

Los Angeles County
Metropolitan Transportation Authority

FTA Quarterly Review

Briefing Book

DECEMBER 4, 2019



Metro

FTA QUARTERLY REVIEW MEETING AGENDA

Los Angeles County Metropolitan Transportation Authority

Wednesday, December 4, 2019 – 9:00 a.m.

William Mulholland Conference Room – 15th 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 VEHICLE PROCUREMENT

- A. P3010 Light Rail Vehicle Procurement
- B. Heavy Rail Vehicle Acquisition Program

Annie Yang
Cop Tran

III. METRO PLANNING REPORTS

- A. East San Fernando Valley Transit Corridor
- B. Eastside Transit Corridor Phase 2
- C. West Santa Ana Branch Transit Corridor
- D. Green Line Extension to Torrance
- E. Sepulveda Transit Corridor

James de la Loza

IV. METRO CONSTRUCTION REPORTS

- A. Program Management Overview
- B. Patsaouras Plaza Busway Station Project
- C. Willowbrook/Rosa Parks Station Project
- D. Eastside Access Improvements Project
- E. Rail to Rail Active Transportation Corridor Connector Project
- F. Crenshaw/LAX Transit Project
- G. Regional Connector Transit Project
- H. Westside Purple Line Extension Section 1 Project
- I. Westside Purple Line Extension Section 2 Project
- J. Westside Purple Line Extension Section 3 Project

Richard Clarke
Timothy Lindholm
Paul Whang
Brad Owen
Brad Owen
Sameh Ghaly
Gary Baker
James Cohen
Michael McKenna
Kimberly Ong

V. FTA ACTION ITEMS

FTA / PMOC

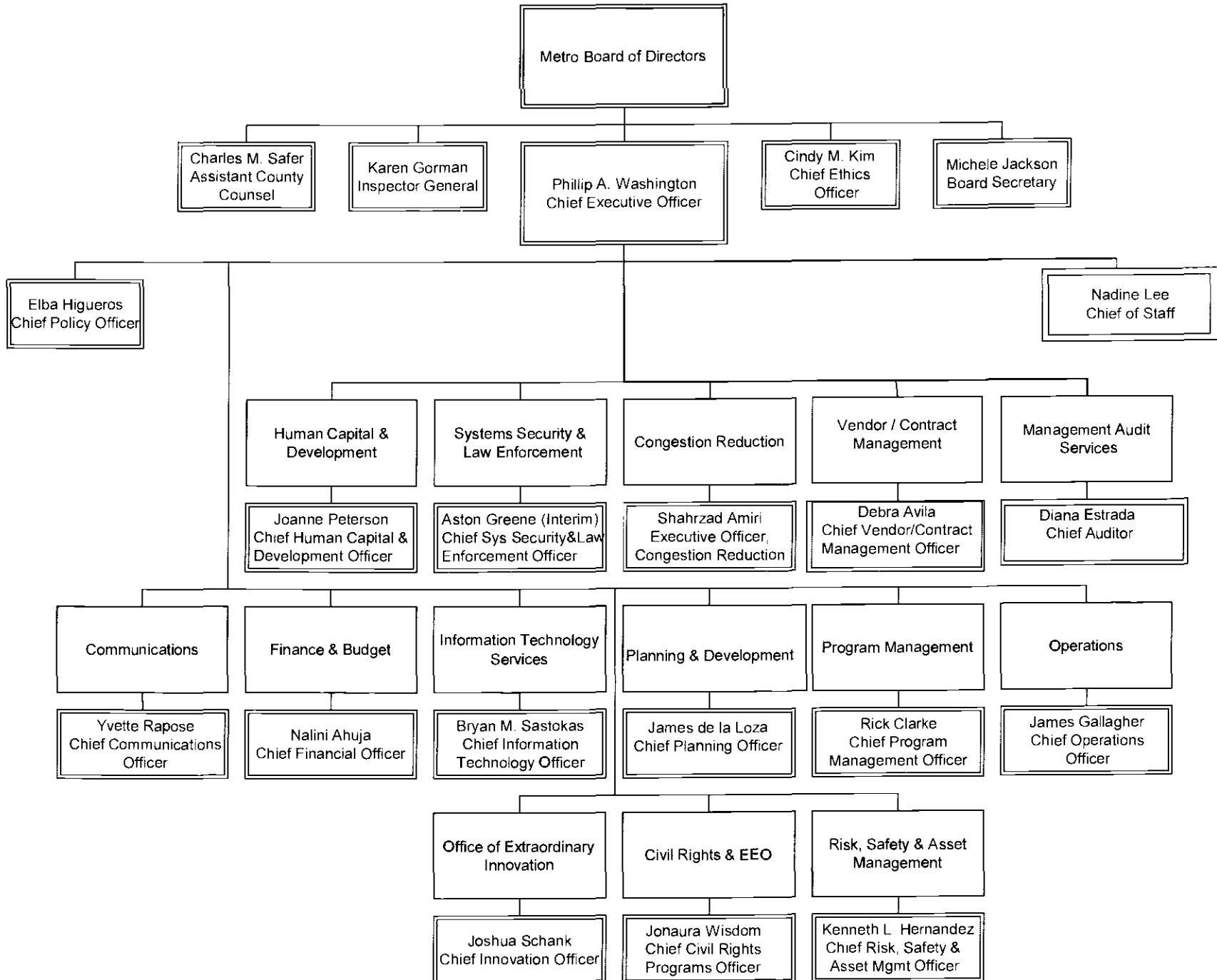
PROPOSED SCHEDULE AND LOCATION OF NEXT MEETING

Los Angeles County Metropolitan Transportation Authority

Wednesday, February 26, 2020

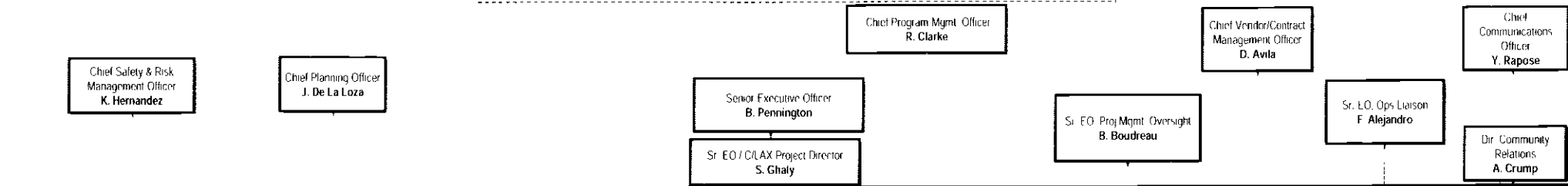
William Mulholland Conference Room - 15th Floor

Metro Organization Chart

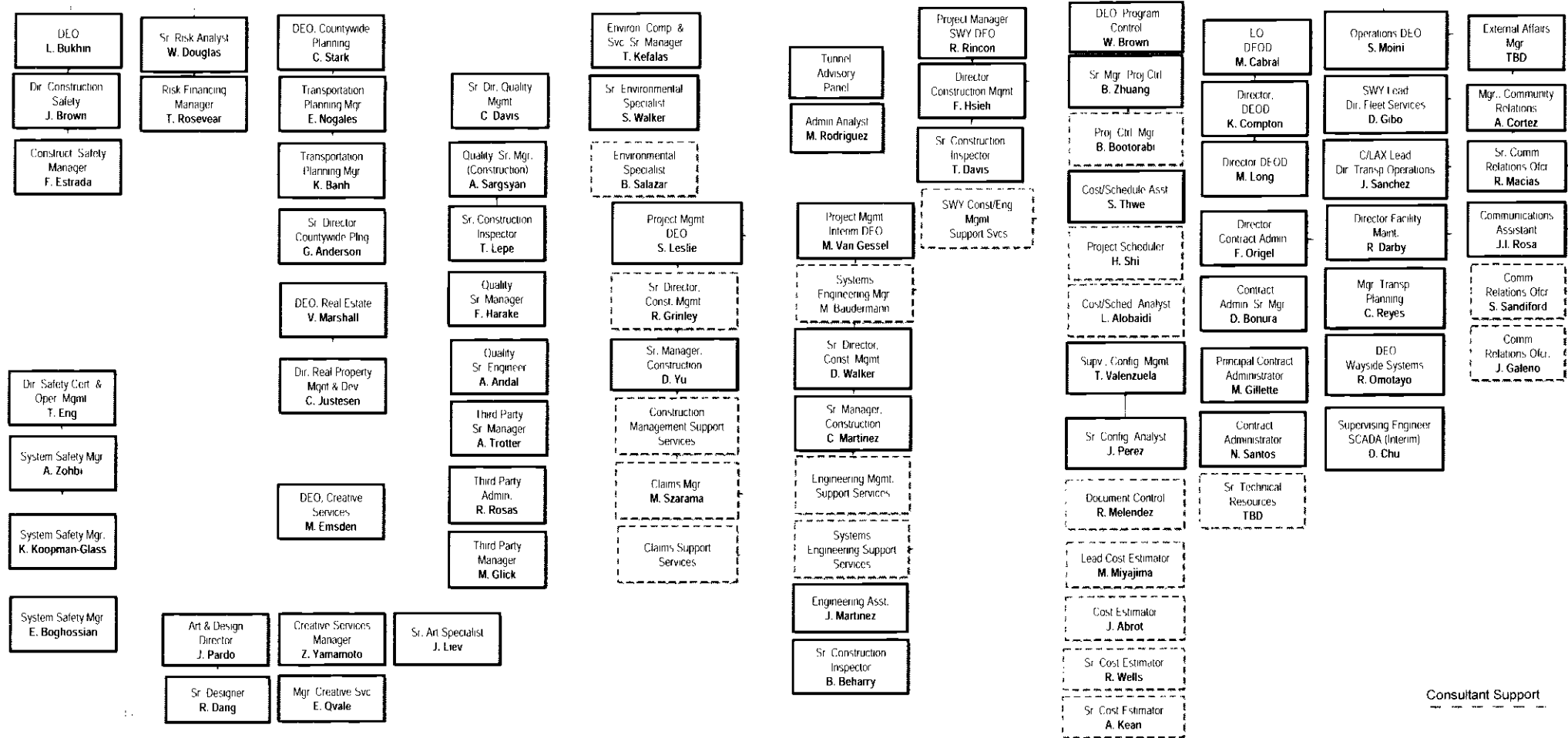


CRENSHAW/LAX TRANSIT PROJECT MATRIX ORGANIZATION

Metro Executive Management Organization and Staff

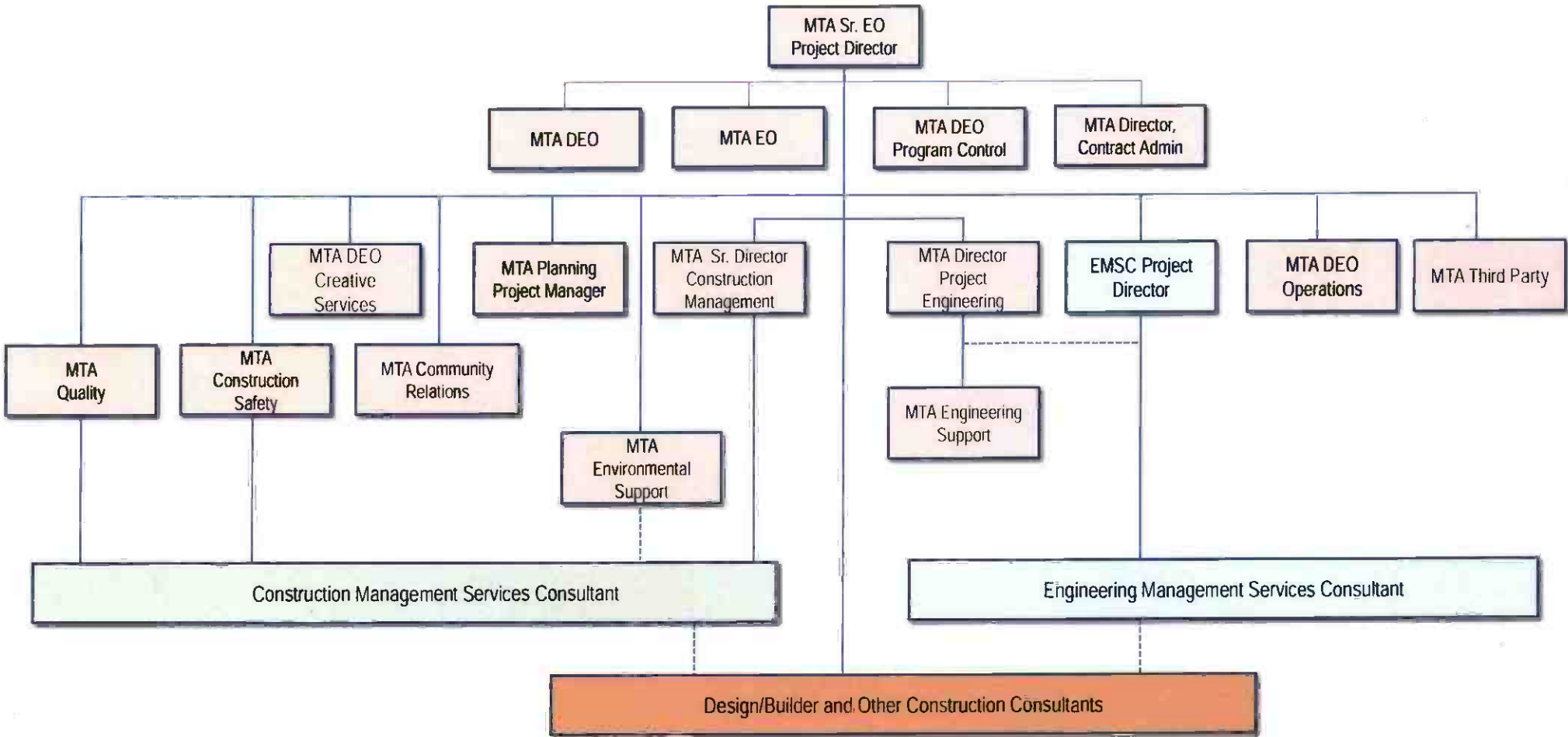


INTEGRATED PROJECT MANAGEMENT OFFICE TEAM (IPMO)



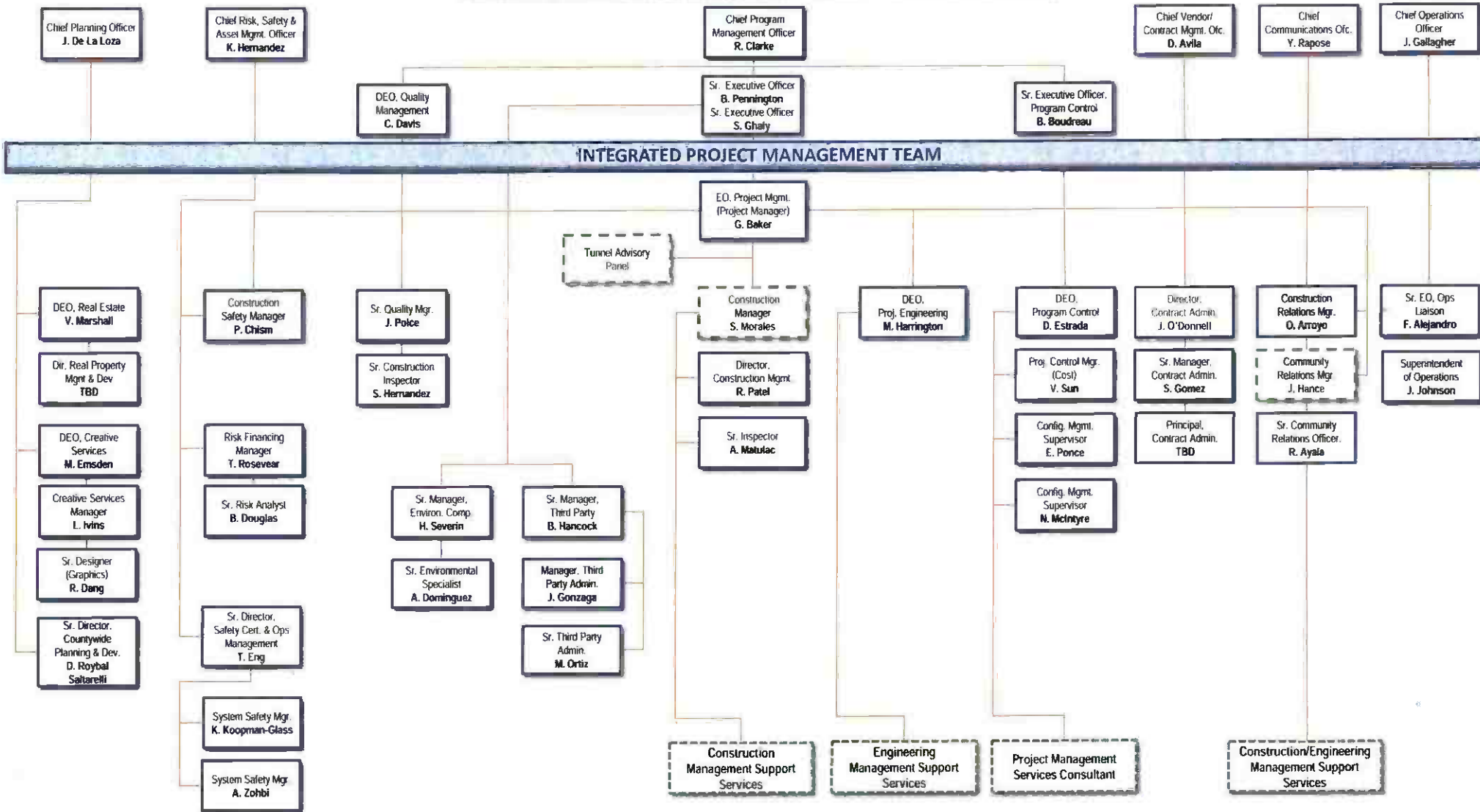
Consultant Support

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

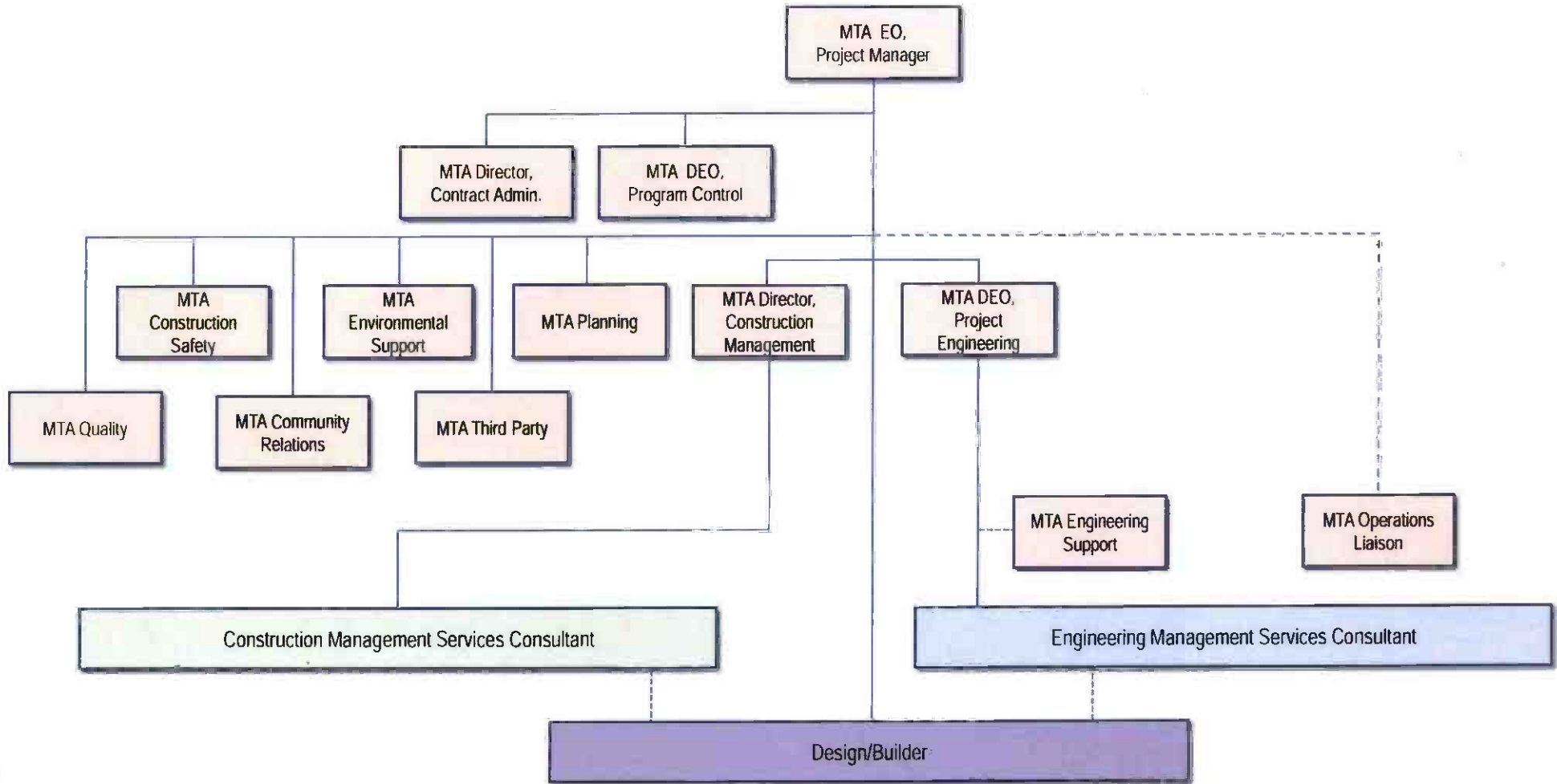


REGIONAL CONNECTOR TRANSIT PROJECT MATRIX ORGANIZATION

Metro Executive Management Organization and Staff

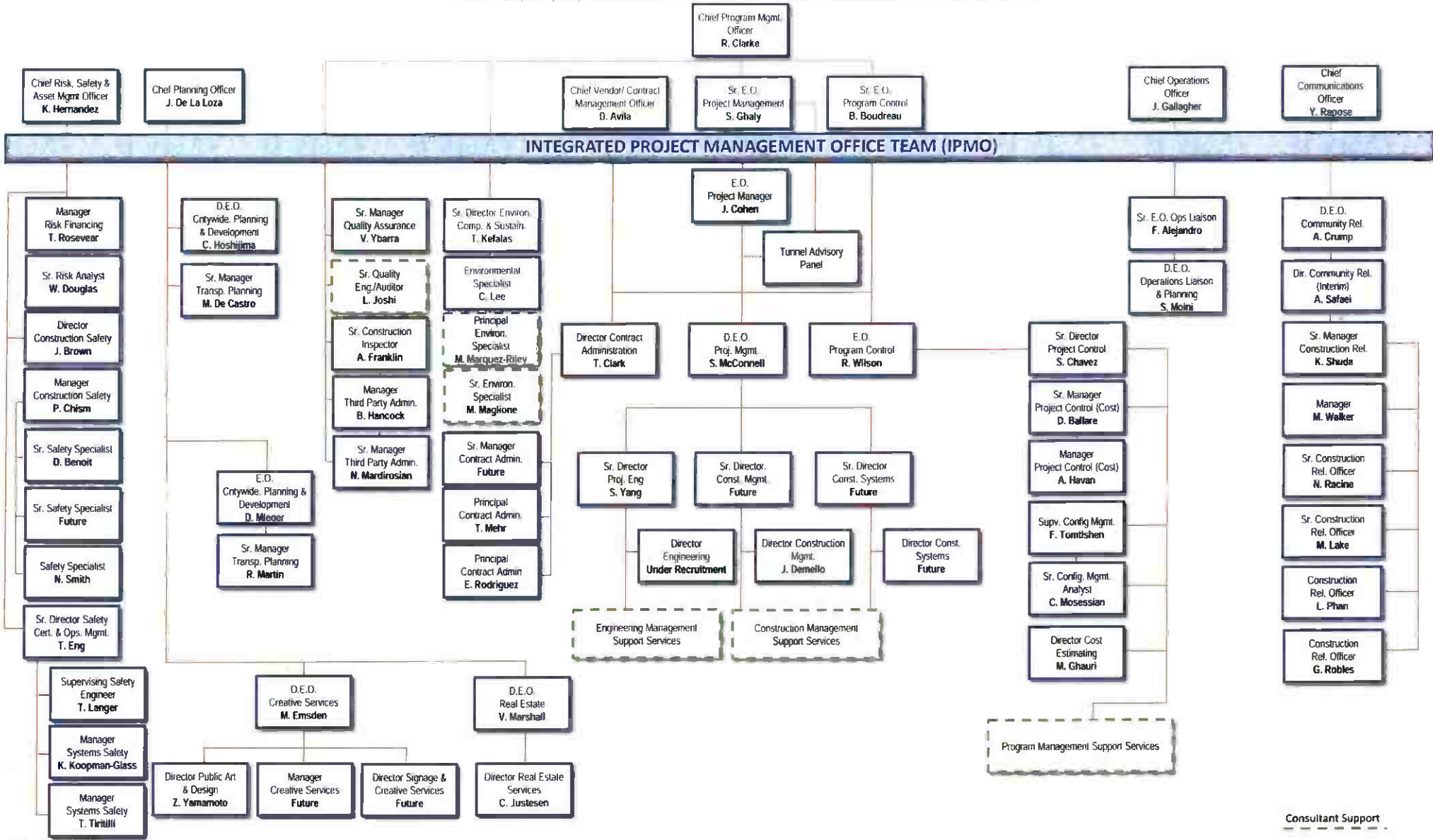


Regional Connector Transit Project Responsibility and Reporting Matrix

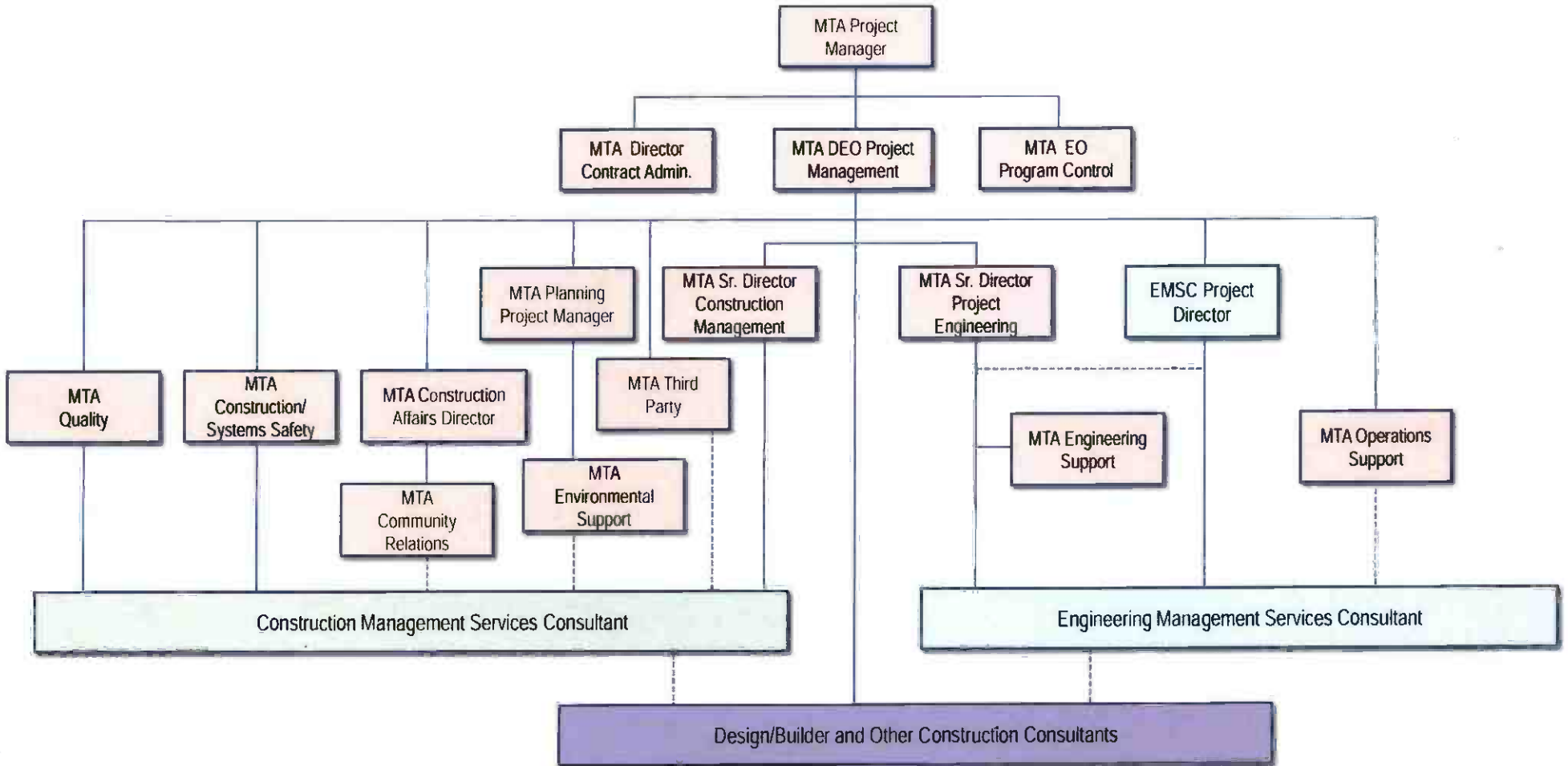


**WESTSIDE PURPLE LINE EXTENSION SECTION 1
Matrix Organization**

Metro Executive Management Organization and Staff

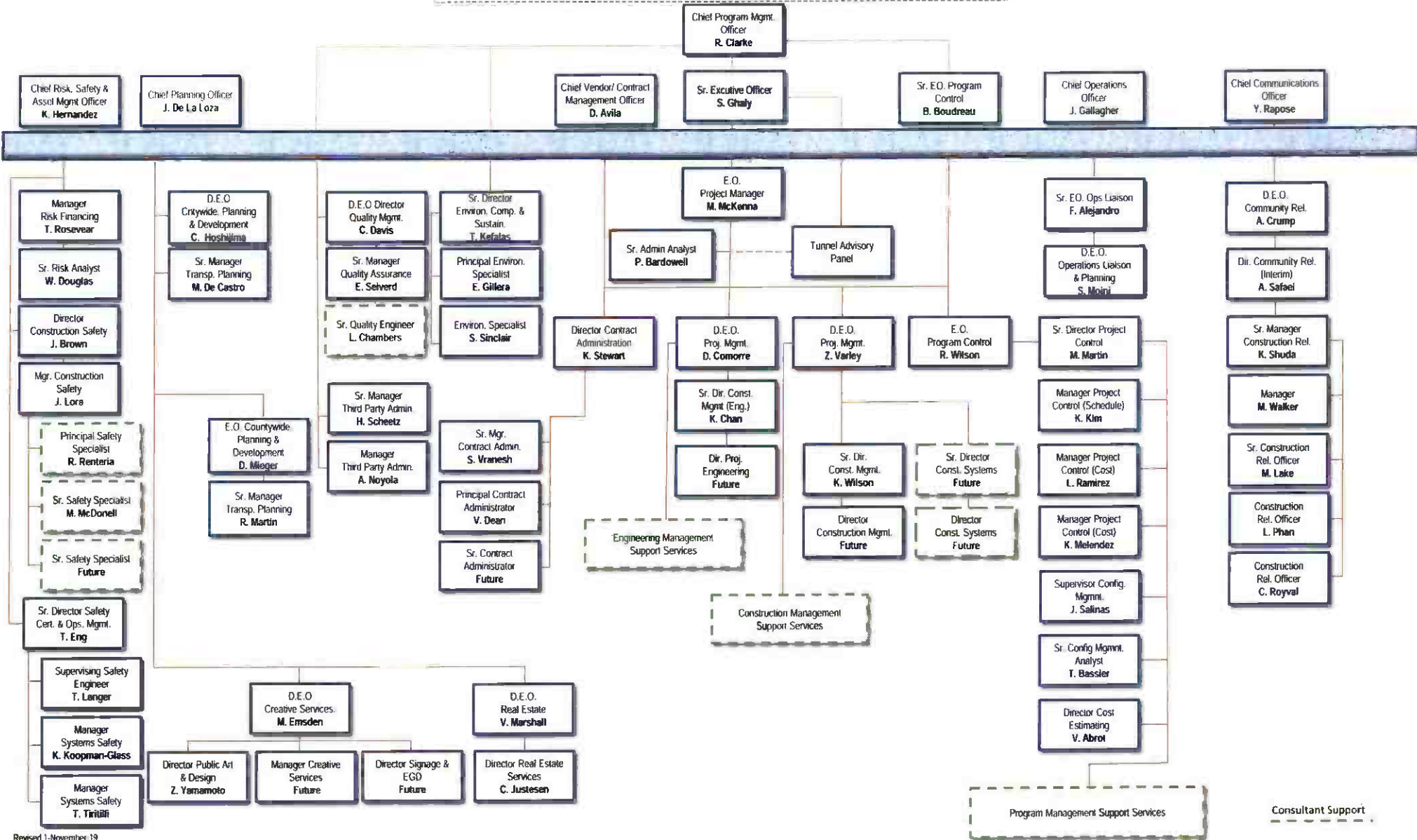


Westside Purple Line Extension Section 1 Responsibility and Reporting Matrix

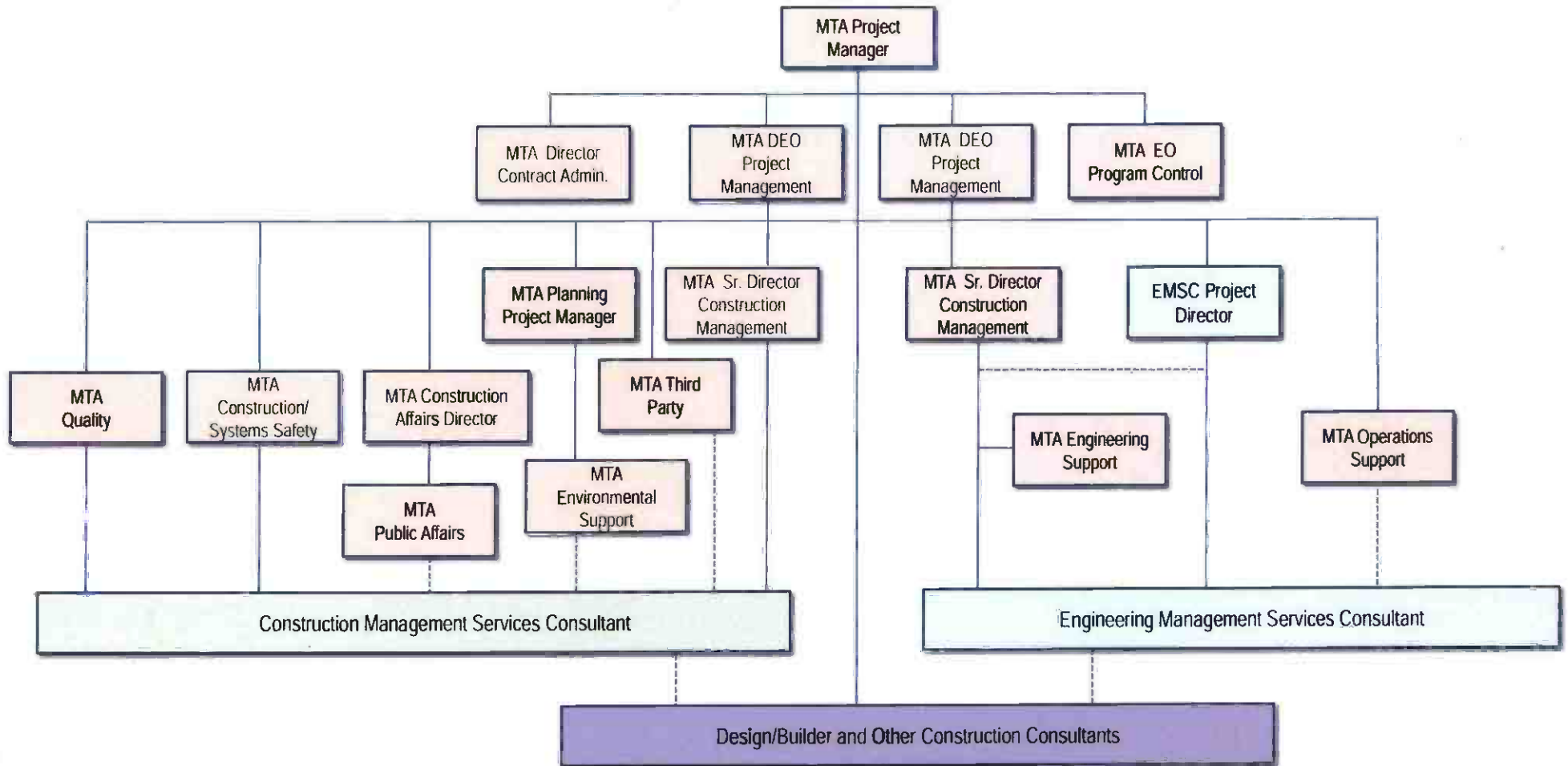


WESTSIDE PURPLE LINE EXTENSION SECTION 2 Matrix Organization

Metro Executive Management Organization and Staff

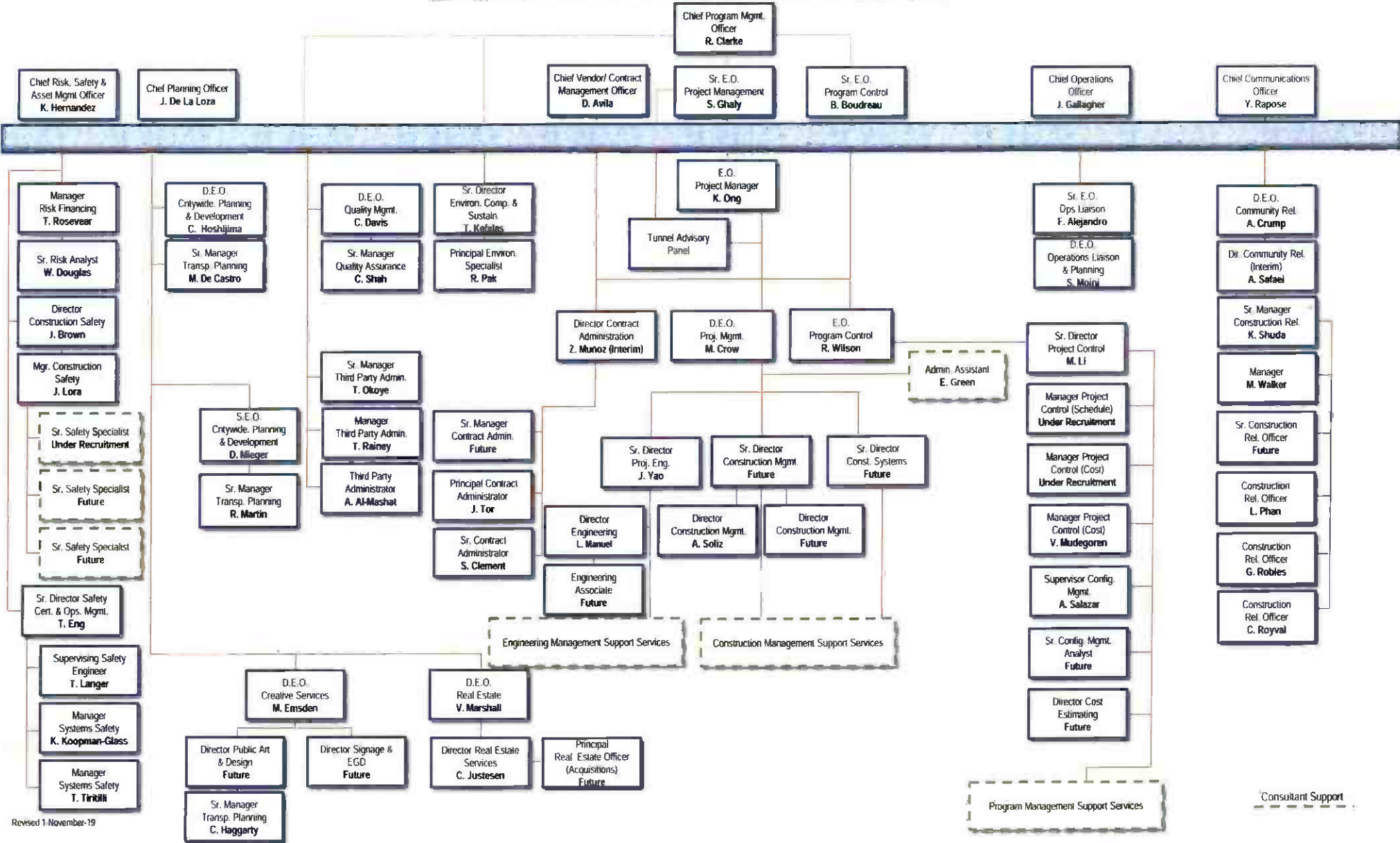


Westside Purple Line Extension Section 2 Responsibility and Reporting Matrix

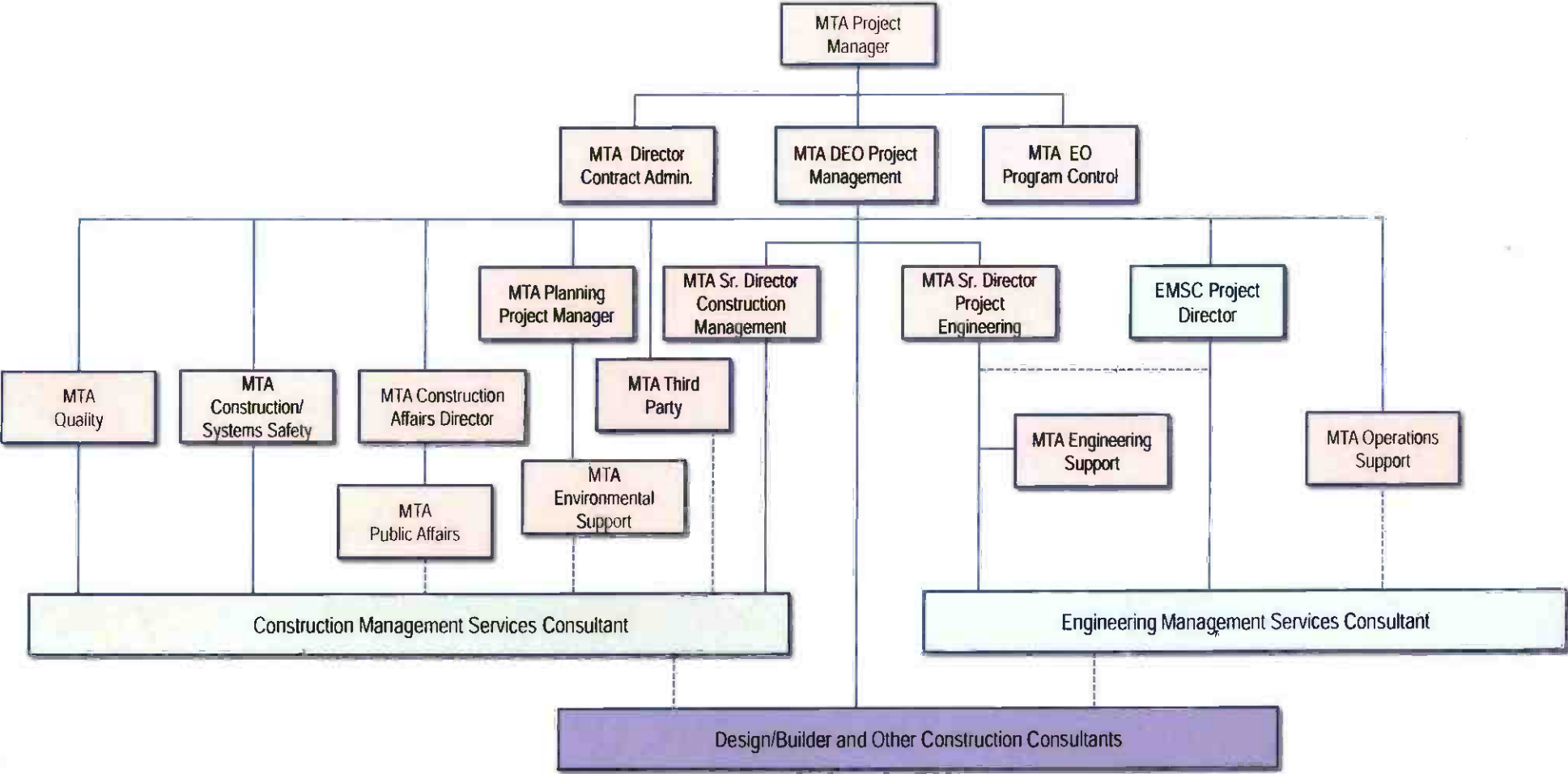


WESTSIDE PURPLE LINE EXTENSION SECTION 3 Matrix Organization

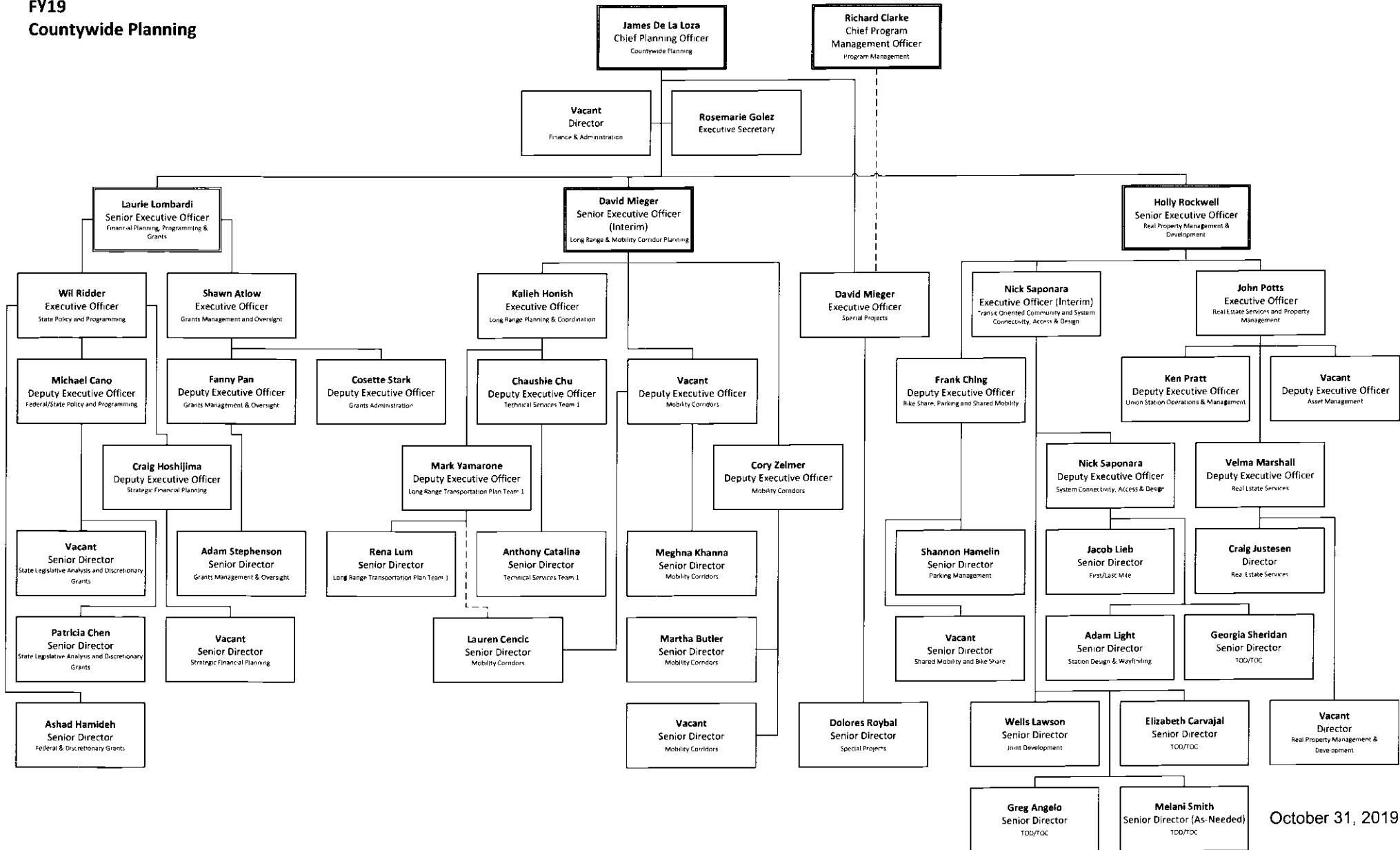
Metro Executive Management Organization and Staff



Westside Purple Line Extension Section 3 Responsibility and Reporting Matrix

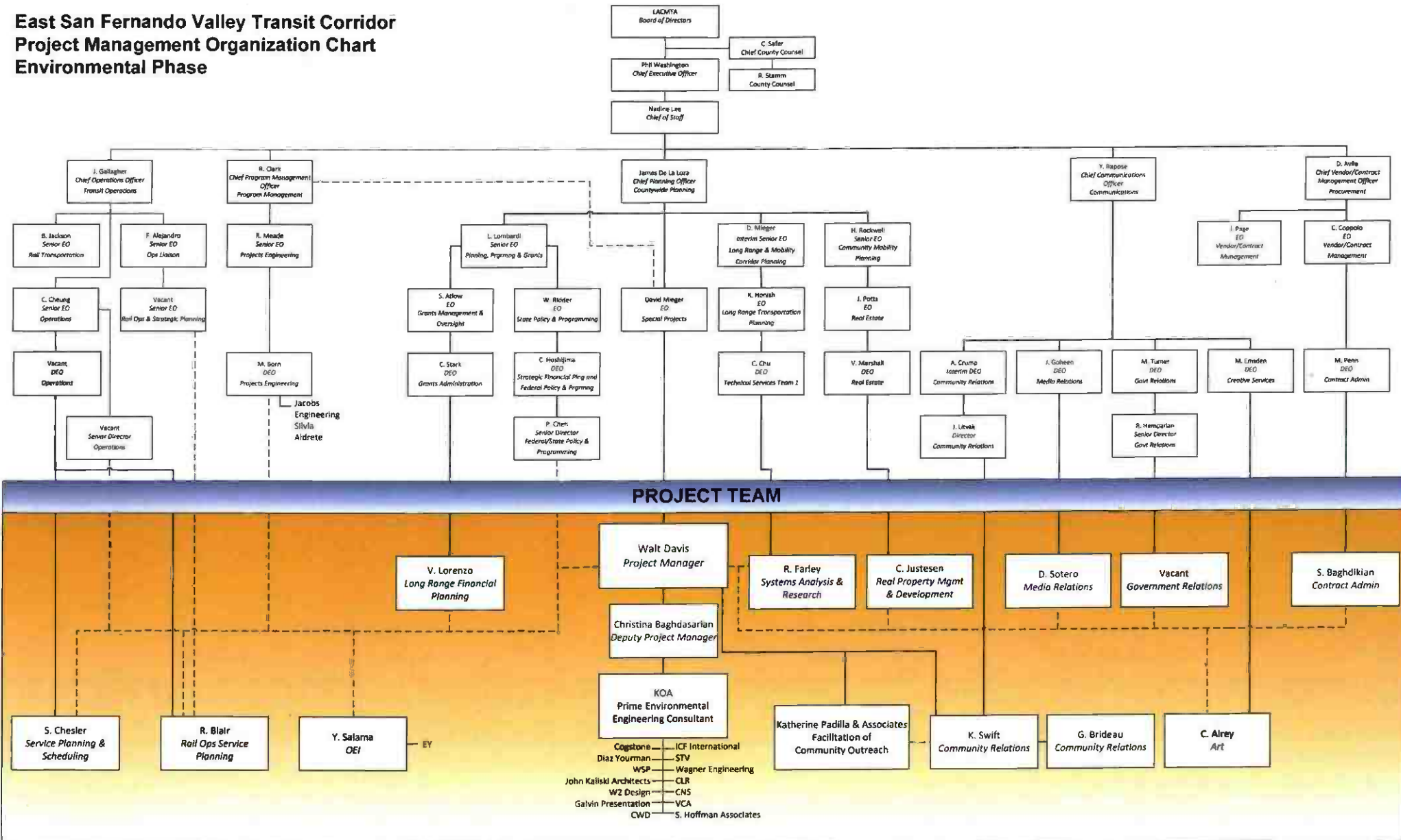


**FY19
Countywide Planning**



October 31, 2019

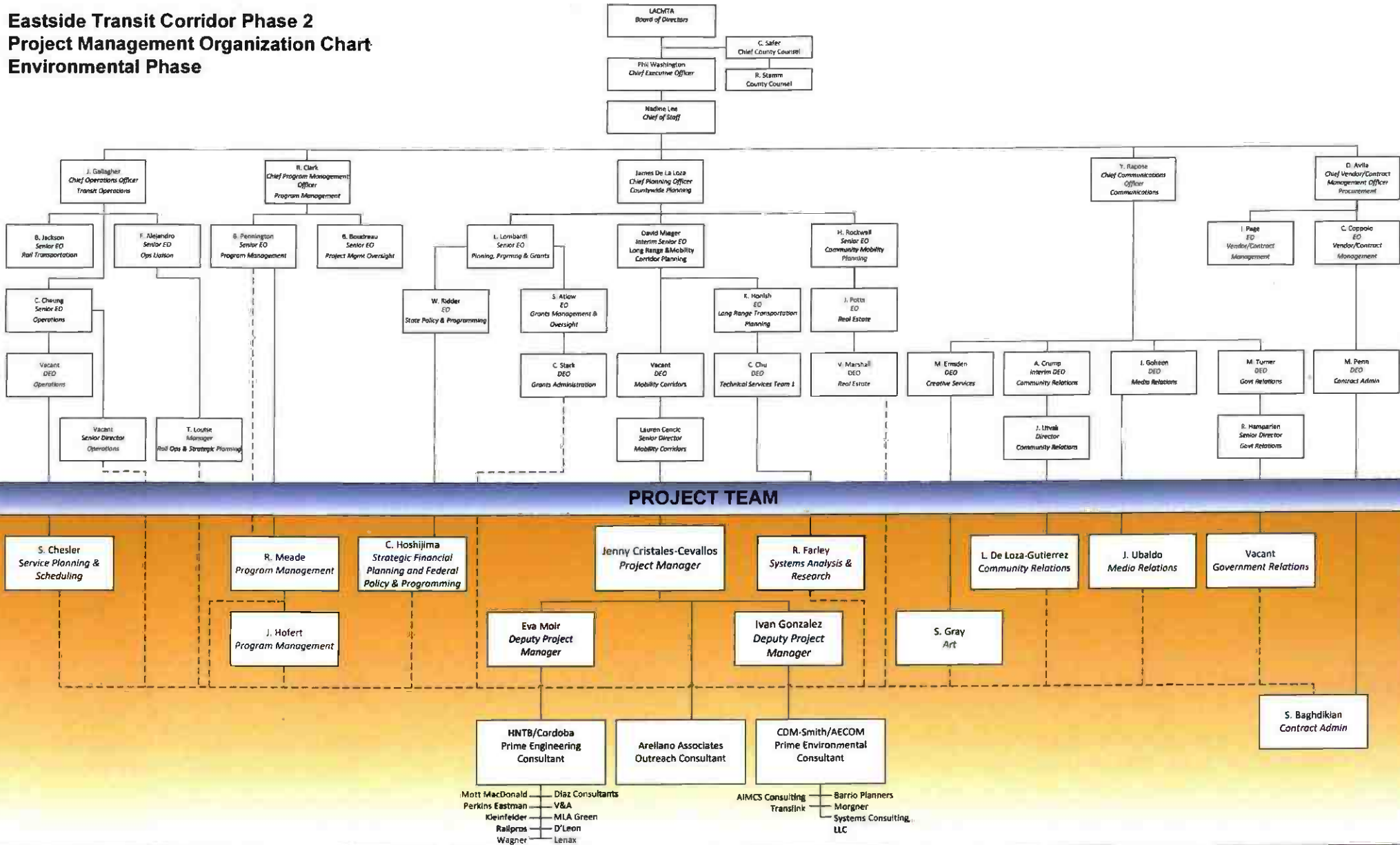
East San Fernando Valley Transit Corridor Project Management Organization Chart Environmental Phase



October 31, 2019

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

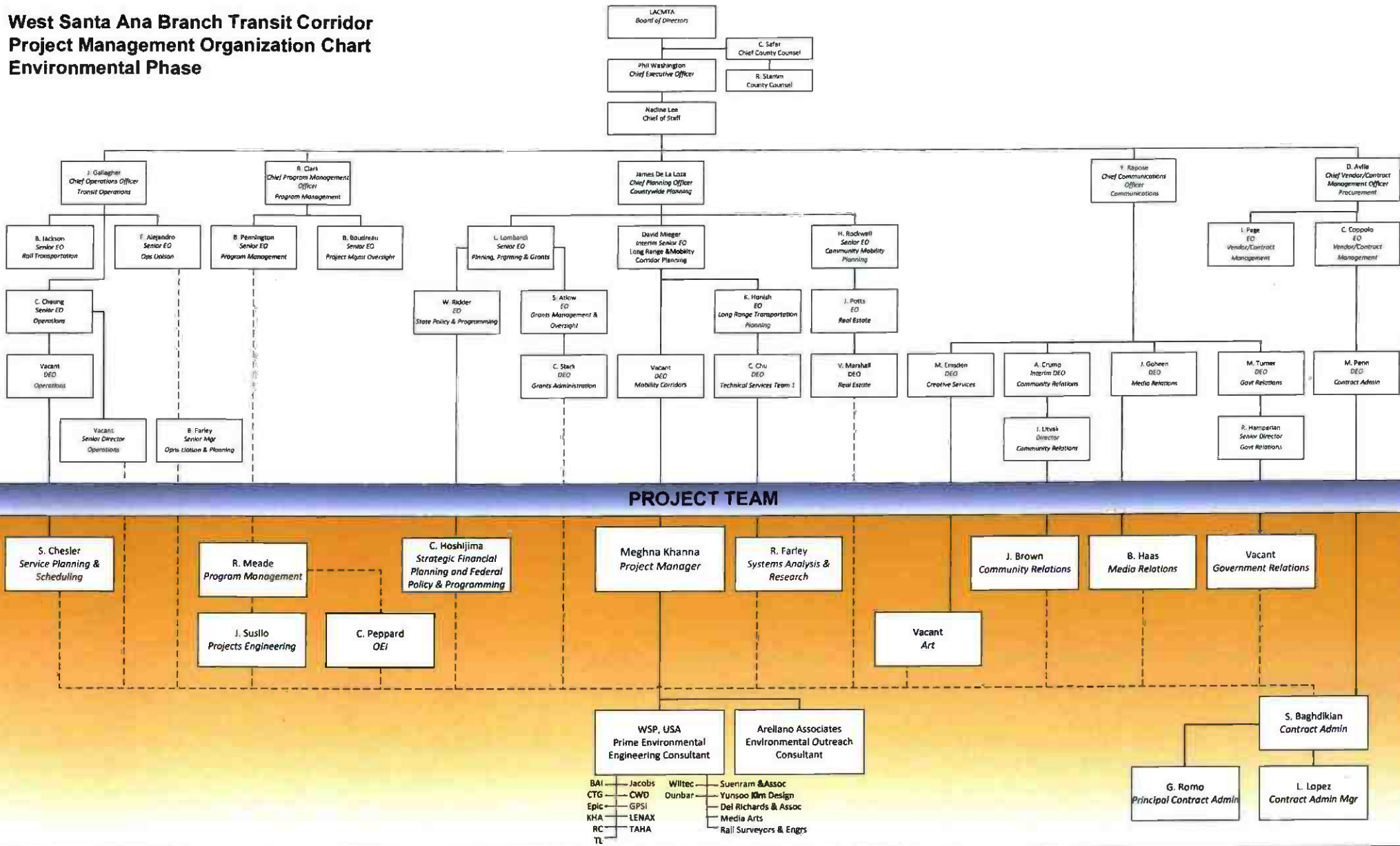
Eastside Transit Corridor Phase 2 Project Management Organization Chart Environmental Phase



October 31, 2019

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

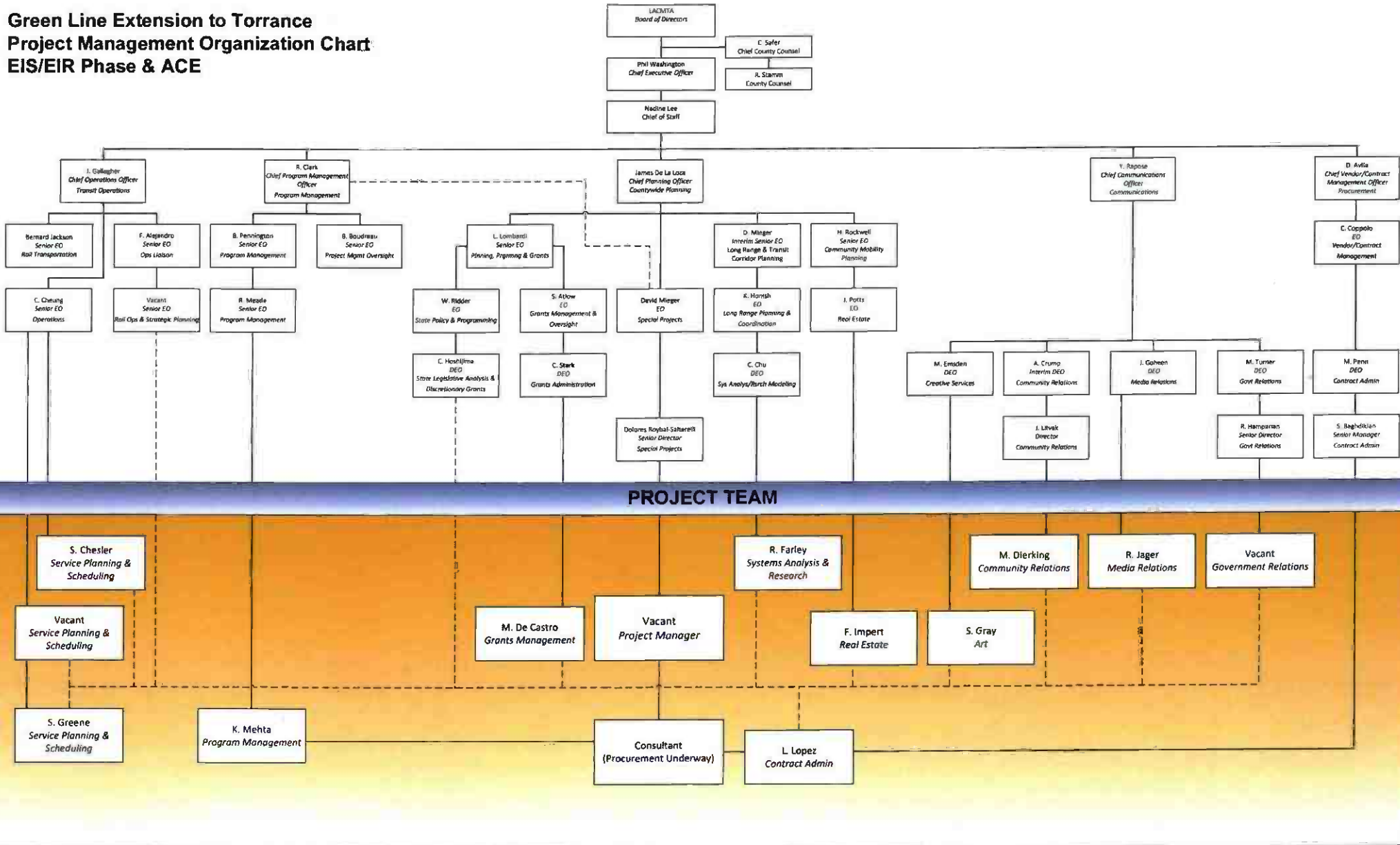
West Santa Ana Branch Transit Corridor Project Management Organization Chart Environmental Phase



October 30, 2019

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

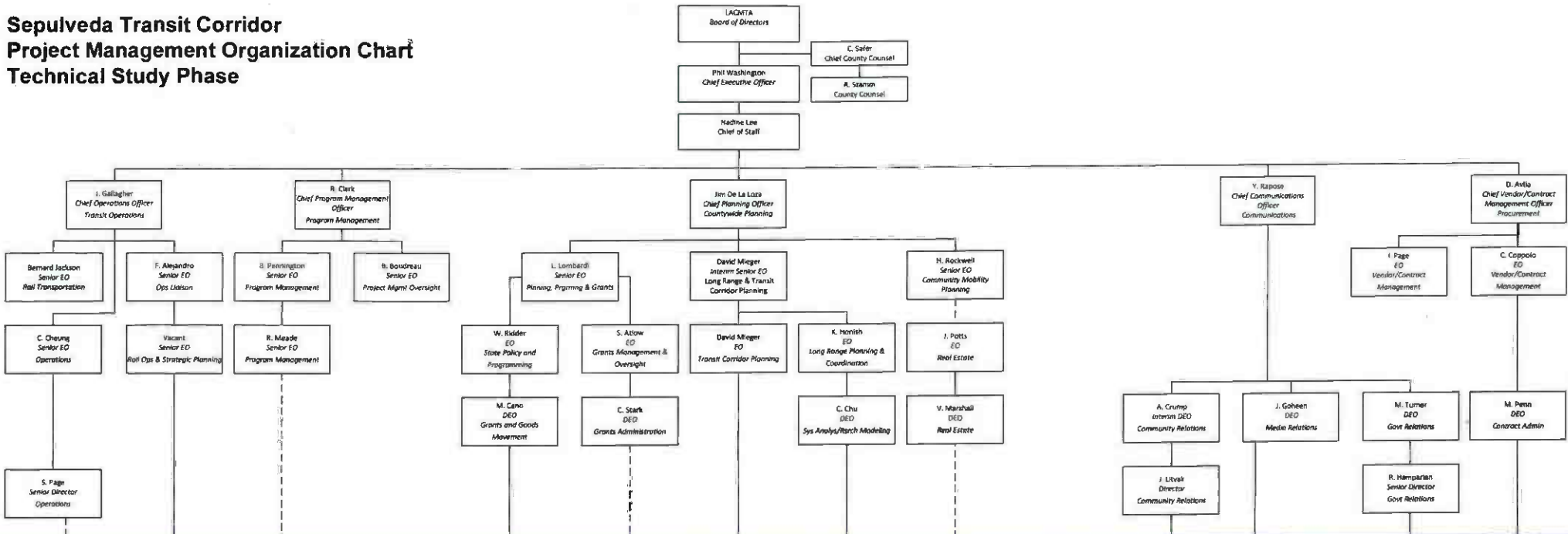
Green Line Extension to Torrance Project Management Organization Chart EIS/EIR Phase & ACE



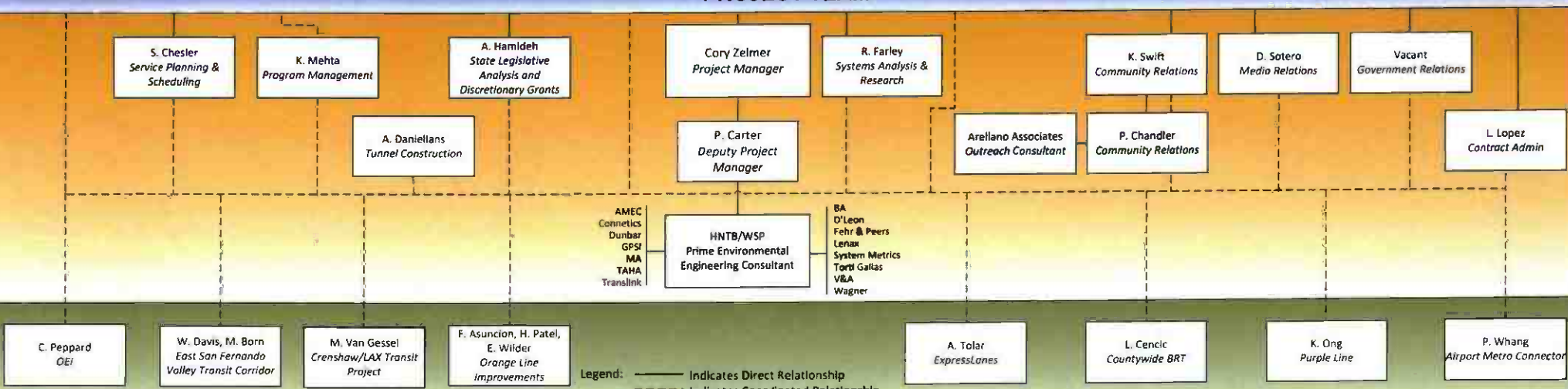
October 31, 2019

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

Sepulveda Transit Corridor Project Management Organization Chart Technical Study Phase



PROJECT TEAM



Legend: ——— Indicates Direct Relationship
 - - - - - Indicates Coordinated Relationship
 [Orange Box] Project Team
 [Green Box] Related Project/Team

October 31, 2019

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

STATE LEGISLATION

<u>AB 1112</u> <u>Friedman D</u>	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)	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. Last Amended on 6/19/2019	Oppose Unless Amended
Shared mobility devices: local regulation.			

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<u>AB 1262</u> <u>O'Donnell D</u>	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)	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. Last Amended on 4/25/2019	Support
<u>AB 1402</u> <u>Petrie-Norris D</u>	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)	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	Oppose Unless Amended

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. 11/5/2019
Bills highlighted in PURPLE have been submitted in the current month for Board consideration.

**Los Angeles County Metropolitan Transportation Authority (Metro)
State and Federal Legislative Matrix – Board Approved Positions
SEPTEMBER 2019
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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. **Last Amended on 3/26/2019**

**Los Angeles County Metropolitan Transportation Authority (Metro)
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<p><u>ACA 1</u> <u>Aguiar-Curry D</u></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. Last Amended on 3/18/2019</p>	<p>Support</p>
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<p><u>SB 43</u> <u>Allen D</u></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. & 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. Last Amended on 7/1/2019</p>	<p>Work with Author</p>
<p><u>SB 152</u> <u>Beall D</u></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 agencies and</p>	<p>Oppose Unless Amended</p>

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

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 behalf, to allocate a portion of

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<p><u>SB 664</u> <u>Allen D</u></p> <p>Electronic toll and transit fare collection systems.</p>	<p>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)</p>	<p>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. Last Amended on 4/25/2019</p> <p>(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. Last Amended on 9/10/2019</p>	<p>Support</p>
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FEDERAL		
BILL/AUTHOR	DESCRIPTION	STATUS
H.R. 2164 Representative Julia Brownley (CA)	The Green Bus Act of 2019 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.
H.R. 1139 U.S. Representative Grace Napolitano (D-El Monte)	THE TRANSIT WORKER AND PEDESTRIAN PROTECTION ACT 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"> • Assault mitigation infrastructure and technology, including barriers to prevent assaults on bus operators • De-escalation training for bus operators • Modified bus specifications and retrofits to reduce visibility impairments • Driver assistance technology that reduces accidents • Installation of enhanced bus driver seating to reduce ergonomic injuries This legislation will also require transit agencies to report all assaults on bus drivers to the USDOT's	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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	National Transit Database (NTD).	
H.R. 4101/S. 2404 Representative Karen Bass (CA-37) and U.S. Senator Kirsten Gillibrand	Build Local, Hire Local Act 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
S. 2302 U.S. Senator John Barrasso (R-WY)	America’s Transportation Infrastructure Act of 2019 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

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MARY C. WICKHAM
County Counsel

October 18, 2019

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 September 30, 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:rww
Attachments

c: Charles M. Safer
Ray Tellis
Cindy Smouse
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 September 30, 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 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. A status conference is set for 11/14/19.
Crenshaw Subway Coalition v. MTA, et al.	CV11-9603	CA-79-0001 -- TIFIA 2011-1005A	Environmental challenge under CEQA and Cal. Govt. Code alleging deficiencies in Crenshaw/LAX Light Rail Transit FEIR/EIS and discriminatory impacts on African-Americans in the Crenshaw area.	Judgments for MTA and FTA on CEQA and NEPA claims. Government Code Claim for disparate impact remanded to State court. Case dismissed by the Court on 2/5/19 for failure to prosecute.
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 1/13/20. Discovery is ongoing. MTA's motion for judgment on the pleadings will be heard 10/18/19.

CASE NAME	CASE NUMBER	GRANT NUMBER	NARRATIVE	CASE STATUS
Leo Jordan v MTA	BC710101		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 transport him.	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. Demurrer/Motion to Strike Hearing: 10/31/19 FSC 12/2/19 Trial 12/16/19 OSC re dismissal 6/13/21

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

Period: July 1, 2019 – September 30, 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)

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 1st/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 the Exclusive Negotiation Agreement and Planning Document was executed, ELACC has engaged with the community, and worked with Metro to refine the project's scope and design. 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)

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 the Soto station site and the 0.29-acre parcel. In December 2018, Metro and Bridge/ELACC extended the term of the Exclusive Negotiation Agreement and Planning Document through December 31, 2019 and the parties are now discussing a further extension to accommodate the timeline for project entitlements and environmental clearance noted below. 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 4,200 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 not be pursued separately from the Los Lirios project due to the separate funding sources that will be 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 negotiation/completion a term sheet setting forth the key terms and conditions to be included in a Joint Development Agreement and ground lease with Metro.

1st/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 (24 of which will be supportive housing) and approximately 10,000 square feet of retail space. 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 of the proposed project.

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 seeking 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. The developer is now in the process of securing financing for the project.

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 Abodes 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 given the City's plan to construct and operate a community park just southerly of the project site. Next steps for Abode include resolving the viability of the proposed project's community park, 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

SEPTEMBER 2019



METRO RAIL PERFORMANCE – SEPTEMBER 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	Jul Month	Aug Month	Sep Month
Systemwide									
On-Time Pullouts	99.81%	99.68%	99.72%	99.80%	99.69%	🟡	99.56%	99.72%	99.79%
Mean Miles Between Chargeable Mechanical Failures ³	29,711	31,146	39,034	44,540	39,859	🟡	36,692	39,267	44,583
In-Service On-time Performance	98.24%	98.46%	98.81%	99.10%	98.90%	🟡	98.81%	98.77%	99.02%
Service Delivery Ratio	99.23%	99.22%	99.56%	99.70%	99.72%	🟢	99.82%	99.60%	99.73%
Traffic Accidents Per 100,000 Train Miles	1.01	0.98	0.68	0.85	0.64	🟢	0.63	0.94	0.33
CPUC Reportable Accidents per 100,000 Train Miles	0.36	0.54	0.29	0.37	0.32	🟢	0.31	0.47	0.16
Passenger Accidents per 100,000 Boardings	0.023	0.022	0.014	0.010	0.009	🟢	0.027	0.000	0.000
Complaints per 100,000 Boardings	1.98	1.81	1.83	1.10	1.59	🔴	1.63	1.32	1.84
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours ^{1,2}	12.27	11.17	11.43	10.05	11.59	🟡	4.72	18.43	11.47
Lost Work Days per 200,000 Exposure Hours ^{1,2}	733	888	800	821.44	836	🟡	833	839	-
OSHA Injuries per 200,000 Exposure Hours ^{1,2}	8.53	7.61	7.23	6.43	7.46	🟡	4.72	10.14	-
Wayside Maintenance & Engineering									
Past-Due Preventive Maintenance - Aging of Outstanding Work Orders	1	3	55	N/A	209	N/A	31	34	144
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	5.35	5.02	5.31	5.40	15.63	🔴	3.55	16.99	10.75
Lost Work Days per 200,000 Exposure Hours ¹	194	312	218	298	108	🟢	114	102	0
OSHA Injuries per 200,000 Exposure Hours ¹	4.01	4.01	3.84	4.13	6.85	🔴	3.55	10.19	0
Blue Line									
On-Time Pullouts	99.80%	99.39%	99.46%	99.50%	99.46%	🟡	98.92%	100.00%	99.44%
Mean Miles Between Chargeable Mechanical Failures ³	15,405	13,772	22,391	22,391	83,825	🟢	177,184	173,761	30,401
In-Service On-time Performance	98.44%	97.11%	98.13%	98.80%	99.65%	🟢	99.72%	99.35%	99.86%
Service Delivery Ratio	98.54%	98.42%	99.31%	99.40%	99.74%	🟢	99.80%	99.52%	99.92%
Traffic Accidents Per 100,000 Train Miles	2.18	1.63	1.05	1.84	1.69	🟢	3.32	1.67	0.00
CPUC Reportable Accidents per 100,000 Train Miles	0.71	1.03	0.38	0.40	1.13	🔴	1.68	1.67	0.00
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	2.68	🔴	3.01	1.17	3.89
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours ^{1,2}	16.74	13.95	14.22	11.90	14.41	🟡	18.42	18.42	6.24
Lost Work Days per 200,000 Exposure Hours ¹	836	1,016	695	953	1,113	🟡	751	1,478	-
OSHA Injuries per 200,000 Exposure Hours ¹	10.40	8.10	5.98	5.93	9.21	🔴	6.14	12.28	-

¹ There is a One Month lag in reporting this data

² Includes Operations, RFS and Wayside

³ 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	Jul Month	Aug Month	Sep Month
Red Line									
On-Time Pullouts	99.95%	99.88%	99.85%	100.00%	99.87%	●	99.81%	100.00%	100.00%
Mean Miles Between Chargeable Mechanical Failures ³	104,637	68,407	58,255	94,165	51,630	●	41,178	50,065	72,273
In-Service On-time Performance	99.39%	99.33%	99.41%	99.70%	99.52%	●	99.46%	99.47%	99.64%
Service Delivery Ratio	99.72%	98.85%	99.73%	100.00%	99.77%	●	99.72%	99.78%	99.78%
Traffic Accidents Per 100,000 Train Miles	0.57	0.64	0.57	0.57	0.28	●	0.00	0.00	0.86
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	0.010	●	0.020	0.000	0.000
Complaints per 100,000 Boardings	1.19	1.18	1.35	0.55	0.69	●	0.66	0.70	0.73
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	12.68	11.80	14.74	10.80	5.79	●	5.70	5.65	6.05
*Lost Work Days per 200,000 Exposure Hours	992	827	755	809	700	●	706	694	-
*OSHA Injuries per 200,000 Exposure Hours	7.52	4.99	9.67	3.89	2.84	●	5.70	0.00	-

Green Line									
On-Time Pullouts	99.69%	99.59%	99.85%	99.70%	99.61%	●	99.08%	99.76%	100.00%
Mean Miles Between Chargeable Mechanical Failures ³	16,375	21,614	22,144	22,851	21,396	●	24,773	20,446	19,532
In-Service On-time Performance	98.69%	98.72%	98.76%	98.00%	98.45%	●	98.01%	98.80%	98.54%
Service Delivery Ratio	99.61%	99.38%	99.70%	100.00%	99.81%	●	99.86%	99.75%	99.80%
Traffic Accidents Per 100,000 Train Miles	0.48	0.34	0.25	0.35	0.28	●	0.00	0.78	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	2.44	●	2.64	2.86	1.98
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	9.14	12.87	6.82	11.52	14.97	●	0.00	26.43	17.99
*Lost Work Days per 200,000 Exposure Hours	712	984	1,321	930	1,009	●	1,108	916	-
*OSHA Injuries per 200,000 Exposure Hours	6.65	9.84	5.31	8.70	8.97	●	0.00	17.62	-

Gold Line									
On-Time Pullouts	99.82%	99.84%	99.58%	100.00%	99.68%	●	99.87%	99.46%	99.70%
Mean Miles Between Chargeable Mechanical Failures ³	38,427	43,588	40,584	49,281	37,284	●	24,637	38,533	74,537
In-Service On-time Performance	97.61%	98.19%	98.50%	98.80%	97.15%	●	97.40%	98.78%	97.27%
Service Delivery Ratio	98.88%	99.07%	99.39%	99.50%	99.51%	●	99.84%	99.22%	99.47%
Traffic Accidents Per 100,000 Train Miles	0.61	0.55	0.55	0.51	0.62	●	0.91	0.91	0.00
CPUC Reportable Accidents per 100,000 Train Miles	0.25	0.26	0.25	0.40	0.31	●	0.46	0.46	0.00
Passenger Accidents per 100,000 Boardings	0.030	0.086	0.044	0.010	0.028	●	0.082	0.000	0.000
Complaints per 100,000 Boardings	2.77	2.65	2.71	1.80	2.86	●	3.26	2.01	3.34
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	14.31	14.24	14.15	11.87	15.59	●	0.00	25.75	21.07
*Lost Work Days per 200,000 Exposure Hours	1,055	1,148	1,391	993	1,738	●	1,899	1,578	-
*OSHA Injuries per 200,000 Exposure Hours	9.69	11.87	10.61	8.94	10.32	●	5.17	15.45	-

Expo Line									
On-Time Pullouts	98.76%	99.71%	98.87%	99.70%	99.69%	●	99.68%	99.69%	99.69%
Mean Miles Between Chargeable Mechanical Failures ³	33,402	57,013	93,728	93,278	43,243	●	81,986	32,641	37,125
In-Service On-time Performance	98.48%	98.72%	98.93%	98.80%	99.30%	●	99.52%	99.02%	99.34%
Service Delivery Ratio	99.46%	99.54%	99.67%	99.80%	99.83%	●	99.92%	99.76%	99.82%
Traffic Accidents Per 100,000 Train Miles	1.26	1.78	1.19	1.28	0.91	●	0.00	1.79	0.95
CPUC Reportable Accidents per 100,000 Train Miles	0.63	1.30	0.56	0.40	0.61	●	0.00	0.89	0.95
Passenger Accidents per 100,000 Boardings	0.018	0.010	0.010	0.010	0.000	●	0.000	0.000	0.000
Complaints per 100,000 Boardings	3.68	2.20	2.11	1.40	1.97	●	1.72	1.51	2.74
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	19.26	12.57	16.21	11.84	9.61	●	0.00	20.93	7.37
*Lost Work Days per 200,000 Exposure Hours	887	1,470	980	1,343	796	●	845	749	-
*OSHA Injuries per 200,000 Exposure Hours	16.60	9.92	9.73	9.92	7.13	●	7.28	6.98	-

* There is One Month lag in reporting this data

³ 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%.

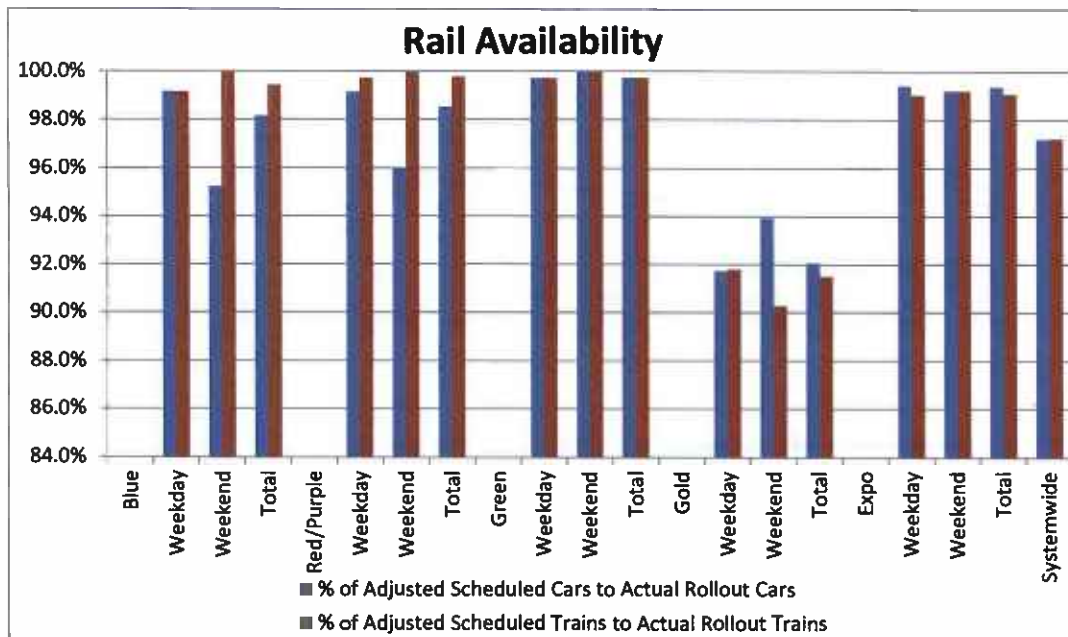
● Red - High probability that the target will not be achieved -- significant problems and/or delays. Falls below Target >70%.

N/A = Not Available

Vehicle Availability

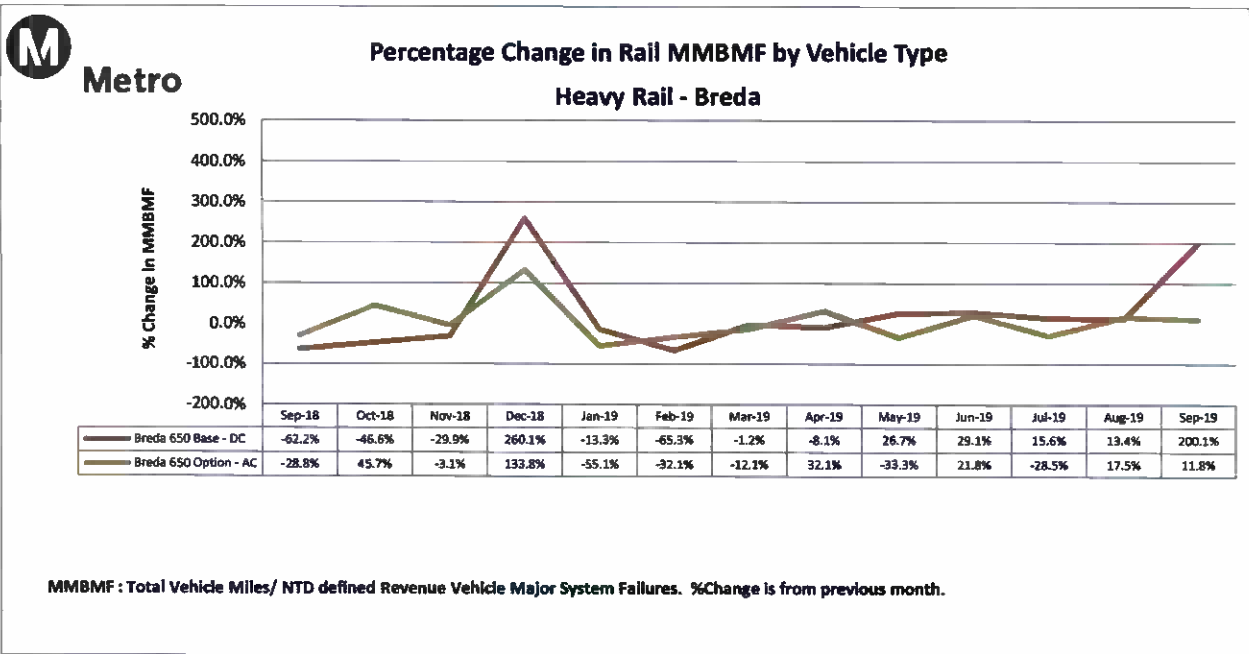
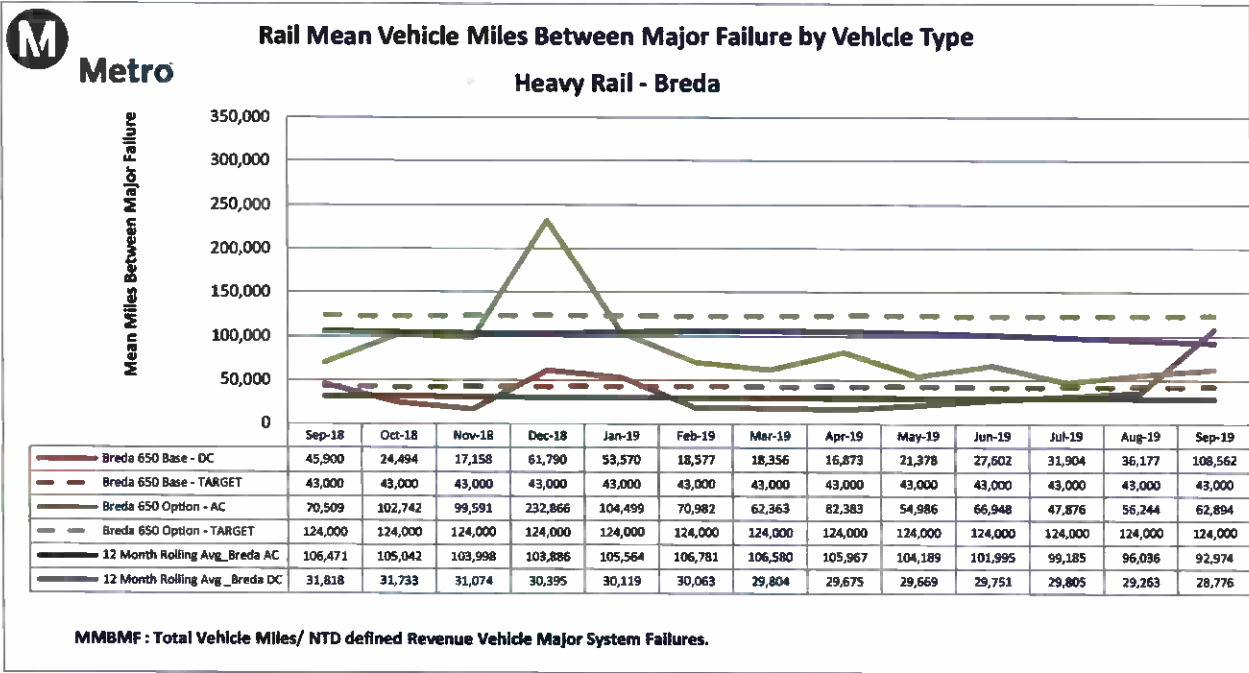
Sep 2019

Day Type	% of Adjusted Scheduled Cars to Actual Rollout Cars	% of Adjusted Scheduled Trains to Actual Rollout Trains
Blue		
Weekday	99.17%	99.17%
Weekend	95.24%	100.00%
Total	98.15%	99.44%
Red/Purple		
Weekday	99.15%	99.74%
Weekend	96.02%	100.00%
Total	98.55%	99.79%
Green		
Weekday	99.74%	99.74%
Weekend	100.00%	100.00%
Total	99.75%	99.75%
Gold		
Weekday	91.74%	91.81%
Weekend	93.92%	90.30%
Total	92.08%	91.51%
Expo		
Weekday	99.41%	99.02%
Weekend	99.21%	99.21%
Total	99.36%	99.06%
Systemwide	97.21%	97.22%



METRO RAIL PERFORMANCE – SEPTEMBER 2019

Rail Performance by Vehicle Type

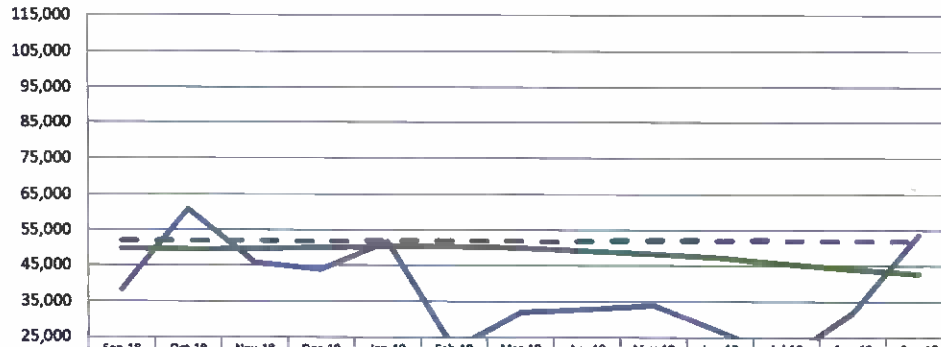




Metro

Rail Mean Vehicle Miles Between Major Failure by Vehicle Type Light Rail - Breda

Mean Miles Between Major Failure



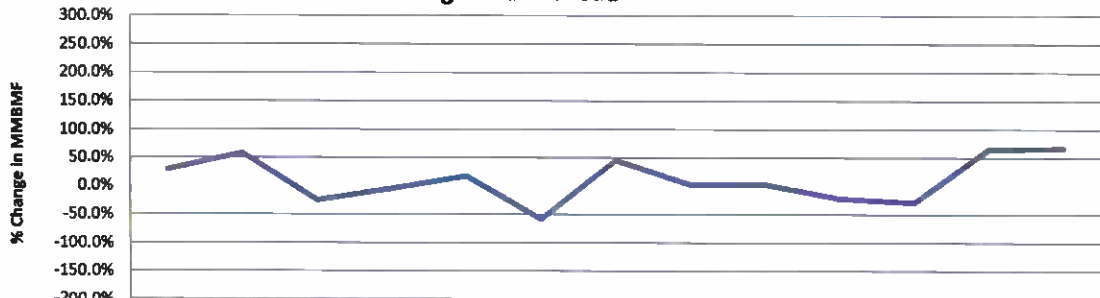
	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
— AnsaldoBreda 2550 Base - AC	38,403	60,989	45,884	43,889	51,768	21,949	32,069	32,976	34,128	26,913	19,321	32,039	53,666
- - - AnsaldoBreda 2550 Base - TARGET	52,000	52,000	52,000	52,000	52,000	52,000	52,000	52,000	52,000	52,000	52,000	52,000	52,000
— 12 Month Rolling Avg AnsaldoBreda2550Base - AC	49,789	49,586	49,710	50,097	50,339	50,411	50,011	49,160	48,395	47,296	45,542	44,074	42,820

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



Metro

Percentage Change in Rail MMBMF by Vehicle Type Light Rail - Breda



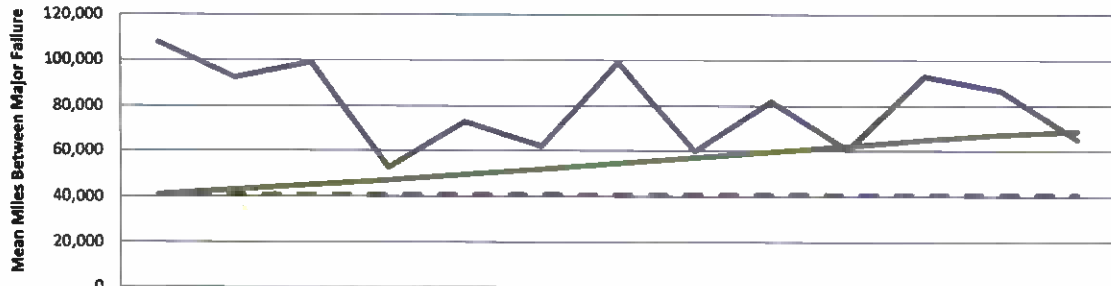
	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
— AnsaldoBreda 2550 Base - AC	29.6%	58.8%	-24.8%	-4.3%	18.0%	-57.6%	46.1%	2.8%	3.5%	-21.1%	-28.2%	65.8%	67.5%

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



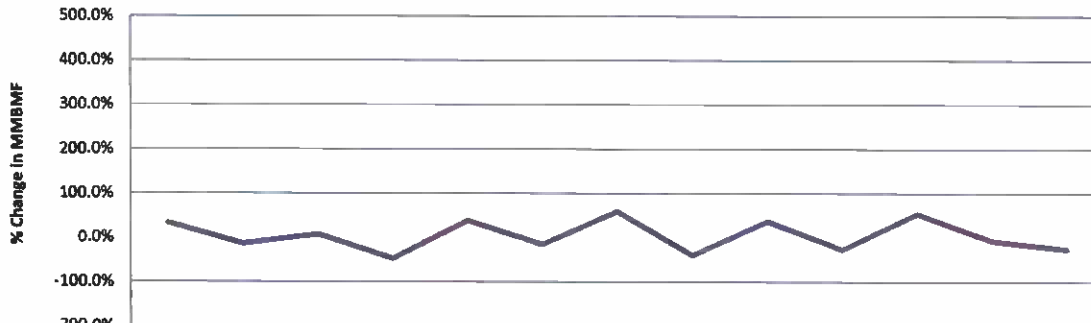
	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
KinkiSharyo P3010 *	107,909	92,771	99,289	52,753	73,160	62,116	99,363	60,035	82,231	60,577	93,250	86,940	65,214
KinkiSharyo P3010 - TARGET	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000
12 Month Rolling Avg KinkiSharyo P3010	41,041	43,081	45,127	47,286	49,760	52,080	54,615	57,102	59,695	62,225	65,092	67,414	68,946

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



Metro

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



	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
KinkiSharyo P3010 *	33.8%	-14.0%	7.0%	-46.9%	38.7%	-15.1%	60.0%	-39.6%	37.0%	-26.3%	53.9%	-6.8%	-25.0%

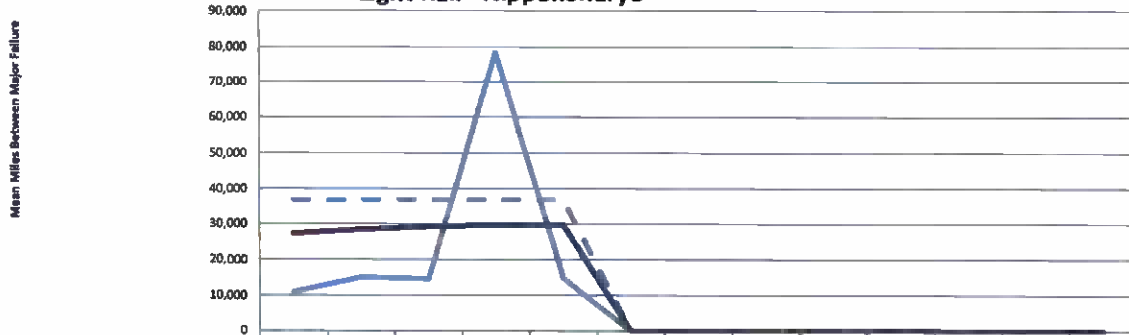
MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures. %Change is from previous month.



Metro

Rail Mean Vehicle Miles Between Major Failure by Vehicle Type

Light Rail - NipponSharyo



	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Nippon Sharyo 2020 - DC *	11,089	15,181	14,712	78,477	14,858	0	0	0	0	0	0	0	0
Nippon Sharyo 2020 - TARGET	37,000	37,000	37,000	37,000	37,000	0	0	0	0	0	0	0	0
12 Month Rolling Avg Nippon Sharyo 2020 - DC	27,348	28,502	29,261	29,756	29,803	0	0	0	0	0	0	0	0

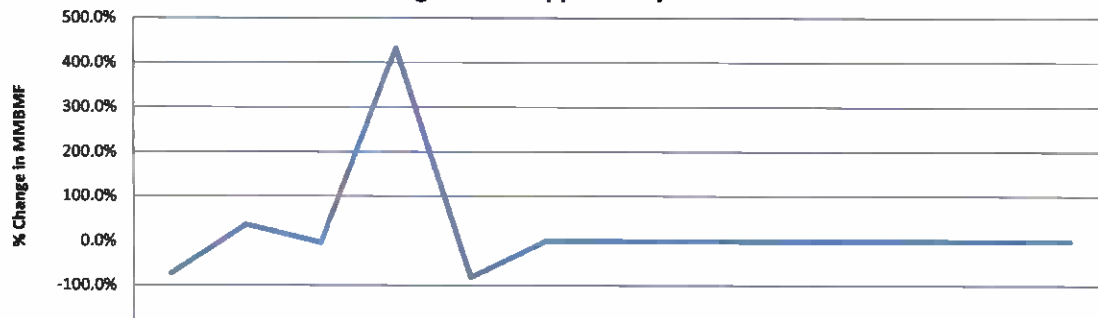
- * Nippon Sharyo 2020 Cars did not operate starting in February 2019
 - ** Nippon Sharyo 865 -DC Cars have been retired starting September 2018
- MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.



Metro

Percentage Change in Rail MMBMF by Vehicle Type

Light Rail - NipponSharyo



	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Nippon Sharyo 2020 - DC *	-72.3%	36.9%	-3.1%	433.4%	-81.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

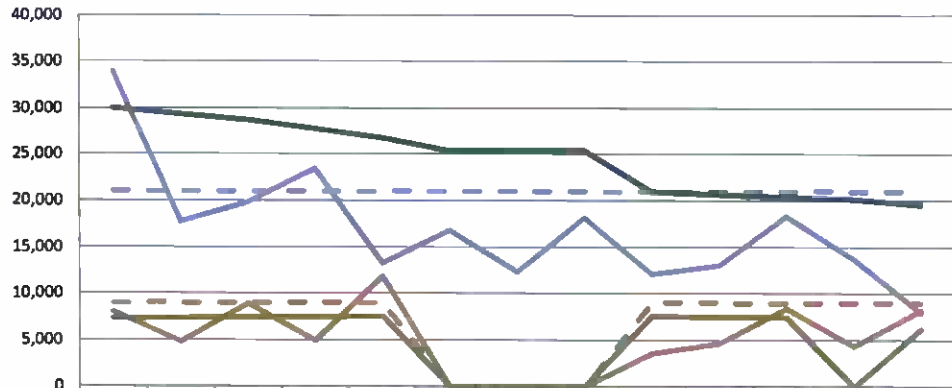
- * Nippon Sharyo 2020 did not operate starting in February 2019
 - ** Nippon Sharyo 865 -DC Cars have been retired starting September 2018
- MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures. %Change is from previous month.



Metro

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

Mean Miles Between Major Failure



	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Siemens 2000 Base - AC	33,989	17,816	19,888	29,455	13,310	16,886	12,338	18,216	12,118	13,056	18,410	13,747	7,953
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 **	8,052	4,877	8,911	4,963	11,882	0	0	0	3,607	4,711	8,422	4,402	8,222
Siemens 2000 GE/ATP - TARGET **	9,000	9,000	9,000	9,000	9,000	0	0	0	9,000	9,000	9,000	9,000	9,000
12 Month Rolling Avg Siemens 2000 Base - AC	30,076	29,419	28,766	27,801	26,804	25,377	25,372	25,427	20,982	20,708	20,446	20,206	19,619
12 Month Rolling Avg - Siemens 2000 GE/ATP - AC	7,356	7,382	7,450	7,496	7,573	0	0	0	7,591	7,527	7,488	0	6,193

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

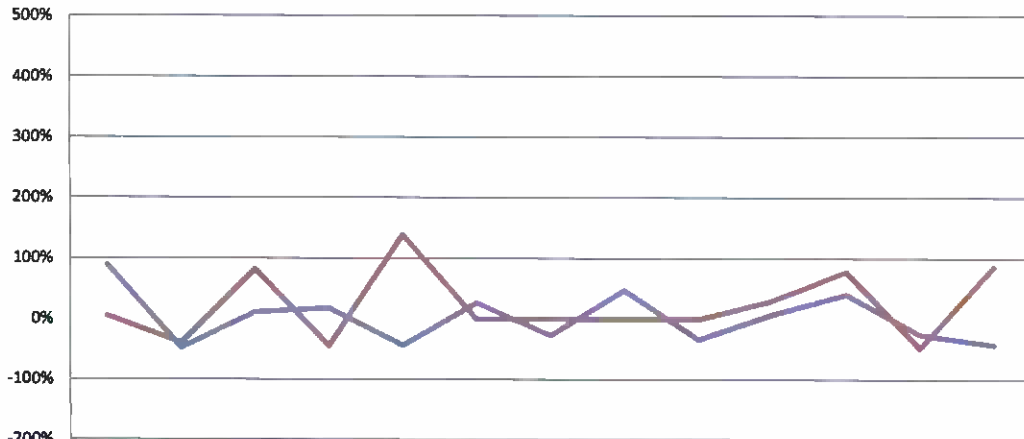
MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.



Metro

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

% Change in MMBMF



	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Siemens 2000 Base - AC	89.7%	-47.6%	11.6%	17.9%	-43.3%	26.9%	-26.9%	47.6%	-33.5%	7.7%	41.0%	-25.3%	-42.1%
Siemens 2000 GE/ATP - AC **	5.1%	-39.4%	82.7%	-44.3%	139.4%	0.0%	0.0%	0.0%	0.0%	30.6%	78.8%	-47.7%	86.6%

** 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

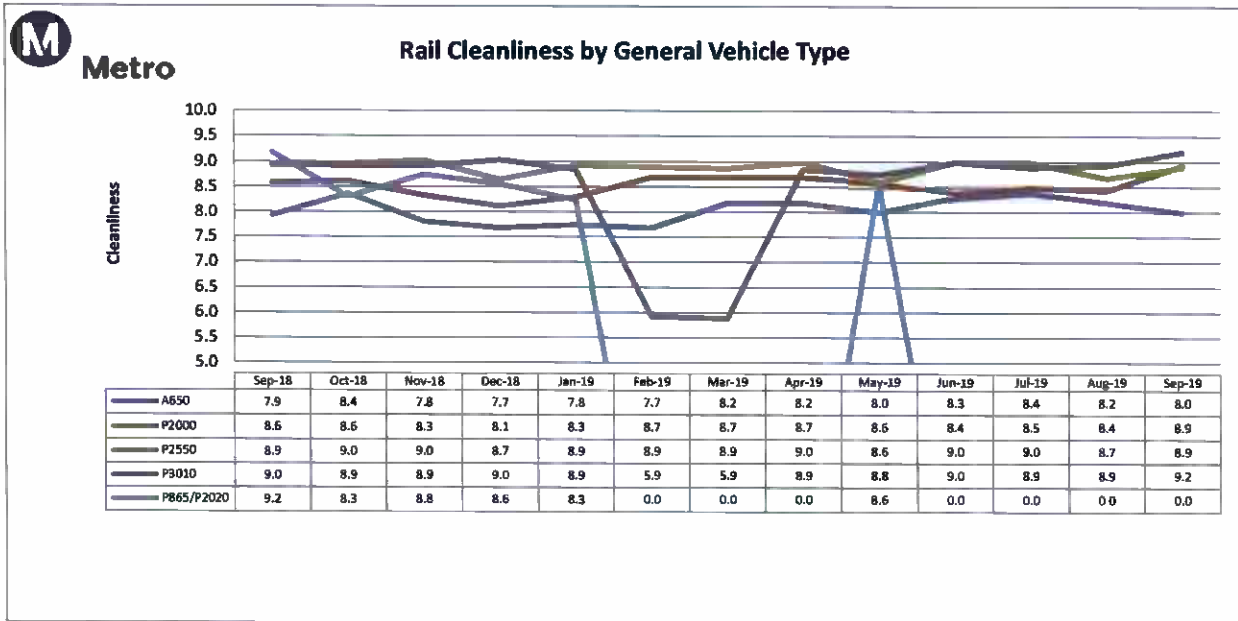
	FY 2019	FY2020 Goal	FY2020 YTD
AnsaldoBreda2550Base - AC	37,825	52,000	29,284
Breda 650 Base - DC	27,616	43,000	49,244
Breda 650 Option - AC	85,062	124,000	55,115
Kinkisharyo P3010	70,566	41,000	80,419
Nippon Sharyo 2020 - DC	21,405	37,000	0
Nippon Sharyo 865 - DC			0**
Siemens 2000 Base - AC	17,841	21,000	12,803
Siemens 2000 GE/ATP - AC	6,920	9,000	6,193

** retired in September 2018

Rail Fleet Distribution – September 2019

Number of Rail Vehicle Type by Division	Blue	Red / Purple	Green	Gold	Expo	Total
AnsaldoBreda 2550 Base - AC				50		50
Breda 650 Base - DC		28				28
Breda 650 Option - AC		68				68
Kinkisharyo P3010	54		25	47	56	182
Nippon Sharyo 2020 - DC	15					15
0						0
Siemens 2000 Base - AC	7				15	22
Siemens 2000 GE/ATP - AC			16			16
TOTALS	76	96	41	97	71	381

Cleanliness by Vehicle Type Sep 2019

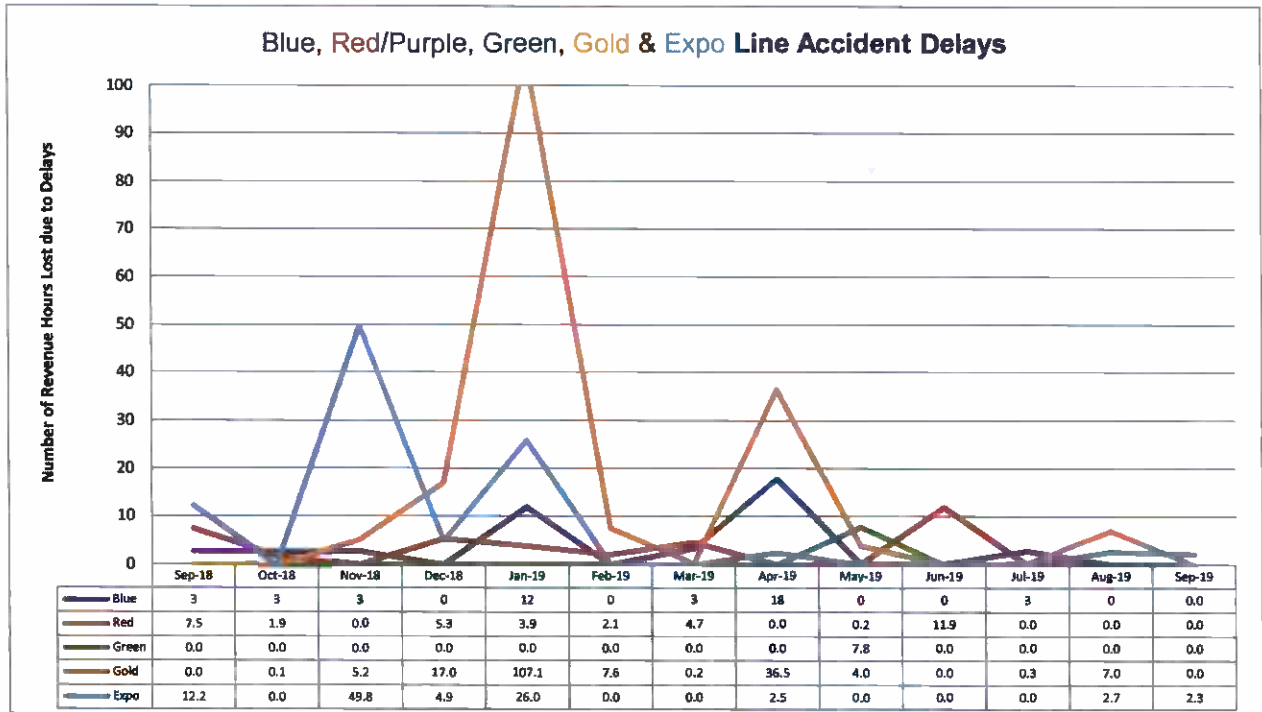


P2020 has only one cleanliness inspection since Jan 2019 due to Blue Line Construction

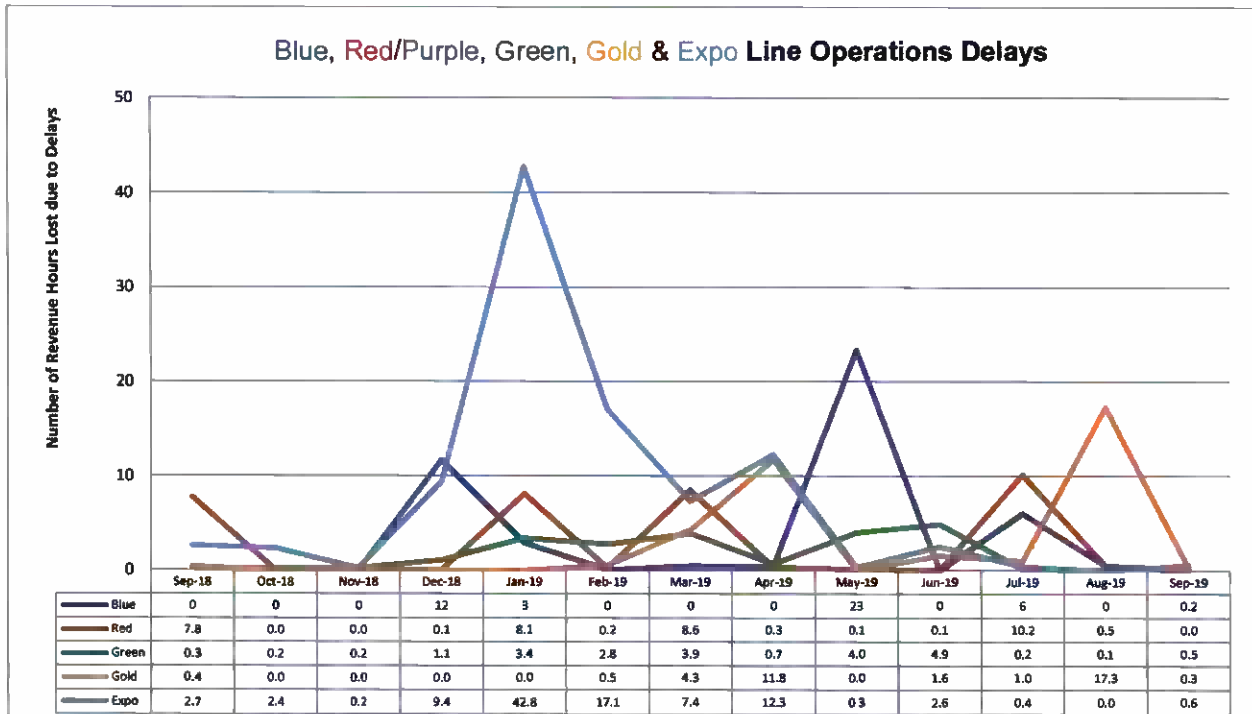
RAIL DELAYS BY CATEGORY - SYSTEMWIDE

Revenue Hours Lost Related to - ACCIDENTS

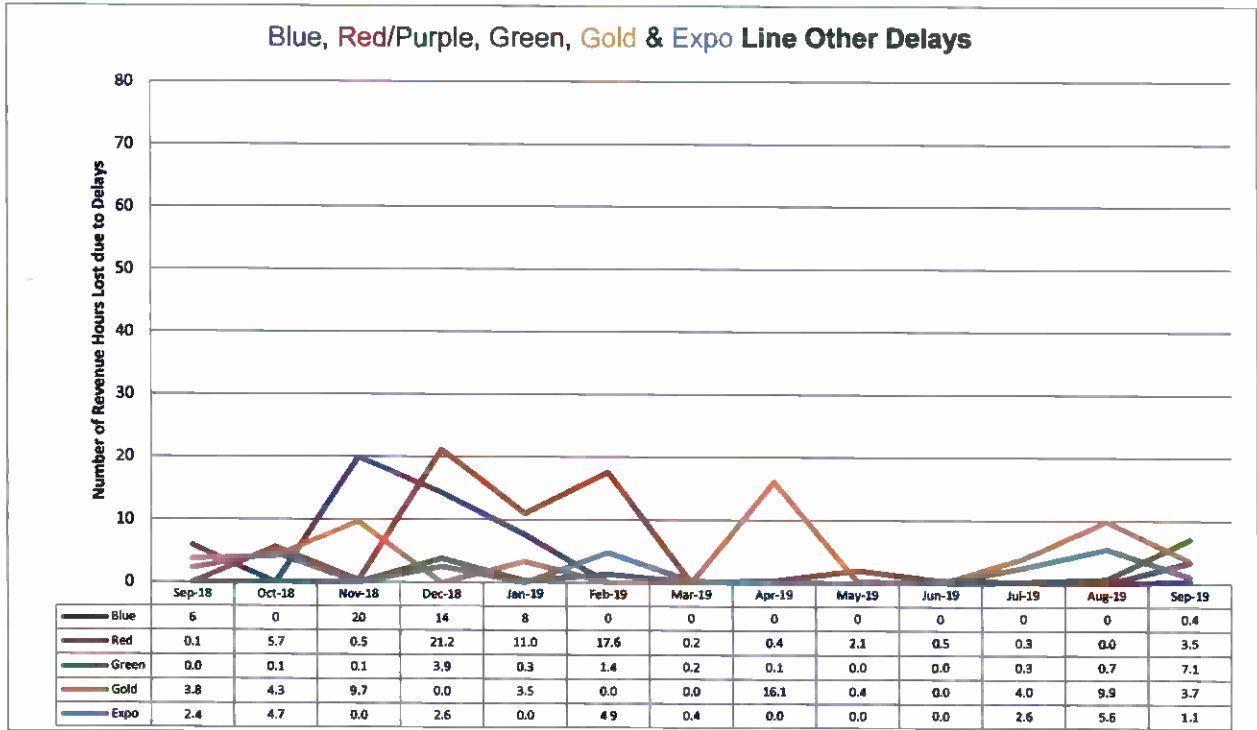
Sep 2019



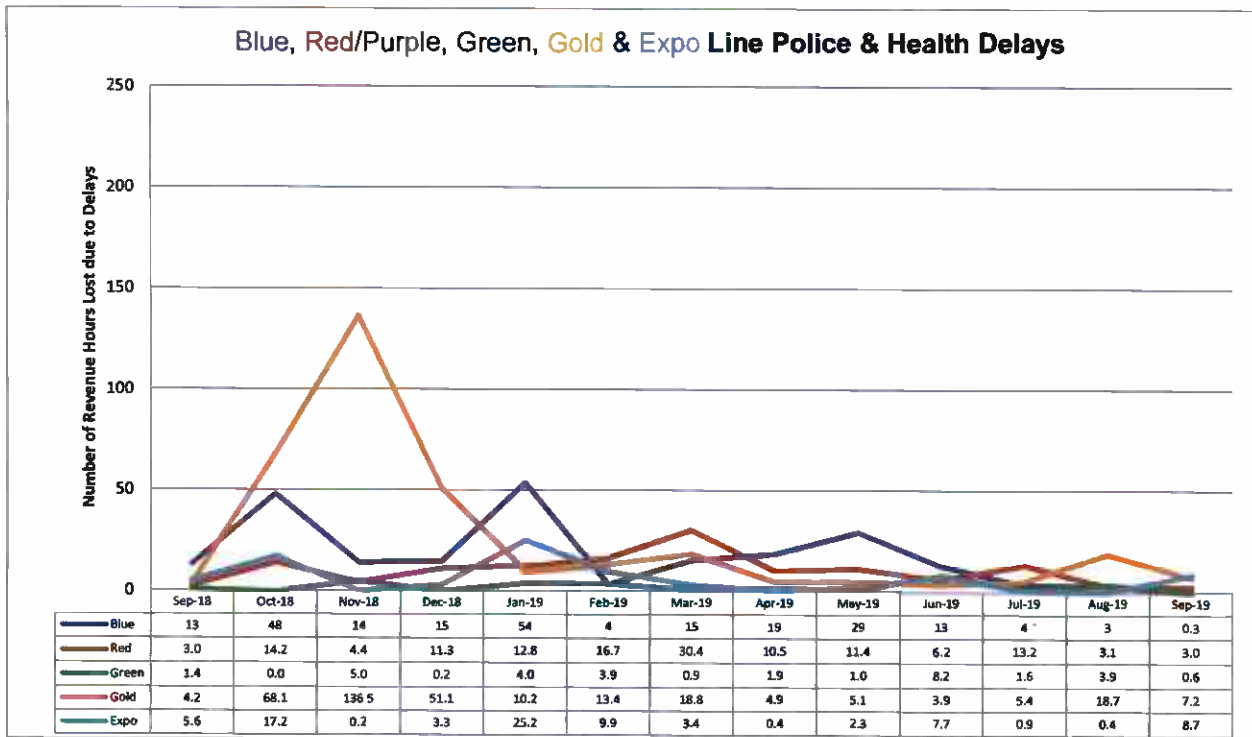
Revenue Hours Lost Related to - OPERATIONS



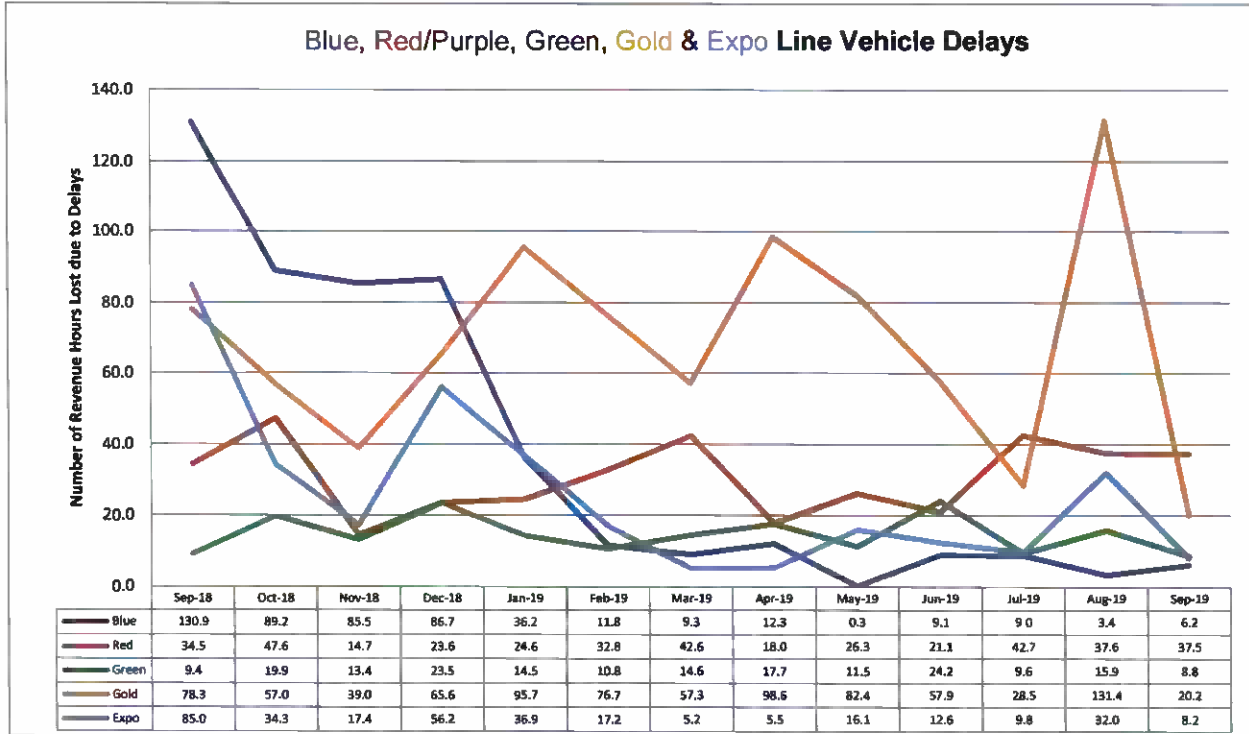
Revenue Hours Lost Related to - OTHER



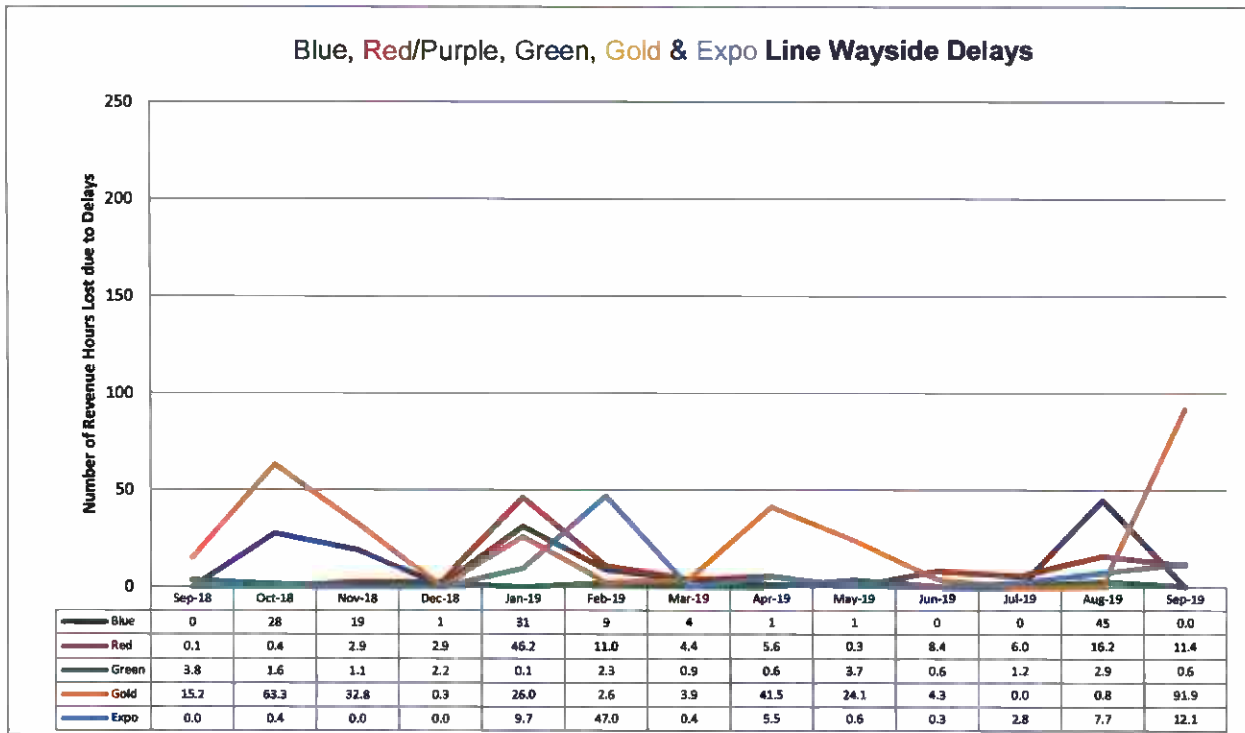
Revenue Hours Lost Related to - POLICE & HEALTH



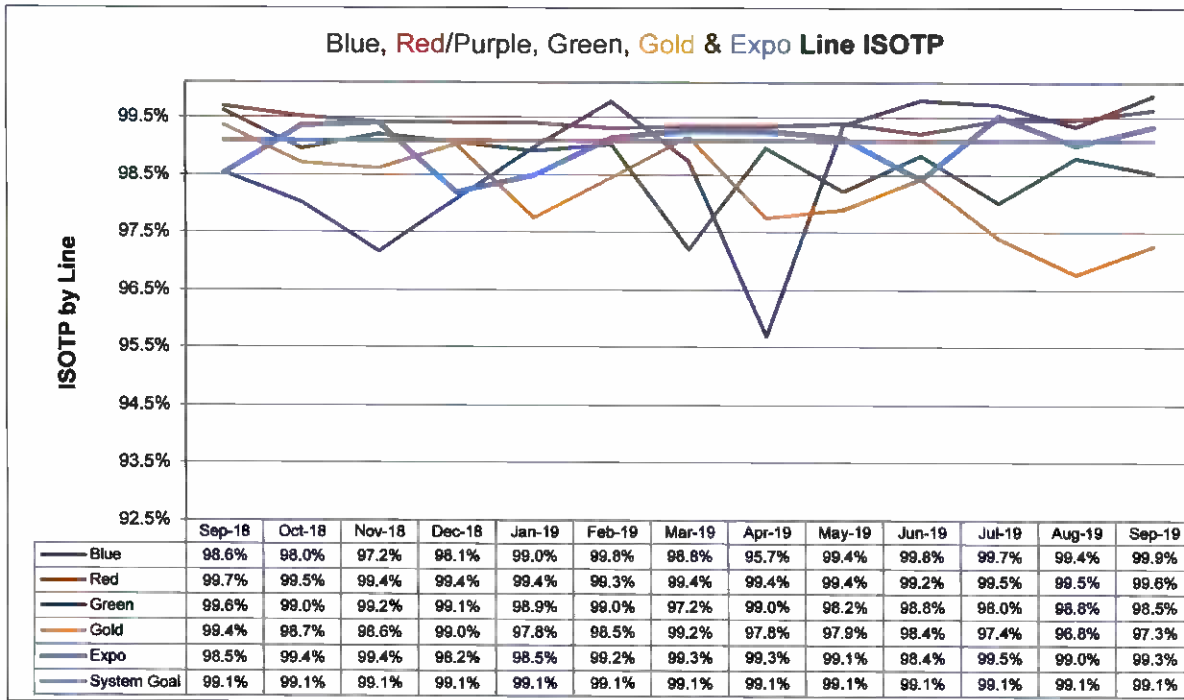
Revenue Hours Lost Related to - Vehicle Delays



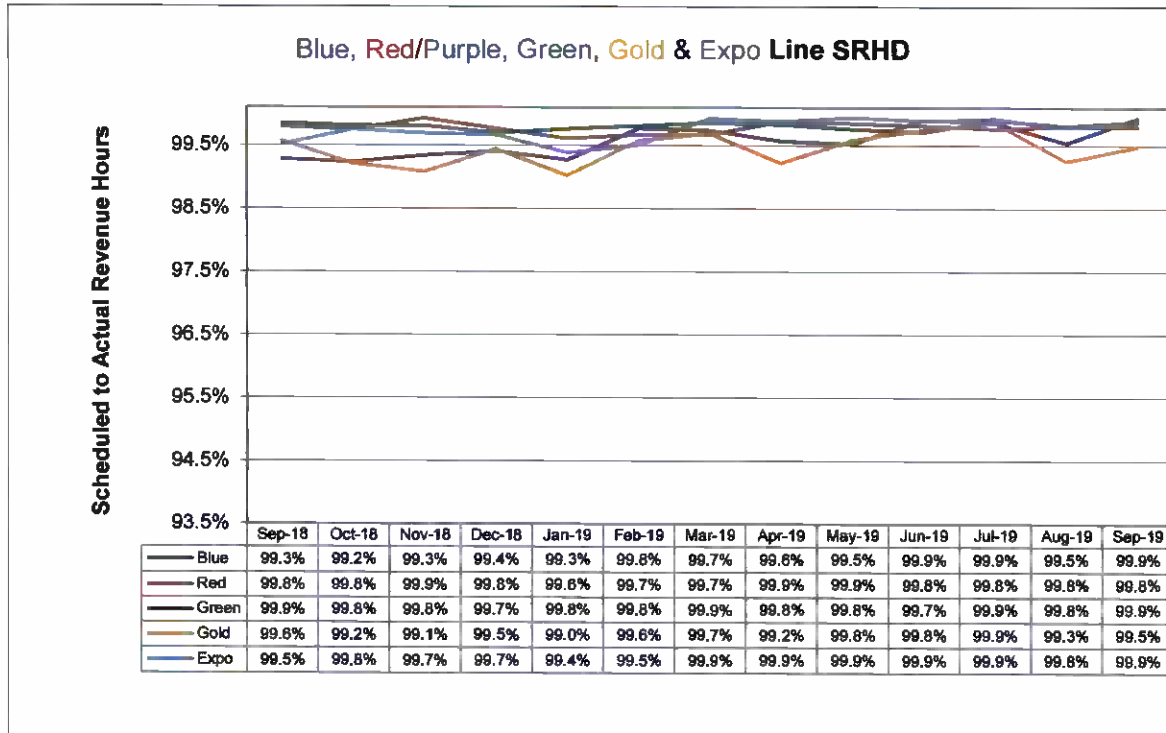
Revenue Hours Lost Related to - WAYSIDE



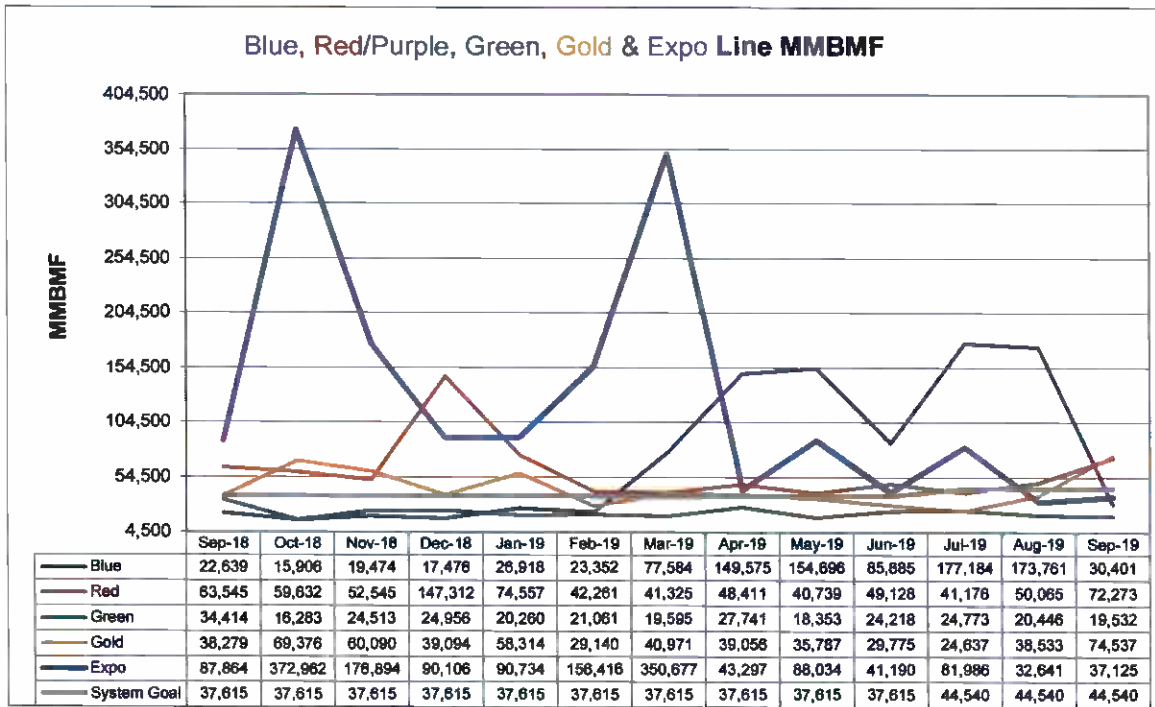
Rail Service Performance In Service On Time Performance by Line Sep 2019



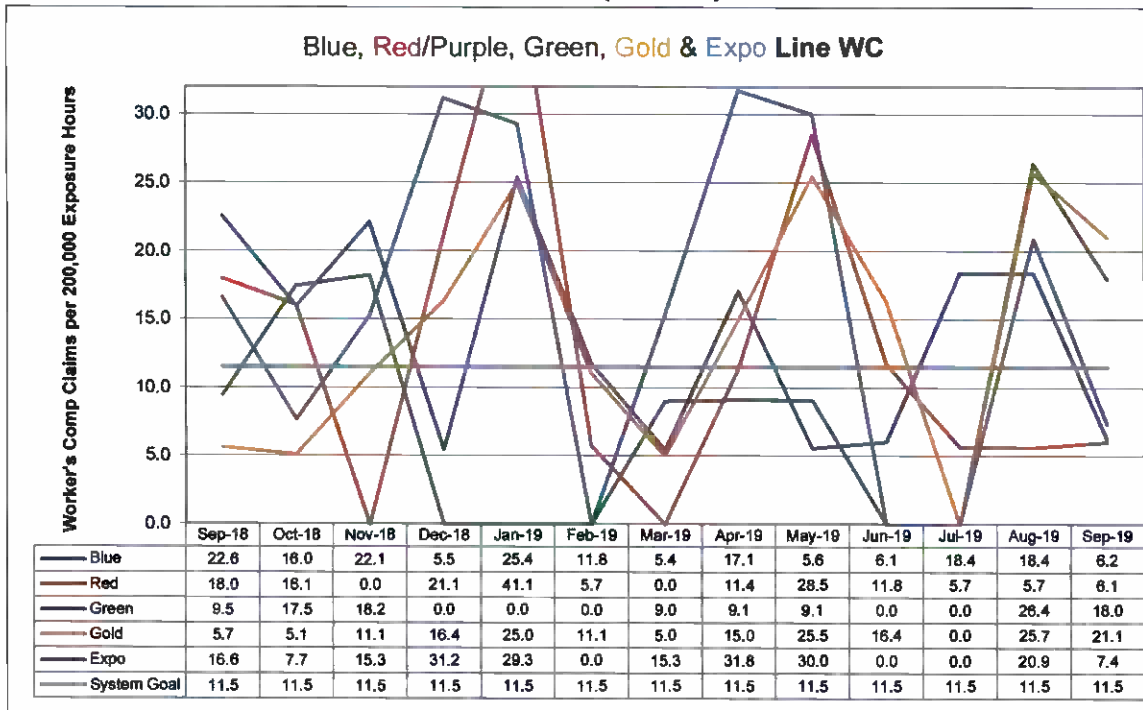
Ratio of Scheduled to Revenue Hours Delivered by Line



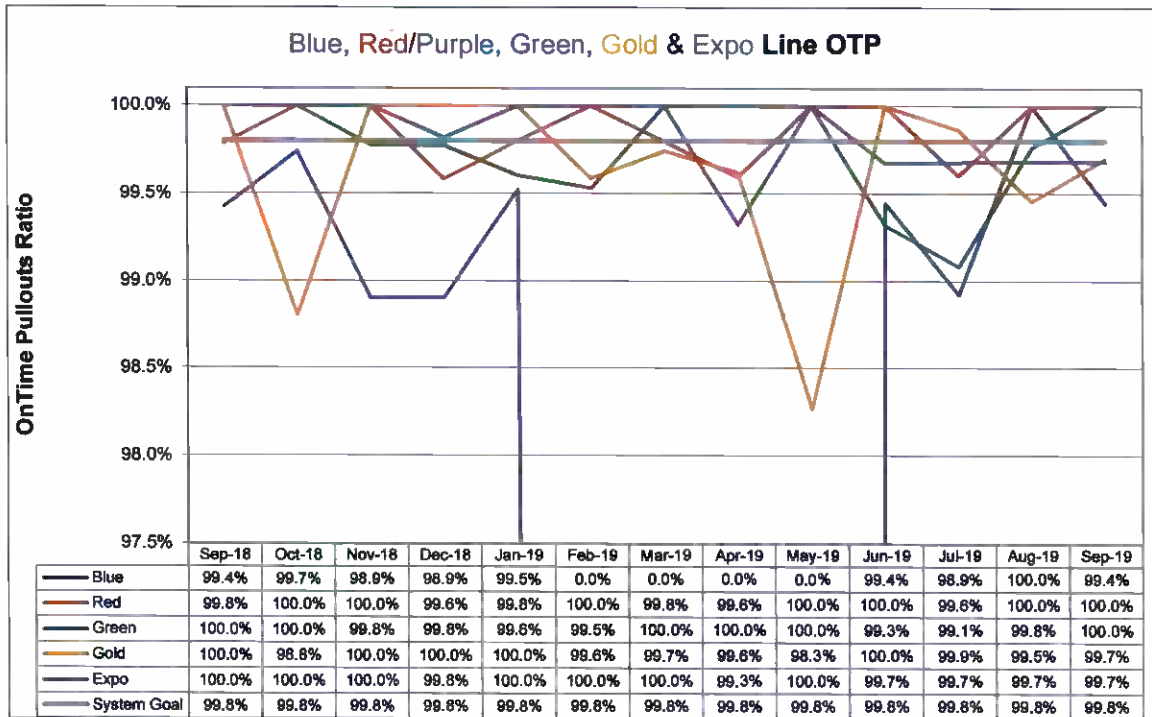
Mean Miles Between Mechanical Failures by Line



Workers Comp Claims by Line



On-Time Pullouts Ratio by Line

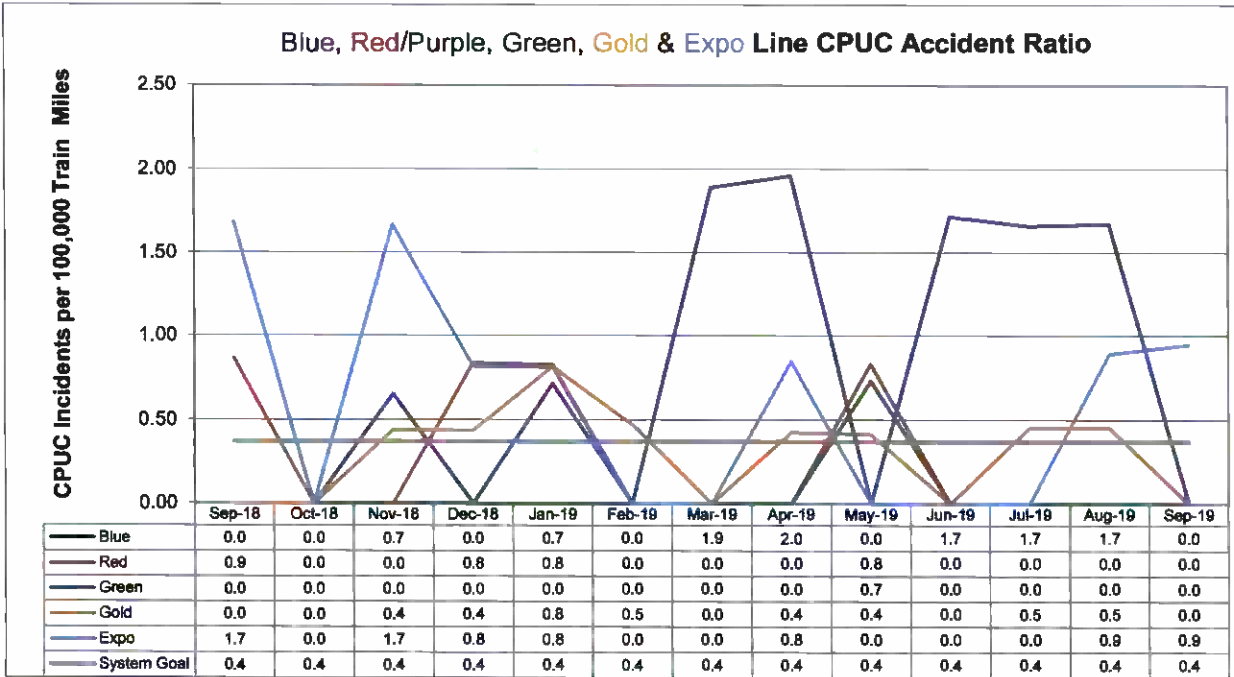


Due to Blue Line Construction, Blue pulled out of EXPO for Feb, Mar, Apr and May 2019.

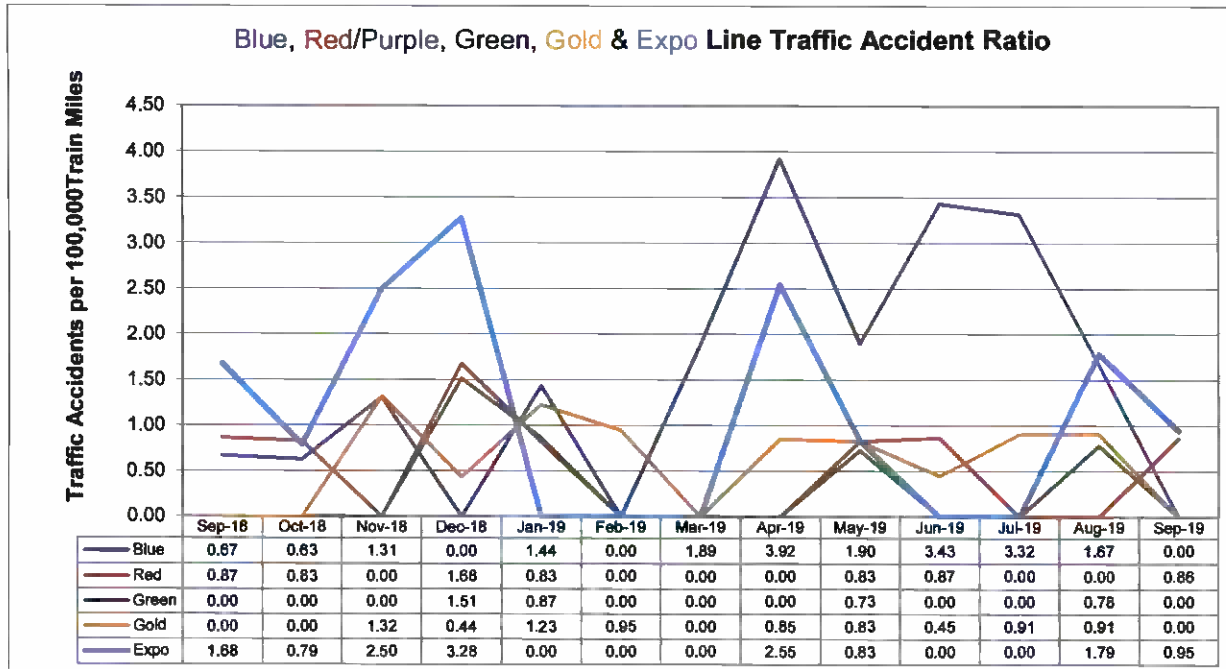
Rail Safety Performance

CPUC REPORTABLE INCIDENTS PER 100,000 TRAIN MILES

Sep 2019



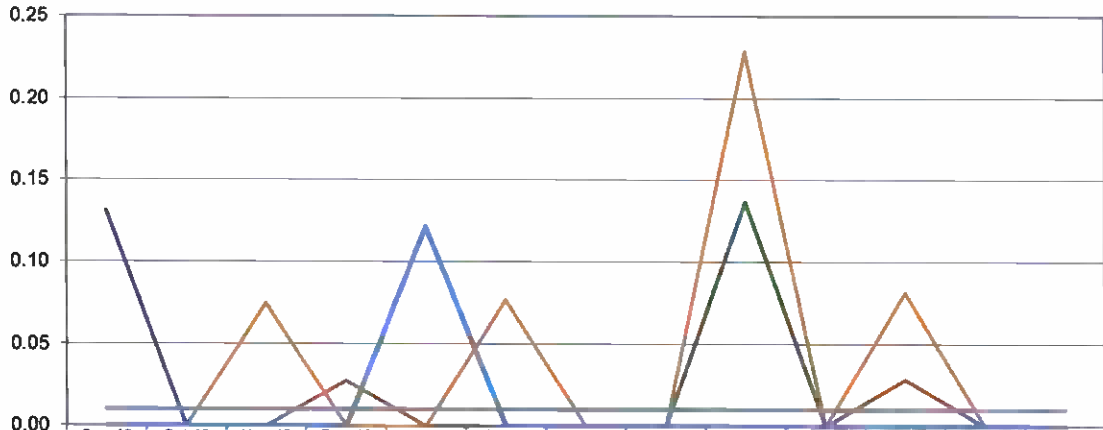
TRAFFIC ACCIDENTS PER 100,000 TRAIN MILES



PASSENGER ACCIDENTS PER 100,000 BOARDINGS

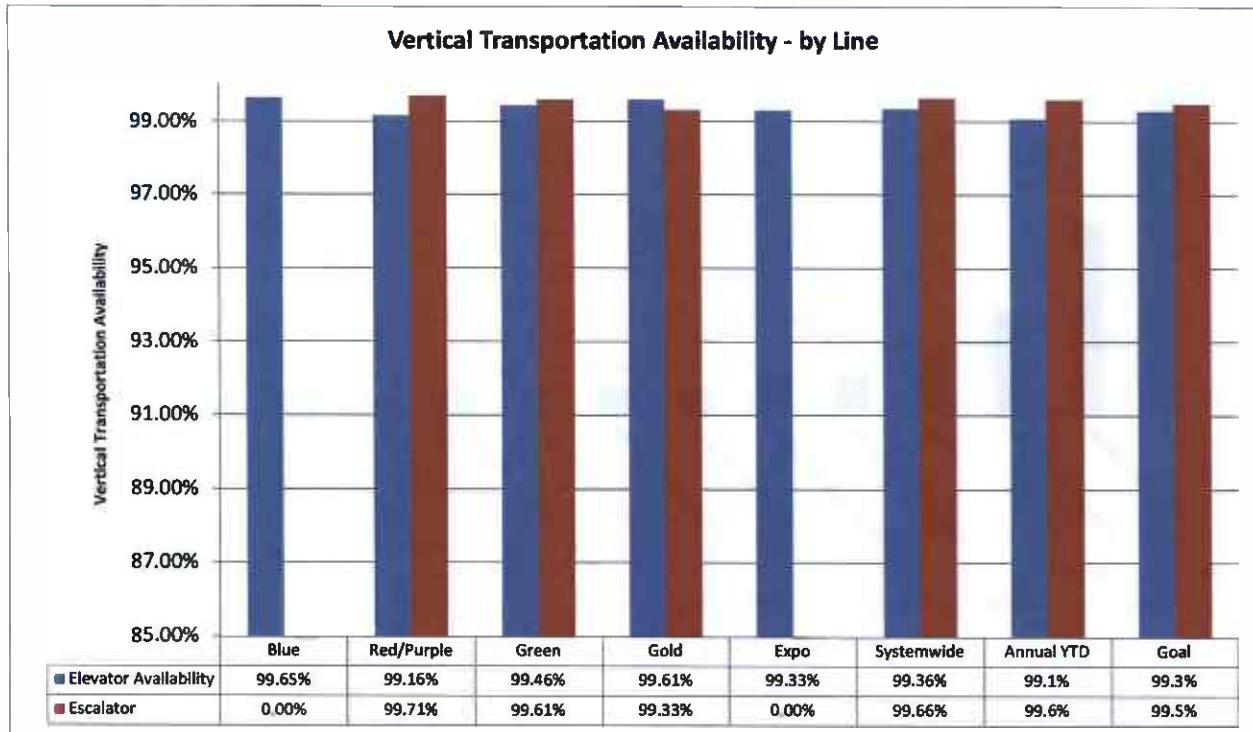
Blue, Red/Purple, Green, Gold & Expo Line Passenger Accident Ratio

Passenger Accidents per 100,000 Boardings



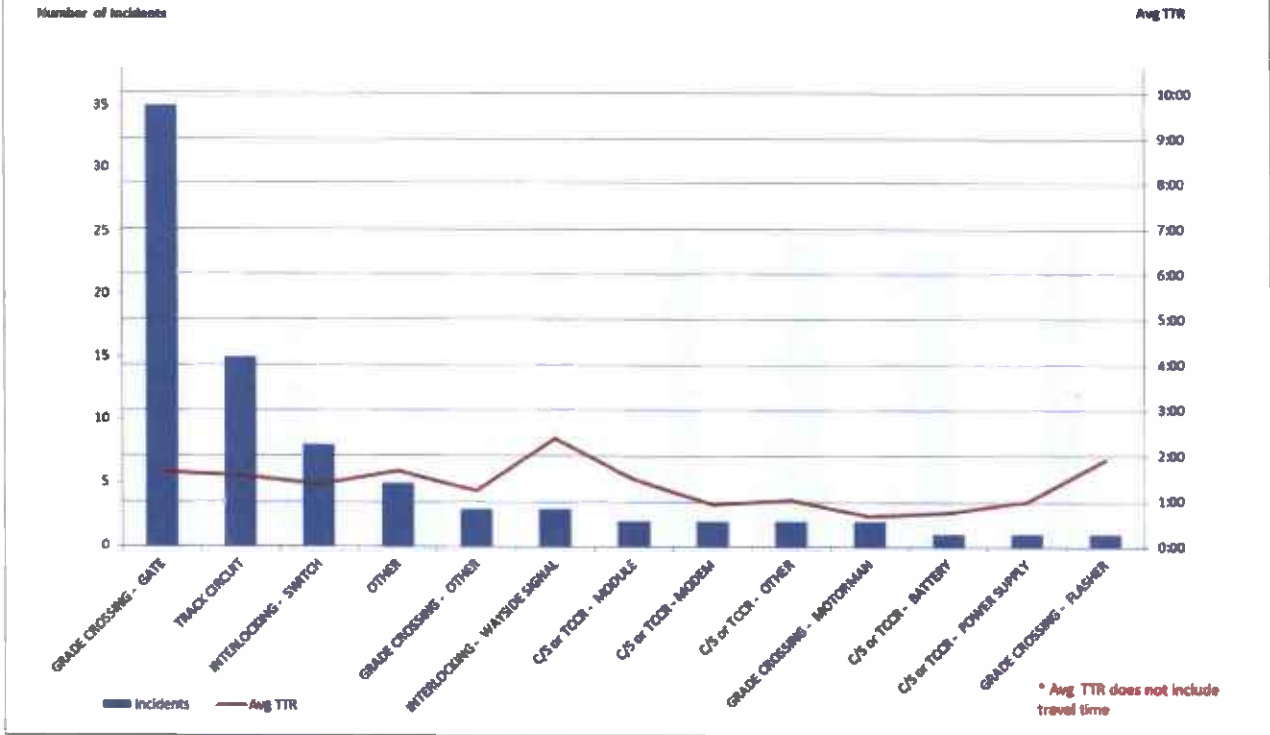
	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Blue	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Red	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Green	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00
Gold	0.00	0.00	0.08	0.00	0.00	0.08	0.00	0.00	0.23	0.00	0.08	0.00	0.00
Expo	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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 Sep 2019

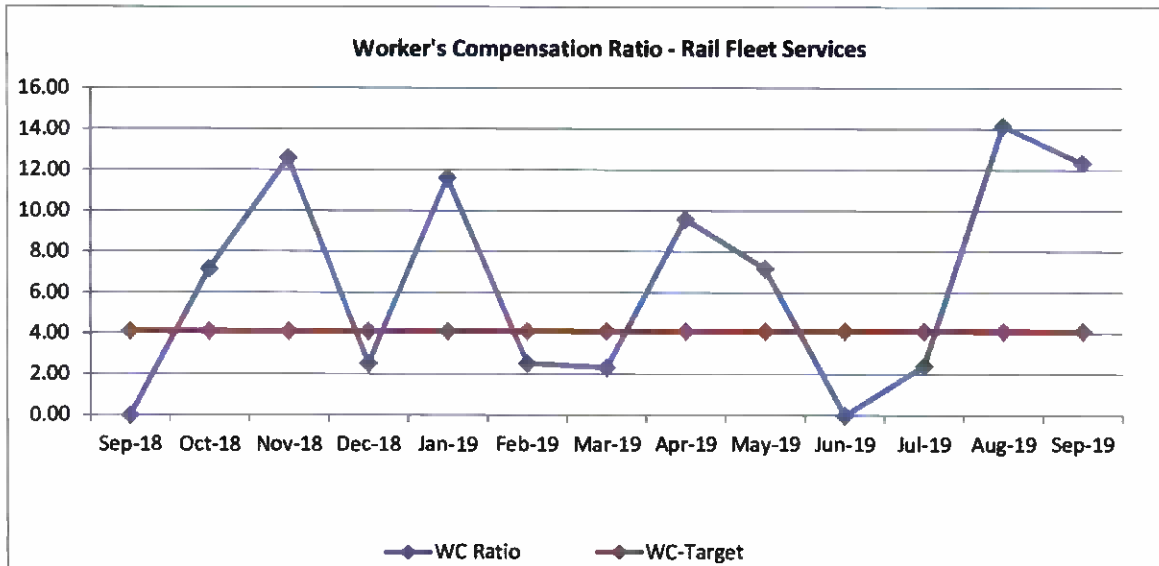
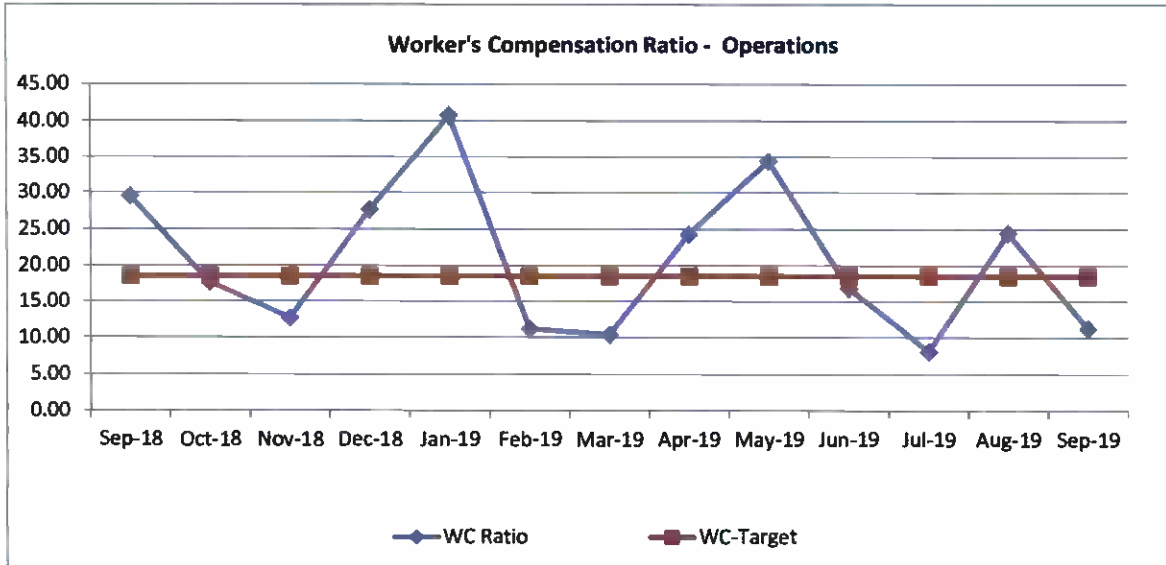


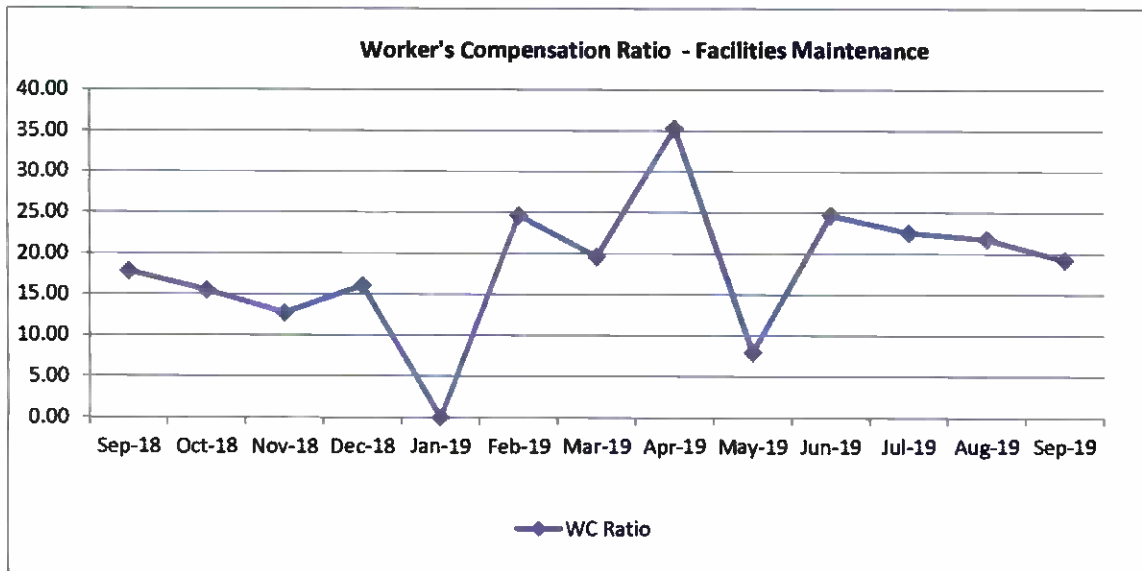
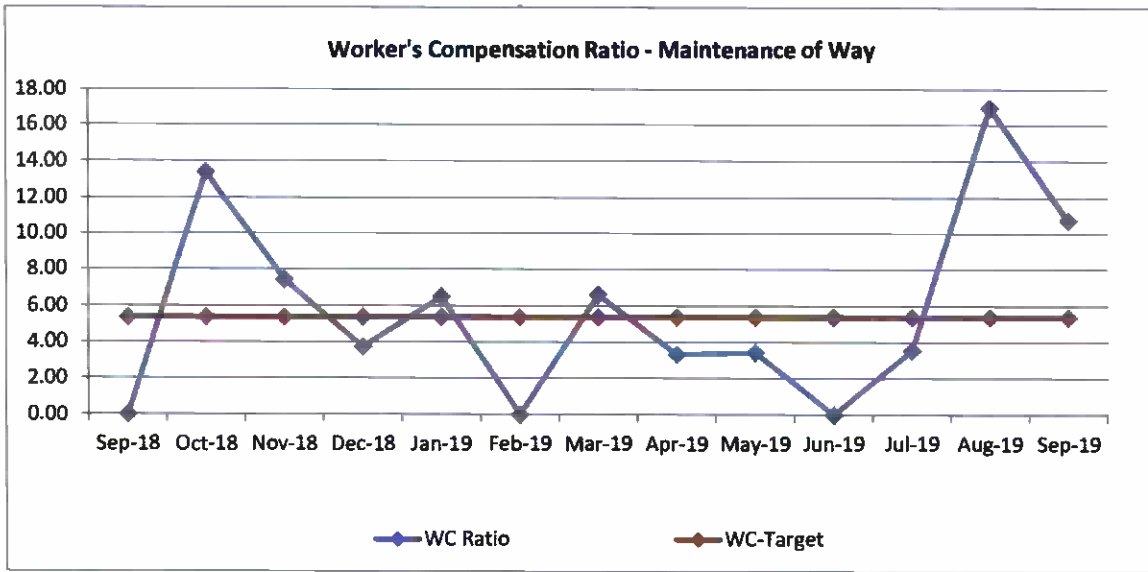
Note: No Escalators at Blue and Expo Lines

Wayside Signal Maintenance
 (Incidents & Avg Time-To-Repair (TTR))
 September 2019

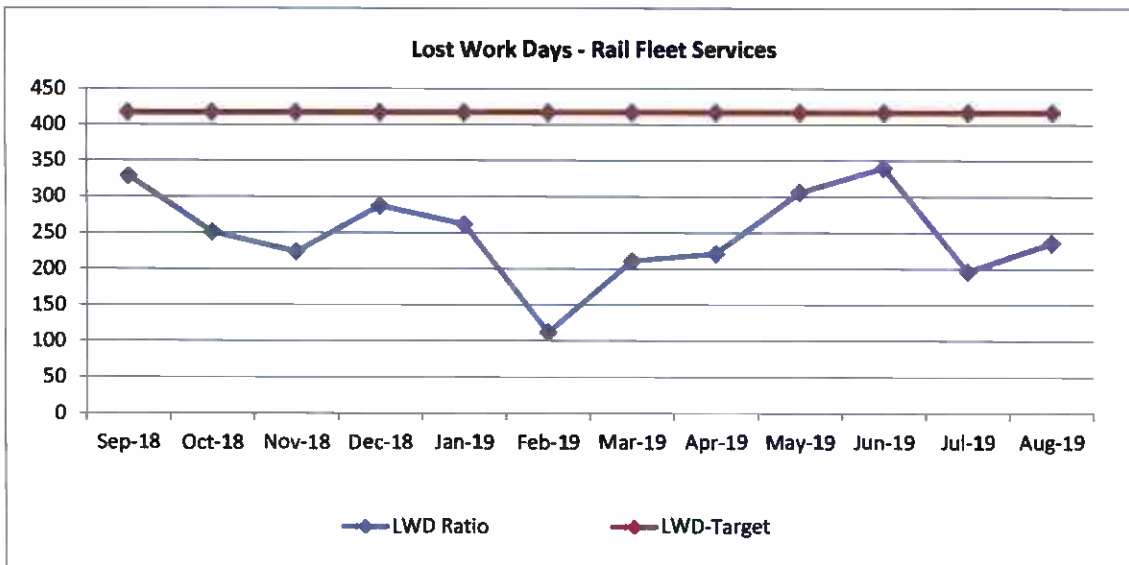
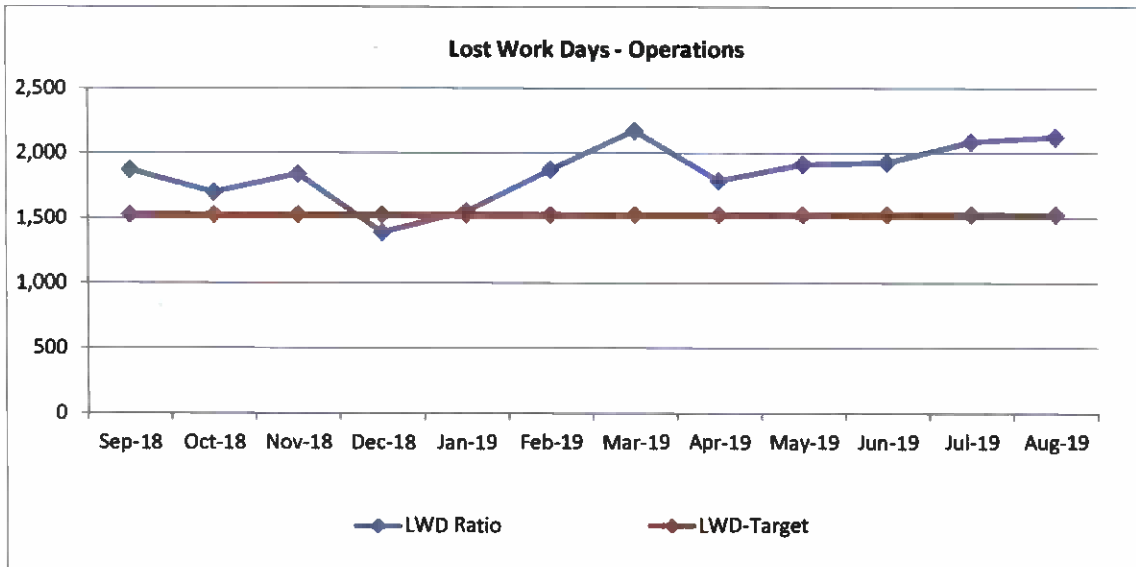


Administrative Key Performance Indicators Worker's Compensation, Lost Work Days, OSHA Sep 2019

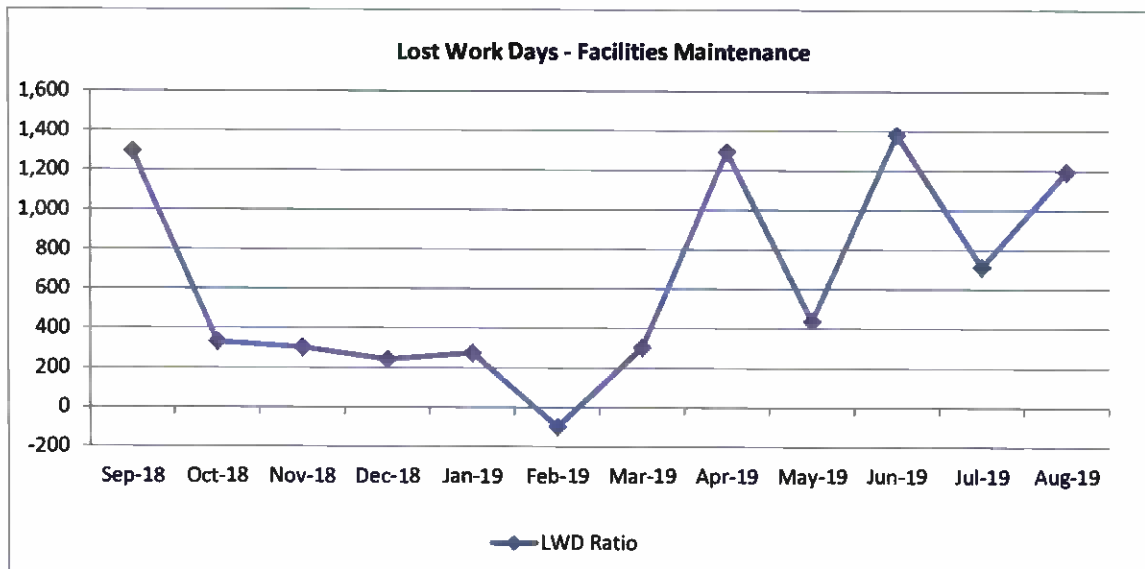
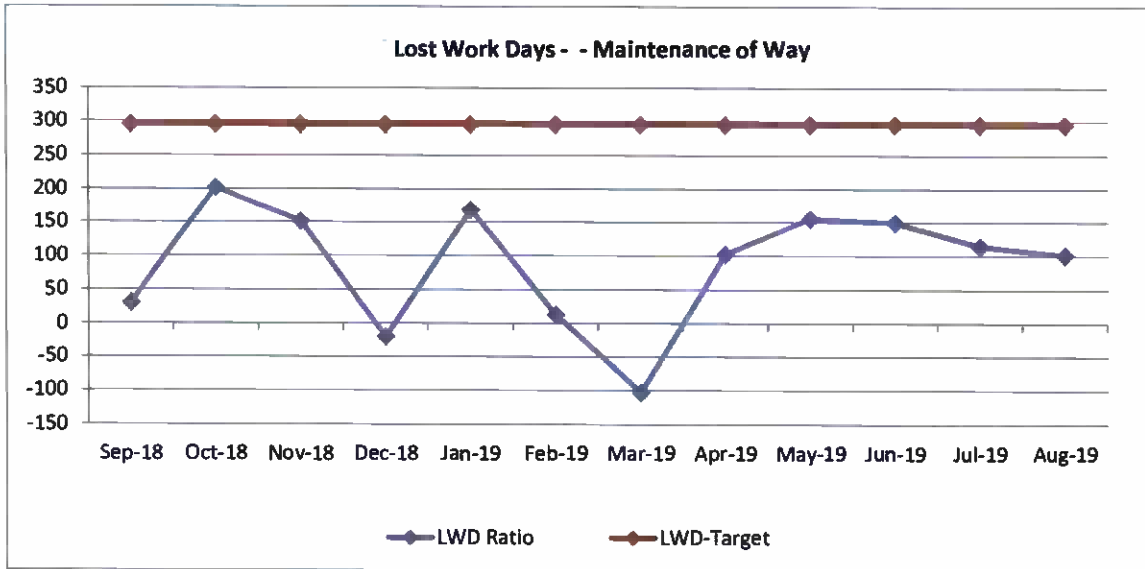




Facilities Maintenance goals to be established.

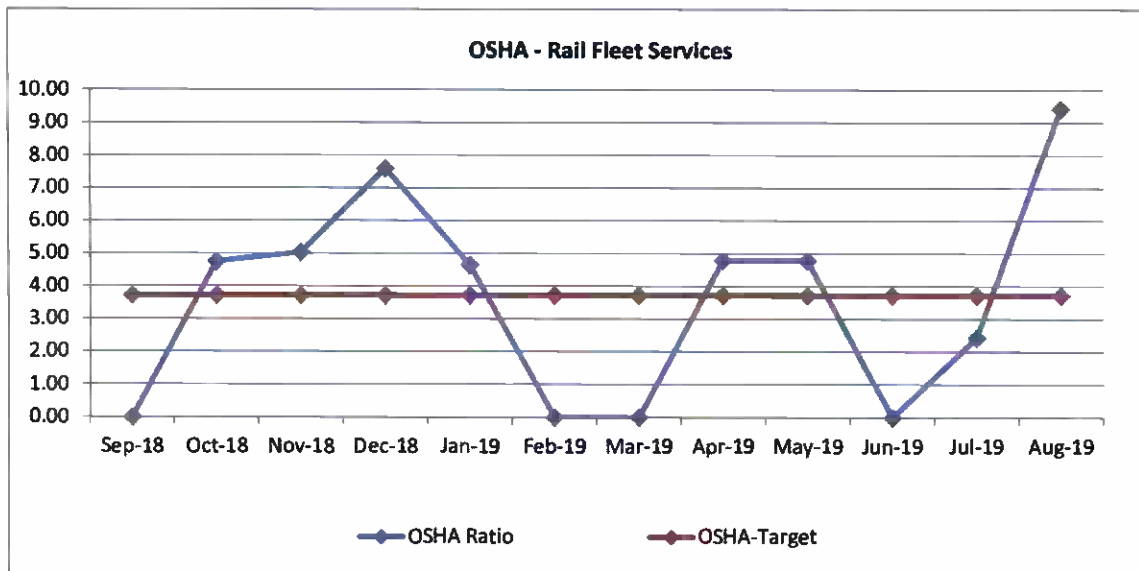
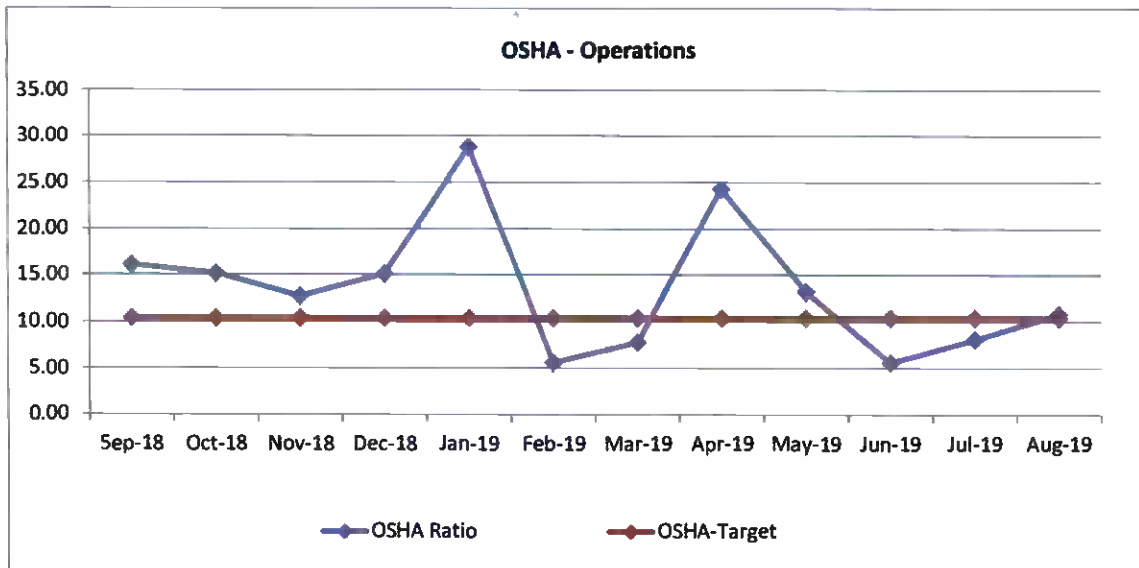


Note: There is a one month lag in Lost Work Days and OSHA data.

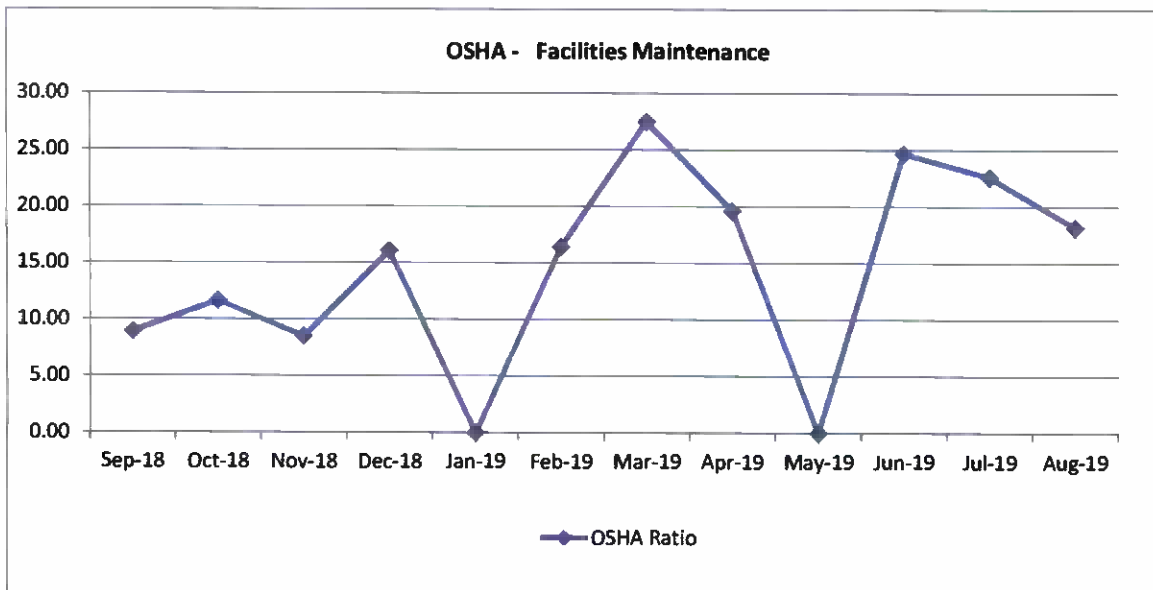
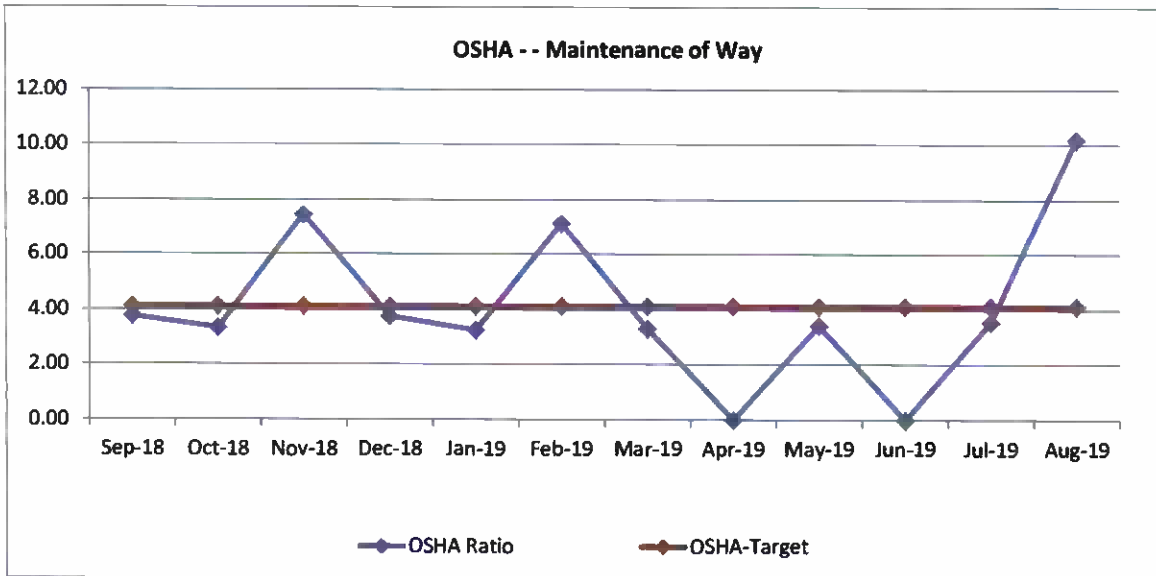


Facilities Maintenance goals to be established.

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



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Facilities Maintenance goals to be established.

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

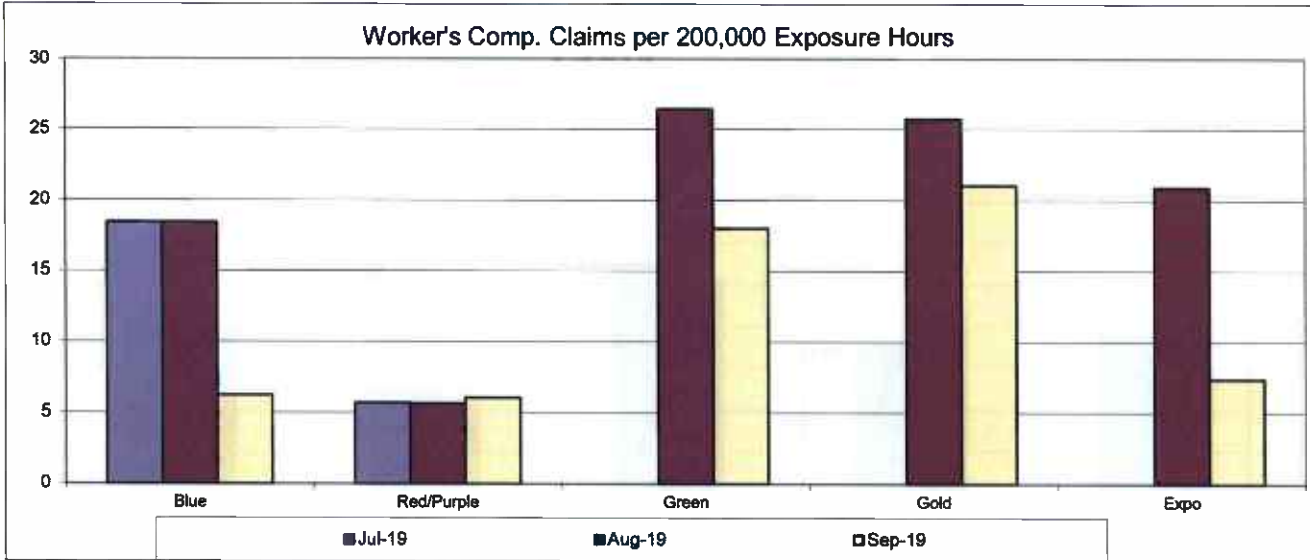
Worker's Comp. Claims

Jul 2019 - Sep 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.

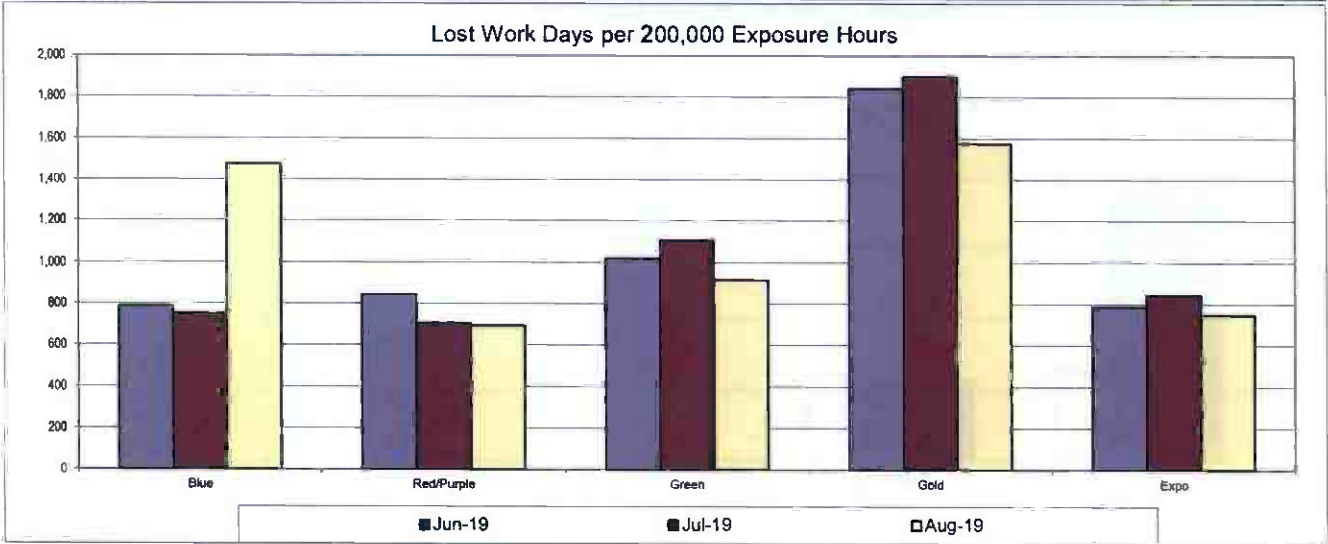
Calculation: New reported Workers' Compensation Indemnity and Medical claims filed per 200,000 Exposure Hours = $\text{New Claims} / (\text{Exposure Hours} / 200,000)$



Lost Work Days and OSHA Injuries
Jun 2019 - Aug 2019
3 Month Comparison

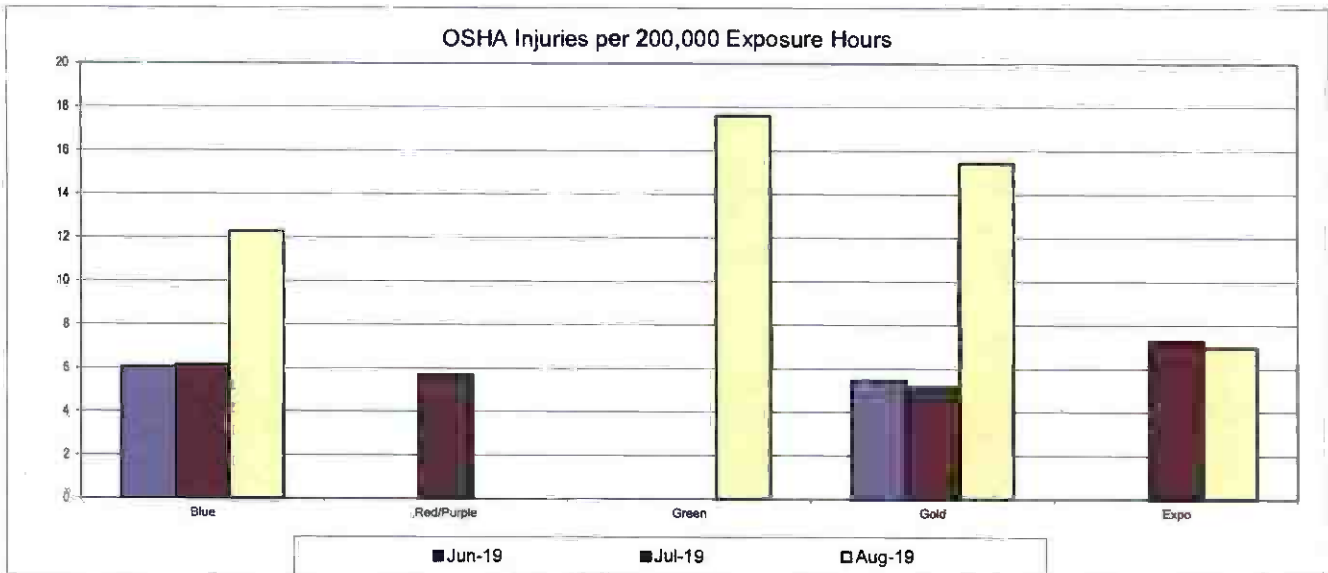
LWD Definition: Number of paid working days lost due to employees workers' compensation injuries each month per 200,000 exposure hours. This indicator measures use of Transitional Duty Program.

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

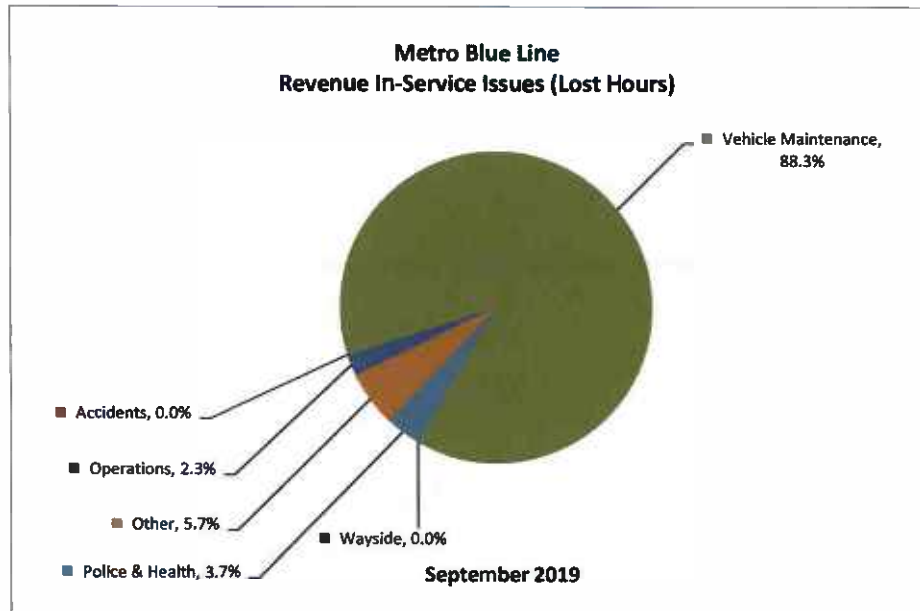
Out of a total of 9,408 hours operated, there were approximately 7 total hours of service delays.

September 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	9,401	99.9%
Cancelled + Delayed Hours	7	0.1%
Total Revenue Hours	9,408	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	1	0.2	2.3%
Accidents	0	0.0	0.0%
Vehicle Maintenance	5	6.2	88.3%
Wayside	0	0.0	0.0%
Police & Health	4	0.3	3.7%
Other	4	0.4	5.7%
Total	14	7.0	100.0%

* 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



September 2019 Blue Line incidents causing delay were as follows:

Operations Incidents:

9/28/2019 1:54:00 PM - Incident# 3206569 (0 lost trips, 10 lost minutes)

Approaching Compton Station, operator reports flats on car 1123-1100
Train 101
Track 1
Northbound
T-308
1123-1190

Vehicle Maintenance Incidents:

9/9/2019 4:30:00 AM - Incident# 3198141 (1 lost trip, 174 lost minutes) CHARGEABLE

T-216 arriving late at the Willow Station due to problems with the train.
T-216
Tr#104
Cars(1073A)-1112-1140
Southbound Trk#1
Sound wall

9/10/2019 5:55:00 AM - Incident# 3198660 (0 lost trips, 6 lost minutes) CHARGEABLE

Air Conditioning leaking, cars 1173-(1112)-1140
Train #103
T-541
Compton Station, track #2, Southbound.

9/11/2019 4:32:00 AM - Incident# 3199137 (0 lost trips, 5 lost minutes) CHARGEABLE

Roll-Out, cars #1116-1131-1123
Train #104
T-216
Blue line Yard

9/12/2019 9:48:00 AM - Incident# 3199816 (1 lost trip, 174 lost minutes) CHARGEABLE

Train 101 reports no movement at transit mall.
Train 101
T-264
LRV'S (1087) 1118-1084
Transit Mall track 1 northbound

9/19/2019 10:33:00 PM - Incident# 3203130 (0 lost trips, 18 lost minutes)

No Cab Signal also B/O speedometer
Train 105 TK #2 SB Compton Station
T-69
(1116B)-1083-1117

Police & Health Incidents:

9/9/2019 4:59:00 AM - Incident# 3198205 (0 lost trips, 8 lost minutes) CHARGEABLE

T-256 reports that there was a patron with a weapon on his person in car #1092.

9/11/2019 6:48:00 PM - Incident# 3199569 (0 lost trips, 5 lost minutes) CHARGEABLE

Long Beach Police Department Officer Grajea Metro Unit #3 was on scene reporting 2 buses at 1st and Long Beach involved in a accident and blocking both tracks.

9/20/2019 9:50:00 AM - Incident# 3203341 (0 lost trips, lost minutes)

Late departure from Transit Mall Station due to blocked track, Track 1.

9/26/2019 6:28:00 PM - Incident# 3205959 (0 lost trips, 3 lost minutes)

Trespasser

Train 105

T-244

1107-1090-1123

Northbound, Track 1 8Th and Long Beach TK 2.

Other Incidents:

9/28/2019 6:19:00 PM - Incident# 3206612 (0 lost trips, lost minutes) CHARGEABLE

Train 102

(1084)-1118

T201

Track #2

Compton Station

Operator reports someone spilled gas on the consist.

Unable to Duplicate:

9/9/2019 5:19:00 AM - Incident# 3198180 (0 lost trips, 8 lost minutes) CHARGEABLE

T-216 experiencing problems with cab signals on car #1073 A.

T-216

Tr#104

Cars(1073A)-1112-1140

Southbound Trk#2

Willow Station

9/20/2019 11:55:00 AM - Incident# 3203393 (0 lost trips, 8 lost minutes) CHARGEABLE

Train 101

Southbound

Track #2

(1090B)-1076-1139

T-262

Operator reports propulsion problems with loss of power at 26th Street.

Reset:

9/11/2019 9:31:00 AM - Incident# 3199312 (0 lost trips, 6 lost minutes) CHARGEABLE

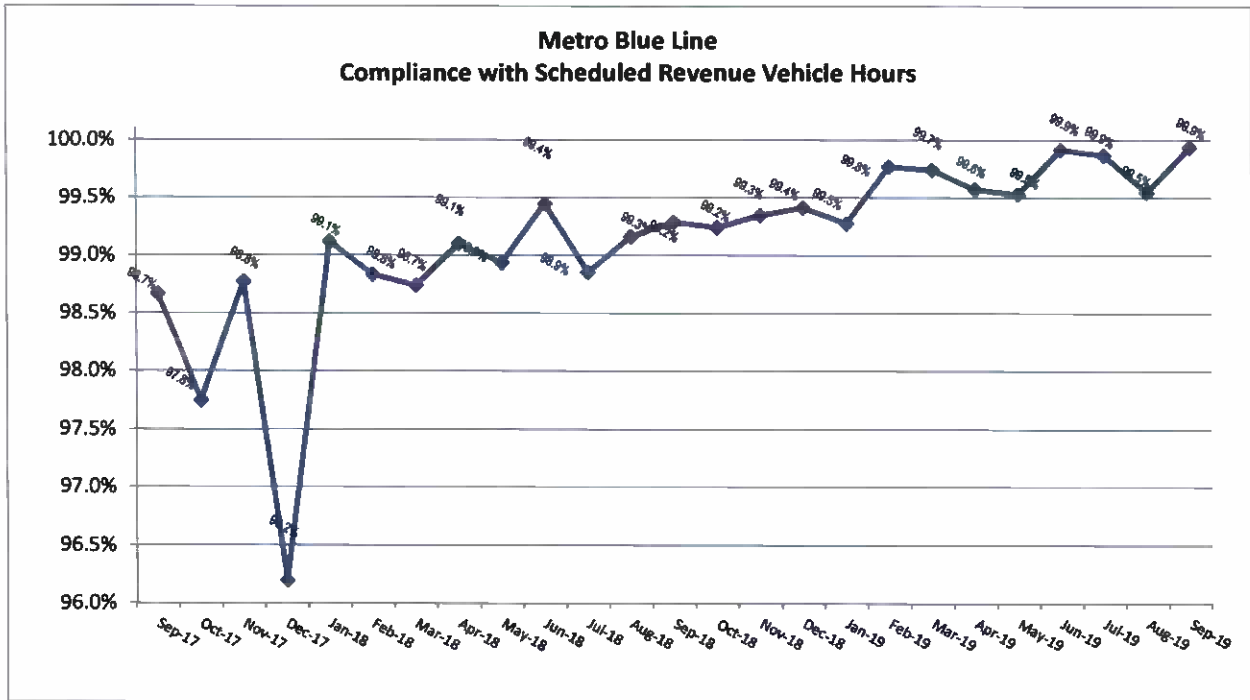
Auto Train Protection (Speed Limit) cars #(1140A)-1073-1093

Train #105

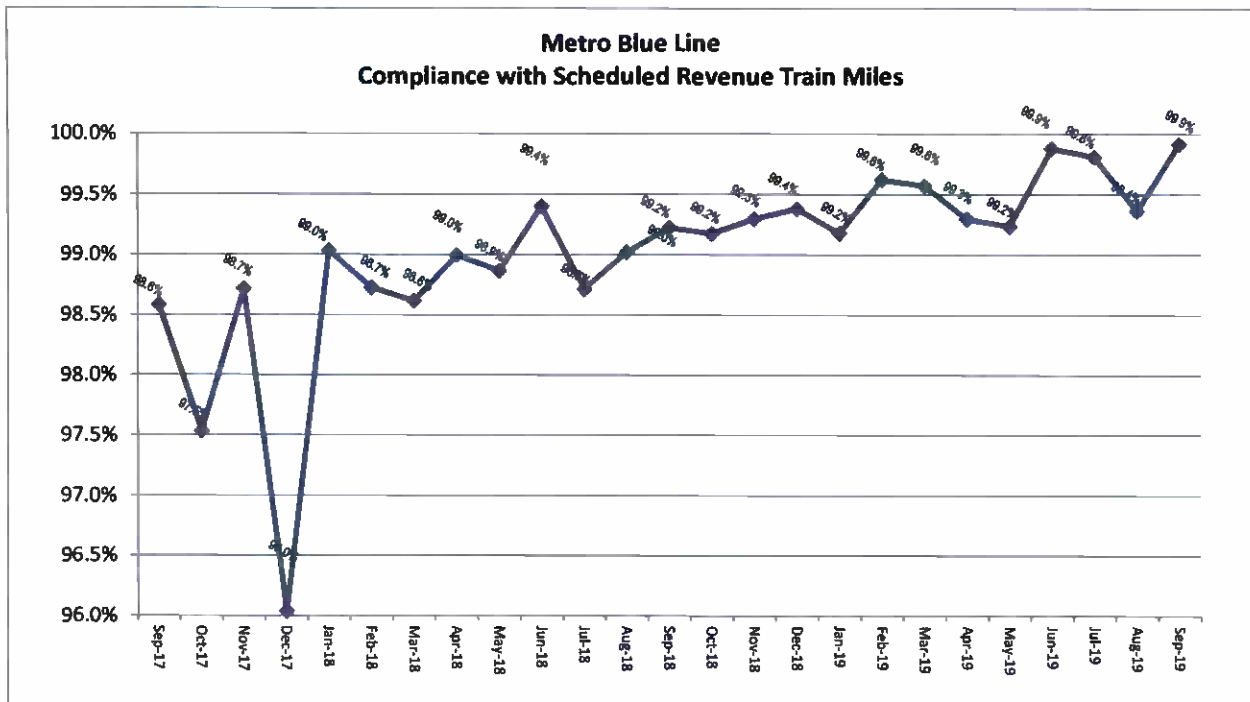
T-216

Wardlow Station, track #2, Southbound.

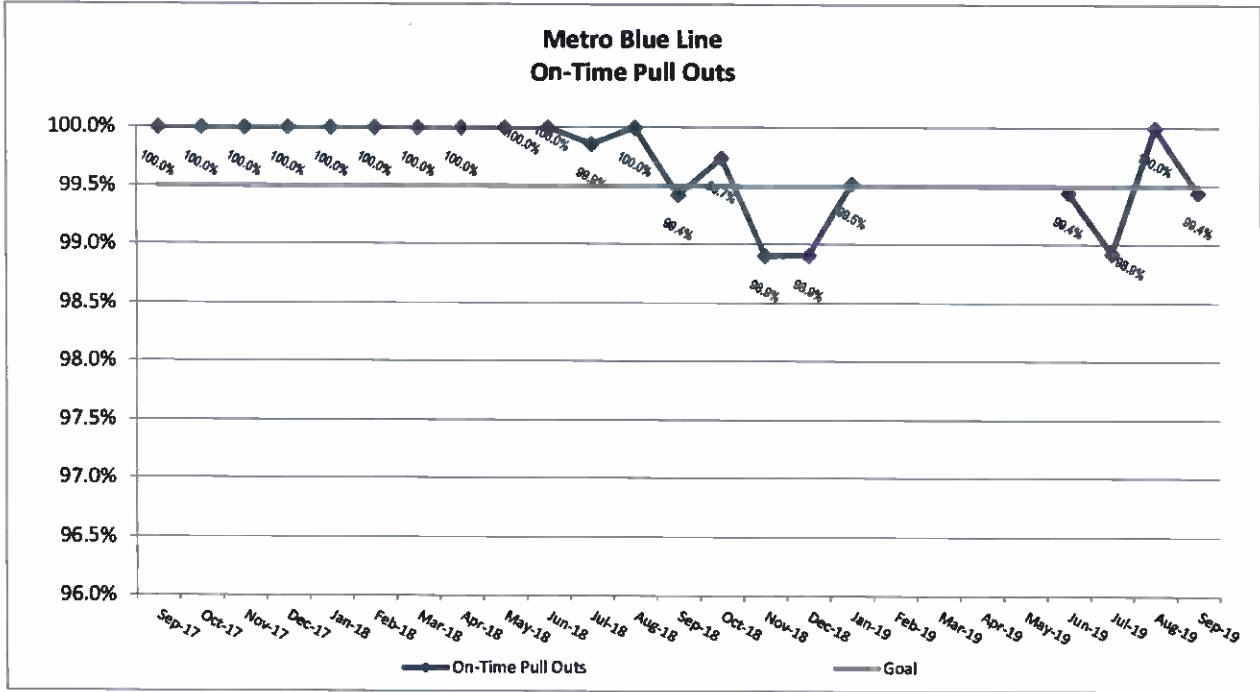
**MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS
COMPLIANCE WITH SCHEDULED VEHICLE HOURS
Sep 2019**



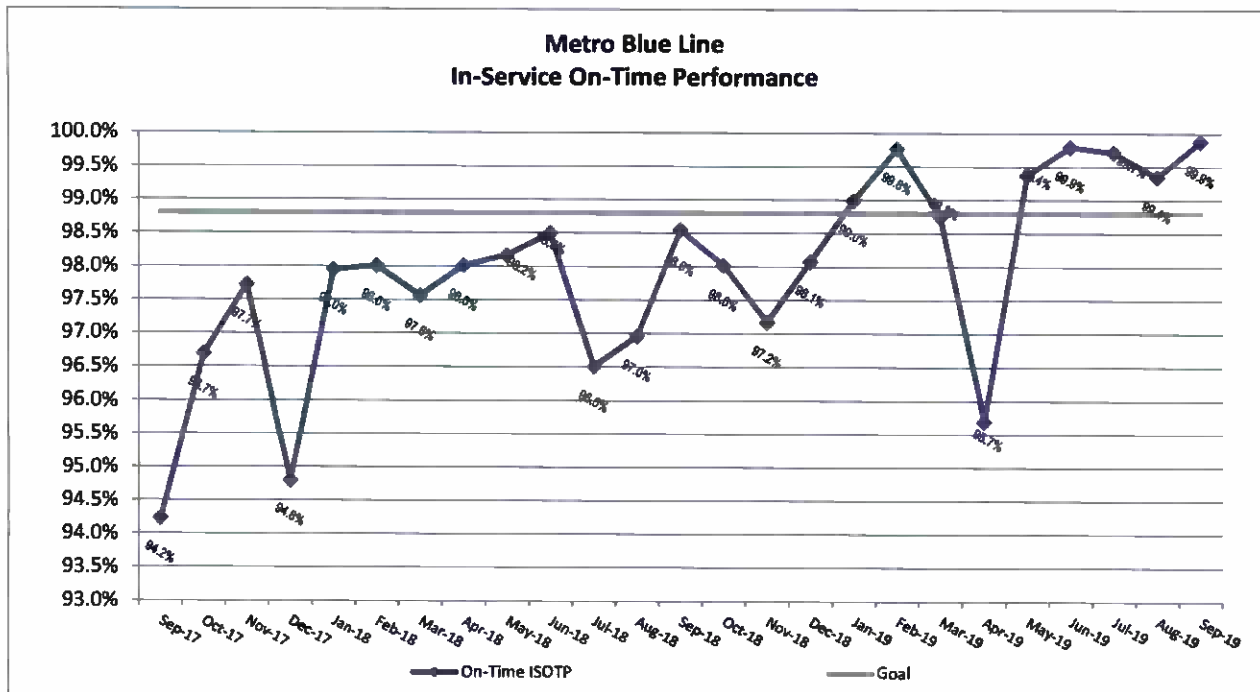
COMPLIANCE WITH SCHEDULED TRAIN MILES



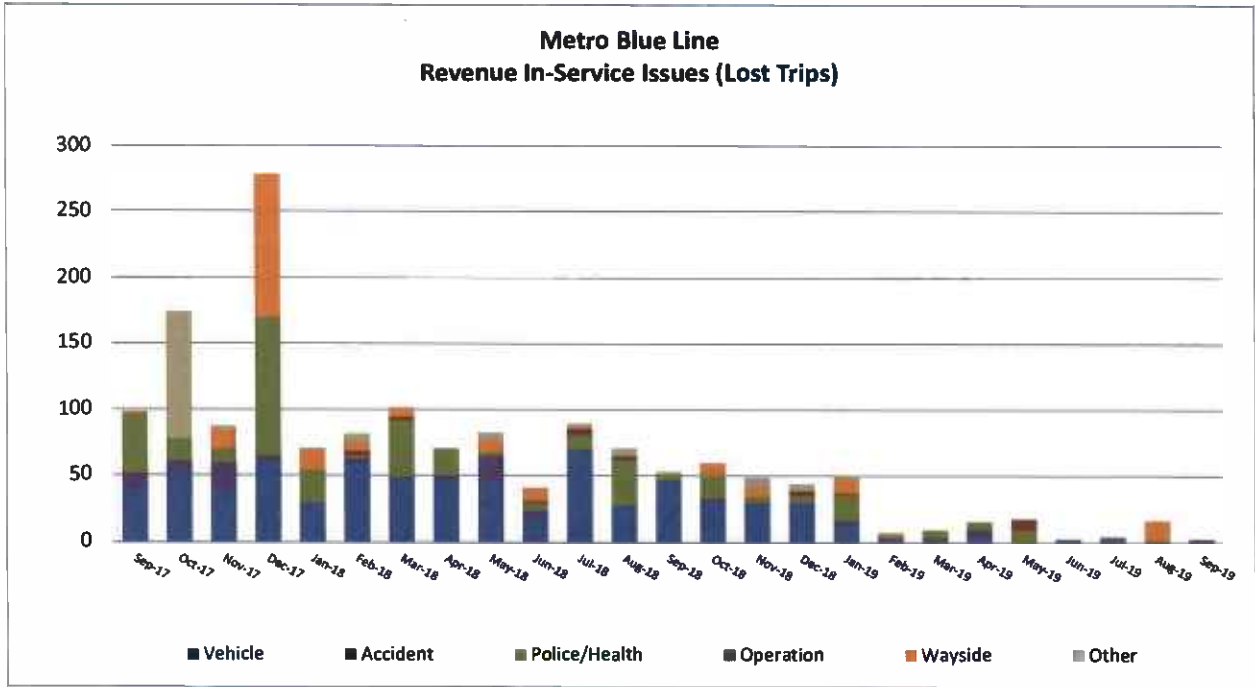
ON-TIME PULL OUTS



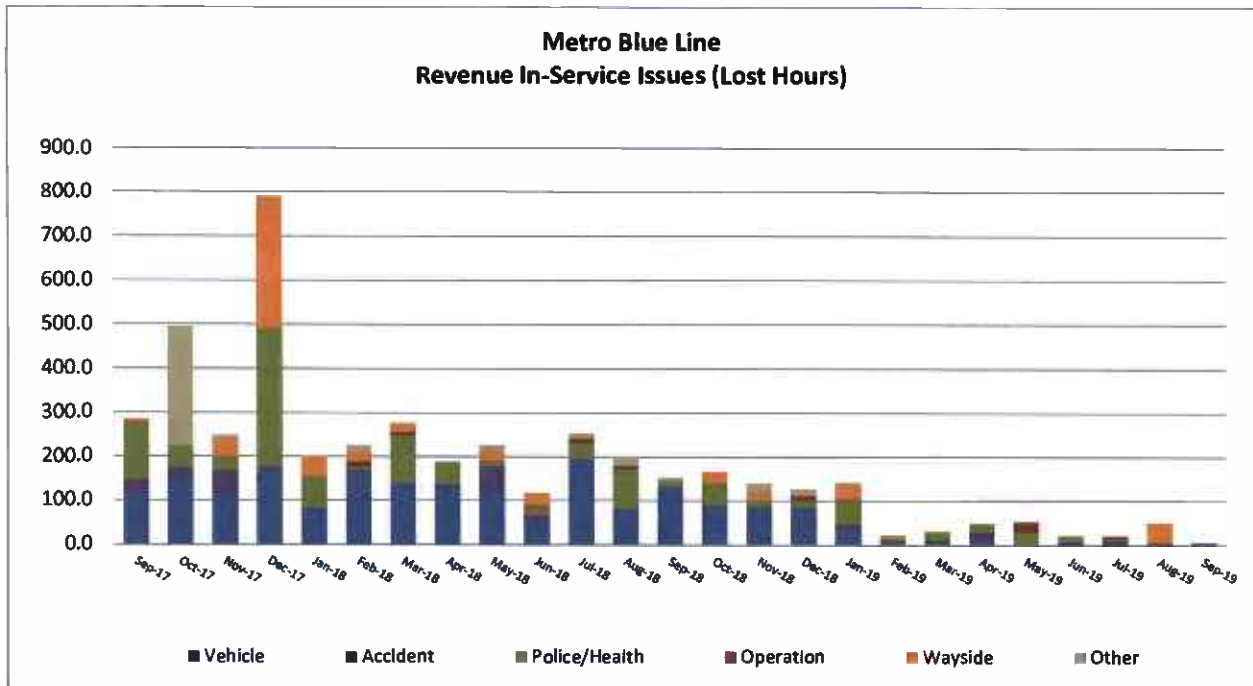
IN-SERVICE ON-TIME PERFORMANCE CHART



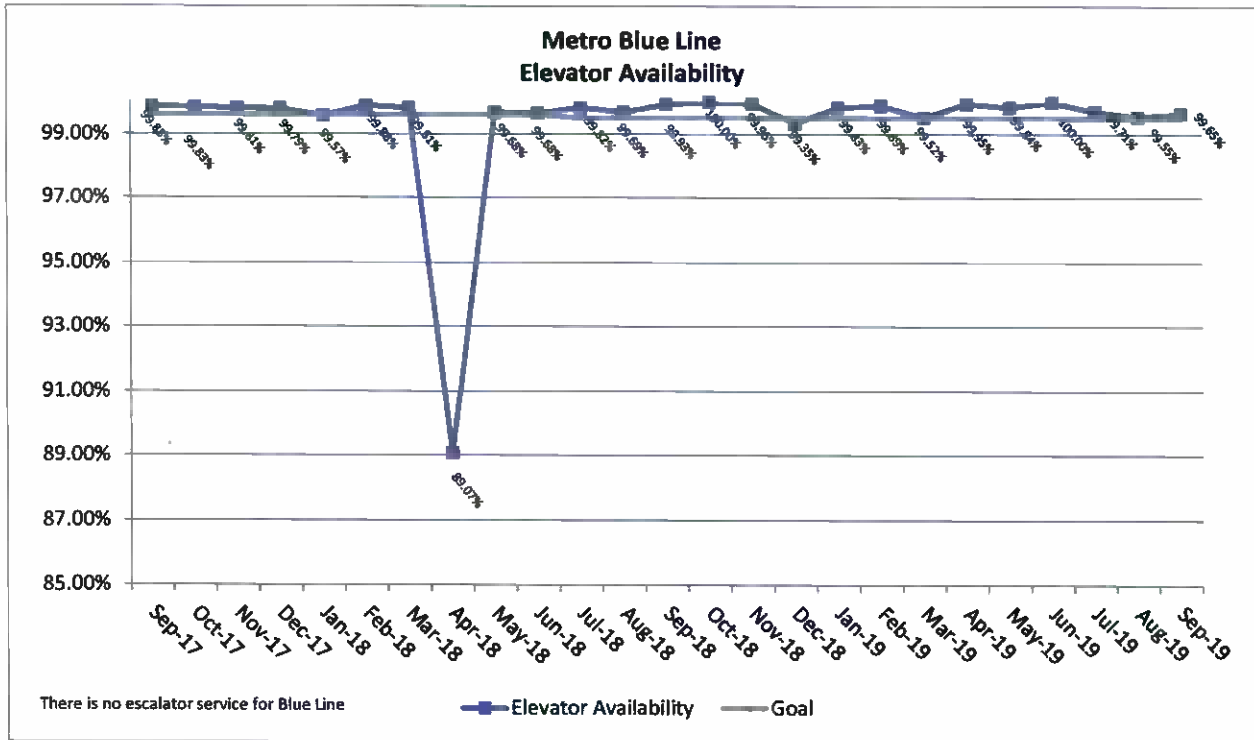
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



RED LINE

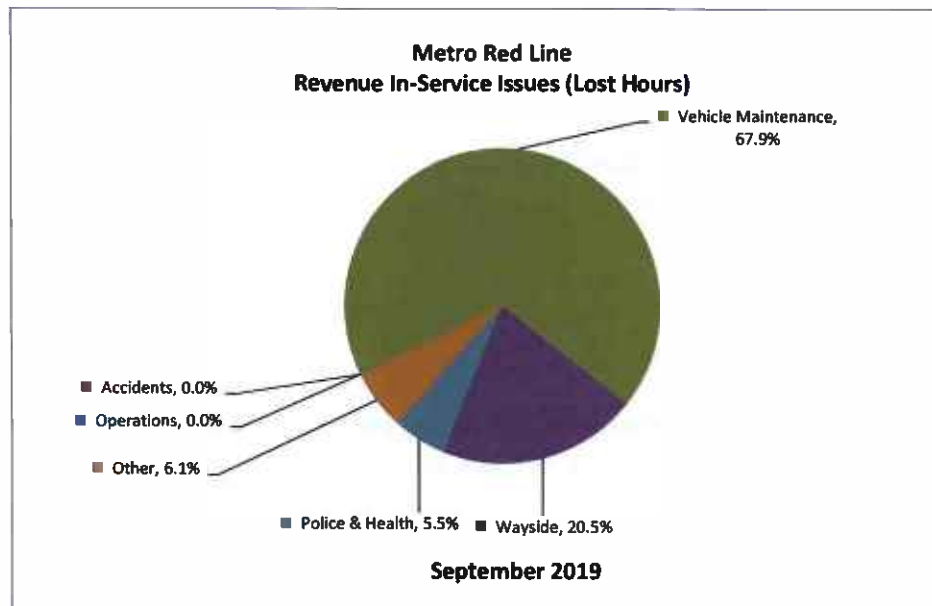
Out of a total of 26,411 hours operated, there were approximately 55 total hours of service delays.

September 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	26,356	99.8%
Cancelled + Delayed Hours	55	0.2%
Total Revenue Hours	26,411	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	0	0.0	0.0%
Accidents	0	0.0	0.0%
Vehicle Maintenance	9	37.7	67.9%
Wayside	2	11.4	20.5%
Police & Health	2	3.1	5.5%
Other	5	3.4	6.1%
Total	18	55.6	100.0%

* 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



September 2019 Red Line incidents causing delay were as follows:

Operations Incidents:

None

Vehicle Maintenance Incidents:

9/3/2019 11:32:00 AM - Incident# 3195697 (12 lost trips, 1,810 lost minutes)

Stuck mode selector

Train 205

T-031/074

CARs 569-570-575-(576)

Signal US 2 AL East

9/4/2019 7:50:00 PM - Incident# 3196564 (0 lost trips, 6 lost minutes) CHARGEABLE

Loss of cab signal emergency brake application 593,594,559,560,567(568).

Westlake Station

Train #214, T-199, AL, eastbound.

9/8/2019 12:44:00 PM - Incident# 3198015 (1 lost trip, 116 lost minutes)

Report of multiple emergency brake application.

T-022

Train 203

Cars (603)-604-565-566

Civic Center AR westbound.

9/10/2019 4:17:00 PM - Incident# 3199034 (1 lost trip, 156 lost minutes)

Recurring emergency brake application.

Train #214

T-074

Cars #599-600-545-546-533-(534).

E/Bound Westlake Station A/L Track.

9/13/2019 1:45:00 PM - Incident# 3200437 (1 lost trip, 149 lost minutes)

T-333 reports Emergency lighting in cars # 557 and 558 in Train # 204. H/V AL E.

9/20/2019 3:09:00 PM - Incident# 3203490 (0 lost trips, 3 lost minutes)

Mode Selector for key switch is loose.

Train 206

T-169

(579)-580-567-568

Eastbound, Track BR Wilsher/Western.

9/23/2019 5:24:00 AM - Incident# 3204137 (0 lost trips, 7 lost minutes)

Car 567 Friction brake fault will not clear.

Train 210

(567)-568-537-538-581-582

T-318

Union Station, AR, Westbound

9/24/2019 10:35:00 AM - Incident# 3204844 (0 lost trips, 11 lost minutes)

Emergency Brakes not releasing on car (568)

Train 209

T-170

North Hollywood, AL, westbound

535 536 567 (568)

9/30/2019 6:28:00 PM - Incident# 3207306 (0 lost trips, 5 lost minutes)

T-197

Train 201

Operator reports friction brakes will not release in car 588.

Wilshire Vermont AR west

587, (588), 571, 572

Wayside Incidents:

9/13/2019 2:00:00 PM - Incident# 3200480 (1 lost trip, 155 lost minutes)

False occupancy track circuits 3A and 3BT.

Wilshire Vermont Station

9/15/2019 4:25:00 AM - Incident# 3200945 (3 lost trips, 534 lost minutes) CHARGEABLE

Train 204 No movement at yard limits

(501)-502/525-524/517-518

T-254

Yard limits, AL track

Police & Health Incidents:

9/5/2019 5:57:00 AM - Incident# 3196679 (1 lost trip, 171 lost minutes) CHARGEABLE

Train Operator T-384 reports a trespasser on the right of way at Union Station AL-E (Behind Signal US-10)

9/6/2019 6:30:00 AM - Incident# 3197169 (0 lost trips, 6 lost minutes) CHARGEABLE

Train #207 departed late 6 minutes late due to police activity.

Other Incidents:

9/8/2019 4:07:00 AM - Incident# 3197924 (0 lost trips, 5 lost minutes) CHARGEABLE

Yard routing issue (Annex board): Train 202

T-104

541-542/549-550

Yard limits

9/25/2019 6:04:00 PM - Incident# 3205501 (0 lost trips, 7 lost minutes)

Train 218

T-179

Bloody male patron entered Vermont Sunset Station at 1804 hours attempted to board consist.

Vermont Sunset AR west

579, (580) 591, 592, 587, 588

Unable to Duplicate:

9/3/2019 10:11:00 AM - Incident# 3195668 (0 lost trips, 9 lost minutes)

Mode Selector Stuck

Train 201

T-031

Cars (543)-544-577-578

North Hollywood AR East

9/10/2019 6:44:00 AM - Incident# 3198677 (0 lost trips, 12 lost minutes)

No door close indication: No movement

Train 204

T-31

545-546/543-544/549-(550)

Vermont/Santa Monica, AL Eastbound

9/15/2019 8:23:00 PM - Incident# 3201127 (1 lost trip, 174 lost minutes)

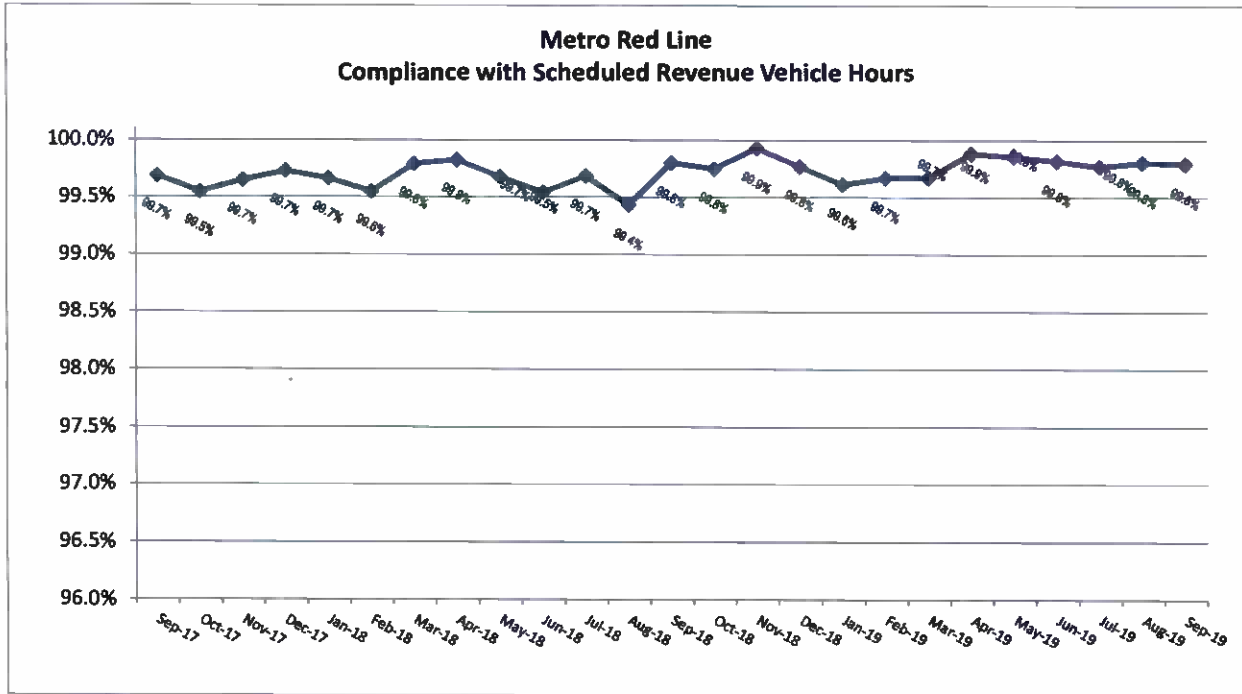
T-199 reports door problems, unable to open doors or initiate berthing bypass.

Train 206

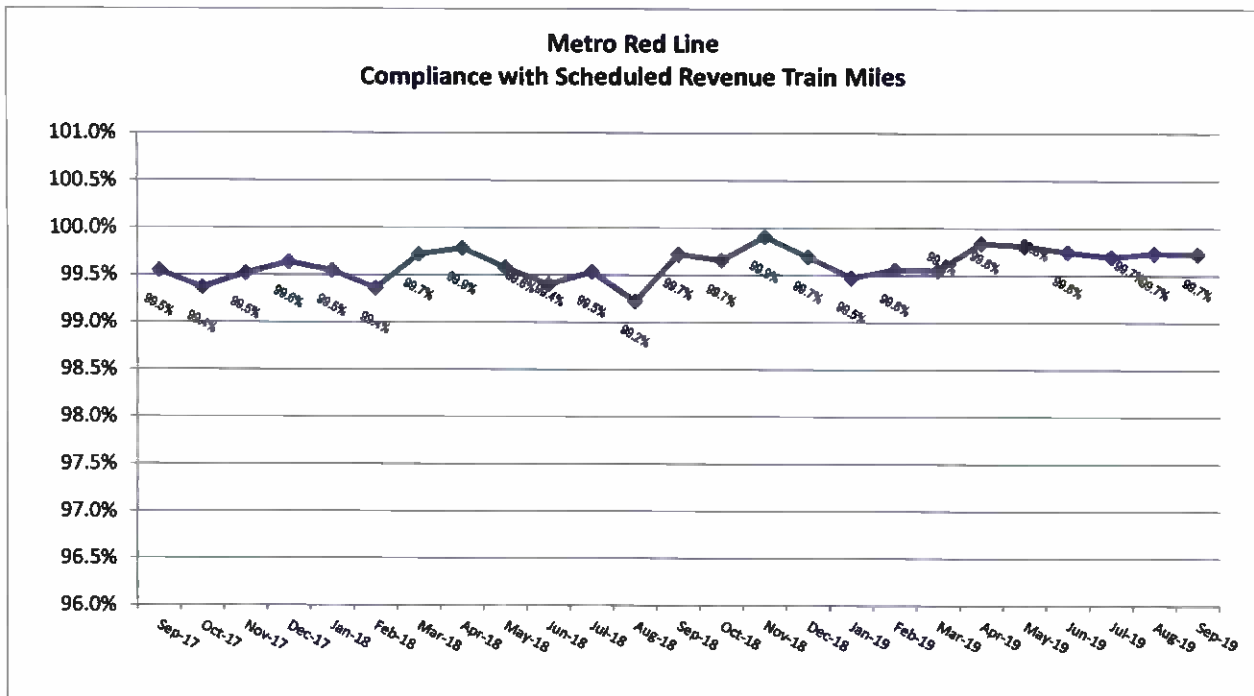
Cars 533, 534, 537, 538, 567, 568

Vermont/ Beverly AL and 7th Metro AL

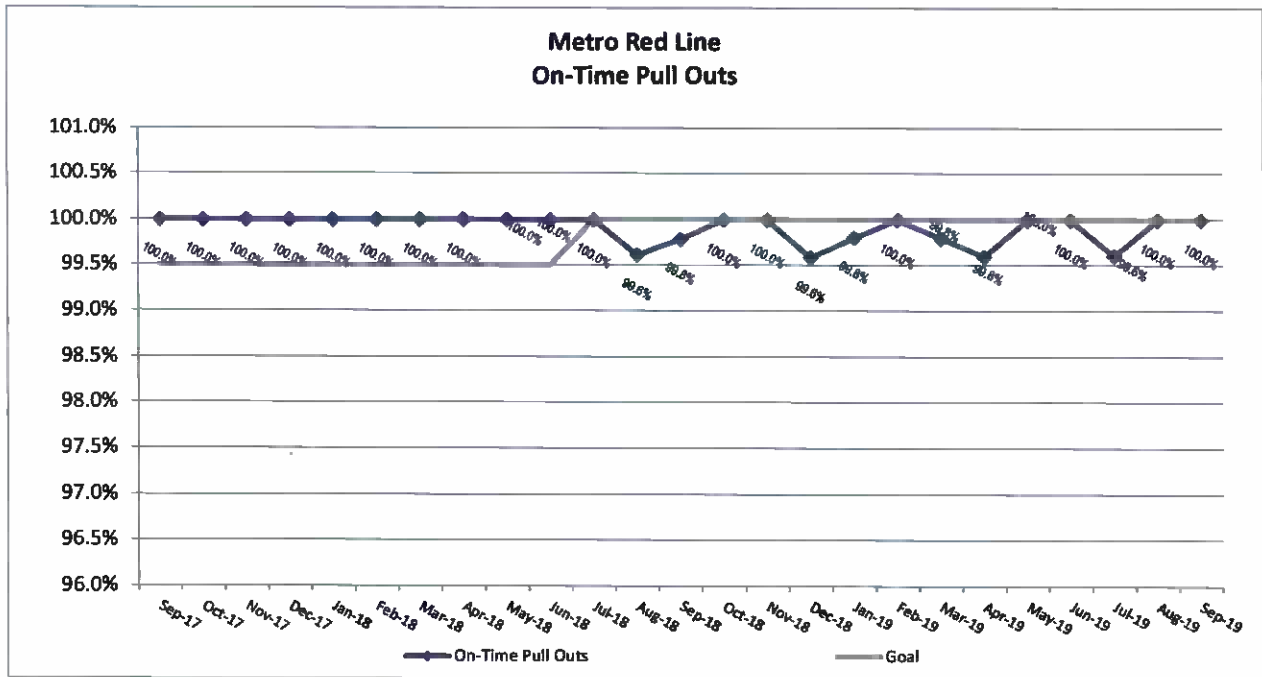
MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS
COMPLIANCE WITH SCHEDULED VEHICLE HOURS
Sep 2019



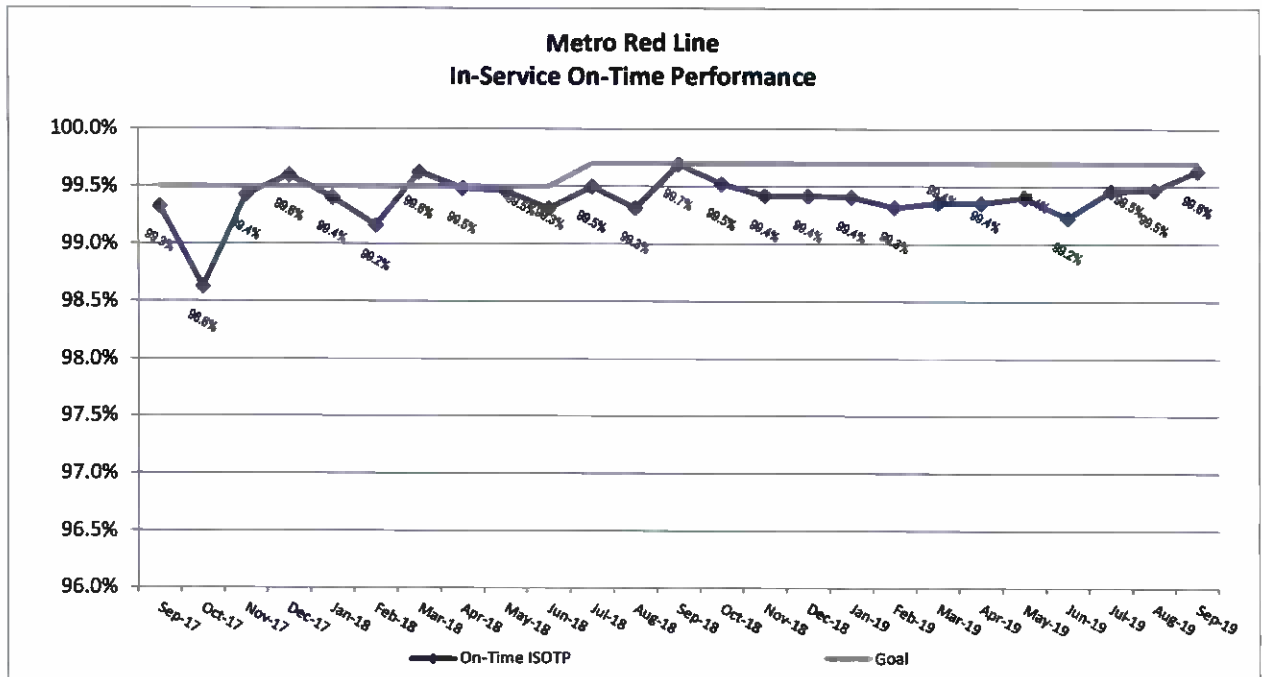
COMPLIANCE WITH SCHEDULED TRAIN MILES



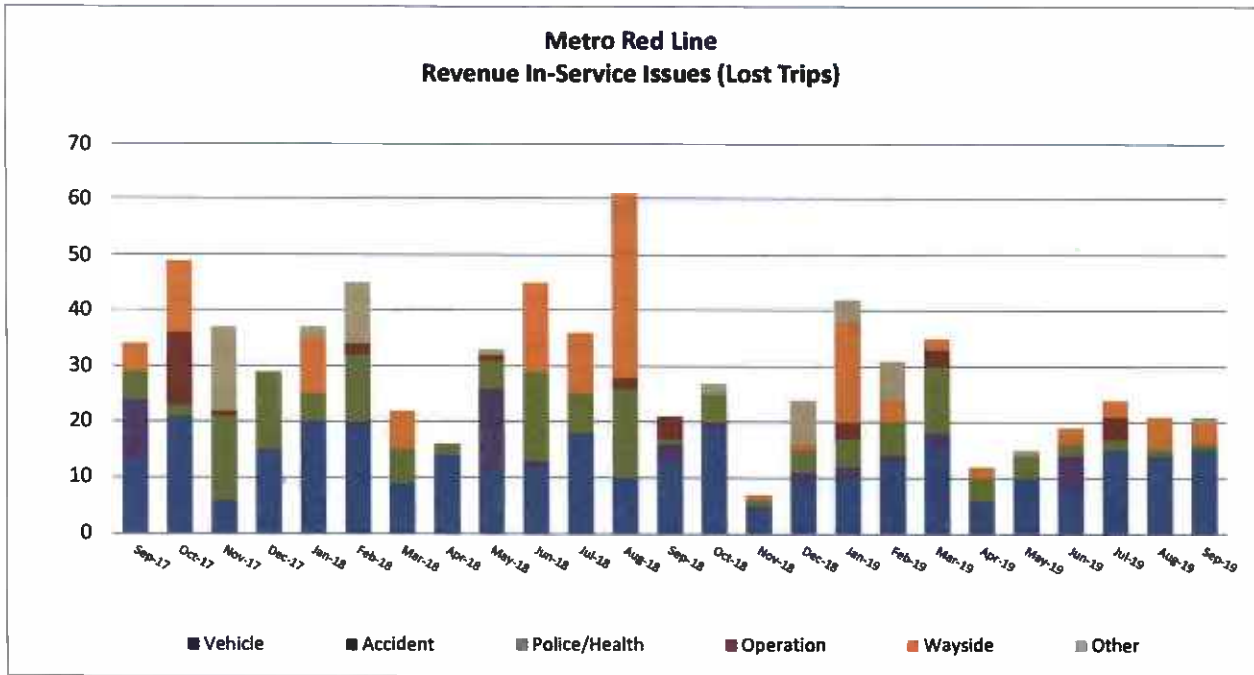
ON-TIME PULL OUTS



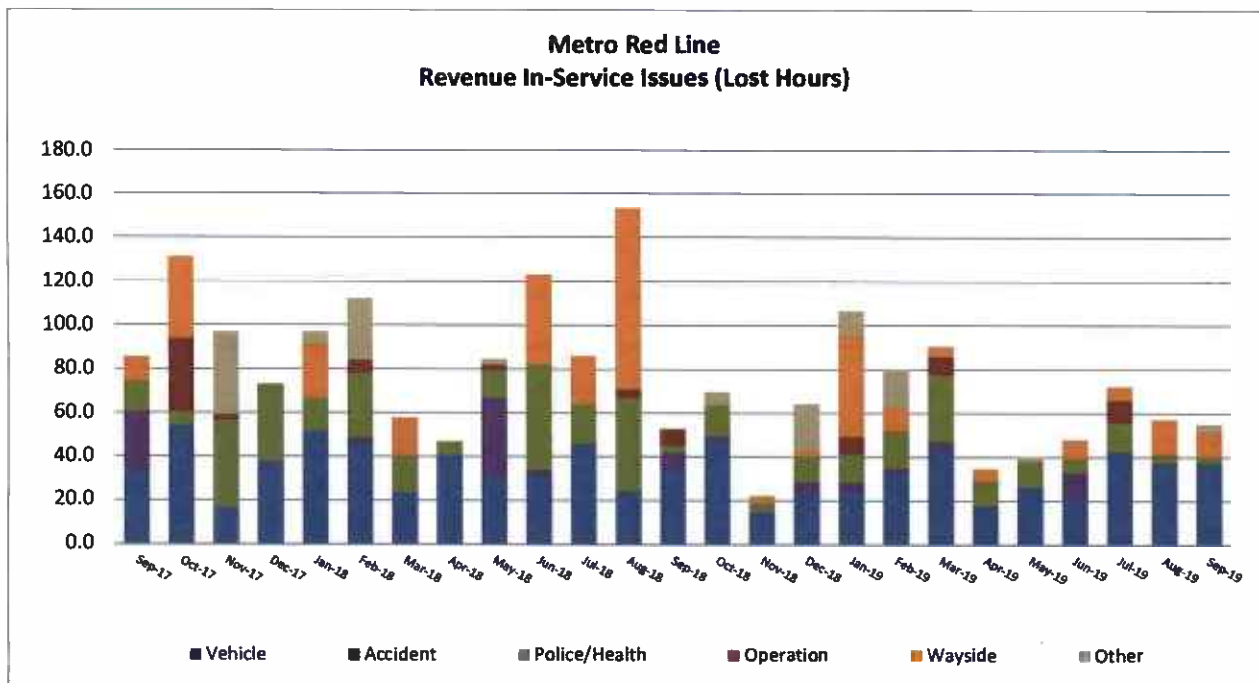
IN-SERVICE ON-TIME PERFORMANCE



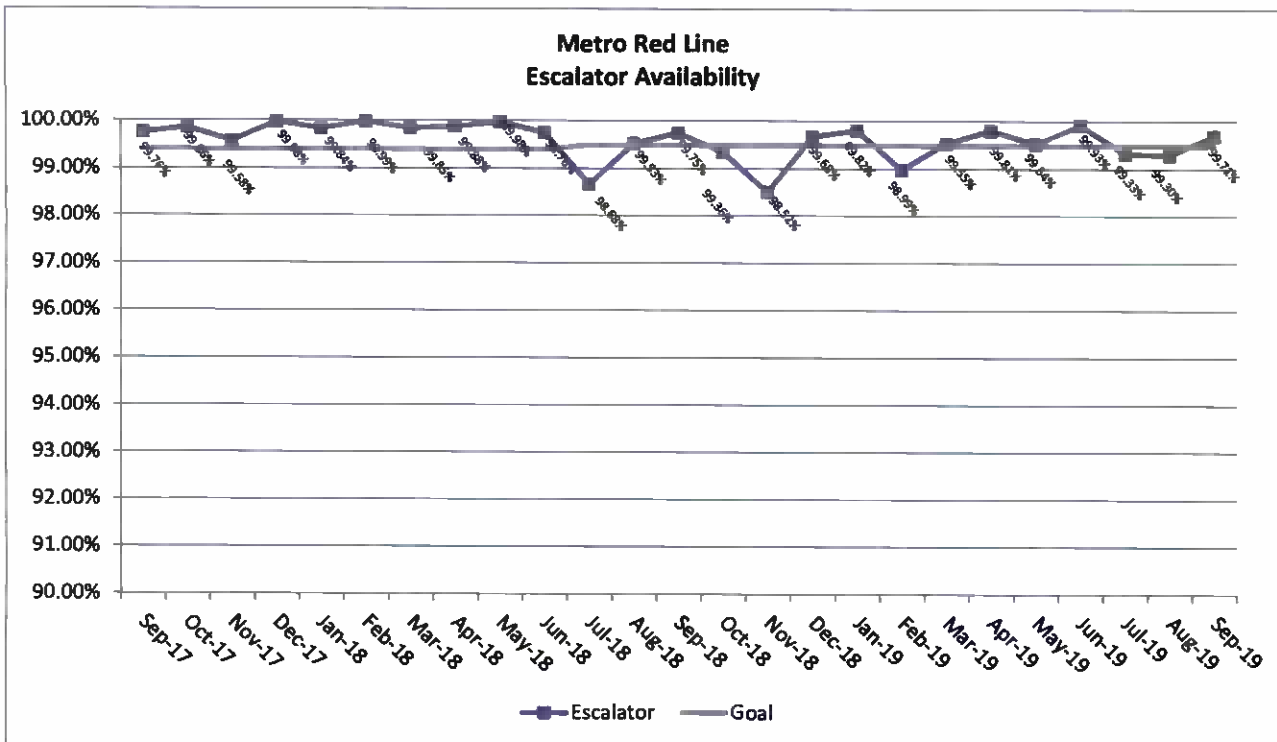
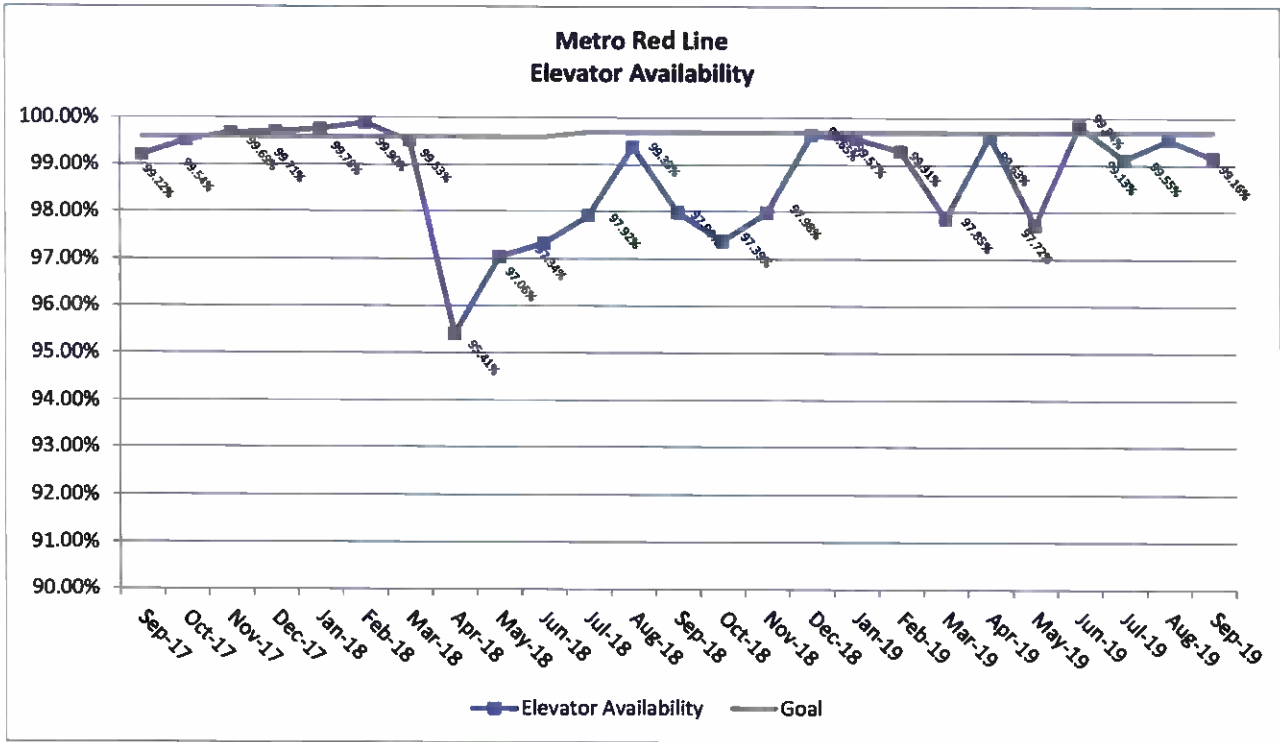
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



GREEN LINE

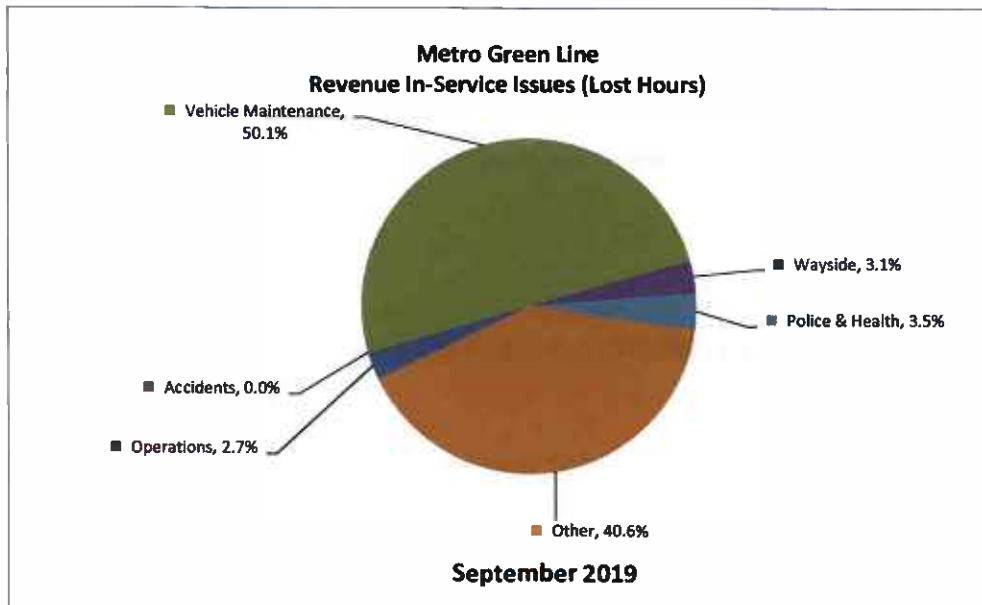
Out of a total of 8,918 hours operated, there were approximately 18 total hours of service delays.

September 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	8,900	99.8%
Cancelled + Delayed Hours	18	0.2%
Total Revenue Hours	8,918	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	2	0.5	2.7%
Accidents	0	0.0	0.0%
Vehicle Maintenance	14	8.8	50.1%
Wayside	5	0.6	3.1%
Police & Health	4	0.6	3.5%
Other	16	7.1	40.6%
Total	41	17.6	100.0%

* 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



September 2019 Green Line incidents causing delay were as follows:

Operations Incidents:

9/2/2019 12:07:00 AM - Incident# 3195121 (0 lost trips, 13 lost minutes) CHARGEABLE

Rule Violation/ 4250 Schedule Adherence

Train #335, T-13

Car # 227, Aviation Station, EB

9/4/2019 11:17:00 PM - Incident# 3196611 (0 lost trips, 16 lost minutes) CHARGEABLE

Unable to uncouple

Train 351 T-294

TK 1 Marine

1145-1146

Vehicle Maintenance Incidents:

9/2/2019 12:21:00 PM - Incident# 3195315 (0 lost trips, 12 lost minutes) CHARGEABLE

No cab signals. car (225B)-209

T-193

Track 2

Eastbound

Wilmington station

ATO MODE

9/3/2019 4:19:00 AM - Incident# 3195496 (0 lost trips, 8 lost minutes) CHARGEABLE

ATP fail no movement

Train #333 T-079 Car 206B-209

eastbound at Mariposa.

9/4/2019 5:58:00 PM - Incident# 3196549 (0 lost trips, 10 lost minutes)

Train 353

T-394

Operator reports no movement in car 243. M-132 stated the brakes will not release he will set consist up for dead tow.

Willowbrook Track 2 east.

203, (243)

9/4/2019 9:53:00 PM - Incident# 3196599 (0 lost trips, 10 lost minutes) CHARGEABLE

Broken Windshield

Train 333 TK 2

Marine T-255

(1144A)-1147

9/6/2019 10:52:00 PM - Incident# 3197101 (0 lost trips, 15 lost minutes)

T-13 reports no cab signal.

9/9/2019 5:56:00 AM - Incident# 3198166 (0 lost trips, 3 lost minutes)

Auto Train Protection (Speed Limit), cars (202)-203

Train #336

T-193

Crenshaw Station, track #1, Westbound.

9/10/2019 3:11:00 PM - Incident# 3198975 (0 lost trips, 10 lost minutes)

No cab signals (225A)

Train 333

T 235

(225A)-208

Track 2

Eastbound

Aviation station

ATO MODE

9/17/2019 6:07:00 AM - Incident# 3201785 (0 lost trips, 8 lost minutes)

Loss of Air Pressure due to Propulsion Fault and Speed Restriction.

Train 346

T-409

(222)-225

Harbor Station, westbound, Track 1.

9/17/2019 10:37:00 AM - Incident# 3201942 (0 lost trips, 10 lost minutes)

Loss of cab signal at Marine IL.

Train 336

T-078

(1168B)-1177

Marine IL, Track 2, Eastbound.

9/24/2019 5:10:00 AM - Incident# 3204649 (2 lost trips, 144 lost minutes)

Loss of movement after emergency brake self applied.

Train 336

T-078

(220A)-225

Hawthorne Station, Track 2, eastbound.

Crenshaw IL, Track 2, eastbound.

9/24/2019 10:40:00 PM - Incident# 3205111 (0 lost trips, 12 lost minutes)

Train-356

T-450.

LRV- 202- (205B).

Marine Station, Track #2 Eastbound.

OC Code and ATP Failure.

9/25/2019 5:12:00 PM - Incident# 3205492 (2 lost trips, 142 lost minutes)

Operator reports that the train has a friction brake fault and no movement.

9/26/2019 3:10:00 PM - Incident# 3205894 (1 lost trip, 66 lost minutes)

Propulsion fault speed restriction

Train 335 TK1

Wb Lakewood

T-184

(217A)-206

9/30/2019 9:34:00 AM - Incident# 3207077 (1 lost trip, 79 lost minutes)

Train-332 T-193 cars 220-216 with self applying friction brakes on car 220A. Exchanged patrons and equipment at Vermont Station. Rail Fleet Services Technician (M268) advises equipment removed immediately from service.

Third occurrence today.

Wayside Incidents:

9/3/2019 2:49:00 PM - Incident# 3195849 (0 lost trips, 8 lost minutes)

Marine IL, switch 1 out of correspondance.

9/16/2019 1:29:00 AM - Incident# 3201161 (0 lost trips, 5 lost minutes) CHARGEABLE

Inspection: Switch Machine Inspection

Marine Interlocking, Track #1/2

MS-154/EIC, MS-155/Watchperson

9/25/2019 10:46:00 AM - Incident# 3205301 (0 lost trips, 7 lost minutes)

Traction Power personnel (TP-063, 196, 121, 146, 194, 188, 176, 197, 180) are requesting authorization to enter the ROW

9/26/2019 5:45:00 AM - Incident# 3205614 (0 lost trips, 6 lost minutes) CHARGEABLE

Marine interlocking showing out of correspondance intermittently.

9/26/2019 10:38:00 AM - Incident# 3205742 (0 lost trips, 7 lost minutes) CHARGEABLE

Work Permit E-5/Traction Power performing a rolling High Rail inspection of the OCS from Yard to Marine to Norwalk and back. High Rail # 939

TP-176 EIC

TP-180 Watchperson

TP-197 Pilot

TP-149 supporting.

Police & Health Incidents:

9/15/2019 4:49:00 PM - Incident# 3201087 (0 lost trips, 10 lost minutes) CHARGEABLE

Harbor Station, nude male hispanic on edge of the Platform.

9/20/2019 7:28:00 AM - Incident# 3203254 (0 lost trips, 9 lost minutes) CHARGEABLE

Norwalk Station G-403 assaulted by a patron not letting G403 get onboard.

9/23/2019 1:34:00 PM - Incident# 3204427 (0 lost trips, 10 lost minutes) CHARGEABLE

LASD contacted ROC to stop a train that had a suspected male with a gun. Affected train was train 335, train was directed to hold at Aviation Station and wait for LASD.

9/24/2019 4:08:00 PM - Incident# 3205020 (0 lost trips, 8 lost minutes) CHARGEABLE

LASD, at Wilmington Station, officers request control to hold trains for a possible suspect.

Other Incidents:

9/4/2019 7:43:00 AM - Incident# 3196083 (1 lost trip, 76 lost minutes) CHARGEABLE

Train 335 / Operator T-113 / Consist 1193-(1176)

Operator reports an African American Female in Car 1176b, complaining of shortness of breath.

Train 335 off loaded patrons at Vermont Station Track 2. Train held for LAFD to respond.

9/8/2019 12:16:00 AM - Incident# 3197790 (0 lost trips, 8 lost minutes) CHARGEABLE

Patron pulled emergency T at Paramount interlocking.

Unable To Duplicate:

9/18/2019 4:03:00 PM - Incident# 3202540 (0 lost trips, 15 lost minutes)

Operator reports that the train has no movement just west of the Norwalk Interlocking.

T-235

Train 355

Cars (1184)-1148

West of Norwalk Interlocking, Track 1, westbound

9/9/2019 4:35:00 PM - Incident# 3198529 (0 lost trips, 12 lost minutes)

T-235 on Train 356 states no cab signal going through Yard Interface Interlocking.

Train 356, cars (1174A)-1173, Yard Interface, Track 2, Eastbound.

9/13/2019 5:19:00 AM - Incident# 3200184 (0 lost trips, 10 lost minutes)

Train 335 / Operator T-302 / Consist (1193B)-1168

Operator reports no cab signals departing Norwalk Station Track 1.

9/1/2019 3:33:00 PM - Incident# 3195049 (2 lost trips, 130 lost minutes)

Train 335

T-20

El Segundo IL, Westbound, Track 1

LRV's (1151)-1171

T-20 reported Train 335 went into emergency braking and then no movement at El Segundo IL, operating LRV 1151.

9/3/2019 9:18:00 PM - Incident# 3195980 (0 lost trips, 15 lost minutes) CHARGEABLE

No Fault - Loss of Cab Signals

T-302, Train # 356

Aviation Station, Track #3, EB

Car # (1170A)-1148

9/5/2019 1:03:00 PM - Incident# 3196891 (0 lost trips, 16 lost minutes)

SLC fault, HSCB trip and speed restriction (1177B)1151.

Lakewood Station

Train #334, T-136, track #1, westbound.

9/6/2019 7:35:00 AM - Incident# 3197209 (0 lost trips, 6 lost minutes) CHARGEABLE

Train 333 / Operator T-055 / Consist (1144)-1147

Norwalk Station Track 2 Westbound

Operator reports no movement with no faults indicated.

Reset:

9/8/2019 6:47:00 PM - Incident# 3198074 (0 lost trips, 10 lost minutes) CHARGEABLE

Train 333

T-168

Long Beach Station, Track 2, Eastbound

(227)-209

T-168 reported a propulsion fault with a speed restriction departing Long Beach Station in LRV 227.

9/4/2019 11:11:00 AM - Incident# 3199737 (0 lost trips, 10 lost minutes)

Train 336 / Operator T-20 / Consist 1150-(1177)

Operator was holding at Vermont Station due to the single tracking and experienced a door problem.

Operator cleared the problem and experienced a 10 minute delay in service Eastbound.

9/5/2019 6:19:00 AM - Incident# 3196689 (0 lost trips, 7 lost minutes) CHARGEABLE

Train 343

T-55

LRV Cars 1176-1193

Track 1 WB Departing Avalon Station.

Operator is reporting a loss of Cab Signals.

9/15/2019 2:06:00 PM - Incident# 3201059 (1 lost trip, 80 lost minutes)

Cars (1168-1193) doors do not open.

T-257

Train 331

Harbor Station, Track 2, eastbound.

9/18/2019 4:01:00 AM - Incident# 3202241 (0 lost trips, 12 lost minutes)

Train 343 / Operator T-070 / Consist (1150)-1174

Operator reports no speed code departing Marine Track 2. Operator utilized stop and proceed mode to Douglas Station. Upon arrival to Douglas the Operator performed a "Local Off" and cleared the fault.

9/19/2019 5:32:00 AM - Incident# 3202719 (0 lost trips, 10 lost minutes)

Train 346 no movement.

T-57

Train 346

Cars:(1193)-1169

EB Douglas Station Tk-2

9/29/2019 7:25:00 PM - Incident# 3206839 (0 lost trips, 11 lost minutes) CHARGEABLE

Train 331 HSCB Trip.

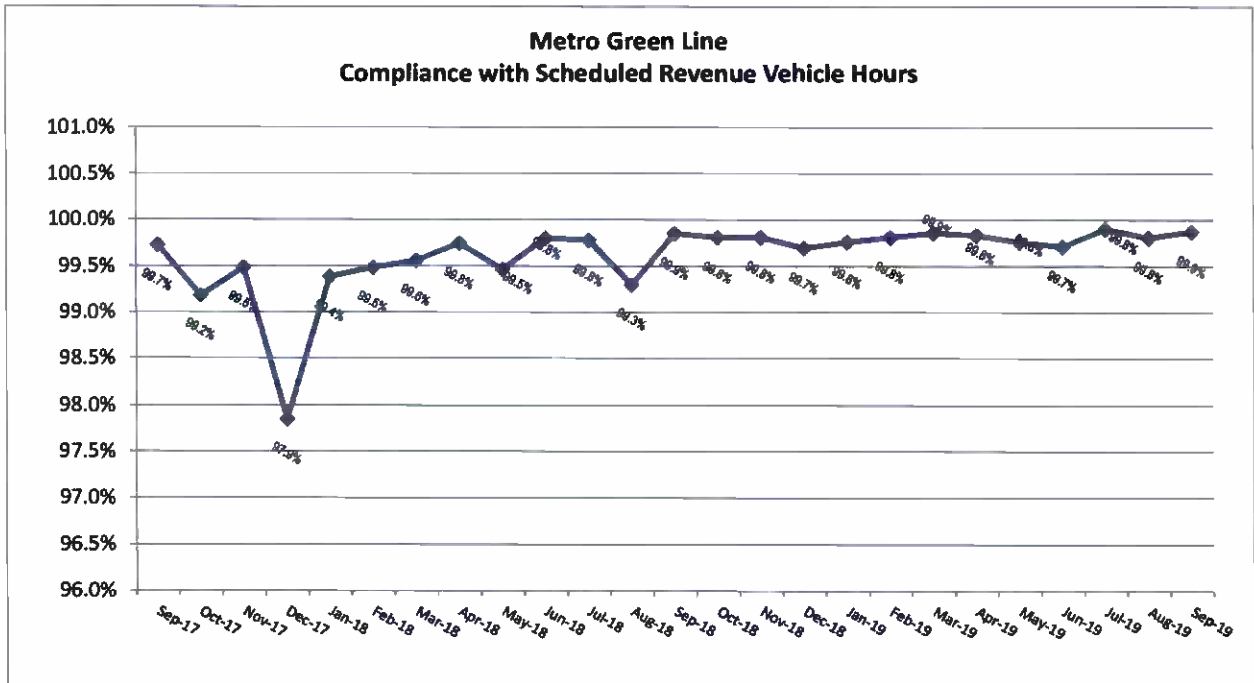
T-294

Train 331

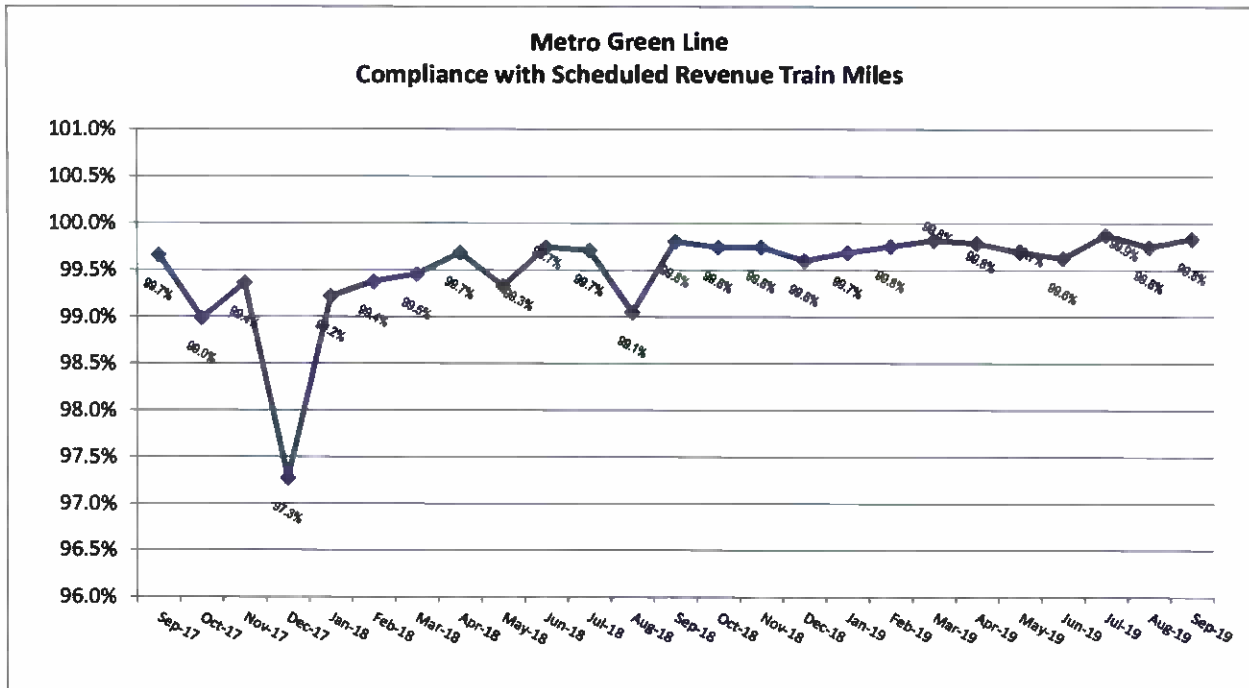
Cars: (1177)-1144

WB Marine Station

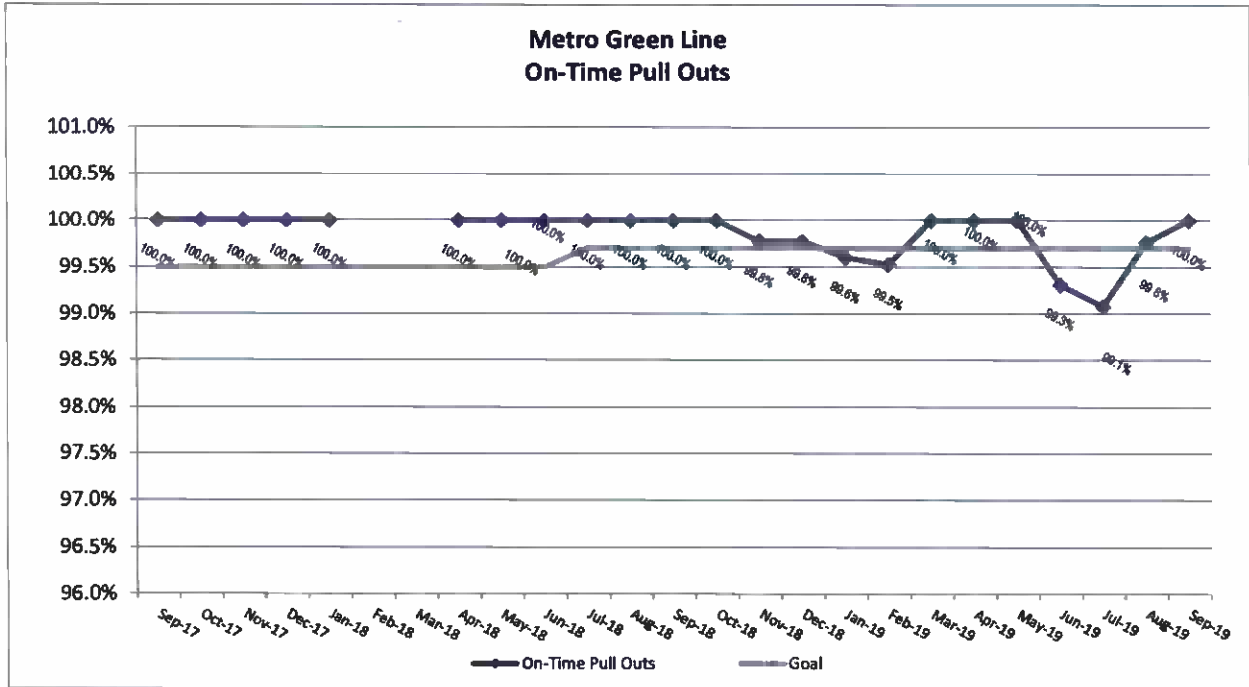
MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS
COMPLIANCE WITH SCHEDULED VEHICLE HOURS
Sep 2019



COMPLIANCE WITH SCHEDULED TRAIN MILES

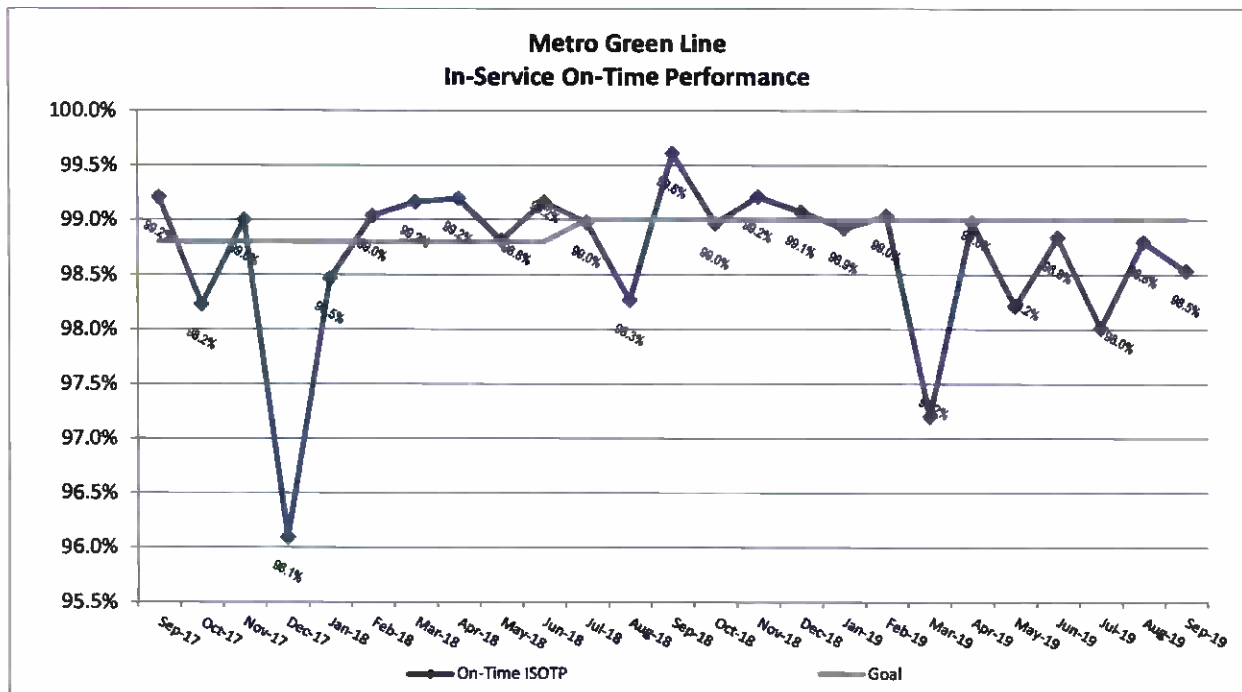


ON-TIME PULL OUTS

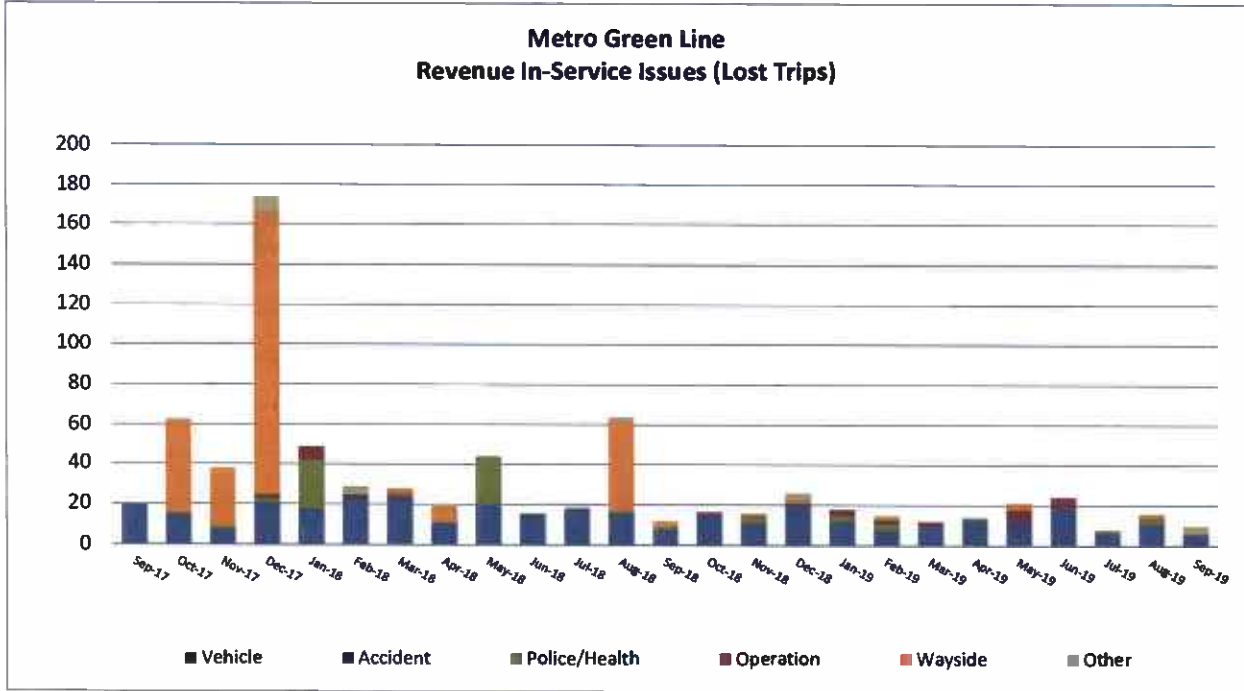


Due to the Crenshaw line link construction in Feb and March 2018, Green Line trains did not pull in or pull out, trains stayed on the tracks.

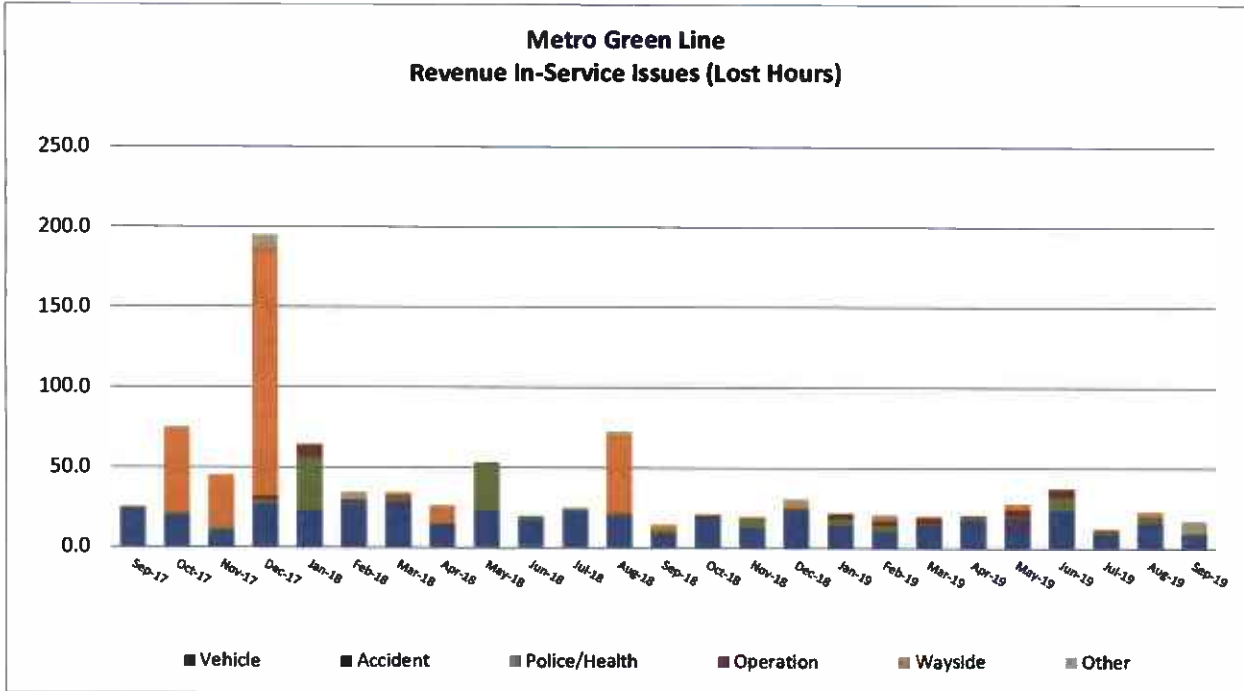
IN-SERVICE ON-TIME PERFORMANCE



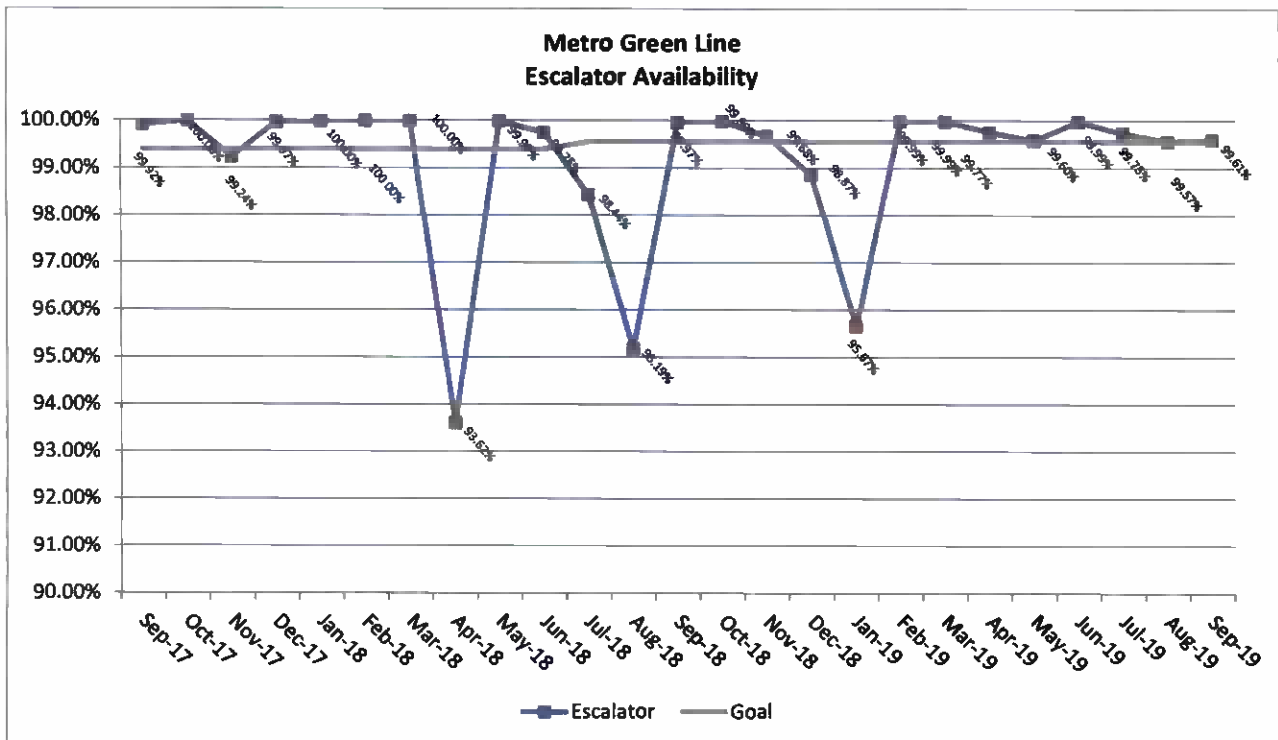
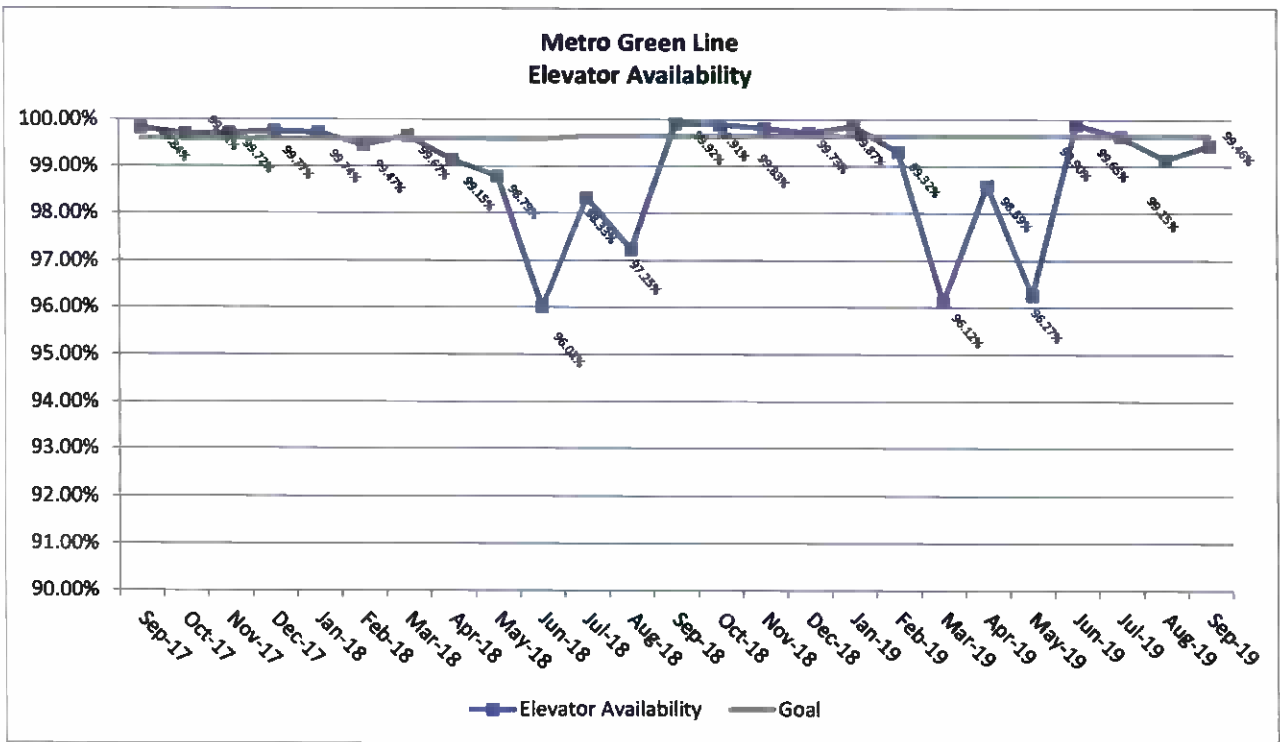
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



GOLD LINE

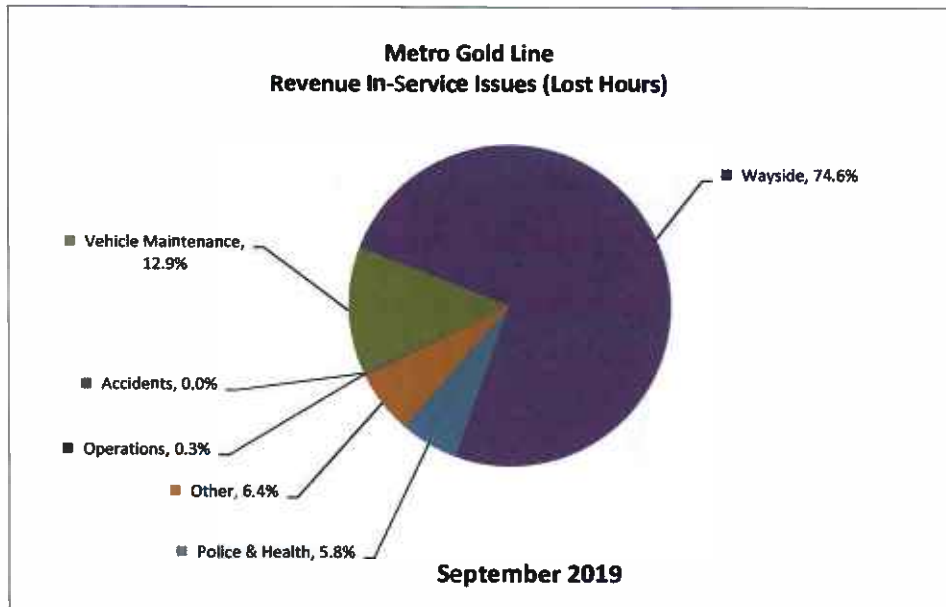
Out of a total of 23,075 hours operated, there were approximately 123 total hours of service delays.

September 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	22,952	99.5%
Cancelled + Delayed Hours	123	0.5%
Total Revenue Hours	23,075	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	4	0.3	0.3%
Accidents	0	0.0	0.0%
Vehicle Maintenance	9	15.9	12.9%
Wayside	7	91.9	74.6%
Police & Health	4	7.2	5.8%
Other	9	7.9	6.4%
Total	33	123.2	100.0%

* 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



September 2019 Gold Line incidents causing delay were as follows:

Operations Incidents:

9/7/2019 6:56:00 AM - Incident# 3197683 (0 lost trips, 4 lost minutes) CHARGEABLE
10-100

train #401

T-224

Atlantic Station, track #1, Northbound.

9/19/2019 7:06:00 AM - Incident# 3202760 (0 lost trips, 5 lost minutes)

Train 454, T-36 departed 5 minutes late from APU Station. Scheduled to depart at 0701 and departed at 0706 hours.

9/20/2019 2:34:00 AM - Incident# 3203160 (0 lost trips, lost minutes) CHARGEABLE

Late pull outs due to Operator refusing to pull into yard.

9/20/2019 3:41:00 PM - Incident# 3203534 (0 lost trips, 10 lost minutes) CHARGEABLE

T-445 arrived late to Atlantic Station

Vehicle Maintenance Incidents:

9/1/2019 2:42:00 PM - Incident# 3195046 (1 lost trip, 146 lost minutes)

Brake fault on car 728-(722A)

T-340

Track 1

Sierra Madre

Northbound

9/3/2019 11:25:00 AM - Incident# 3195693 (0 lost trips, 6 lost minutes)

Air Conditioning, car #(702B)-732-704

Train #401

T-178

Azusa/Citrus, track #2, Southbound.

9/5/2019 5:30:00 PM - Incident# 3197009 (1 lost trip, 218 lost minutes)

Operator reports LVPS fault.

Train-426

T-008

Cars (726),709, 722

Delmar Station, Track 1, NB

9/8/2019 12:54:00 PM - Incident# 3198029 (1 lost trip, 151 lost minutes)

LVPS fault on car (728B)

Train 409

T-488

702-(728B)

Track 2

Irwindale station

Southbound

9/15/2019 10:24:00 PM - Incident# 3201132 (0 lost trips, 5 lost minutes)

Reports of no cab signal

Train # 410

T-192

(1166A)-1009-1059

Lincoln/Cypress Station, Track #2, SB

9/20/2019 4:47:00 AM - Incident# 3203168 (0 lost trips, 5 lost minutes) CHARGEABLE

Train 403 reports of doors not opening.

T-98

Train 403

Cars: (1166)-1109-1181

Tk-1 SB APU/ Citrus

9/26/2019 9:43:00 AM - Incident# 3205716 (1 lost trip, 210 lost minutes)

Brakes on indication

Train 454

Cars 739-750-(744)

Sierra Madre Track 1 North

9/26/2019 9:40:00 PM - Incident# 3205991 (1 lost trip, 210 lost minutes)

Friction Brake fault on all 3 cars

748-746-736

Train 453

T-122

Chinatown Tk 2 SB

9/30/2019 2:44:00 PM - Incident# 3207217 (0 lost trips, 9 lost minutes)

Train 402 was unable to couple properly.

T-161

Train 402

Cars:(1160)-1164-1064

SB Tk-1 APU/ Citrus

Wayside Incidents:

9/6/2019 2:00:00 PM - Incident# 3197568 (25 lost trips, 5,206 lost minutes) CHARGEABLE

Arinc system displays multiple OCS segments are deenergized along with DC bus #2. Breaker A-04 locked out and B-04 tripped.

9/7/2019 7:55:00 AM - Incident# 3197686 (0 lost trips, 22 lost minutes) CHARGEABLE

OCS repairs

TP-194

Pilot: TP-

Train #940

Indian Siding to South West Museum interlocking.

9/8/2019 1:39:00 AM - Incident# 3197795 (0 lost trips, 20 lost minutes)

Utility undervoltage A01, DC Bus 2 undervoltage, RT01 X-Form deenergized, RT02 X-2 form deenergized, RT03 X-3 deenergized, Monrovia yard FCP summary supv alarm, Monrovia yard FCP trouble alarm

9/9/2019 5:32:00 AM - Incident# 3198175 (1 lost trip, 209 lost minutes)

Train operator reporting OCS wire down train 406 stranded between stations Sierra Madre and Allen Station.

9/16/2019 11:36:00 AM - Incident# 3201598 (0 lost trips, 25 lost minutes)

Operator reports no movement.

Train-402

T-283

Cars 744,748,738

Lake Station, Track 1, NB

9/19/2019 10:13:00 AM - Incident# 3202871 (0 lost trips, 15 lost minutes)

Emergency OCS Repair Tk-2, 2 Hi-Rail vehicles

in tandem known as train 949.

TP-63 (EIC)

TP-146 (watch person with protran)

9/28/2019 7:55:00 AM - Incident# 3206496 (0 lost trips, 18 lost minutes)

Tree Trimming and OCS Inspection, Traction Power and Facilities Maintenance will coordinate.

Police & Health Incidents:

9/4/2019 7:46:00 PM - Incident# 3196566 (0 lost trips, 5 lost minutes)

Reports of trespasser in the refuge area.

Train #403

T-245

1111-1013-1191

Lincoln Cypress Station, Track #1, NB

9/8/2019 1:28:00 AM - Incident# 3197917 (0 lost trips, 18 lost minutes)

LASD Willeum informed control of a alleged robbery on train 410 and to be held at SMV with doors closed

9/19/2019 4:52:00 AM - Incident# 3202720 (2 lost trips, 397 lost minutes)

Train 401 reports a trespasser naked on track 1 unable to proceed.

9/29/2019 10:19:00 PM - Incident# 3206875 (0 lost trips, 12 lost minutes)

Train 407 reports a 10-57 on the lead car 1058A

Train 407

T-323

(11S8A)-1126

Sierra Madre IL, Reverse Running on Track 1, Southbound

Other Incidents:

9/17/2019 4:54:00 PM - Incident# 3202140 (0 lost trips, 8 lost minutes)

South of SMV IL, Track 1, MP 13.3 weed fire.

9/19/2019 10:53:00 PM - Incident# 3203133 (0 lost trips, 7 lost minutes) CHARGEABLE

Vomit on consist (11S8)1178.

Citrus Station

Train #423, T-S40, track #1, southbound.

9/27/2019 4:58:00 AM - Incident# 3206053 (0 lost trips, 10 lost minutes) CHARGEABLE

T-421 reported an individual on his consist requesting medical attention.

9/30/2019 1:53:00 PM - Incident# 3207192 (1 lost trip, 198 lost minutes) CHARGEABLE

Train 404 reports of dirty car.

T-280

Train 404

Cars: (1010)-1013

SB Tk-1 Heritage Square

Unable to Duplicate:

9/4/2019 7:23:00 AM - Incident# 3196087 (0 lost trips, lost minutes)

Propulsion fault unable to clear

Train #4S4 T-036 car#737-736-741

southbound at Sierra Madre station.

9/5/2019 7:15:00 AM - Incident# 3196717 (1 lost trip, 229 lost minutes)

High Speed Circuit Breaker Fault

Train 412

T-441

Cars 724-701-70SB

Allen Station Track 2 South

9/19/2019 5:48:00 PM - Incident# 3203085 (0 lost trips, 8 lost minutes) CHARGEABLE

Doors 7/8
Train 406
T-411
1126-(1159)-1157
Northbound, Track 1 South Pasadena station.

9/23/2019 10:47:00 PM - Incident# 3204607 (0 lost trips, 7 lost minutes)

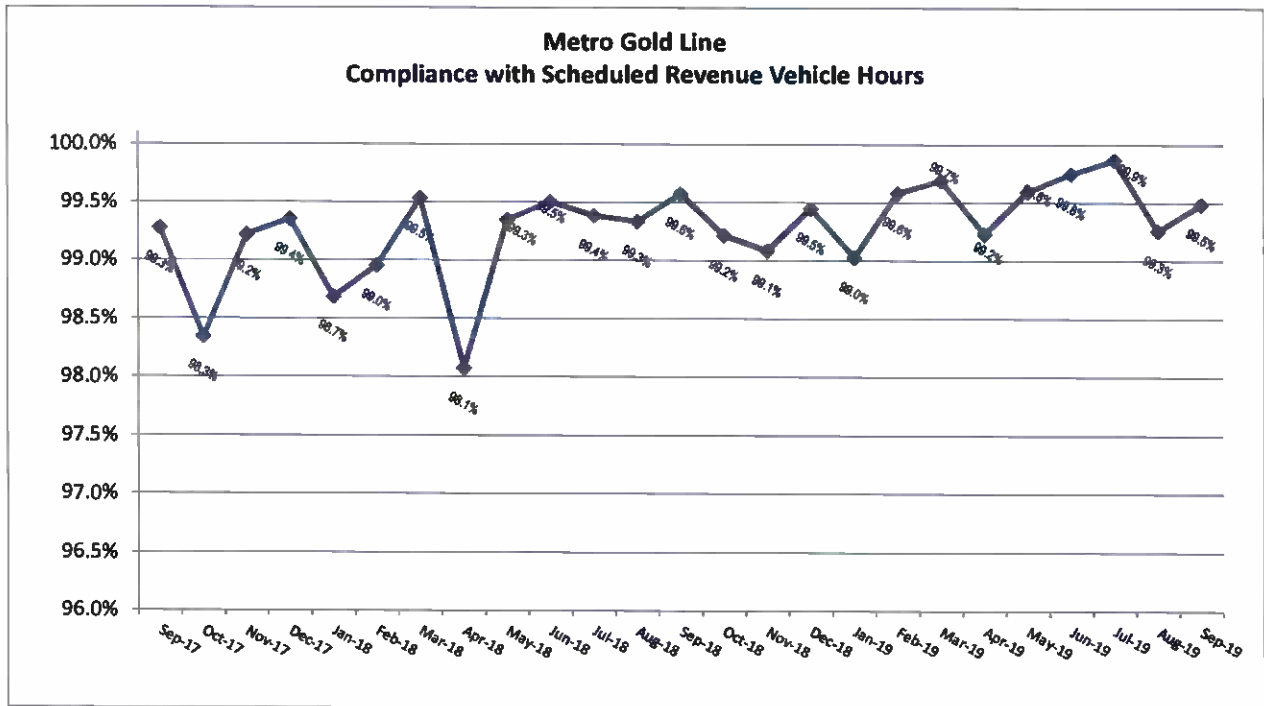
Damaged Left Side Mirror on LRV 728A
Train 423
T-151
(728A)-715
APU Station, Platform 1, Southbound

Reset:

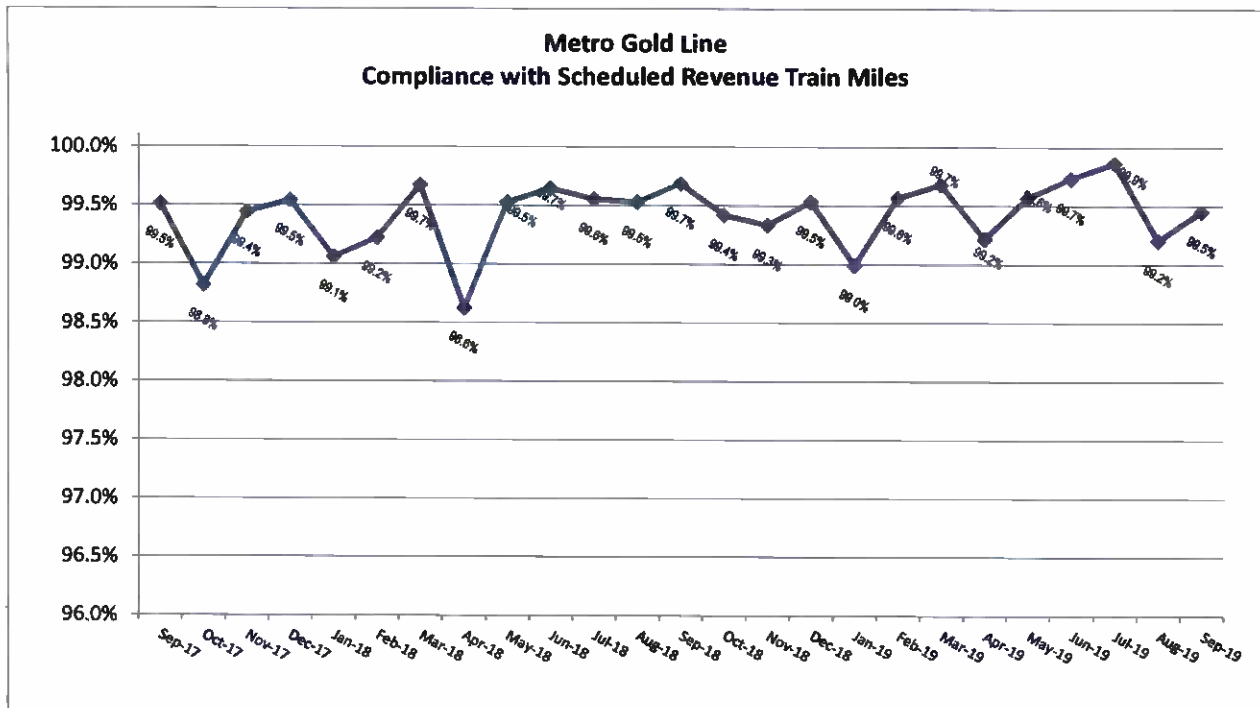
9/27/2019 10:30:00 AM - Incident# 3206214 (0 lost trips, 8 lost minutes)

T-17 reported to Control that he had a speed code of 3 mph at Atlantic Station.
T-17
Train 402
(1012)-1164-1005
Northbound, Track 1
Atlantic Station

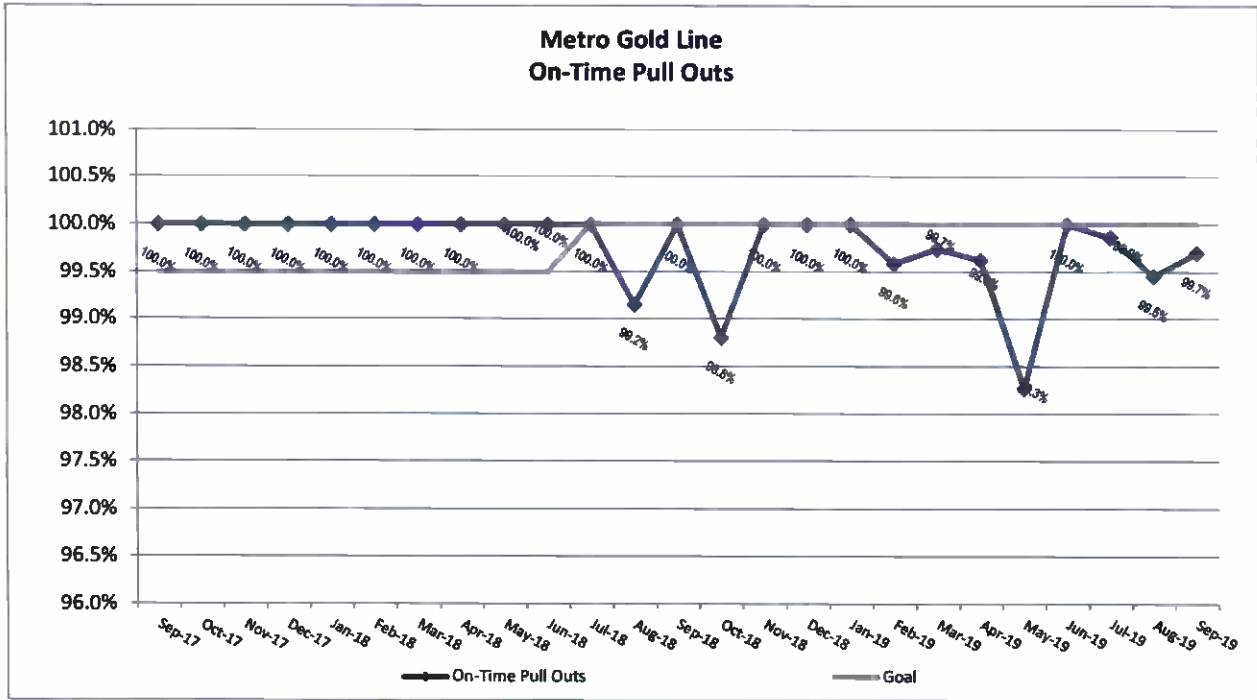
MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS
COMPLIANCE WITH SCHEDULED VEHICLE HOURS
Sep 2019



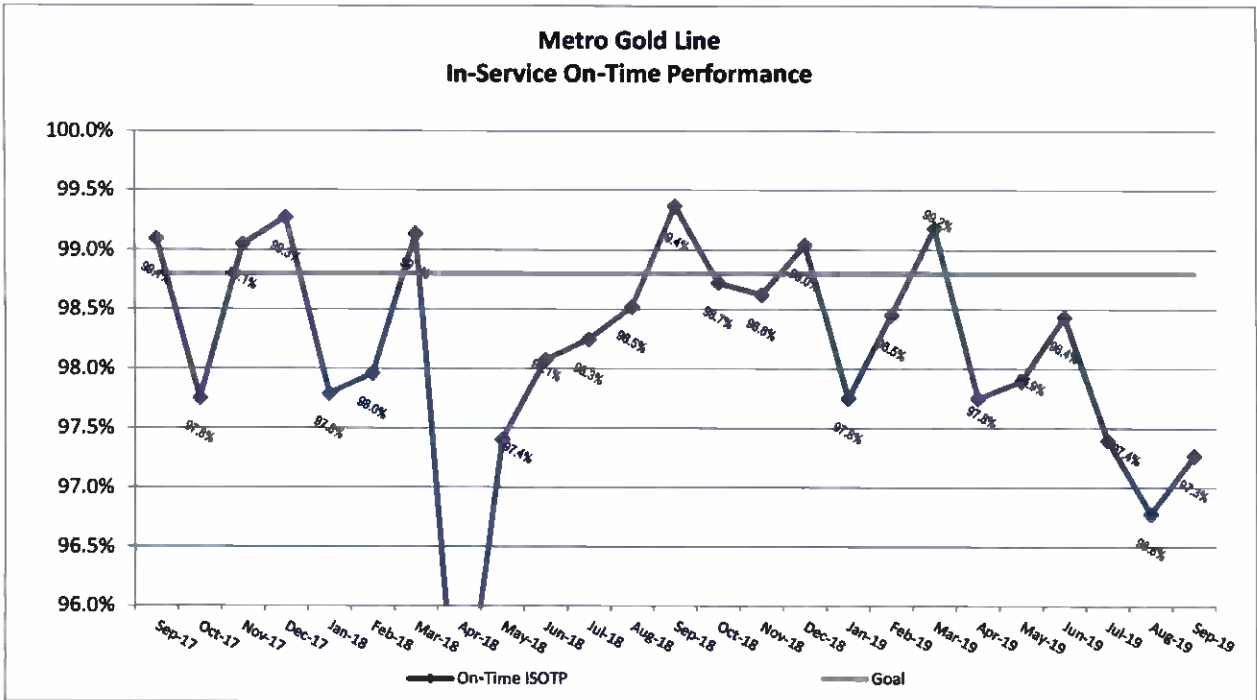
COMPLIANCE WITH SCHEDULED TRAIN MILES



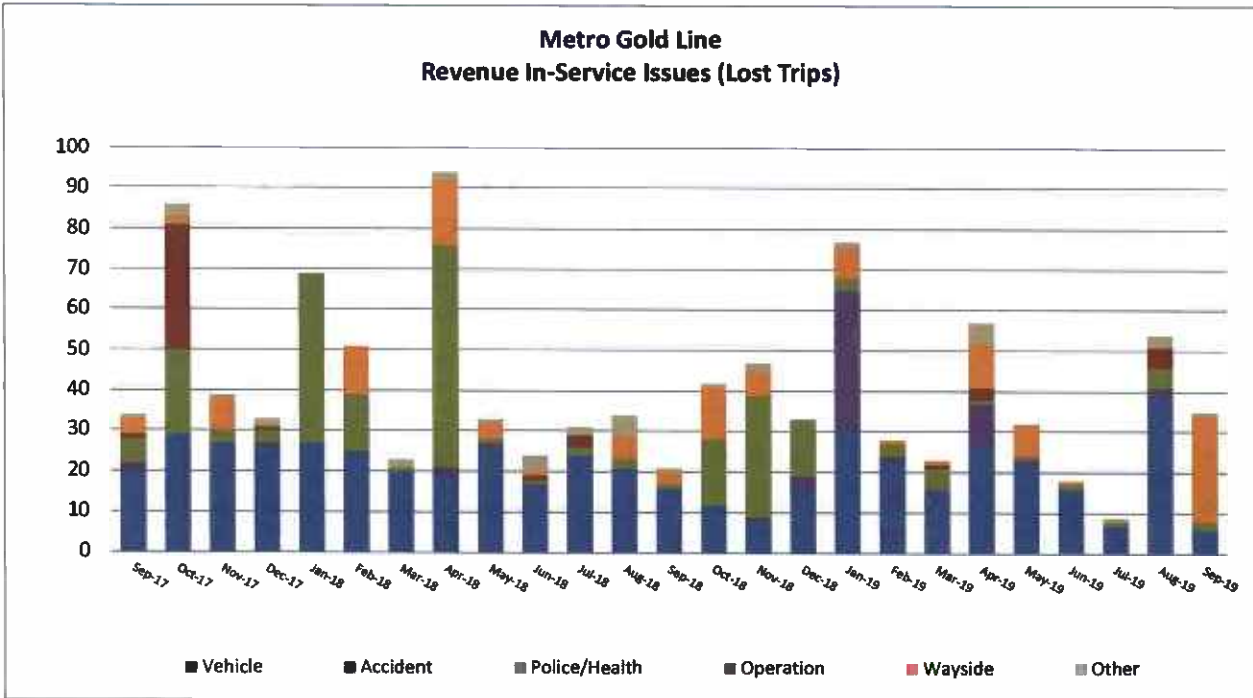
ON-TIME PULL OUTS



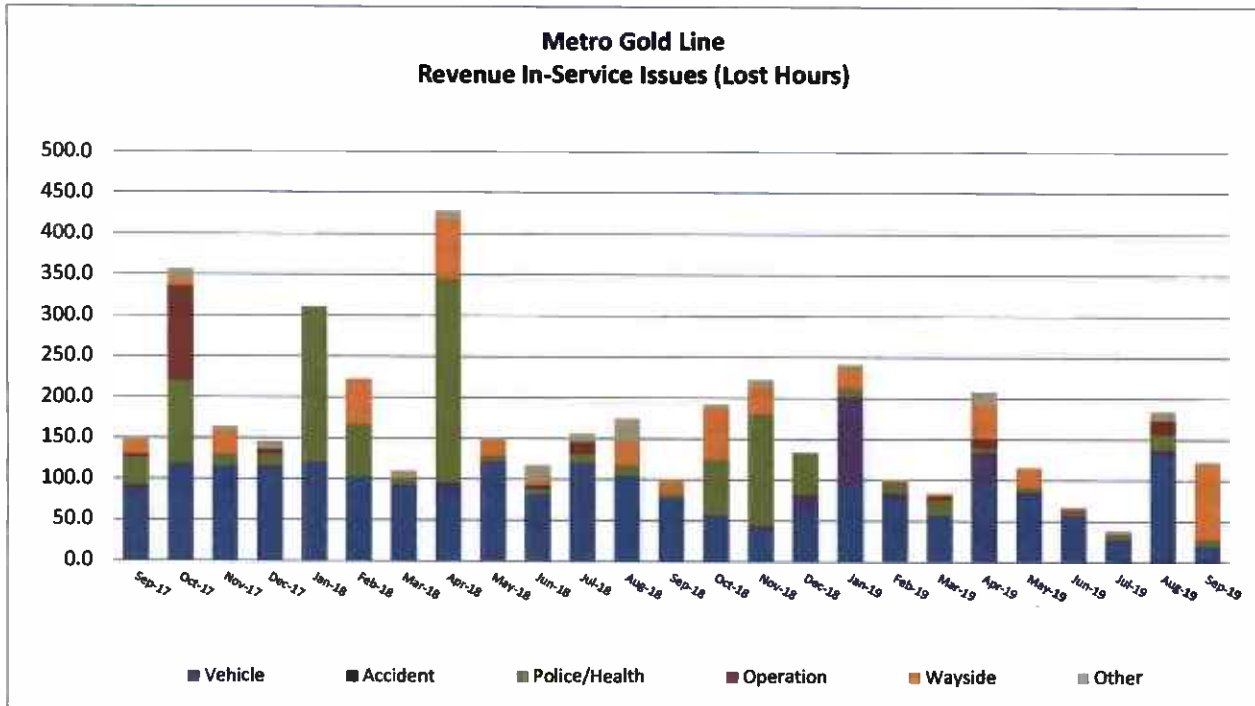
IN-SERVICE ON-TIME PERFORMANCE



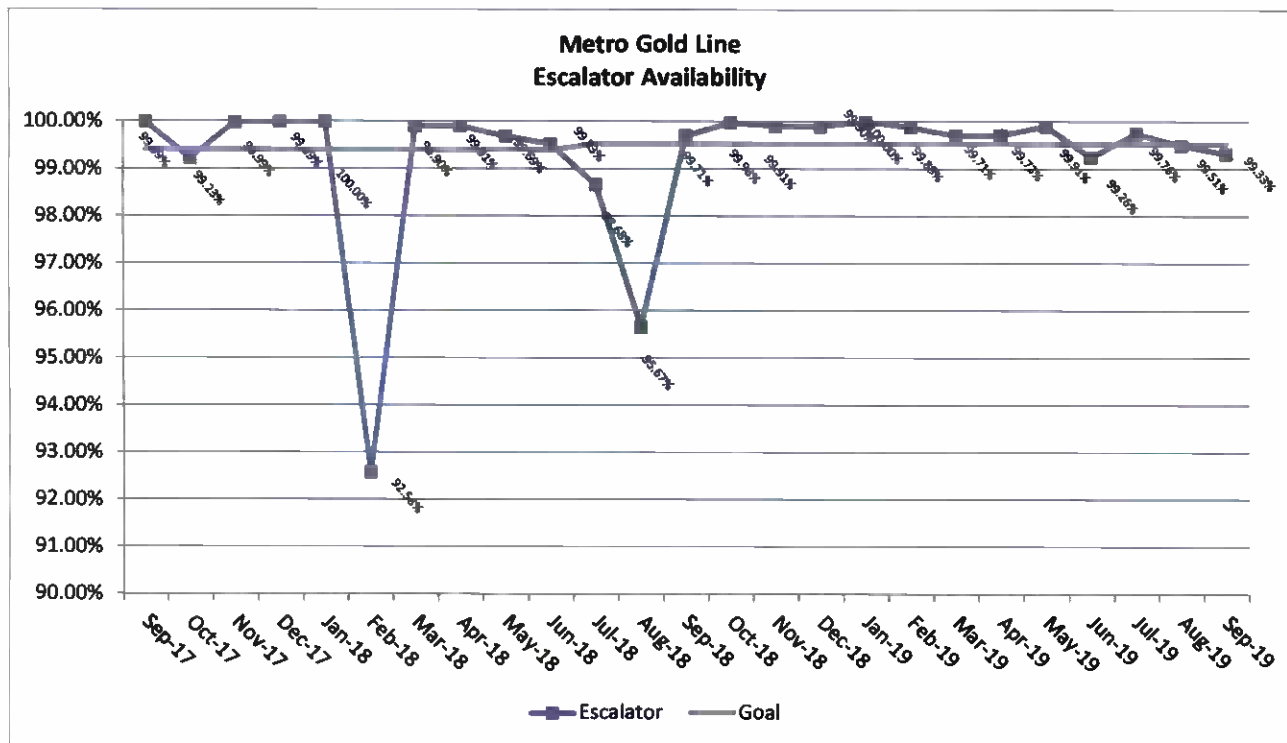
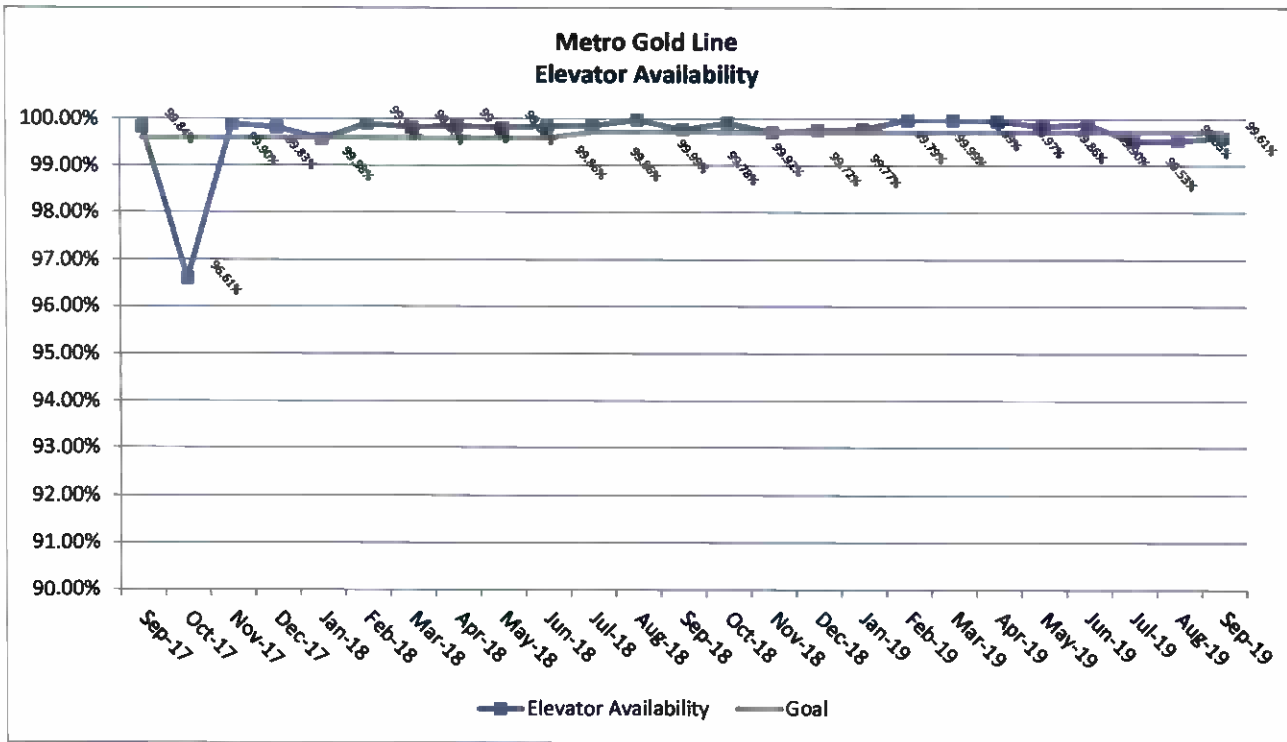
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



EXPO LINE

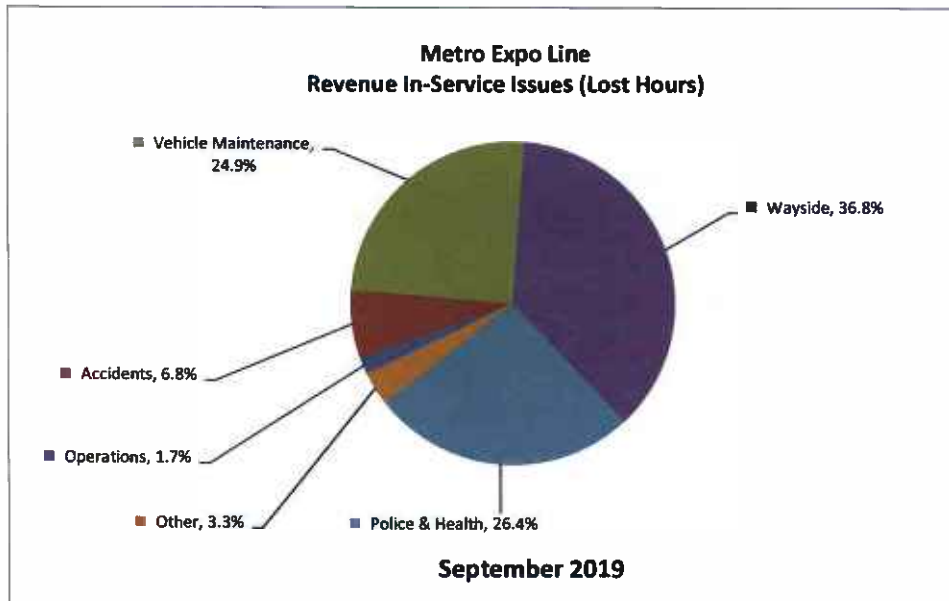
Out of a total of 18,425 hours operated, there were approximately 33 total hours of service delays.

September 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	18,392	99.8%
Cancelled + Delayed Hours	33	0.2%
Total Revenue Hours	18,425	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	5	0.6	1.7%
Accidents	1	2.3	6.8%
Vehicle Maintenance	9	8.2	24.9%
Wayside	7	12.1	36.8%
Police & Health	8	8.7	26.4%
Other	7	1.1	3.3%
Total	37	32.9	100.0%

* 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



September 2019 Expo Line incidents causing delay were as follows:

Operations Incidents:

9/4/2019 1:13:00 PM - Incident# 3196333 (0 lost trips, 13 lost minutes) CHARGEABLE

Train 607 was delayed by 13 minutes on its 13:13 departure due to coupling procedures at Santa Monica Station. It was accidentally uncoupled at Santa Monica Station on its 11:13 departure trip.
Schedule M-778

9/5/2019 10:13:00 AM - Incident# 3196809 (0 lost trips, 9 lost minutes) CHARGEABLE

Train 621 departed late from Santa Monica Station.

9/26/2019 6:58:00 PM - Incident# 3205962 (0 lost trips, lost minutes)

Due to crowded platforms

9/29/2019 2:07:00 PM - Incident# 3206794 (0 lost trips, 4 lost minutes) CHARGEABLE

Operator states she misread the summary and left Santa Monica 4 minutes late

Train 612

T-296

1048-1053-1032

Track 3

Santa Monica station

9/30/2019 6:27:00 PM - Incident# 3207307 (0 lost trips, 7 lost minutes)

Train 618

T-232

(1047)-1061-1032

Downtown Santa Monica, Track 4, Northbound

T-232 reported not being able to engage in Street Run on LRV 1047.

Accidents:

9/22/2019 11:06:00 AM - Incident# 3203951 (1 lost trip, 135 lost minutes)

T-241 reports a 10-73 at the 18th/Flower grade crossing.

T-241

Tr#606

Cars(1024B)-1052-1045

Southbound Trk#4

Flower/18th

Vehicle Maintenance Incidents:

9/2/2019 7:08:00 PM - Incident# 3195414 (0 lost trips, 4 lost minutes)

Aux power (AC or MA Fault)
Train 610
T-142
Cars 1066)-1051-1001
4th Santa Monica

9/3/2019 3:49:00 PM - Incident# 3195841 (0 lost trips, 8 lost minutes)

T-486 on train 610 states having an intermidate propulsion fault with intermidate speed restriction.
Train 610 cars 1046-1016-1069, Palms Station, Track 3, Northbound.

9/5/2019 5:35:00 AM - Incident# 3196708 (2 lost trips, 298 lost minutes)

Air Compressors off on Train 604.
Train 604
T-038
(302)-(245)-(246)
28th Street, Track 4, Southbound.

9/10/2019 7:51:00 AM - Incident# 3198705 (0 lost trips, 20 lost minutes)

Doors
(240)-302-246
Train 602
T-47
Sepulveda, Northbound, Track 3

9/16/2019 5:45:00 PM - Incident# 3201630 (1 lost trip, 141 lost minutes)

Aux power (AC or MA Fault)
Train 605
T-412
Cars (1018) 1064-1021
23rd street station southbound.

9/23/2019 11:35:00 PM - Incident# 3204615 (0 lost trips, 10 lost minutes)

Train Operator T-29 states no movement.

Train 619
T-29
Cars 1071-(1041)-1039
Northbound, track 3, DTSM Station

9/24/2019 9:58:00 AM - Incident# 3204811 (0 lost trips, 6 lost minutes)

No Movement
Train 603 TK 4
SB Crenshaw T-89
(1064B)-1060-1017

9/30/2019 3:48:00 PM - Incident# 3207257 (0 lost trips, 5 lost minutes)

Train 606
T-114
(1017)-1068-1018
Palms Station, Northbound, Track 3
T-114 reported an SLC Fault with speed restriction on LRV 1017.

Wayside Incidents:

9/2/2019 7:45:00 PM - Incident# 3195423 (0 lost trips, 6 lost minutes)

UPS General Alarm TCC and Barrington, Military and Westwood gates are being held down.

9/4/2019 4:34:00 AM - Incident# 3196010 (0 lost trips, 10 lost minutes)

Interlocking: Switch Out Of Correspondence
ARINC
7th and Metro South interlocking, switch 12.

9/13/2019 3:48:00 PM - Incident# 3200606 (0 lost trips, lost minutes)

Train 601
Track 4
Southbound
T-358
(1071A)-1028-1064
States he has a reoccurring prop fault.

9/13/2019 4:06:00 PM - Incident# 3200590 (1 lost trip, 144 lost minutes)

Train 620
T-546
(245A)-302-(246A)
Northbound Track #3
I-10 Box
Train operator states has a friction brake fault with no movement.

9/13/2019 6:37:00 PM - Incident# 3200597 (2 lost trips, 275 lost minutes)

Operator reports that the train has no movement with a SLC fault.

Train 621
T-252
Cars (1014A)-1042-1065
23rd street Station, track 4, westbound

9/14/2019 2:47:00 PM - Incident# 3200871 (1 lost trip, 161 lost minutes)

National, Overland, and Clarington TPSS displayed open breakers.

9/19/2019 3:23:00 PM - Incident# 3203032 (1 lost trip, 133 lost minutes)

AC Breaker: Open
A01 and B05
18th street TPSS

Police & Health Incidents:

9/1/2019 4:20:00 AM - Incident# 3194887 (0 lost trips, 60 lost minutes)

Operator reports a car on the ROW.

T-226

Tr#601

Cars(1049-1036-1070)

Southbound Trk#4

Between Western Station & Grammercy Grade

9/4/2019 6:47:00 AM - Incident# 3196058 (0 lost trips, 4 lost minutes)

unruly passenger, cars #(1063A)-1002-1061

Train #612

T-100

Downtown Santa Monica, track #4, Northbound.

9/5/2019 8:53:00 PM - Incident# 3197061 (0 lost trips, 5 lost minutes)

Reports of altercation aboard.

Train # 610

T-315

(1068A)-1019-1029

23rd Street Station, Track #4, SB

9/6/2019 10:57:00 AM - Incident# 3197387 (0 lost trips, 37 lost minutes)

T-243 on train 603, car 1043A, La Brea, track 4, off platform, reported a fight between multiple individuals aboard the train.

9/16/2019 5:33:00 AM - Incident# 3201200 (0 lost trips, 8 lost minutes)

T-303 reported an individual on board his train throwing shoes at another patron.

T-303

Train 611

(1004)-1035-1017

Northbound, Track 4

Sepulveda Station

9/17/2019 8:00:00 PM - Incident# 3202196 (3 lost trips, 398 lost minutes)

Train Delay/ 7th Metro

Presidential Motorcade

LAPD/ Sgt Chairez

9/21/2019 2:37:00 PM - Incident# 3203774 (0 lost trips, 5 lost minutes)

Train 609 (1067,1035,1065) T-427, 7th & Metro, Track 1 reports he received a report that there is a patron who is unresponsive on board car 1067A.

9/30/2019 1:42:00 PM - Incident# 3207191 (0 lost trips, 5 lost minutes)

LAPD Operator 763 reported someone aboard train 602 possibly armed with a weapon.

Other Incidents:

9/3/2019 3:00:00 PM - Incident# 3195867 (0 lost trips, 14 lost minutes)

T-296 on Train 603 reports propulsion fault and HVAC failure with a speed restriction.
Train 603, cars (1020A)-1039-1050, Culver City Station, Track 4, Southbound.

9/7/2019 9:53:00 AM - Incident# 3197710 (0 lost trips, 10 lost minutes)

Train operator reports of feces in rail car 1049B
Train 607
T-296
(1049B)1053-1045
Sepulveda station, Trk. 3, Northbound

9/21/2019 5:23:00 PM - Incident# 3203806 (0 lost trips, 12 lost minutes)

R-139 reports train 608 (1031,1068,1018) on track 1 at 7th & Metro has blood all over the place.

Unable To Duplicate:

9/15/2019 3:03:00 PM - Incident# 3201067 (0 lost trips, 14 lost minutes)

Sick Individual
Train 611
T-454
Cars 1025)-1060-1053
Jefferson platform 2 northbound.

9/6/2019 3:58:00 PM - Incident# 3197532 (0 lost trips, 5 lost minutes) CHARGEABLE

Operator reports that train 617 has a STL fault that later developed into a brake fault with over heating brakes and a speed restriction.
Train 617
T-374 North and T-546 South
Cars 1018-(1022)-1054
7 and Metro, track 1

9/22/2019 5:14:00 AM - Incident# 3203897 (0 lost trips, 11 lost minutes) CHARGEABLE

Operator T-100 reports a brake fault with no movement.
T-100
Tr#604
Cars(1048B)-1016-1037
Southbound Trk#4
Between 7th Ave/Degnan Intl.

Reset:

9/1/2019 2:08:00 PM - Incident# 3195035 (0 lost trips, 5 lost minutes)

Aux power (AC or MA Fault)

No movement.

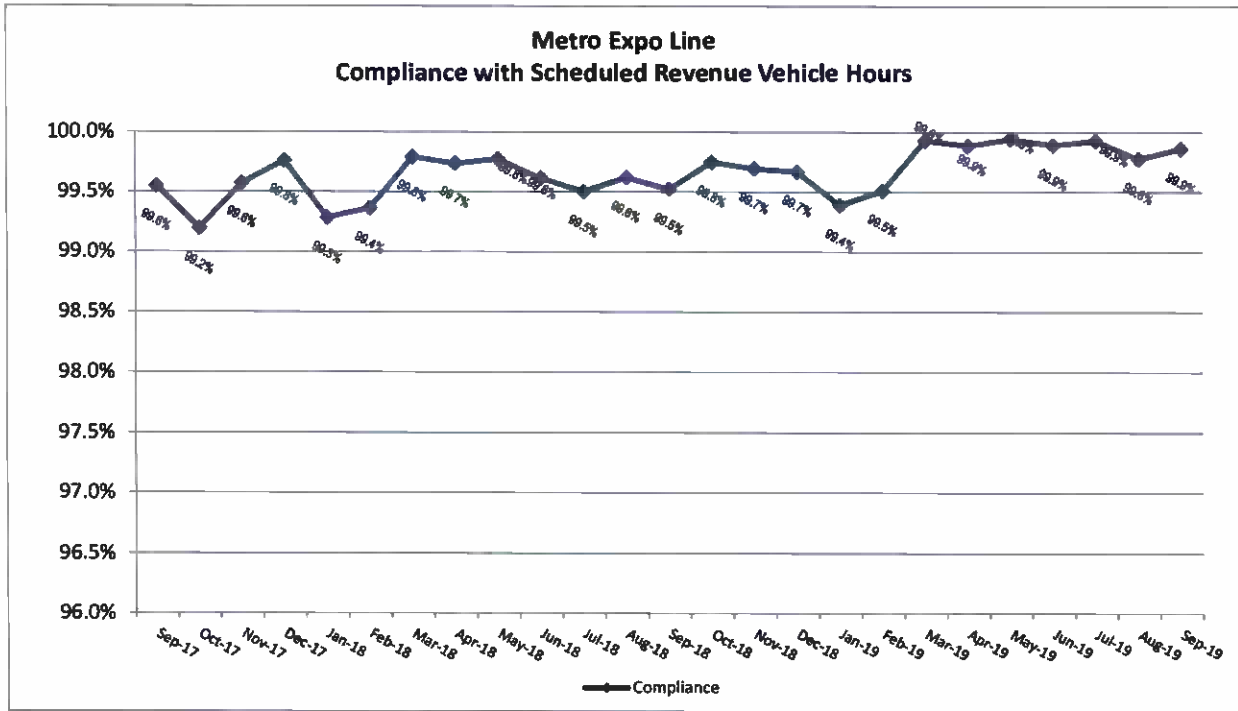
Train 606

T-296

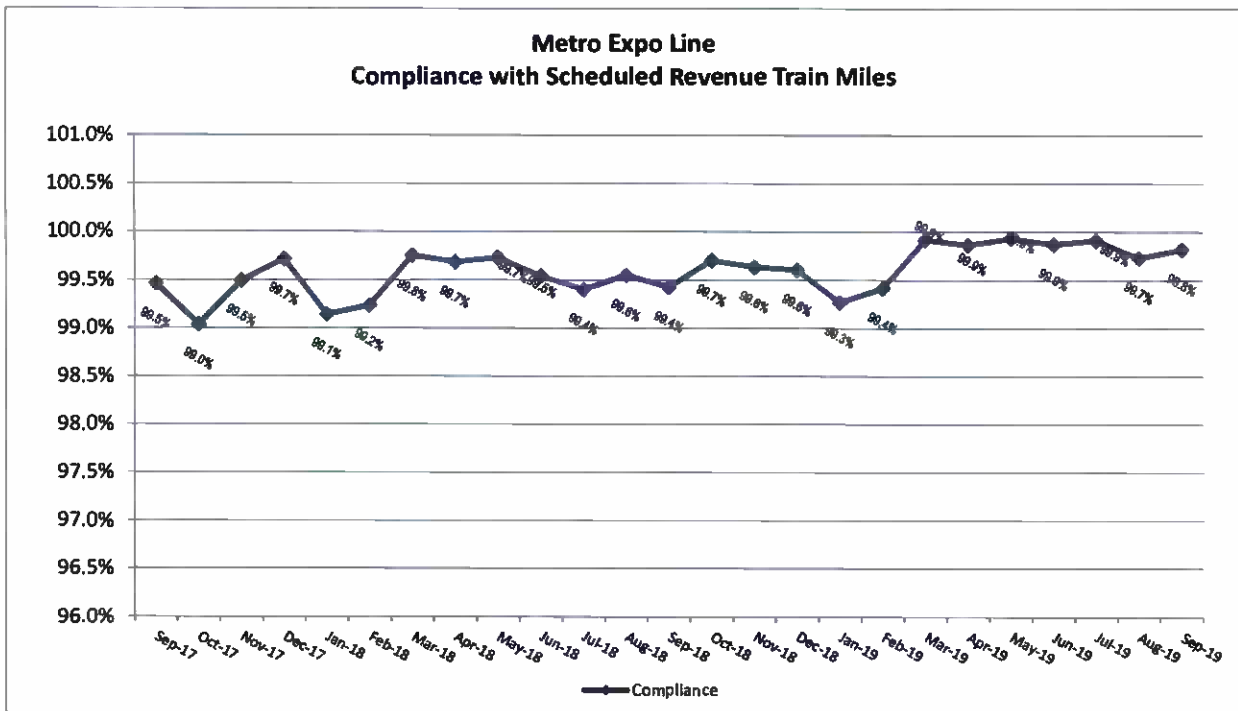
Cars 1033)-1037-1043

4th Santa Monica Station.

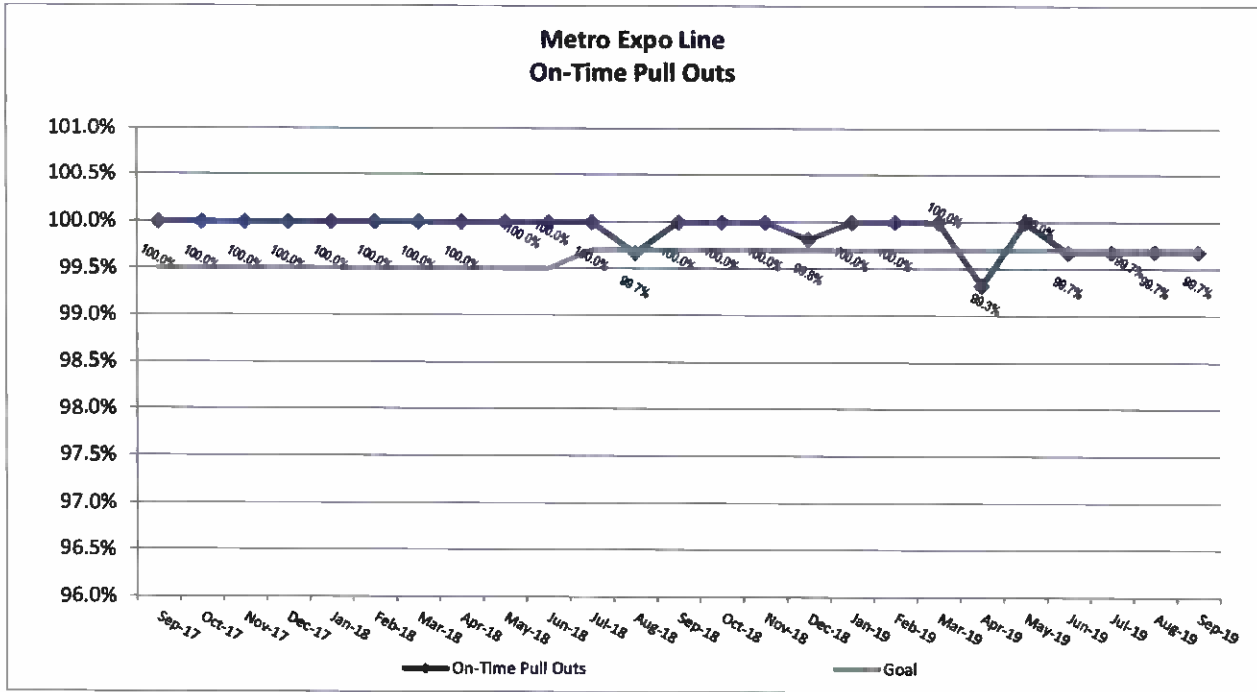
MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS
COMPLIANCE WITH SCHEDULED VEHICLE HOURS
Sep 2019



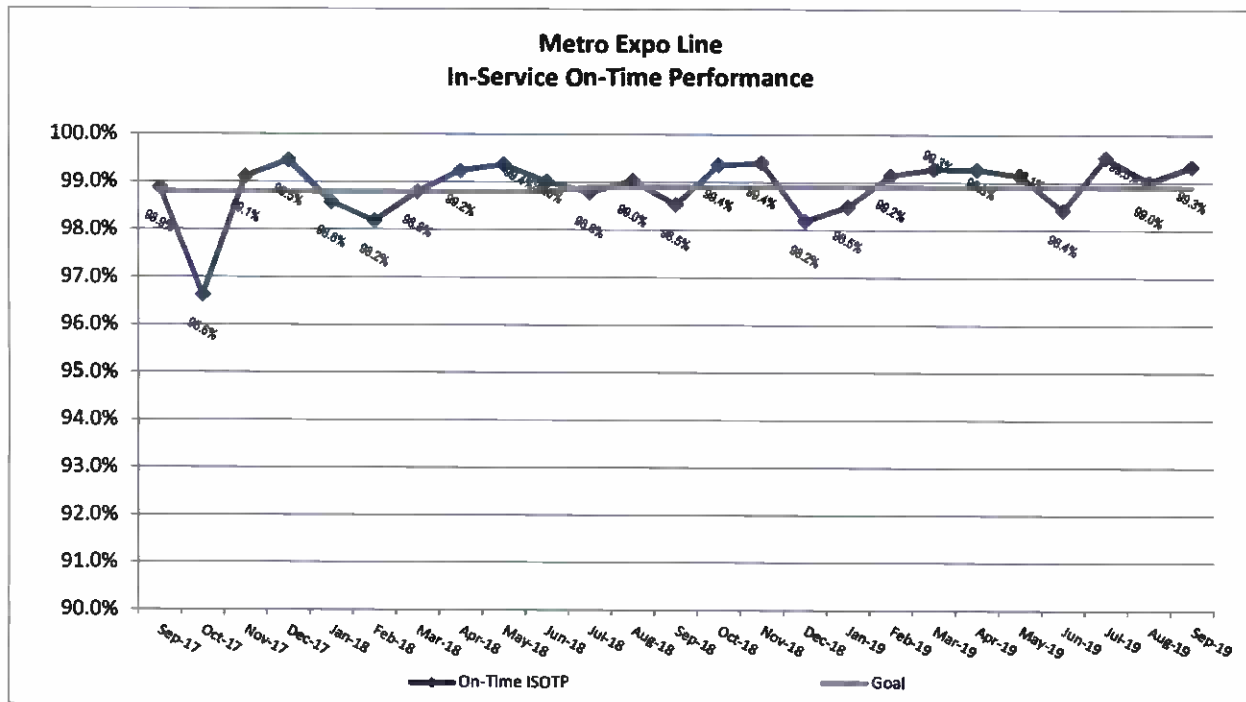
COMPLIANCE WITH SCHEDULED TRAIN MILES



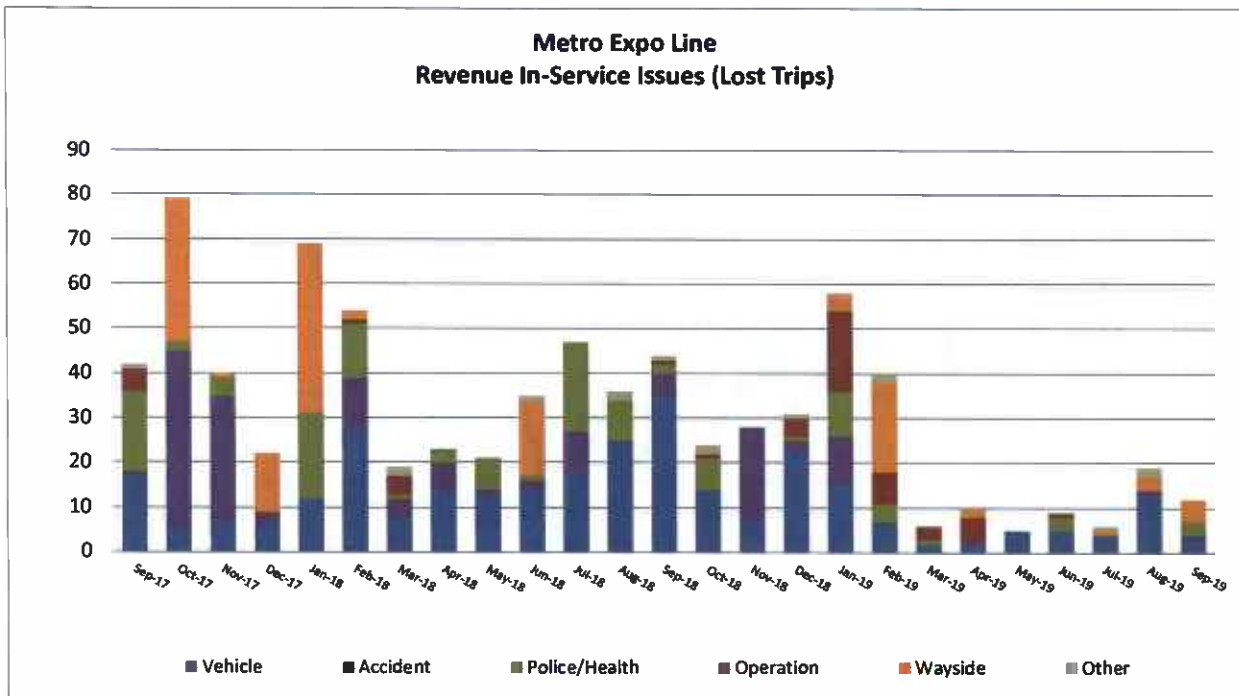
ON-TIME PULL OUTS



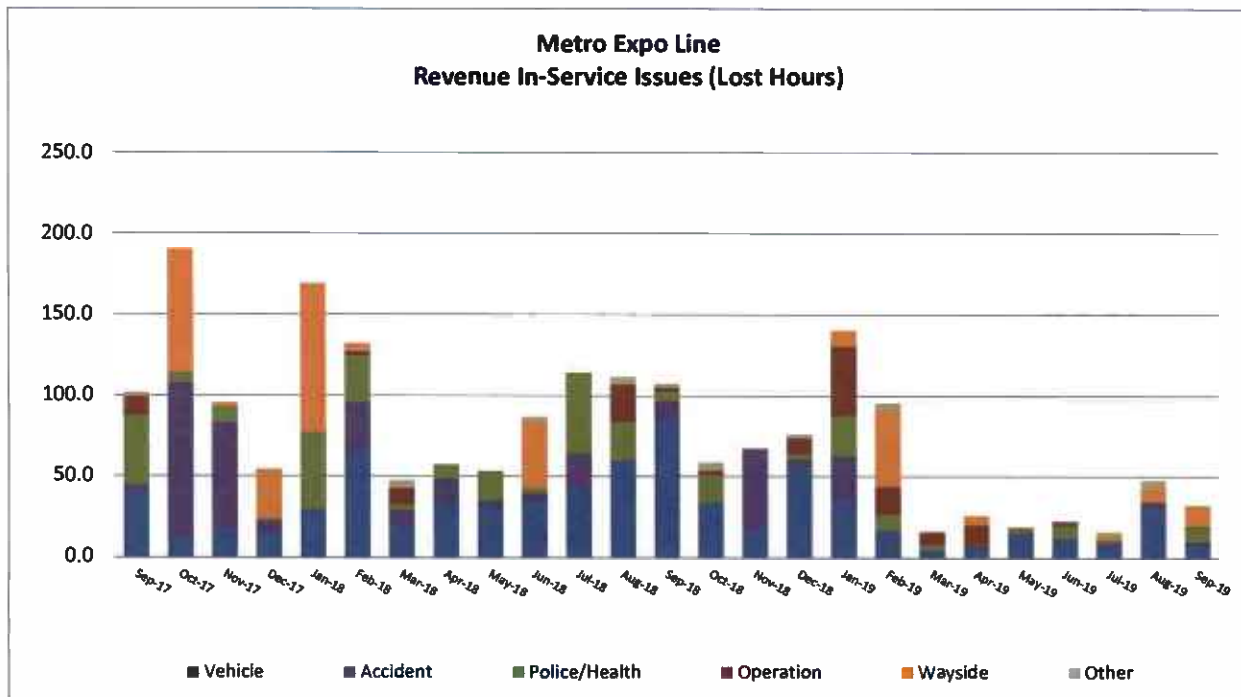
IN-SERVICE ON-TIME PERFORMANCE



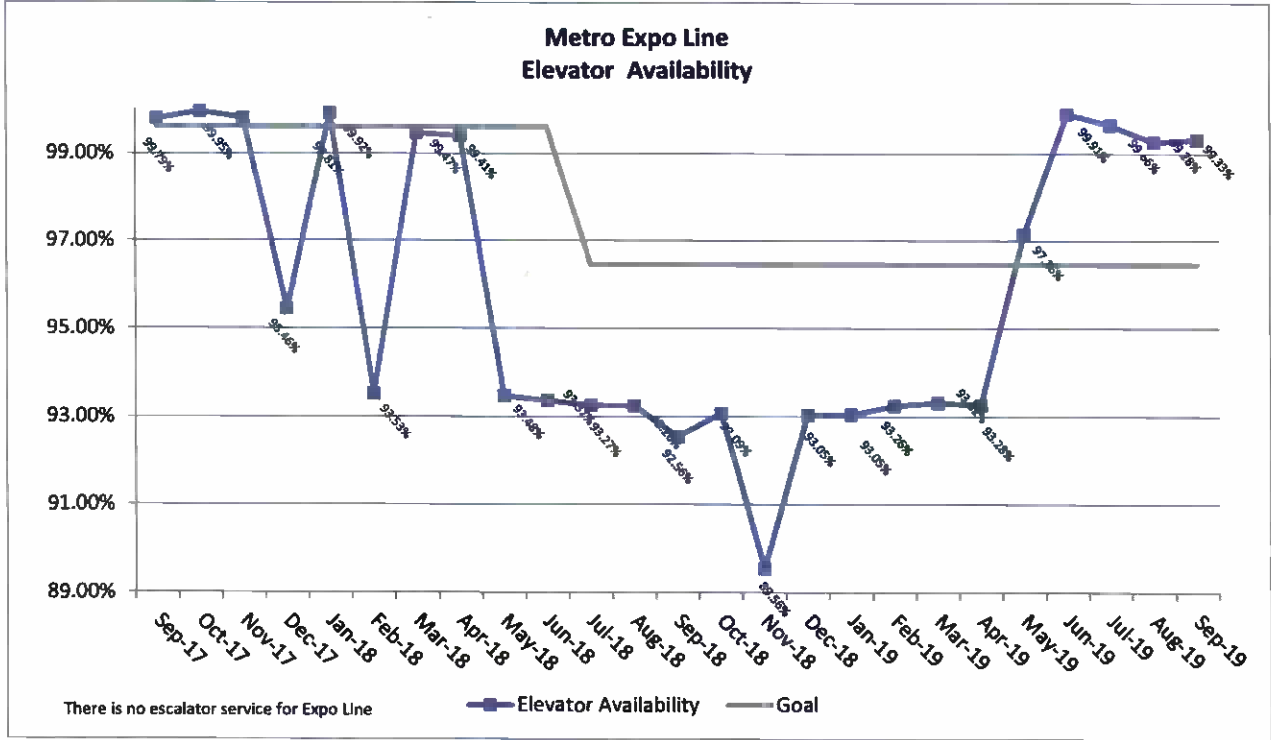
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



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

Financial Status

September 2019

FTA Quarterly Review

December 2019



Metro

Excellence in Service and Support

FY20 – Q1 Indicators

- **FY20 actual cash receipts from locally imposed sales tax revenues (PA, PC, MR, MM) totaled \$877M during Q1 of the fiscal year, a decrease of 1.8% from FY19Q1.**
- **Both the County of Los Angeles and the State of California unemployment rates have remained steady in the last 12 months while the national rate has declined to 50 lows (1969=3.5%).**

LA 4.4%, CA 4.0% and US 3.5%

- **Inflation in the Los Angeles Metropolitan Area measured 3.0% for the 12 month period ended September '19**
 - **Excluding Food and Energy, core inflation equaled 2.8%**

- **Transit indicators – FY 20 Q1**
 - Ridership versus prior year**
 - Bus: +4.8%**
 - Rail: -19.6%**
 - Total: -2.0%**



Metro

Fare revenues – FY20 Q1 – (11.7)% vs FY 18

FY20 Q1 – Highlights

- **Board approved contract awards for both the Technical and Public Communication and Engagement Services for Metro's Congestion Pricing Feasibility Study**
- **Approved a Memorandum of Agreement (MOA) with the US Army Corps of Engineers to streamline administrative requirements surrounding project review, approvals, and the permitting process**
- **Introduced TAP Wearables to be sold at select Metro Customer Service Centers**



FY20 Q2 – Look Ahead

- **Opening of the A (Blue) Line after a 9 month closure to upgrade and rehabilitate the line (New Blue project)**
- **Issuance of an RFP for a Pre-Development Agreement (PDA) with up to 2 private sector proposers to assist in the planning and design of the Sepulveda Transit Corridor Project.**
- **Initiated FY21 budget development process with an internal capital call for new projects and state of good repair requirements.**

Los Angeles County
Metropolitan Transportation Authority

METRO CONSTRUCTION SAFETY FTA Quarterly Review Meeting December 4, 2019



CONSTRUCTION SAFETY QUARTERLY REPORT



Crenshaw/LAX Transit Project

CRENSHAW/LAX TRANSIT PROJECT

- ❑ Metro participated in WSCC Tool-Box Safety Huddle Meetings in July, August and September 2019.
- ❑ WSCC participated in Metro's All Hands Safety and Security Meetings in July, August and September 2019.
- ❑ Metro's Executive Safety Team participated in Safety Walks in July, August and September 2019.
- ❑ Project-to-Date Total Work Hours: 8,783,792
- ❑ Recordable Injuries as of September 2019: 98
- ❑ Project Rate per 200,000 Labor Hours: 2.2
- ❑ BLS National Heavy Construction Incident Rate: 2.5
- ❑ Total Days Away Cases: 7
- ❑ Total Restrictive Duty Cases: 12

CONSTRUCTION SAFETY QUARTERLY REPORT



Westside Purple Line Extension
Section 1 Project

WESTSIDE PURPLE LINE EXTENSION SECTION 1 PROJECT

❑ Project to Date Total Work Hours:	3,868,744
❑ Recordable Injuries as of August 2019:	23
❑ Project Rate per 200,000 Labor Hours:	1.1
❑ BLS National Heavy Construction Incident Rate:	2.5
❑ Total Days Away Cases:	6



Regional Connector Transit Project

REGIONAL CONNECTOR TRANSIT PROJECT

❑ Project to Date Total Work Hours:	4,072,904
❑ Recordable Injuries as of August 2019:	18
❑ Project Rate per 200,000 Labor Hours:	.88
❑ BLS National Heavy Construction Incident Rate:	2.5
❑ 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.



Metro

East San Fernando Valley Transit Corridor

Project Status

- Incorporating final FTA comments and conducting legal sufficiency reviews
- Responded to SHPO concerns pertaining to the Pacific Pipeline along the San Fernando rail ROW
- Separate study of First/Last Mile Station Area Plans nearing completion and being reviewed by Cities of Los Angeles and San Fernando



East San Fernando Valley Transit Corridor

Next Steps

- December 2019
 - Admin Final EIS completing legal sufficiency review
- January 2020
 - Anticipated release of Final FEIS/EIR
- February 2020
 - Anticipated Board certification of the EIR













Eastside Transit Corridor Phase 2

Study Corridor

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



- | | | | |
|---|---|---|---|
|  | Metro Rail Lines & Station |  | At-Grade Option |
|  | Metro Silver Line & Station |  | Aerial Option |
|  | Metrolink & Station |  | At-Grade/Aerial Option |
|  | Regional Connector (under construction) |  | Below Grade Option |
| | |  | Potential Station |
| | |  | Project Area Boundary within Study Area |

Eastside Transit Corridor Phase 2

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



Eastside Transit Corridor Phase 2

SR 60
Alternative -
South El
Monte/Peck
Road Terminus
Station Concept
(Aerial)



Eastside Transit Corridor Phase 2

Status

- Completed scoping period May 31, 2019 – July 15, 2019 and seven (7) public scoping meetings in June
- Fall 2019 – Special design refinement studies underway
- Fall 2019 – Key technical meetings with cities, agencies, and stakeholders

Next Steps

- Address scoping comments and ongoing preparation of the environmental analysis.

West Santa Ana Branch Transit Corridor

IOS 1: I-105/Green Line Station to Pioneer Station



Study Corridor

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

Board Update (September 2019)

- In addition to the entire Project, staff will also be evaluating two Initial Operating Segment (IOS) options as part of the Draft EIS/EIR:
 - IOS 1: I-105/Green Line Station to Pioneer Station
 - IOS 2: Slauson Station to Pioneer Station

West Santa Ana Branch Transit Corridor

IOS 2: Slauson Station to Pioneer Station



Study Corridor

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

Board Update (September 2019)

- In addition to the entire Project, staff will also be evaluating two Initial Operating Segment (IOS) options as part of the Draft EIS/EIR:
 - IOS 1: I-105/Green Line Station to Pioneer Station
 - **IOS 2: Slauson Station to Pioneer Station**

West Santa Ana Branch Transit Corridor



Status

- October 2019 – Three community meetings (DTLA, Bellflower, Huntington Park)
- Supplemental staff for FTA under contract to help accelerate environmental review
- Coordinating with Union Pacific to accommodate project on freight-owned ROW

Next Steps

- Advance/refine design
- Continue coordination with Union Pacific
- Late 2020 – completion of Draft EIS/EIR
- First/Last Mile Planning: 2020

Green Line Extension to Torrance

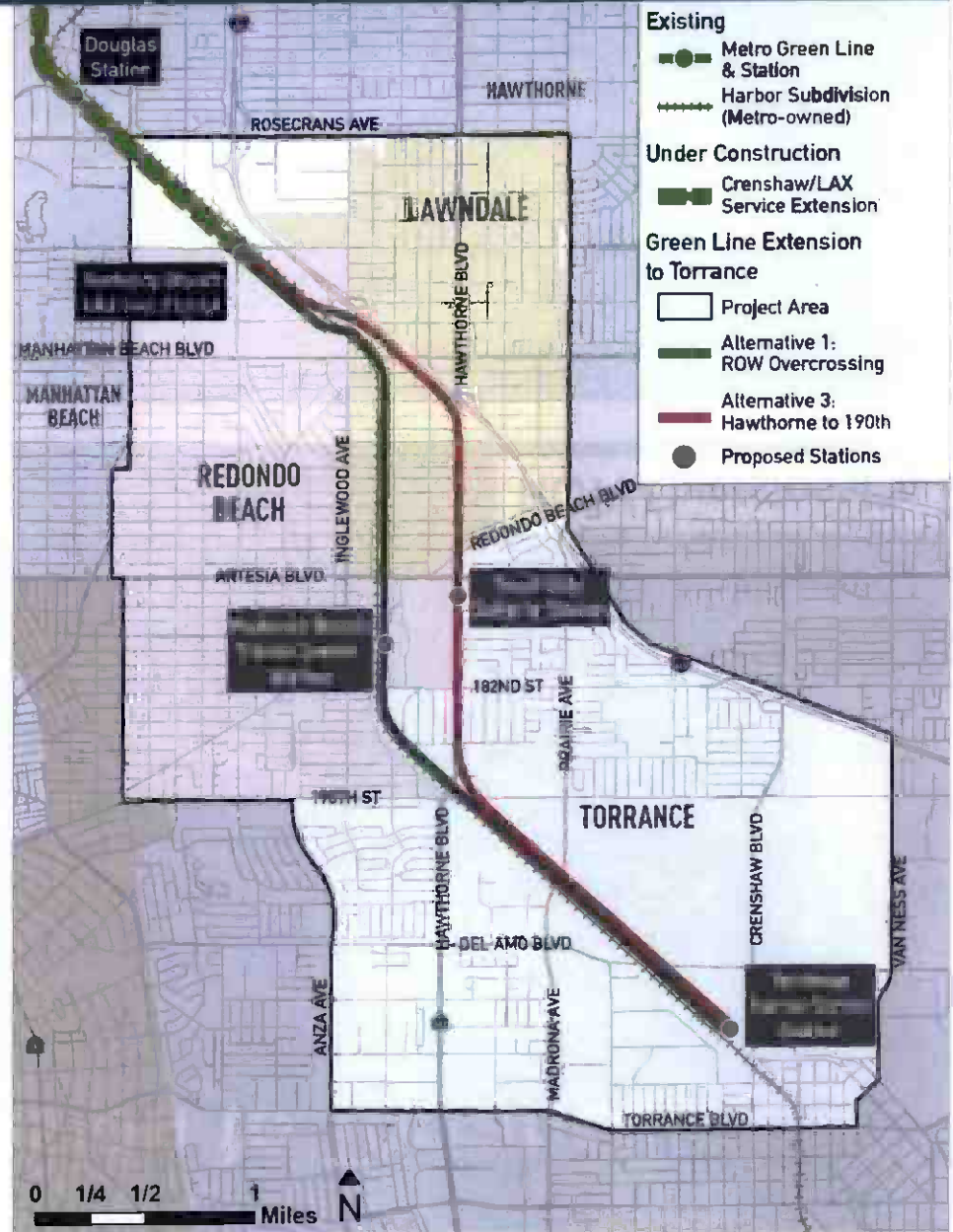
Regional Context



Green Line Extension to Torrance

Status

- Finalizing contract negotiations for:
 - CEQA EIR
 - Advanced Conceptual Engineering
 - Options for NEPA EIS, PE, & Bid Services



Green Line Extension to Torrance

Next Steps

- January 2020 – Award Environmental/ACE contract and initiate Environmental Study



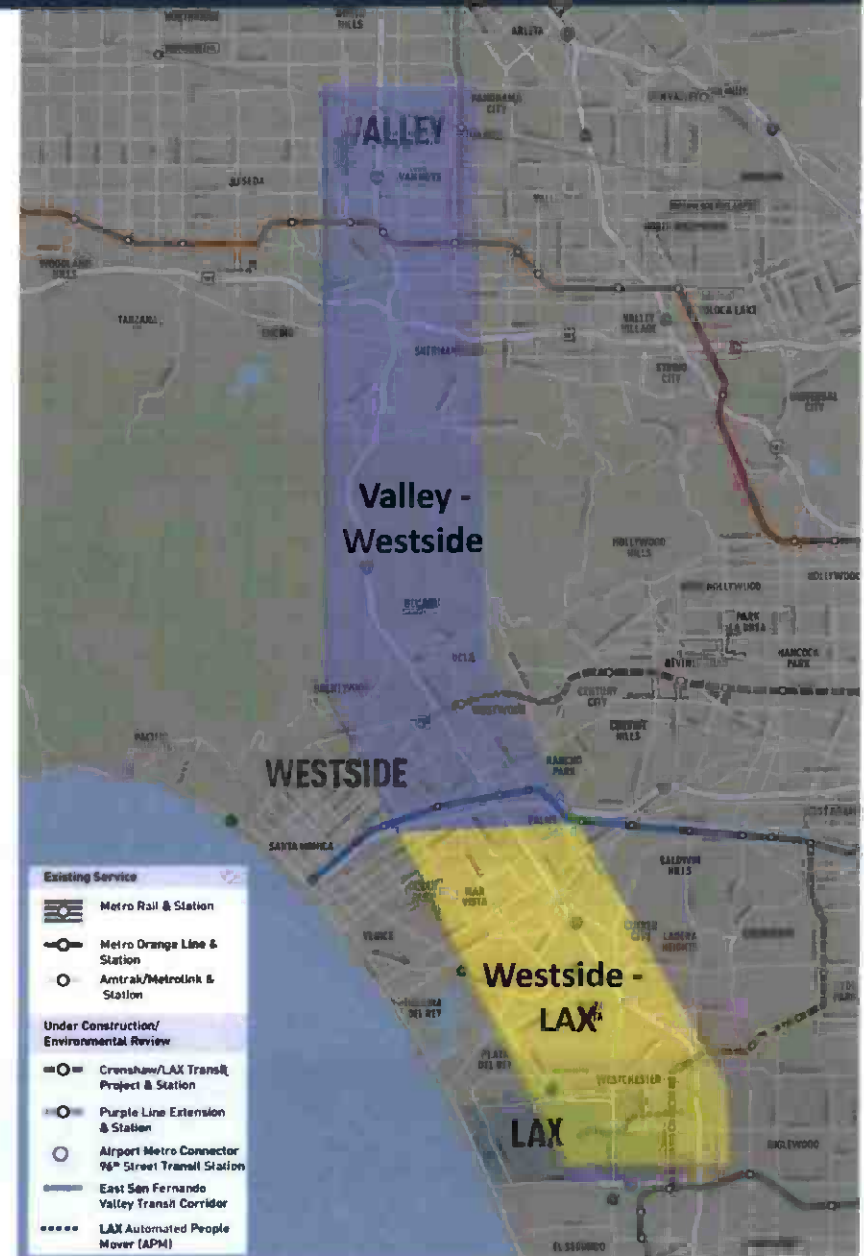
Sepulveda Transit Corridor

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





HRT 1

HRT 2

HRT 3

MRT 1


**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



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

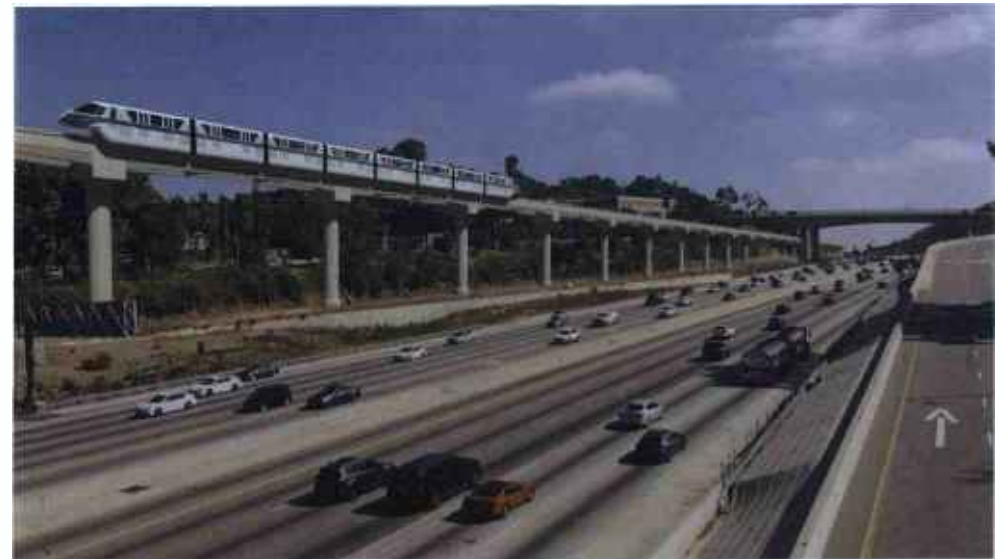
- October 2019 – Release RFP for Predevelopment Agreement (PDA)
- November 2019 – Complete Feasibility Study; release RFP for EIS/EIR
- December 2019 – Present completed Feasibility Study to Metro Board of Directors



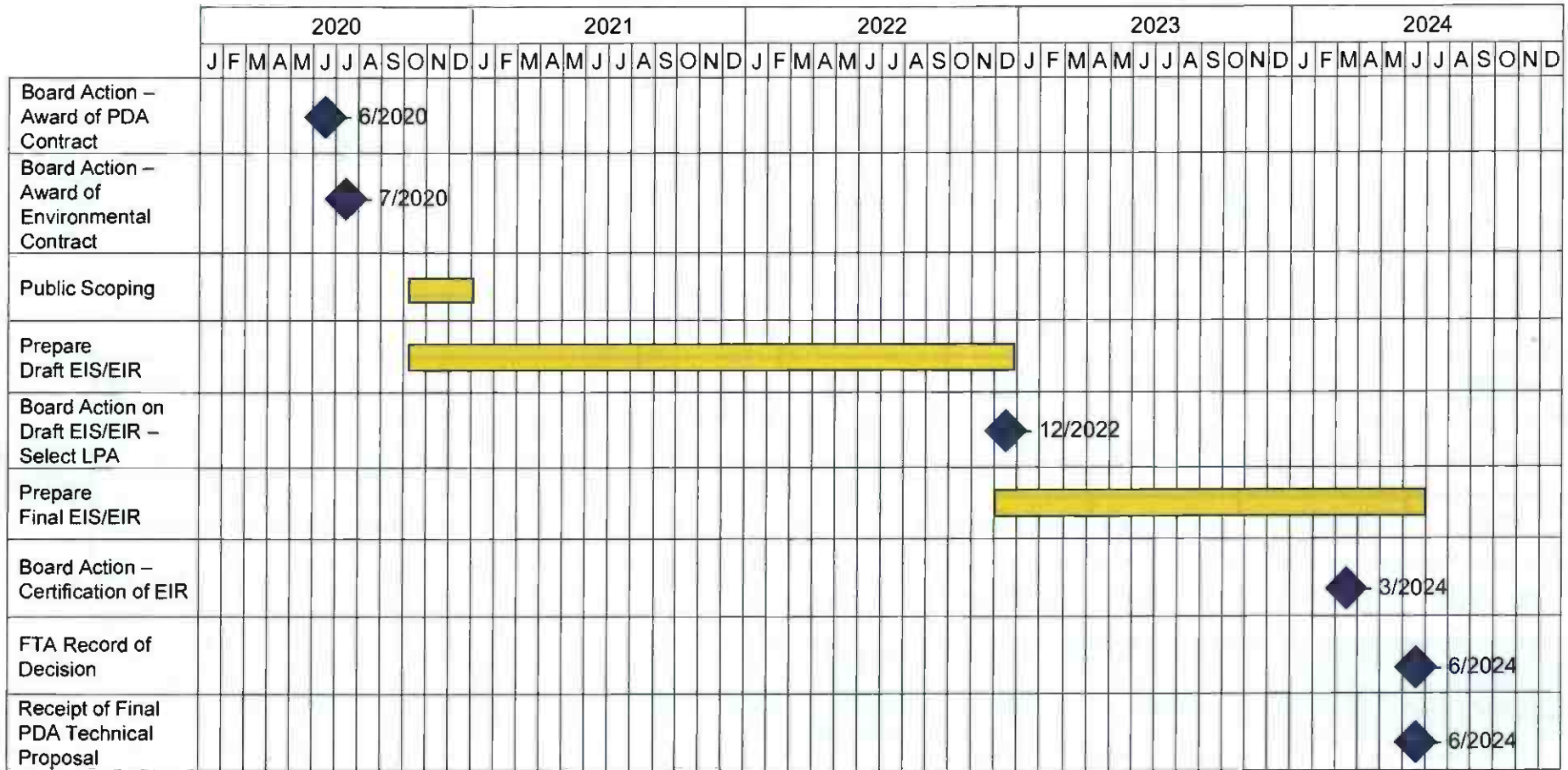
Sepulveda Transit Corridor

Next Steps

- June/July 2020
 - Award PDA contract(s)
 - Award environmental contract
 - Approve alternatives for environmental review
- Fall 2020 – Begin NEPA/CEQA scoping process



Sepulveda Transit Corridor Schedule



◆ = Milestone Date

Last Revised: 11/2019



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	Mar-20
	Eastside Transit Corridor Phase 2	Jan-10 ^[1]	Dec-13 ^[1]	Aug-14 ^[1]	Dec-21 ^[2]	Sep-22	TBD
	West Santa Ana Branch Transit Corridor	Jun-17	Aug-19	Feb-21	Apr-21	Oct-21	Jan-22
	Green Line Extension to Torrance	Feb-20 ^[3]	TBD ^[4]	TBD ^[4]	Sep-21	TBD ^[4]	TBD ^[4]
	Sepulveda Transit Corridor	Oct-20	TBD	TBD	TBD	TBD	TBD

[1] Dates for the Original Draft EIS/R

[2] Reinitiated Draft EIS/R

[3] CEQA NOP

[4] CEQA only DEIR, with option for future NEPA, if necessary

Metro Rapid System Gap Closure Lines



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 underway and scheduled to be completed in early 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 over the next quarter

Number of Stations	Agency	Completion Date	Notes
29	City of Torrance	Winter 2019/20	Construction underway
8	Culver City	Winter 2019/20	Construction underway
37	TOTAL		



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
TOTAL BUDGET	\$29,204,301

Activities	Approved Budget	Current Budget	Expenditures To Date	Forecast to Complete
Transit Signal Priority	\$24,044,301	\$23,121,925	\$19,137,308	\$3,984,617
Shelters	\$ 5,160,000	\$ 5,160,000	\$ 4,580,306	\$579,694
TOTAL	\$29,204,301	\$28,281,925	\$23,717,614	\$4,564,311

Cesar Chavez Bus Stop Improvements Project

Status

- November 2019 – Completed bid evaluation
- Construction contract has been executed, pending issuance of Notice to Proceed
- City approvals for work in City streets are underway



Cesar Chavez Bus Stop Improvements Project

Next Steps / Schedule

- Anticipate Metro award of construction contract in Winter 2019
- Begin construction Winter 2019
- Complete construction 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
TOTAL BUDGET	\$3,530,000

Original Budget	Current Budget	Expenditures to Date	Forecast to Complete
\$ 2,085,697	\$ 3,530,000	\$ 489,991	\$ 3,040,009

Crenshaw/LAX Transit Project FTA Quarterly Review – December 4, 2019



Project Description

- 8.5 miles, 8 stations, 22 LRT vehicles
- Current Budget = \$2,058 million
- Current Forecast = \$2,058 million
- Remaining Unallocated Contingency = 0.6% of Total Project Current Forecast and 5.9% 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 = 93%
- 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



Key Project Issues

- Contractor continues critical construction efforts in the north end underground structures.
- Contractor continues work to test the rail system software over a 10-weekend period at the Green Line and Crenshaw/LAX junction.
- 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 3rd parties to complete power drops for traction power substations in support of testing systems equipment.
- The estimated jobs created to-date is 24,592 with 540 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

Construction Update Segment A



Aviation Station – Glass panel installation at ticket kiosk



Century Bridge – Inspectors on SB Track measuring
TOR

Construction Update Segment B



High Street – OCS work siding track area



UG3 – Crenshaw restoration paving asphalt



Construction Update Segment C



Vernon Station – Continued installation of edge pavers on the north and south bound platform level



Leimert Park Station – Continued installation of entrance canopy steel for elevators 1 and 2 at the plaza level

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	2,048,545	438,881,218	(3,802,559)	424,920,633	2,048,545	438,881,218	(11,473,157)
20	STATIONS, STOPS, TERMINALS, INTERMODAL	153,906,000	-	315,050,000	-	311,216,717	1,460,460	277,563,778	-	311,216,717	(3,833,283)
30	SUPPORT FACILITIES (SOUTHWEST YARD)	66,673,000	-	71,164,000	-	67,318,266	260,261	65,926,149	-	67,338,361	(3,825,639)
40	SITWORK/SPECIAL CONDITIONS	235,576,000	-	395,798,361	(4,610,838)	403,755,400	1,542,321	354,918,640	(4,634,838)	404,182,424	8,384,063
50	SYSTEMS	125,132,000	-	169,436,000	-	174,966,183	2,517,059	133,698,069	-	174,969,936	5,533,936
	CONSTRUCTION SUBTOTAL (10-50)	1,052,622,000	-	1,401,802,736	(2,562,293)	1,396,137,784	1,977,541	1,257,027,270	(2,586,293)	1,396,588,657	(5,214,079)
60	RIGHT-OF-WAY	132,294,000	-	127,490,000	20,590	133,697,247	55,942	133,543,980	20,590	133,697,247	6,207,247
70	VEHICLES / BUSES	87,780,000	-	83,571,544	-	83,571,544	-	81,362,870	-	83,571,544	(0)
80	PROFESSIONAL SERVICES	273,147,000	-	368,734,466	(2,882,052)	405,571,492	3,227,975	371,076,791	(2,402,232)	405,768,576	37,034,110
	SUBTOTAL (10-80)	1,545,843,000	-	1,981,598,746	(5,423,755)	2,018,978,067	5,261,458	1,843,010,910	(4,967,935.00)	2,019,626,024	38,027,278
90	UNALLOCATED CONTINGENCY	177,157,000	-	50,401,254	-	-	-	-	4,967,935	12,373,976	(38,027,278)
	TOTAL PROJECT 865512 (10-100)	1,723,000,000	-	2,032,000,000	(5,423,755)	2,018,978,067	5,261,458	1,843,010,910	0	2,032,000,000	-
	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	-
	TOTAL PROJECTS 405512 & 465512 (ENV / PLAN'G)	26,000,000	-	26,000,000	-	25,549,031	-	25,549,030.97	-	26,000,000	-
	TOTAL PROJECTS 405512, 465512 & 865512	1,749,000,000	-	2,058,000,000	(5,423,755)	2,044,527,098	5,261,458	1,868,559,941	0	2,058,000,000	-

1. Expenditures are Cumulative through September 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.

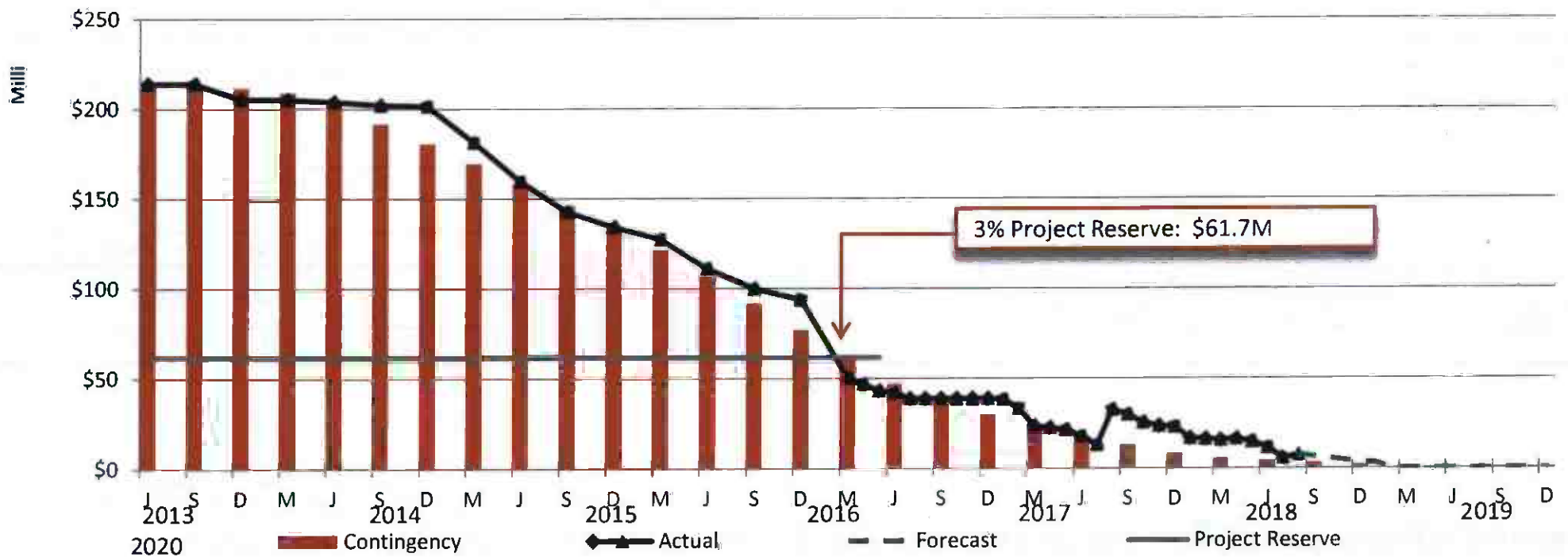
3. Expenditures exclude \$5.5 million for various right-of-way and professional services costs that are being reallocated to other local funding.

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	TO DATE	
405556 SYSTEMWIDE TRANSIT PLANNING	-	320,035	-	320,035	-	320,035	-	320,035	-
210090/93 FARE GATE PROJECT	-	2,566,226	-	3,066,226	-	2,291,126	-	2,566,226	-
210152 CRENSHAW/LAX BUS TRANSFER FACILITY	-	2,200,000	-	2,200,000	89,832	582,999	-	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	-	3,980,937	-	3,980,937	887,975	1,894,532	-	3,980,937	-
TOTAL	-	48,557,025	-	47,222,038	977,807	42,681,805	-	48,557,025	-

Budget Contingency Drawdown

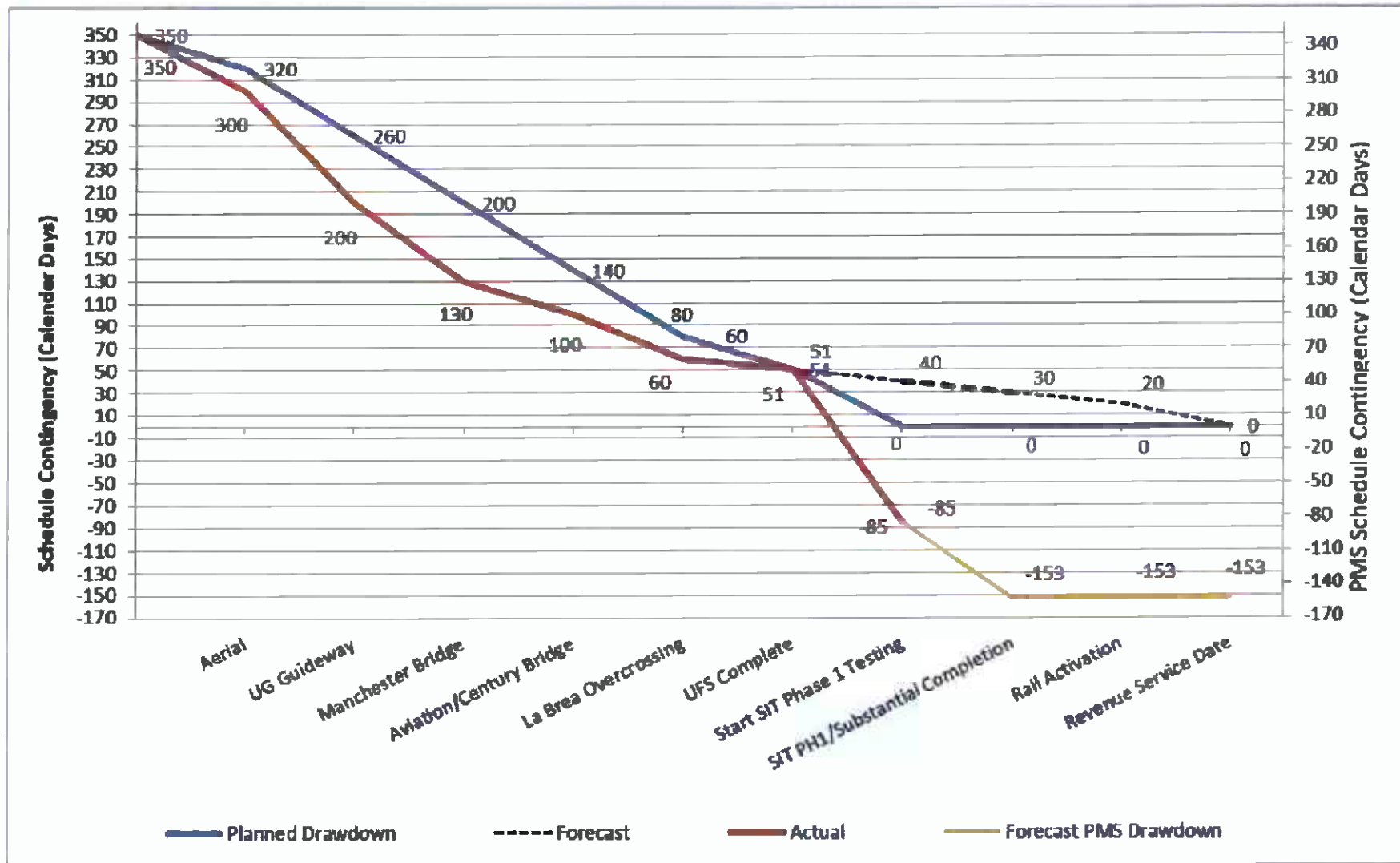


PROJECT COST CONTINGENCY (through 27-Sep-2019)					
UNITS IN DOLLARS					
	Original Contingency	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	173,500,000	(166,093,960)	4,967,935	(161,126,025)	12,373,975
Allocated Contingency	40,366,792	(40,366,792)	-	(40,366,792)	-
Total Contingency	213,866,792	(206,460,752)	4,967,935	(201,492,817)	12,373,976

Summary Schedule

Crenshaw/LAX Transit Corridor - Master Schedule September 2019		Crenshaw/LAX Level 1 Schedule						MASTER SCHEDULE SEPTEMBER 2019		
Activity Name	Finish	2020						2021		
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Crenshaw/LAX Transit Corridor - Master Schedule	21-Oct-20	▼ 21-Oct-20								
Milestones & Key Dates	14-Oct-20	▼ 14-Oct-20								
Program Elements	20-Jul-20	▼ 20-Jul-20								
865512 - Crenshaw/LAX	24-Aug-20	▼ 24-Aug-20								
C0990 - Advanced Utility Relocation	27-May-16 A									
C0992 - Concrete Ties and Assembly Items	16-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	24-Aug-20	▼ 24-Aug-20								
Sitework	21-Nov-19	▼ 21-Nov-19								
Stations	24-Feb-20	▼ 24-Feb-20								
Guideway & Track	02-Jan-20	▼ 02-Jan-20								
System-Wide Components	20-Feb-20	▼ 20-Feb-20								
Systems	13-Jan-20	▼ 13-Jan-20								
Testing	12-May-20	▼ 12-May-20								
Substantial Completion	12-May-20	▼ 12-May-20								
Start Up	24-Aug-20	▼ 24-Aug-20								
Pre - Revenue Operations	24-Oct-20	▼ 24-Oct-20								
Revenue Service	24-Oct-20	▼ 24-Oct-20								
Revenue Service Summer/Fall of 2020	24-Oct-20*	◆ Revenue Service Summer/Fall of 2020								
860003 - Southwestern Yard and Paint Body Shop	30-Jan-19 A									

Schedule Contingency Drawdown

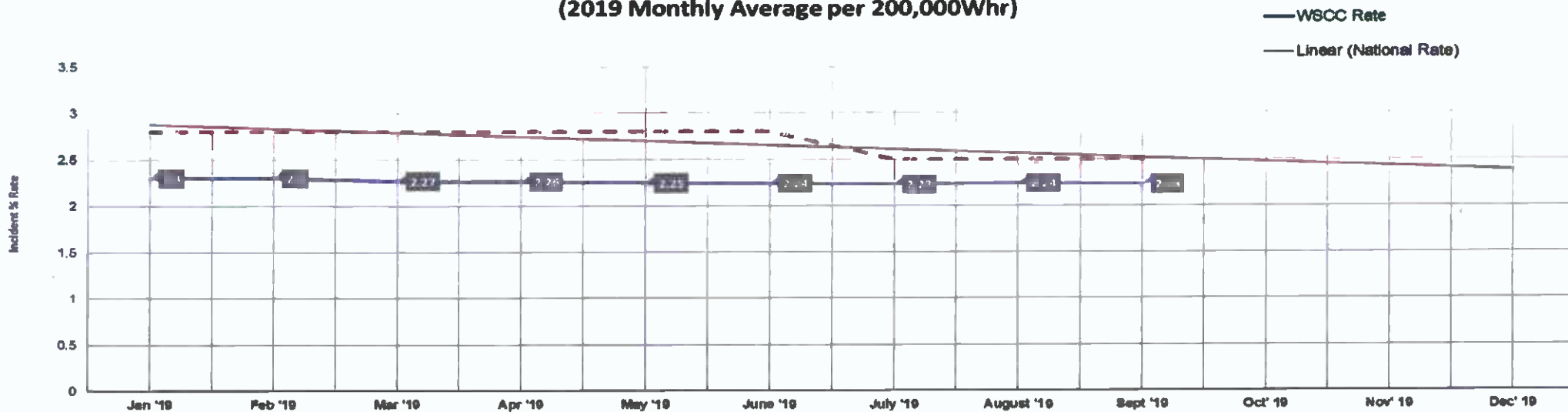


Top Risks & Mitigations

RISK ID	RISK DESCRIPTION	RISK SCORE	MITIGATION STRATEGIES
369	Continued delay of fire rated conduit/cable installation	20	<ol style="list-style-type: none"> 1. Establish priorities by location for emergency fans, lighting, Etc. 2. Expedite work related to fire rated cable including conduits, installation and testing
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"> 1. Prepare appropriate testing schedule and review with operations people. 2. Have pre-meetings with test firm presidents to emphasize importance of staffing. 3. Testing schedules to be prepared based on previous project startup experience. 4. DB submit test plan, Metro review for completeness. 5. Monitor completion of factory acceptance testing - FATs. 6. Monitor completion of LFATS 7. Expedite contractor/vendor turnaround of test results. 8. Keep test firms informed of critical schedule needs. 9. Final schedule for testing
359	Extended Overhead or productivity loss claims exposure not covered by cost impacts in individual risks.	18	<ol style="list-style-type: none"> 1. Verify the CM is keeping very good documentation 2. Respond to all contractor notice of delay to protect Metro interests and clarify negative implications in contractors letters. 3. Resolve time impacts at the same time as resolving the direct cost of changes. 4. Identify potential critical procurements.

Safety Status (Project Specific)

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



Contract C0988 WSCC

- Completed 161,220 work hours with one (1) recordable injury for the month of September 2019
- The Crenshaw/LAX Corridor Transit project-to-date work hours are 8,783,793 with ninety-eight (98) recordable incidents
- The project recordable rate is 2.23. 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 \$29,519,271 23.47%

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) \$299,840,669 26.31%

317 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

- WSCC issued three Non-Conformance Reports (NCR'S) during the month.
- Metro issued two Corrective Action Requests (CAR'S)
- Attended weekly Quality Team Meetings with WSCC Lead Quality personnel and City of Los Angeles Bureau of Contract Administration (ConAd).
- Participated in Readiness Review Meeting for Re-groutable Hose Grout Injection.
- Participated in Project Progress Meeting and Internal Project Review Meeting.
- No Inspections scheduled for Metro's Independent Testing Lab (ITL).

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.
- Conducted an EMS and Environmental Compliance Progress Meeting on 9/11/19 and 9/25/19,
- Metro observed 8 nighttime noise exceedances on three separate nights during this reporting period related to the UG3 closure.
- Fugitive dust is a larger focus for inspections due to the warmer months. No violations were reported or witnessed.

Public Outreach Program

- 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.
- Continued outreach for the UG3 (Hyde Park area) road restoration.

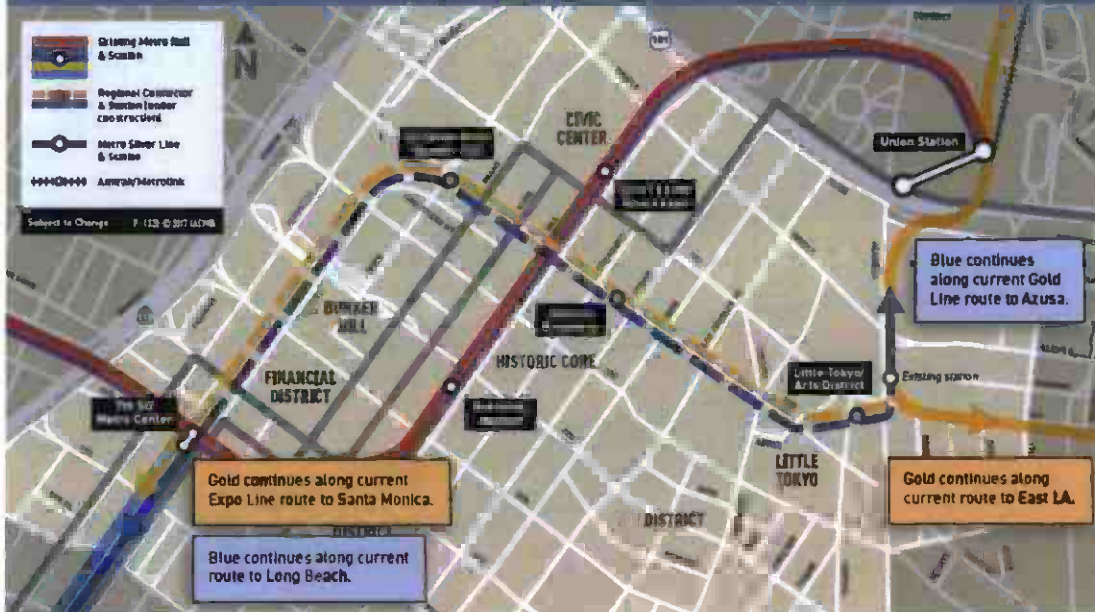
Regional Connector Transit Project

FTA Quarterly Review Meeting

December 4, 2019



Project Description



- FFGA Budget – \$1,402.93M
- FFGA Forecast – \$1,670.83M
- FFGA Proposed RSD – 02/2023
- Forecast RSD – Summer/Fall 2022

- FFGA Contingency (Proposed Budget) – 2.93%
- FFGA Contingency (To Go) – 5.22%

- 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 – 58.1%
- Final Design Progress – 99.9%
- Construction Progress – 55.7%

- 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

Key Project Updates

1. All major design packages have been approved
2. Street restoration at 1st/Alameda Wye to begin January 2020
3. Project schedule has slipped slightly; cost forecast remains within budget
4. Earned Value is lagging - Recognize that construction activity must ramp-up to recover and maintain schedule
5. Construction focus remains on station and guideway concrete construction
6. Project staff continues witnessing various testing of fabricated materials and equipment
7. Estimated Jobs Created to Date as of August 2019 is 12,828 with a Estimated Total Jobs of 20,225*.

Construction Update Tunnel

- Floating Track Slab production underway; site visits to Old Castle conducted weekly; and delivery and installation scheduled began the week of October 28th



Floating Slabs delivery at Grand Av Arts/Bunker Hill Station



Gluing of bearing pads to Floating Slabs 4

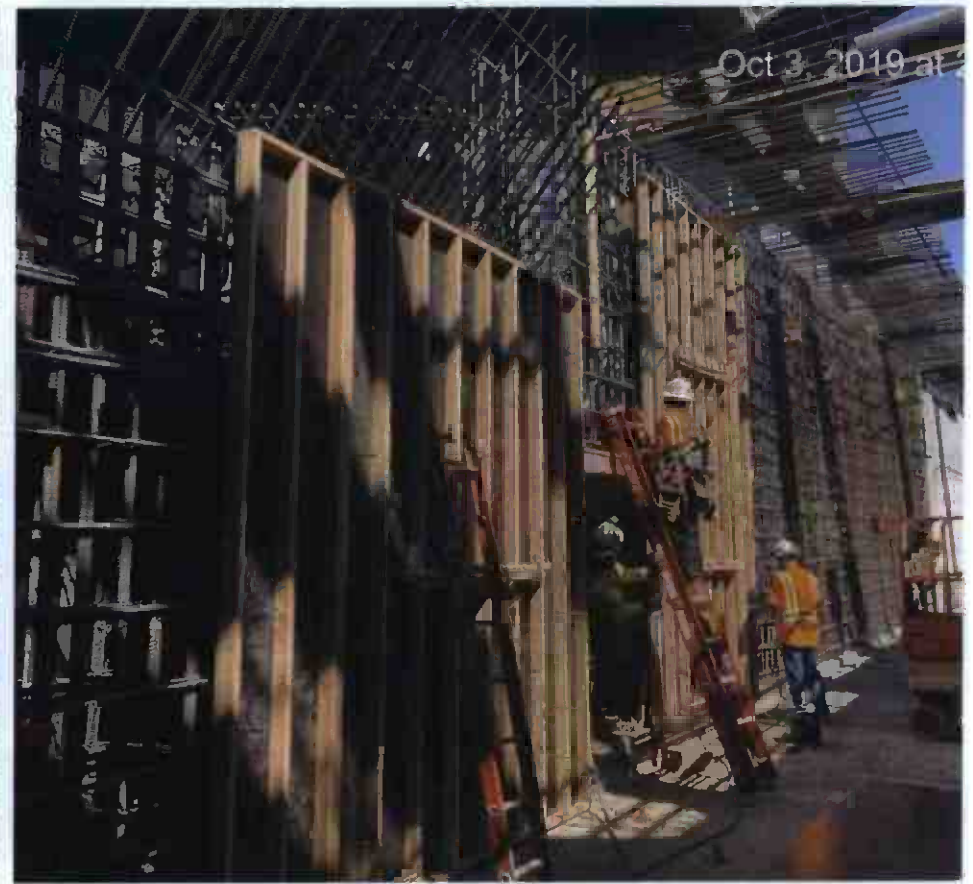
Construction Update

Little Tokyo/Arts District Station

- Structural concrete operations continue throughout the Wye, 1st Street Leg, Station, and portions of the Fan Plant; continue Pre-Bus Bridge preparation work



Bottom mat rebar installation for track roof slab



Interior wall forming at Fan Plant

Construction Update Historic Broadway Station



Interior wall progress overview



SEM Cavern overview from west

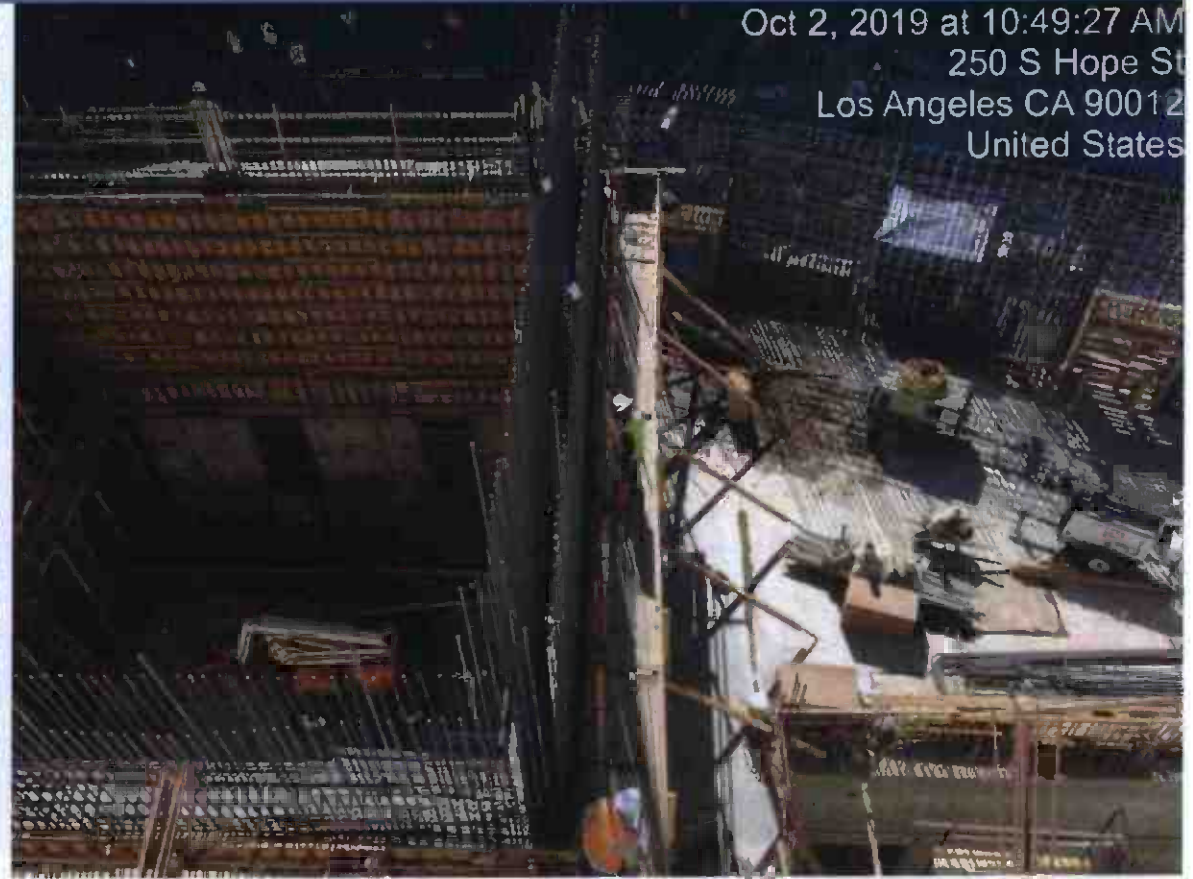
- Structural concrete continues with interior and exterior walls in entrance, concourse and SEM Cavern

Construction Update

Grand Av Arts/Bunker Hill Station



Setting wall forms at Concourse Level



Multiple deck and interior wall progress overview

- Structural concrete walls continue to be erected at multiple levels

Construction Update Flower Street



HDPE installation at south Flower St



Left Track Tunnel at Flower St

- Structural concrete for invert and walls continue at Flower St

Real Estate Status

a. Duco Yard TCE (RC-473)

- Right-of-entry was granted
- Construction mitigation work is 95% complete
- Pre-Bus Bridge work to begin January 2020

b. COLA SSE/TCE Fan Plant (RC-471A)

- Right-of-entry was granted
- FTA, MTA Board and LA City Council have approved acquisition

FFGA Project Cost Status Above the Line

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT (860228)
PERIOD ENDING SEP 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	244,931	246,064	182,148	266,385	21,454
20	STATIONS, STOPS, TERMINALS, INTERMODAL	354,268	220,966	221,070	72,669	221,619	653
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	0	0	0	0	0	0
40	SITWORK & SPECIAL CONDITIONS	141,785	578,180	567,286	465,957	602,304	24,123
50	SYSTEMS	69,667	72,674	67,593	18,289	80,362	7,687
	CONSTRUCTION SUBTOTAL (10-50)	846,343	1,116,752	1,102,014	739,063	1,170,669	53,918
60	ROW, LAND, EXISTING IMPROVEMENTS	115,889	90,629	52,615	52,527	59,315	-31,313
70	VEHICLES	16,275	16,275	16,275	6,912	16,275	0
80	PROFESSIONAL SERVICES	261,455	350,272	306,507	282,122	366,090	15,818
	SUBTOTAL (10-80)	1,239,963	1,573,927	1,477,411	1,080,624	1,612,349	38,422
90	UNALLOCATED CONTINGENCY	135,399	82,600	0	0	44,178	-38,422
100	FINANCE CHARGES	27,571	14,301	0	0	14,301	0
	TOTAL PROJECT (10-100)	1,402,932	1,670,828	1,477,411	1,080,624	1,670,828	0

NOTE: TOTAL INCURRED COST TO DATE \$1,093,823,760.

*PROPOSED FFGA BUDGET UPDATED ON AN ANNUAL BASIS; LAST UPDATED (MAY 2017). GRANT AMENDMENT TO REFLECT UPDATES PERMITTED ONLY AFTER FFGA AMENDMENT IS APPROVED.

**CURRENT PROJECT BUDGET LESS NON-FFGA ACTIVITIES.

Project Cost Status

FFGA – Non-FFGA

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT (860228)
 PERIOD ENDING SEP 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	244,931	246,064	182,148	266,385	21,454
20	STATIONS, STOPS, TERMINALS, INTERMODAL	354,268	220,966	221,070	72,869	221,619	853
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	0	0	0	0	0	0
40	SITework & SPECIAL CONDITIONS	141,785	578,180	567,296	465,957	602,304	24,123
50	SYSTEMS	66,667	72,674	67,593	18,289	80,362	7,667
	CONSTRUCTION SUBTOTAL (10-50)	843,343	1,116,752	1,102,014	739,063	1,170,669	53,916
60	ROW, LAND, EXISTING IMPROVEMENTS	115,889	90,629	52,615	52,527	58,315	-31,313
70	VEHICLES	16,275	16,275	16,275	6,912	16,275	0
80	PROFESSIONAL SERVICES	261,466	350,272	306,507	282,122	366,090	15,818
	SUBTOTAL (10-80)	1,239,953	1,573,827	1,477,411	1,080,624	1,612,349	38,422
90	UNALLOCATED CONTINGENCY	135,369	82,600	0	0	44,178	-38,422
100	FINANCE CHARGES	27,571	14,301	0	0	14,301	0
	TOTAL PROJECT (10-100)	1,402,932	1,670,828	1,477,411	1,080,624	1,670,828	0

NOTE: TOTAL INCURRED COST TO DATE \$1,093,823,760.

*PROPOSED FFGA BUDGET UPDATED ON AN ANNUAL BASIS; LAST UPDATED (MAY 2017). GRANT AMENDMENT TO REFLECT UPDATES PERMITTED ONLY AFTER FFGA AMENDMENT IS APPROVED.

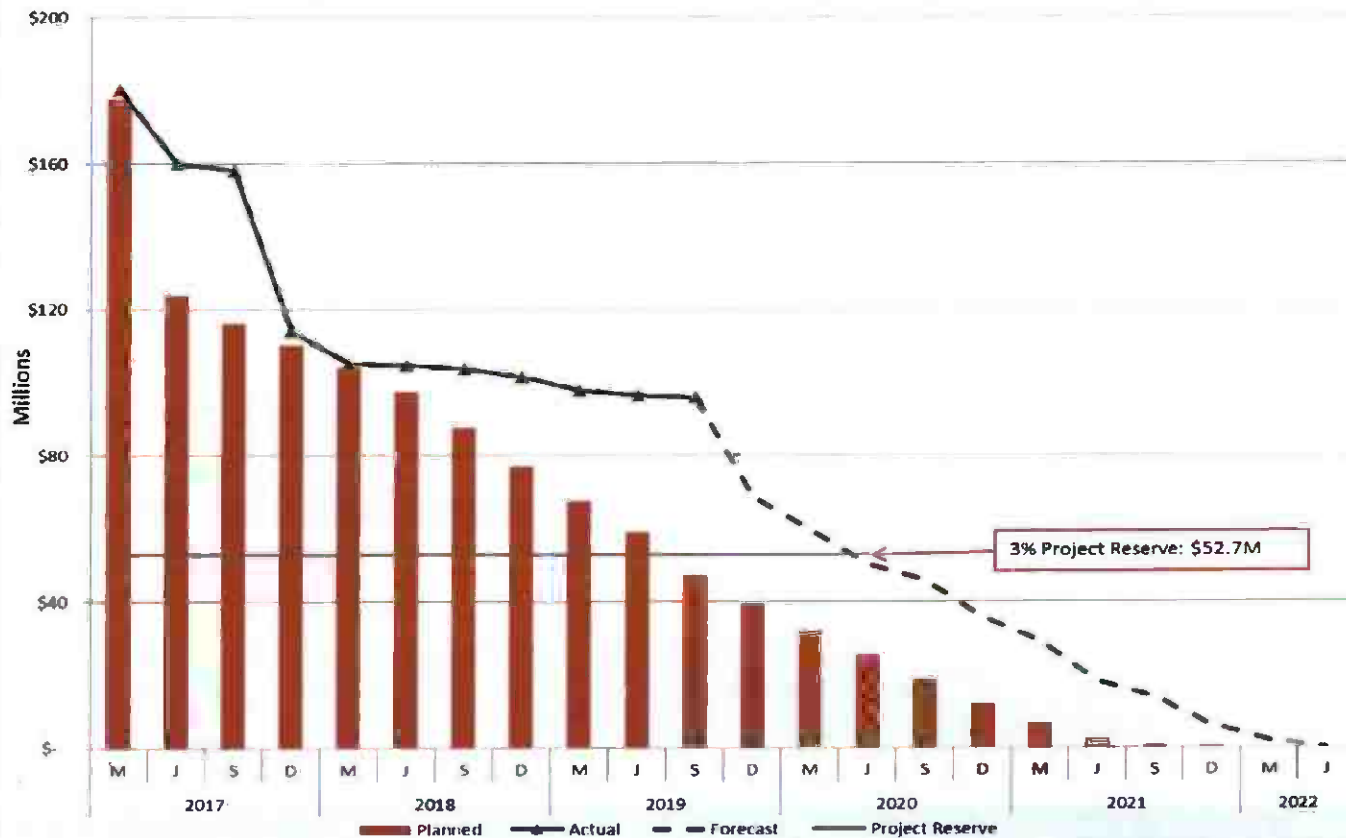
**CURRENT PROJECT BUDGET LESS NON-FFGA ACTIVITIES.

SCC CODE	DESCRIPTION	ORIGINAL NON FFGA BUDGET	PROPOSED NON FFGA BUDGET	COMMITMENTS	EXPENDITURES	PROPOSED NON FFGA FORECAST AT COMPLETION	VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS		4,350	5,137	1,276	2,204	-2,146
20	STATIONS, STOPS, TERMINALS, INTERMODAL		8,953	9,121	7,442	9,170	218
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS		0	0	0	0	0
40	SITework & SPECIAL CONDITIONS		26,237	12,508	5,680	26,648	8,412
50	SYSTEMS		750	129	19	900	190
	CONSTRUCTION SUBTOTAL (10-50)		34,289	26,895	14,418	40,923	6,634
60	ROW, LAND, EXISTING IMPROVEMENTS		2,113	0	0	0	-2,113
70	VEHICLES		0	0	0	0	0
80	PROFESSIONAL SERVICES		29,066	14,772	12,441	27,667	-1,398
	SUBTOTAL (10-80)		65,468	41,668	26,859	68,590	3,122
90	UNALLOCATED CONTINGENCY		7,346	0	0	4,224	-3,122
100	FINANCE CHARGES		0	0	0	0	0
	TOTAL NON-FFGA (10-100)		72,814	41,668	26,859	72,814	0
	ENVIRONMENTAL PLANNING		26,500	26,500	26,063	26,500	0
	TOTAL NON-FFGA (INCL. ENV./PLANNING)		99,314	68,167	51,922	99,314	0

NOTE: TOTAL INCURRED COST TO DATE \$52,185,270. METRO AND TRIBUNE AGREED ON REIMBURSEMENT OF \$1.6 MILLION RELATED TO 2ND/BROADWAY OVERBUILD.

TOTAL PROJECT	1,402,932	1,770,142	1,545,578	1,132,546	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	(44,023)	2,479	(41,544)	48,401	54%
Allocated Contingency	86,345	92,809	(42,762)	(2,523)	(45,286)	47,523	51%
Total Contingency	211,263	182,754	(86,785)	(45)	(86,830)	95,925	52%

Schedule Table

	Milestone Date	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20
Complete Flower Excavation	09/03/19 A	⬡					
Complete Duco Yard Racking System Foundations	09/20/19 A	⬡					
Complete Wye Cut & Cover Tunnel Walls	10/02/19		⬡				
Complete Concourse Level Walls at Grand Ave / Bunker Hill Station	10/04/19		⬡				
Complete Ancillary Lower Level Exterior Walls at Little Tokyo / Art District Station	10/09/19		⬡				
Complete SEM Exterior Walls Concrete	10/18/19		⬡				
Complete North Flower Cut & Cover Tunnel Walls	11/12/19			⬡			
Complete West Ancillary Deck at Little Tokyo / Art District Station	11/15/19			⬡			
Complete West Concourse Station Box Exterior Walls at Historic Broadway Station	12/06/19				⬡		
Complete Lower Ancillary Level Walls at Grand Ave / Bunker Hill Station	12/18/19				⬡		
Complete Concourse Entrance Exterior Walls at Historic Broadway Station	01/07/20					⬡	
Complete Upper Ancillary Deck at Little Tokyo / Art District Station	02/10/20						⬡



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

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

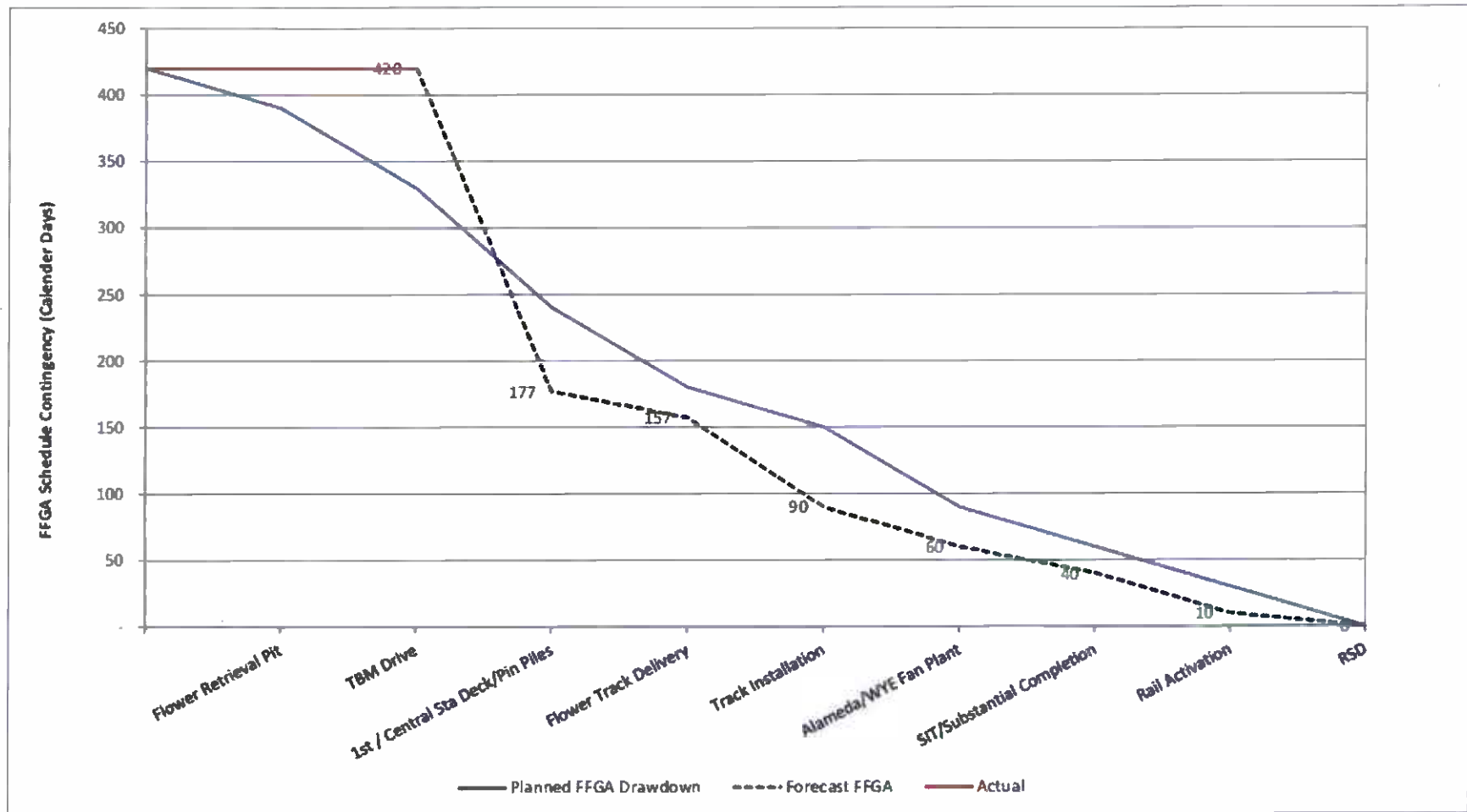
*A" following date is actual and completed
 * New

Summary Schedule

Regional Connector Master Schedule Current		Regional Connector Level 1 Schedule												MASTER SCHEDULE SEPTEMBER 2019										
Activity ID	Activity Name	Finish	2018				2019				2020				2021				2022				2023	
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
	Regional Connector Master Schedule Current (September 2019)	08-Sep-22																						
	Project Planning & Development	29-Jun-12 A																						
	FFGA / TIFIA Loan Approved	20-Feb-14 A																						
	Engineering	20-Jun-15 A																						
	Right of Way	30-Sep-19																						
	Metro Furnished Equipment	24-Feb-20																						
	Construction	06-May-22																						
	Utilities (Including 3rd Parties)	12-May-21																						
	Guideway & Track	27-Sep-21																						
	SEM	06-Feb-20																						
	Stations	14-Dec-21																						
	Systems	04-Jan-22																						
	Substantial Completion	01-Apr-22																						
	Testing	06-May-22																						
	Pre-Revenue Operations	Summer/Fall 2022																						
	RSD	Summer/Fall 2022																						

 Remaining Work  Milestone	1 of 1 Regional Connector Level 1 Summary Schedule Los Angeles County Metropolitan Transportation Authority	Data Date : 28-Sep-19 Current Date : 02-Oct-19
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Schedule Contingency Drawdown (Proposed FFGA RSD)

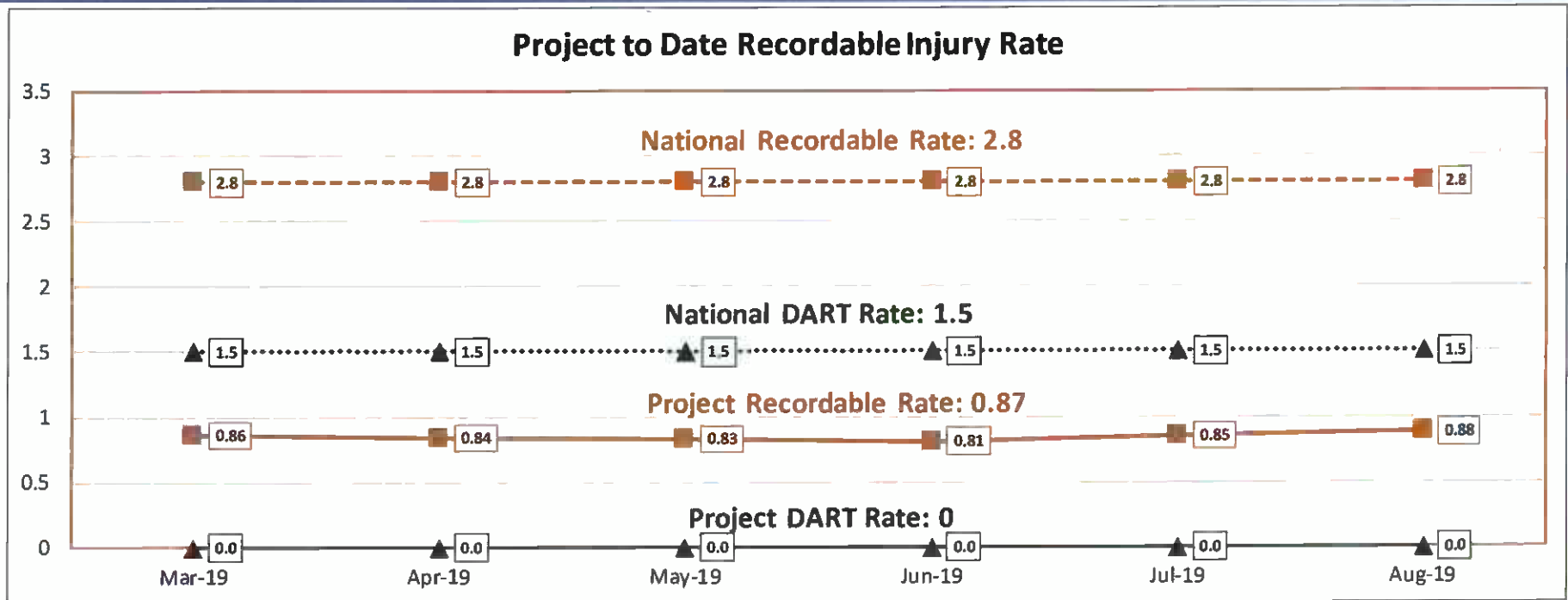


Top Risks & Mitigations

October 2019

Risk ID	Risk Description	Risk Score	Action Items
514	Fan Plant final modification negotiated above 12M. Costs shown are above the current forecast and adjustment	11	<ol style="list-style-type: none"> 1. Hold fact-finding meeting to review technical analysis
502	Temple Sewer Line total costs run higher due to offset constructability issues and depth.	10	<ol style="list-style-type: none"> 1. Review scope challenges for cost impacts; adjust estimate as required 2. Confirm scope elements (e.g. house connections)
304	Unknown obstructions may be encountered during station or cut/cover guideway excavation, or Support of Excavation installation; delays may ensue.	9	<ol style="list-style-type: none"> 1. Familiarize RE Team to potential issues at/on Alameda
311	Commonwealth Agreement may impact costs due to extended "construction phase"	8	<ol style="list-style-type: none"> 1. Ensure responsiveness to FSP commitments 2. Refine response to RSP obligations with already budgeted costs 3. Interface with Community Relations regarding Business Assistance 4. Community Relations interact with scheduling to obtain schedule updates on Flower St
500	Late redundancy requirements raise radio costs above forecast	8	<ol style="list-style-type: none"> 1. Define specific change conditions and estimate accordingly in anticipation of RFC

Project Safety Status



Includes C0981 & C0980 Contractors, Support Services Consultants and Metro Staff:

- There was one recordable incidents during the quarter.
- Total Project Recordable Injuries: 18
- Project to Date – Recordable Injury Rate: 0.88 (National Rate: 2.8)
- Project to Date – Total Days Away (DART) Injury Rate: ZERO (National Rate: 1.5)
- Total Project To Date Work Hours: 4,072,904

Disadvantaged Business Enterprises

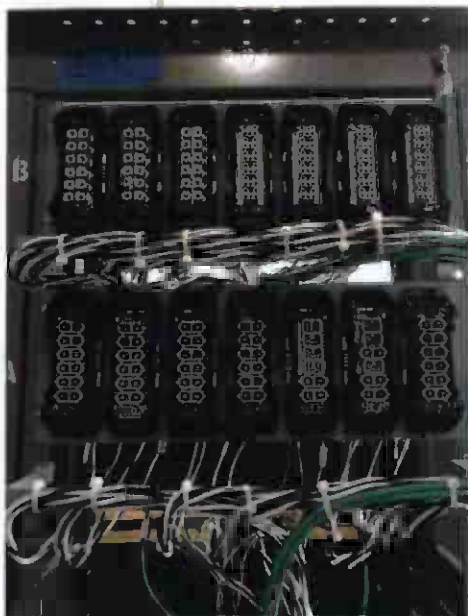
Contract C0980 Regional Connector Transit Corridor Design-Build (Reporting Data as of August 2019)

Design	<ul style="list-style-type: none"> • DBE Goal • Current DBE Commitment • Current DBE Attainment • Twelve (12) design DBE sub-consultants have been identified to date 	<p>22.63%</p> <p>\$14.5M (22.63%)</p> <p>24.32%</p>
Construction	<ul style="list-style-type: none"> • DBE Goal • Current DBE Commitment • Current DBE Attainment • Ninety-three (93) construction DBE sub-consultants have been identified to date 	<p>18%</p> <p>\$194.9M (18%)</p> <p>13.75%</p>

Quality Assurance & Quality Control

	Cumulative prior period	Recorded this period	Closed this period	Total Remaining
Audits	5	1	0	1
Surveillances	72	7	7	n/a
NCRs (Contractor)	67	11	8	19

(As of September 30, 2019)



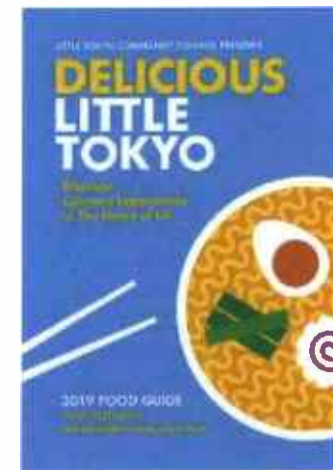
Environmental Mitigation Status

- Metro began preparation of the 27th Quarterly Mitigation Monitoring and Reporting Plan covering August 2019 to October 2019 and will submit the report to the FTA on November 14, 2019.
- On Friday September 13th, Metro notified FTA and SHPO of a new 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 Program

Metro Partners up with Little Tokyo to Promote Business in Advance of Street Closures

- Metro, in partnership with *Little Tokyo Community Council-Go Little Tokyo*, assisted in the production of *Delicious Little Tokyo*, a culinary guide to unique Little Tokyo eateries. The marketing tool will help promote business in advance of street restoration closures in Little Tokyo.



A Summer of Festivals in Little Tokyo

- Nearly 5,000 visitors took advantage of the “Little Tokyo Circulator” during summer festivals to enjoy vibrant culture and delicious food in Little Tokyo. The free-shuttle, part of Metro’s Environmental Justice mitigations, made access to parking facilities and the business district in Little Tokyo a lot easier.

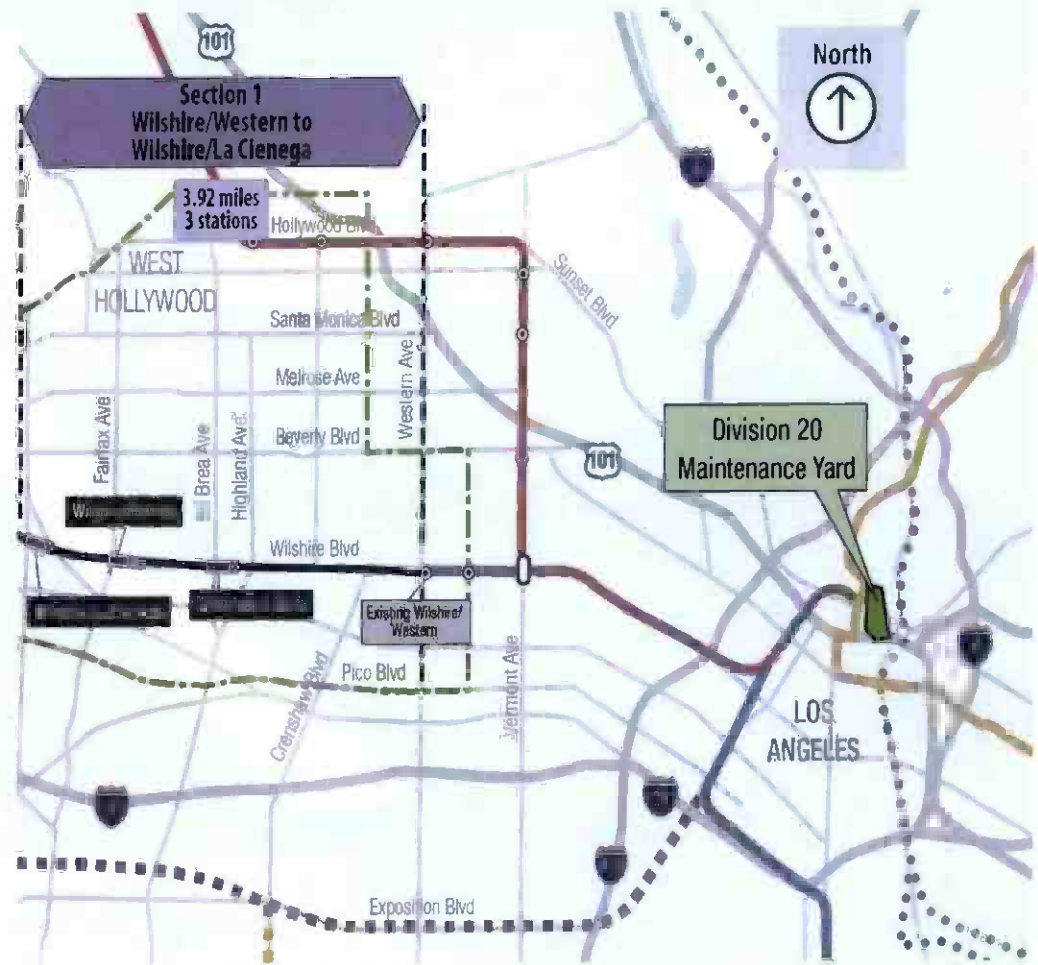


Westside Purple Line Extension Section 1 Project FTA Quarterly Review December 4, 2019



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: 53%
- 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 and W/W TBM Shaft under construction. Tunnel drive is on-going.



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:
 - September 2019: 205 estimated jobs
 - First Quarter of FY 2020: 433 estimated jobs
 - To Date: 16,985 estimated jobs

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

Current Activities:

- Reconfigure yard and shaft to accommodate mining Reach 1 cross passage construction.

Status:

- Receiving tunnel segments and support materials for Reach 2 tunneling.
- Cross passage work is schedule to being in November 2019.
- Continued maintenance of sump and dewatering pumps.



Lowering Tunnel Segments at Western Yard



Staging Tunnel Segments at Western Yard

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

Current Activities:

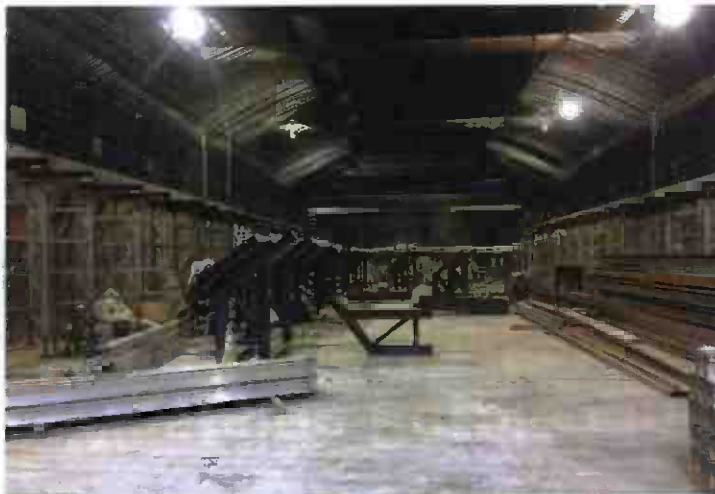
- TBM #1 Reach 2 Mining; TBM #2 Launch Preparation.
- Continued preparation for 2nd lift exterior wall construction.

Status:

- Continued installation of decking for second lift exterior walls.
- Preparation work for infill slab at east hammerhead (south) continues.
- Commenced assembly of arched roof deck shoring.
- Work on the concourse level high bay area is scheduled in December 2019.



Decking at High Bay Platform



Arched Roof Deck Shoring



HDPE Installation at East Bulkhead

Westside Purple Line Extension Section 1 Wilshire/Fairfax Station Update

Current Activities:

- First lift exterior wall concrete placement.

Status:

- On October 18, 2019, placement of first lift exterior wall concrete commenced.
- First lift exterior wall placement is scheduled to complete in December 2019.



Installing Architectural Finish Molds on Wall Forms



First Lift Wall Concrete Placement



Wall Rebar Installation

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

Current Activities:

- Preparation for invert rebar installation.

Status:

- French drain installation is complete. Installation of grounding, geotextile and gravel continues.
- Mud mat placement commenced on October 12, 2019. Invert rebar placement is scheduled to start in November 2019.
- Maintenance items per the COBH MOA is ongoing.



Dewatering System



Mud Mat Placement



La Cienega Station Facing East

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

Current Activities:

- TBM mining/commissioning.
- Cross passage construction preparation.

Status:

- Reach 2 launch (Purple TBM) commenced on October 7, 2019. Commissioning activities are underway on the Red TBM.
- Cross passage work is scheduled to start in November 2019.



Installing Steel Rings – Purple TBM



TBMs La Brea Station (Facing West)



Cross Passage Probe Hole Drilling

Westside Purple Line Extension Section 1 Real Estate Acquisition Status

REAL ESTATE

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	100	100	9
Part Takes	6	6	6	6	6	0	0	6
TCE	4	4	4	4	3	0	0	4
Total Parcels	19	19	19	19	18	109	109	19

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 SEPTEMBER 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	390,478	389,555	210,861	390,478	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	570,051	522,582	489,837	213,251	522,582	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	39,086	39,704	39,354	39,312	39,704	-
40	SITWORK & SPECIAL CONDITIONS	139,820	811,525	786,574	580,879	811,525	-
50	SYSTEMS	123,579	118,561	101,293	29,188	118,561	-
CONSTRUCTION SUBTOTAL (10-50)		1,437,616	1,882,850	1,806,613	1,073,492	1,882,850	-
60	ROW, LAND, EXISTING IMPROVEMENTS	212,475	190,036	190,036	172,949	190,036	-
70	VEHICLES	160,196	108,302	98,118	16,061	108,302	-
80	PROFESSIONAL SERVICES	410,342	507,409	430,726	347,873	507,409	-
SUBTOTAL (10-80)		2,220,629	2,688,597	2,525,492	1,610,374	2,688,597	-
90	UNALLOCATED CONTINGENCY	225,859	70,439	-	-	70,439	-
100	FINANCE CHARGES	375,470	331,065	-	-	331,065	-
TOTAL PROJECT (10-100)		2,821,957	3,090,101	2,525,492	1,610,374	3,090,101	-

NOTE: TOTAL INCURRED COST TO DATE \$1,626,252

* 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 SEPTEMBER 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	390,478	389,555	210,861	390,478	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	570,051	522,582	489,837	213,251	522,582	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	39,086	39,704	39,354	39,312	39,704	-
40	SITWORK & SPECIAL CONDITIONS	139,820	811,525	786,574	580,879	811,525	-
50	SYSTEMS	123,579	118,561	101,293	29,188	118,561	-
	CONSTRUCTION SUBTOTAL (10-50)	1,437,616	1,882,850	1,806,613	1,073,492	1,882,850	-
60	ROW, LAND, EXISTING IMPROVEMENTS	212,475	190,036	190,036	172,949	190,036	-
70	VEHICLES	160,196	108,302	98,118	16,061	108,302	-
80	PROFESSIONAL SERVICES	410,342	507,409	430,726	347,873	507,409	-
	SUBTOTAL (10-80)	2,220,629	2,688,597	2,525,492	1,610,374	2,688,597	-
90	UNALLOCATED CONTINGENCY	225,859	70,439	-	-	70,439	-
100	FINANCE CHARGES	375,470	331,065	-	-	331,065	-
	TOTAL FFGA PROJECT ACTIVITIES (10-100)	2,821,957	3,090,101	2,525,492	1,610,374	3,090,101	-

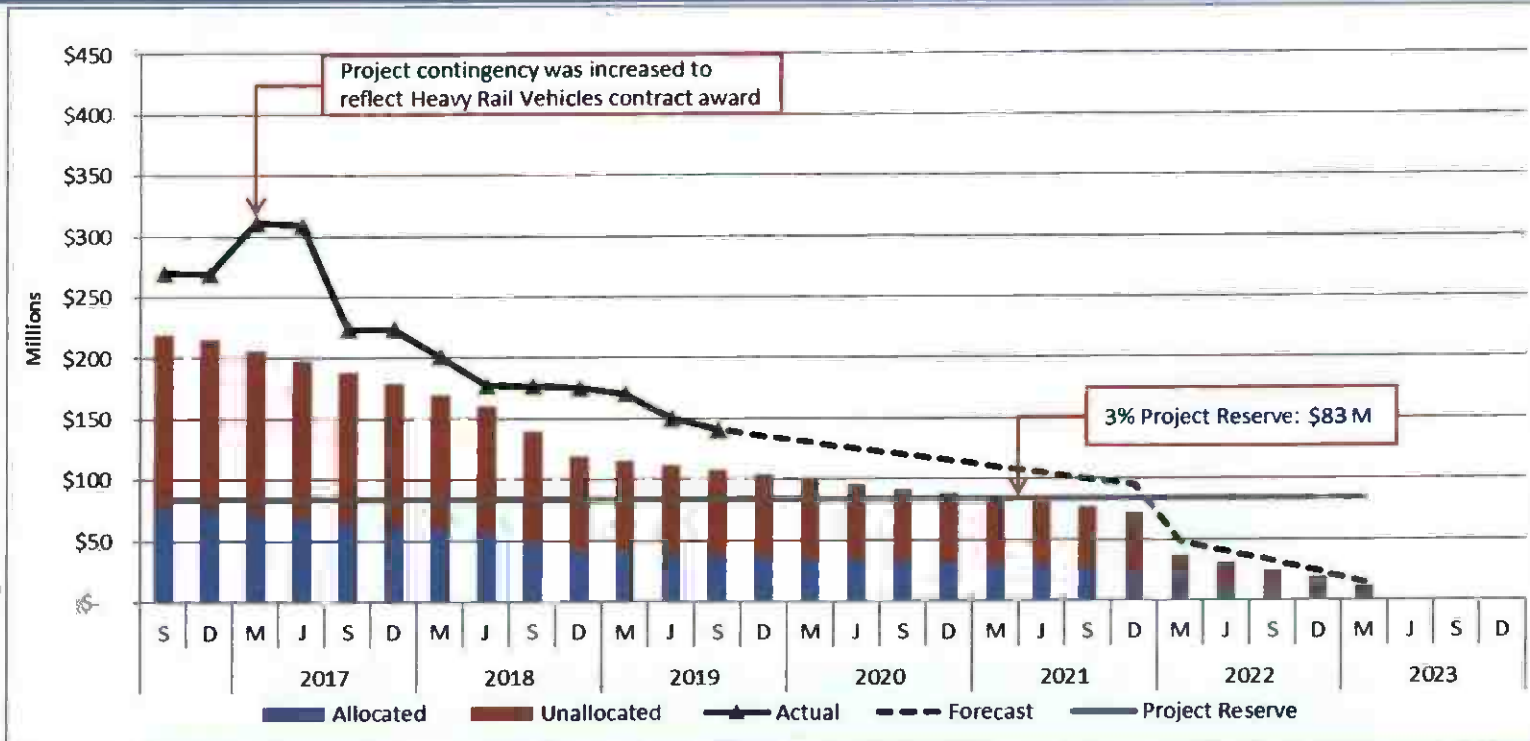
NOTE: TOTAL INCURRED COST TO DATE \$1,626,252

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	3,355	3,628	53
	SUBTOTAL (10-80)	14,305	19,305	21,494	19,093	23,864	4,559
90	UNALLOCATED CONTINGENCY	2,000	5,574	-	-	1,015	(4,559)
100	FINANCE CHARGES	-	-	-	-	-	-
	TOTAL CONCURRENT NON-FFGA PROJECT ACTIVITIES (10-100)	16,305	24,879	21,494	19,093	24,879	-
	ENVIRONMENTAL/PLANNING	39,370	39,370	39,370	39,357	39,370	-
	TOTAL NON-FFGA (INCL. ENV./PLANNING)	55,674	64,248	60,864	58,450	64,248	-

NOTE: TOTAL INCURRED COST TO DATE \$58,450

	TOTAL PROJECT	2,838,262	3,154,350	2,586,356	1,668,824	3,154,350	-
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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	234	(3,014)	(2,780)	69,183
Total Contingency	320,555	(176,904)	(3,014)	(179,918)	140,637

Westside Purple Line Extension Section Schedule Table

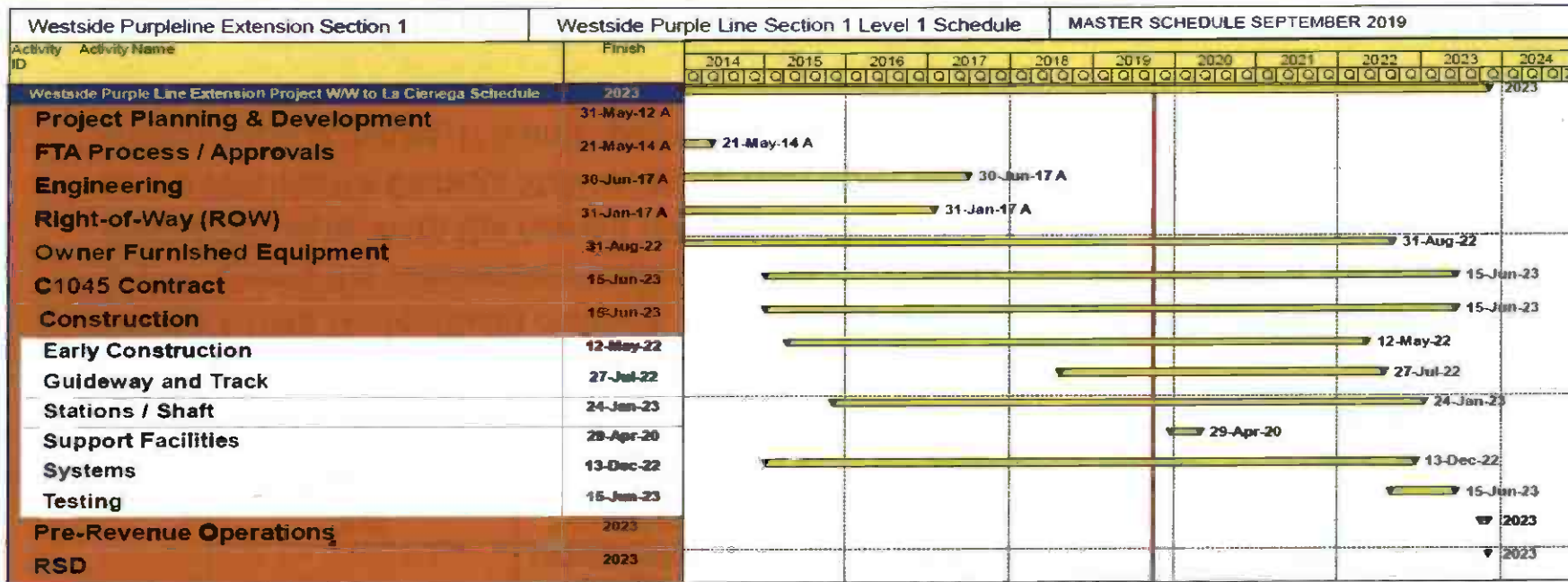
C1045 Design-Build Contract Schedule Metrics

	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	06/27/23	06/15/23	-12 days

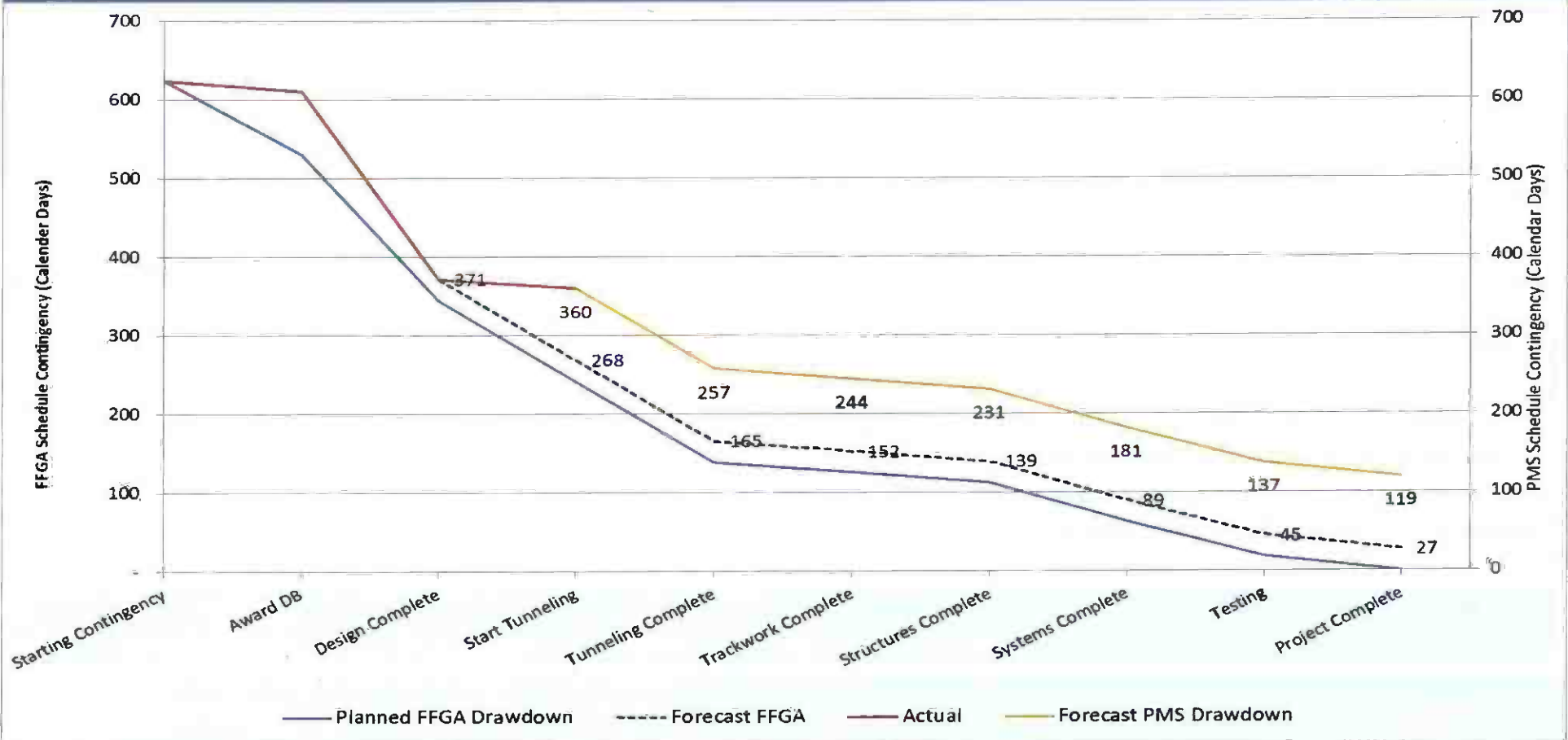
For the C1045 Design/Build contract, Metro has received the September 2019 schedule update, which reports the substantial completion date finishing 12 calendar days after the June 15, 2023 contractual date. With the current mitigation efforts that have been implemented for excavation at the Wilshire/La Cienega Station, along with other planned remedial actions for follow-on construction activities, it is anticipated that the contractual completion date will be achieved.

The critical path of the project remains Wilshire/La Cienega Station excavation and structural concrete activities, followed by traction power installation at Wilshire/La Cienega Station, testing and pre-revenue operations.

Westside Purple Line Extension Section 1 Summary Project Schedule



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

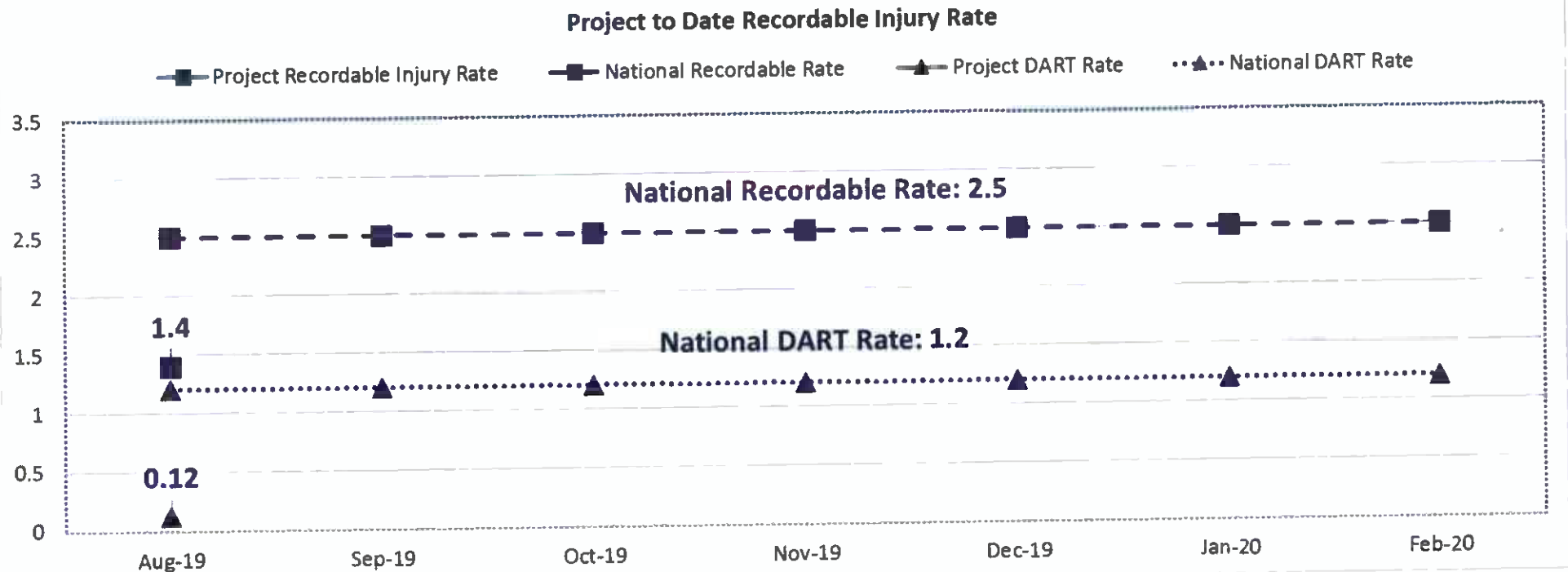
Risk ID	Risk Description	Risk Score	Action Items
633.0	Cost of ROW acquisition exceeds the FFGA SCC Line Item.	15	<ol style="list-style-type: none"> 1. Metro's Life of Project Budget includes contingency that covers the increase. The Risk Score will remain as "high" until the \$3.15 billion Life of Project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

*Based on October 2019 Risk Register

~ Risk #400 CLOSED (Potential requirement for alternative construction methods for cross passages in tar.)

~ Risk #586 CLOSED (Potential delay in completion of Div 20 may result in coordination/interface issues on Section 1 trackwork.)

Westside Purple Line Extension Section 1 Safety Status



- There was one recordable injury during the month of September 2019.
- Project to Date Recordable Injury Rate: 1.4 (Twenty-three Recordable Injuries) (each rate is per 200,000 work hours) (National Rate: 2.5)
- Project to Date Total Days Away (DART) Injury Rate: 0.12 (130 Days Away From Work Injuries) (National Rate: 1.2)
- Total Project to Date Work Hours (Contractor & the IPO Staff) (through 8/31/19): 3,868,744

Westside Purple Line Extension Section 1 Disadvantaged Business Enterprises

DISADVANTAGED BUSINESS ENTERPRISE (DBE)

(Reported Data as of August 2019)

DBE Goal – Design The percentage of funds apportioned to Design Contracts	20.25%
Current DBE Commitment Design Total DBE Committed Dollars divided by Total Contract Value for Design	\$13.6 M 20.25%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime:	\$12.5 M 20.16%

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

DBE Goal – Construction The percentage of funds apportioned to Construction Contracts	17.00%
Current DBE Commitment Construction Contract commitment divided by current contract value for Construction	\$113.4M 7.10%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime:	\$122.0M 14.24%

One hundred twenty-one (121) 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.
- Wilshire/Fairfax Station – engaged in oversight for the installation of HDPE Membrane and 1st lift exterior wall construction.
- Processed 32 surveillances, 19 Quality Action Requests and 22 Nonconformance Reports and 1 Corrective Action Request.

C1078 – Division 20 MOW and NRV Building Location 64

- Project is in final phase of completing punch list items.
- Closeout and completion of punch list items in progress.
- Submission of Contract required documents for closing is in progress including owner's manual, warranties and record drawings.
- Contractor in the process of submitting remaining project deliverables such as rebar mill certifications, concrete test data and daily inspection reports.
- Processed 2 surveillances, 11 Quality Action Requests (all closed), 17 Nonconformance Reports and one (1) Corrective Action Request.

Westside Purple Line Extension Section 1 Environmental Mitigation Status

ENVIRONMENTAL

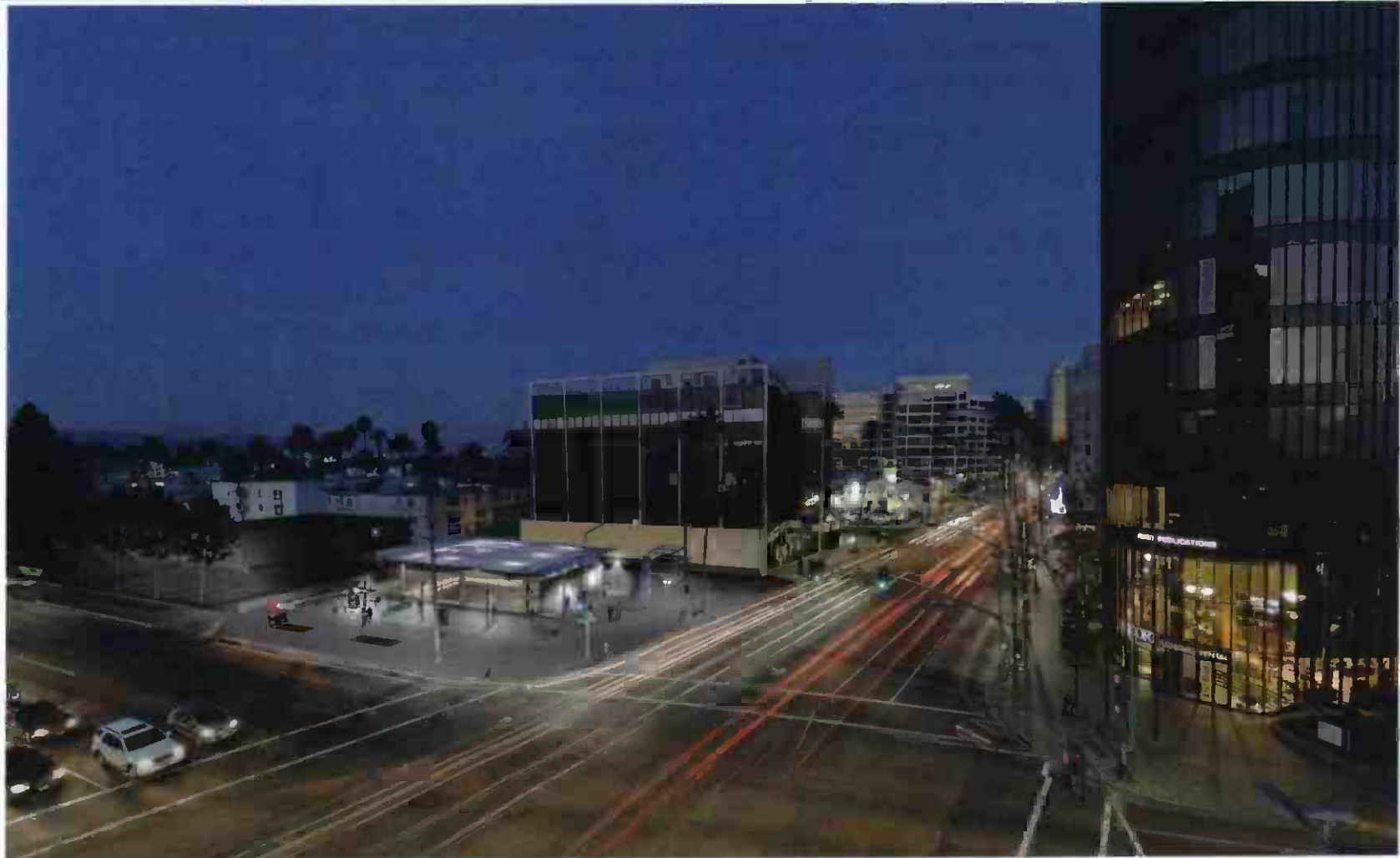
- Continuing to evaluate noise impacts during late night ventilation, excavation, invert pour and early morning export activities.
- Evaluated modifications to dewatering treatment system operations at Wilshire/La Brea Station and the sequence for installation of French Drains beneath the mud mat at Wilshire/La Cienega Station.
- Investigated root cause, responses and reporting to Water Board attributed to pipe breakage and illicit discharge at Wilshire/La Brea Station.
- Evaluated baseline groundwater elevation levels concerning potential impacts to private property.
- Evaluated CEQA/NEPA issues related to construction traffic mitigation.
- Conducted evaluation of mitigation enhancements at Wilshire/La Cienega and Wilshire/Western Yards.
- Reviewed air quality permitting requirements and evaluated noise level impacts related to vapor extraction equipment in Reach 2.
- Reviewed City of Beverly Hills proposed Noise and Dust Mitigation Program.

Westside Purple Line Extension Section 1 Public Outreach Program

CONSTRUCTION AND COMMUNITY RELATIONS

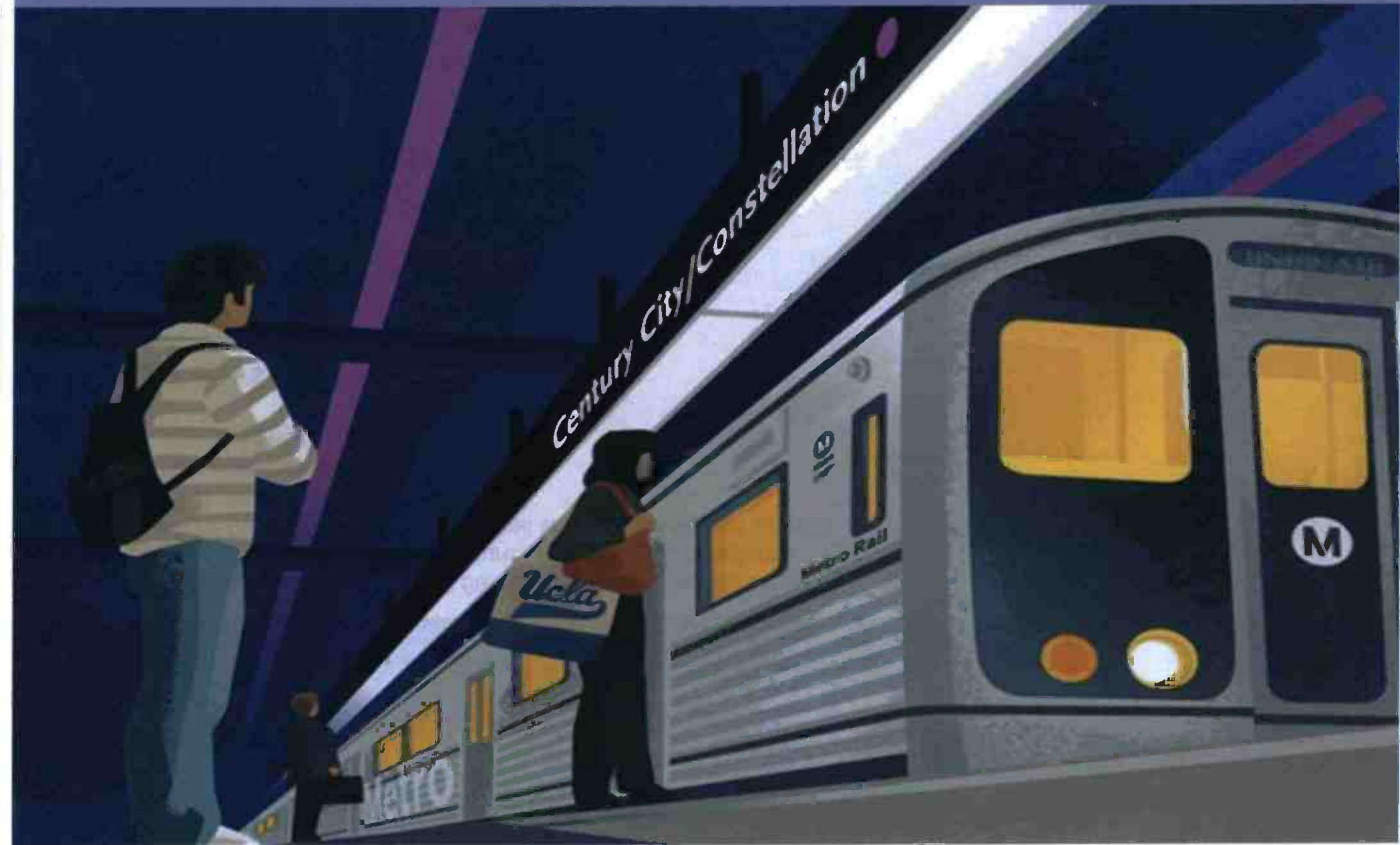
- Continued community outreach for the naming of Section 1 stations.
- Continued additional business mitigations including: alternative parking options, business signage, street signs and print ads at no cost to the businesses.
- Held meetings and made Project presentations at the following: Mid-City West Community Council, Wilshire Center Koreatown Neighborhood Council, Beverly Hills City Hall, Elected Officials Deputies, Construction Community Meetings and various stakeholders.
- Updated website, Facebook, Twitter as needed. Published monthly PLE (Purple Line Extension) newsletter to email list.
- Continued with the "Eat, Shop, Play Spotlight" campaign to advertise and promote businesses that participate in ESP Wilshire and Beverly Hills.
- Produced and distributed nine construction work notices for construction activities; weekly construction lookahead emails to construction stakeholders and monthly look ahead for the City of Beverly Hills.
- Distributed Construction Notices to businesses and residents adjoining McCarthy Vista, Wilshire Boulevard and Orange Grove Avenue.
- Conducted site tours of Section 1 Stations for stakeholders.

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 Review
December 4, 2019



Westside Purple Line Extension Section 2 Project 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: 96%
- Construction Progress: 24%
- Daily Project Transit Trips: 36,121
- Daily New Transit Trips: 5,350
- Current Contingency Forecast (SCC 10-80): 15%
- Current Contingency Forecast of Cost-to-Go (SCC 10-80): 24%
- Federal Funds: \$1.36 Billion
- Local Funds: \$1.14 Billion
- Status:
 - TBM Launch Box and Tunnel Access Shaft under construction.
 - Wilshire/Rodeo station box plie installation.



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:
 - 100% Track Noise and Vibration Report DU 5.1
 - 100% Special Tunnel Liner DU 4.1 (Pkg 3, Vol 1B)
 - IFC LADWP Water Design, Partial APDU 2.5
- The current job creation estimates as extrapolated from the Los Angeles Economic Development Corporation (LAEDC) analysis of job impacts is as follows:
 - To date: 7,487 estimated jobs
 - September 2019: 2,805 estimated jobs

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

- The closure of North Canon Drive, which included installation of a sound wall and traffic improvements, was completed in October 2019.
- Piling for the station box excavation is began on October 22, 2019.



North Canon Drive Street Closure

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

- TBM launch box excavation is complete. Construction of the base slab is ongoing.
- Tunnel access shaft excavation is at a depth of 61 feet (approximately 65% complete). Geophysical testing is underway within the partially excavated shaft to confirm there are no subsurface obstructions on the alignment near the shaft.
- 3,566 of 4,100 Tunnel Rings have been produced as of October 18, 2019.
- A request for an additional extension of the full closure of Constellation Blvd (in the vicinity of the TBM launch box) will be presented to the Board of Public Works before the existing closure expires in December 2019.
- Cable pulling and splicing for AT&T was completed in September 2019. Cable pulling and splicing for LADWP is anticipated to complete prior to the start of piling activities west of the TBM launch box.



TBM Launch Box Excavation



Tunnel Access Shaft Excavation

Westside Purple Line Extension Section 2 Project Real Estate 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	3	3	3	3	1	2	21	21	3
Part Takes	3	3	3	3	1	0	0	0	1
TCE	3	3	3	3	1	1	1	1	2
SSE	23	23	23	23	11	6	3	3	9
Permanent Easements	1	1	0	0	0	0	0	0	0
Total Parcels	33	33	32	32	14	9	25	25	15

- Settlement agreement reached for W-3603 for loss of goodwill (Gillis).
- TPOG gained site access to Parcel W-3901 located on the Southeast corner of Constellation Blvd & Century Park West (10250 Constellation Blvd) on September 27, 2019.

Westside Purple Line Extension Section 2 Project FFGA Cost Status

PERIOD ENDING: SEPTEMBER 2019

DOLLARS IN THOUSANDS

SCC CODE	DESCRIPTION	APPROVED FFGA BUDGET	CURRENT FFGA BUDGET ¹	COMMITMENTS	EXPENDITURES	CURRENT FFGA FORECAST	CURRENT BUDGET / CURRENT FORECAST VARIANCE
10	GUIDEWAY & TRACK ELEMENTS	385,323	321,703	307,360	73,131	321,703	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	517,378	454,245	412,143	32,357	454,245	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	-	-	-	-	-	-
40	SITWORK & SPECIAL CONDITIONS	406,955	564,989	550,162	320,965	564,989	-
50	SYSTEMS	96,734	83,025	68,661	7,775	83,025	-
	CONSTRUCTION SUBTOTAL (10-50)	1,406,389	1,423,962	1,338,326	434,228	1,423,962	-
60	ROW, LAND, EXISTING IMPROVEMENTS	312,422	419,396	274,846	211,995	419,396	-
70	VEHICLES	85,351	42,000	-	-	42,000	-
80	PROFESSIONAL SERVICES	383,941	386,642	255,525	192,315	386,642	-
	SUBTOTAL (10-80)	2,188,104	2,272,000	1,868,697	838,538	2,272,000	-
90	UNALLOCATED CONTINGENCY	222,441	138,545	-	-	138,545	-
100	FINANCE CHARGES	88,695	88,695	-	-	88,695	-
	TOTAL (10-100)	2,499,240	2,499,240	1,868,697	838,538	2,499,240	-

NOTE: TOTAL FFGA INCURRED COST TO DATE \$847,959

EXCLUDES CONCURRENT NON-FFGA PROJECT ACTIVITIES

¹ REFLECTS CURRENT LIFE OF PROJECT (LOP) BUDGET PLUS FINANCE CHARGES

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

PERIOD ENDING: SEPTEMBER 2019

DOLLARS IN THOUSANDS

SCC CODE	DESCRIPTION	ORIGINAL FFGA BUDGET	CURRENT FFGA BUDGET ¹	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	CURRENT BUDGET / CURRENT FORECAST VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	385,323	321,703	307,360	73,131	321,703	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	517,378	454,245	412,143	32,357	454,245	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-	-
40	SITWORK & SPECIAL CONDITIONS	406,955	564,989	550,162	320,965	564,989	-
50	SYSTEMS	96,734	83,025	68,661	7,775	83,025	-
	CONSTRUCTION SUBTOTAL (10-50)	1,406,389	1,423,962	1,338,326	434,228	1,423,962	-
60	ROW, LAND, EXISTING IMPROVEMENTS	312,422	419,396	274,846	211,995	419,396	-
70	VEHICLES	85,351	42,000	-	-	42,000	-
80	PROFESSIONAL SERVICES	383,941	386,642	255,525	192,315	386,642	-
	SUBTOTAL (10-80)	2,188,104	2,272,000	1,868,697	838,538	2,272,000	-
90	UNALLOCATED CONTINGENCY	222,441	138,545	-	-	138,545	-
100	FINANCE CHARGES	88,695	88,695	-	-	88,695	-
	TOTAL PROJECT (10-100)	2,499,240	2,499,240	1,868,697	838,538	2,499,240	-

NOTE: TOTAL FFGA INCURRED COST TO DATE \$847,959

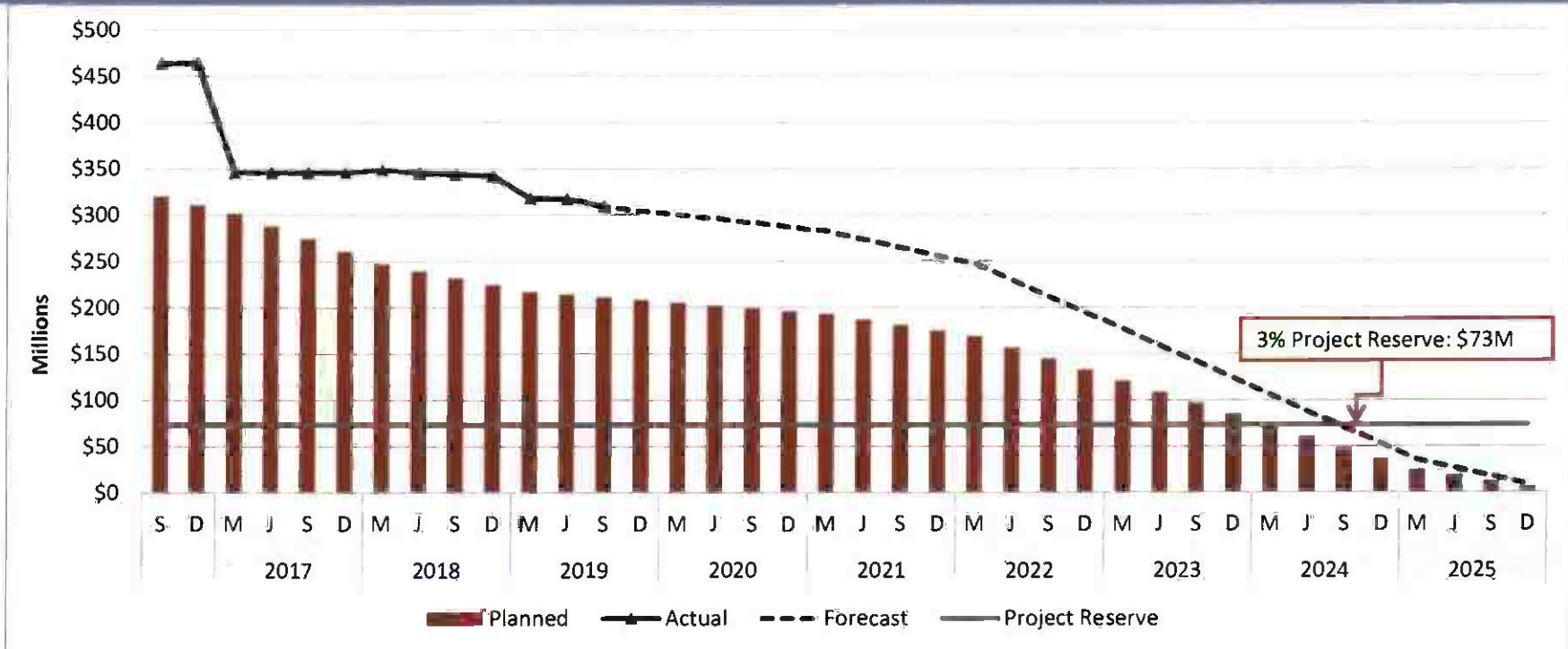
SCC CODE	DESCRIPTION	ORIGINAL NON FFGA BUDGET	CURRENT NON FFGA BUDGET	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	CURRENT NON FFGA BUDGET/ FORECAST VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	-	-	-	-	-	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	-	-	-	-	-	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-	-
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	6,993	10,678	3,678
70	VEHICLES	-	-	-	-	-	-
80	PROFESSIONAL SERVICES	1,400	1,400	675	173	1,400	-
	SUBTOTAL (10-80)	24,575	23,397	19,418	11,880	26,075	2,678
90	UNALLOCATED CONTINGENCY	1,500	2,678	-	-	-	(2,678)
100	FINANCE CHARGES	-	-	-	-	-	-
	TOTAL NON-FFGA (10-100)	26,075	26,075	19,418	11,880	26,075	-
	ENVIRONMENTAL/PLANNING	4,349	4,349	3,957	3,374	4,349	-
	TOTAL NON-FFGA (INCL. ENV./PLANNING)	30,424	30,424	23,375	15,254	30,424	-

NOTE: TOTAL NON-FFGA INCURRED COST TO DATE \$15,254

	TOTAL PROJECT	2,529,664	2,529,664	1,892,073	853,792	2,529,664	-
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NOTE: TOTAL INCURRED COST TO DATE \$863,213

Westside Purple Line Extension Section 2 Project Project Cost Contingency Drawdown



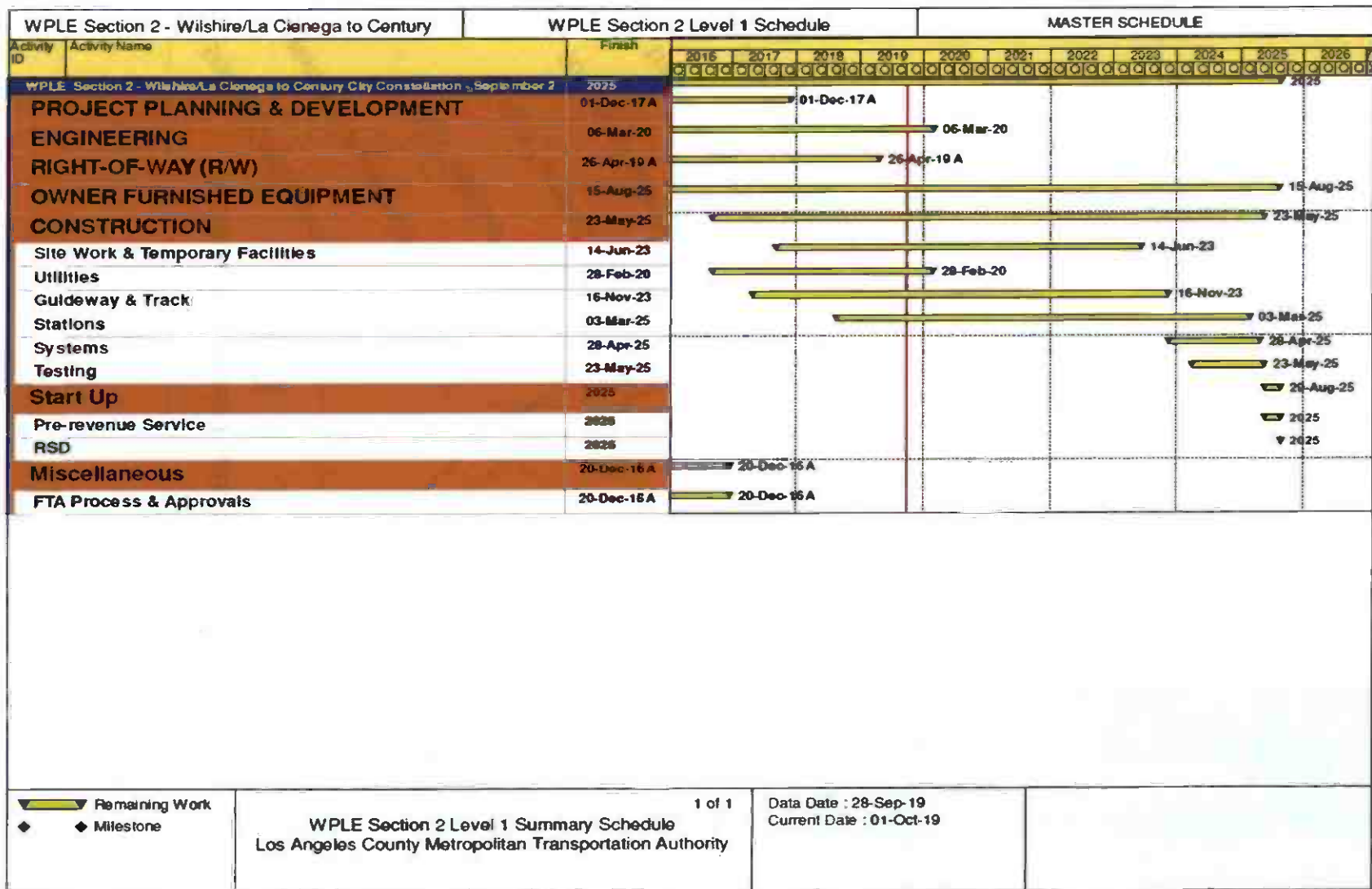
PROJECT COST CONTINGENCY					
DOLLARS IN THOUSANDS					
	Original Contingency (LOP Budget)	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	177,176	(35,953)	(2,678)	(38,632)	138,545
Allocated Contingency	168,534	5,725	(4,037)	1,688	170,221
Total Contingency	345,710	(30,228)	(6,716)	(36,944)	308,766

Westside Purple Line Extension Section 2 Project Schedule Table

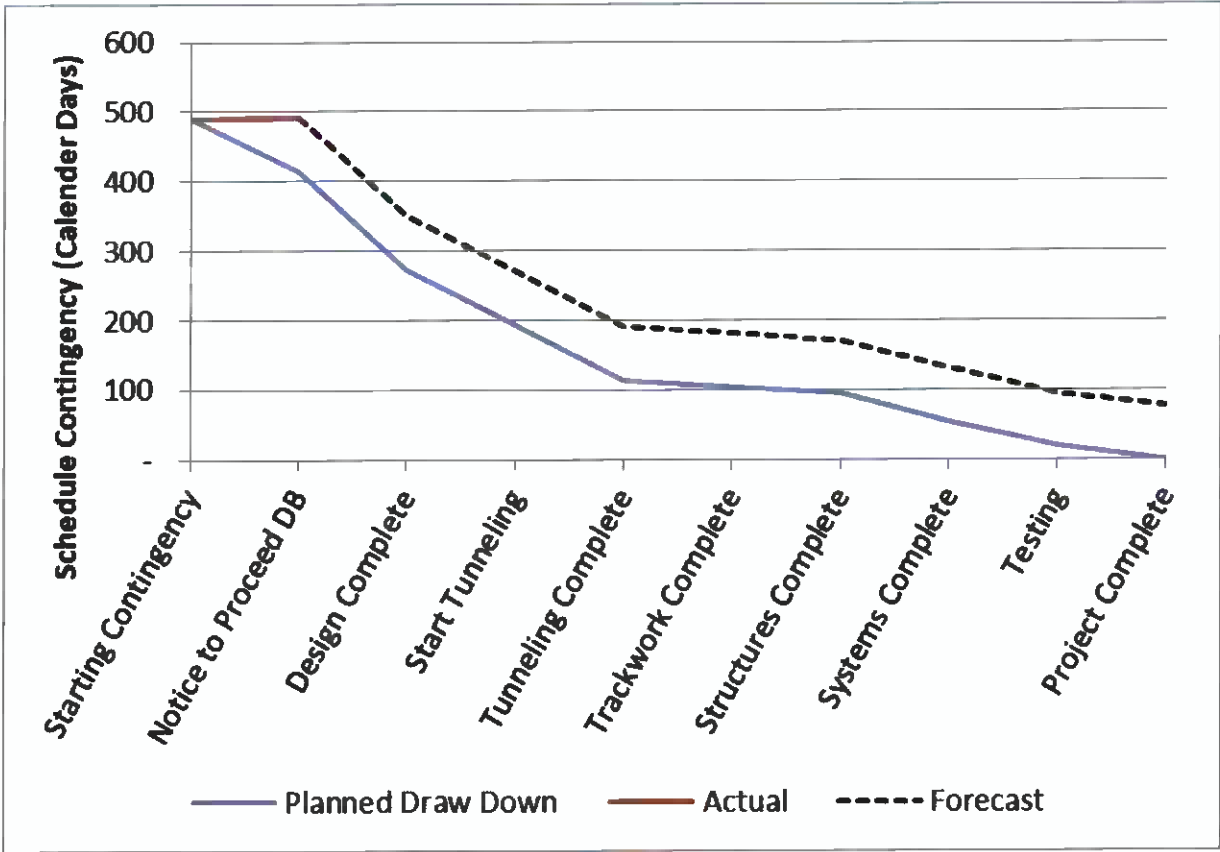
	Original Contract Dates	Time Extension	Current Contract	Forecast	Variance CDs
Notice to Proceed	04/26/17A	0	04/26/17A		0
Substantial Completion	05/23/25	0	05/23/25	05/23/25	0



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

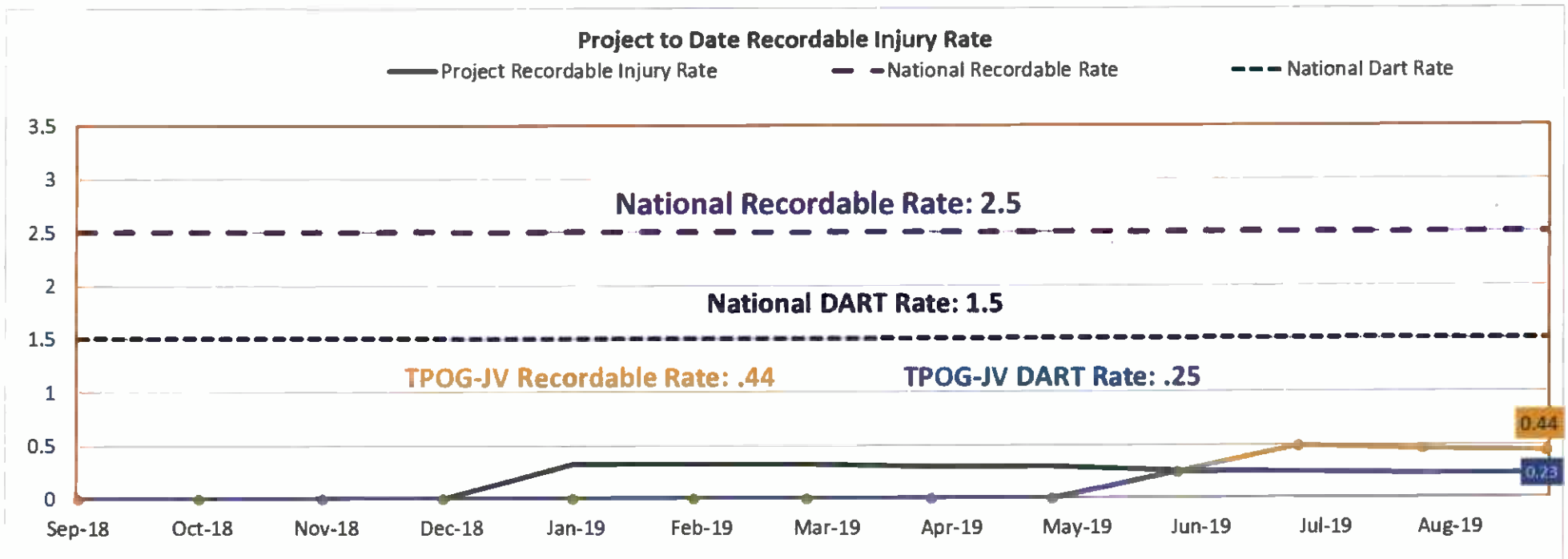
The project schedule contingency drawdown model provides a dual-axis perspective based upon the FFGA RSD of December 2026 and Metro’s Project Master Schedule (PMS) forecast of 2025.



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"> 1. Metro to complete property acquisition before the need date. 2. Building demolition to be part of DB contract. DB Contractor to start work as early as possible. 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.
PLE2-23	Utility relocations by third parties delay construction.	12.0	<ol style="list-style-type: none"> 1. Work with COLA and COBH and utility owners to expedite obtaining permits, and complete design and construction on schedule. 2. Metro is working more closely with DWP to monitor progress and mitigate any potential impacts to the Project schedule.
PLE2-6	Valuation of properties exceed budget.	12.0	<ol style="list-style-type: none"> 1. Current project schedule accounts for additional time required for condemnation.
PLE2-70	Public protest to the Project causes delays.	12.0	<ol style="list-style-type: none"> 1. Continue working collaboratively with the COLA and COBH to share information with stakeholders.
PLE-135	CMSS difficulty finding key resources (Mgmt. Personnel)	10.0	<ol style="list-style-type: none"> 1. Temporarily assign additional responsibilities to existing staff until new staff is identified.

Westside Purple Line Extension Section 2 Project Safety Status



- TPOG work hours completed in September 2019: 44,572
- TPOG to Date Work Hours through September 2019: 906,016
- There is one recordable injury through September 2019*

*January 2019: TPOG employee was walking on an uneven surface, slipped and strained his right knee. Classified as days away from work, TPOG is no longer capable of accommodating the employee's restricted work status.



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

As of September 2019:

DBE Goal – Design The percentage of funds apportioned to Design Contracts	25.31%
Current DBE Commitment Design Total DBE Committed Dollars divided by Total Contract Value for Design	\$16.9M 27.49%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$17.7M 32.89%

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

DBE Goal – Construction The percentage of funds apportioned to Construction Contracts	17.00%
Current DBE Commitment Construction Contract commitment divided by current contract value for Construction	\$126.6M 9.70%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime:	\$36.2M 9.39%

Twenty-five (28) 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 with TPOG and reviewed Daily Inspection Reports by TPOG and Metro inspectors for the scheduled activities for completeness and correctness at various job locations as well as Twining Independent test laboratory Inspection Reports.
- Chaired weekly quality meetings with TPOG Quality Manager for the corrective actions for Non-Conformance Reports (NCRs) issued by TPOG and Metro to have been implemented in compliance with approved documentation; Material Test Reports (MTRs) for the piles installed at tunnel shaft will be collected and transmitted for Metro's records; new welder qualification is in compliance with applicable codes; strut loads at tunnel shaft are monitored; MTRs for rebar used to manufacture standard segments for tunnel lining for 1st and 2nd Quarters of 2019 are collected and transmitted for Metro's records; planning of documentation to be prepared and submitted for Metro's review for the manufacturing of special segments for tunnel lining including two sets of demonstration rings.
- Reviewed the following with a disposition for record only:
 - Product data Cold-Applied Tape Wrap Project wide.
- Reviewed the following with a disposition of approved or approved as noted:
 - Methane Venting Shop Drawings at the TBM launch box in Century City.



Westside Purple Line Extension Section 2 Project Environmental Status

- Completed abatement activities for 1950 Century Park East (Former AAA Building).
- 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 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

- Produced and distributed six (6) construction work notices including work for advanced utility relocations, piling installation, utility work, installation of traffic signal, sidewalk and lane closures and N. Canon Dr. closure in Beverly Hills.
- Attending the following meetings: Construction Management, Advanced Utility Relocations, Construction Relations, Third Party Coordination, LADOT, Holiday Moratorium, Wilshire/Rodeo Station Construction Coordination, Beverly Hills Chamber, BHHS Construction Coordination meetings, Building and Property Manager Meetings in Beverly Hills and Century City.
- Conducted Project presentations at the Beverly Hills Monthly Community Meeting, City of Beverly Hills Monthly Webinar, Monthly Wilshire/Rodeo business stakeholder meeting and one-on-one business owner meetings. Conducted follow up meetings with Beverly Hills stakeholders regarding Holiday Moratorium request.
- 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 Review December 4, 2019



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: 25%
- Construction Progress: 5.25%
- Daily Project Transit Trips: 42,903
- Daily New Transit Trips: 9,386
- Status:
 - SCE ductbank construction



Westside Purple Line Extension Section 3

Key Project Issues

- C1151 Tunnels Contract
 - Memorandum of Agreement (MOA) and associated Historic Resources Monitoring and Discovery Plan (HRMDP) reviews completed; documents circulating for execution.
 - Real Estate negotiations for access to VA property are ongoing, and draft Access Easement Agreement (AEA) as well as draft Right of Entry (ROE) are under review.
- C1152 Stations, Trackwork, Systems and Testing Contract
 - Station easement acquisitions continue.
- The current job creation as extrapolated from the Los Angeles Economic Development Corporation (LAEDC) analysis of job impacts is the following:
 - September 2019: 670 estimated jobs
 - First Quarter of FY 2020: 1,229 estimated jobs
 - To Date: 3,308 estimated jobs

Westside Purple Line Extension Section 3 Design/Construction Update

- C1151 Tunnels
 - Final design is ongoing
 - Geotechnical drilling, potholing, and pre-construction surveys continue.
 - SCE ductbank construction within LA County jurisdiction ongoing.
- C1152 Stations, Trackwork, Systems, and Testing
 - Final design is ongoing.
 - Work plan preparation for geotechnical and potholing operations is ongoing.
- C1153 Advanced Utility Relocations
 - Contract closeout in progress.
 - City of LA Bureau of Contract Administration has approved all punch list items.
- Other third party utility relocations
 - Joint trench activities for combining Verizon and Frontier telecommunications are ongoing.
 - Southern California Gas as well as Sempra Energy line relocations at Westwood/UCLA Station are ongoing.



Lateral A8 Excavation and Potholing on Wilshire Blvd.



Telecom Main Line A and Lateral A6 Installation

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	0	0	0	0	0	0	0
TCE	5	3	0	0	0	0	0	0	0
SSE	75	75	1	1	0	0	0	0	0
Permanent Easements	1	1	1	1	0	0	0	0	0
Total Parcels	83	81	2	2	0	0	0	0	0

Real Estate certifications are progressing, appraisers have been selected and appraisals are under review.

Westside Purple Line Extension Section 3 Project Cost Status

PERIOD ENDING SEPTEMBER 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	34,957	490,712	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	624,995	624,995	591,735	262	624,995	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-	-
40	SITWORK & SPECIAL CONDITIONS	491,805	491,805	645,704	155,471	491,805	-
50	SYSTEMS	130,778	130,778	57,041	-	130,778	-
	CONSTRUCTION SUBTOTAL (10-50)	1,738,291	1,738,291	1,701,871	190,691	1,738,291	-
60	ROW, LAND, EXISTING IMPROVEMENTS	466,874	466,874	127,772	2,065	466,874	-
70	VEHICLES	38,092	38,092	-	-	38,092	-
80	PROFESSIONAL SERVICES	504,493	504,493	203,203	86,109	504,493	-
	SUBTOTAL (10-80)	2,747,750	2,747,750	2,032,845	278,864	2,747,750	-
90	UNALLOCATED CONTINGENCY	464,142	464,142	-	-	464,142	-
100	FINANCE CHARGES	387,375	387,375	-	-	387,375	-
	TOTAL FFGA PROJECT ACTIVITIES (10-100)	3,599,267	3,599,267	2,032,845	278,864	3,599,267	-

NOTE: TOTAL INCURRED FFGA COST TO DATE \$322,433,538

¹ Reflects current Life of Project (LOP) budget plus finance charges.

² LOP does not include \$11.7 million Concurrent Non-FFGA activities.

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

PERIOD ENDING SEPTEMBER 2018
DOLLARS IN THOUSANDS

SCC CODE	DESCRIPTION	LIFE OF PROJECT BUDGET ¹	PROPOSED FFGA BUDGET ¹	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	PROPOSED FFGA BUDGET/ FORECAST VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	490,712	490,712	407,391	34,957	490,712	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	624,995	624,995	501,735	262	624,995	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-	-
40	SITENETWORK & SPECIAL CONDITIONS	491,805	491,805	645,704	155,471	491,805	-
50	SYSTEMS	130,778	130,778	57,041	-	130,778	-
	CONSTRUCTION SUBTOTAL (10-50)	1,738,291	1,738,291	1,701,871	190,681	1,738,291	-
60	ROW, LAND, EXISTING IMPROVEMENTS	466,874	466,874	127,712	2,065	466,874	-
70	VEHICLES	38,092	38,092	-	-	38,092	-
80	PROFESSIONAL SERVICES	504,493	504,493	203,203	86,109	504,493	-
	SUBTOTAL (10-80)	2,147,750	2,147,750	2,032,845	278,864	2,147,750	-
90	UNALLOCATED CONTINGENCY	464,142	464,142	-	-	464,142	-
100	FINANCE CHARGES	387,375	387,375	-	-	387,375	-
	TOTAL FFGA PROJECT ACTIVITIES (10-100)	3,599,267	3,599,267	2,032,845	278,864	3,599,267	-

NOTE: TOTAL INCURRED FFGA COST TO DATE \$322,433,538

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	-	-	-	-	-	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	-	-	-	-	-	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-	-
10	GUIDEWAYS & TRACK ELEMENTS	-	-	-	-	-	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	-	-	-	-	-	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-	-
40	SITENETWORK & SPECIAL CONDITIONS	6,000	6,000	3,520	8	6,000	-
50	SYSTEMS	-	-	-	-	-	-
	CONSTRUCTION SUBTOTAL (10-50)	6,000	6,000	3,520	8	6,000	-
60	ROW, LAND, EXISTING IMPROVEMENTS	1,000	1,000	-	-	1,000	-
70	VEHICLES	-	-	-	-	-	-
80	PROFESSIONAL SERVICES	3,600	3,600	13	11	3,600	-
	SUBTOTAL (10-80)	4,600	4,600	13	11	4,600	-
90	UNALLOCATED CONTINGENCY	-	-	-	-	-	-
100	FINANCE CHARGES	-	-	-	-	-	-
	TOTAL NON-FFGA (10-100)	10,600	10,600	3,533	19	10,600	-
	ENVIRONMENTAL/PLANNING	1,131	1,131	897	863	1,131	-
	TOTAL NON-FFGA (INCL. ENV./PLANNING)	11,731	11,731	4,430	881	11,731	-

NOTE: TOTAL NON-FFGA INCURRED COST TO DATE \$881,300

TOTAL PROJECT	3,610,998	3,610,998	2,037,275	279,745	3,610,998
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NOTE: TOTAL INCURRED COST TO DATE \$323,314,838

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	6/05/26	0	6/05/26	6/05/26	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

WPLE Section 3 Century City Constallation to VA Hospital - September 2019		WPLE Section 3 Level 1 Schedule				MASTER SCHEDULE						
Activity ID	Activity Name	Finish	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
WPLE Section 3 Century City Constallation to VA Hospital - September 2019			2027									
PROJECT PLANNING & DEVELOPMENT			▼ 21-Dec-18 A									
ENGINEERING			▶ 30-Sep-20									
RIGHT-OF-WAY (ROW)			▶ 24-Feb-23									
OWNER FURNISHED EQUIPMENT			▶ 16-May-24									
CONSTRUCTION			▶ 05-Jun-26									
Utilities			▶ 27-Jul-20									
Guideway & Track			▶ 28-Mar-25									
Stations			▶ 12-Nov-25									
Systems			▶ 15-Oct-25									
Testing			▶ 05-Jun-26									
Start Up			2027									
Dynamic Testing and System Integration Tests			2026									
Test Running & Trial Operations			2027									
Revenue Service Date - RSD			2027									
Miscellaneous			▶ 20-Dec-19									
FTA Process & Approvals			▶ 20-Dec-19									

<ul style="list-style-type: none"> ▶ Remaining Work ▼ Milestone ▶ Summary 	<p align="center">WPLE Section 3 Level 1 Summary Schedule Los Angeles County Metropolitan Transportation Authority</p>	<p align="center">Page 1 of 1</p>	<p>Data Date: 01-Oct-19 Current Date: 07-Oct-19</p>
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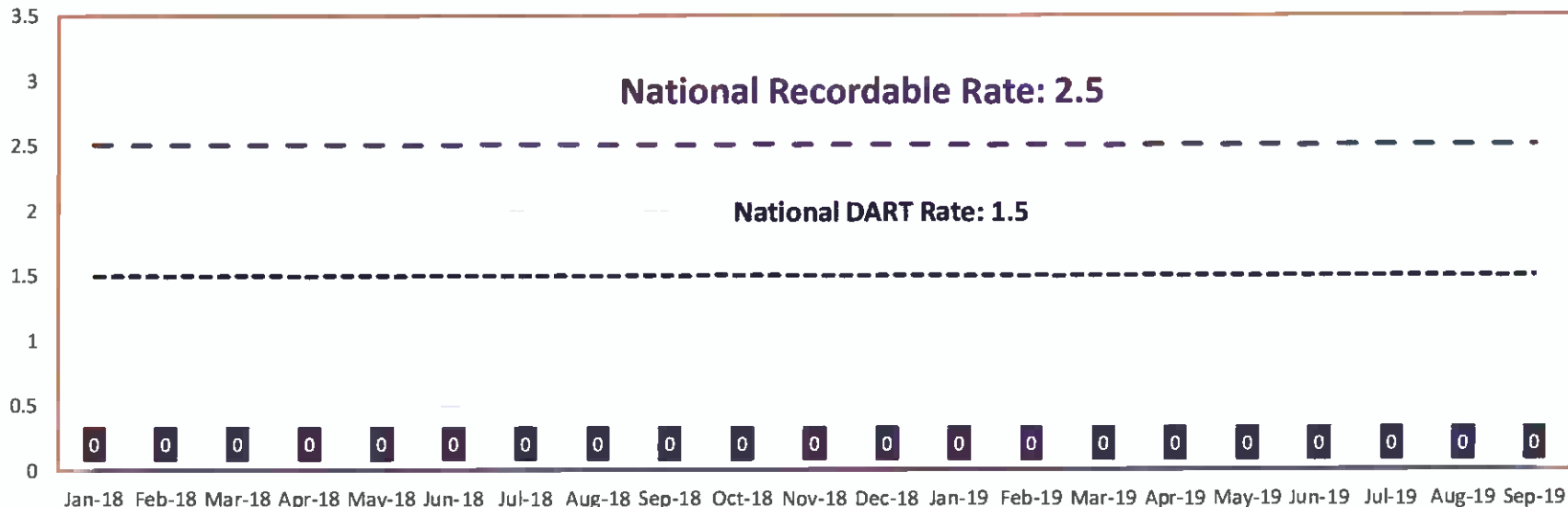
Westside Purple Line Extension Section 3 Top Risks & Mitigations

Risk ID	Risk Description	Risk Score	Action Items
701.3	Tariffs potentially impact D/B contractors.	10.5	<ol style="list-style-type: none"> 1. Monitor the market trend and assess the potential impact. 2. Review contract condition for any escalation clause to allow cost increase.
287.3	Delays due to obtaining lane closures and peak hour exemptions.	9.0	<ol style="list-style-type: none"> 1. Identify temporary bus stop re-locations. Meet with City to identify relocation of stops outside work areas. 2. Metro to review bus routes and stop locations. 3. Submit the Peak Hour Exemption Request.
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"> 1. Include in ROW budget - Complete 2. Identify local funding source to meet the additional parking spaces requirement. - closed 3. Close coordination with VA on the bus shuttle service and temporary parking area during the design and construction of the replacement parking structure.
653.3	Delay of contract turnover from tunnels to stations.	8.0	<ol style="list-style-type: none"> 1. Review scope, ROW, procurement methodology, NEPA action, LONP to identify schedule risks. - closed 2. Received LONP and 130c documents. - closed 3. Review schedule interface between tunnels and stations contracts. 4. Setup regular collaboration meeting.
203.4	Dewatering cost increase due to the dewatering volume & treatment requirement exceeds GBR baseline estimate.	7.5	<ol style="list-style-type: none"> 1. Further analysis is required.

Westside Purple Line Extension Section 3 Safety Status

Project to Date Recordable Injury Rate

— Project Recordable Injury Rate - - - National Recordable Rate - - - National Dart Rate



- There were no recordable injuries through September 2019.
- Frontier-Kemper/Tutor Perini, JV (FKTP) work hours completed in September 2019: 10,286
- FKTP work hours completed to date: 65,112
- Tutor Perini/OG (TPOG) work hours completed in September 2019: 17,926
- TPOG work hours completed to date: 25,767

Westside Purple Line Extension Section 3 Disadvantaged Business Enterprises

Contract C1151

As of August 2019

DBE Goal – Design The percentage of funds apportioned to Design Contracts	11.19%
Current DBE Commitment Design Total DBE Committed Dollars divided by Total Contract Value for Design	\$4.3M 24.90%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$1.1M 14.40%

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

DBE Goal – Construction The percentage of funds apportioned to Construction Contracts	17.10%
Current DBE Commitment Construction Contract commitment divided by current contract value for Construction	\$37.3M 9.50%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime:	\$534K 0.67%

Thirteen (13) Construction DBE sub-contractors have been identified to date.

Westside Purple Line Extension Section 3 Disadvantaged Business Enterprises

Contract C1152

As of September 2019

DBE Goal – Design The percentage of funds apportioned to Design Contracts	19.25%
Current DBE Commitment Design Total DBE Committed Dollars divided by Total Contract Value for Design	\$11.8M 19.25%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$0.0 0.00%

Fourteen (14) Design DBE subcontractors have been identified for Design.

DBE Goal – Construction The percentage of funds apportioned to Construction Contracts	21.00%
Current DBE Commitment Construction Contract commitment divided by current contract value for Construction	\$24.8M 1.90%
Current DBE Participation 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

- Initial Quality meeting with TPOG for C1152 Stations.
- Readiness review meeting for tree transplant/relocation and sound wall installation at VA property construction kick off for C1151 Tunnels.
- Completed C1151 Tunnels project annual Audit on FKTP.

Westside Purple Line Extension Section 3 Environmental Mitigation Status

- Completed work plans for air quality baseline study for VA Hospital site.
- Coordinated with VA Hospital on palm tree transplanting.
- Conducted meetings with FKTP for noise and groundwater treatment.
- Conducted meetings with FTA for MMRP reporting, and review occurred in Q2 and Q3 2019 reporting periods.
- Q3 2019 MMRP reporting is currently under draft.

Westside Purple Line Extension Section 3 Public Outreach Program

- Participated in the UCLA Westwood Block Party and distributed WPLE information to 1,200 students.
- Produced and distributed six (6) construction work notices for advanced utility relocations and geotechnical investigations.
- Extensive coordination with major stakeholder groups, homeowners' associations, neighborhood councils and city council districts.

Patsaouras Plaza Busway Station

FTA Quarterly Review – December 4, 2019



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	25,368,000	31,020,000	(475,000)
S	SPECIAL CONDITIONS	750,000	1,917,000	1,637,000	1,181,000	1,913,000	14,000
R	RIGHT-OF-WAY	-	-	-	-	-	-
P	PROFESSIONAL SERVICES	7,425,000	16,501,000	14,644,000	13,763,000	16,718,000	217,000
PC	PROJECT CONTINGENCY	2,817,000	1,000,000	-	-	1,244,000	244,000
TOTAL PROJECT		30,984,000	50,913,000	46,188,000	40,312,000	50,913,000	-



Expenditures through September 30, 2019



Patsaouras Plaza Busway Station

Issues With Potential to go Above \$100,000



- DS5 Drainage System at Retaining Wall and Excavation of Austin Vault
This may result in discovery of new archeological features
- Archeological/Paleontological Monitoring
Over \$750,000 worth of Task Orders issued
- Programmatic Plan to Address Man-Made Buried Objects
Over \$1,000,000 worth of Task Orders issued



Patsaouras Plaza Busway Station

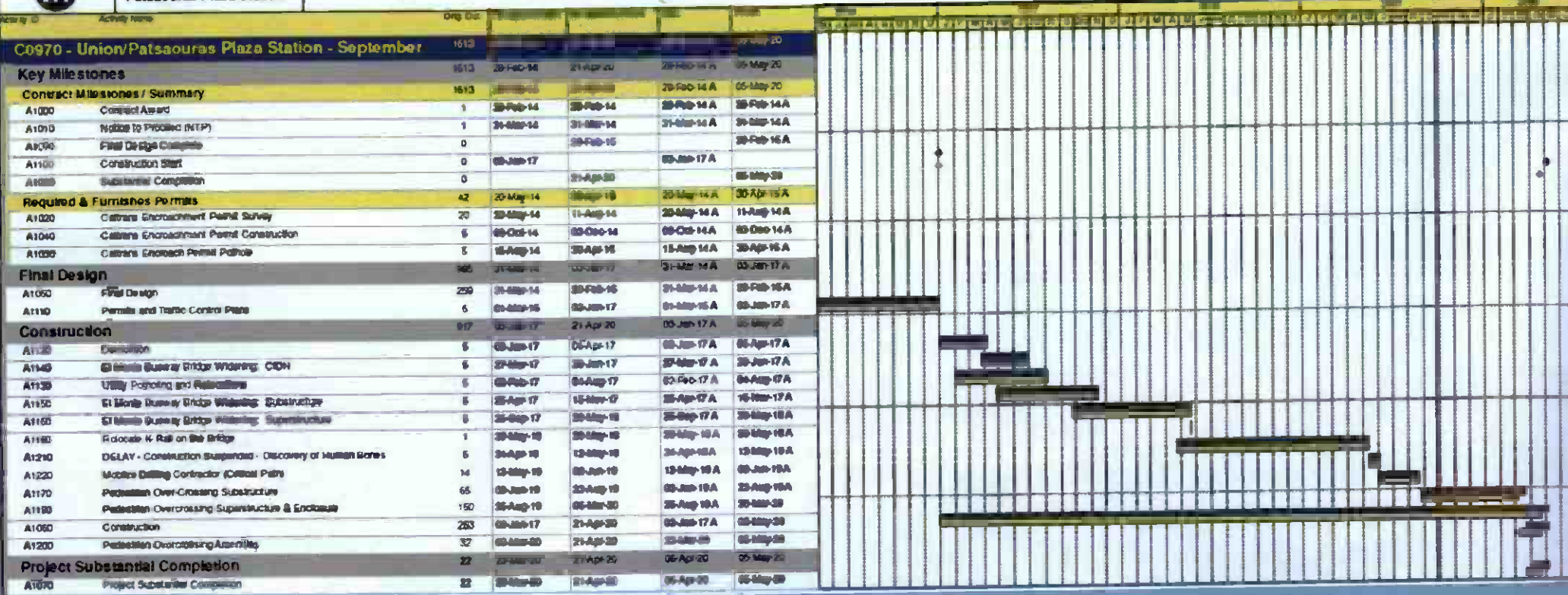
Project Schedule

30-Sep-19



C0970 - Union/Patsaouras Plaza Station

September 2019 vs. Approved Re-Baseline 2019



Contractor's current schedule.



Patsaouras Plaza Busway Station

Design/Build Contract C0970 - Current Quarter Update



Construction

- Pedestrian walkway foundations poured and falsework completed
- Pedestrian overcrossing foundations poured and falsework completed
- Elevator platform foundations poured and falsework completed
- Retaining wall graded

Administration

- Executed Task Order for execution of the Programmatic Plan



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



- Complete the Pedestrian Conduit
- Pour the Pedestrian Overcrossing
- Finish installation of rebar for the bus station platform
- Begin construction of the Austin Vault



Patsaouras Plaza Busway Station

Construction Photos



Pouring concrete at Retaining Wall 1 Footing



Ped Bridge Bent 1, 2, and 3 micropile installation



Pedestrian Bridge columns construction



Falsework construction of Pedestrian Bridge Bent cap 2



Metro



Willowbrook/Rosa Parks Station

FTA Quarterly Review Meeting

December 4, 2019



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: 56%
- Federal Funds: \$10,250,000
- Local Funds: \$58,354,819



Willowbrook/Rosa Parks Station

Major Activities During Reporting Period



- Early Start Package:
 - Completed Final Contract Modifications and contract close-out
- Package A:
 - Installed Station amenities (lighting, map cases, ticket vending machines, communication systems) and temporary north pedestrian crossing at the Blue Line Platform for re-opening of Station.
 - Final interior finish work at CSSB and Mobility Hub ongoing.
 - Hardscape work at public plaza and bus bays nearly completed.
- Package B:
 - Completed statistical analysis of findings and environmental report for Caltrans.
 - Finalizing internal coordination of 100% documents for procurement of construction work.



Metro

Willowbrook/Rosa Parks Station Project Schedule

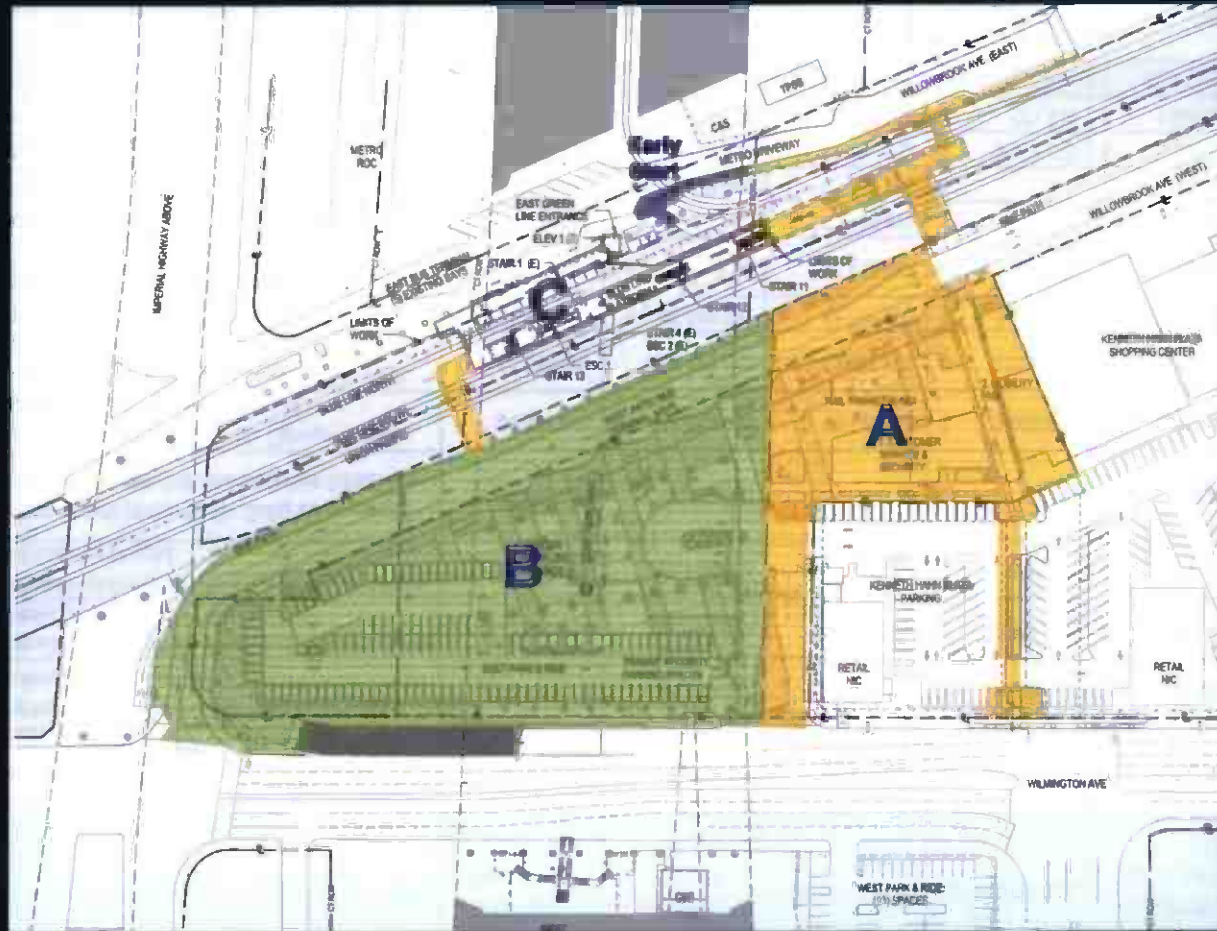
MILESTONE	Baseline Date	Current Date
Grant Award	1/17/2014	1/17/2014
Environmental Finding	8/1/2015	8/1/2015
Preliminary Engineering		
30% Design	9/9/2016	9/9/2016
Final Design		
60% Design	11/18/2016	12/29/2016
100% Design	11/30/2016	7/6/2017
Third Party Approval (Caltrans/LACDPW)	3/24/2017	3/24/2017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



Metro

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 (<i>Items 1-5: Platform Extensions, Canopies, Grade Crossing Improvements, new South Entrance, ROW Fencing</i>)	\$4,747,240	\$6,917,022	\$5,331,807	\$ 5,021,814	\$ 5,960,173	(\$956,849.39)
Green Line Improvements (<i>Items 6-9: Vertical Circulation, Lighting & Acoustical Enhancements</i>)	\$14,417,979	\$4,819,652	\$3,715,104	\$ 725,532	\$ 4,152,937	(\$666,714.76)
New Construction (<i>Items 10-13: Civic Plaza, Metro Customer Service Center, Sheriff's Facility, Mobility Hub</i>)	\$16,642,913	\$23,081,773	\$17,791,987	\$ 13,863,136	\$ 19,888,813	(\$3,192,960.10)
Bus and Shelter Improvements (<i>Items 14-16: Improvements to West and East Bus Depots</i>)	\$3,462,904	\$1,745,813	\$1,345,715	\$ 609,749	\$ 1,504,310	(\$241,502.74)
Parking Improvements (<i>Items 17-19: Safety enhancement and reconfiguration for both East and West Park & Ride Lots</i>)	\$3,555,068	\$8,123,783	\$0	\$ -	\$ 7,000,000	(\$1,123,783.00)
Circulation Improvements (<i>Items 20-23: Signage, Transit Hall, Pedestrian Promenade, Kiss & Ride Lot</i>)	\$4,844,769	\$4,049,093	\$3,121,139	\$ 2,076,650	\$ 3,488,972	(\$560,120.91)
Site-Wide Improvements (<i>Items 24-26: General Site Work, Landscaping, Artwork</i>)	\$3,236,024	\$3,181,242	\$2,452,178	\$ 2,568,181	\$ 2,741,173	(\$440,069.31)
Preliminary Engineering and Final Design	\$4,281,888	\$5,818,091	\$5,794,075	\$ 3,699,477	\$ 5,818,091	\$0.00
Construction - Agency Labor/Const Mgmt/Other Prof Svc	\$0	\$0	\$6,512,063	\$ 287,461	\$ 6,394,500	\$6,394,500
Construction - Thrd Party	\$0	\$0	\$579,644	\$ 168,994	\$ 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	\$ 9,875,883	\$ 5,389,800	\$0.00
Tenant Relocation	\$1,300,000	\$1,500,100	\$0	\$ 541,649	\$ 1,500,100	\$0.00
Total Project Cost	\$66,657,683	\$68,604,819	\$58,159,121	\$39,438,526	\$ 68,604,819	(\$0)

1. Expenditures cumulative through 09/30/2019; TIGER expenditures YTD: \$6,811,462.37

2. Total Construction Progress percentage: 56%



Metro

Willowbrook/Rosa Parks Station

Top Risks and Mitigations

Top Risks and Mitigations

Risk ID	Risk Description	Type	Rating	Mitigation Strategies
16b	3rd party coordination: - UPRR	M	46	<ol style="list-style-type: none"> 1. Install temporary North Crossing 2. Engineering of UPRR ROW portion of ped crossing in progress
19	Complete construction during scheduled Blue Line Closure (8 months)	C	10.5	<ol style="list-style-type: none"> 1. Complete construction and testing for Station re-opening and public access in November 2019
21	Coordination with Operations and other concurrent Blue Line Projects ongoing.	C	10.5	<ol style="list-style-type: none"> 1. Continue ongoing coordination with Operations during phasing plan development and construction.
16a	3rd party coordination: - Caltrans - County - LACDA	M	7.5	<ol style="list-style-type: none"> 1. Coordinate the review of Package B with Caltrans – Ongoing 2. LACDA funding coordination with award of Package B - Ongoing

Willowbrook/Rosa Parks Station

Anticipated Activities for Next Reporting Period

- Package A:
 - Substantially complete Customer Service and Mobility Hub Buildings and begin testing of systems.
 - Complete installation of planters & hardscape at Plaza and Buildings
 - Install furnishings and equipment for occupancy
 - Punch List
- Package B:
 - Issue Package B for Construction.
 - Receive Caltrans approval of the ISA/ADL report and 100% documents.



Eastside Access Improvements 1st and Central Station FTA Quarterly Meeting December 4, 2019



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
- Design Status: Updates to 100% Design Plans
(Plan Packages will be split to expedite the
Approved For Construction (AFC) process)
- Construction Status: Scheduled to commence by end-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
	Subtotal:	\$11,800,000	\$5,000,000	\$16,800,000	\$14,991,662	-\$3,191,662	\$0
	Professional Services - Design	N/A			\$2,960,492		\$2,435,881
	Professional Services - Construction				\$390,000		
	Third Party - Design	N/A			\$900,000		\$700,401
	Third Party - Construction				\$500,000		
	Metro Project Labor - Design	N/A			\$500,000		\$259,274
	Metro Project Labor - Construction				\$2,500,000		
	Total Project Cost:	\$11,800,000			\$22,742,154	-\$10,942,154	\$3,395,556

10/2/2019

Notes:

Expenditures cumulative through September 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	August '19 UPDATE	August '19 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	27-Mar-20
End Date:	30-Sep-16	30-Jun-19			
Procurement:					
IFB Issue:	6-Aug-19	6-Aug-19		2-Jul-20	28-Aug-20
Bid Opening:	3-Oct-19	3-Oct-19		31-Aug-20	
NTP:	12-Mar-20	12-Mar-20		22-Jan-21	
Owner Developed Construction Schedule		START	END	START	END
Submittals		13-Mar-20	13-Apr-20	25-Jan-21	24-Feb-21
Segment 1		14-Apr-20	2-Jun-20	25-Feb-21	14-Apr-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	25-Mar-21	30-Aug-21
Segment 4		3-Jun-20	3-Aug-20	15-Apr-21	15-Jun-21
Segment 5		4-Aug-20	7-Dec-20	25-Mar-21	23-Aug-21
Segment 6		28-Apr-20	17-Sep-20	11-Mar-20	30-Jul-21
Segment 7		27-May-20	27-Apr-21	25-Feb-21	16-Nov-21
Punch List for all Segments (except Seg 2)				15-Apr-21	9-Dec-21
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	19-Dec-22	30-Oct-23

10/1/2019

NOTES:

- (1) To expedite AFC approval process for EAIP Plans will be split into two packages - Segment 2 plans will be finalized upon approval of Regional Connector Plans
- (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)	Vary High (4)	Significant (5)	Risk Score P*(C+T)*2
Probability (P)	< 10%	10-50%	50-70%	75-90%	> 90%	1-5
Cost Impact (C)	<\$250K	\$250K-\$1M	\$1-\$3M	\$3-\$10M	>\$10M	1-10
Time Impact (T)	<1 Mth	1-3 Mths	3-6 Mths	6-12 Mths	>12 Mths	1-5

Risk Register by SCC
Eastside Access Improvements Project
Register Version: Sept 2019

Risk ID	Risk Description	SCC	Status	Risk Category	Assessment			Risk Score	Mitigation Strategy	Risk Owner	Management		Next Recent Comments
					Prob	Cost	Time				Action Name	Action by Date	
ESP-001	Final OPRN Budget shortfall due to forecasted cost increase	80	Active	High	5	40	20	High	1. Metro to identify additional funding sources for board approval 2. Finalize funding sources based on LDP	1. 04/13/2020 2. 11/01/2020	07/19 - Internal construction cost estimates will be available by August 2019 07/12/2019 - Estimate process to identify additional funding in Sept 2019 after delivery of ICE. Full action on cost/estimating will not be taken until last opening in Aug 2020 7/8/2019 - Full action on additional funding will not be taken until last opening in Nov Full 2020 10/29/2019 - Action by Date 1: modified		
ESP-002	RCC Change Order could impact affected budget	80	Active	High	5	5	1	High	1. EAP to coordinate with RC prior to establishing T-1 bid	1. 12/09/2019	3/16/2019 - CM to be issued to RCC by end of Feb 2019. RCC delay may impact scope and cost 07/23/2019 - Awaiting contractor response on CM 7/8/2019 - Still awaiting contractor response		
ESP-003	Segment 2 Construction delays could impact the project schedule	50	Active	High	5	20	20	High	1. Explore possibility of using Micro tunnel for Segment 2 construction 2. PM to coordinate with RC on Project propose	1. 12/01/2019 2. Ongoing	3/16/2019 - Risk Scoring changed as RCC schedule has slipped 6 months from July '21 to April '22 07/22/2019 - Action Date Updated 7/8/2019 - Construction start in the April '22 6/29/2019 - Risk Description modified. Project to confirm with FTA what will occur if the \$11M TIGER Grant is not approved by 8/2021		
ESP-004	Metro procurement of process for permit/review delay during award	80	Active	High	5	5	2	High	1. Metro project team to complete as much documentation as possible	1. 12/01/2019	07/2019 - Process reevaluation for assignment by Metro CA 02/12/2019 - Process for reevaluation initiated as of 5/20. This will trigger assignment of CA 7/8/2019 - Action Date added		
ESP-011	Unanticipated utility egress could delay project and increase cost	40	Active	High	5	5	2	Accept	1. Review design during construction	1. 04/09/2020	07/2019 - Design phase investigations completed 02/12/2019 - Design completed with identified utilities utilizing as-built. Contractor will re-verify prior to start of construction 7/8/2019 - Full report to be determined at start of construction in August 2022 02/26/2019 - Map of the underground utilities to be accessed in Segment 2. Project will be published		
ESP-019	Loss of bidders delays project and increases cost	50	Active	High	5	5	3	High	Mitigation	Mitigation	12/20/2018 - Construction outreach workshop will be conducted upon completion of 100% design plans to engage the response from the contractors 07/2019 - Contact with four potential bidders		
ESP-016	CoLA requirements could add additional scope	80	Active	High	2	5	2	High	1. Elevate situation to assist management with resolution 2. Conduct over the shoulder reviews with CoLA	1. Ongoing 2. Ongoing	07/2019 - Actions updated to Ongoing 02/12/2019 - Comments from CoLA on Reg-ARC add requested by ESP-10. Those comments will define extra work. Probability increased from 1 to 2. Cost added increased from 1 to 3 7/8/2019 - Metro Senior Management and CoLA Senior Management working to resolve. Scope clarification will be provided soon. AFC approval 02/02/2019 - Metro Senior Management and CoLA Senior Management met approval. Resolution is in the works with proposal for Metro to only support the cost in perpetuity and the fees for over 21 year period of maintenance requirement		
ESP-017	Resolution of OPRN responsibility with CoLA for the Alameda extension could result in delay of the project or rejection of final plan (AFC) by CoLA	40	Active	High	2	5	2	High	1. Elevate to Metro senior management 2. Elevate to Mayor office if necessary	Mitigation	07/2019 - New Risk Added. New risk identify with Metro senior management and affected Mayor's office of situation 07/2019 - Met and elevated concern to CoLA and Mayor's Office 7/8/2019 - Metro Senior Management and CoLA Senior Management working to resolve 02/02/2019 - Metro Senior Management and CoLA Senior Management met approval. Resolution is in the works with proposal for Metro to only support the cost in perpetuity and the fees for over 21 year period of maintenance requirement Probability decreased from 4 to 2. Cost decreased from 2 to 1. Time decreased from 2 to 2.		
ESP-018	Delay in plan approval by CoLA due to requirement for prior design approval of construction (RC and Div 20) projects	80	Active	High	5	5	5	Accept	Mitigation	Mitigation	7/8/2019 - New Risk Added. Per CoLA requirement AFC plans must be used from RC and Div 20 which will not be ready until August 2019 7/31/2019 - Probability increased from 3 to 5 02/02/2019 - Metro Senior Management and CoLA Senior Management met approval. Metro proposal to City will be to approve EAP plans first and have RC and Div 20 components approved as additions		
ESP-018	Third party involvement to MHP/State code and delay construction activities	50	Active	High	5	2	4	High	Mitigation	Mitigation	07/2019 - Risk added		

Eastside Access Improvements

Current Quarter Update

Major Activities During Last Quarter (July '19 – Sept'19)

Design Development

- Submitted Pre- Approved For Construction (AFC) Plans to City Bureaus
- Received City Comments on Pre-AFC Plans
- Resolution Meetings with City Bureaus
- Updating plans for AFC resubmittal
- Met with various Bureaus for Over-The-Shoulder Reviews

Other activities:

- Coordinate with Overlapping Projects

Eastside Access Improvements

Activities for Next Quarter

Major Activities Planned During October '19 to December '19

Design Development

- Pre-AFC Plans comments resolution and approval
- Coordinate with overlapping projects to prepare AFC plans
- Plans will be split into two packages. One will contain plans for Segment 1,3,4,5,6,and 7. The other package will contain Segment 2 plans which will be finalized once Regional Connectors' AFC plans are ready
- Complete Approved For Construction (AFC) Plans

Other:

- Continue coordination meetings with City of Los Angeles (COLA) officials
- Continue coordination meetings with Department of Water & Power (DWP)
- Continue coordination meetings with Local Community leaders

Los Angeles County Metropolitan Transportation Authority



Rail to Rail Active Transportation Corridor Connector Project
FTA Quarterly Meeting - Wednesday, December 4, 2019



Metro

Rail to Rail Active Transportation Corridor Connect

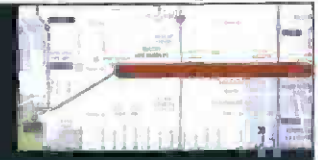


RAIL TO RAIL ACTIVE TRANSPORTATION CORRIDOR CONNECTOR PROJECT

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)

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)

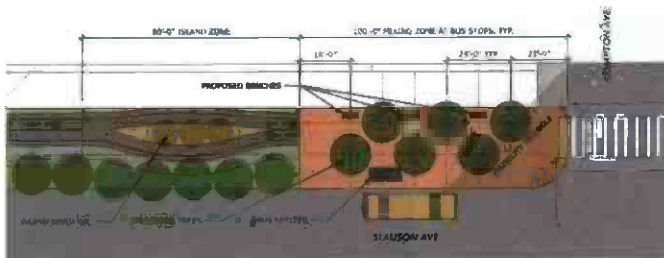


Before photo of Metro ROW at Hyde Park / Chesterfield Square segment



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: March 2020
- Procurement Complete: February 2021
- NTP to Contractor: March 2021
- Construction Start: April 2021
- Substantial Completion: October 2023

RAIL TO RAIL ACTIVE TRANSPORTATION CORRIDOR CONNECTOR PROJECT

July – September 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%
- Continue seeking COLA approval for “Raised Crosswalk”
- Finalized agreement with BNSF
- Initiated Soil Treatment Work Plan development
- Coordinate with Metro Real Estate Department

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
Total Funding:	<u>\$62,126,000</u>

ROM LOP Budget:

• Consultants:	\$7,000,000
• Soft Costs:	\$26,000,000
• Soil Treatment:	\$10,000,000
• Construction:	\$88,181,818(*)
• Contingency:	\$8,818,182
<u>Projected LOP Total:</u>	<u>\$140,000,000</u>

() 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 Quarterly Review Meeting

December 4, 2019



Project Description

To Union Station

Safety: 300 days without Lost Time Incident

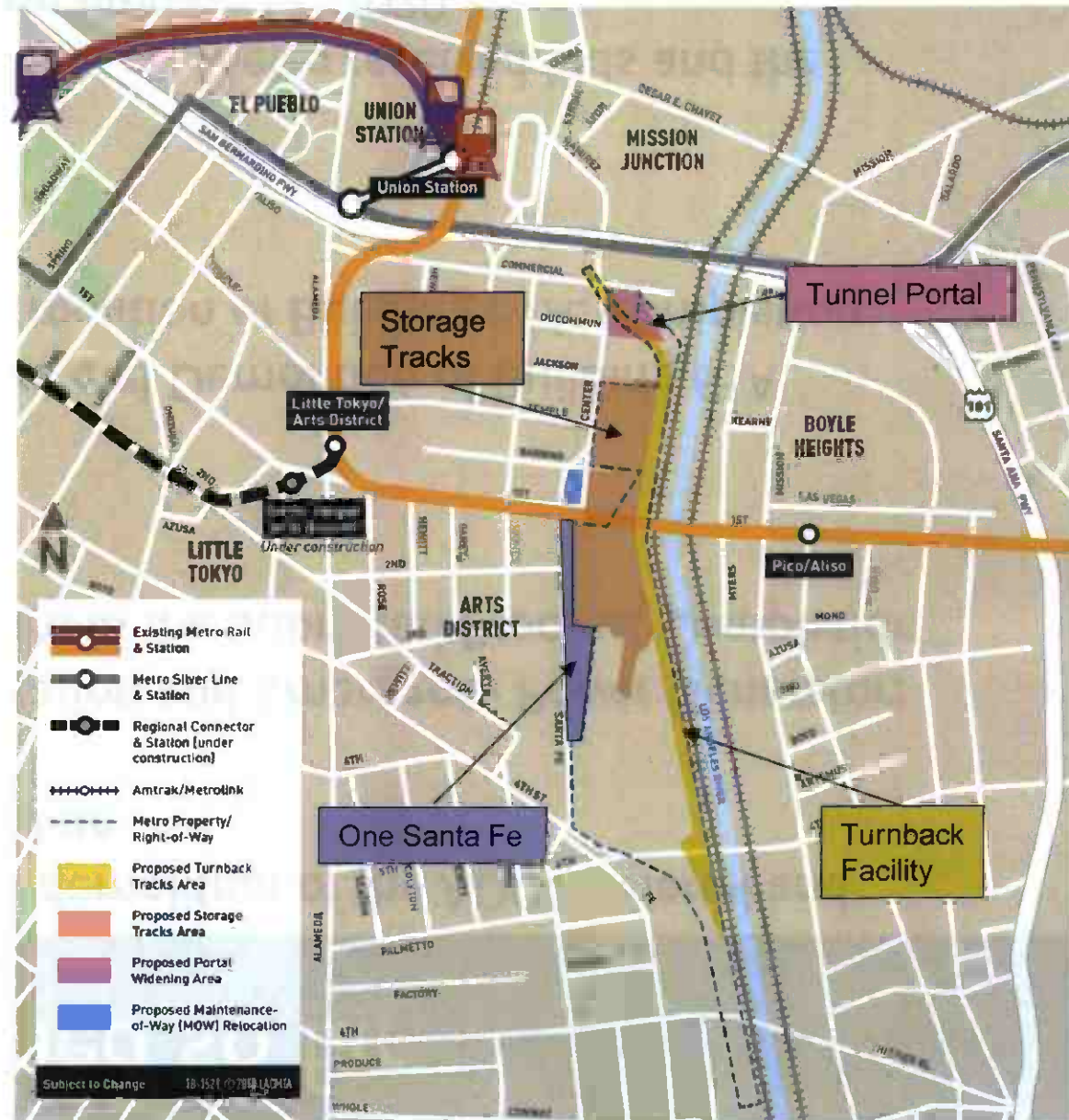
Project includes: widening of the heavy rail tunnel portal south of the US-101 freeway, new turnback tracks and expansion/reconfiguration of train car storage tracks to improve service at Union Station and throughout the Metro Red/Purple Line system.

Major scope elements:

- Complete building demolition
- Directional boring
- Installation of underground conduits and manhole structures
- Earthwork/Grading, Paving, Soil Stockpiling, hauling
- Track/Rail installation
- Structural/Bridge work

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 99% complete
- C1184: Procurement of TPSS Station and Emergency Power Generator: Contract was awarded and we are in the Submittal Process. Completion percentage: 5%
- C1193: Installation of Ductbanks and Demolition of Building 61A: Advancing several lines, and demolition of Building 61A. Completion percentage is 20%
- C1136: Portal Widening and Turnback: Metro received bids and the contract is scheduled for NTP on January 13, 2020

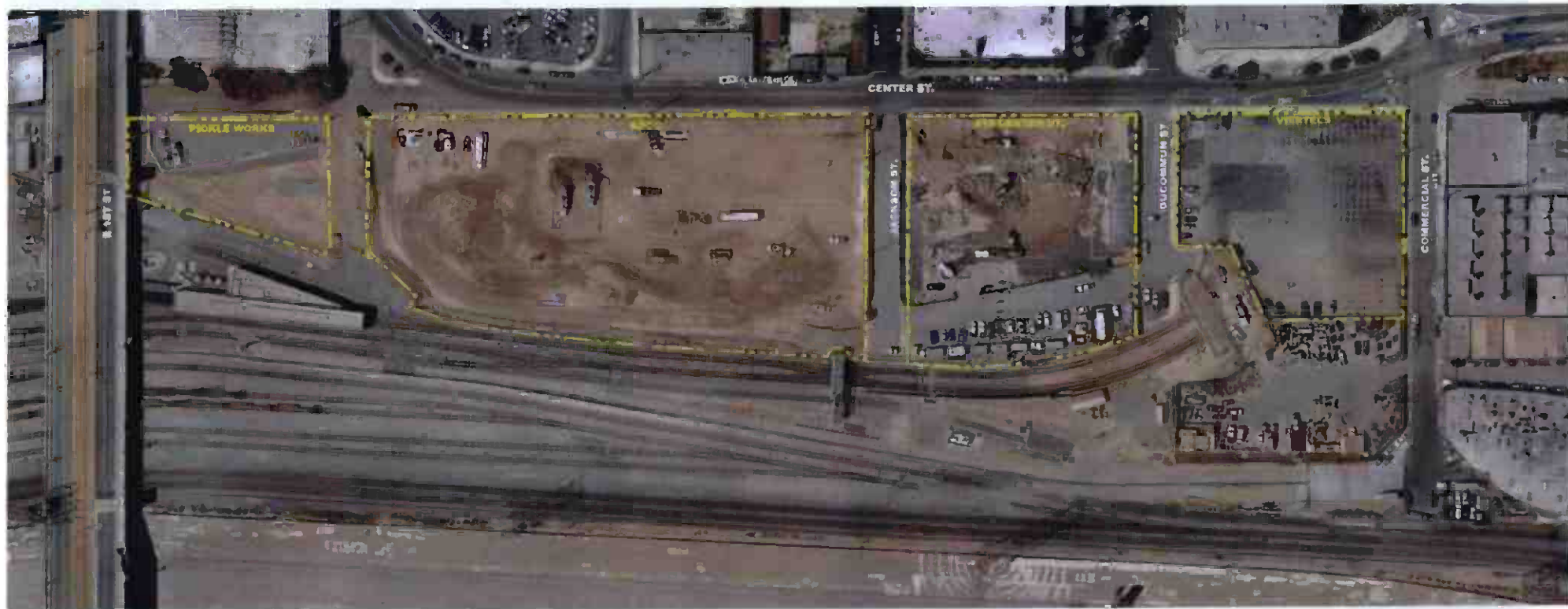


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Before Early Demolition



Abatement, Demolition, & Site Clearing



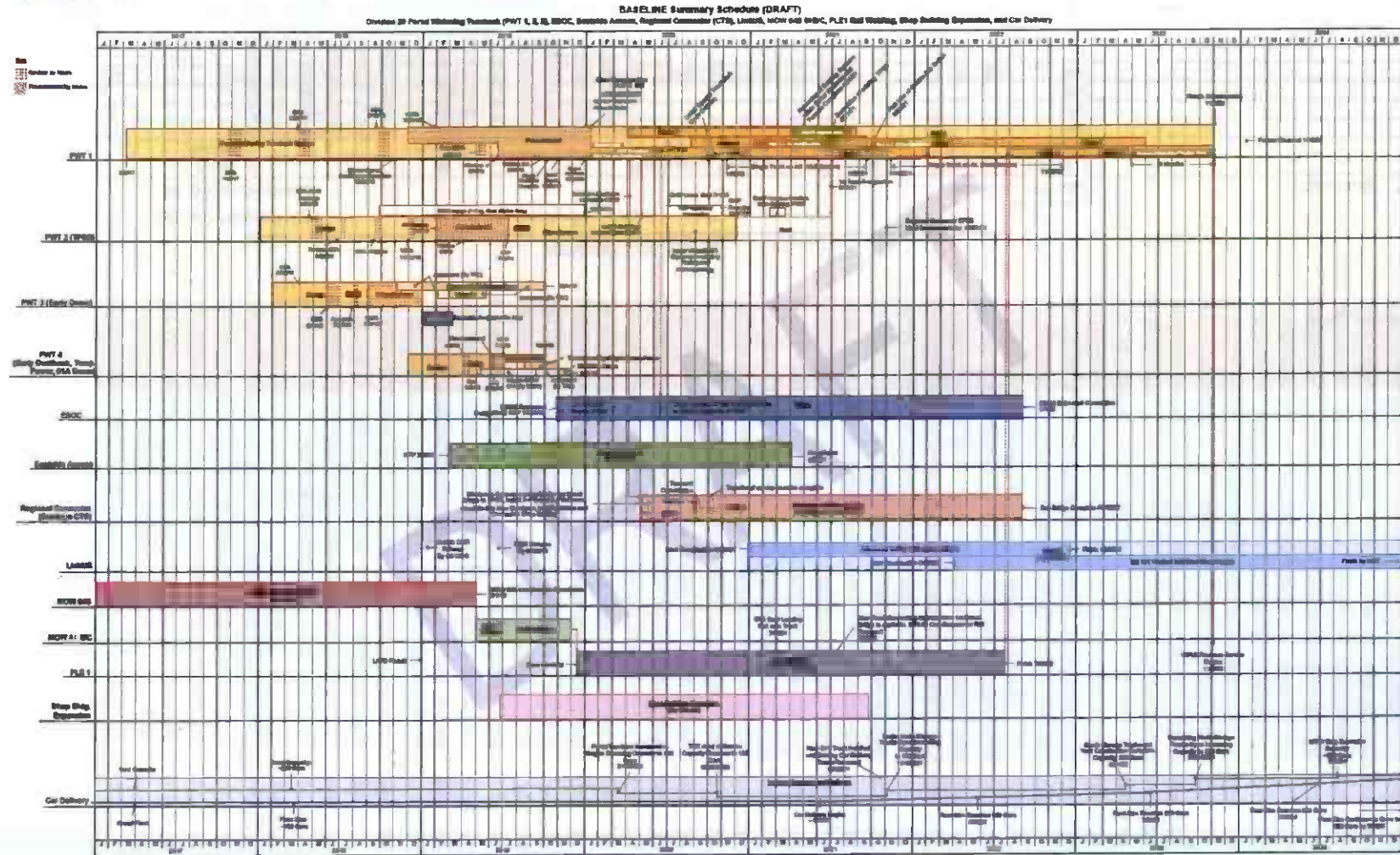
Metro



Project Schedule

TYLINT INTERNATIONAL

Metro



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Major Milestones

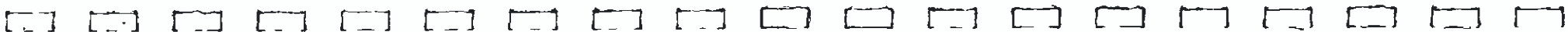
- C1180: Early Demolition: Expected Completion December 17, 2019
- C1184: Procurement of TPSS Station and Emergency Power Generator: Expected Completion December 2020.
- C1193: Installation of Ductbanks and Demolition of Building 61A: Expected Completion January 2020
- C1136: Portal Widening and Turnback: Expected completion December 2023.

Project Cost Updates

- C1180: Early Demolition: Original Plus Modifications: \$16.7 Million
- C1184: Procurement of TPSS Station and Emergency Power Generator: Expected Completion December 2020. \$16.2 Million
- C1193: Installation of Ductbanks and Demolition of Building 61A: Expected Completion January 2020: \$9.6 Million
- C1136: Portal Widening and Turnback: Expected completion December 2023. Apparent Low Bidder: \$440 Million



Metro



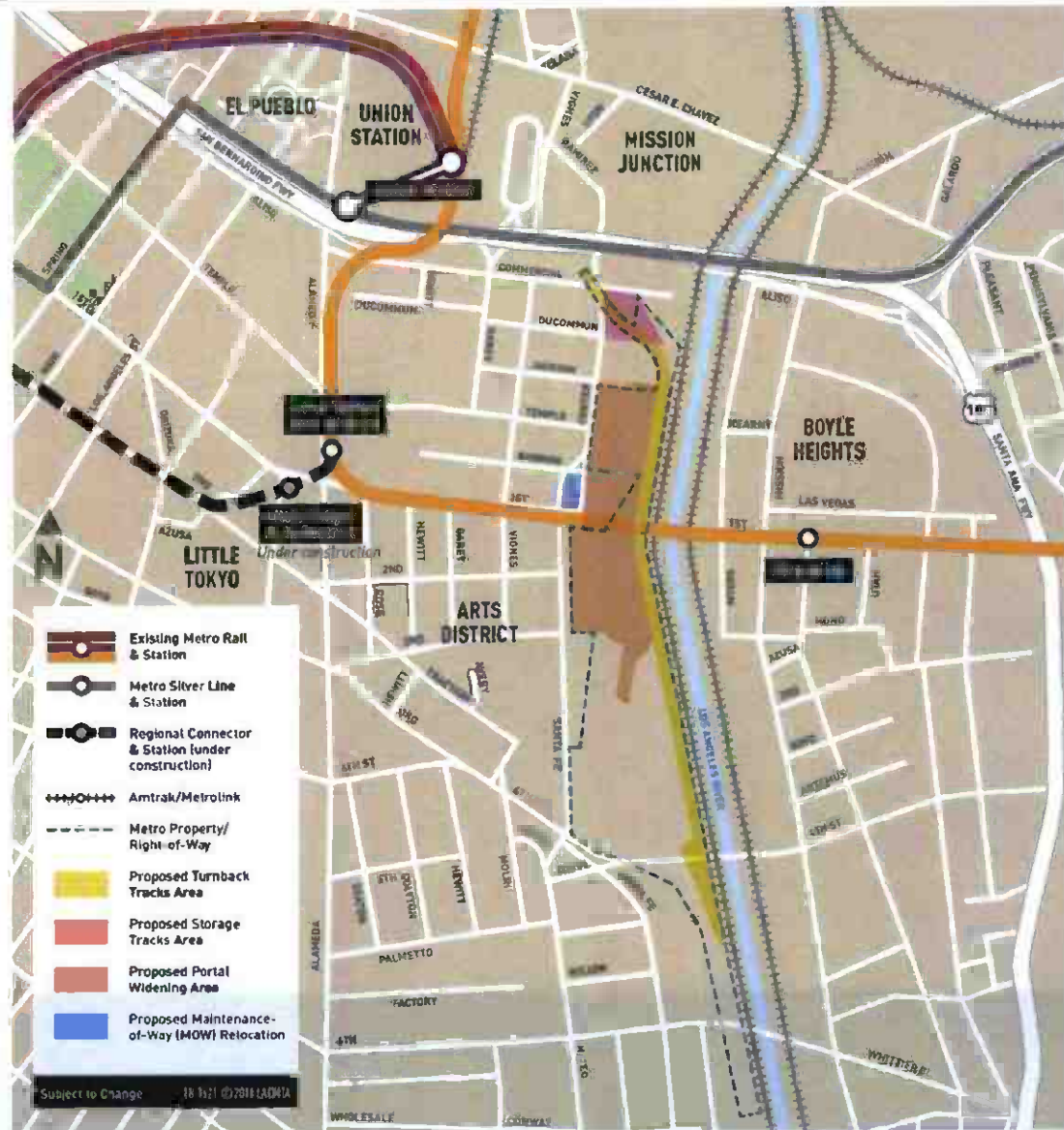
Project Top Risks

- Underground Utilities
- DWP – Power Response Time
- 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
- Completion of Early Demolition Contract
- Continue the procurement of the TPSS and Emergency Generator
- Completion of Early Ductbanks
- Completion of Building 61A Demo



Metro



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

 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	Construction Staging Activities on Center St 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.	HTML PDF
02/19/2019	Division 20 Portal Widening and Turnback Facility Project: Abatement and Demolition of Structures, Arts District 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.	HTML PDF

Stay Connected

Receive email alerts and follow us on the web.



Contact Us

Project Hotline: [213.922.1111](tel:213.922.1111)

Project Email:

div20portalwidening@metro.net

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Fact Sheets

Video

Maps

Meetings



Metro



metro.net/division20



P3010 Light Rail Vehicle Acquisition

FTA Quarterly Review Meeting – December 4, 2019



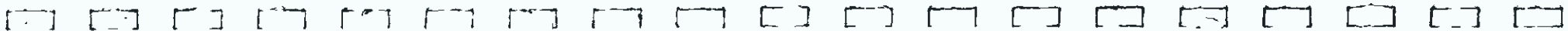
Reporting Month: July 2019-September 2019

Presentation Date: December 2019

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.
- 10 Cars shipped to Metro facilities for storage purposes
- 4 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	\$0.00	\$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
VEHICLE SUB-TOTAL	\$299,061,827.00	\$299,061,827.00	\$299,061,827.00	\$272,495,834.00	\$26,565,993.00	\$0.00
APPROVED MODIFICATIONS SUB-TOTAL	\$5,373,918.00	\$7,055,343.00	\$7,055,343.00	\$7,055,343.00	\$0.00	\$0.00
CONTINGENCY SUB-TOTAL	\$10,704,091.00	\$9,022,666.00	\$0.00	\$0.00	\$9,022,666.00	\$0.00
VEHICLE TOTAL	\$315,139,836.00	\$315,139,836.00	\$306,117,170.00	\$279,551,177.00	\$35,588,659.00	\$0.00
PROFESSIONAL SERVICES (ELEMENT A)	\$21,208,749.00	\$21,208,749.00	\$21,208,749.00	\$19,534,819.00	\$1,673,930.00	\$0.00
PROFESSIONAL SERVICES (ELEMENT B)	\$8,378,885.00	\$8,378,885.00	\$8,378,885.00	\$4,081,405.00	\$4,297,480.00	\$0.00
PROFESSIONAL SERVICES SUB-TOTAL	\$29,587,634.00	\$29,587,634.00	\$29,587,634.00	\$23,616,224.00	\$5,971,410.00	\$0.00

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: July 2019 – September 2019

Presentation Date: December 2019

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
VEHICLE SUB-TOTAL	\$366,321,644.00	\$366,321,644.00	\$366,321,644.00	\$336,163,628.00	\$30,158,016.00	\$0.00
CONTINGENCY SUB-TOTAL	\$18,604,375.00	\$18,604,375.00	\$13,655,283.00	\$13,655,283.00	\$4,949,092.00	\$0.00
VEHICLE TOTAL	\$384,926,019.00	\$384,926,019.00	\$379,976,927.00	\$349,818,911.00	\$35,107,108.00	\$0.00

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

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	\$0.00	\$15,589,699.00	\$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
VEHICLE SUB-TOTAL	\$239,918,120.00	\$232,023,222.00	\$232,023,222.00	\$86,902,242.00	\$145,120,980.00	\$0.00
CONTINGENCY SUB-TOTAL	\$15,869,912.00	\$23,764,810.00	\$4,279,654.00	\$4,279,654.00	\$19,485,156.00	\$0.00
VEHICLE TOTAL	\$255,788,032.00	\$255,788,032.00	\$236,302,876.00	\$91,181,896.00	\$164,606,136.00	\$0.00

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

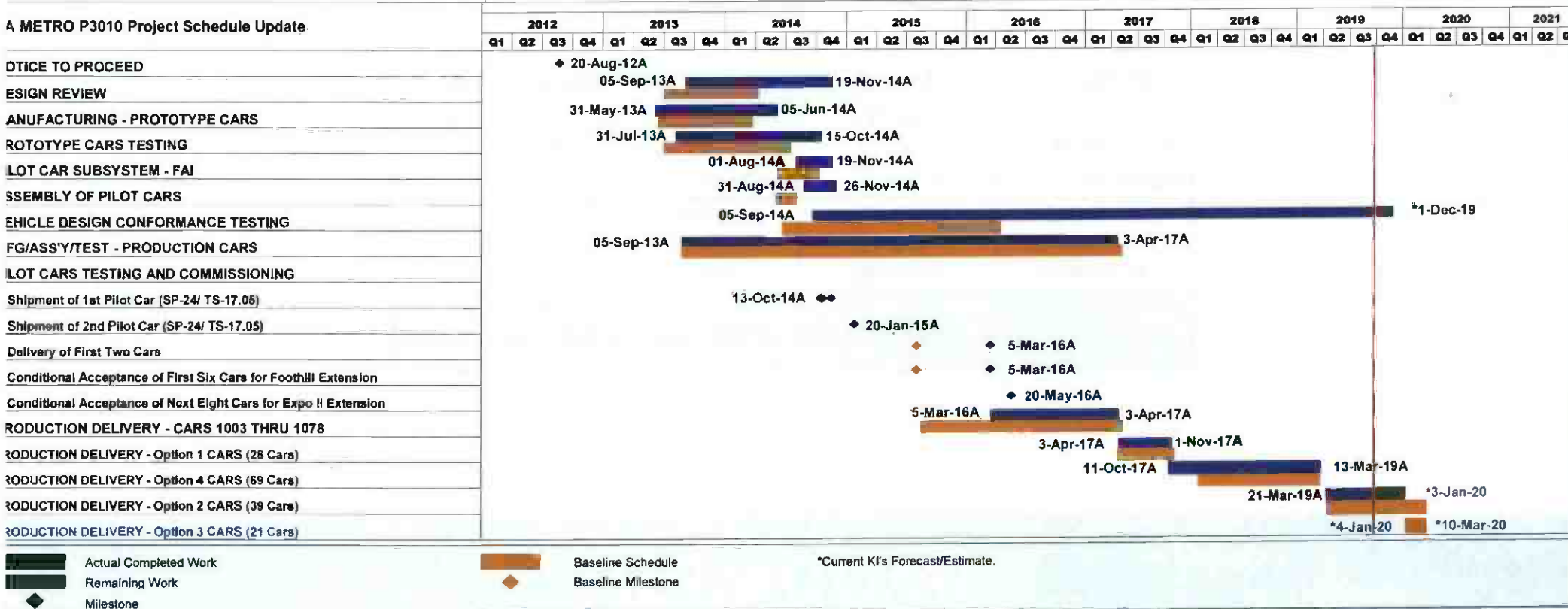
PROJECT COST CONTINGENCY (through September 2019) UNITS IN DOLLARS			
Orders	Current Contingency (Budget)	Allocated To-Date (Forecast)	Remaining Contingency (Forecast)
Base Order	\$16,078,009.00	\$7,055,343.00	\$9,022,666.00
Options 1 and 4	\$18,604,375.00	\$13,655,283.00	\$4,949,092.00
Options 2 and 3	\$23,764,810.00	\$4,279,654.00	\$19,485,156.00
Total Contingency	\$58,447,194.00	\$24,990,280.00	\$33,456,914.00

Summary Schedule

P3010 Light Rail Vehicle Acquisition Program
Monthly Project Status Report

September 2019

A METRO P3010 Project Schedule Update



Top Risks & Mitigations

Risk ID	Risk Description	Risk Score	Risk Mitigation
03	Aggressive Schedule - Overly aggressive project schedule may potentially become impossible for both Metro and KI to implement.	12	<ol style="list-style-type: none"> 1. Maintain master integrated schedule to identify interfacing capital projects. 2. Stagger project implementation schedule (i.e. avoid overlap of procurement cycles). 3. Identify activities that can be fast-tracked.
12	Systems integration 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	Design Conformance Testing (DCT) - 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"> 1. Perform early coordination with Operations and Planning on the test logistics and yard/track/Operator needs. 2. Develop contingency plans to continue performing mainline test at alternative yards. 3. Monitor and anticipate mainline test track availability.
01	Final Assembly Site – 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"> 1. Perform early training on acquired staffs, clearly define working expectations, and allocate time for corrective actions. 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. 3. KI to provide plans to grow and retain current staffs as well as incentives for attracting new qualifying staffs.
04	Contract Modification Process – 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"> 1. Anticipate, identify and define potentially essential "Needs" and "Wants" in the early stages of the project phase. 2. Engage customers and stakeholders for early discussions. 3. Obtain swift concurrence on the "Needs" based on safety, maintainability, and reliability requirements.

Questions

HR4000 Heavy Rail Vehicle Procurement



Los Angeles County
Metropolitan Transportation Authority

Metro



**FTA Quarterly Meeting Review
December 4, 2019**



PROJECT STATUS (ACTIVITIES FOR REPORTING PERIOD)

—Pre-Production Configuration Review (PPCR)

- Fire Mist Suppression System (FMSS) Contract Modification has been executed on August 21, 2019.
- This Design Review Phase is completed.

—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 Spring 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	\$12,911,853	\$0	\$20,938,375
MTA ADMINISTRATION	\$11,960,055	\$11,960,055	\$3,248,523	\$0	\$11,960,055
VEHICLE SUBTOTAL	\$211,294,299	\$211,294,299	\$48,027,010		\$211,294,299
CONTINGENCY	\$21,926,767	\$21,926,767	\$0	\$423,615	\$21,503,152
TOTAL PROJECT	\$233,221,066	\$233,221,066	\$48,027,010	\$423,615	\$232,797,451



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
Total		\$1,142,782.45
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
Total		\$707,580.34
	Variance	\$435,202.11



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_PPGR_FCR_FAI_DATA DATE SEPTEMBER 2019_11_5_2019

ID	WBS ID	Task Name	%	Baseline Start	Baseline Finish	Start	Finish	2019	2020	2021	2022	2023	2024
1	1	1	0%	8/30/17	8/31/27	8/30/17	8/31/27						
2	2	2	100%	8/30/17	10/31/17	8/30/17	10/31/17						
38	38	38	0%	9/5/19	9/23/19	9/5/19	10/15/19						
44	44	44	0%	1/31/19	1/31/20	2/28/19	2/24/20						
45	45	45	100%	2/8/19	2/8/19	2/28/19	2/28/19						
46	46	46	100%	5/3/19	5/3/19	4/18/19	4/18/19						
47	47	47	100%	3/25/19	3/25/19	6/12/19	6/12/19						
51	51	51	100%	6/1/19	6/1/19	7/11/19	7/11/19						
52	52	52	100%	5/1/19	5/1/19	7/11/19	7/11/19						
53	53	53	100%	4/30/19	4/30/19	8/8/19	8/8/19						
54	54	54	100%	5/6/19	5/6/19	8/30/19	8/30/19						
48	48	48	100%	4/16/19	4/16/19	9/10/19	9/10/19						
50	50	50	100%	5/10/19	5/10/19	9/27/19	9/27/19						
47	47	47	0%	3/28/19	3/28/19	10/16/19	10/16/19						
58	58	58	0%	5/13/19	5/13/19	10/29/19	10/29/19						
60	60	60	0%	8/5/19	8/5/19	10/29/19	10/29/19						
61	61	61	0%	8/16/19	8/16/19	11/15/19	11/15/19						
40	40	40	0%	4/19/19	4/19/19	12/12/19	12/12/19						
38	38	38	0%	5/31/19	5/31/19	12/12/19	12/12/19						
39	39	39	0%	6/17/19	6/17/19	12/24/19	12/24/19						
54	54	54	0%	1/10/19	1/10/19	1/6/20	1/6/20						
62	62	62	0%	8/23/19	8/23/19	1/14/20	1/14/20						
57	57	57	0%	3/27/19	3/27/19	1/16/20	1/16/20						
65	65	65	0%	1/31/20	1/31/20	1/31/20	1/31/20						
66	66	66	0%	1/31/20	1/31/20	1/31/20	1/31/20						
69	69	69	0%	9/5/19	9/5/19	2/24/20	2/24/20						
67	67	67	0%	4/17/19	3/28/20	1/30/19	3/31/20						
71	71	71	0%	7/8/19	7/8/19	1/30/19	1/30/19						
74	74	74	0%	8/30/19	8/30/19	12/3/19	12/3/19						
76	76	76	0%	8/4/19	8/4/19	12/6/19	12/6/19						
75	75	75	0%	7/5/19	7/5/19	12/27/19	12/27/19						
76	76	76	0%	8/6/19	8/6/19	12/31/19	12/31/19						
73	73	73	0%	8/8/19	8/8/19	1/21/20	1/21/20						
77	77	77	0%	1/23/20	1/23/20	1/23/20	1/23/20						
76	76	76	0%	1/24/20	1/24/20	1/31/20	1/31/20						
66	66	66	0%	5/21/19	5/21/19	2/3/20	2/3/20						
76	76	76	0%	12/10/19	12/10/19	2/3/20	2/3/20						
61	61	61	0%	2/5/20	2/5/20	2/5/20	2/5/20						
62	62	62	0%	2/14/20	2/14/20	2/14/20	2/14/20						
78	78	78	0%	2/3/20	2/3/20	2/20/20	2/20/20						
68	68	68	0%	2/17/20	2/17/20	2/25/20	2/25/20						
69	69	69	0%	2/4/20	2/4/20	3/5/20	3/5/20						
64	64	64	0%	3/18/20	3/18/20	3/18/20	3/18/20						
68	68	68	0%	3/26/20	3/26/20	3/26/20	3/26/20						
66	66	66	0%	4/17/19	4/17/19	3/31/20	3/31/20						
68	68	68	0%	12/31/20	12/31/20	12/31/20	12/31/20						
67	67	67	0%	8/7/20	8/31/22	9/28/20	8/31/22						
66	66	66	0%	8/1/21	8/31/27	7/23/21	8/31/27						



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	Operations	Resources and track availability may be a constraint for LACMTA and delay the Contractor in commissioning Vehicles	25-Jan-16	01-Nov-19	4	4	5	20	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, China.	4	3	4	14
2	Engineering/Production	The Contractor may not effectively manage their suppliers during design and production.	15-Nov-16	01-Nov-19	3	4	4	14	LACMTA	Mitigate	1.Closely monitor the Contractor and their management of its suppliers. 2.Arrange a bi-weekly meeting between LACMTA support staff and responsible CRRC staff to discuss progress. 3.Encourage intermediate "over-the-shoulder design reviews." 4.Participate periodically in CRRC Bi-Weekly Supplier meetings 5.Schedule design review workshops with CRRC and Suppliers	2	4	4	12
3	External	U.S. Government tariffs on steel, aluminum and other products could result in a cost change order	06-Apr-18	01-Nov-19	5	1	4	19	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.	4	1	4	10
4	Engineering	Contractor may not be able to provide necessary U.S. based resources, which may delay design, performance and car delivery.	15-Nov-16	01-Nov-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
5	Commercial	Local Employment Program and Facility Commitment (Hiring, Technology Transfer, and Production)	09-May-17	01-Nov-19	5	3	3	9	Contractor	Mitigate	1.LACMTA to work and coordinate with Contractor to plan and mitigate risks. 2.LACMTA to work and coordinate with Contractor to leverage and apply best practices/lessons learned to plan and mitigate risks. 3.LACMTA to audit suppliers for compliance to LEP commitment. 4.LACMTA to meet with CRRC Senior Execs to push for progress in implementing the LEP.	3	3	3	9



ANTICIPATED ACTIVITIES FOR NEXT REPORTING PERIOD

- 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.
- First six (6) Pilot Vehicle Assembly will begin in Changchun, China.



Test Carshell





Test Carshell





Test Carshell





Test Carshell





1st Production Carshell





1st Production Carshell





Metro

1/3 Mockup





Metro

HR4000 Renderings





HR4000 Renderings





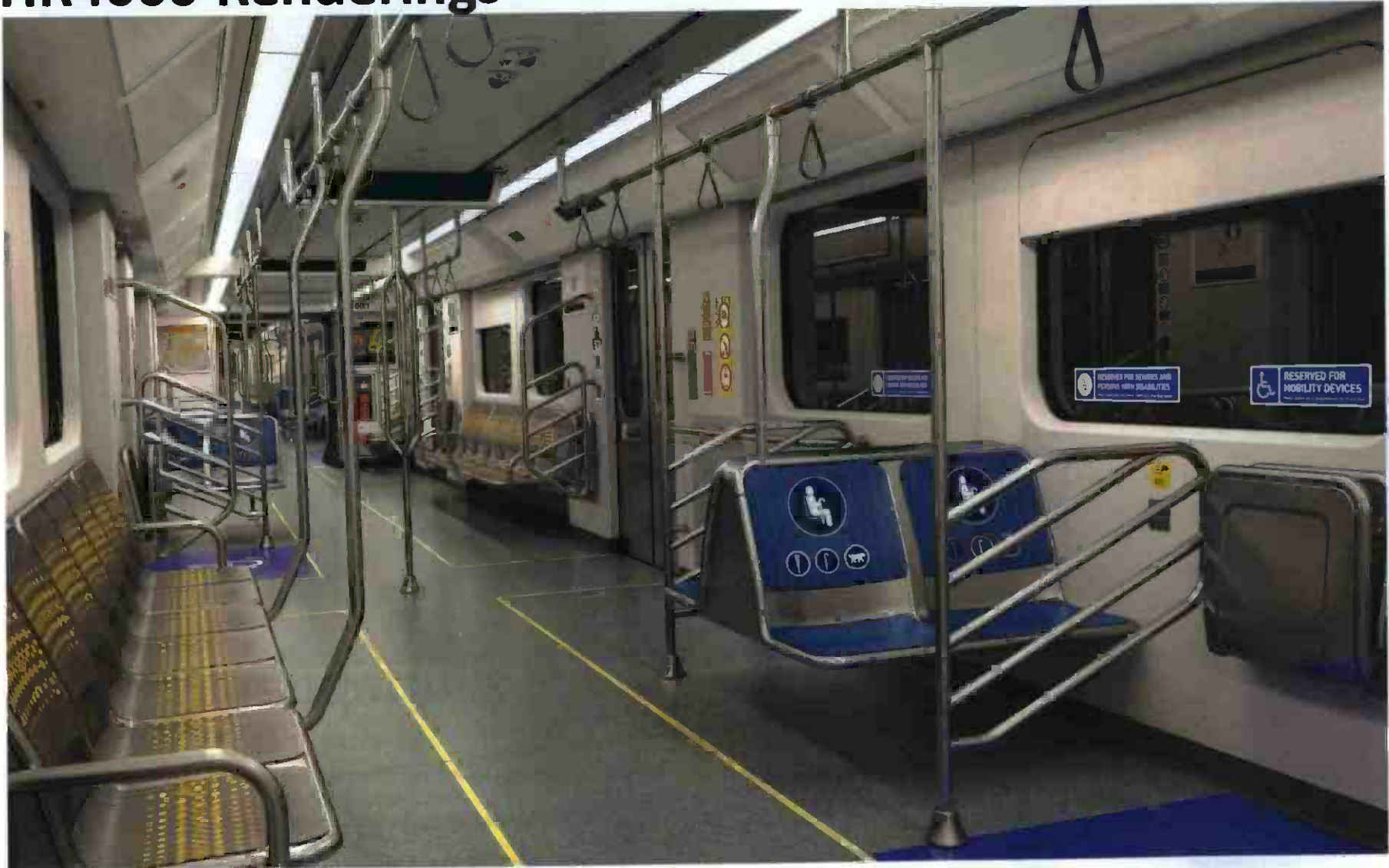
HR4000 Renderings





Metro

HR4000 Renderings





HR4000 Renderings





HR4000 Renderings





Metro

HR4000 Renderings





Metro

Local Assembly Site





Metro

Local Assembly Site





Metro

Local Assembly Site



FTA Quarterly Review Action Item Report – September 4, 2019

Item No.	Status	Description	Responsible Agency	Responsible Staff	Due Date
		There were no New FTA Action Items resulting from the September 4, 2019 FTA Quarterly Review Meeting.			