15,589,699.00	\$3,745,191.00	\$11,844,508.00	\$0.00
SPECIAL TOOLS	\$389,435.00	\$383,740.00	\$383,740.00	\$0.00	\$383,740.00	\$0.00
DIAGNOSTIC TEST EQUIPMENT	\$1,416,049.00	\$1,395,344.00	\$1,395,344.00	\$0.00	\$1,395,344.00	\$0.00
TRAINING	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MANUALS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PERFORMANCE BOND	\$7,921,238.00	\$3,418,462.00	\$3,418,462.00	\$0.00	\$3,418,462.00	\$0.00
ON-SITE ENGINEER	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>VEHICLE SUB-TOTAL</b>	<b>\$239,918,120.00</b>	<b>\$232,023,222.00</b>	<b>\$232,023,222.00</b>	<b>\$90,647,433.00</b>	<b>\$141,375,789.00</b>	<b>\$0.00</b>
<b>CONTINGENCY SUB-TOTAL</b>	<b>\$15,869,912.00</b>	<b>\$23,764,810.00</b>	<b>\$4,279,654.00</b>	<b>\$4,279,654.00</b>	<b>\$19,485,156.00</b>	<b>\$0.00</b>
<b>VEHICLE TOTAL</b>	<b>\$255,788,032.00</b>	<b>\$255,788,032.00</b>	<b>\$236,302,876.00</b>	<b>\$94,927,087.00</b>	<b>\$160,860,945.00</b>	<b>\$0.00</b>

Notes:

- The MTA Administration Budget of \$7,211,968.00 is not included in the chart above.
- P3010 Life Of Project (LOP) TOTAL (Base Buy, Options #1 & #4 and Options #2 & #3, and MTA Administration) is \$972 Million

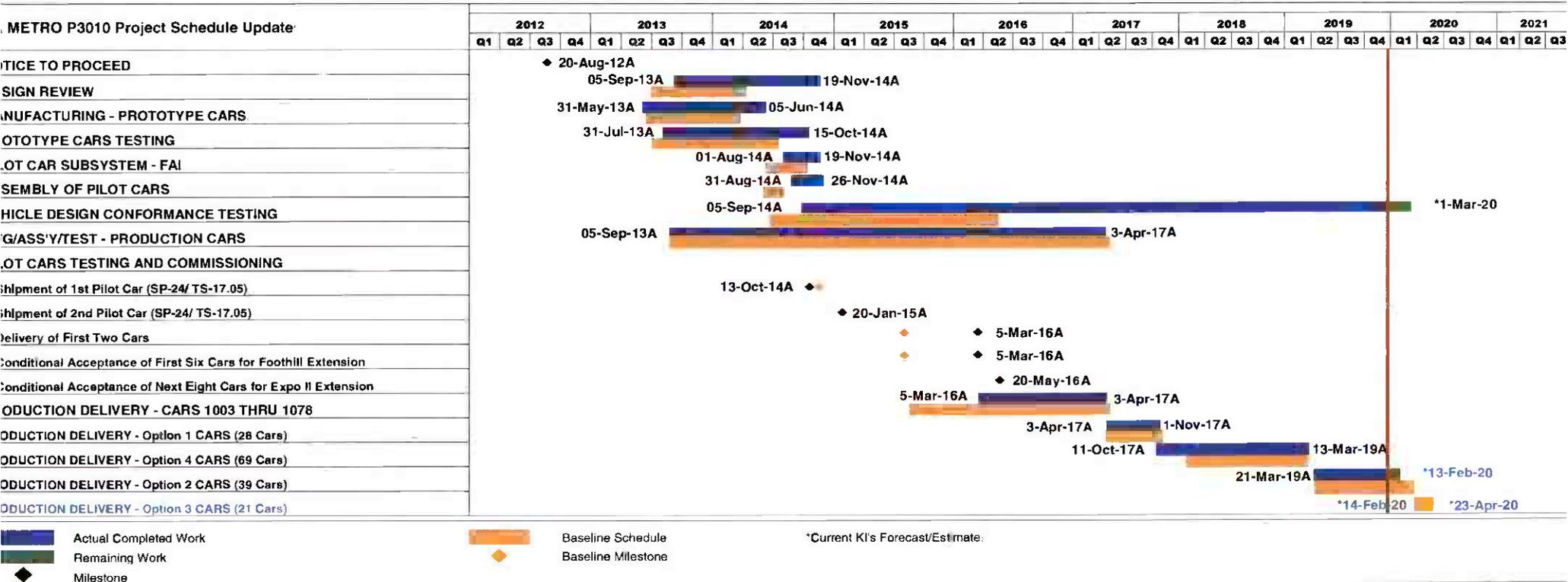
# Budget Contingency Drawdown

PROJECT COST CONTINGENCY (through December 2019)			
UNITS IN DOLLARS			
Orders	Current Contingency (Budget)	Allocated To-Date (Forecast)	Remaining Contingency (Forecast)
Base Order	\$16,078,009.00	\$7,055,343.00	\$9,022,666.00
Options 1 and 4	\$18,604,375.00	\$13,655,283.00	\$4,949,092.00
Options 2 and 3	\$23,764,810.00	\$4,279,654.00	\$19,485,156.00
<b>Total Contingency</b>	<b>\$58,447,194.00</b>	<b>\$24,990,280.00</b>	<b>\$33,456,914.00</b>

# Summary Schedule

P3010 Light Rail Vehicle Acquisition Program  
Monthly Project Status Report

December 2019



# Top Risks & Mitigations

Risk ID	Risk Description	Risk Score	Risk Mitigation
03	<b>Aggressive Schedule</b> - Overly aggressive project schedule may potentially become impossible for both Metro and KI to implement.	12	<ol style="list-style-type: none"> <li>1. Maintain master integrated schedule to identify interfacing capital projects.</li> <li>2. Stagger project implementation schedule (i.e. avoid overlap of procurement cycles).</li> <li>3. Identify activities that can be fast-tracked.</li> </ol>
12	<b>Systems integration</b> is critical to a smooth testing program.	11	Metro to closely monitor KI's approach and implementation of the systems integration including the communication systems.
02	<b>Design Conformance Testing (DCT)</b> - DCT is performed on Metro's property prior to vehicle acceptance and could take longer than expected due to mainline test track availability.	9	<ol style="list-style-type: none"> <li>1. Perform early coordination with Operations and Planning on the test logistics and yard/track/Operator needs.</li> <li>2. Develop contingency plans to continue performing mainline test at alternative yards.</li> <li>3. Monitor and anticipate mainline test track availability.</li> </ol>
01	<b>Final Assembly Site</b> – Potential workforce challenges including not being able to obtain/maintain qualified personnel to perform quality work within aggressive FA schedule.	9	<ol style="list-style-type: none"> <li>1. Perform early training on acquired staffs, clearly define working expectations, and allocate time for corrective actions.</li> <li>2. Identify potential open items, establish/maintain quality verification process and standards, allocate staffs to mitigate potential schedule slippage due to re-works and re-tests.</li> <li>3. KI to provide plans to grow and retain current staffs as well as incentives for attracting new qualifying staffs.</li> </ol>
04	<b>Contract Modification Process</b> – Changes initiated by either party during design review, assembly, commissioning and warranty could potentially cause delay or claims.	8	<ol style="list-style-type: none"> <li>1. Anticipate, identify and define potentially essential “Needs” and “Wants” in the early stages of the project phase.</li> <li>2. Engage customers and stakeholders for early discussions.</li> <li>3. Obtain swift concurrence on the “Needs” based on safety, maintainability, and reliability requirements.</li> </ol>

# Questions

# HR4000 Heavy Rail Vehicle Procurement

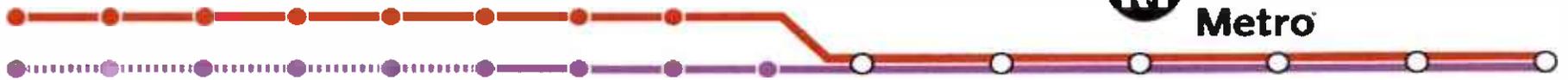


Los Angeles County  
Metropolitan Transportation Authority

Metro



FTA Quarterly Meeting Review  
March 4, 2020



## PROJECT STATUS (ACTIVITIES FOR REPORTING PERIOD)

### —First Article Inspections (FAIs)

- We are currently conducting FAIs on all suppliers.

### —Final Configuration Review (FCR)

- This final design review phase will start in December 2019 through Summer 2020.



# PROJECT BUDGET

DESCRIPTION	ORIGINAL PROJECT BUDGET	CURRENT PROJECT BUDGET	EXPENDITURES (ITD)	CURRENT PROJECT FORECAST (CONTRACT MODIFICATIONS)	PROJECT FORECAST
BASE ORDER 64 VEHICLES	\$178,395,869	\$178,395,869	\$31,866,634	\$435,202	\$178,831,071
PROFESSIONAL SERVICES	\$20,938,375	\$20,938,375	\$14,494,862	\$0	\$20,938,375
MTA ADMINISTRATION	\$11,960,055	\$11,960,055	\$3,296,228	\$0	\$11,960,055
<b>VEHICLE SUBTOTAL</b>	<b>\$211,294,299</b>	<b>\$211,294,299</b>	<b>\$49,657,725</b>		<b>\$211,294,299</b>
CONTINGENCY	\$21,926,767	\$21,926,767	\$0	\$423,615	\$21,503,152
<b>TOTAL PROJECT</b>	<b>\$233,221,066</b>	<b>\$233,221,066</b>	<b>\$49,657,725</b>	<b>\$423,615</b>	<b>\$232,797,451</b>



**Metro**

## CHANGE ORDER IN-PROCESS

Metro Requested Changes	Status	Credit to CRRC
Addition of Low Beam	In-Process	\$106,487.45
FMSS Increased Cost	Executed	\$236,028.00
FMSS Spare Parts	In-Process	\$81,039.00
FMSS Specials Tools	In-Process	\$16,038.00
Stanchion Additions and Flip Seat Conversion	In-Process	\$434,219.00
AT 13-02 Advanced Passenger Counting	In-Process	\$268,971.00
<b>Total</b>		<b>\$1,142,782.45</b>
CRRC Requested Changes	Status	Credit to Metro
Fuse vs HSCB/APE	In-Process	\$286,375.38
Single Sided Interior Announcement Sign	In-Process	\$134,226.96
Leveling Valves	In-Process	\$286,978.00
<b>Total</b>		<b>\$707,580.34</b>
	<b>Variance</b>	<b>\$435,202.11</b>



## PROJECT SCOPE

— Base Order of 64 new HRVs:

- 34 HRVs to support the Purple Line Extension (PLE), Section 1
- 30 HRVs for A650 Base Buy fleet replacement.
- The Total Project Budget is \$233 million, excluding five Options.

— Options:

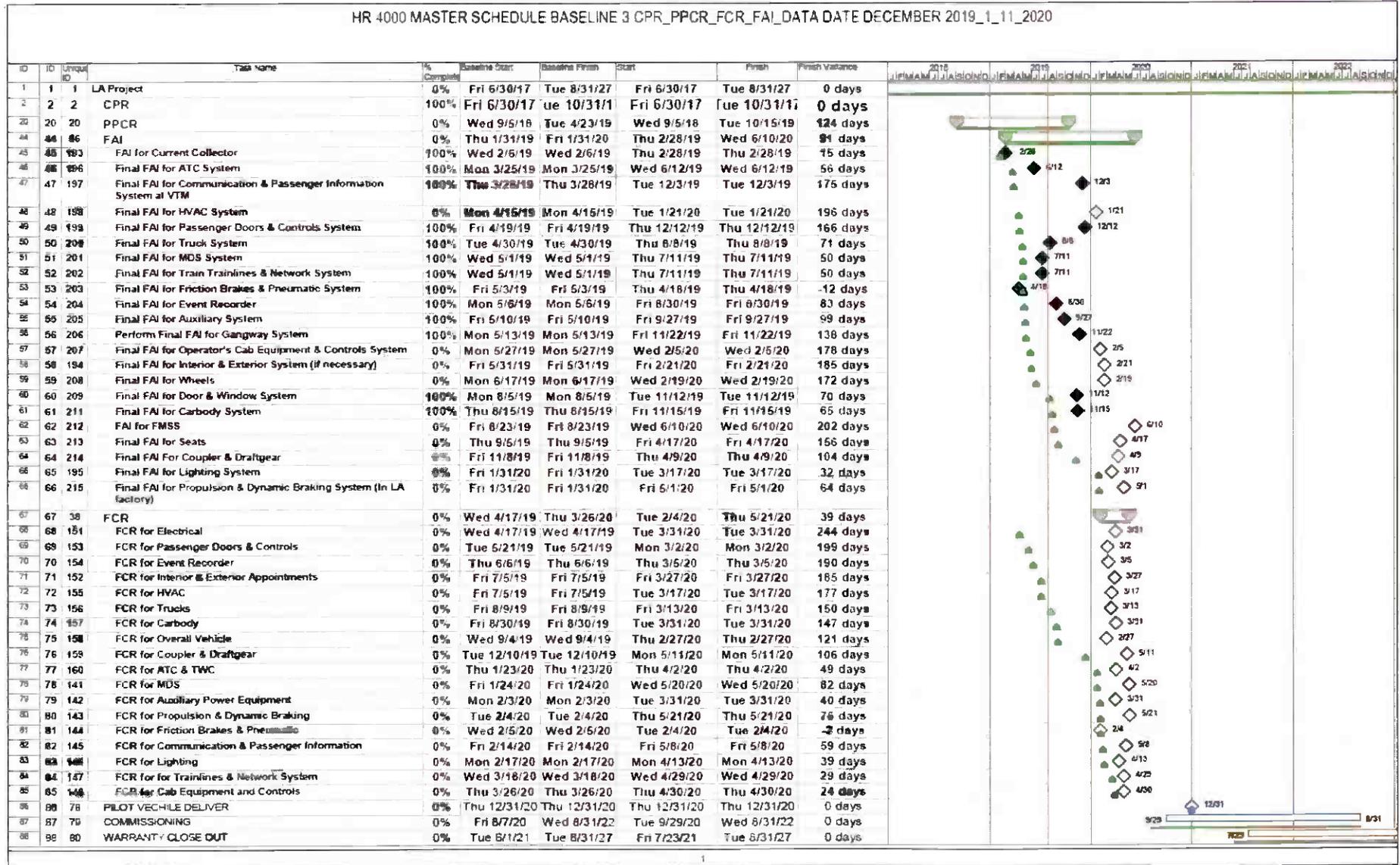
- Option 1 (24 HRVs) and Option 2 (84 HRVs) to support fleet and service expansion
- Option 3 (20 HRVs) to support the Purple Line Extension (PLE), Section 2
- Option 4 (16 HRVs) to support the Purple Line Extension (PLE), Section 3
- Option 5 (74 HRVs) for the A650 Option Buy fleet replacement

— Metro does not intend to exercise any Options until we are confident in the Contractor being able to deliver a safe, reliable and performing vehicle.



# MASTER PROJECT SCHEDULE (MPS) – BASE ORDER

HR 4000 MASTER SCHEDULE BASELINE 3 CPR\_PPCR\_FCR\_FAI\_DATA DATE DECEMBER 2019\_1\_11\_2020





# RISK REGISTER

Risk ID	Risk Type	Risk Description	Date	Updated	Cost	Time	Prob	Risk Score	Risk Owner	Mitigation Strategy	Action Items	Cost	Time	Prob	Risk Score After Mitigation
1	External	Coronavirus, or other contagion, originating in China restricts travel and delays key milestones and activities (FAIs, Pre-shipment Inspections, etc.)	27-Jan-20	N/A	2	3	5	32.5	LACMTA	Accept	1. LACMTA to monitor China Disease Control measures and progress. 2. Make use of Domestic Chinese resources for Inspections and tests. 3. Coordinate with CRRC to use more Skype workshops.	2	3	5	30
2	External	U.S. Government tariffs on steel, aluminum and other products could result in a cost change order	06-Apr-18	26-Jul-19	5	1	3	15	Contractor	Accept	1. LACMTA is in discussions with other affected Agencies, MBTA, SEPTA & CTA. 2. LACMTA Gov't Affairs is closely monitoring 3. LACMTA will request a cost mitigation plan from CRRC 4. LACMTA is exploring mitigation measures that will be discussed with CRRC 5. LACMTA is concerned tariffs may affect the Cab Simulator as well, no update from CRRC.	5	1	4	12
3	Engineering / Production	The Contractor may not effectively manage their suppliers during design and production	15-Nov-16	10-Jun-19	3	4	4	14	LACMTA	Mitigate	1. Closely monitor the Contractor and their management of its suppliers. Arrange a bi-weekly meeting between LACMTA support staff and responsible CRRC staff to discuss progress. 2. Encourage intermediate "over-the-shoulder design reviews." 3. Participate periodically in CRRC Bi-Weekly Supplier meetings 4. Schedule design review workshops with CRRC and Suppliers	2	4	4	12
4	Operations	Resources and track availability may be a constraint for LACMTA and delay the Contractor in commissioning Vehicles	25-Jan-16	02-Dec-19	3	4	4	14	LACMTA	Mitigate	1. LACMTA will coordinate closely with competing projects to avoid conflicts and resource availability. 2. LACMTA will consider some preliminary testing to be performed in the yard. 3. Contractor to perform static, functional and dynamic testing before delivering Vehicles to ensure that LACMTA yard is a Commissioning Site. 4. CRRC is scheduled to begin static and dynamic testing of the Pilot Cars starting in March 2020 in Changchun. 5. Metro has requested a master Test Schedule for Changchun, Springfield and LA.	4	3	3	10.5
5	Engineering	Contractor may not be able to provide necessary U.S. based resources, which may delay design, performance and car delivery.	15-Nov-16	06-Aug-19	3	3	4	12	LACMTA	Mitigate	1. LACMTA to work and coordinate with Contractor to plan and mitigate risks. 2. LACMTA to work and coordinate with Consultants to leverage and apply best practices/lessons learned to plan and mitigate risks. 3. LACMTA to meet with CRRC Senior Execs to push for necessary resources 4. CRRC has proposed changing seat supplier from U.S. based to China based, LACMTA is ensuring CRRC justify the change, demonstrate how they will make up for it for BA content.	2	3	4	10



## ANTICIPATED ACTIVITIES FOR NEXT REPORTING PERIOD

- First six (6) Pilot Vehicle Production Assembly has started in Changchun, China.
- Continue with FAIs.
- Begin FCR Design Review phase.
- Follow up on Quality Assurance audit of the Contractor and its Suppliers and close out Open Action Items
- Conduct Working Sessions and Design Review meetings with the Contractor and its Supplier.
- Follow up on localization site readiness in the City of Industry, i.e, test benches, jigs and fixtures, etc for LEP components.
- Schedule impact from Coronavirus is unknown at this time. CRRC MA has notified Metro that they intend to invoke “force majeure” in the Contract to request schedule relief.



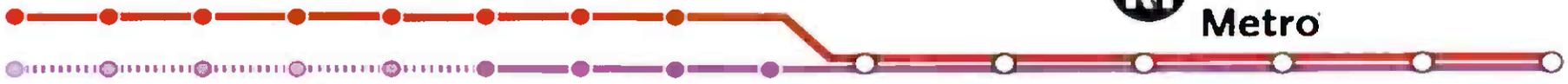
## Pilot Vehicle Production and Assembly





## Pilot Vehicle Production and Assembly





# Pilot Vehicle Production and Assembly



**FTA Quarterly Review Action Item Report – December 4, 2019**

<b>Item No.</b>	<b>Status</b>	<b>Description</b>	<b>Responsible Agency</b>	<b>Responsible Staff</b>	<b>Due Date</b>
1-12/4	New	The Crenshaw/LAX Project Team to provide FTA/PMOC the mutually-agreed (Metro-Contractor) Project Schedule and the team's assessment of the newly projected Revenue Service Date. A similar projection for an associated cost-to-completion will be submitted to FTA.	LACMTA	Sameh Ghaly/ Stephanie Leslie	1/29/20