

Los Angeles County
Metropolitan Transportation Authority

FTA Quarterly Review

Briefing Book

SEPTEMBER 4, 2019



Metro

FTA QUARTERLY REVIEW MEETING AGENDA

Los Angeles County Metropolitan Transportation Authority

Wednesday, September 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
Vijay Khawani

II. METRO PLANNING REPORTS

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

James de la Loza

III. CONSTRUCTION REPORTS

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

Richard Clarke
Sameh Ghaly
Gary Baker
James Cohen
Michael McKenna
Kimberly Ong

IV. FTA ACTION ITEMS

FTA / PMOC

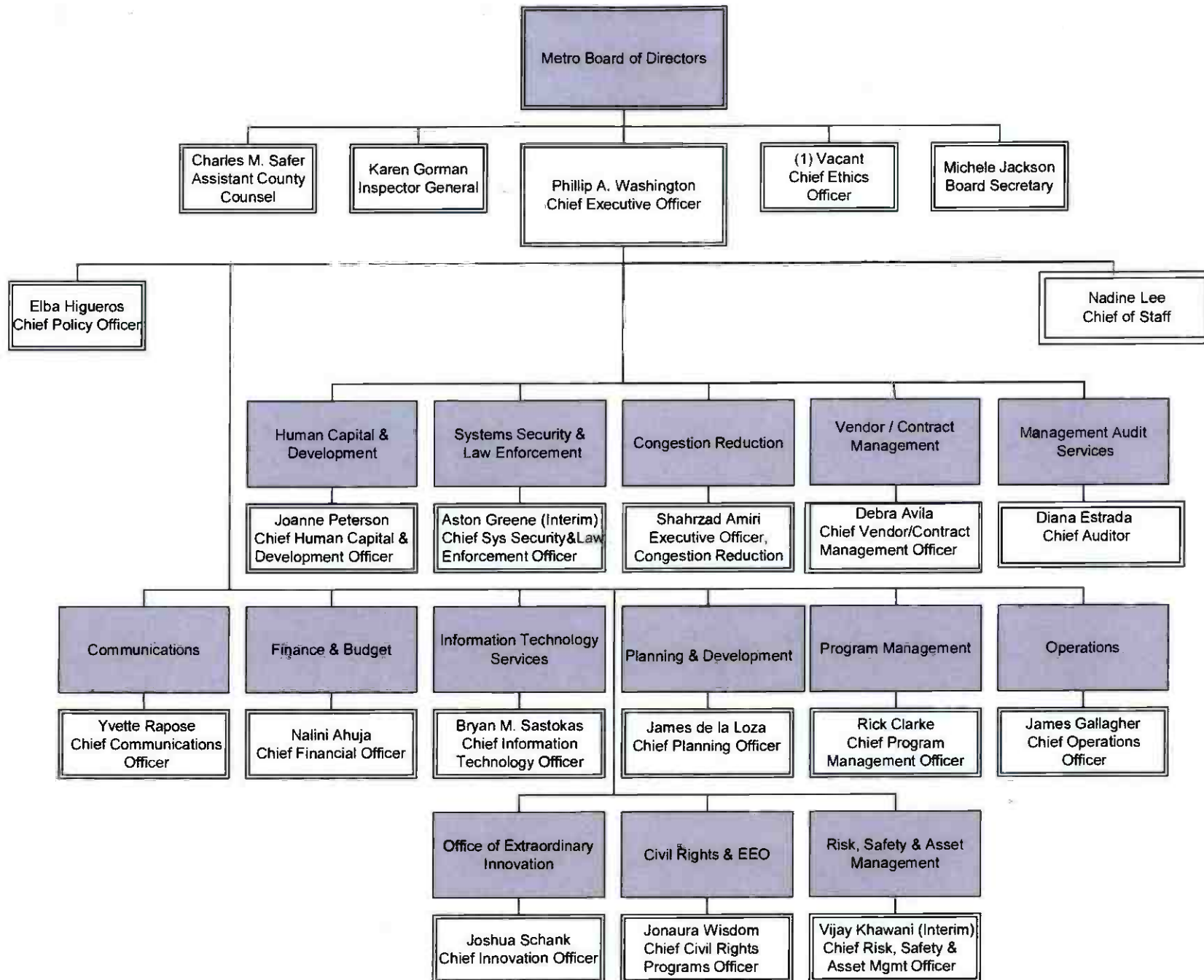
PROPOSED SCHEDULE AND LOCATION OF NEXT MEETING

Los Angeles County Metropolitan Transportation Authority

Wednesday, December 4, 2019

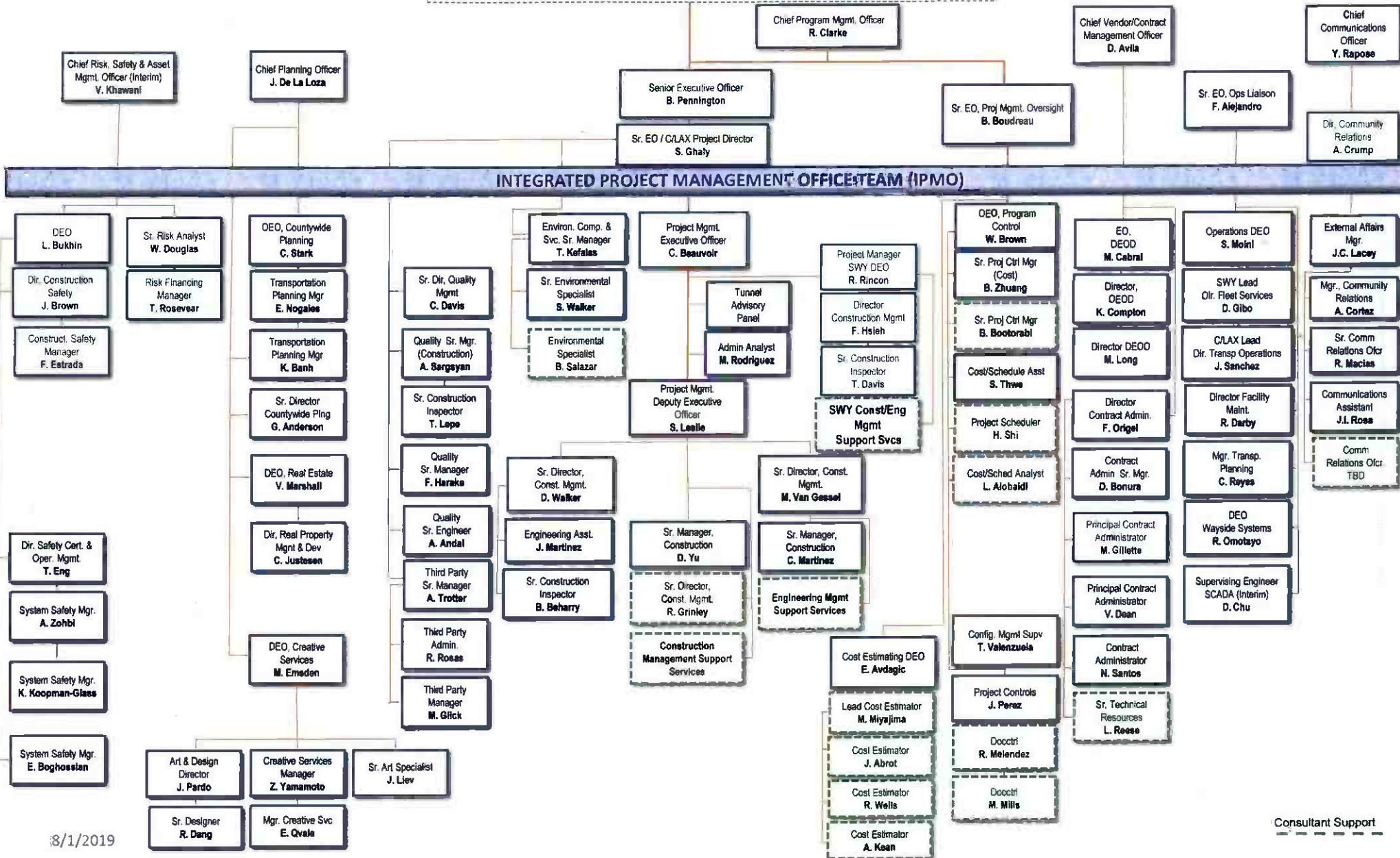
William Mulholland Conference Room - 15th Floor

Metro Organization Chart

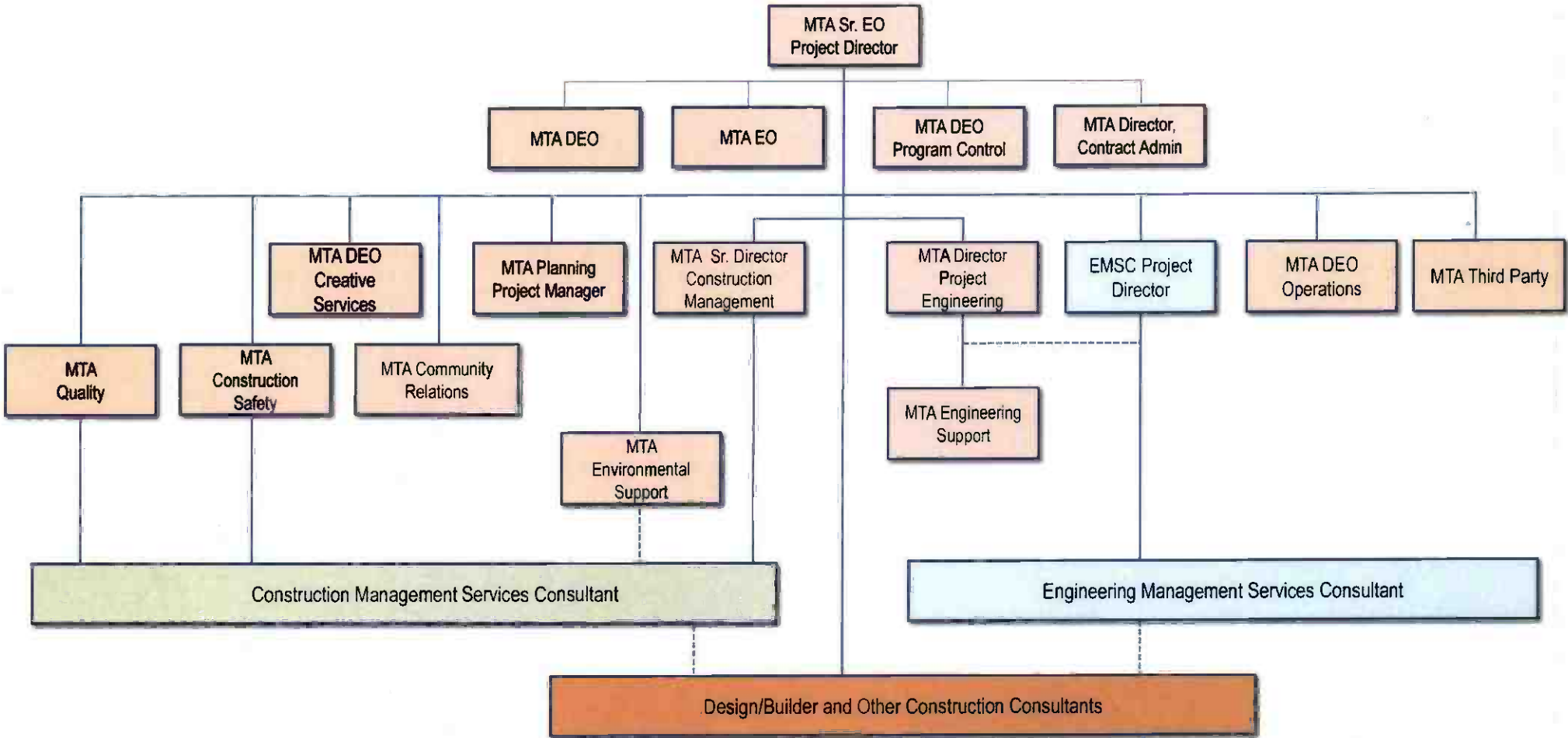


CRENSHAW/LAX TRANSIT PROJECT MATRIX ORGANIZATION

Metro Executive Management Organization and Staff

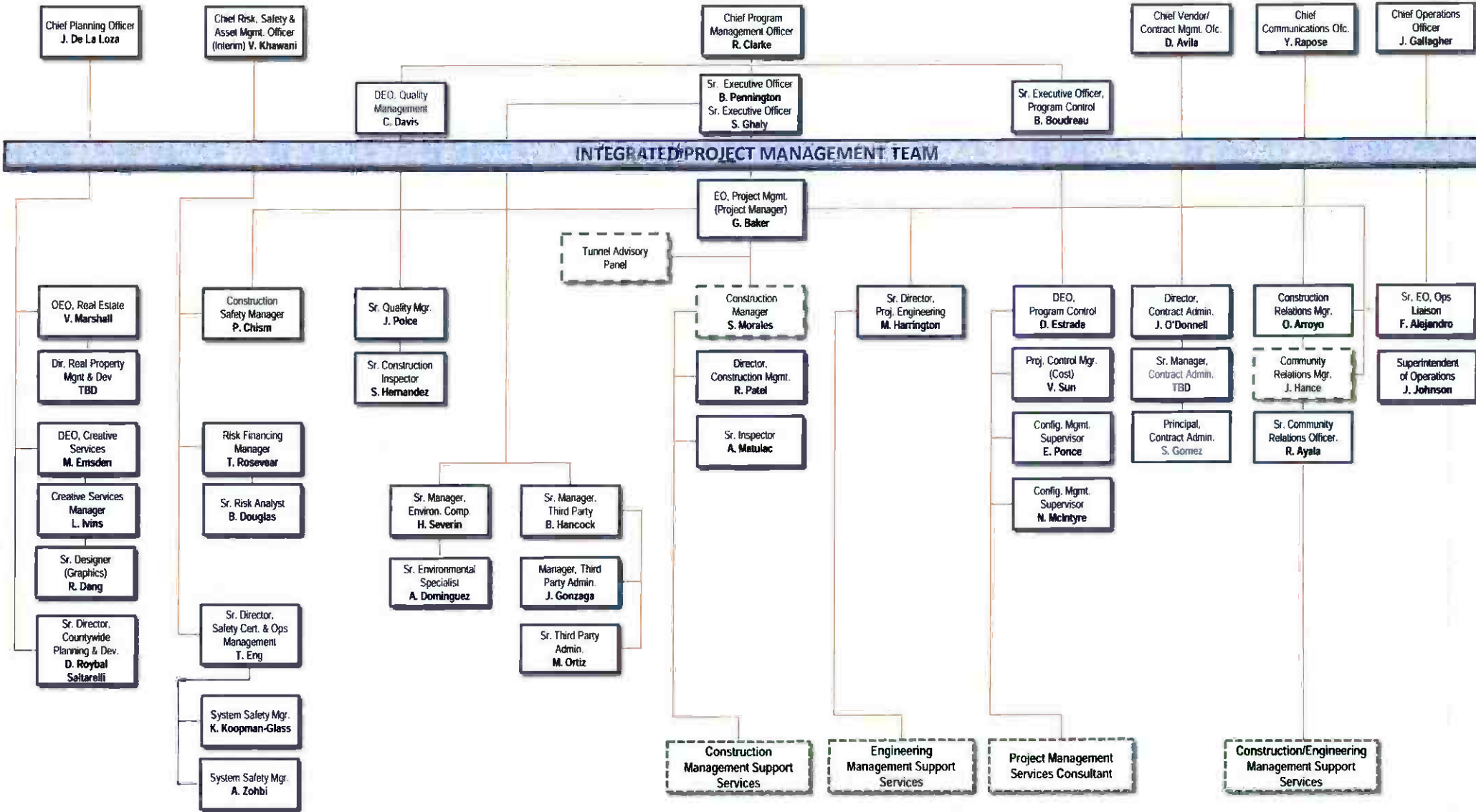


**CRENSHAW/LAX TRANSIT PROJECT
Responsibility and Reporting Matrix**

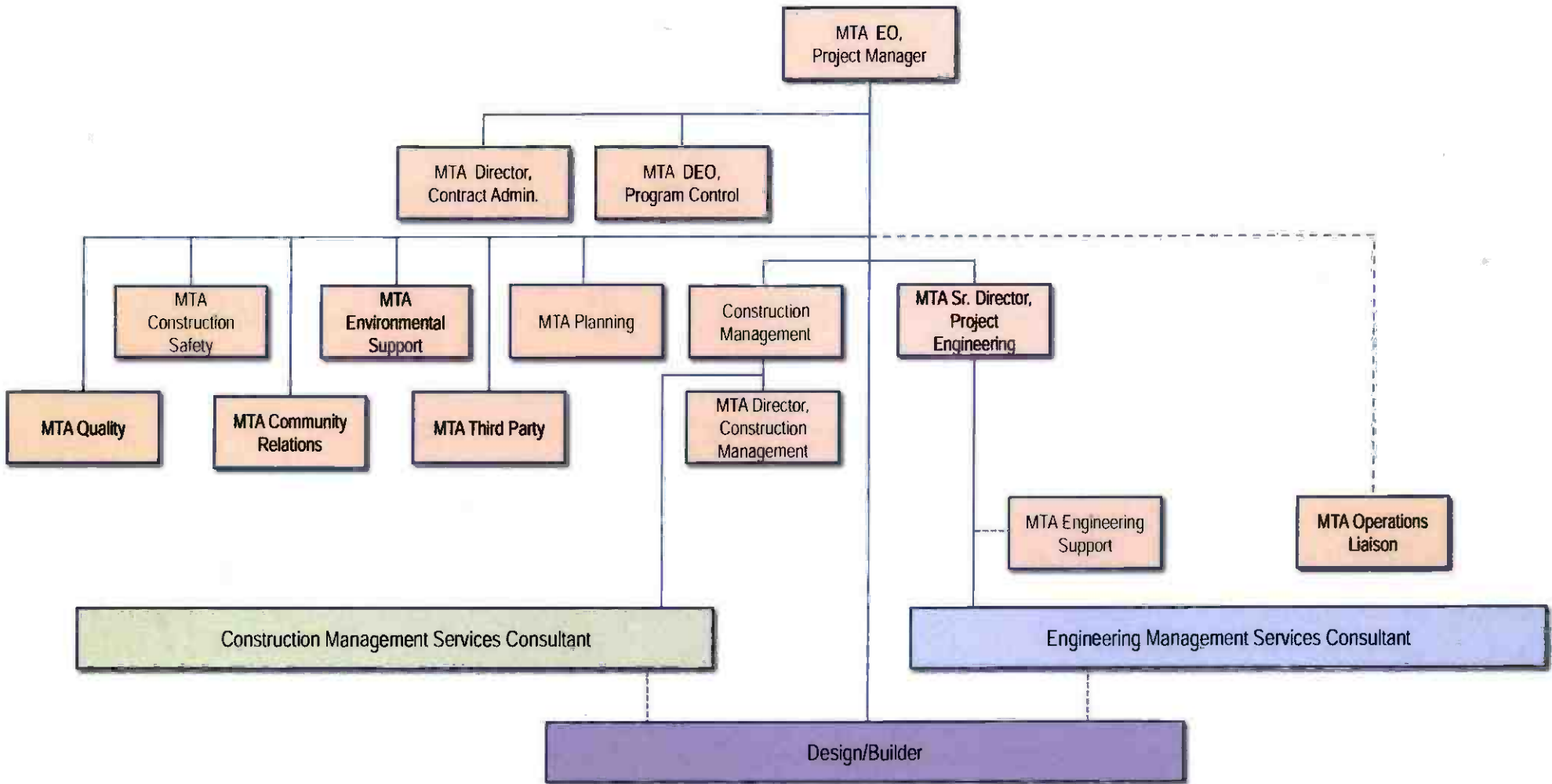


REGIONAL CONNECTOR TRANSIT PROJECT MATRIX ORGANIZATION

Metro Executive Management Organization and Staff

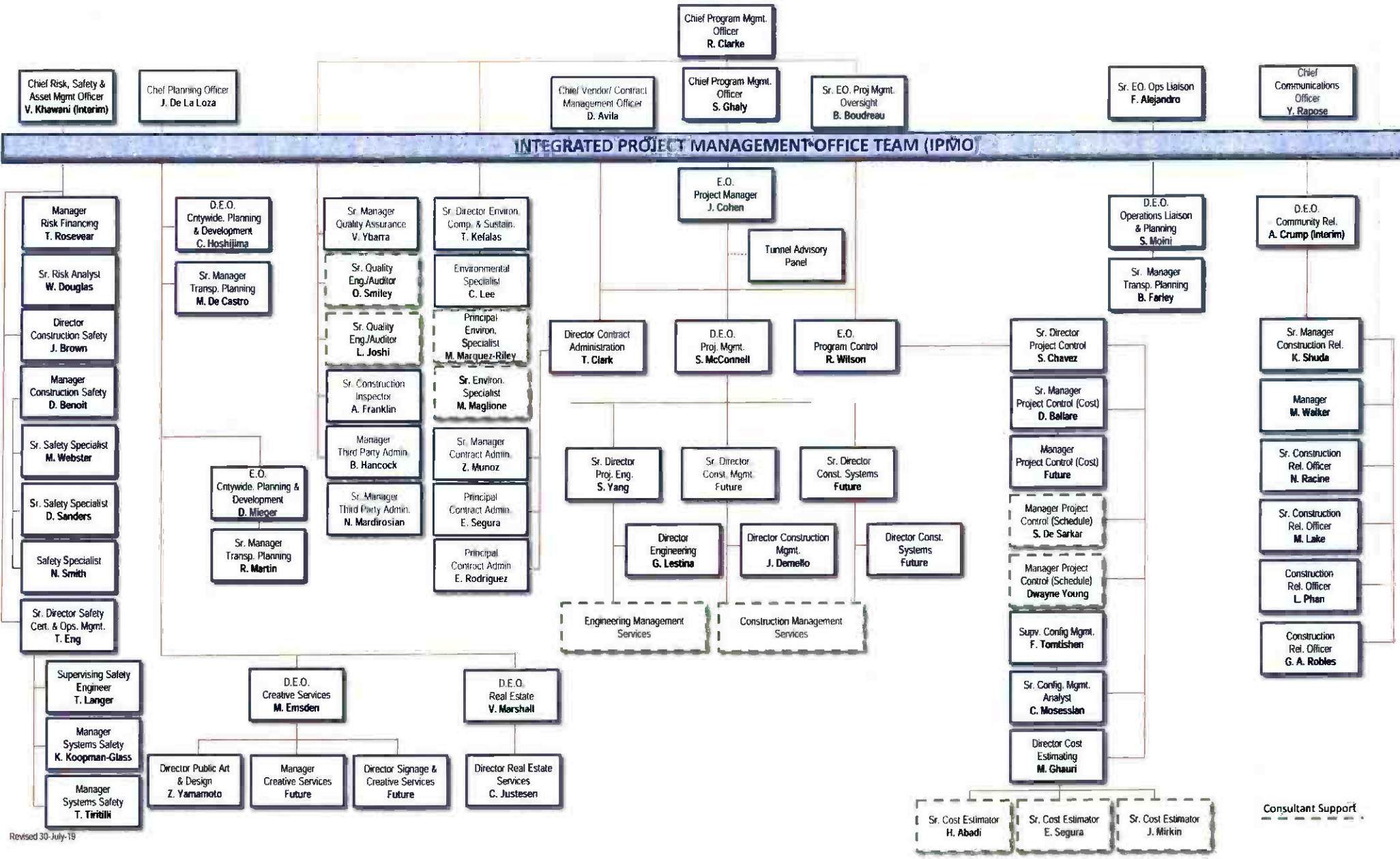


Regional Connector Transit Project Responsibility and Reporting Matrix

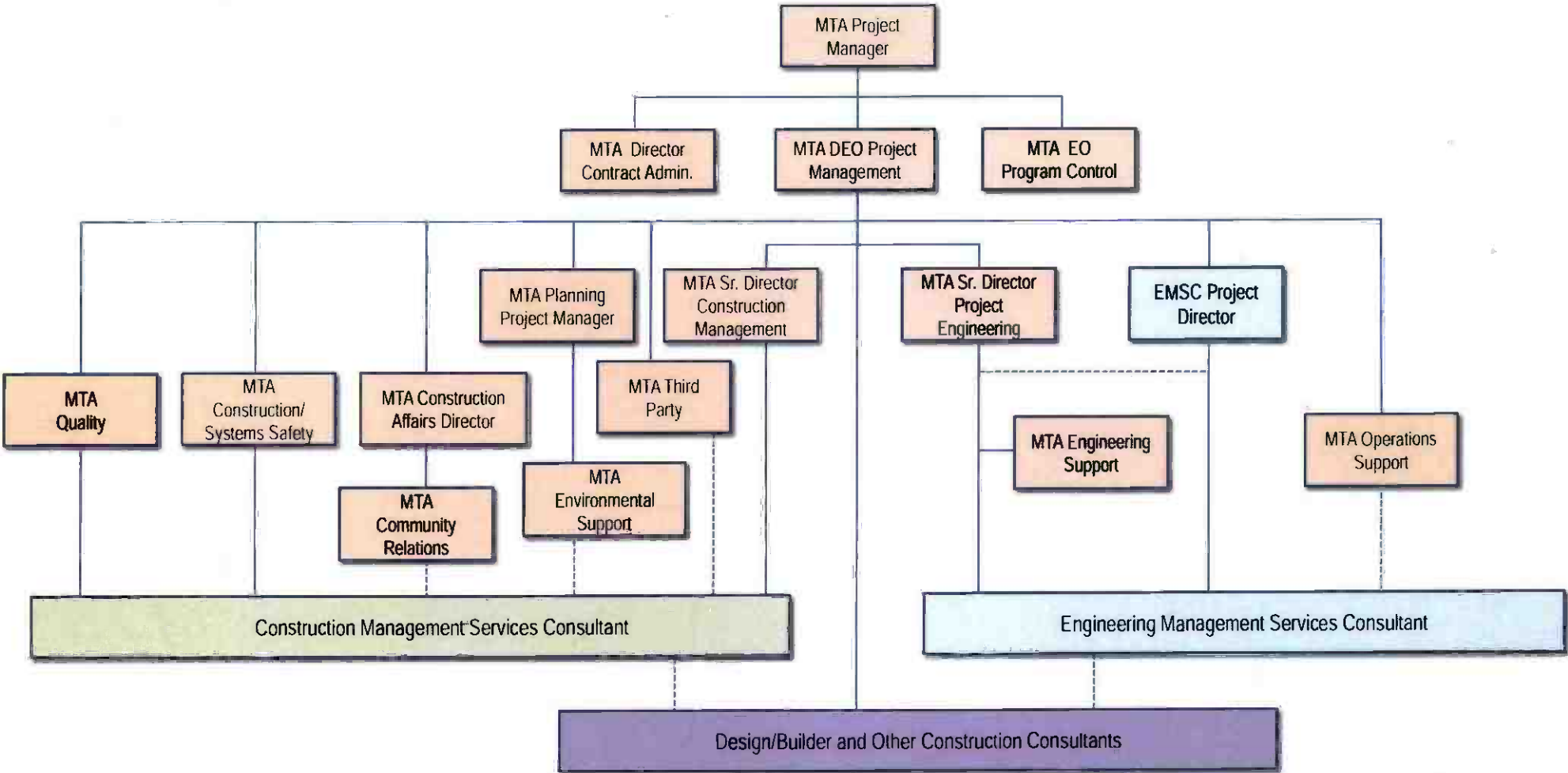


WESTSIDE PURPLE LINE EXTENSION SECTION 1 Matrix Organization

Metro Executive Management Organization and Staff

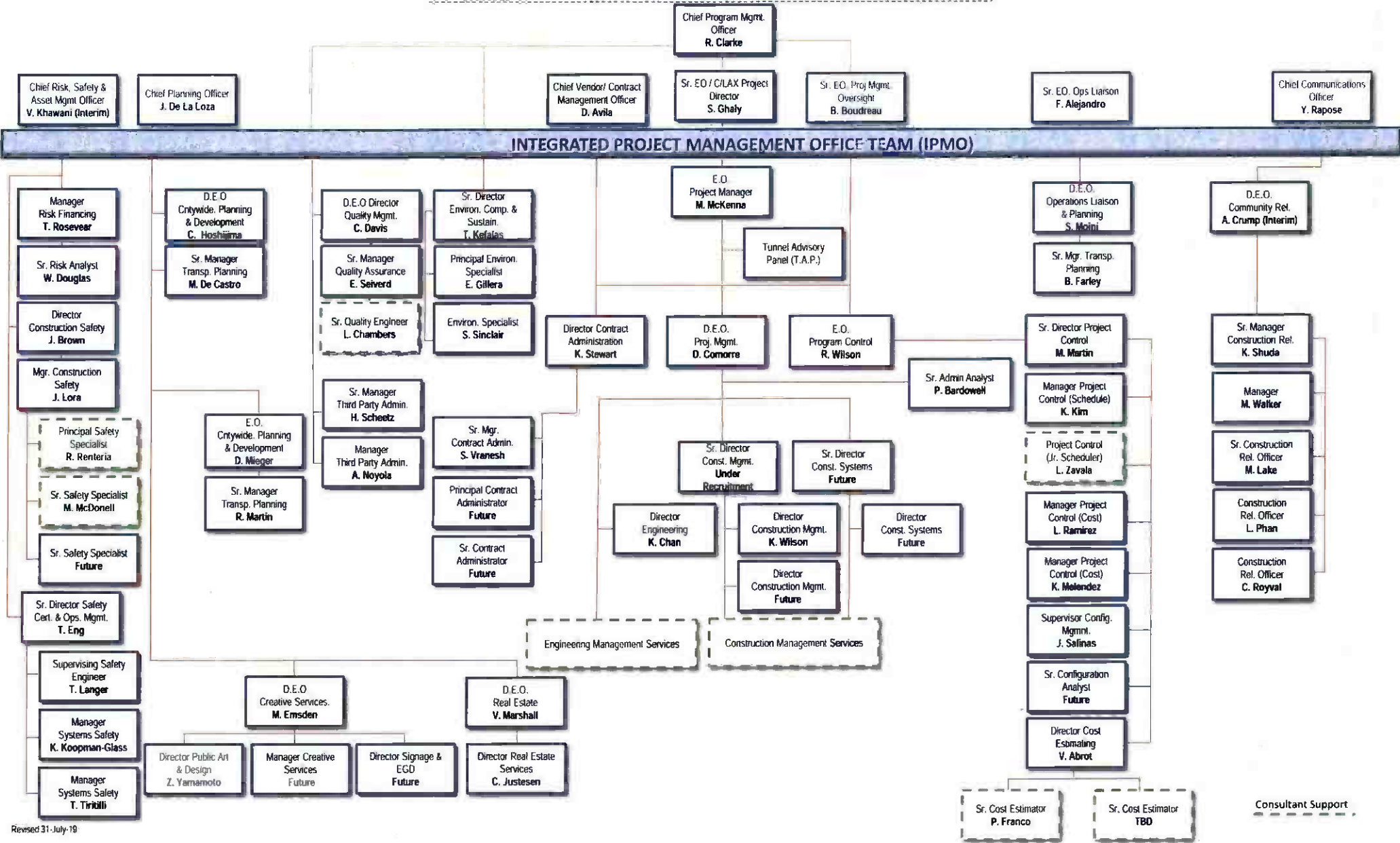


Westside Purple Line Extension Section 1 Responsibility and Reporting Matrix

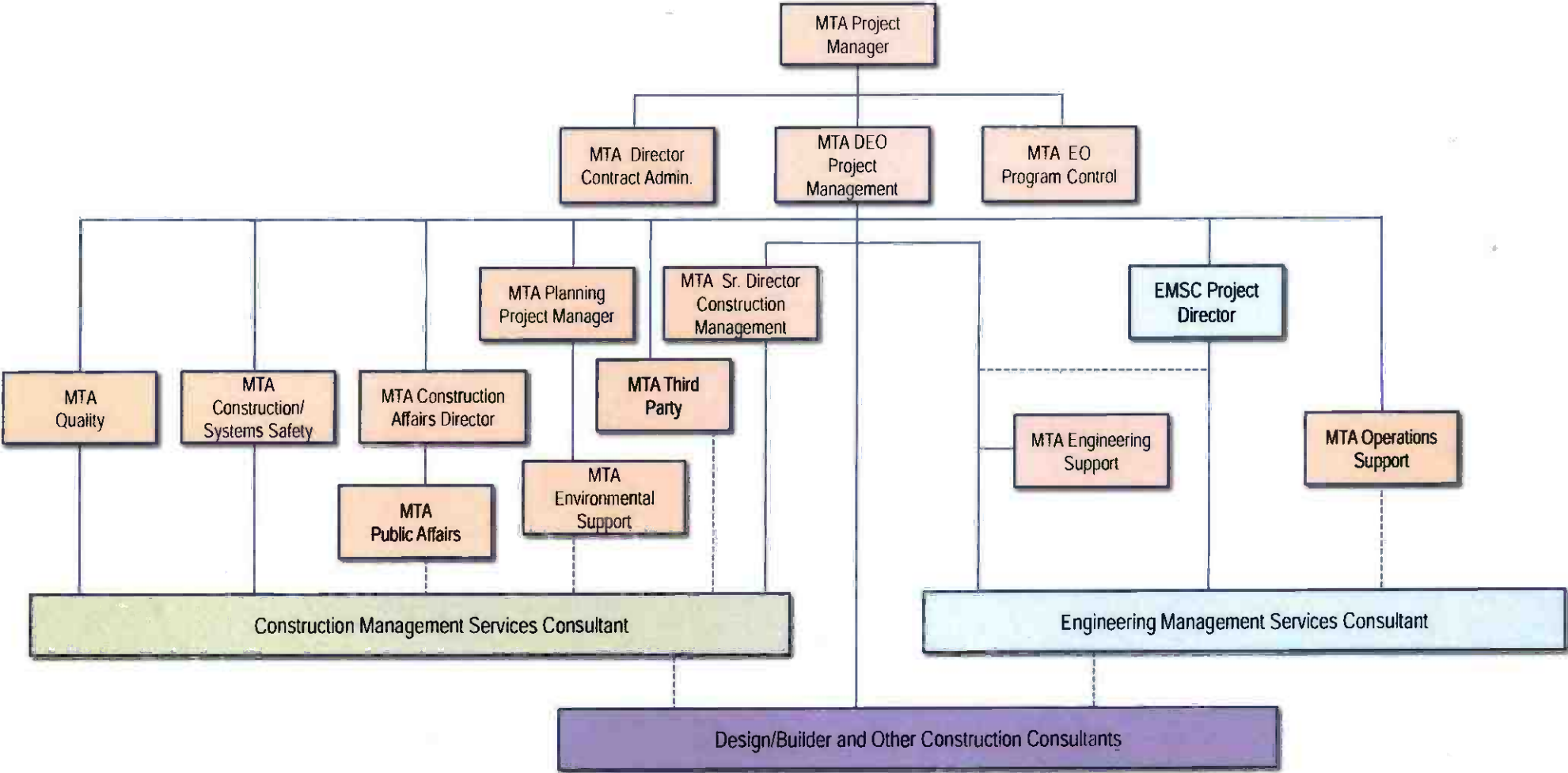


WESTSIDE PURPLE LINE EXTENSION SECTION 2 Matrix Organization

Metro Executive Management Organization and Staff

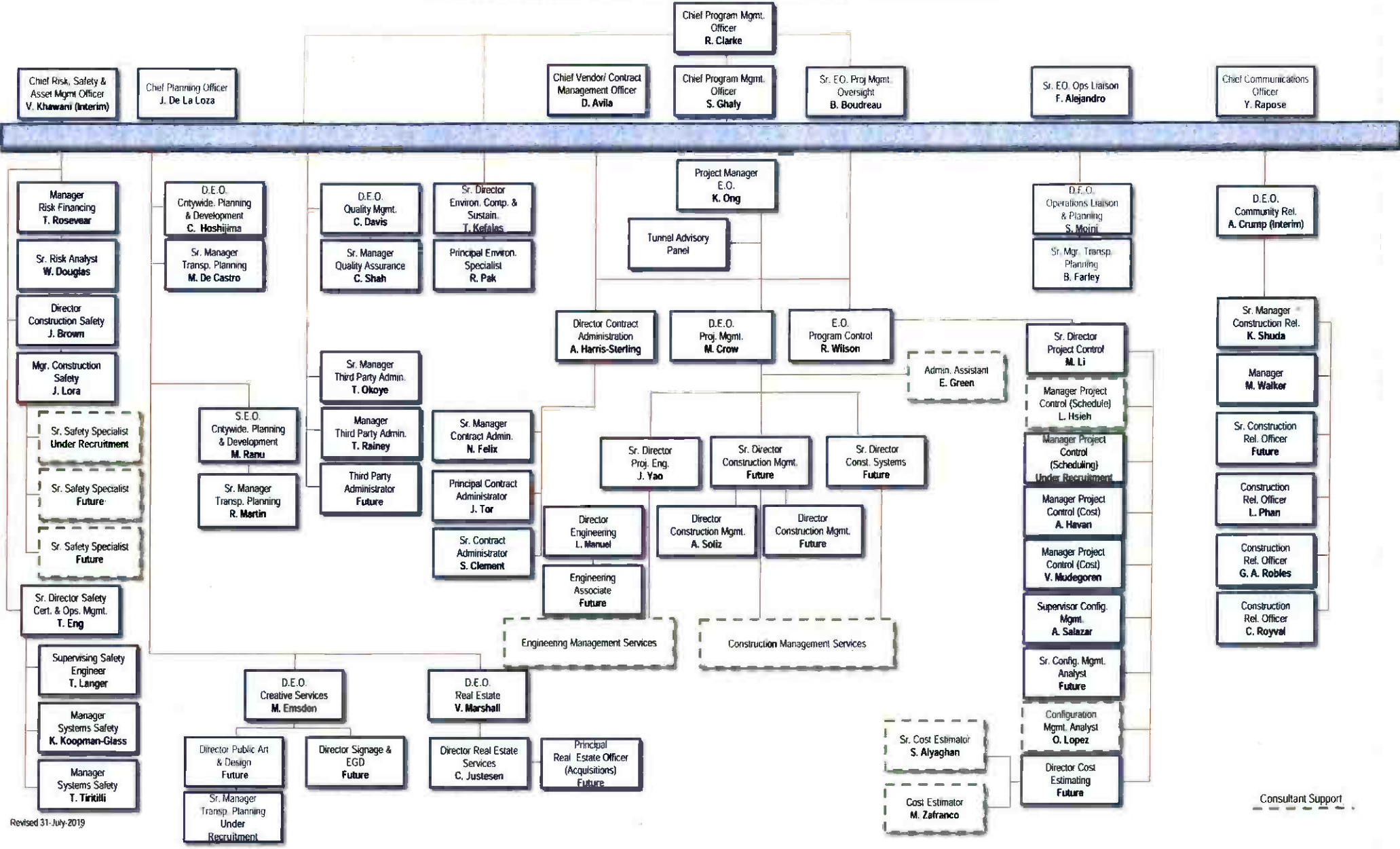


Westside Purple Line Extension Section 2 Responsibility and Reporting Matrix



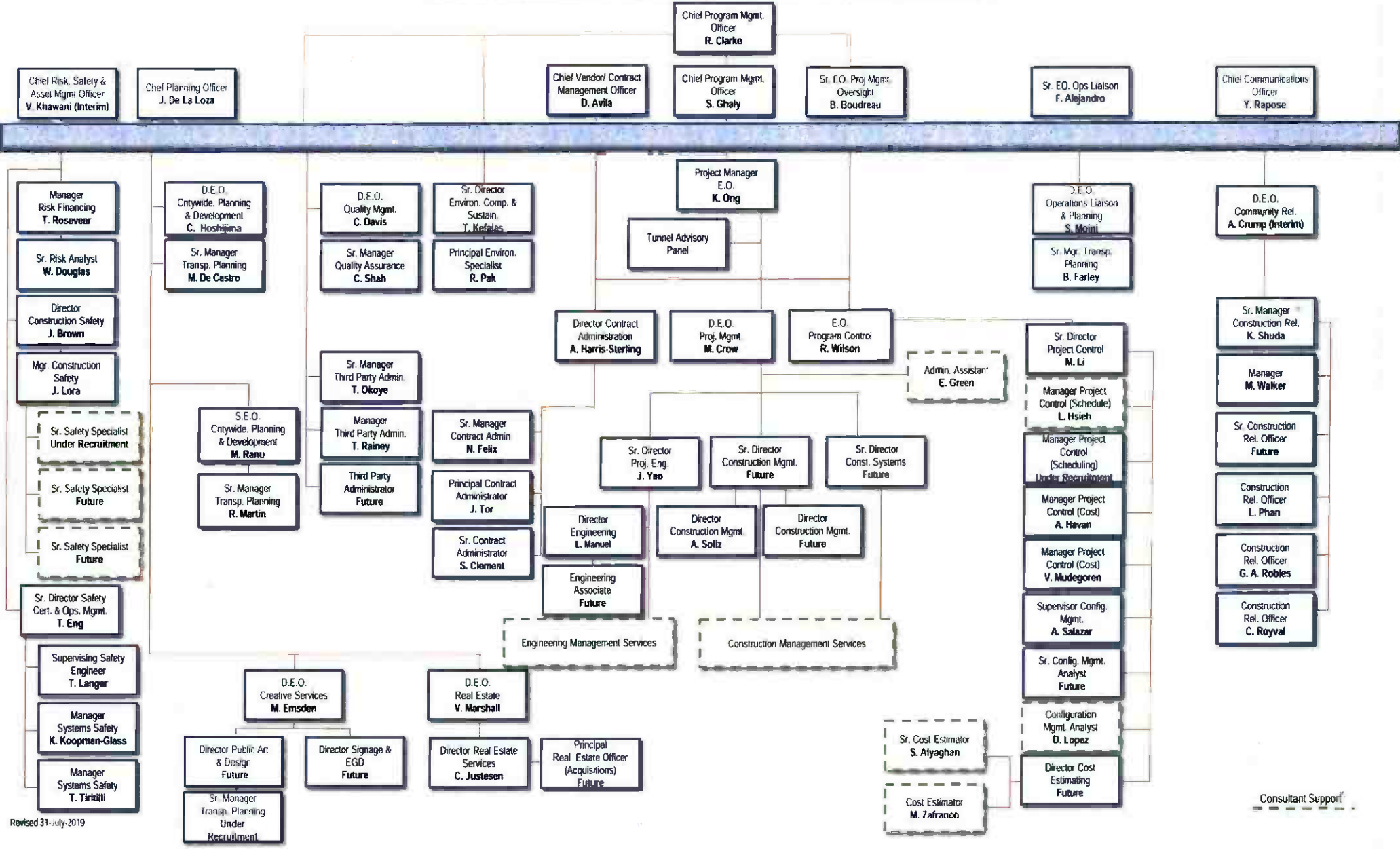
WESTSIDE PURPLE LINE EXTENSION SECTION 3 Matrix Organization

Metro Executive Management Organization and Staff

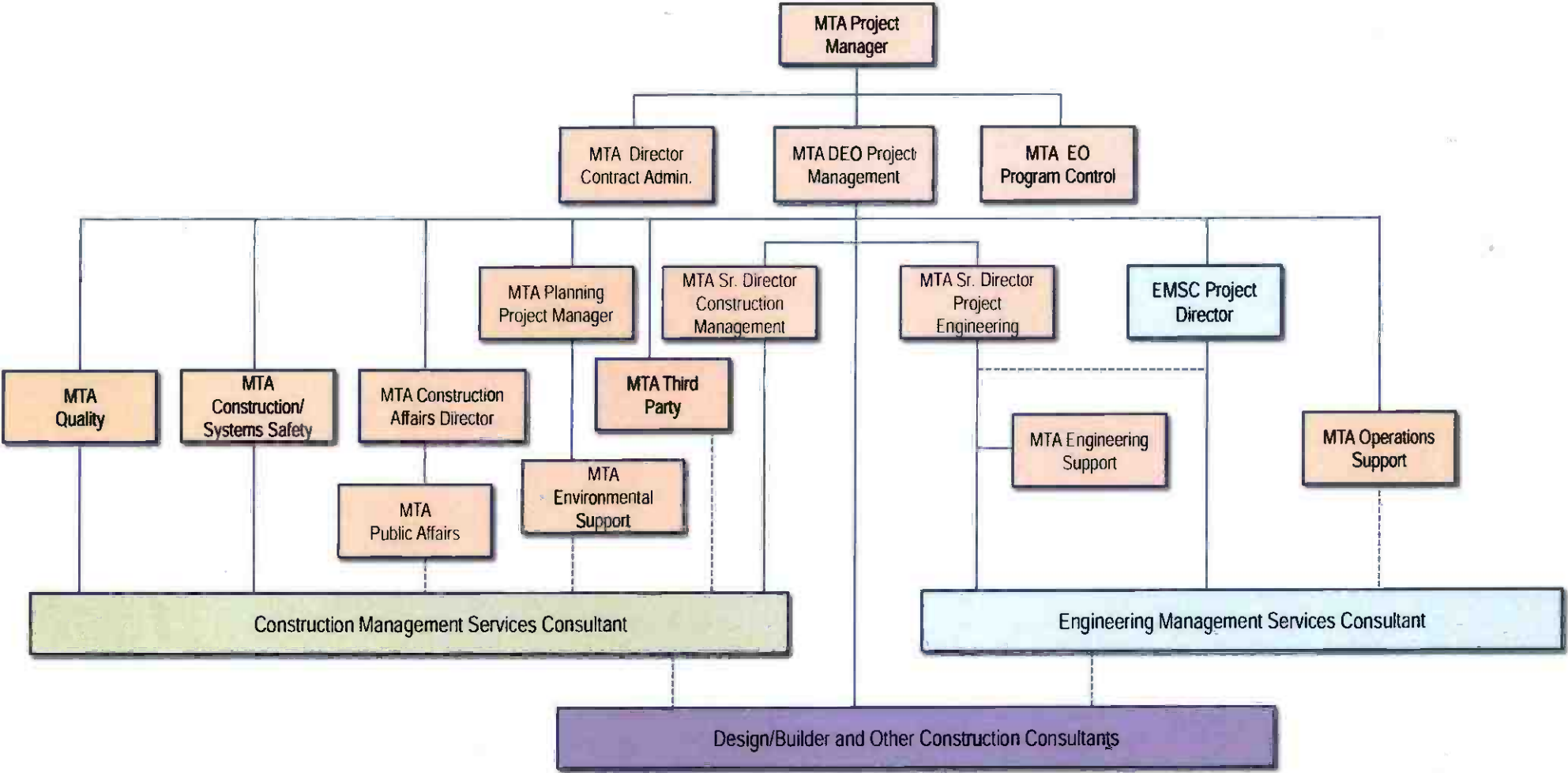


WESTSIDE PURPLE LINE EXTENSION SECTION 3 Matrix Organization

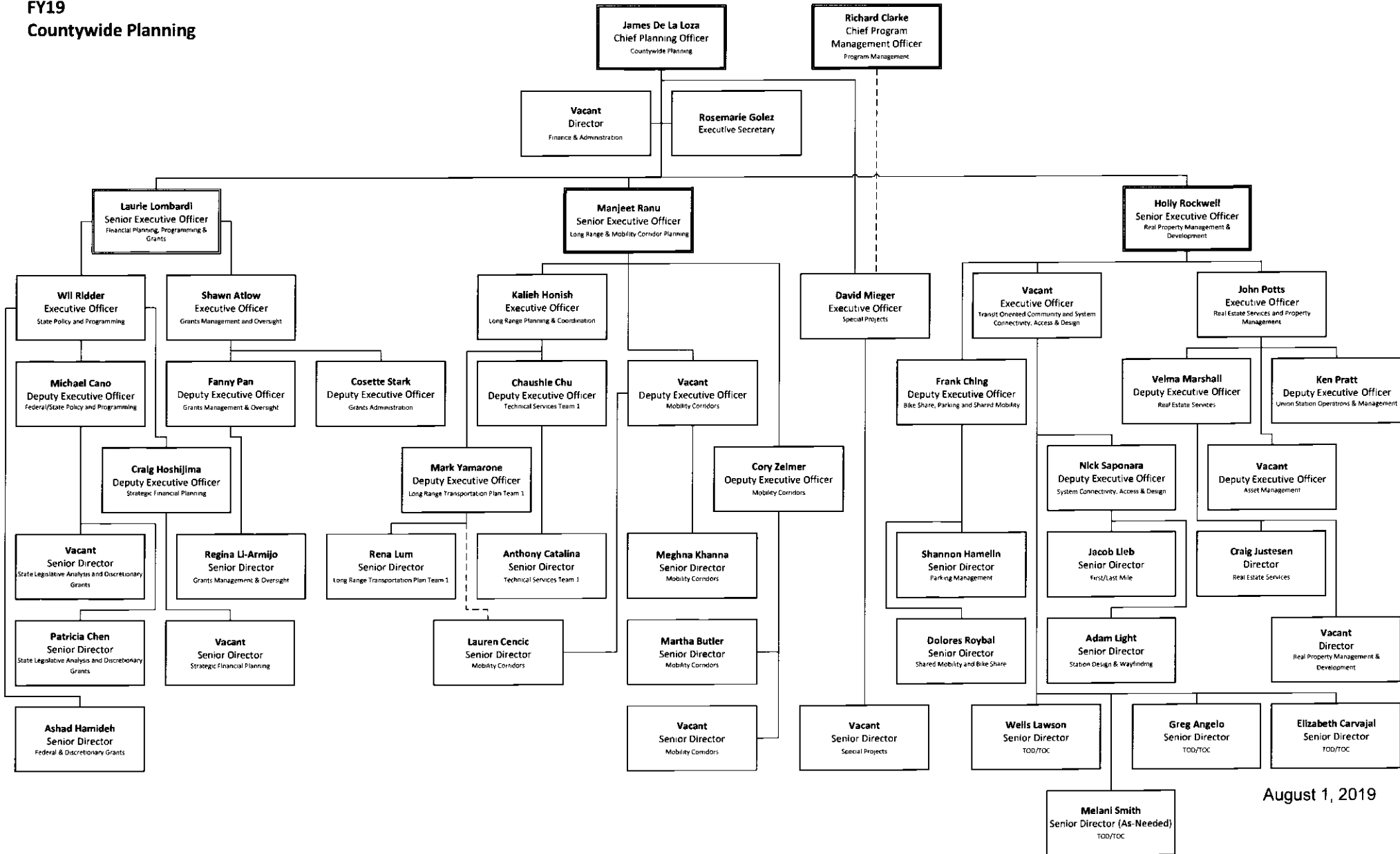
Metro Executive Management Organization and Staff



Westside Purple Line Extension Section 3 Responsibility and Reporting Matrix

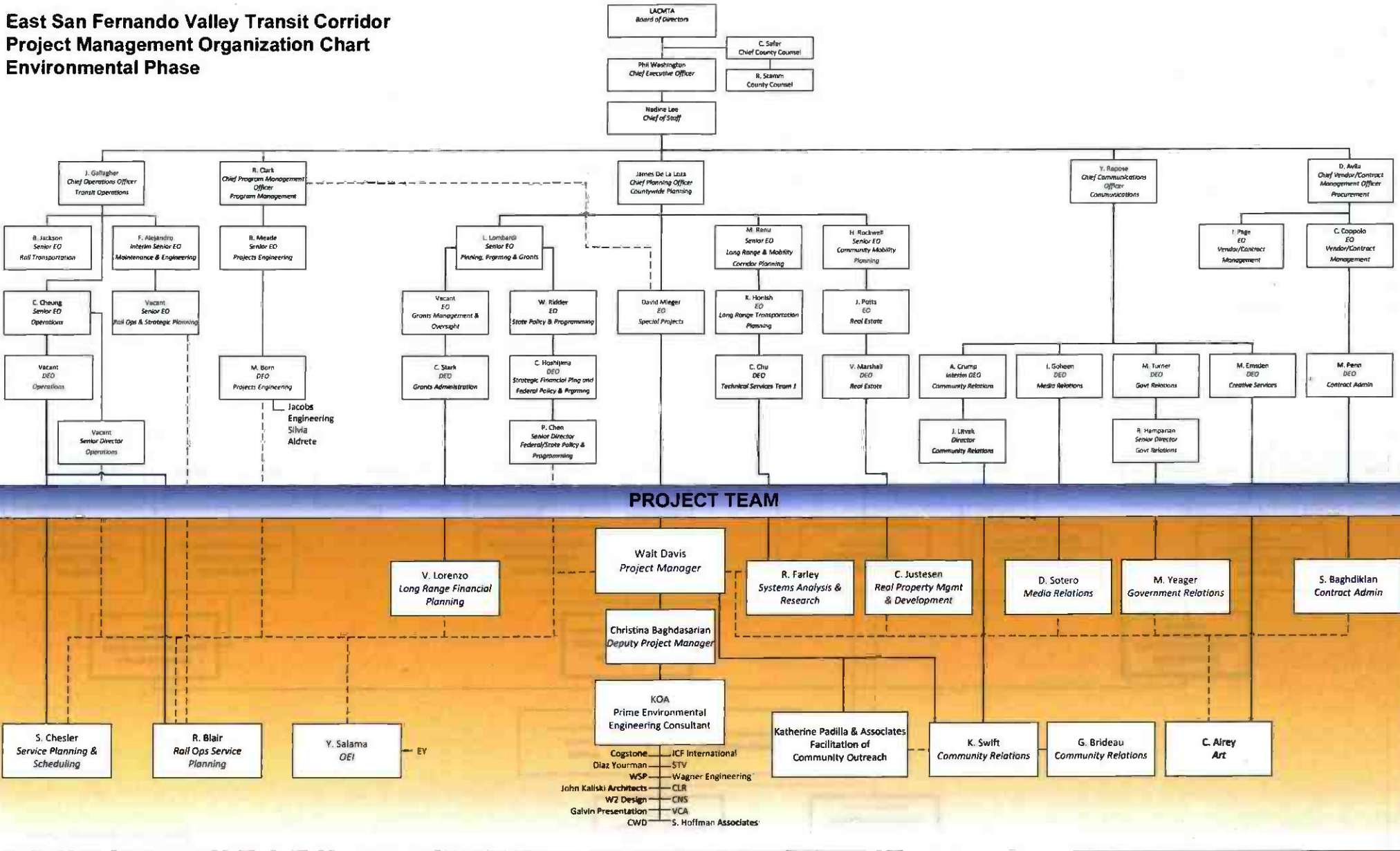


**FY19
Countywide Planning**



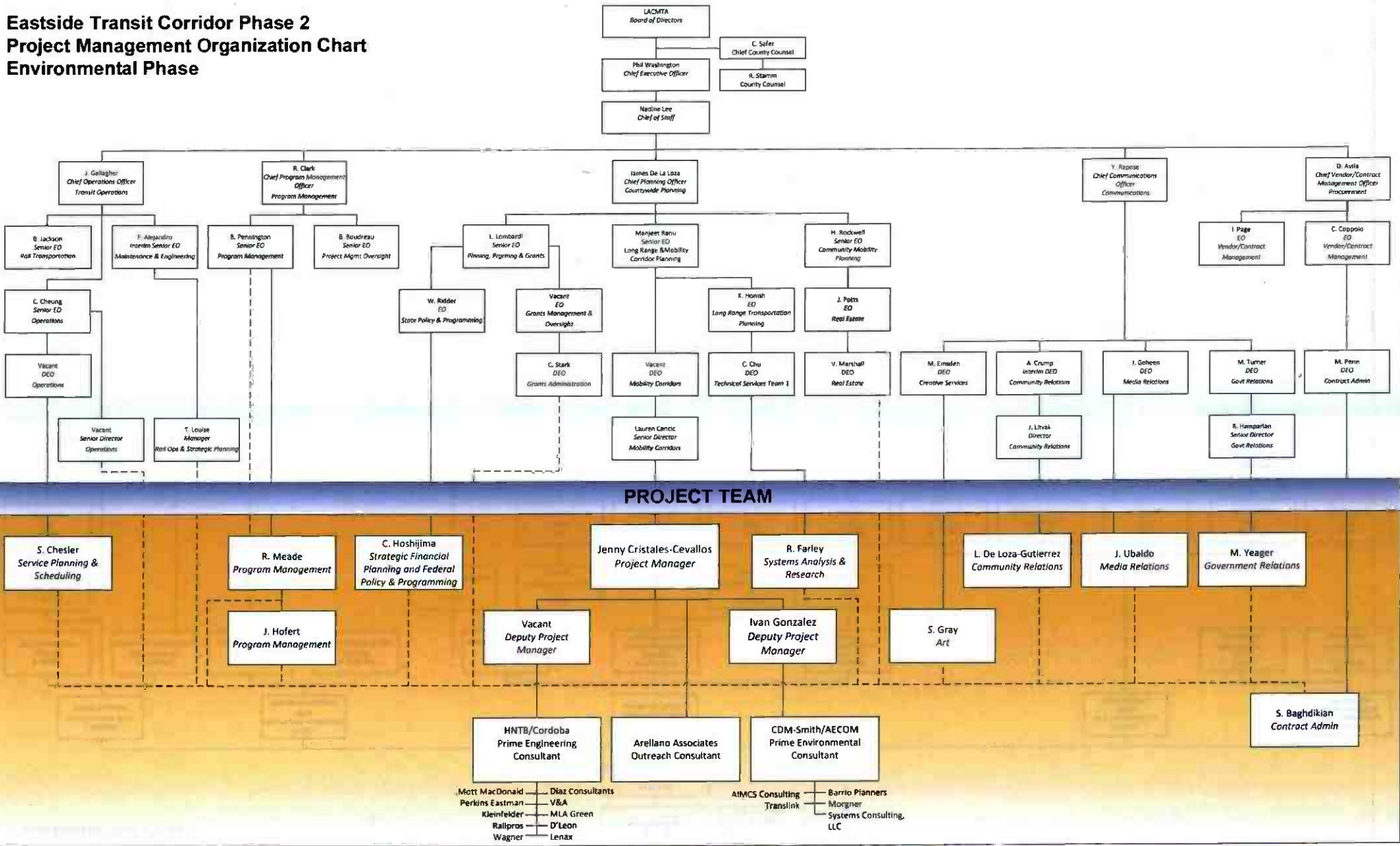
August 1, 2019

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



August 1, 2019

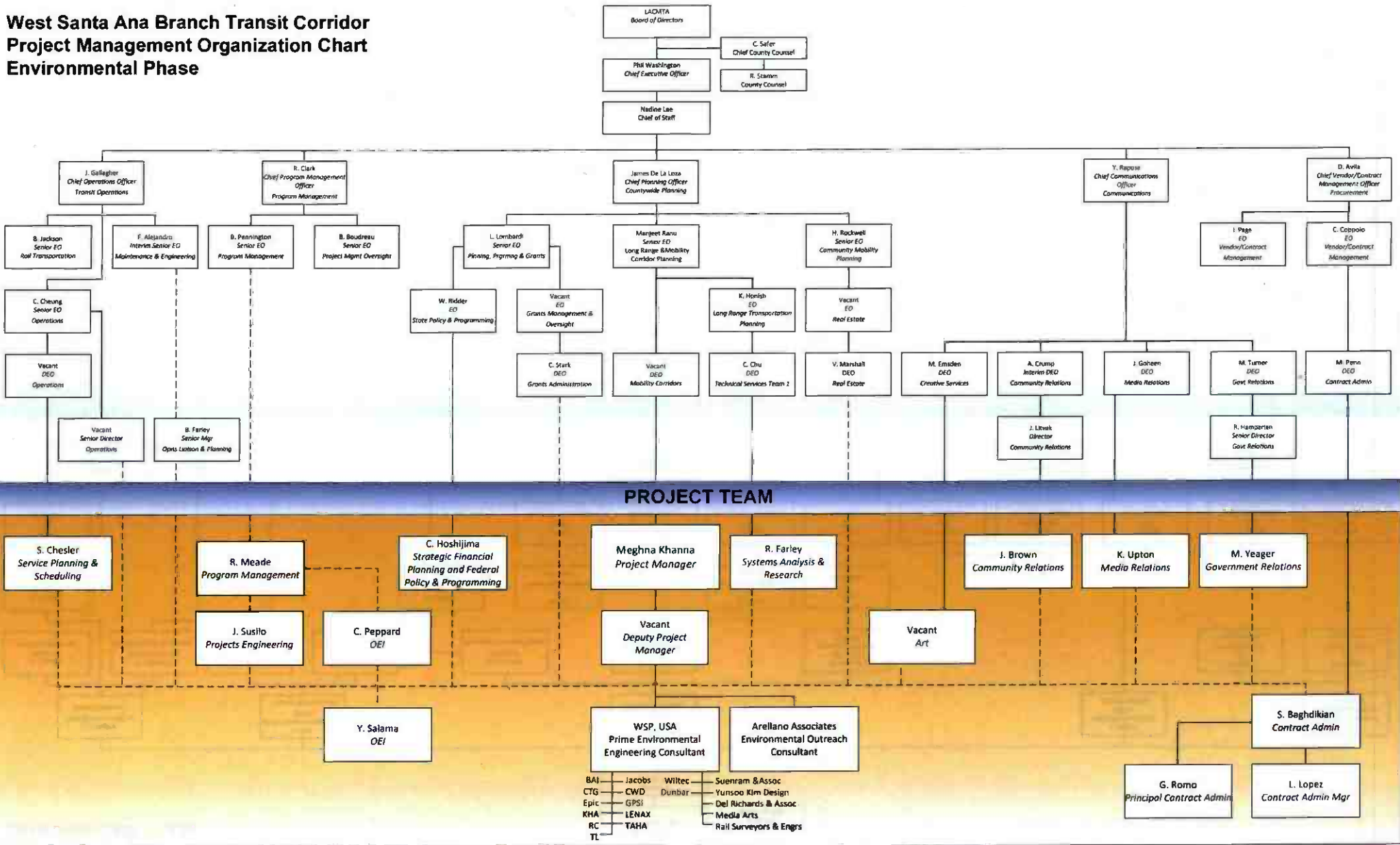
Eastside Transit Corridor Phase 2 Project Management Organization Chart Environmental Phase



August 1, 2019

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

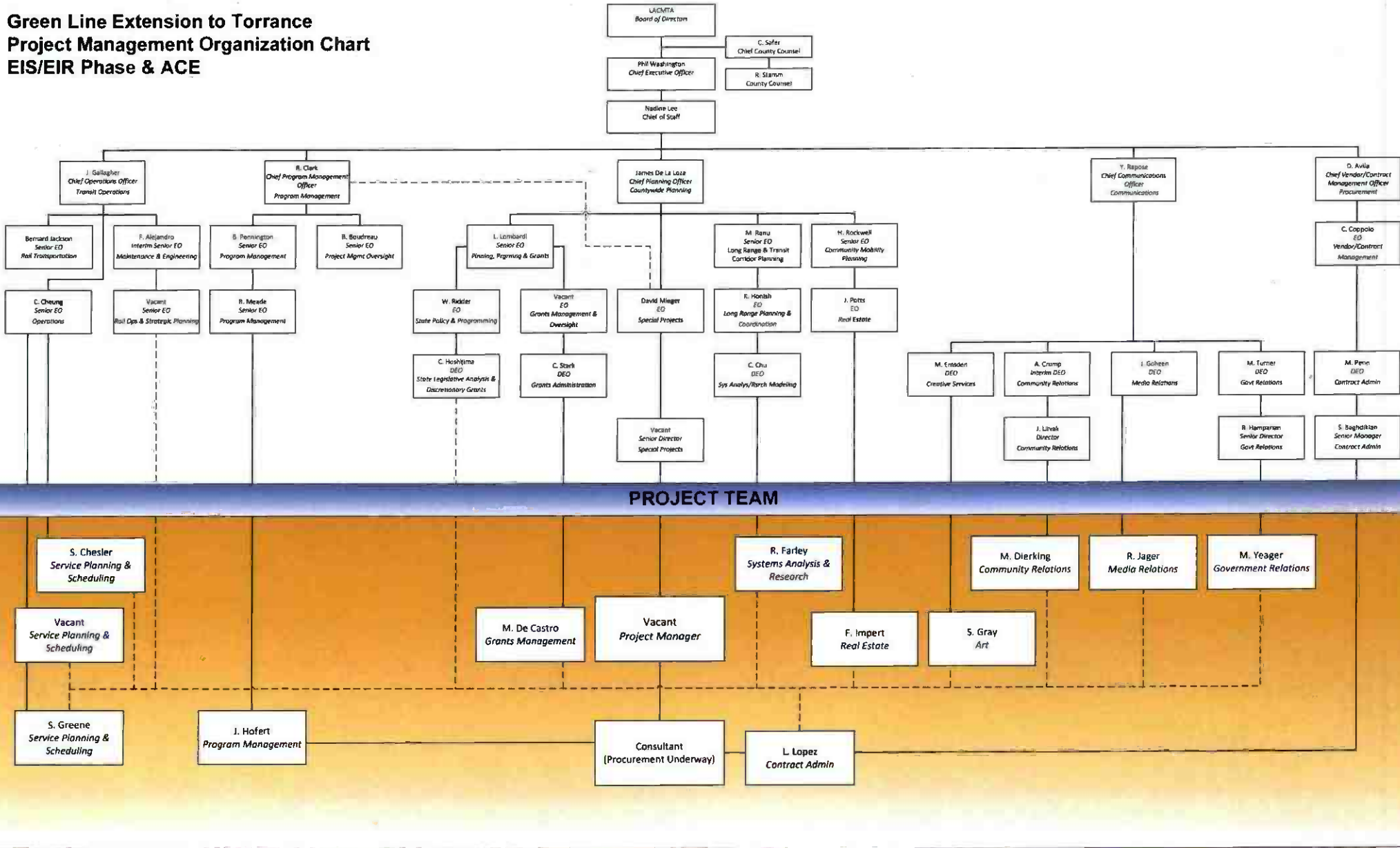
West Santa Ana Branch Transit Corridor Project Management Organization Chart Environmental Phase



August 1, 2019

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

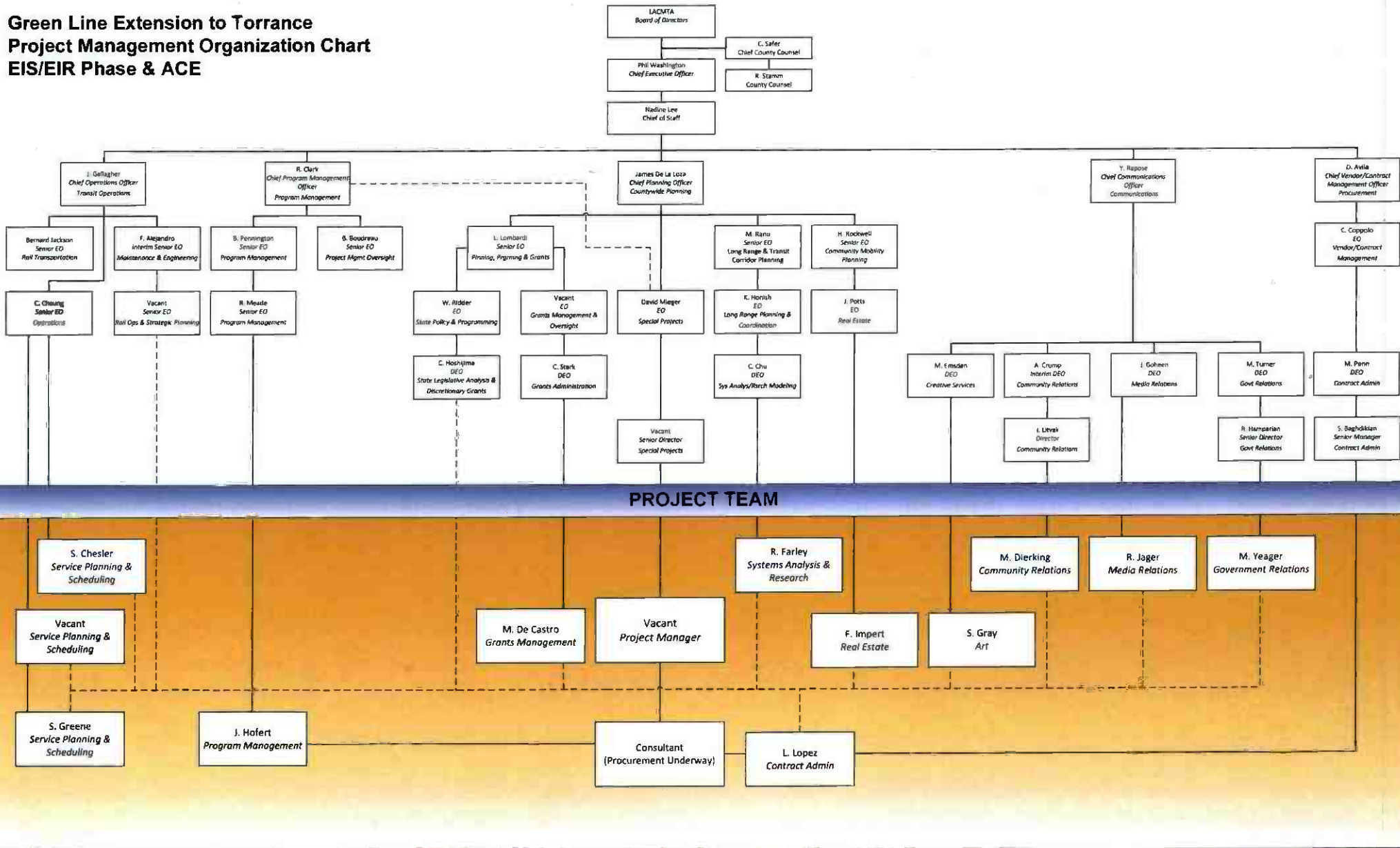
Green Line Extension to Torrance Project Management Organization Chart EIS/EIR Phase & ACE



August 1, 2019

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

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



August 1, 2019

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

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

STATE LEGISLATION

Bill ID/Topic	Location	Summary	Position
<p>AB 29 Holden D</p> <p>State Highway Route 710.</p>	<p>SENATE TRANS. 6/6/2019 - Referred to Com. on TRANS.</p>	<p>(1)Existing law provides that the Department of Transportation has full possession and control of all state highways and associated property. Existing law designates and describes state highway routes, and also describes the state highway routes in the California freeway and expressway system, including all of Route 710 in the County of Los Angeles. Existing law requires the California Transportation Commission to relinquish to local agencies state highway portions that have been deleted from the state highway system by legislative enactment, and authorizes relinquishment in certain other cases.This bill would remove the portion of Route 710 located north of Route 10 from the California freeway and expressway system.This bill contains other related provisions and other existing laws. Last Amended on 5/22/2019</p>	<p>Support</p>
<p>AB 252 Daly D</p> <p>Department of Transportation: environmental review process: federal program.</p>	<p>SENATE THIRD READING 6/25/2019 - Read second time. Ordered to third reading.</p> <p>7/1/2019 #101 SENATE ASSEMBLY BILLS - THIRD READING FILE</p>	<p>Existing law gives the Department of Transportation full possession and control of the state highway system. Existing federal law requires the United States Secretary of Transportation to carry out a surface transportation project delivery program, under which the participating states may assume certain responsibilities for environmental review and clearance of transportation projects that would otherwise be the responsibility of the federal government. Existing law, until January 1, 2020, provides that the State of California consents to the jurisdiction of the federal courts with regard to the compliance, discharge, or enforcement of the responsibilities it assumed as a participant in the program. This bill would extend the operation of these provisions indefinitely.</p>	<p>Support</p>

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

Bill ID/Topic	Location	Summary	Position
<u>AB 752</u> <u>Gabriel D</u> Public transit: transit stations: lactation rooms.	SENATE TRANS. 6/6/2019 - Referred to Com. on TRANS. 7/9/2019 1:30 p.m. - John L. Burton Hearing Room (4203) SENATE TRANSPORTATION, BEALL, Chair	Existing law requires the airport manager of an airport operated by a city, county, city and county, or airport district that conducts commercial operations and that has more than one million enplanements a year, or upon new terminal construction or the replacement, expansion, or renovation of an existing terminal, to provide a room or other location at each airport terminal behind the airport security screening area for members of the public to express breast milk in private. This bill would require a multimodal transit station that meets certain criteria, including that it has an enclosed waiting room of no less than 4,000 square feet, or a transit station that is proposed to serve California's high-speed rail system, that commences operations or a renovation on or after January 1, 2021, to include a lactation room. To the extent the bill imposes additional duties on a local agency, the bill would impose a state-mandated local program. This bill contains other related provisions and other existing laws. Last Amended on 5/17/2019	Work with Author
<u>AB 784</u> <u>Mullin D</u> Sales and use taxes: exemption: California Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project: transit buses.	SENATE APPR. 6/24/2019 - Read second time and amended. Re-referred to Com. on APPR. 7/8/2019 10 a.m. - John L. Burton Hearing Room (4203) SENATE APPROPRIATIONS, PORTANTINO, Chair	Existing state sales and use tax laws impose a tax on retailers measured by the gross receipts from the sale of tangible personal property sold at retail in this state, or on the storage, use, or other consumption in this state of tangible personal property purchased from a retailer for storage, use, or other consumption in this state. The Sales and Use Tax Law provides various exemptions from those taxes. This bill would, until January 1, 2024, provide an exemption from those taxes with respect to the sale of, and the storage and use of, or other consumption in this state of, specified zero-emission technology transit buses sold to specified public agencies. The bill would provide that this exemption does not apply to specified state sales and use taxes from which the proceeds are deposited into the Local Revenue Fund, the Local Revenue Fund 2011, or the Local Public Safety Fund. This bill contains other related provisions and other existing laws. Last Amended on 6/24/2019	Support

Deferred=bill will be brought 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. 8/5/2019
 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
JUNE 2019
Metro Government Relations**

Bill ID/Topic	Location	Summary	Position
<p><u>AB 1112</u> Friedman D</p> <p>Shared mobility devices: local regulation.</p>	<p>5/29/2019-S. TRANS. 6/19/2019-In committee: Hearing postponed by committee. From committee chair, with author's amendments: Amend, and re-refer to committee. Read second time, amended, and re-referred to Com. on TRANS.</p>	<p>Existing law generally regulates the operation of bicycles, electric bicycles, motorized scooters, and electrically motorized boards. Existing law allows local authorities to regulate the registration, parking, and operation of bicycles and motorized scooters in a manner that does not conflict with state law. This bill would define a "shared mobility device" as a bicycle, electric bicycle, motorized scooter, electrically motorized board, or other similar personal transportation device, that is made available to the public for shared use and transportation, as provided. The bill would require shared mobility devices to include a single unique alphanumeric ID. The bill would allow a local authority to require a shared mobility device provider to provide the local authority with deidentified and aggregated trip data and operational data, including as a condition for operating a shared mobility device program. The bill would prohibit the sharing of individual trip data, except as provided by the Electronic Communications Privacy Act. The bill would allow a local authority to enact reasonable regulations on shared mobility devices and providers within its jurisdiction, including, but not limited to, requiring a shared mobility service provider to obtain a permit. The bill would allow a local authority to ban persons from deploying and offering shared mobility devices for hire on its public right of way, subject to the California Environmental Quality Act. This bill contains other related provisions.</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
JUNE 2019
Metro Government Relations**

Bill ID/Topic	Location	Summary	Position
<u>AB 1262</u> <u>O'Donnell D</u> California Sustainable Freight Action Plan.	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 non-vehicular 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

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

Bill ID/Topic	Location	Summary	Position
<p><u>AB 1402</u> <u>Petrie-Norris D</u> Active Transportation Program.</p>	<p>ASSEMBLY 2 YEAR 4/26/2019 - Failed Deadline pursuant to Rule 61(a)(2). (Last location was TRANS. on 3/25/2019)(May be acted upon Jan 2020)</p>	<p>Existing law establishes the Active Transportation Program in the Department of Transportation for the purpose of encouraging increased use of active modes of transportation, such as biking and walking. Existing law requires specified funds for the program to be appropriated to the department in the annual Budget Act and allocated to eligible projects by the California Transportation Commission. Existing law requires the commission to award 50% of available funds to projects statewide, 10% of available funds to projects in small urban and rural regions, and the remaining 40% of available funds to projects by metropolitan planning organizations (MPO), with the funds available for distribution by each MPO based on its relative population. Existing law requires the commission to develop guidelines and procedures, including project selection criteria, for 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</p>	<p>Oppose Unless Amended</p>

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

Bill ID/Topic	Location	Summary	Position
<p>ACA 1 Aguiar-Curry D</p> <p>Local government financing: affordable housing and public infrastructure: voter approval.</p>	<p>ASSEMBLY THIRD READING 5/20/2019 - Read second time. Ordered to third reading.</p> <p>7/1/2019 #28 ASSEMBLY THIRD READING FILE - ASSEMBLY BILLS</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>	Support
<p>SB 7 Portantino D</p> <p>State Highway Route 710: surplus residential and nonresidential property.</p>	<p>ASSEMBLY TRANS. 6/24/2019 - From committee with author's amendments. Read second time and amended. Re-referred to Com. on TRANS.</p> <p>7/1/2019 2:30 p.m. - State Capitol, Room 4202 ASSEMBLY TRANSPORTATION, FRAZIER, Chair</p>	<p>(1)Existing law establishes priorities and procedures that any state agency disposing of that surplus residential property is required to follow. Under existing law, specified single-family residences must first be offered to their former owners or present occupants, as specified. Existing law also provides that tenants in good standing of nonresidential properties are given priority to purchase, at fair market value, the property they rent, lease, or otherwise legally occupy. This bill would require, for surplus nonresidential properties located within the State Route 710 corridor in the County of Los Angeles, that purchases of those properties by tenants in good standing be offered at fair market value as determined relative to the current use of the property if the tenant is a nonprofit organization or a city. This bill contains other related provisions and other existing laws. Last Amended on 6/24/2019</p>	Support

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

Bill ID/Topic	Location	Summary	Position
<p>SB 43 Allen D Carbon taxes.</p>	<p>ASSEMBLY REV. & TAX 6/25/2019 - From committee: Do pass and re-refer to Com. on REV. & TAX. (Ayes 8. Noes 3.) (June 24). Re-referred to Com. on REV. & TAX.</p> <p>7/8/2019 2:30 p.m. - State Capitol, Room 126 ASSEMBLY REVENUE AND TAXATION, BURKE, Chair</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 6/17/2019</p>	<p>Work with Author</p>

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Los Angeles County Metropolitan Transportation Authority (Metro) State and Federal Legislative Matrix – Board Approved Positions

JUNE 2019

Metro Government Relations

Bill ID/Topic	Location	Summary	Position
<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 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</p>	<p>Oppose Unless Amended</p>

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

Bill ID/Topic	Location	Summary	Position
<u>SB 664</u> <u>Allen D</u> Electronic toll and transit fare collection systems.	ASSEMBLY TRANS. 6/17/2019 - From committee: Be re-referred to Coms. on TRANS. and P. & C.P. (Ayes 11. Noes 0.) (June 17). Re-referred to Com. on TRANS. 7/1/2019 2:30 p.m. - State Capitol, Room 4202 ASSEMBLY TRANSPORTATION, FRAZIER, Chair 7/9/2019 1:30 p.m. - State Capitol, Room 126 ASSEMBLY PRIVACY AND CONSUMER PROTECTION, CHAU, Chair	(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, as specified, and generally requires any automatic vehicle identification system purchased or installed after January 1, 1991, to comply with those specifications and standards. This bill would authorize a toll facility to require a vehicle owner or user of a toll facility to purchase, use, or install a second device to take advantage of a toll discount. The bill would require that changes made to these provisions on or after January 1, 2019, apply retroactively to January 1, 2011.(2)Existing law prohibits a transportation agency from selling or providing to any other person or entity personally identifiable information, as defined, of a person who subscribes to an electronic toll or electronic transit fare collection system or who uses a toll facility that employs an electronic toll collection system, except as specified. Existing law, with certain exceptions, requires a transportation agency to discard personally identifiable information within 4½ years, as specified. Under existing law, the requirement that the transportation agency discard personally identifiable information, as described above, does not prohibit a transportation agency or its designee from performing financial and accounting functions such as billing, account settlement, enforcement, or other financial activities required to operate and manage the electronic toll collection system or electronic transit fare collection system .This bill would instead provide that a transportation agency is not prohibited from using or providing personally identifiable information to any other person or entity for the sole purpose of operating and managing an electronic toll collection or electronic transit fare collection system including, among other things, performing collection, account maintenance, account settlement, and enforcement activities. The bill would prohibit, on or after January	Support

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Metro Government Relations**

Bill ID/Topic	Location	Summary	Position
		<p>1, 2020, a transportation agency from using or providing personally identifiable information for purposes of issuing public safety and travel alerts, or customer surveys, unless the transportation agency has received affirmative consent to do so. Existing law defines "transportation agency" for these purposes as the Department of Transportation, the Bay Area Toll Authority, any entity operating a toll bridge, toll lane, or toll highway within the state, any entity administering an electronic transit fare collection system and any transit operator participating in that system, or any entity under contract with those entities. This bill would expand the definition of "transportation agency" to also include any entity under contract at any level, including subcontractors, with those entities for purposes of billing, account settlement, enforcement, communications, or other activities related to the operation or management of an electronic toll collection system or electronic fare collection system. The bill would make a contractor or subcontractor that uses personally identifiable information for a purpose other than as identified by the toll or transit authority solely liable for damages for that misuse. Existing law authorizes a person whose personally identifiable information has been knowingly sold or otherwise provided in violation of these provisions to bring an action to recover actual damages, \$2,500 per violation, or \$4,000 per violation if the information has been knowingly sold or otherwise provided 3 or more times, whichever is greater, reasonable costs, and attorney's fees. The bill would limit the damages a person could recover, as described above, to actual damages, not more than \$2,500 per violation, or not more than \$4,000 per violation if the information has been knowingly sold or otherwise provided 3 or more times, whichever is less, reasonable costs, and attorney's fees. The bill would provide, in the case of a repeat toll violator from whom the transportation agency has attempted to recover tolls or penalties, that a damage payment to the repeat toll violator shall not exceed \$4,000, regardless of the number of violations. This</p>	

Deferred=bill will be brought 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. 8/5/2019

Bills highlighted in [redacted] 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
JUNE 2019
Metro Government Relations**

Bill ID/Topic	Location	Summary	Position
		<p>bill would require that changes made to the provisions described in this paragraph (2) on or after January 1, 2019, apply retroactively to January 1, 2011, for transportation agencies that employ electronic toll collection systems, and retroactively to January 1, 2014, for transportation agencies that employ electronic transit fare collection systems.(3) Existing law prohibits a person from evading or attempting to evade the payment of tolls or other charges on any vehicular crossing or toll highway and subjects a violator to civil penalties governed by a civil administrative procedure that includes an administrative investigation and review procedure, and an administrative and judicial appeal process. This bill would deem a person to be evading or attempting to evade the payment of tolls or other charges on any vehicular crossing or toll highway, as specified. The bill would also provide that a notice of toll evasion issued, as specified, would subject the registered owner to civil penalties. This bill would require that changes made to these provisions on or after January 1, 2019, apply retroactively to January 1, 2011.(4)Existing law requires that a notice of a toll evasion violation set forth specified information, including, among other things, if applicable, if a vehicle is found, by automated devices, to have evaded the toll through failure to meet occupancy requirements in a high-occupancy toll lane, a copy of photographic evidence on which the determination was based. Existing law requires the processing agency to prepare and forward a notice of toll evasion violation to the registered owner of the vehicle cited for the violation, as specified. Existing law requires the processing agency to use its best efforts to obtain accurate information concerning the identity and address of the registered owner for the purpose of forwarding a notice of toll evasion violation. This bill would delete the requirement that the toll evasion, if applicable, failed to meet occupancy requirements in a high-occupancy toll lane and would authorize the notice of a toll evasion violation for failure to meet occupancy requirements to include other</p>	

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Bills highlighted in [redacted] 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
JUNE 2019
Metro Government Relations**

Bill ID/Topic	Location	Summary	Position
		<p>evidence on which the notice of the toll evasion determination was based. The bill would also provide that forwarding the notice to the address provided by a state department of motor vehicles or any agency that functions in that role, constitutes prima facie evidence of adequate delivery of notice for all purposes. This bill would authorize the processing agency to use any reliable source to obtain the registered owner's information and would provide that using the address provided by a state department of motor vehicles or any agency that functions in that role, constitutes prima facie evidence of best efforts.(5)This bill would provide that its provisions are declaratory of existing law. Last Amended on 6/10/2019</p>	

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 Note: "Location" will provide most recent action on the legislation and current position in the legislative process. 8/5/2019
Bills highlighted in [redacted] 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
JUNE 2019
Metro Government Relations**

FEDERAL

BILL/AUTHOR	DESCRIPTION	STATUS
<p>H.R. 2164</p> <p>Representative Julia Brownley (CA)</p>	<p>The Green Bus Act of 2019</p> <p>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.</p>	<p>5/23/19 – Metro Board approved Support position</p> <p>House – Bill referred to the Committee of Transportation and Infrastructure.</p>
<p>H.R. 1139</p> <p>U.S. Representative Grace Napolitano (D-El Monte)</p>	<p>THE BUS OPERATOR AND PEDESTRIAN ACT</p> <p>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).</p> <p>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:</p> <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 <p>This legislation will also require transit agencies to report all assaults on bus drivers to the USDOT’s National Transit Database (NTD).</p>	<p>5/23/19 – Metro Board approves Support position</p> <p>House - Referred to the Subcommittee on Highways and Transit</p>

Deferred=bill will be brought 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. 8/5/2019
 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
JUNE 2019
Metro Government Relations**

<p>H.R. 1507</p> <p>Congressman Early Blumenauer (D-OR)</p>	<p>The Bicycle Commute Act of 2019</p> <p>This bill would modify the IRS code to include bicycle commuting as a part of employer provided fringe benefits related to transportation.</p>	<p>5/23/19 – Metro Board approved Support position.</p>
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 Note: "Location" will provide most recent action on the legislation and current position in the legislative process. 8/5/2019
Bills highlighted in [shaded box] have been submitted in the current month for Board consideration.



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MARY C. WICKHAM
County Counsel

July 16, 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

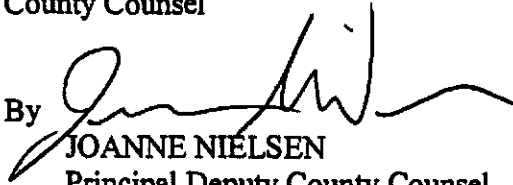
Dear Ms. Fox:

Attached please find the Los Angeles County Metropolitan Transportation Authority's quarterly update as of June 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:rw
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 June 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 mediation on 7/16/19 if case does not settle.
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 has been inactive.
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 9/30/19.
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.
Transport Technologies v. MTA	2:15-cv-6423-RSWL-MRW		This is a patent infringement lawsuit. Plaintiff alleges that MTA infringed upon its patent relating to wireless reader technology in connection with MTA's ExpressLanes Project. MTA's contract with the ExpressLanes Project general contractor Atkinson requires Atkinson to defend and indemnify MTA in any Intellectual Property claims.	The District court dismissed the entire case against LACMTA. The entire case is now closed and completed.

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

Period: April 1, 2019 - June 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 with developers Trammell Crow Company ("TCLA"). Metro has since been working with TCLA as the project moves forward in its design phases to further shape the retail, residential, and transportation improvements coming to the station area.

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. The developer intends to submit an entitlements/CEQA package to the City of Los Angeles for their review and approval in Fall 2019. 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. If competing proposals are received the evaluation committee will conduct a review. If no proposals are received, the evaluation committee may recommend to the Metro Board to consider entering into an Exclusive Negotiation Agreement and Planning Document (ENA) with the 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 2017, Metro released a Request for Proposals for joint development of these parcels. On June 29, 2017, Metro received two proposals and completed a thorough evaluation. In January 2018, the Metro Board of Directors authorized entering into an 18-month Exclusive Negotiation Agreement and Planning Document (ENA) with one of the proposers, East Los Angeles Community Corporation ("ELACC"), the highest scoring firm. ELACC's proposal consists of a 60-unit affordable rental development 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; and a 2,035 square foot Mariachi Cultural Center. Since the ENA was executed in March 2018, ELACC, with Metro staff support, has engaged with the community regarding the project and further refined the project scope. In May 2019, ELACC submitted revised conceptual plans for the project which are currently under review. Next steps will be for ELACC to seek entitlements from the City of Los Angeles, and negotiate a term sheet with Metro leading to a Joint Development Agreement and Ground Lease.

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

This 0.14-acre vacant lot, situated across Bailey Street from the Mariachi Plaza Station site, was included in the Request for Proposals for joint development of Mariachi Plaza released in March 2017. (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) – NO CHANGE

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. Under the framework of this agreement, and a prior Short Term Exclusive 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 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, the Peabody/Werden Historic Home, which is currently being stored on the 0.29-acre site under a license granted by Metro, is being considered for community space and other community serving uses as part of the proposed development.

In August 2018, the 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. Bridge/ELACC anticipates receiving project entitlements, including a review of its environmental impact under the California Environmental Quality Act, before the end of the year.

The next steps for the project 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.

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, transit-oriented development on this site. This agreement was recently amended to extend its term through June 2021 pursuant to Metro Board authority received in May 2019. The proposed development will contain 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.

In March 2016, the City of Los Angeles Planning Department recommended approval of the project's entitlements and clearance of the project under CEQA via a Mitigated Negative Declaration. A month later, however, the adjacent property owner appealed the City Planning Department's recommendation and the project was placed on hold. In March 2018, it looked as though the project would be able to move forward when the City Council approved the project's entitlements and the Mitigated Negative Declaration, but in April 2018, the adjacent property owner filed suit against the City with respect to its CEQA analysis, which again placed the project on hold pending resolution of the lawsuit. The lawsuit, was resolved at trial in the developer's favor in May 2019, but is pending a possible appeal.

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 November 2017, the Metro Board approved the CEQA clearance for the project, and authorized the execution of a Joint Development Agreement and Ground Lease with Abode Communities (“**Abode**”) pursuant to certain specified key terms and conditions. In January 2018, Metro and Abode executed a Joint Development Agreement consistent with the Metro Board-approved key terms and conditions. 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.

The project is scoped to contain 77 apartments for families earning between 30% and 50% of the area median income. The project will also include 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 2017, Metro released a Request for Proposals for joint development of this site. In June 2017, Metro received 5 proposals and conducted a thorough evaluation of these proposals in fall 2017. In January 2018, the Metro Board of Directors authorized entering into an 18-month Exclusive Negotiation Agreement and Planning Document with one of the proposers, Abode, who had the highest scoring proposal.

During the 18-month term of the Exclusive Negotiation Agreement and Planning Document, Abode, with Metro staff support, will outreach to the community regarding the project, further refine the project scope, seek entitlements and negotiate a term sheet leading to a Joint Development Agreement and Ground Lease.

The project is scoped to contain 60 affordable apartments for families earning between 30% and 50% of the area median income, The project also contemplates a 25,000 square feet for a community serving grocery store and a 6,500 square foot community park.

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

JUNE 2019



Metro

METRO RAIL PERFORMANCE – JUNE 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 2016	FY 2017	FY 2018	FY 2019 Target	FY 2019 YTD	FYTD Status	Apr Month	May Month	Jun Month
Systemwide									
On-Time Pullouts	98.63%	98.61%	98.68%	99.80%	99.72%	●	98.60%	98.41%	99.76%
Mean Miles Between Chargeable Mechanical Failures ³	30,482	29,711	31,146	37,615	39,034	●	42,423	38,790	38,984
In-Service On-time Performance	98.10%	98.24%	98.48%	99.10%	98.81%	●	98.31%	98.86%	98.98%
Service Delivery Ratio	99.22%	99.23%	99.22%	99.70%	99.56%	●	99.64%	99.73%	99.78%
Traffic Accidents Per 100,000 Train Miles	1.17	1.01	0.98	0.85	0.88	●	1.07	0.90	0.63
CPUC Reportable Accidents per 100,000 Train Miles	0.80	0.36	0.54	0.37	0.29	●	0.46	0.45	0.18
Passenger Accidents per 100,000 Boardings	0.016	0.023	0.022	0.010	0.014	●	0.000	0.049	0.000
Complaints per 100,000 Boardings	1.43	1.98	1.81	1.10	1.82	●	2.00	1.50	1.54
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours ^{1,2}	10.97	12.27	11.17	10.05	11.43	●	12.90	15.67	5.82
Lost Work Days per 200,000 Exposure Hours ^{1,2}	482	733	886	821.44	797	●	724	826	-
OSHA Injuries per 200,000 Exposure Hours ^{1,2}	6.32	8.53	7.81	6.43	7.69	●	10.14	7.37	-
Wayside Maintenance & Engineering									
Past-Due Preventive Maintenance - Aging of Outstanding Work Orders	0	3	3	N/A	176	N/A	16	23	69
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	4.77	5.35	5.02	5.40	5.31	●	3.35	3.44	0.00
Lost Work Days per 200,000 Exposure Hours ¹	148	194	312	298	210	●	104	-	0
OSHA Injuries per 200,000 Exposure Hours ¹	4.40	4.01	4.01	4.13	4.18	●	0.00	3.44	0
Blue Line (due to Blue Line construction, all Blue Line trips are pulling out of the Expo Line)									
On-Time Pullouts	99.59%	99.60%	99.39%	99.50%	99.46%	●	0.00%	-100.00%	99.44%
Mean Miles Between Chargeable Mechanical Failures ³	19,240	15,405	13,772	16,555	22,391	●	149,575	154,696	85,685
In-Service On-time Performance	96.10%	96.44%	97.11%	98.80%	96.13%	●	95.70%	99.38%	99.80%
Service Delivery Ratio	98.41%	98.54%	98.42%	99.40%	99.31%	●	99.53%	99.51%	99.79%
Traffic Accidents Per 100,000 Train Miles	2.38	2.18	1.83	1.84	1.05	●	3.92	1.90	3.43
CPUC Reportable Accidents per 100,000 Train Miles	1.39	0.71	1.03	0.40	0.38	●	1.96	0.00	1.72
Passenger Accidents per 100,000 Boardings	0.016	0.046	0.033	0.010	0.013	●	0.000	0.000	0.000
Complaints per 100,000 Boardings	1.33	1.67	2.22	1.40	1.73	●	1.59	0.49	3.97
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours ^{1,2}	15.08	16.74	13.95	11.90	14.22	●	17.07	5.58	6.06
Lost Work Days per 200,000 Exposure Hours ¹	797	836	1,016	953	687	●	459	469	-
OSHA Injuries per 200,000 Exposure Hours ¹	6.79	10.40	8.10	5.93	5.95	●	5.69	0.00	-

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 2016	FY 2017	FY 2018	FY 2019 Target	FY 2019 YTD	FYTD Status	Apr Month	May Month	Jun Month
Red Line									
On-Time Pullouts	99.79%	99.95%	99.88%	100.00%	99.85%	●	99.60%	100.00%	100.00%
Mean Miles Between Chargeable Mechanical Failures ³	94,312	104,637	68,407	94,035	58,255	●	48,411	40,739	49,128
In-Service On-time Performance	99.45%	99.39%	99.33%	99.70%	99.41%	●	99.36%	99.41%	99.23%
Service Delivery Ratio	99.71%	99.72%	99.65%	100.00%	99.73%	●	99.87%	99.84%	99.81%
Traffic Accidents Per 100,000 Train Miles	0.75	0.57	0.64	0.57	0.57	●	0.00	0.83	0.87
CPUC Reportable Accidents per 100,000 Train Miles	0.07	0.14	0.21	0.21	0.28	●	0.00	0.83	0.00
Passenger Accidents per 100,000 Boardings	0.002	0.004	0.000	0.000	0.002	●	0.000	0.000	0.000
Complaints per 100,000 Boardings	0.57	1.19	1.16	0.55	1.34	●	1.54	0.81	1.04
New Workers' Compensation Indemnity Claims per	16.43	12.68	11.80	10.80	14.74	●	11.42	28.53	11.80
*Lost Work Days per 200,000 Exposure Hours	526	992	827	809	747	●	571	1,080	-
*OSHA Injuries per 200,000 Exposure Hours	7.99	7.52	4.99	3.89	10.49	●	11.42	17.12	-

Green Line									
On-Time Pullouts	99.49%	99.69%	99.59%	99.70%	99.85%	●	100.00%	100.00%	99.32%
Mean Miles Between Chargeable Mechanical Failures ³	19,238	16,375	21,614	22,562	22,144	●	27,741	18,353	24,218
In-Service On-time Performance	98.52%	98.69%	98.72%	99.00%	98.76%	●	98.98%	98.22%	98.84%
Service Delivery Ratio	99.59%	99.61%	99.38%	100.00%	99.70%	●	99.78%	99.71%	99.59%
Traffic Accidents Per 100,000 Train Miles	0.42	0.48	0.34	0.35	0.25	●	0.00	0.73	0.00
CPUC Reportable Accidents per 100,000 Train Miles	0.07	0.07	0.00	0.40	0.06	●	0.00	0.73	0.00
Passenger Accidents per 100,000 Boardings	0.034	0.048	0.010	0.010	0.021	●	0.000	0.137	0.000
Complaints per 100,000 Boardings	1.54	2.08	1.89	1.20	2.08	●	2.05	1.64	2.53
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	7.18	9.14	12.87	11.52	6.82	●	9.15	9.09	0.00
*Lost Work Days per 200,000 Exposure Hours	228	712	984	930	1,348	●	1,236	1,159	-
*OSHA Injuries per 200,000 Exposure Hours	3.19	6.65	9.84	8.70	5.78	●	0.00	9.09	-

Gold Line									
On-Time Pullouts	99.68%	99.82%	99.84%	100.00%	99.58%	●	99.63%	98.27%	100.00%
Mean Miles Between Chargeable Mechanical Failures ³	40,426	38,427	43,588	49,303	40,584	●	39,056	35,787	29,775
In-Service On-time Performance	97.60%	97.61%	98.19%	98.80%	98.50%	●	97.75%	97.90%	98.44%
Service Delivery Ratio	99.11%	98.88%	99.07%	99.50%	99.39%	●	99.20%	99.57%	99.72%
Traffic Accidents Per 100,000 Train Miles	0.99	0.61	0.55	0.51	0.55	●	0.85	0.83	0.45
CPUC Reportable Accidents per 100,000 Train Miles	0.60	0.25	0.26	0.40	0.25	●	0.43	0.42	0.00
Passenger Accidents per 100,000 Boardings	0.039	0.030	0.086	0.010	0.044	●	0.000	0.229	0.000
Complaints per 100,000 Boardings	2.73	2.77	2.65	1.80	2.70	●	1.89	2.82	2.28
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	11.87	14.31	14.24	11.67	14.15	●	15.01	25.50	16.43
*Lost Work Days per 200,000 Exposure Hours	766	1,055	1,148	993	1,351	●	1,338	1,745	-
*OSHA Injuries per 200,000 Exposure Hours	9.29	9.69	11.87	8.94	11.07	●	30.01	10.20	-

Expo Line									
On-Time Pullouts	99.53%	98.76%	99.71%	99.70%	99.87%	●	99.32%	100.00%	99.68%
Mean Miles Between Chargeable Mechanical Failures ³	18,114	33,402	57,013	49,557	93,728	●	43,297	88,034	41,190
In-Service On-time Performance	98.61%	98.48%	98.72%	98.90%	98.93%	●	99.28%	99.15%	98.42%
Service Delivery Ratio	99.56%	99.46%	99.54%	99.80%	99.67%	●	99.88%	99.91%	99.89%
Traffic Accidents Per 100,000 Train Miles	0.74	1.26	1.78	1.26	1.19	●	2.55	0.83	0.00
CPUC Reportable Accidents per 100,000 Train Miles	0.50	0.63	1.30	0.40	0.56	●	0.85	0.00	0.00
Passenger Accidents per 100,000 Boardings	0.019	0.018	0.010	0.010	0.010	●	0.000	0.000	0.000
Complaints per 100,000 Boardings	3.38	3.68	2.20	1.40	2.11	●	3.26	2.38	1.10
New Workers' Compensation Indemnity Claims per	8.44	19.26	12.57	11.84	16.21	●	31.75	30.04	0.00
*Lost Work Days per 200,000 Exposure Hours	73	887	1,470	1,343	997	●	1,363	783	-
*OSHA Injuries per 200,000 Exposure Hours	5.63	16.60	9.92	9.92	10.61	●	15.88	7.51	-

* 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%.

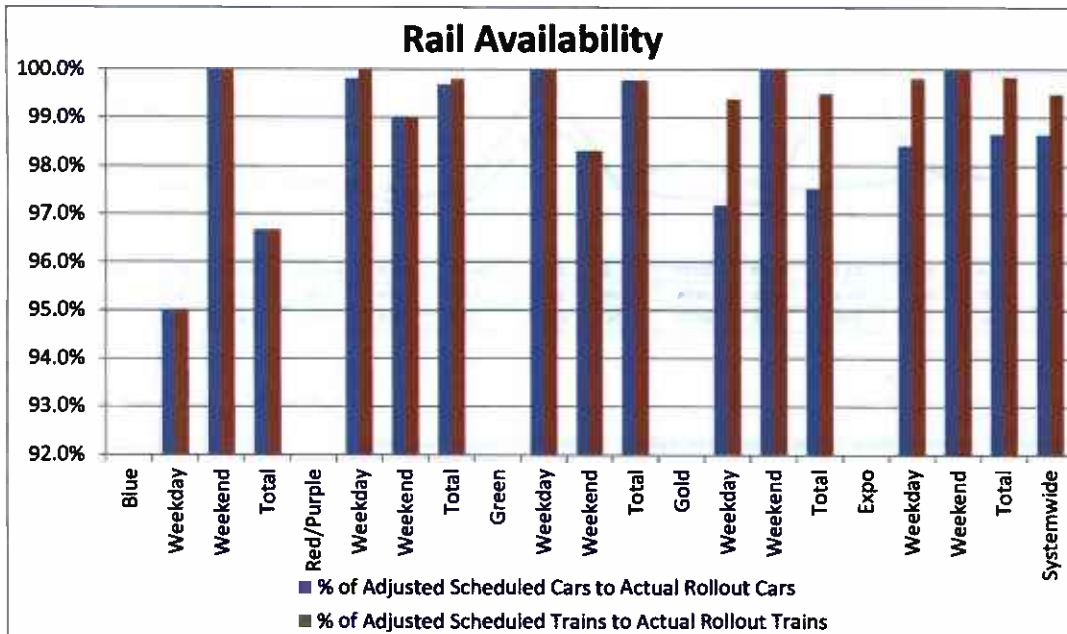
● Red - High probability that the target will not be achieved -- significant problems and/or delays. Falls below Target >70%.

N/A = Not Available

Vehicle Availability

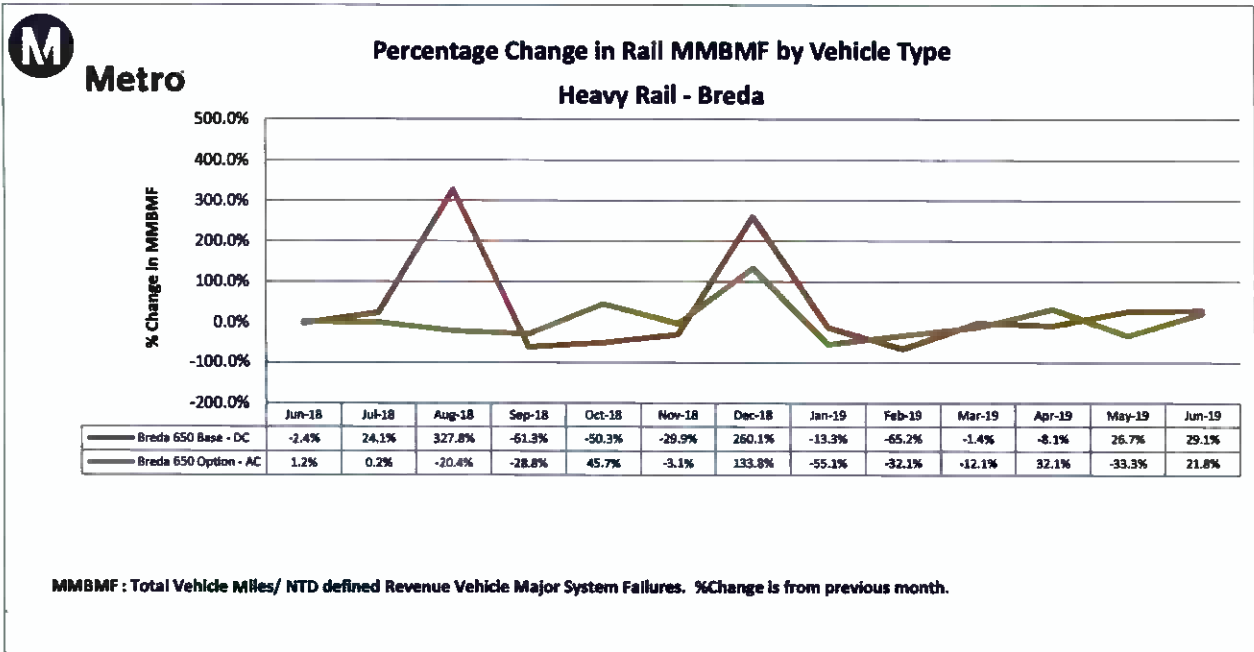
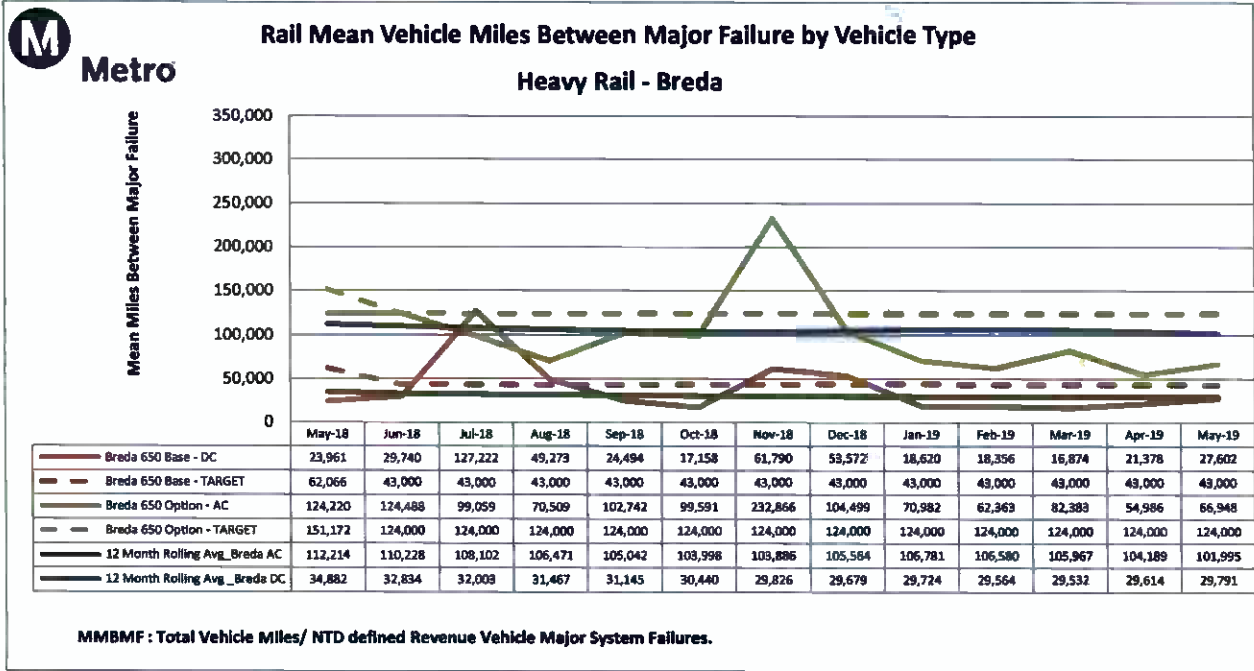
Jun 2019

Day Type	% of Adjusted Scheduled Cars to Actual Rollout Cars	% of Adjusted Scheduled Trains to Actual Rollout Trains
Blue		
Weekday	95.00%	95.00%
Weekend	100.00%	100.00%
Total	96.67%	96.67%
Red/Purple		
Weekday	99.81%	100.00%
Weekend	99.00%	99.00%
Total	99.68%	99.79%
Green		
Weekday	100.00%	100.00%
Weekend	98.31%	98.31%
Total	99.77%	99.77%
Gold		
Weekday	97.18%	99.38%
Weekend	100.00%	100.00%
Total	97.53%	99.49%
Expo		
Weekday	98.41%	99.81%
Weekend	100.00%	100.00%
Total	98.66%	99.84%
Systemwide	98.65%	99.48%



METRO RAIL PERFORMANCE – JUNE 2019

Rail Performance by Vehicle Type

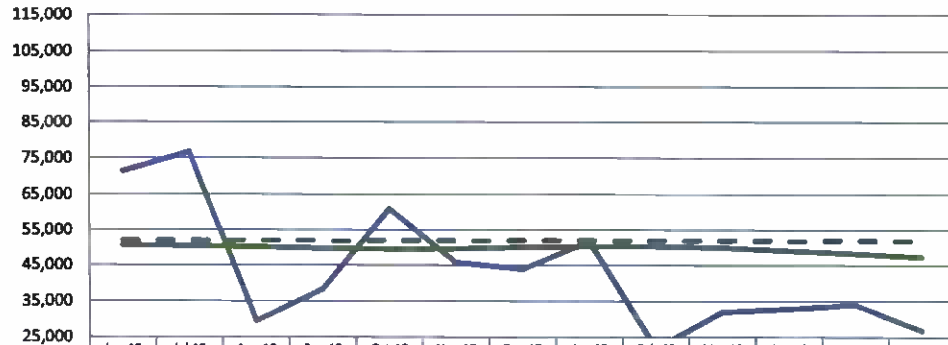




Metro

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

Mean Miles Between Major Failure



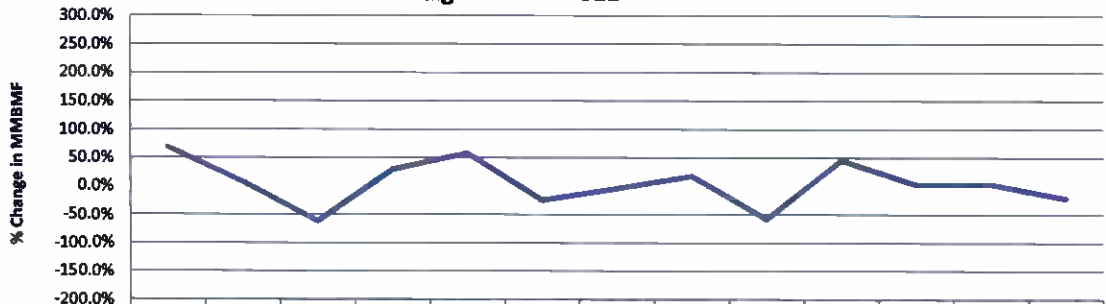
	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
— AnsaldoBreda 2550 Base - AC	71,408	76,730	29,623	38,403	60,989	45,884	43,889	51,768	21,949	32,069	32,976	34,128	26,913
- - - AnsaldoBreda 2550 Base - TARGET	51,977	52,000	52,000	52,000	52,000	52,000	52,000	52,000	52,000	52,000	52,000	52,000	52,000
— 12 Month Rolling Avg AnsaldoBreda 2550 Base - AC	50,638	50,429	50,179	49,789	49,586	49,710	50,097	50,339	50,411	50,011	49,160	48,395	47,296

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



Metro

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



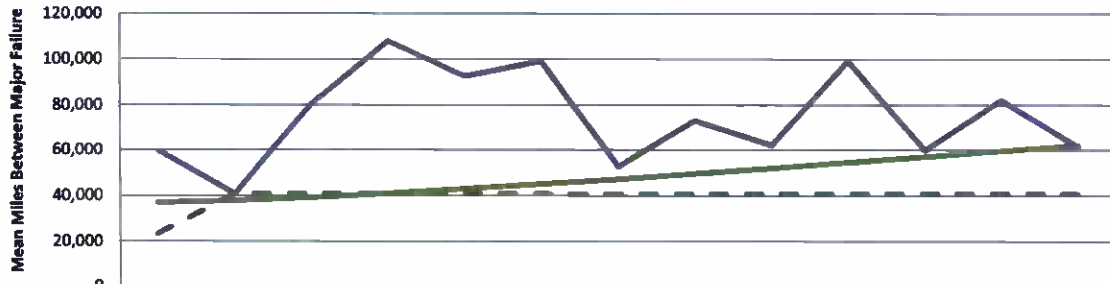
	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
— AnsaldoBreda 2550 Base - AC	69.0%	7.5%	-61.4%	29.6%	58.8%	-24.8%	-4.3%	18.0%	-57.6%	46.1%	2.8%	3.5%	-21.1%

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



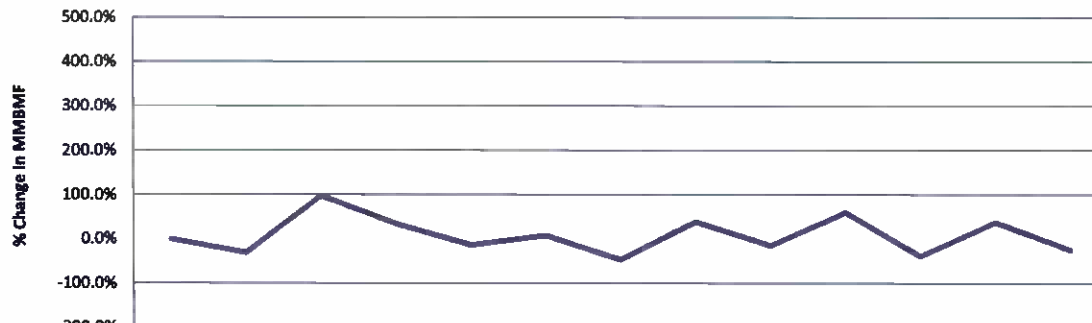
	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
KinkiSharyo P3010 *	59,673	40,836	80,639	107,909	92,771	99,289	52,753	73,160	62,116	99,363	60,035	82,231	61,435
KinkiSharyo P3010 - TARGET	23,489	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000
12 Month Rolling Avg KinkiSharyo P3010	37,118	37,880	39,237	41,041	43,081	45,127	47,286	49,760	52,080	54,615	57,102	59,695	62,232

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



Metro

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



	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
KinkiSharyo P3010 *	-0.8%	-31.6%	97.5%	33.8%	-14.0%	7.0%	-46.9%	38.7%	-15.1%	60.0%	-39.6%	37.0%	-25.3%

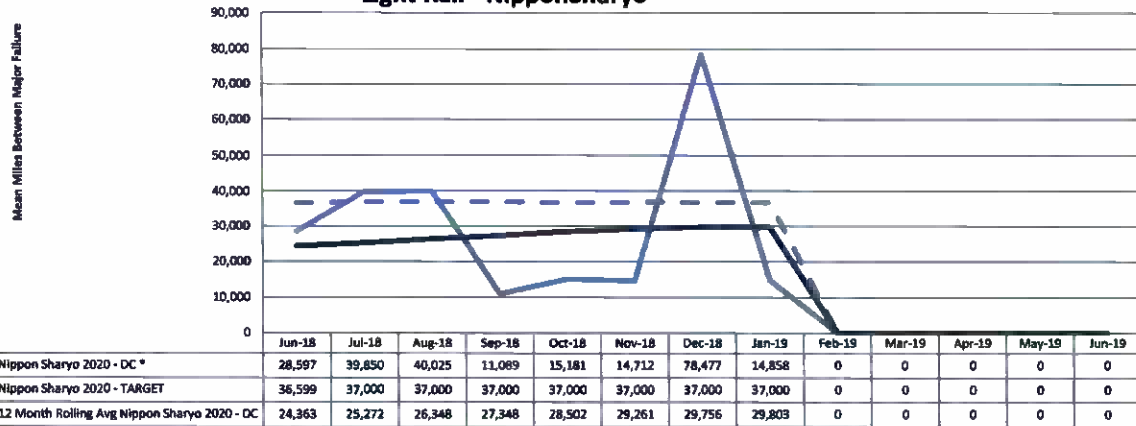
MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures. %Change is from previous month.



Metro

Rail Mean Vehicle Miles Between Major Failure by Vehicle Type

Light Rail - NipponSharyo



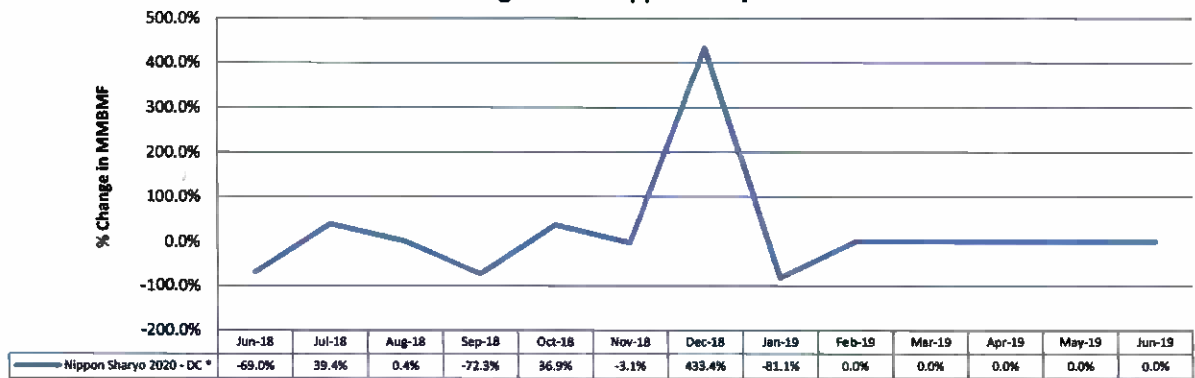
- * Nippon Sharyo 2020 Cars did not operate starting in February 2019
 - ** Nippon Sharyo 865 -DC Cars have been retired starting September 2018
- MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.



Metro

Percentage Change in Rail MMBMF by Vehicle Type

Light Rail - NipponSharyo



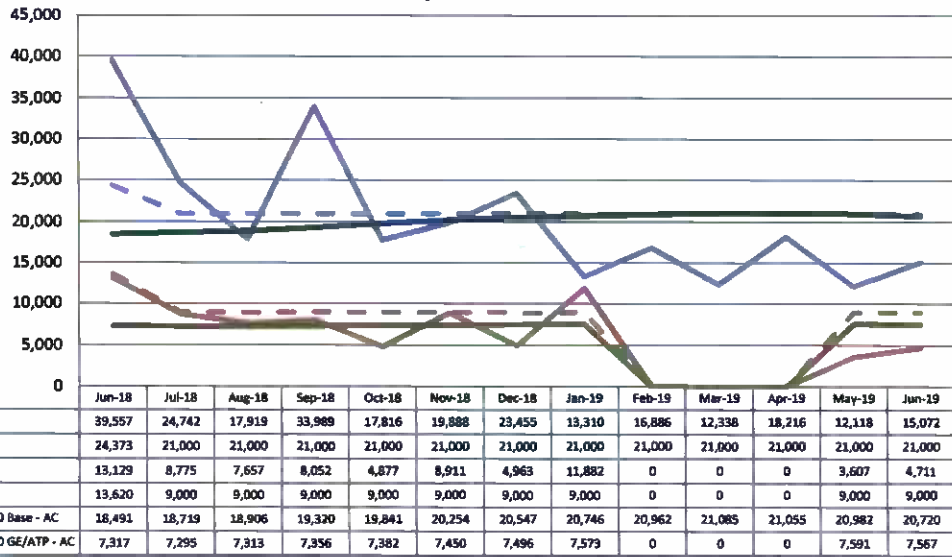
- * Nippon Sharyo 2020 did not operate starting in February 2019
 - ** Nippon Sharyo 865 -DC Cars have been retired starting September 2018
- MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures. %Change is from previous month.



Metro

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

Mean Miles Between Major Failure



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

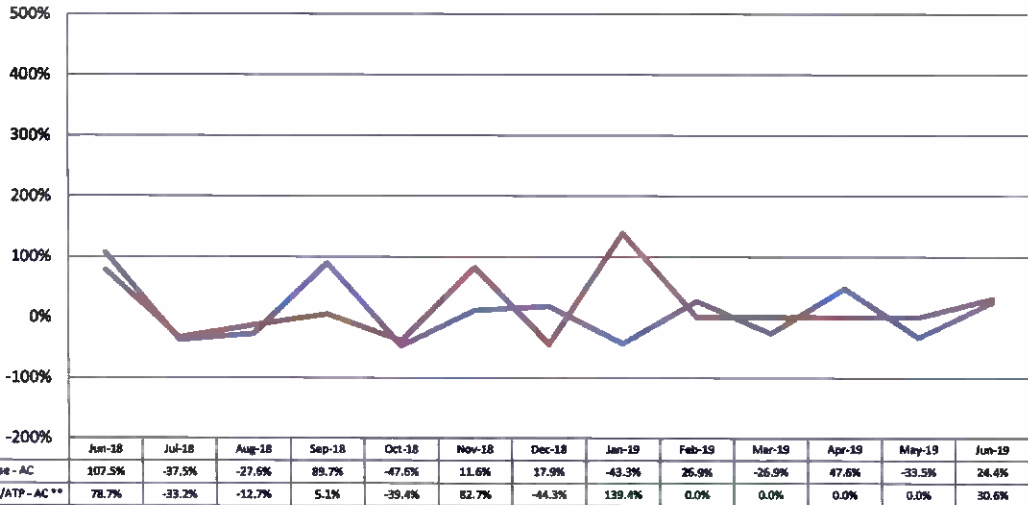
MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.



Metro

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

% Change in MMBMF



** 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 2018	FY2019 Goal	FY2019 YTD
AnsaldoBreda2550Base - AC	49,423	52,000	37,825
Breda 650 Base - DC	25,946	43,000	27,943
Breda 650 Option - AC	107,839	124,000	85,062
Kinkisharyo P3010	42,166	41,000	70,645
Nippon Sharyo 2020 - DC	31,703	37,000	21,405
Nippon Sharyo 865 - DC	8,089	24,000	0
Siemens 2000 Base - AC	21,014	21,000	17,982
Siemens 2000 GE/ATP - AC	7,376	9,000	6,920

Rail Fleet Distribution – MAY 2019

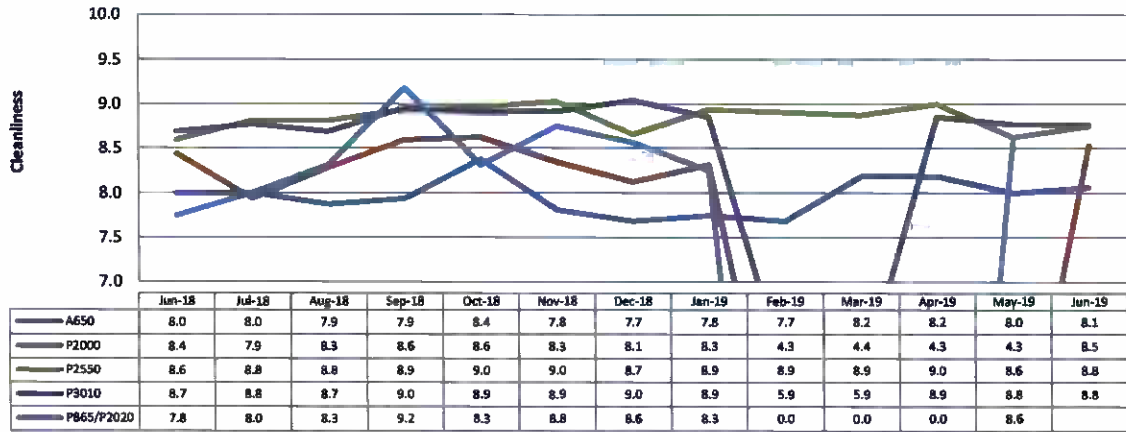
Number of Rail Vehicle Type by Division	Blue	Red / Purple	Green	Gold	Expo	Total
AnsaldoBreda 2550 Base - AC				50		50
Breda 650 Base - DC		30				30
Breda 650 Option - AC		68				68
KinkiSharyo P3010	54		22	46	56	178
Nippon Sharyo 2020 - DC	15					15
0						0
Siemens 2000 Base - AC	7				15	22
Siemens 2000 GE/ATP - AC			24			24
TOTALS	76	98	46	96	71	387

Cleanliness by Vehicle Type Jun 2019



Metro

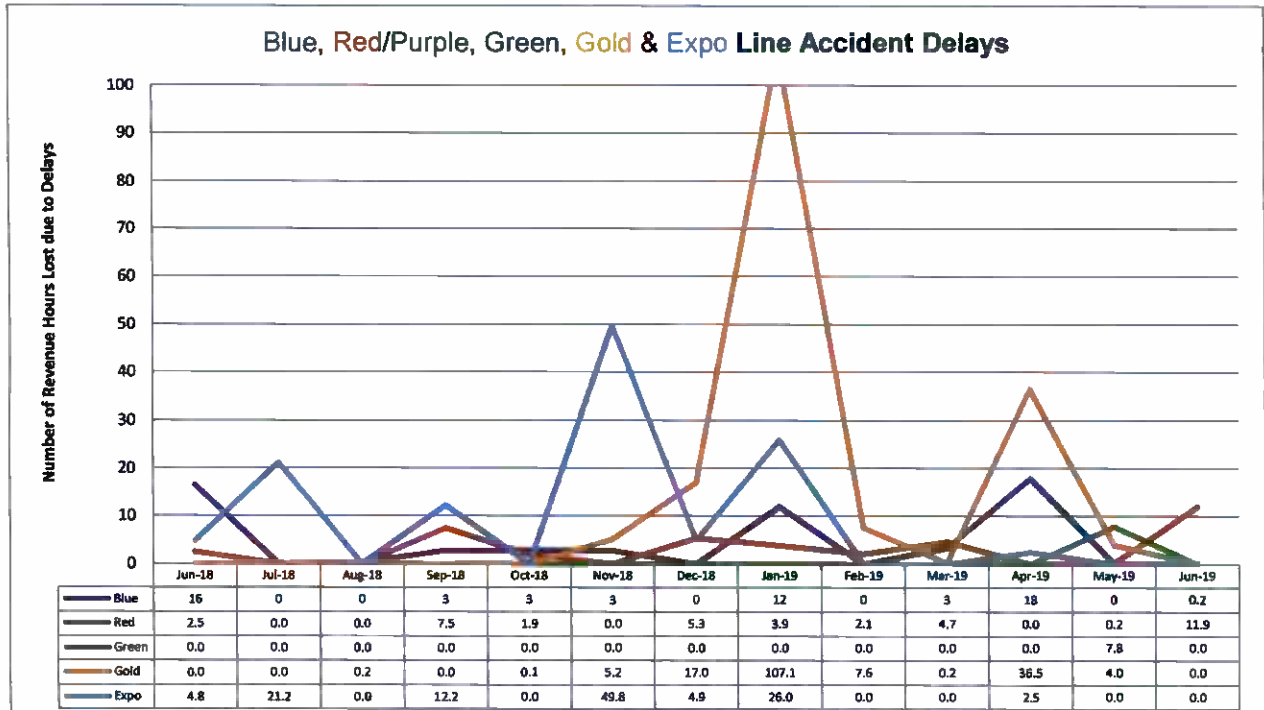
Rail Cleanliness by General Vehicle Type



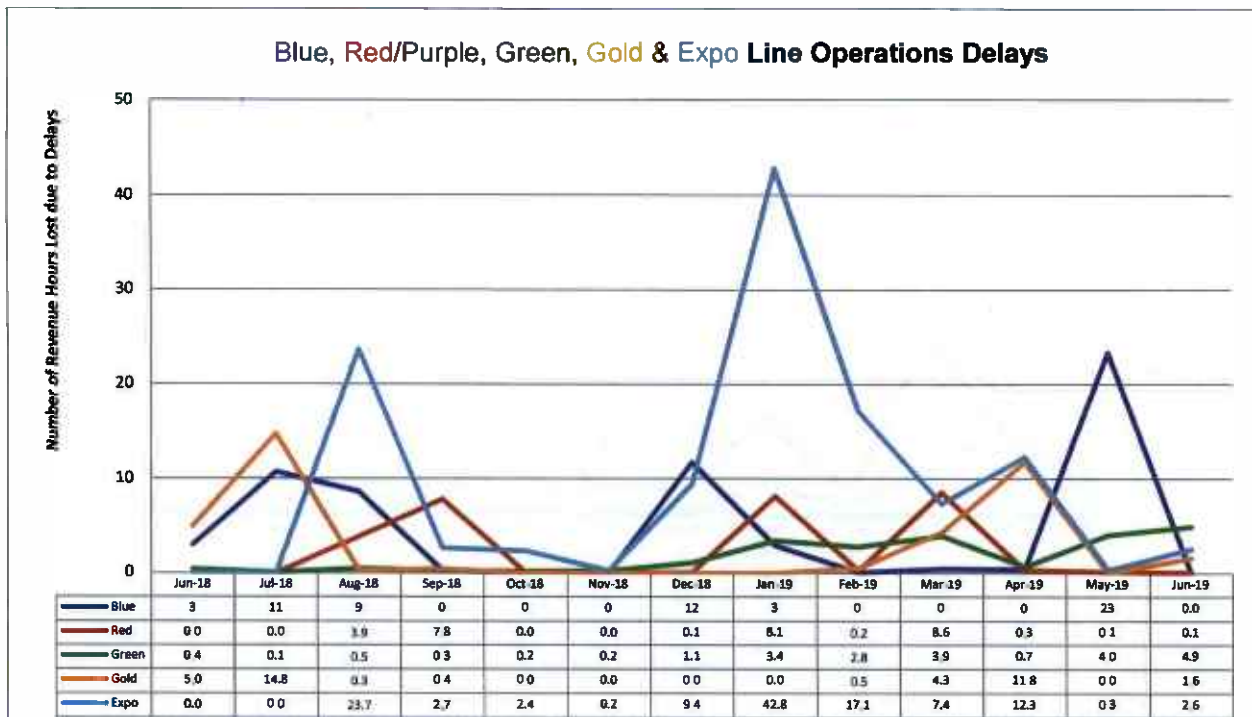
RAIL DELAYS BY CATEGORY - SYSTEMWIDE

Revenue Hours Lost Related to - ACCIDENTS

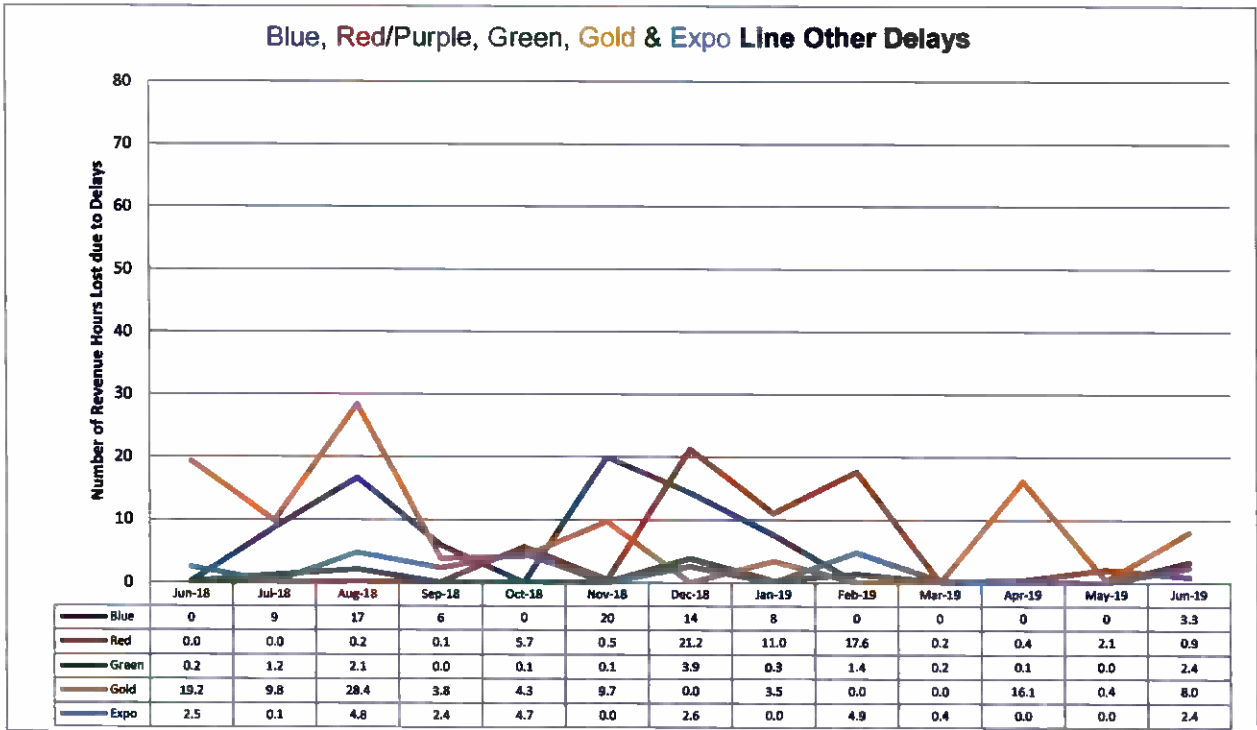
Jun 2019



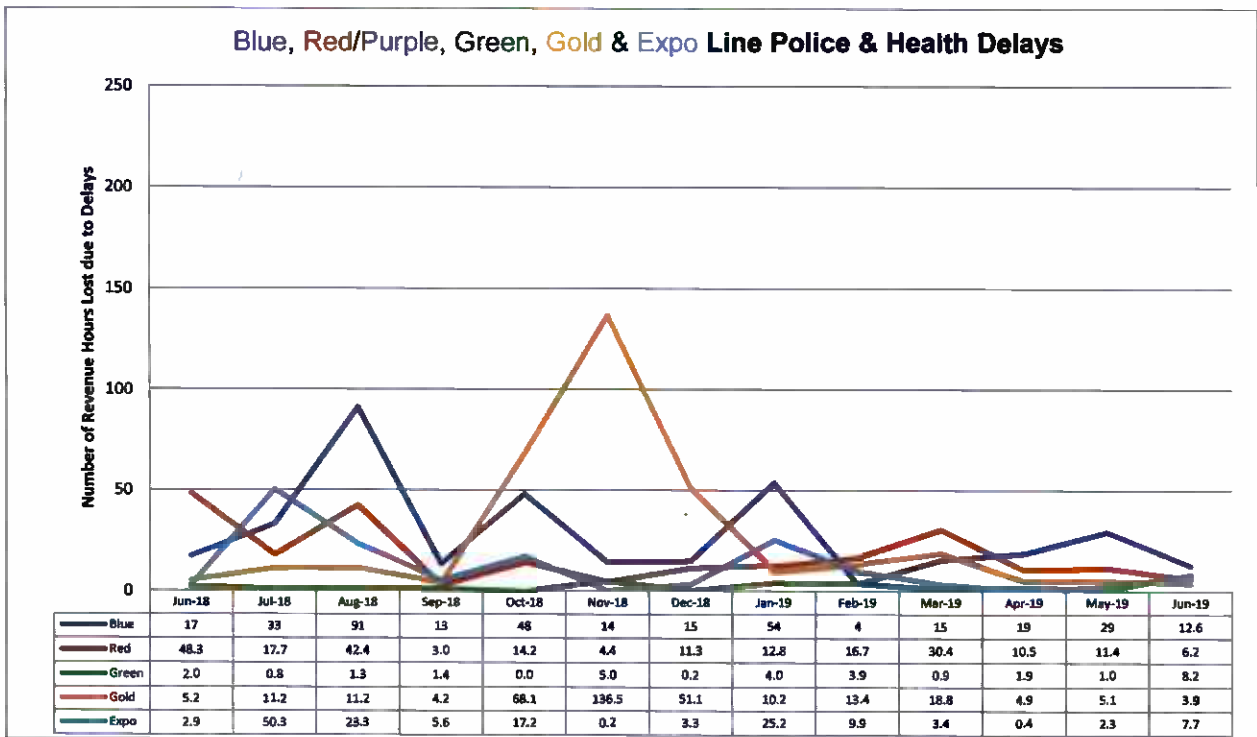
Revenue Hours Lost Related to - OPERATIONS



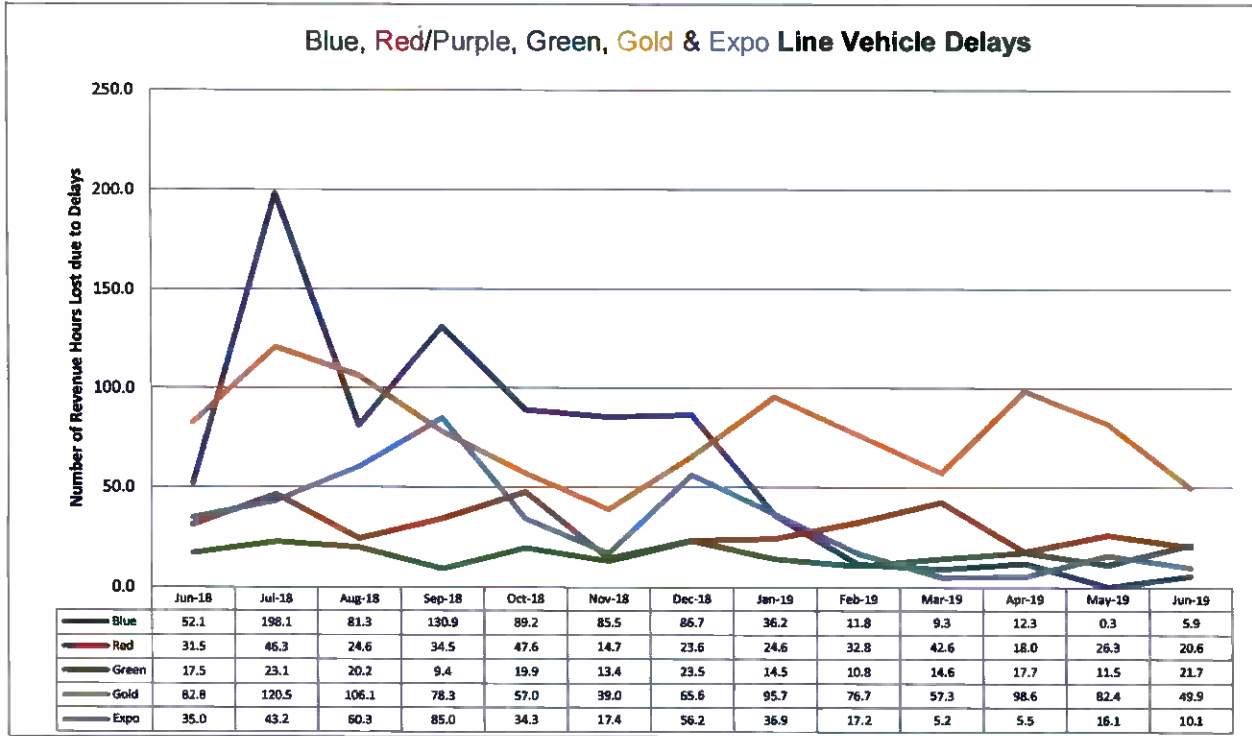
Revenue Hours Lost Related to - OTHER



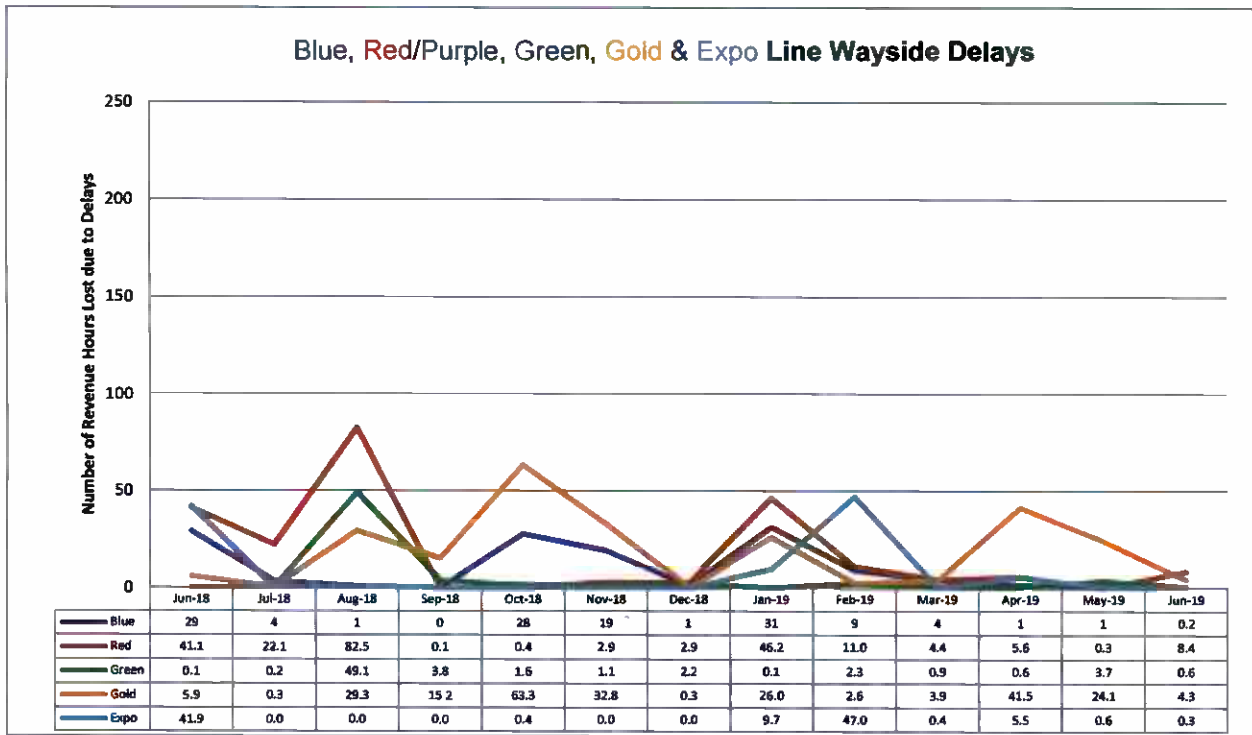
Revenue Hours Lost Related to - POLICE & HEALTH



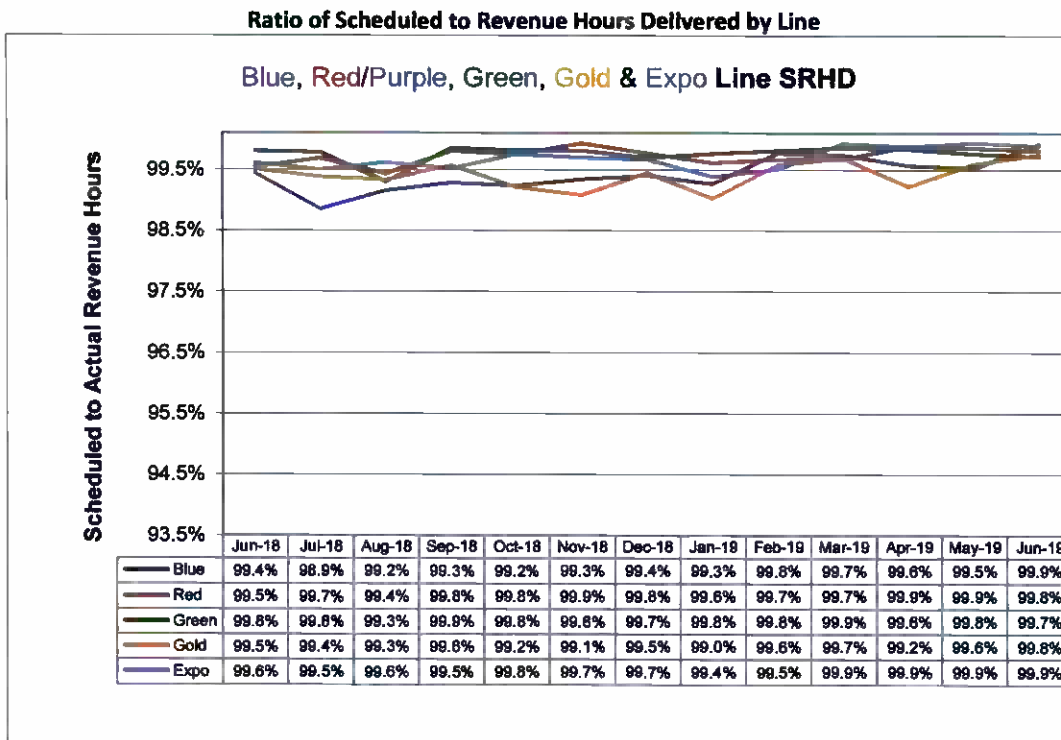
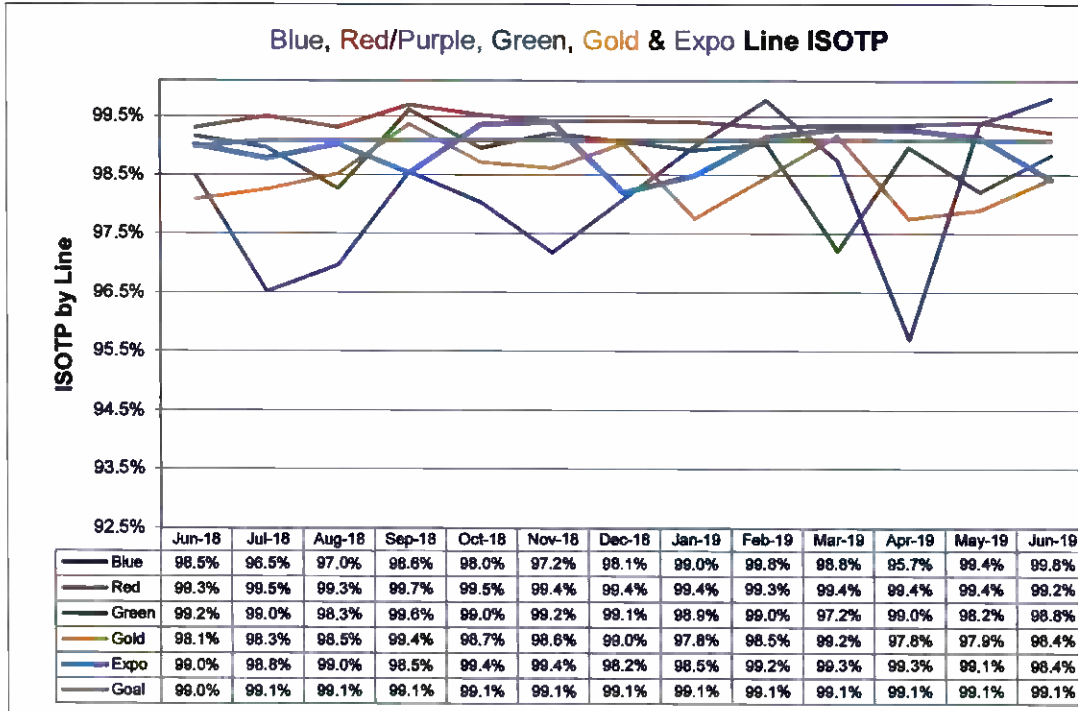
Revenue Hours Lost Related to - Vehicle Delays



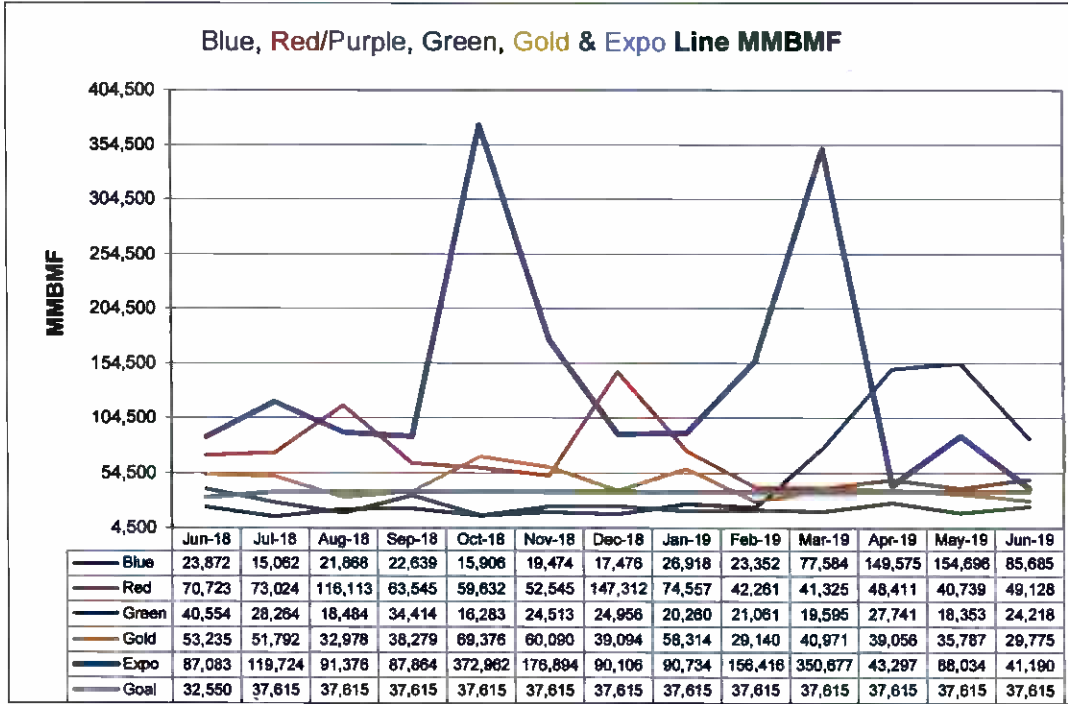
Revenue Hours Lost Related to - WAYSIDE



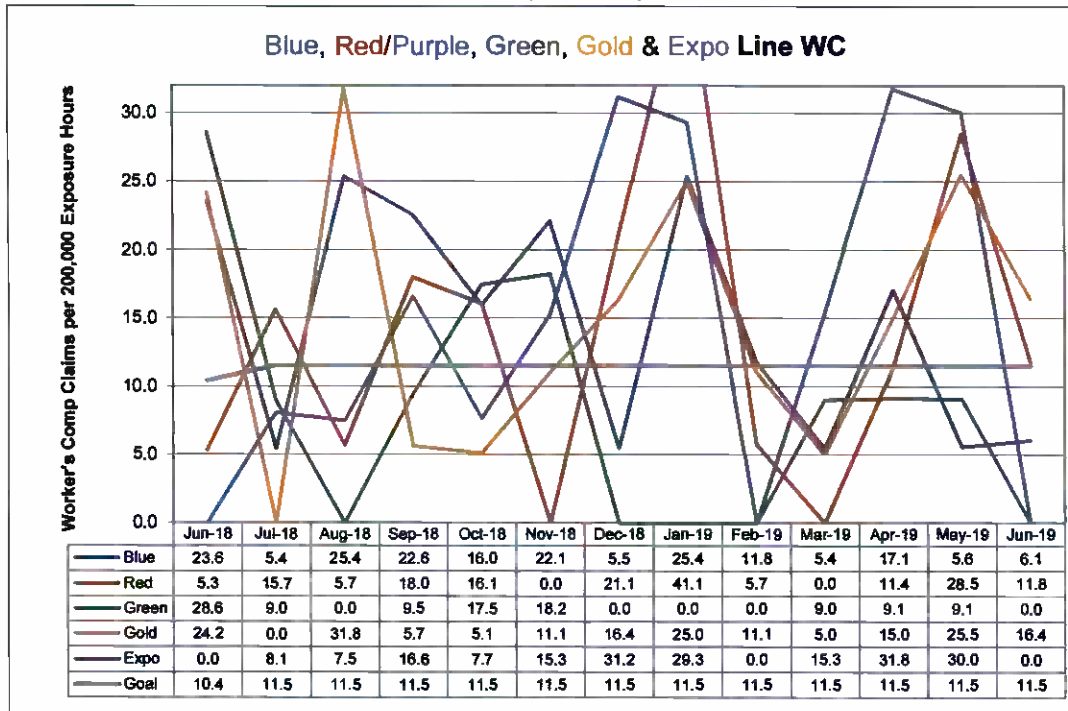
Rail Service Performance In Service On Time Performance by Line Jun 2019



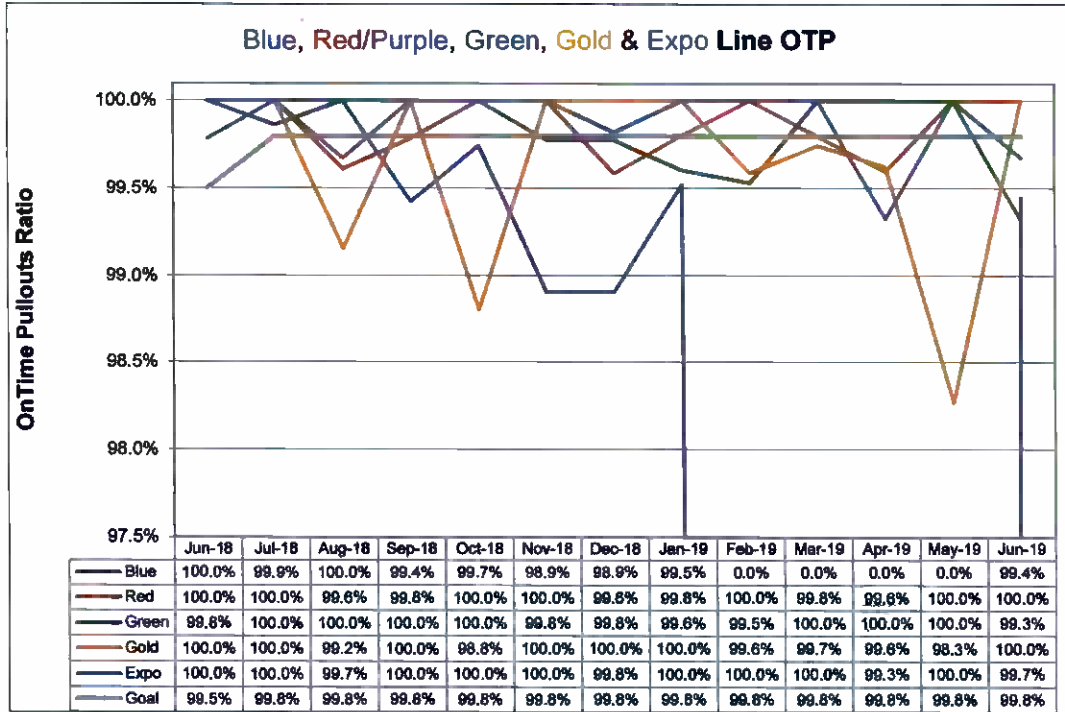
Mean Miles Between Mechanical Failures by Line



Workers Comp Claims by Line



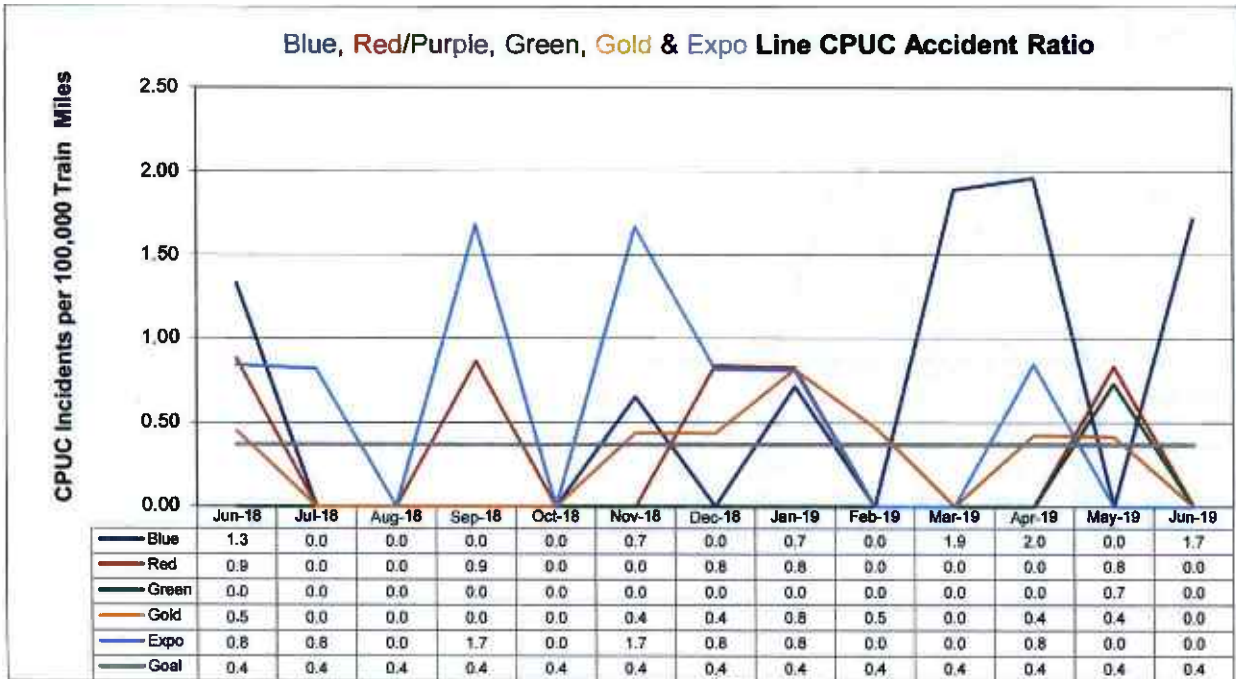
On-Time Pullouts Ratio by Line



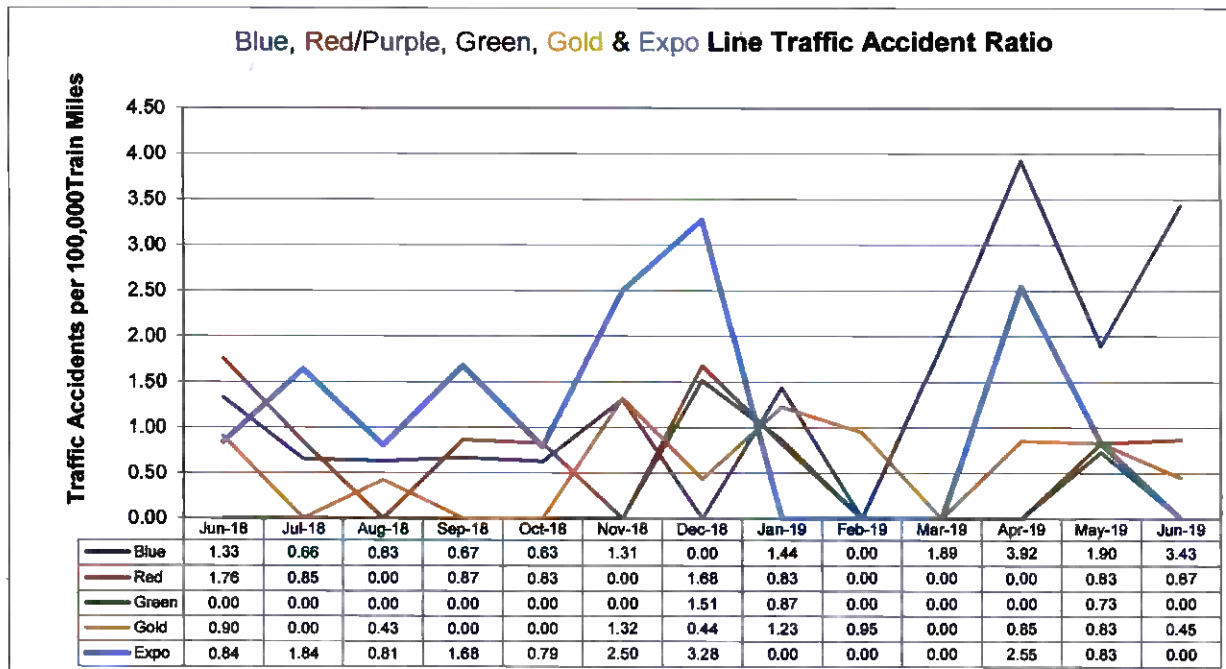
Rail Safety Performance

CPUC REPORTABLE INCIDENTS PER 100,000 TRAIN MILES

Jun 2019

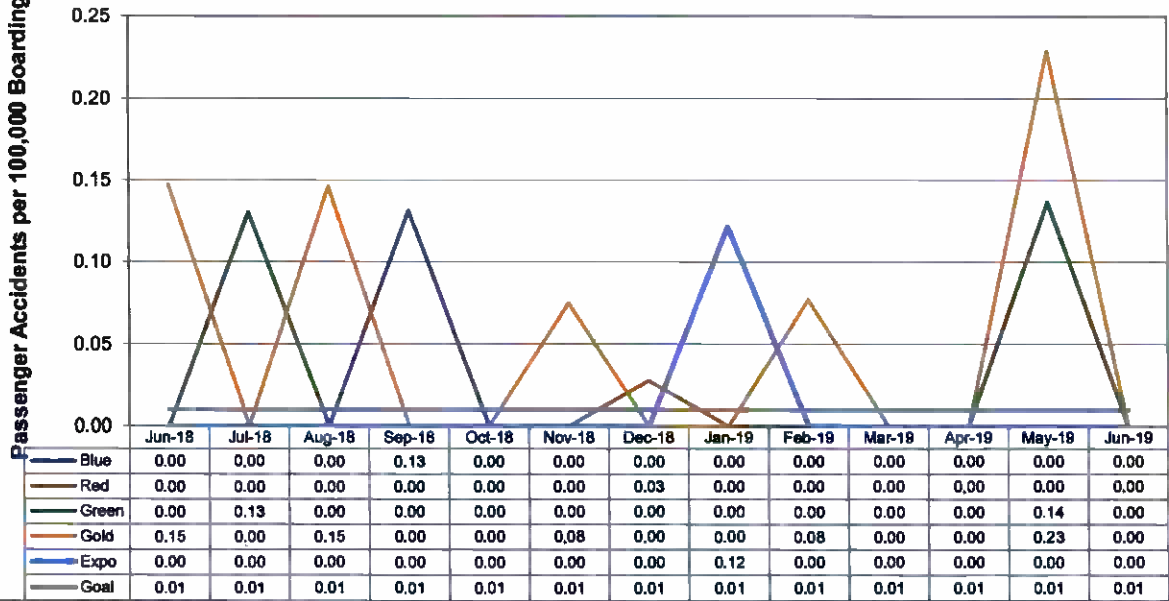


TRAFFIC ACCIDENTS PER 100,000 TRAIN MILES

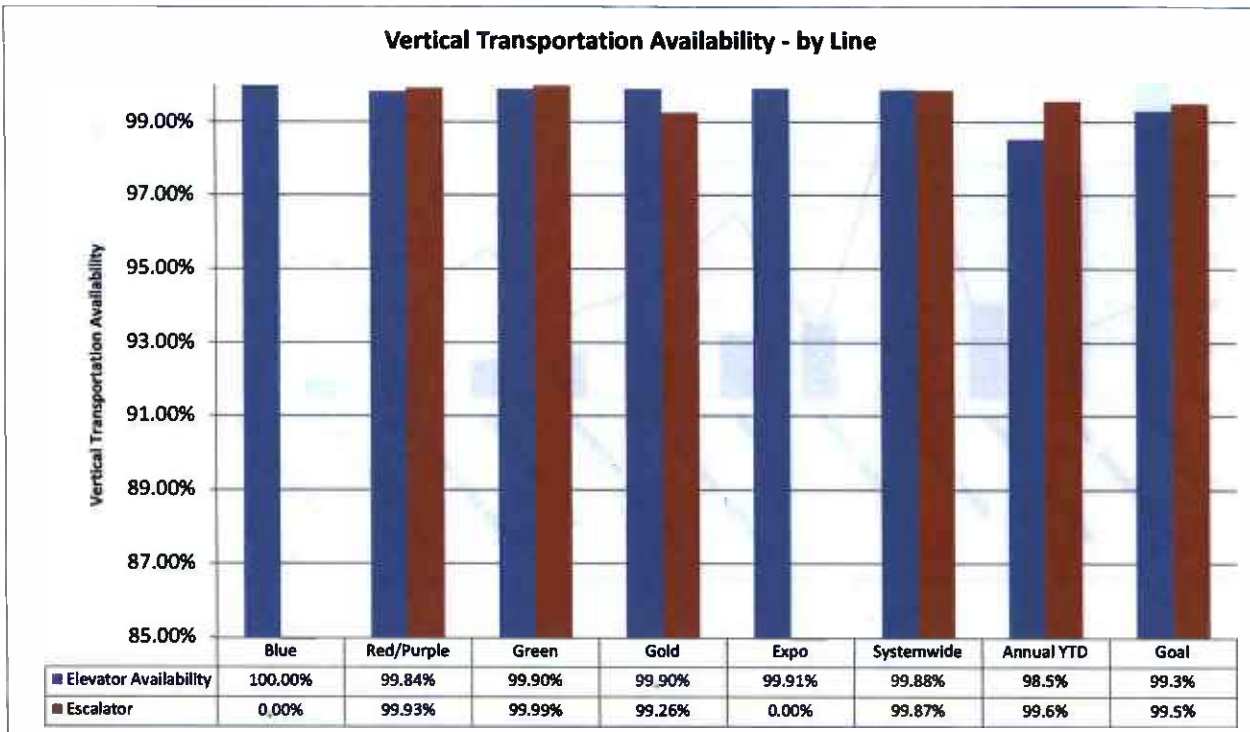


PASSENGER ACCIDENTS PER 100,000 BOARDINGS

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

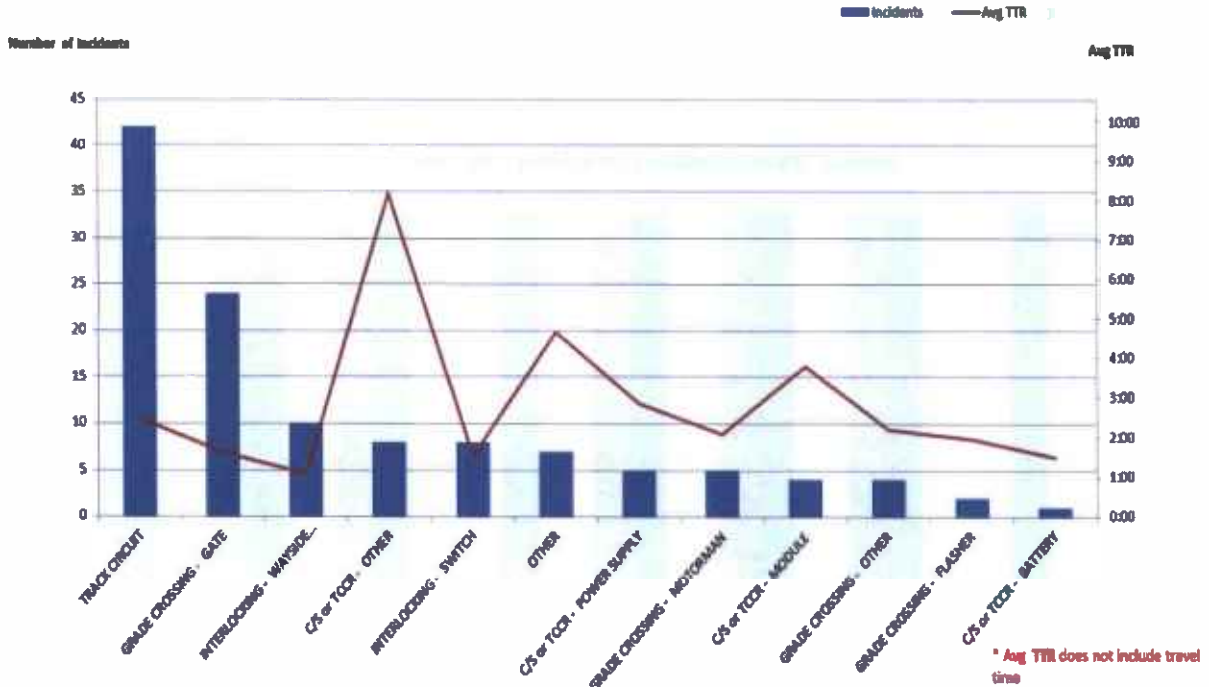


Systemwide Vertical Transportation Availability by Line Jun 2019

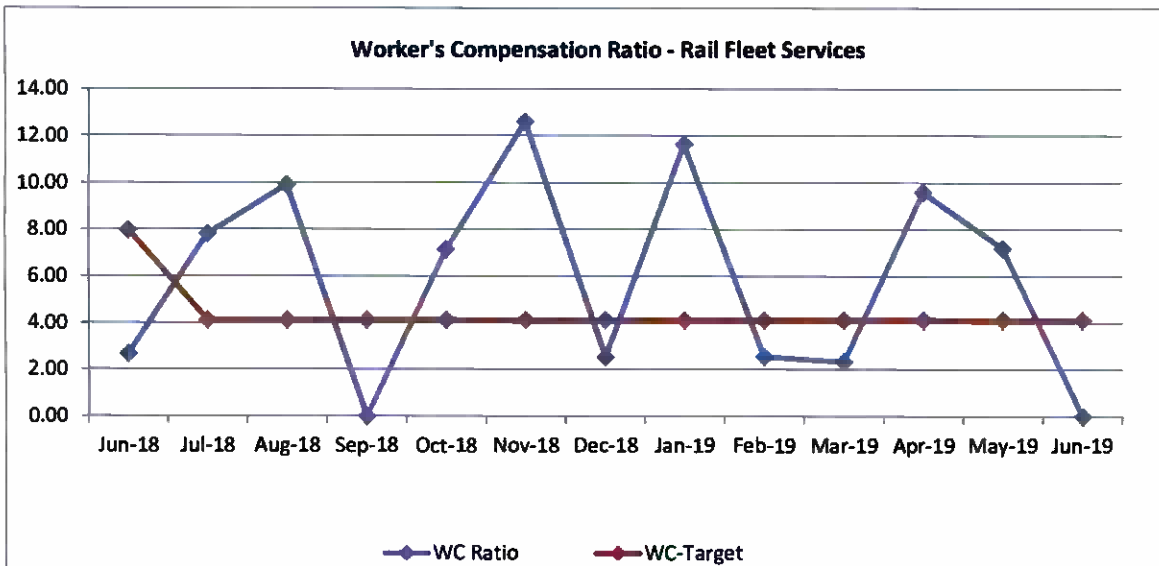
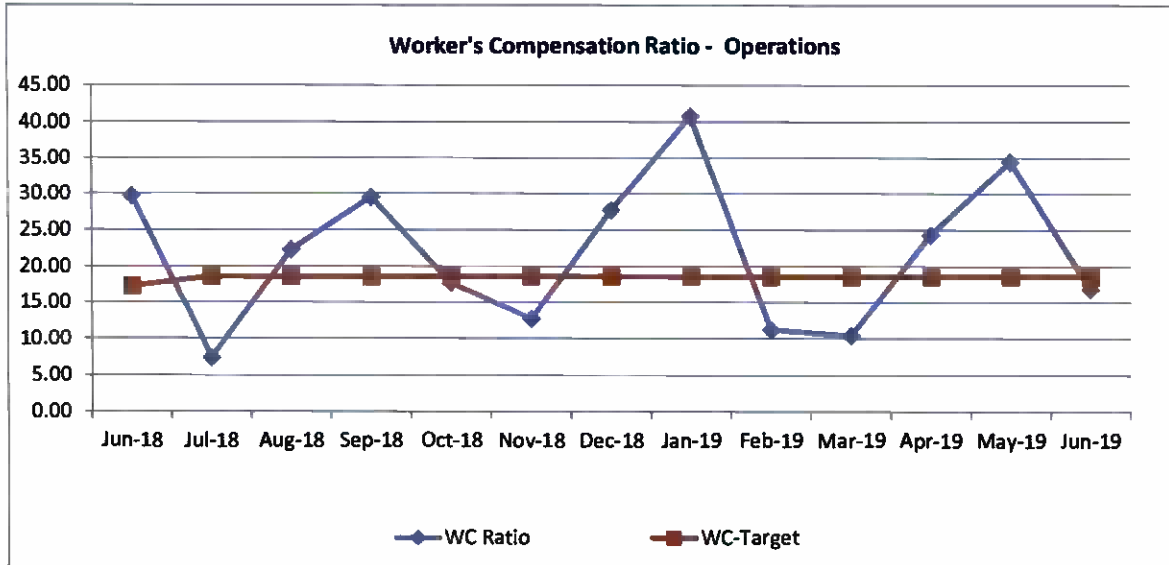


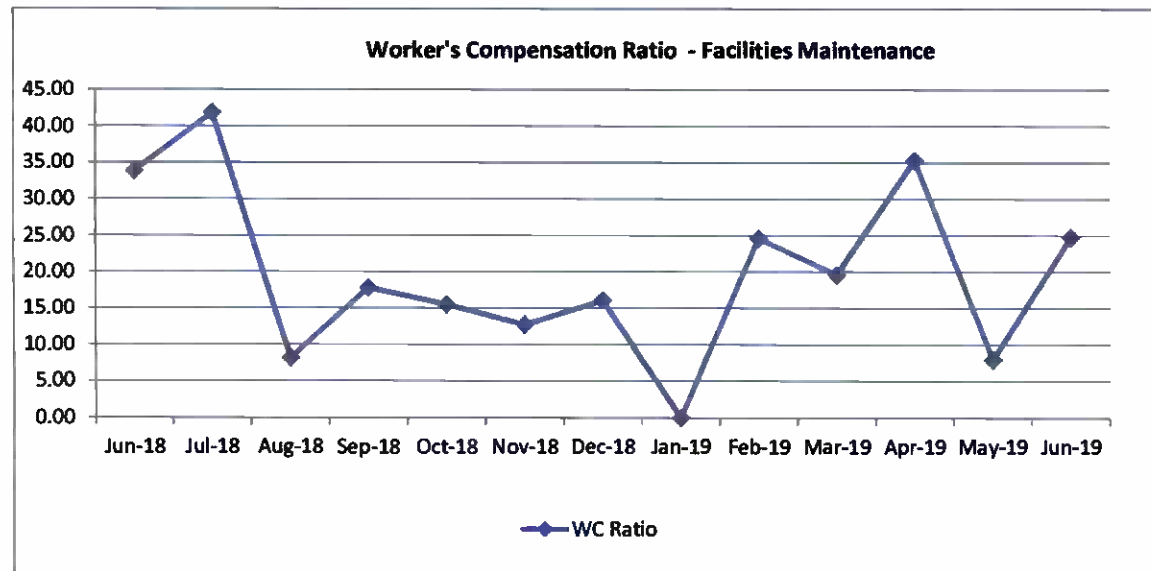
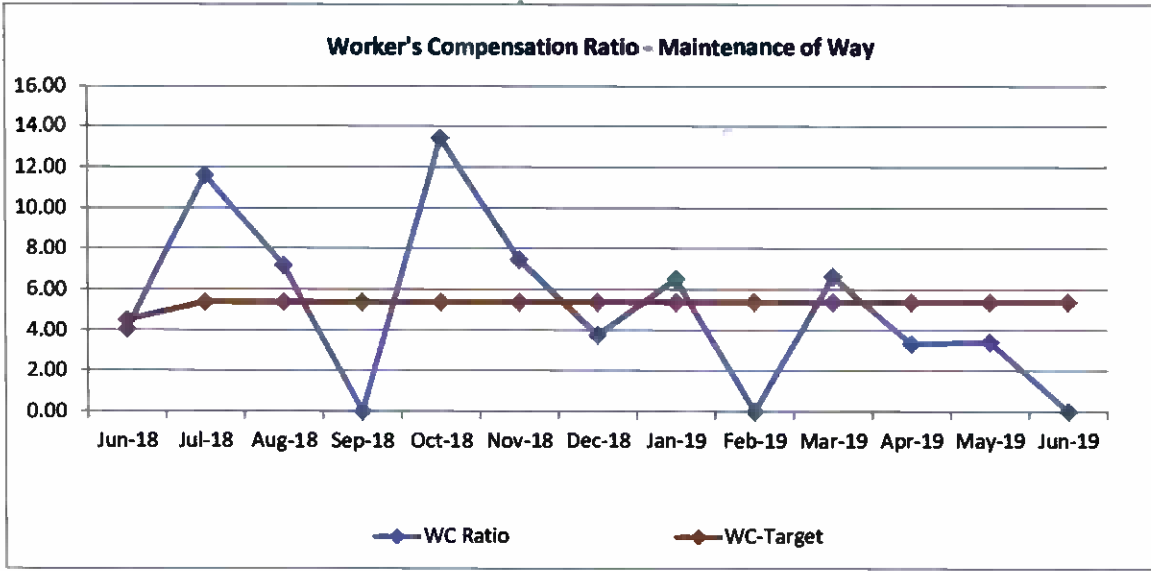
Note: No Escalators at Blue and Expo Lines

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

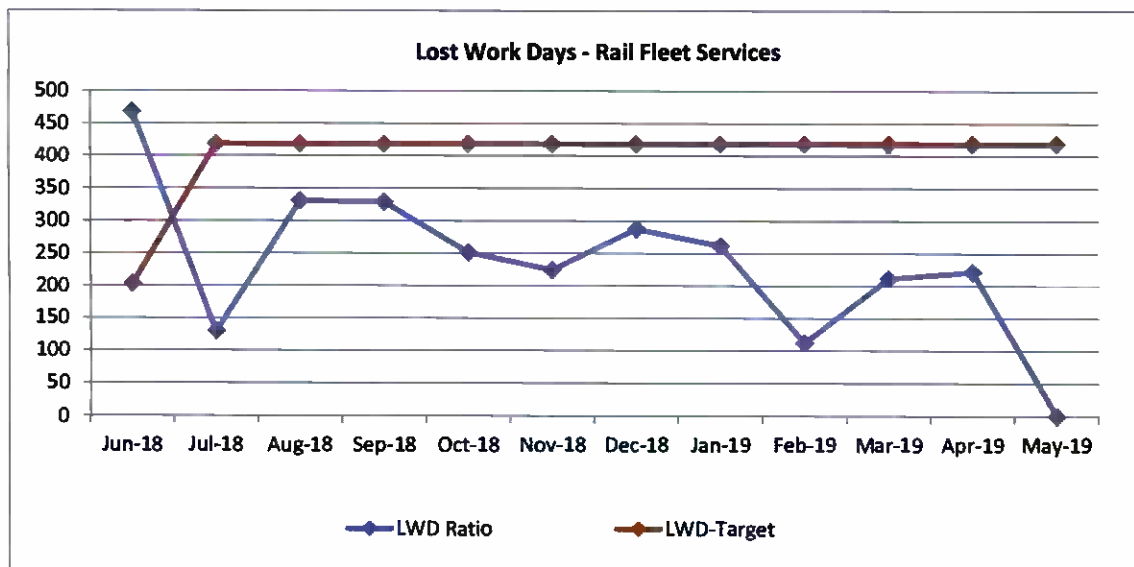
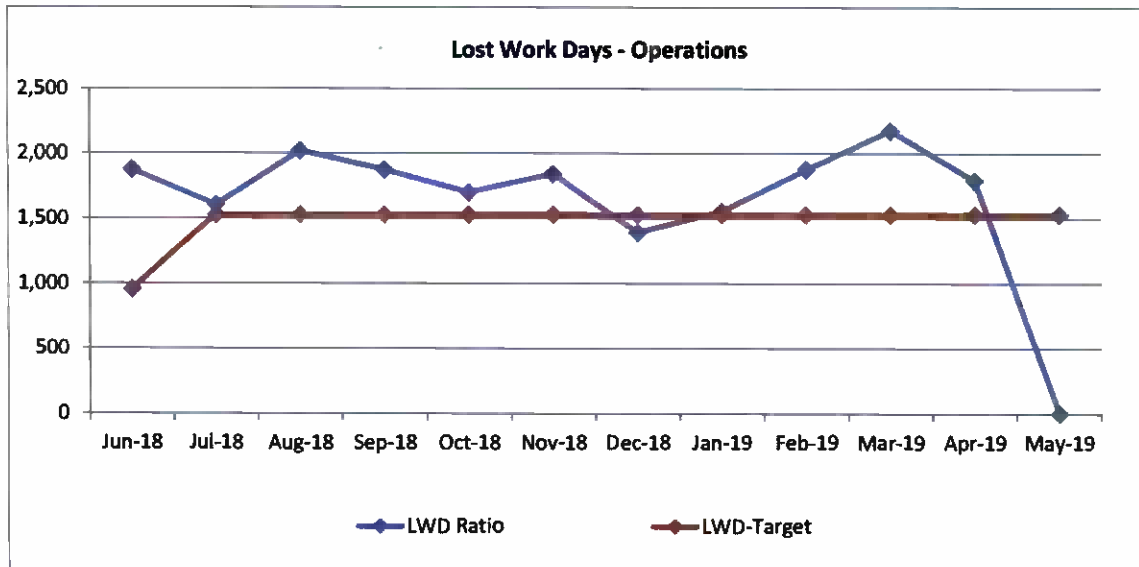


Administrative Key Performance Indicators Worker's Compensation, Lost Work Days, OSHA Jun 2019

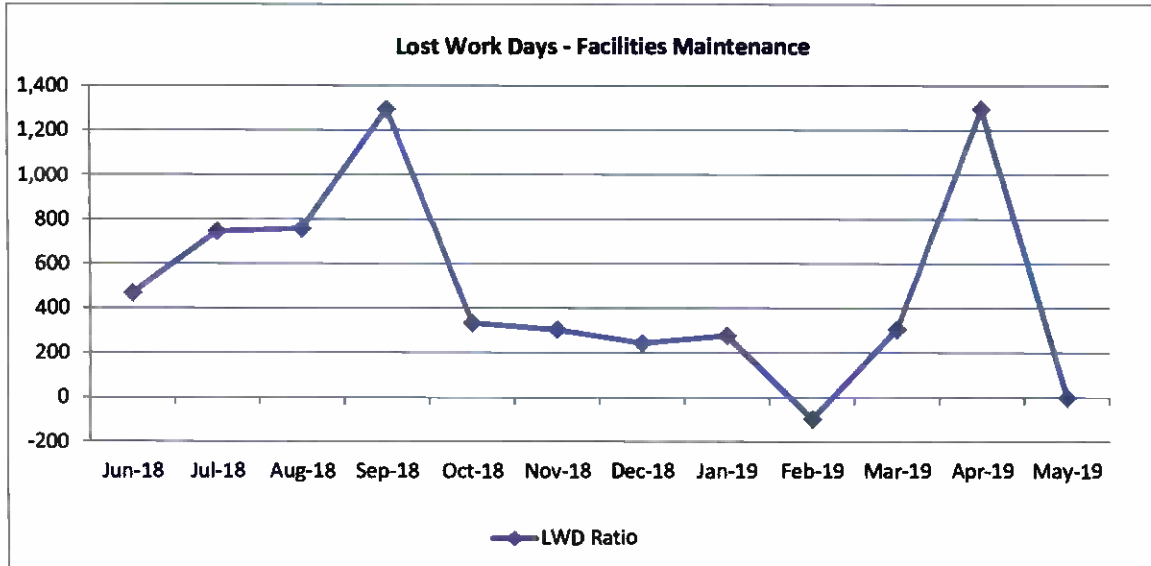
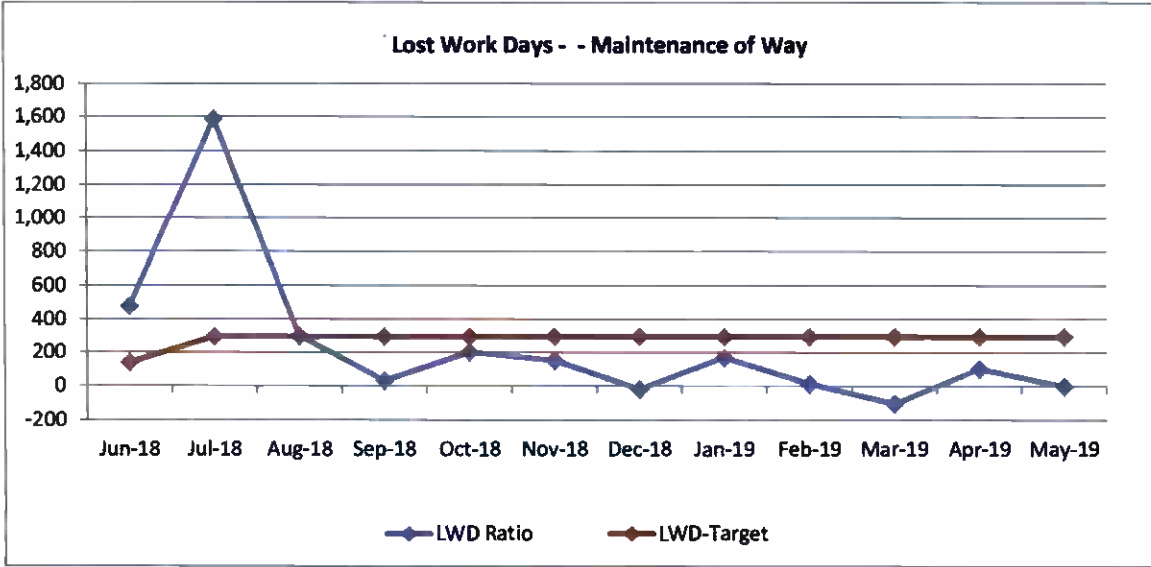




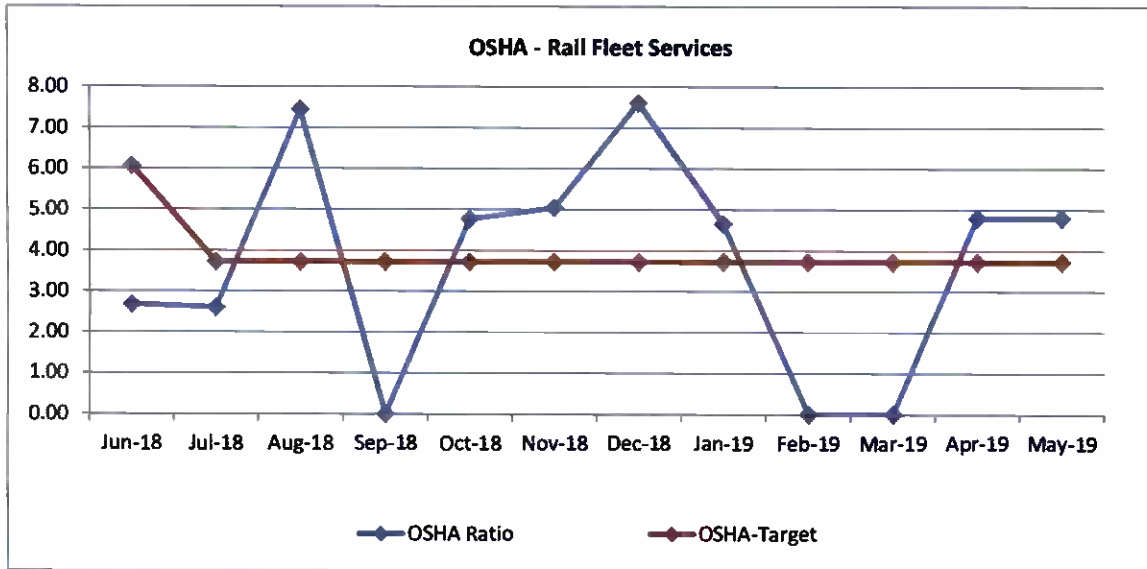
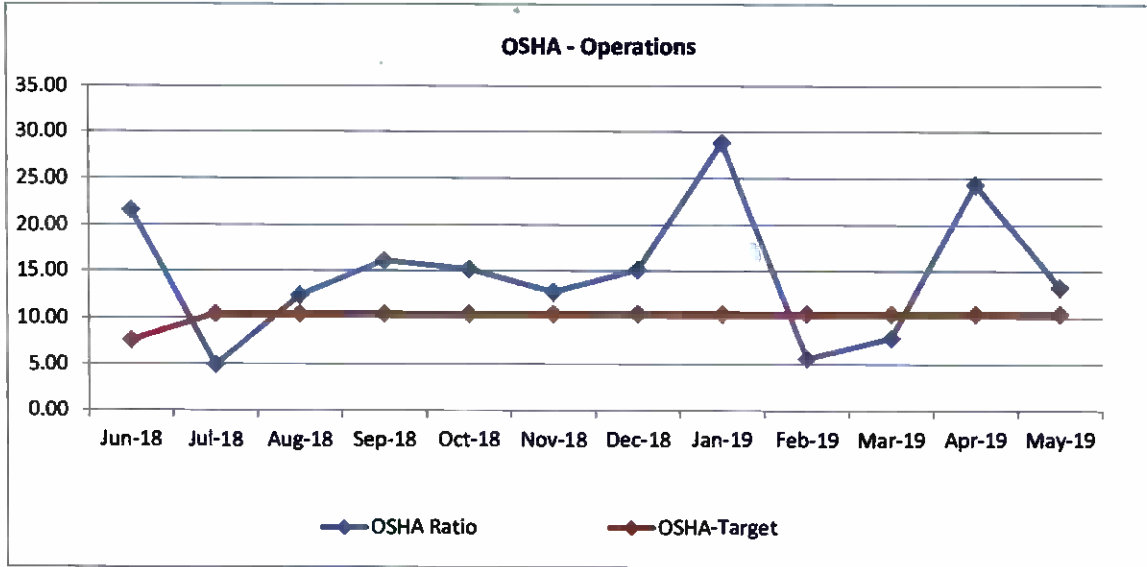
Facilities Maintenance goals to be established.



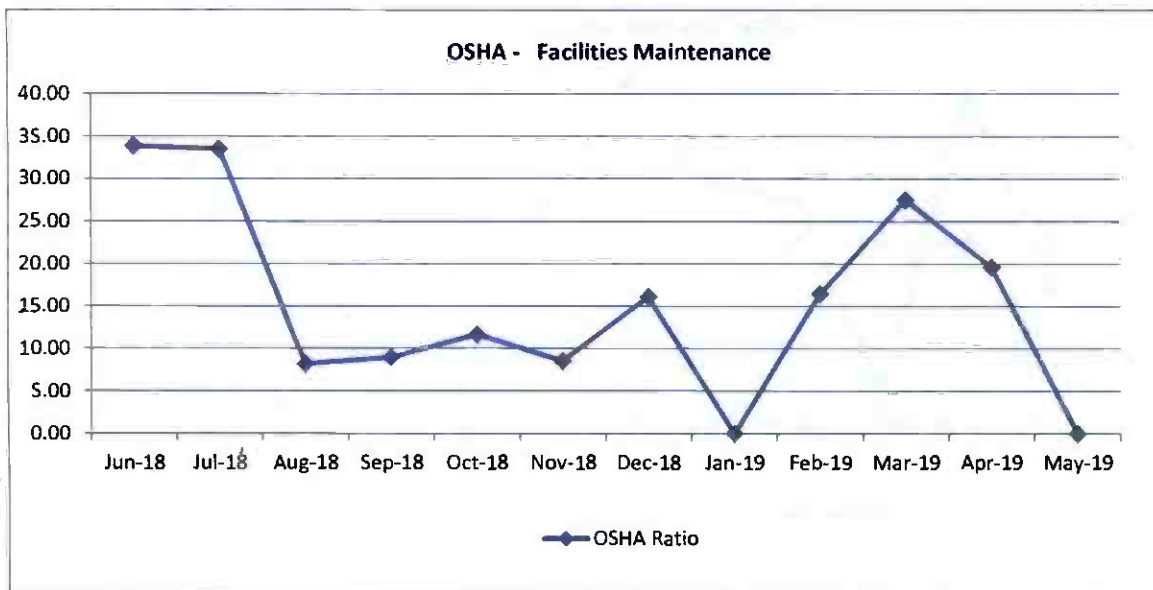
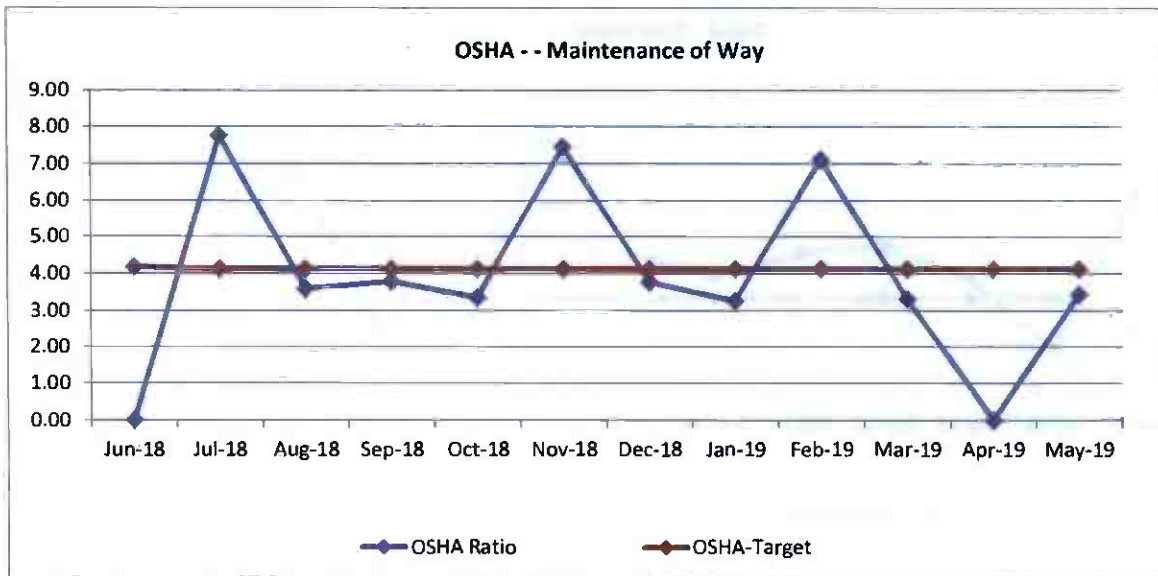
Note: There is a one month lag in Lost Work Days and OSHA data.



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



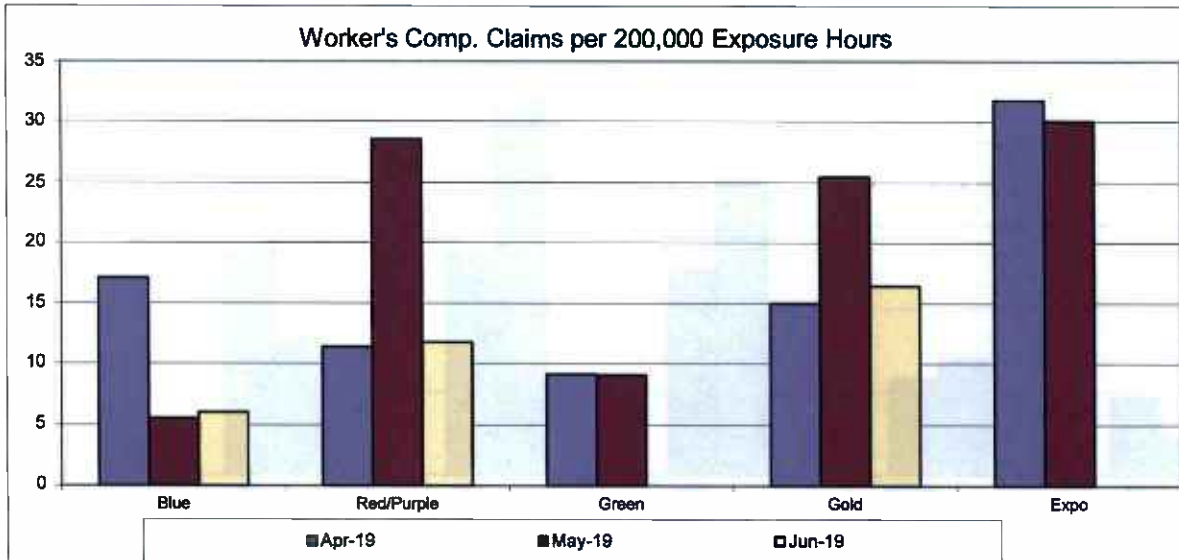
Note: There is a one month lag in Lost Work Days and OSHA data.



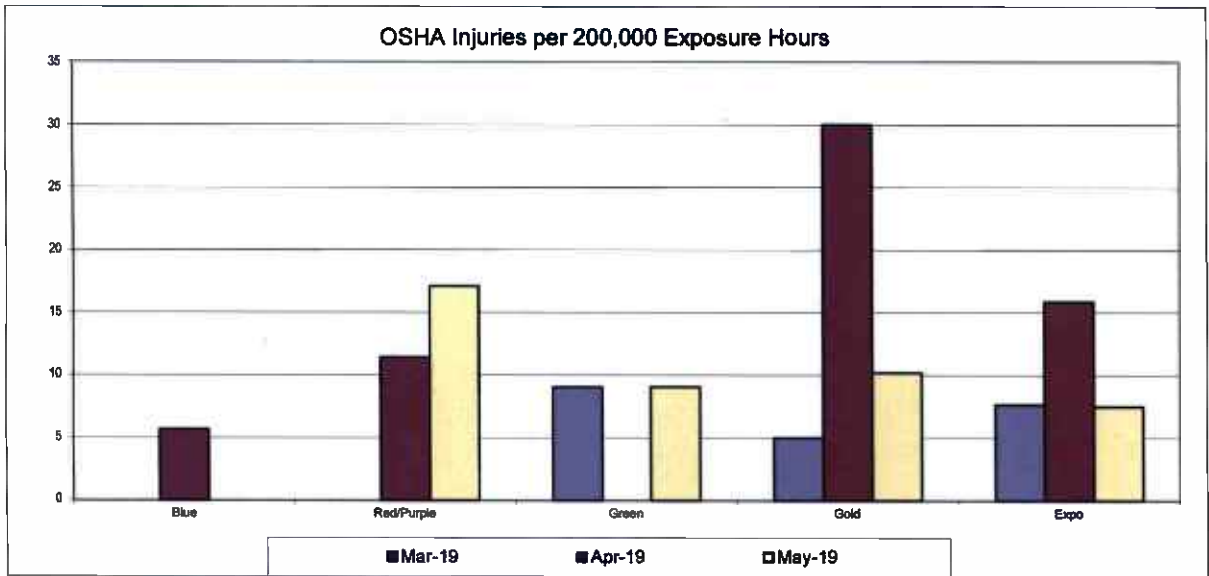
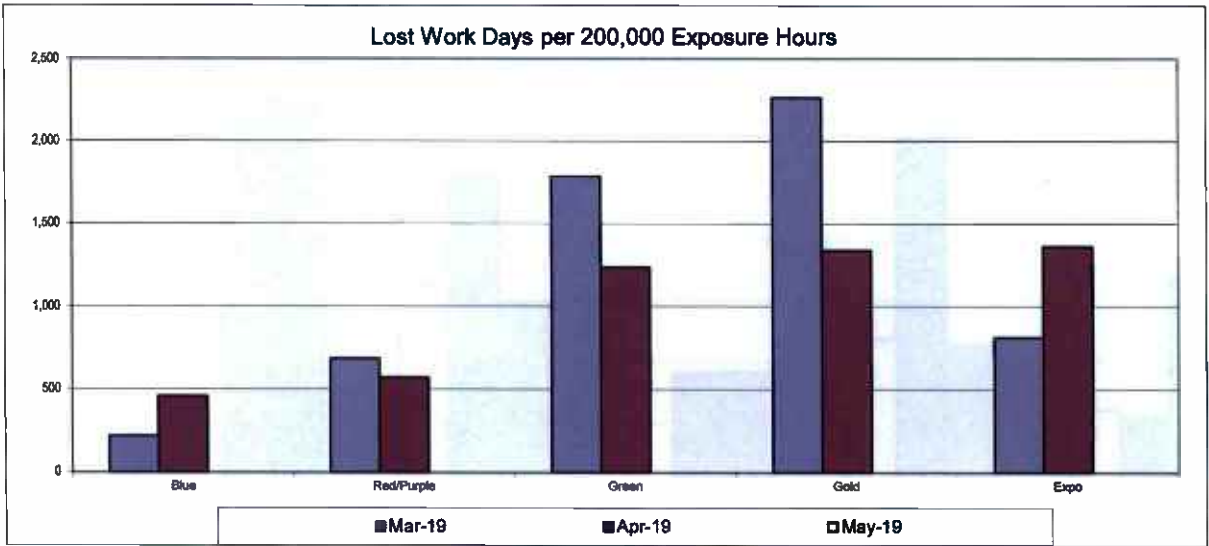
Facilities Maintenance goals to be established.

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

Worker's Comp. Claims
Apr 2019 - Jun 2019
3 Month Comparison



Lost Work Days and OSHA Injuries
Mar 2019 - May 2019
3 Month Comparison



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

BLUE LINE

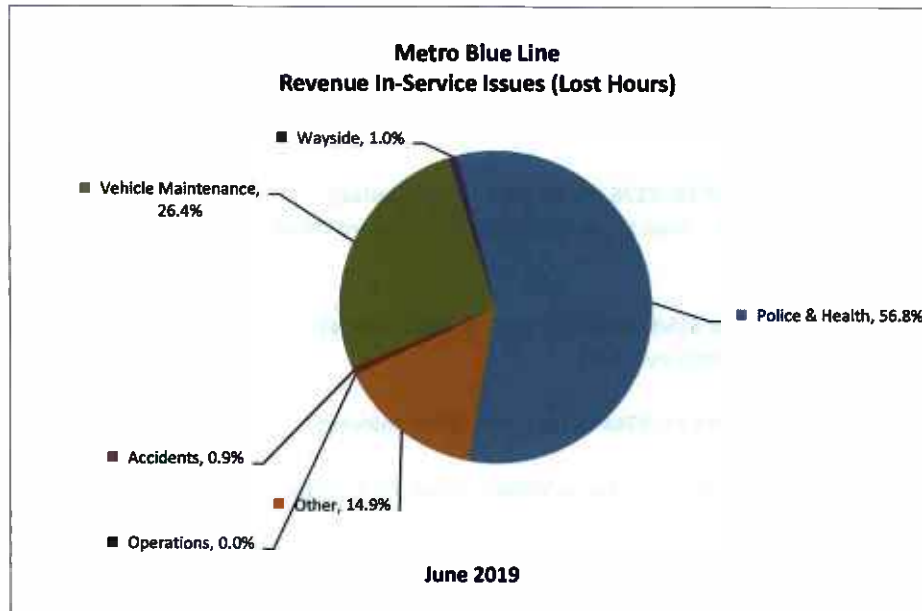
Out of a total of 10,671 hours operated, there were approximately 22 total hours of service delays.

June 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	10,649	99.8%
Cancelled + Delayed Hours	22	0.2%
Total Revenue Hours	10,671	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	1	0.0	0.0%
Accidents	0	0.2	0.9%
Vehicle Maintenance	2	5.9	26.4%
Wayside	3	0.2	1.0%
Police & Health	3	12.6	56.8%
Other	4	3.3	14.9%
Total	13	22.2	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



June 2019 Blue Line incidents causing delay were as follows:

Operations Incidents:

Accidents:

6/21/2019 5:57:00 AM - Incident# 3165363 (0 lost trips, 12 lost minutes)

Train sideswiped by truck

Train 106

T-246

(1081B)-1101-1080

Willow/Long Beach, Track 1, Northbound

Vehicle Maintenance Incidents:

6/16/2019 4:38:00 PM - Incident# 3163335 (1 lost trip, 178 lost minutes)

No Fault - No Movement

Train has no movement with no active fault.

Train 101

T-54

Cars 1094)1079-1085

South of Artesia station tk2

6/23/2019 4:13:00 PM - Incident# 3166135 (1 lost trip, 174 lost minutes)

No Cab Signal

Train 105 T-86

Compton TK 1

Southbound

(1073A)-1091-1101

Wayside Incidents:

6/1/2019 4:28:00 AM - Incident# 3157176 (0 lost trips, lost minutes)

Due to loss of cab signal on track 2 from Del Amo station to main yard interlocking the southbound trains are experiencing delays.

6/3/2019 9:07:00 PM - Incident# 3158114 (0 lost trips, 8 lost minutes)

Compton Interlocking out of correspondence

6/16/2019 6:18:00 PM - Incident# 3163348 (0 lost trips, 5 lost minutes)

Signal: Signal Power Failure

Loss of signaling capability between Compton to Willow station both tracks.

Police & Health Incidents:

6/14/2019 12:02:00 AM - Incident# 3162493 (0 lost trips, 22 lost minutes)

T-34.

Train 105.

Dominguez Flyover, Southbound, Track #2.

1103-1088-1074.

Operator reported that there was a woman in the fetal position laying on the side of track #2 as he was going thru.

6/23/2019 1:21:00 PM - Incident# 3166102 (0 lost trips, 720 lost minutes)

Blockade Long Beach Loop

6/25/2019 11:03:00 PM - Incident# 3167159 (0 lost trips, 15 lost minutes)

Altercation aboard train/ Compton Station

Train #103, T-363

Car # 1092B-1102-1138

Other Incidents:

6/14/2019 4:42:00 AM - Incident# 3162536 (0 lost trips, 12 lost minutes)

Train 103, LRV's (1107A), 1099, 1112.

Compton Interlocking Track 1 south.

Unable to use TWC to call route.

6/14/2019 3:00:00 AM - Incident# 3162522 (0 lost trips, 7 lost minutes)

MT-154 requested to do HiRail track inspection on track 1 from Compton Crossing to Long Beach Loop.

Unable To Duplicate:

6/17/2019 6:20:00 PM - Incident# 3163828 (0 lost trips, 5 lost minutes)

Door problem

Train 106

T-26

Cars 1083-1108-1096

Compton station Platform #2

Reset:

6/25/2019 1:12:00 PM - Incident# 3166990 (1 lost trip, 174 lost minutes)

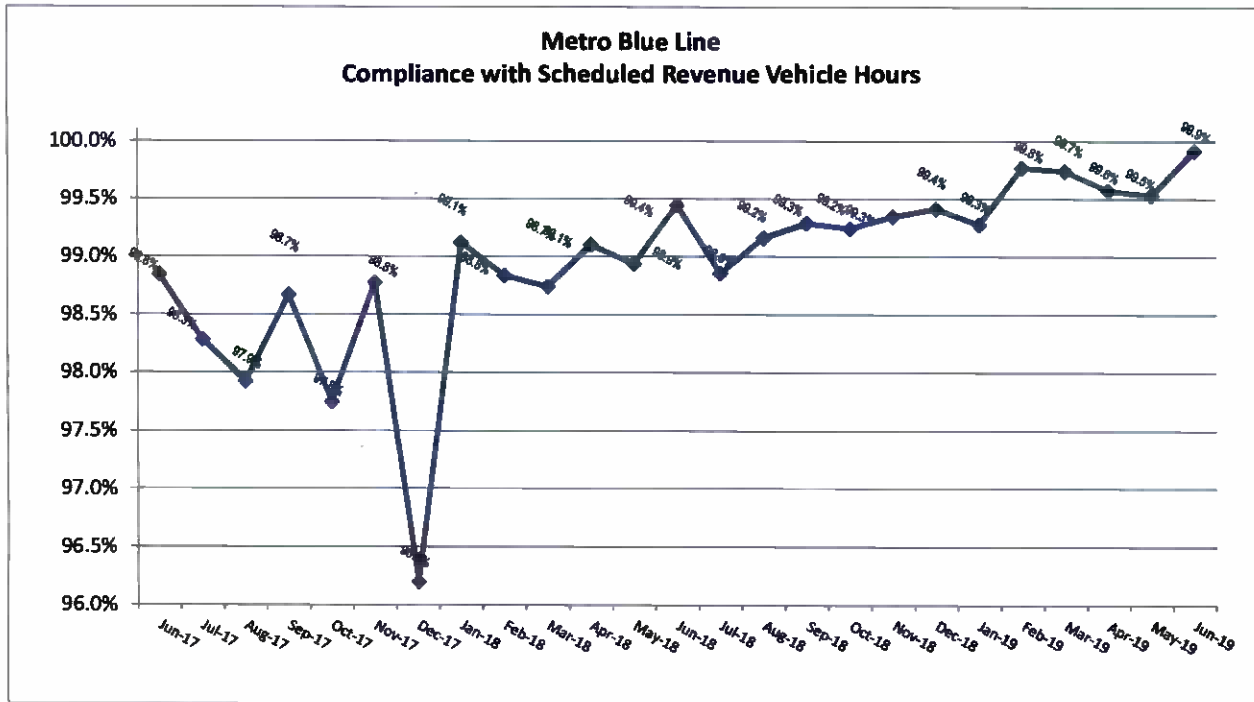
No faults No Indication 35 MPH Restriction

Train 104 T-237 TK !

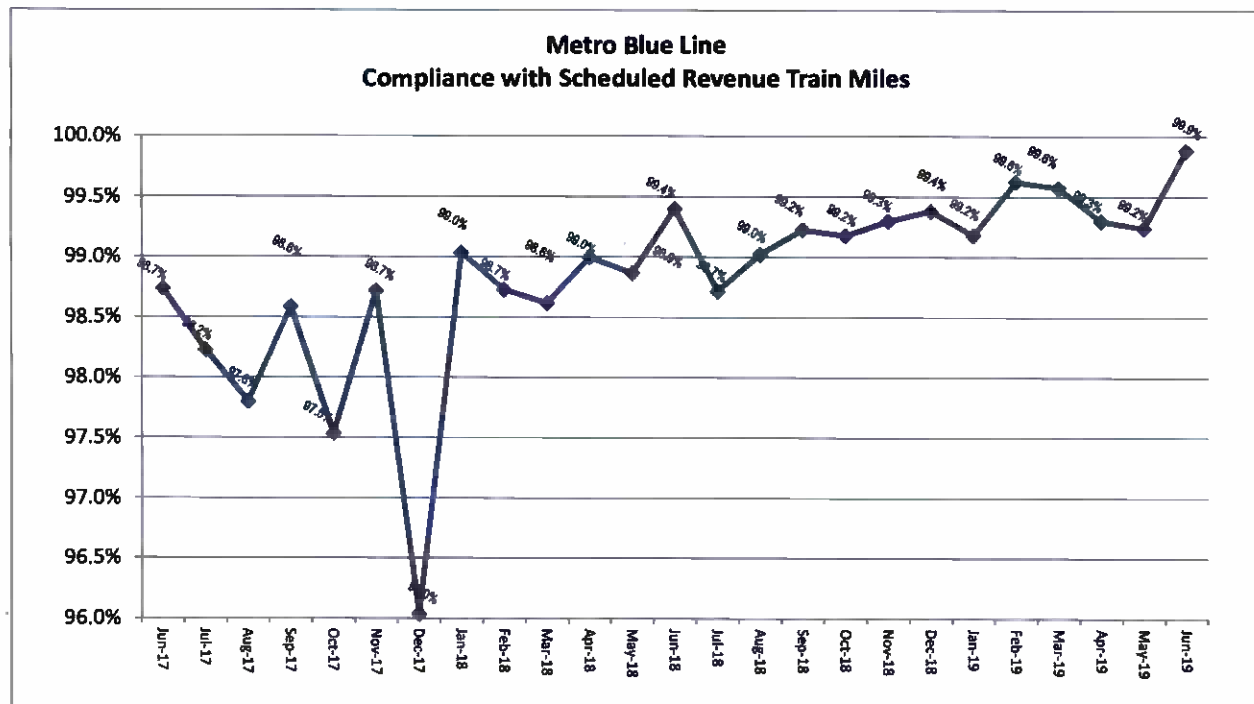
Northbound Del Amo

(1100)-1121-1087

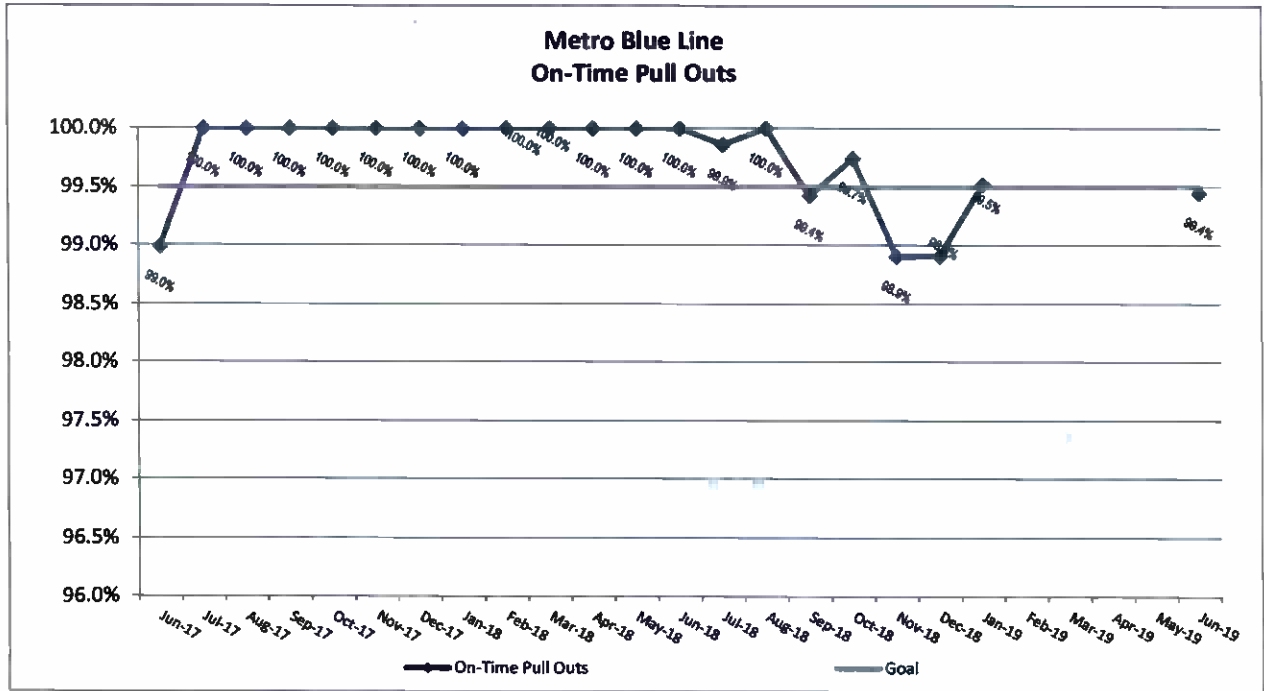
MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS
COMPLIANCE WITH SCHEDULED VEHICLE HOURS
 Jun 2019



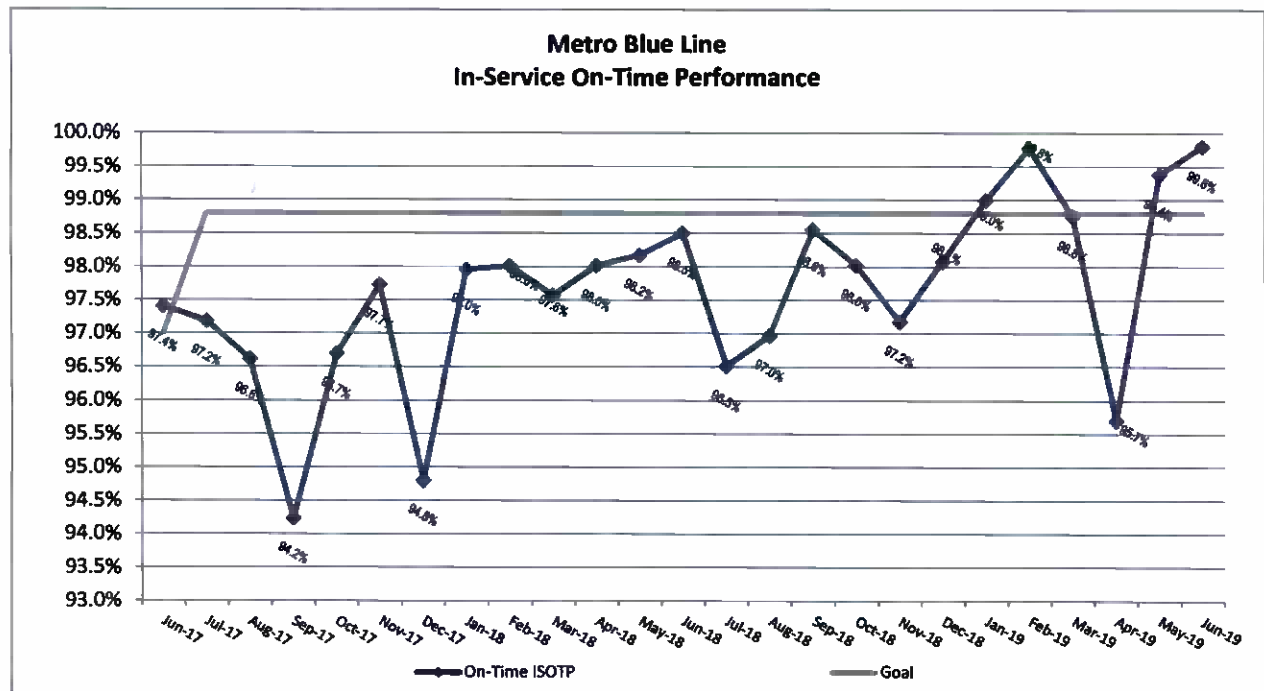
COMPLIANCE WITH SCHEDULED TRAIN MILES



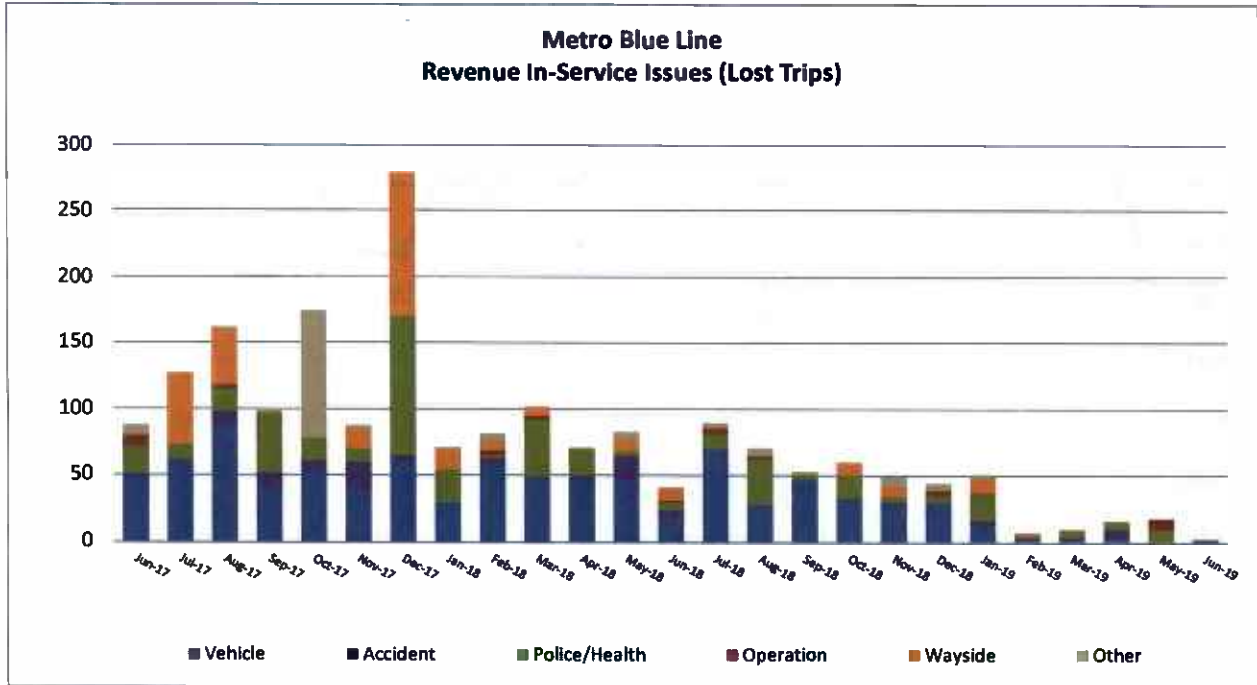
ON-TIME PULL OUTS



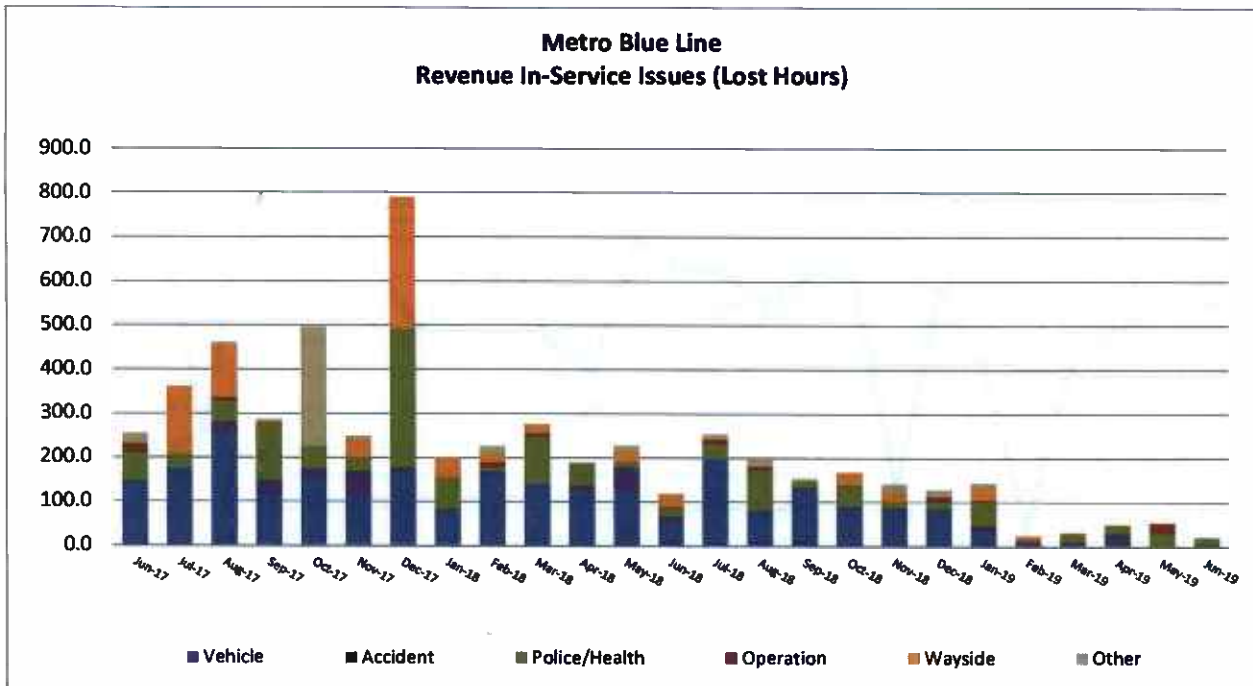
IN-SERVICE ON-TIME PERFORMANCE CHART



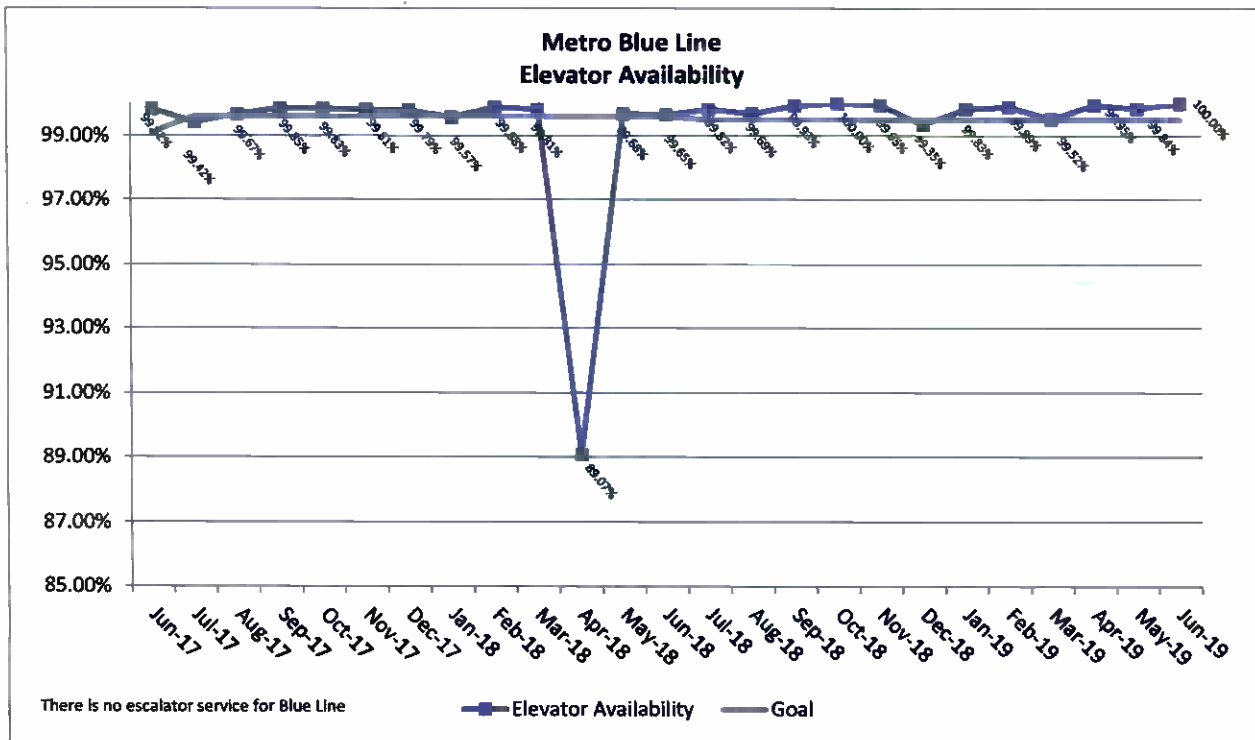
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



RED LINE

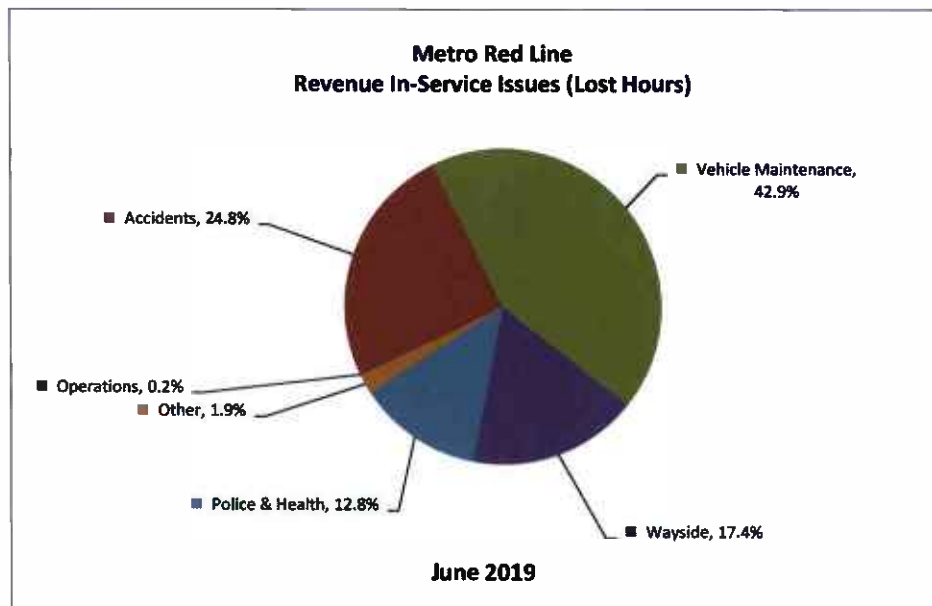
Out of a total of 24,720 hours operated, there were approximately 48 total hours of service delays.

June 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	24,672	99.8%
Cancelled + Delayed Hours	48	0.2%
Total Revenue Hours	24,720	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	1	0.1	0.2%
Accidents	1	11.9	24.8%
Vehicle Maintenance	11	20.6	42.9%
Wayside	6	8.4	17.4%
Police & Health	8	6.2	12.8%
Other	4	0.9	1.9%
Total	31	48.0	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



June 2019 Red Line incidents causing delay were as follows:

Operations Incidents:

6/26/2019 3:55:00 PM - Incident# 3167523 (0 lost trips, 5 lost minutes) CHARGEABLE

Train #203, Cars #527-522-513-514, departed Union Station without opening the doors for revenue service.

Accidents:

6/1/2019 5:00:00 AM - Incident# 3157192 (6 lost trips, 716 lost minutes)

Train 205 reports person under train @ WN

T-364, Train 205

BL, East, 547-548-539-540

Vehicle Maintenance Incidents:

6/3/2019 6:03:00 PM - Incident# 3158068 (1 lost trip, 149 lost minutes)

Propulsion and service brake failure

T-3

Train 202

601-602-(541)-542

Union Station AR

6/5/2019 8:10:00 PM - Incident# 3159063 (1 lost trip, 150 lost minutes)

Train 202 / Operator T-427 / Consist (603),604,563,564

Operator reports flashing cab signals in car 603 with no movement eastbound. Trip was cancelled with a 12 minute delay.

6/7/2019 4:10:00 PM - Incident# 3159842 (0 lost trips, 8 lost minutes)

Operator reports flashing cab signal, emergency brake self apply and unable to open doors.

Vermont Santa Monica Station, AL track, E/bound.

Cars: 551 552 543 544 589 (590).

Train 214.

T-333.

6/10/2019 12:25:00 PM - Incident# 3160852 (1 lost trip, 149 lost minutes)

Operator reports Aux Power failure, train line.

Westlake Station, AR track, W/bound.

Cars: (521) 530 527 522.

Train 202.

T-371.

6/11/2019 3:11:00 PM - Incident# 3161446 (1 lost trip, 154 lost minutes)

Operator reports Emergency Brake self apply.

Union Station, AL track, W/bound.

Cars: (547) 548 549 550 575 576.

Train 213.

T-333.

6/14/2019 7:11:00 PM - Incident# 3162916 (0 lost trips, 5 lost minutes)

Propulsion / Dynamic Brakes

Train 217

T-003

589-590-553-(554)-563-564

East, AL North Hollywood.

6/18/2019 9:09:00 PM - Incident# 3164367 (1 lost trip, 149 lost minutes)

Operator reports no movement and no power to the consist.

Train 217

T-116

Cars 545 546 579 580 599 600.

North Hollywood AR interlocking.

6/19/2019 3:12:00 PM - Incident# 3164752 (1 lost trip, 155 lost minutes)

T-12 Operating Train # 206 in lead car #512 reports Emergency brakes will Not release , No cab signals and the Mode selector and Master controller will not move and No movement.

W/N BL E/B.

6/21/2019 9:50:00 PM - Incident# 3165731 (1 lost trip, 164 lost minutes) CHARGEABLE

Propulsion / Dynamic Brakes

Train 219

T-217

541-(542)-537-538-527-548

Westbound, AR Pershing Square.

6/22/2019 6:36:00 PM - Incident# 3165933 (0 lost trips, 5 lost minutes)

Smoke from one of the train vents.

T-199

Train 206

529-(520)-503-504

North Hollywood AR East

6/27/2019 7:57:00 PM - Incident# 3168013 (1 lost trip, 149 lost minutes)

Friction Brakes

Train 212

T-172

(502)-501-504-503-506-505

Eastbound, AL North Hollywood station.

Wayside Incidents:

6/10/2019 12:09:00 AM - Incident# 3160448 (2 lost trips, 298 lost minutes)

ARINC indicates D-03 UC, D-05 5D opened momentarily and reclosed on their own, leaving a false occupancy throughout the Univeral City interlocking on the AR.

6/11/2019 3:41:00 PM - Incident# 3161453 (1 lost trip, 159 lost minutes) CHARGEABLE

Deenergized AR track between Civic Center and Union Station.

6/14/2019 3:00:00 AM - Incident# 3162527 (0 lost trips, lost minutes) CHARGEABLE

TP-184 contacted ROC at 0300 hours to transfer loads at Union Station. D02, D04, D03 and D05 on the YR/ YL had opened. H14 had lock trip indication. Sweep trains 201 and 212 (gap) were delayed 10 minutes pulling out the yard.

6/16/2019 8:57:00 AM - Incident# 3163248 (0 lost trips, 9 lost minutes) CHARGEABLE

Switch 3 at Wilshire Vermont out of correspondence

6/21/2019 10:21:00 PM - Incident# 3165735 (0 lost trips, 25 lost minutes) CHARGEABLE

Track Circuit: False Occupancy at Westlake/MacArthur on track circuit 1AT and 3AT on the AL.

6/29/2019 12:35:00 PM - Incident# 3168664 (0 lost trips, 10 lost minutes) CHARGEABLE

Wilshire Western Interlocking failed occupied indication track circuit #WW-1B.

Police & Health Incidents:

6/4/2019 10:45:00 PM - Incident# 3158631 (0 lost trips, 10 lost minutes) CHARGEABLE

Operator reports an individual having seizure on car 564, train 219.

6/6/2019 5:41:00 PM - Incident# 3159493 (1 lost trip, 160 lost minutes) CHARGEABLE

Car 552 doors 5-7 off track.

T-15

Train 214

Cars 587-588-581-582-551-(552)

Union Station, AL, westbound.

6/11/2019 12:15:00 AM - Incident# 3161056 (0 lost trips, 15 lost minutes) CHARGEABLE

G-293 reports an individual through a bag of trash on the ROW at Civic Center AR. G-293 also reports the trash bag is on the 3rd rail impeding train movement.

6/21/2019 11:28:00 PM - Incident# 3165748 (0 lost trips, 4 lost minutes) CHARGEABLE

G-243 reported a female passenger falling on car 522 trying to enter.

6/22/2019 6:51:00 AM - Incident# 3165825 (0 lost trips, 6 lost minutes) CHARGEABLE

Train 202 was held by LAPD

6/24/2019 3:18:00 PM - Incident# 3166550 (1 lost trip, 154 lost minutes) CHARGEABLE

T-333 reports a sick individual in car # 576 in Train # 213. Holding at WM For LAFD.

6/26/2019 7:05:00 AM - Incident# 3167243 (0 lost trips, 5 lost minutes) CHARGEABLE

Train 204 held +05 by LAPD at Union Station to remove a single patron

6/29/2019 5:39:00 PM - Incident# 3168712 (0 lost trips, 15 lost minutes) CHARGEABLE

Operator reports a robbery on train 207 at Vermont Santa Monica Station, AR track, W/bound.

Cars: 543 544 (575) 576.

Other Incidents:

6/10/2019 12:17:00 PM - Incident# 3160694 (0 lost trips, 10 lost minutes) CHARGEABLE

CCTV observer reports a trespasser on the AR track at Westlake Station.

6/23/2019 8:16:00 AM - Incident# 3166036 (0 lost trips, 17 lost minutes)

Fire on tracks: AR mile markers 1.7 & 2.3

Unable To Duplicate

6/8/2019 4:50:00 AM - Incident# 3159995 (0 lost trips, 15 lost minutes)

Car 548 Re-occurring emergency brake applications, unable to proceed.

6/12/2019 4:41:00 PM - Incident# 3161960 (0 lost trips, 13 lost minutes)

Operator reports doors problem at the very last car.

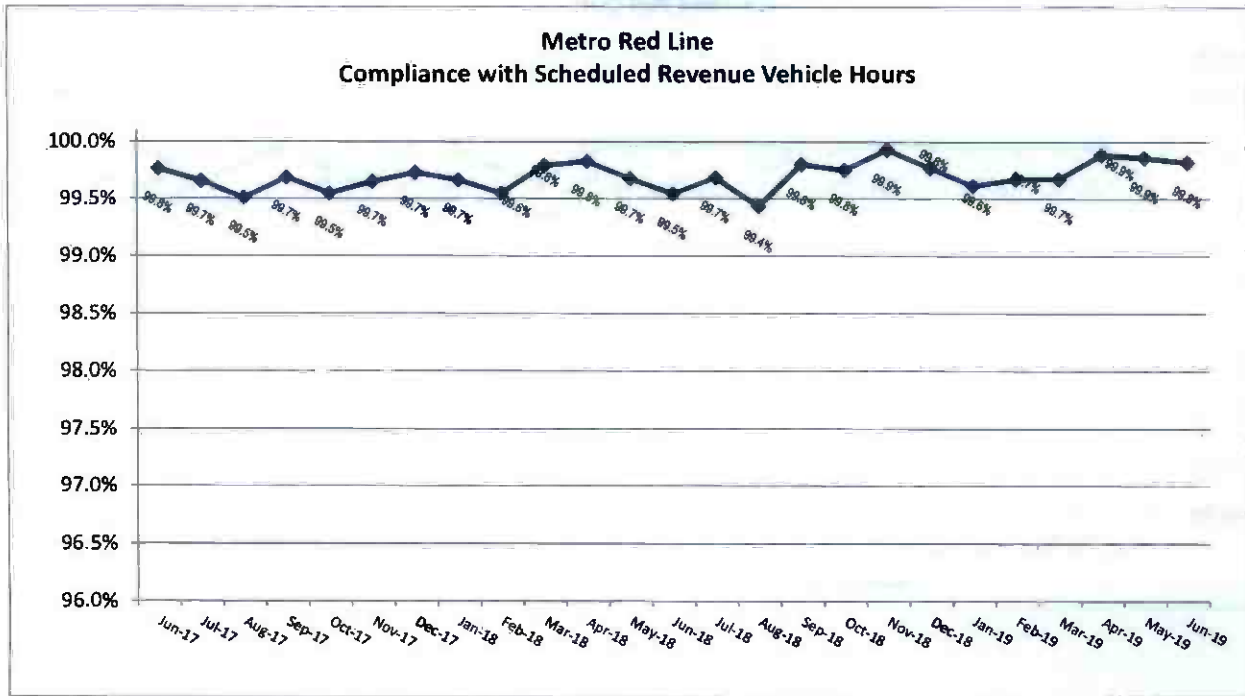
Pershing Square Station, AL track, E/bound.

Cars: (587 588) 571 572 567 568.

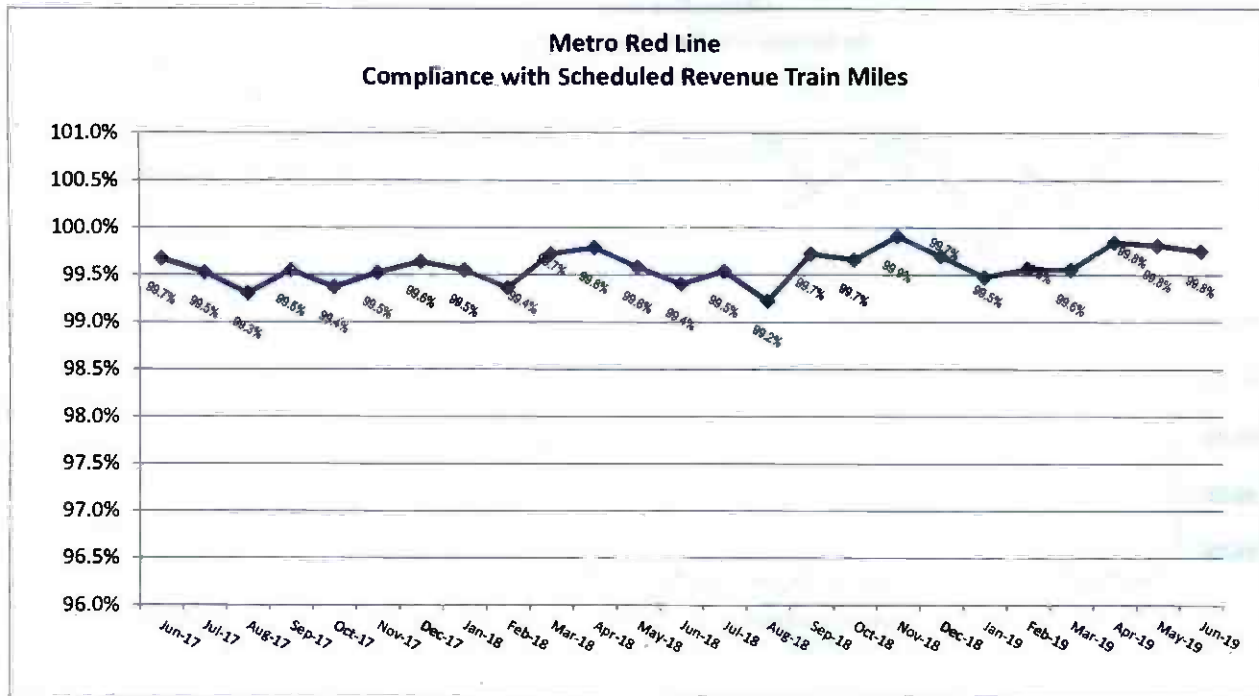
Train 219.

T-061.

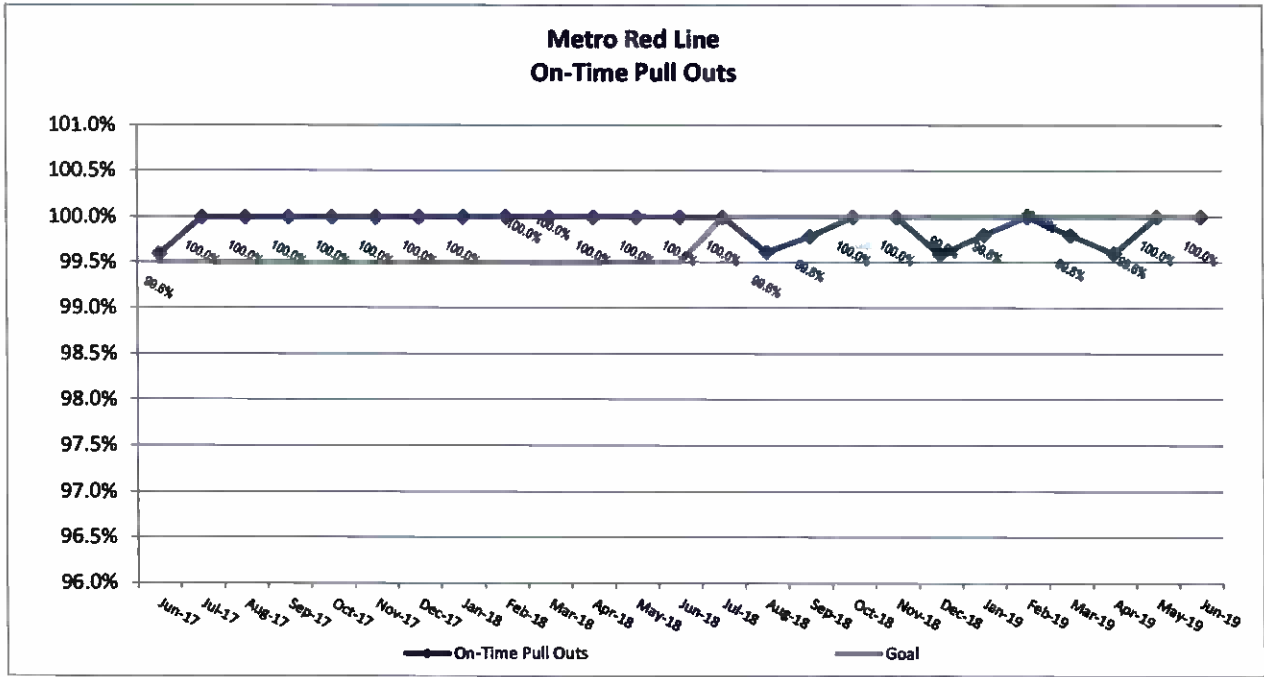
MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS
COMPLIANCE WITH SCHEDULED VEHICLE HOURS
Jun 2019



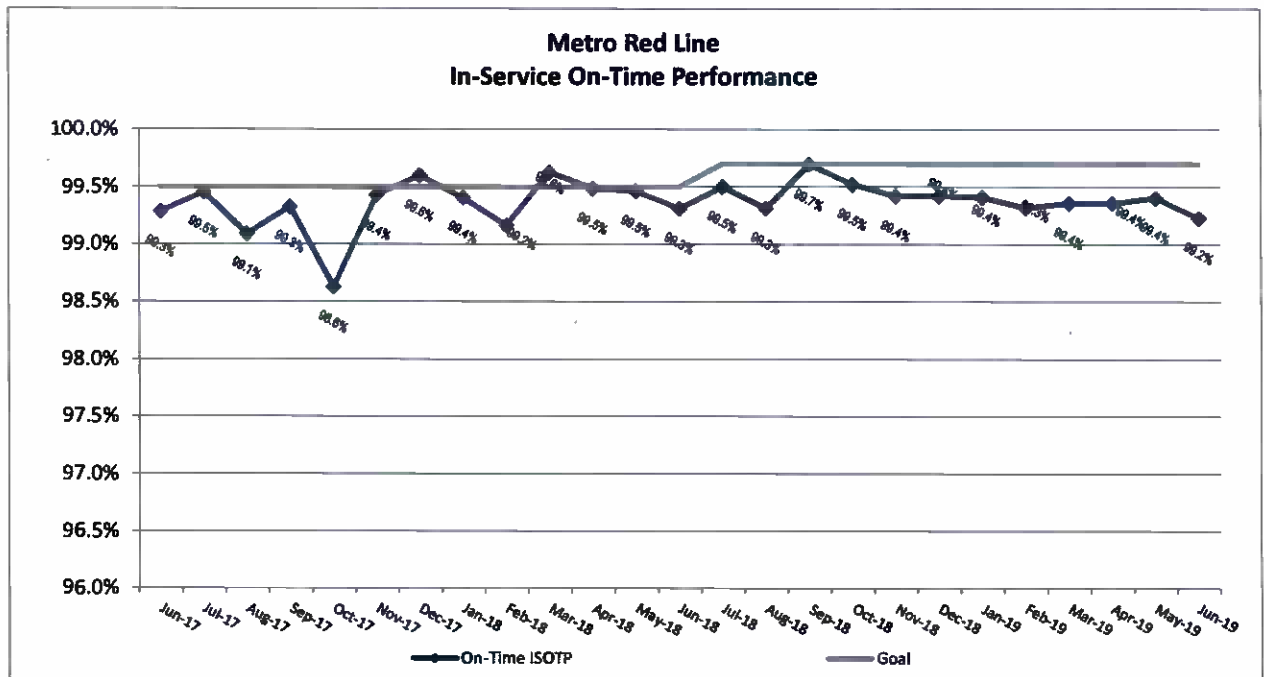
COMPLIANCE WITH SCHEDULED TRAIN MILES



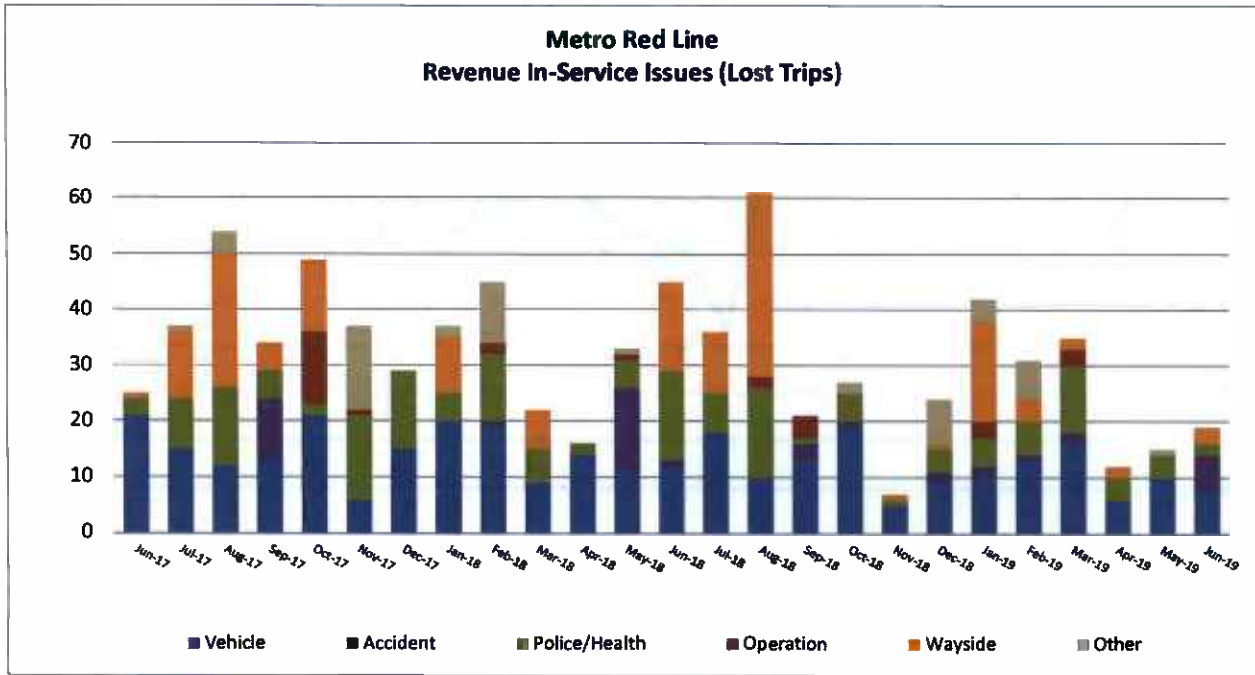
ON-TIME PULL OUTS



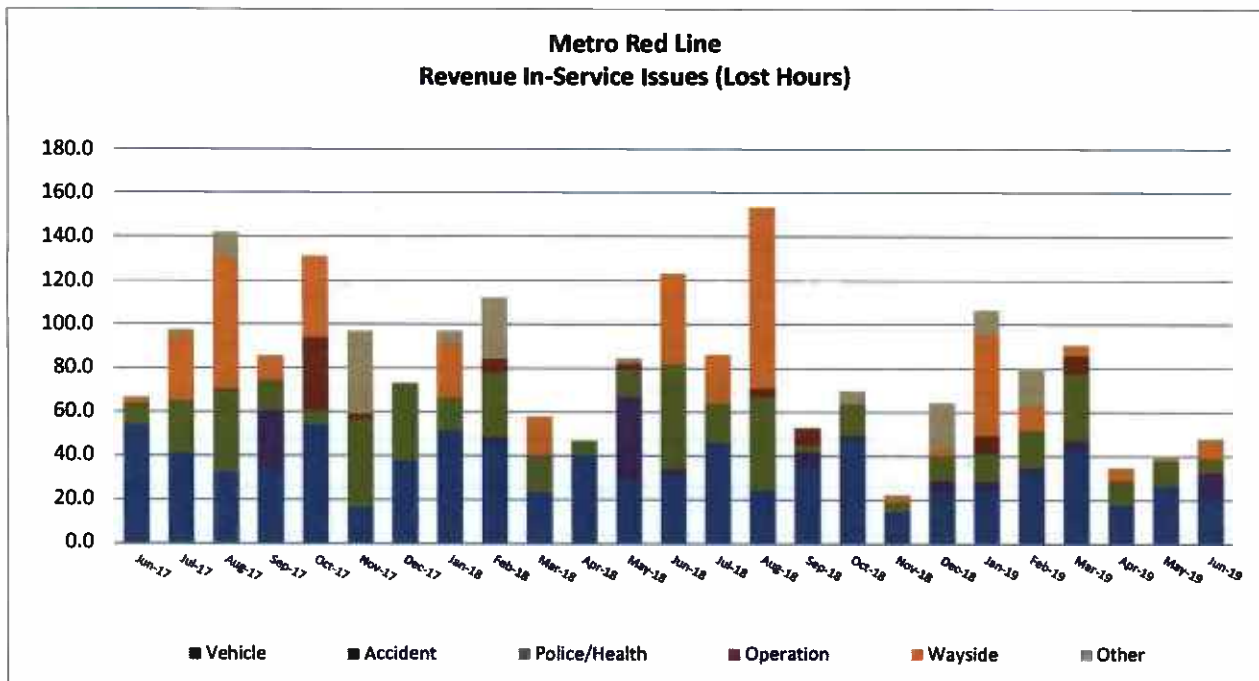
IN-SERVICE ON-TIME PERFORMANCE



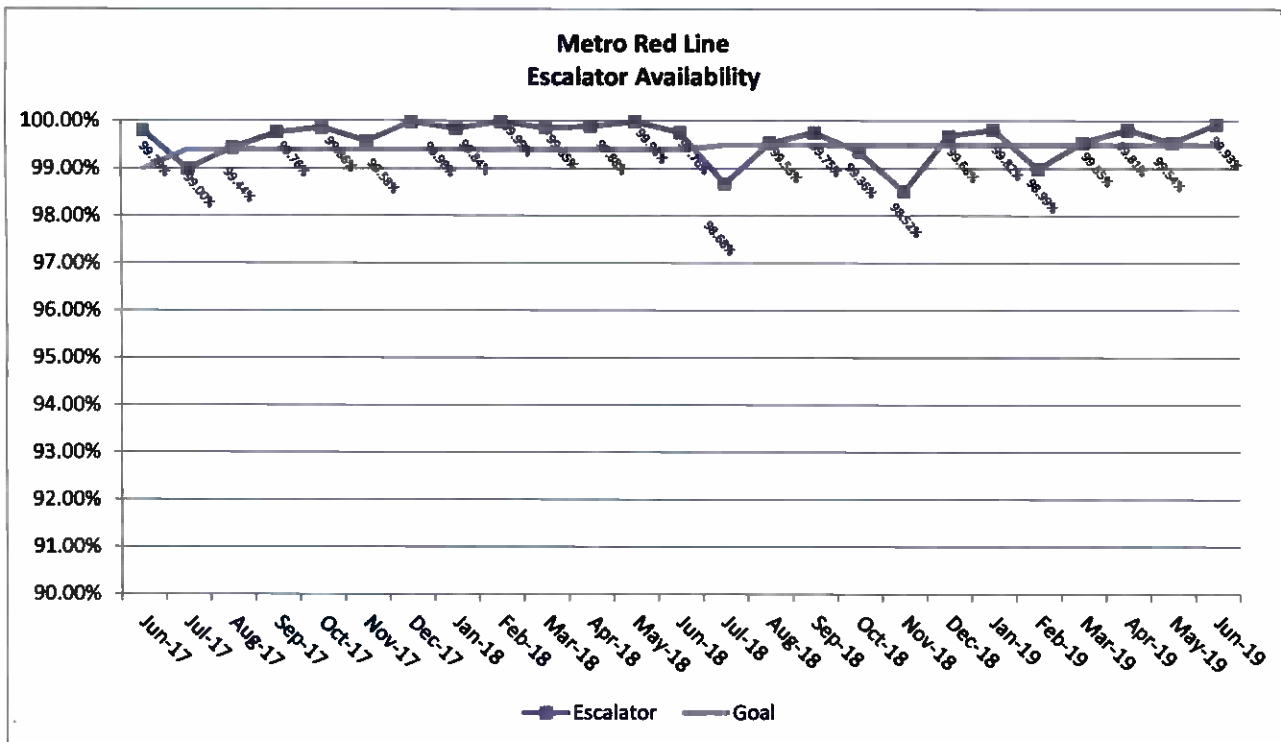
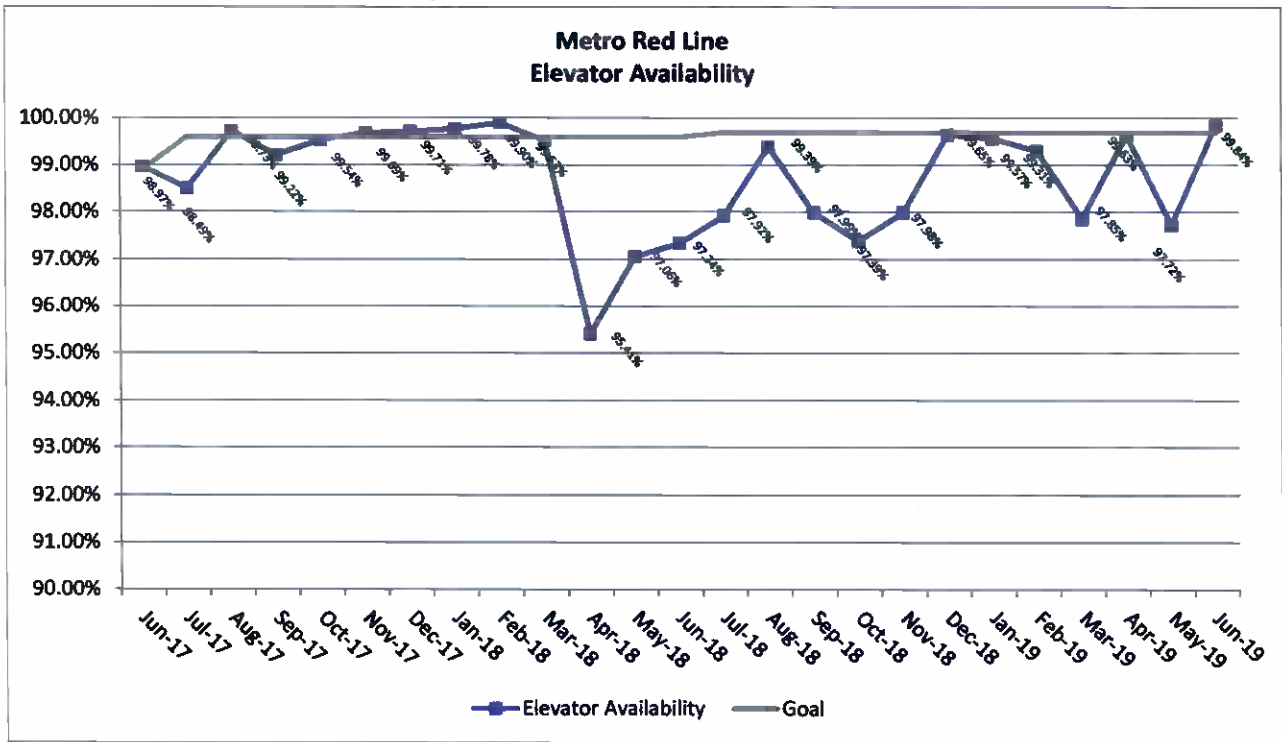
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



GREEN LINE

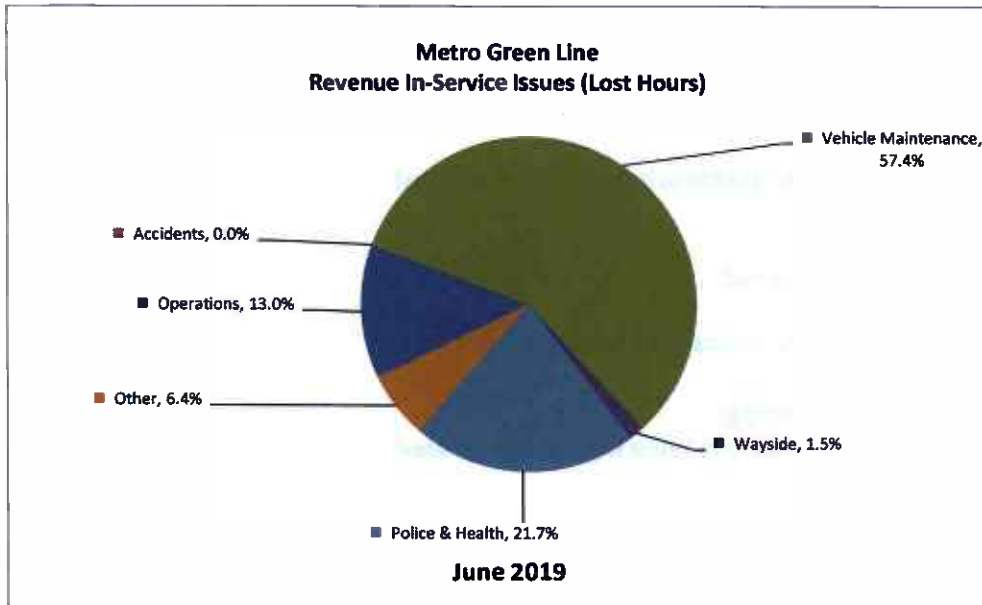
Out of a total of 9,217 hours operated, there were approximately 38 total hours of service delays.

June 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	9,180	99.6%
Cancelled + Delayed Hours	38	0.4%
Total Revenue Hours	9,217	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	6	4.9	13.0%
Accidents	0	0.0	0.0%
Vehicle Maintenance	11	21.7	57.4%
Wayside	1	0.6	1.5%
Police & Health	4	8.2	21.7%
Other	6	2.4	6.4%
Total	28	37.8	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



June 2019 Green Line incidents causing delay were as follows:

Operations Incidents:

6/7/2019 4:49:00 AM - Incident# 3159581 (0 lost trips, 6 lost minutes)

10 minutes pulling out of the yard.

6/12/2019 4:55:00 AM - Incident# 3161624 (0 lost trips, 6 lost minutes)

Operator Error (no cab signal)

Train 336

T-121

LRV cars 1145-1168

Marine Station track 2 eastbound

6/13/2019 6:50:00 AM - Incident# 3162148 (0 lost trips, 10 lost minutes)

Operator reports overshooting the station

Train 341

T-394

(1173B)-1149

Lakewood Station, Track 1, Westbound

6/21/2019 2:34:00 PM - Incident# 3165607 (4 lost trips, 260 lost minutes)

Yard Control R-200 Reported No Manpower for Alpha AA Until Approximately 1800 hours

6/23/2019 9:44:00 AM - Incident# 3166049 (0 lost trips, 8 lost minutes)

Train 332 / Track 1 / Relief Platform

T-343 did not get relieved at the Relief Platform. Operator T-348 missed his sign on to Alpha .

Yard Control sent a replacement Operator to the Relief Platform .

6/28/2019 4:27:00 PM - Incident# 3168438 (0 lost trips, 5 lost minutes)

T-44.

Train #354.

Track #2, Hawthorne Station, Eastbound.

(219A), 225.

T-44 overran Hawthorne Station by both cars 219 and 225 on track #2.

Vehicle Maintenance Incidents:

6/1/2019 6:16:00 PM - Incident# 3157359 (0 lost trips, 10 lost minutes)

Train 332

Track #1

Westbound

(1151B)-1141

T-266

Operator reports ATP fail west of Aviation Signal 8 interlocking.

6/3/2019 5:30:00 PM - Incident# 3158090 (1 lost trip, 66 lost minutes)

T-327 Operating Train # 356 reports Propulsion failure and Power Failure with a speed restriction . Operator did troubleshoot but negative results.

6/7/2019 3:12:00 PM - Incident# 3159828 (14 lost trips, 928 lost minutes)

224A-(222)

WB Btwn Aviation and Mariposa

Friction Brake Fault - No Movement

Train 335

T-57

6/11/2019 3:35:00 PM - Incident# 3161443 (0 lost trips, 6 lost minutes)

Auto Train Protection (Speed Limit), cars # 220-205

Train #335

T-141

Marine Station, track #1, Westbound.

6/11/2019 5:51:00 PM - Incident# 3161492 (0 lost trips, 6 lost minutes)

Train Delay: Train with no movement.

Train 355

T-20

Cars 1143-1177

Douglas station westbound.

6/16/2019 8:16:00 AM - Incident# 3163240 (0 lost trips, lost minutes) CHARGEABLE

HSCB Trip, Propulsion fault and speed restriction on car (225).

Train 335

T-409

(225)-204

Hawthorne Station, Track 2, eastbound.

6/18/2019 7:33:00 AM - Incident# 3164018 (1 lost trip, 72 lost minutes) CHARGEABLE

Lose Cab Signal

Train 345

T-193

LRV cars 1145-1168

Crenshaw Station (east) track 2 eastbound

6/24/2019 6:37:00 AM - Incident# 3166288 (1 lost trip, 77 lost minutes) CHARGEABLE

ATP Fault

Train 333

T-020

LRV cars 222-221B

Wilmington Station track 1 westbound

6/24/2019 3:24:00 PM - Incident# 3166551 (0 lost trips, 6 lost minutes) CHARGEABLE

Door problem car 1171 5/6

Train 355

T-292

Track 2

Eastbound

Aviation station

6/24/2019 7:22:00 PM - Incident# 3166615 (1 lost trip, 66 lost minutes) CHARGEABLE

Propulsion fault unable to clear cars (220A)-203

T-184

Train 333

Track 2

Eastbound

Wilmington station

6/26/2019 9:57:00 PM - Incident# 3167620 (1 lost trip, 66 lost minutes) CHARGEABLE

No movement, No ATP

Train #356, T-394

202

WB, Norwalk Station, Track #1

Wayside Incidents:

6/25/2019 1:59:00 AM - Incident# 3166690 (0 lost trips, 34 lost minutes)

ARINC displayed alarm at 0159 hours Lost power to the Yard due to Tripped breaker.

Police & Health Incidents:

6/9/2019 7:00:00 AM - Incident# 3160248 (0 lost trips, 2 lost minutes) CHARGEABLE

Physical altercation on board Train 334, car 1141.

Train 334

T-148

(1141)-1171

Aviation Station, Track 2, westbound.

6/23/2019 2:12:00 AM - Incident# 3165982 (0 lost trips, lost minutes) CHARGEABLE

Green line: Sick patron @ Norwalk

Train 334

T-266

(1145)

Norwalk, track 1, Westbound

6/27/2019 10:10:00 AM - Incident# 3167848 (0 lost trips, 10 lost minutes) CHARGEABLE

CCTV reported Man on ROW Tk-2 Hawthorne Station.

6/30/2019 8:46:00 PM - Incident# 3168958 (0 lost trips, 480 lost minutes)

Sick Individual

Train #331, T-438

1150-(1173B)

WB, Norwalk Station, Track #1

Other Incidents:

Unable To Duplicate:

6/15/2019 2:44:00 PM - Incident# 3163091 (0 lost trips, 18 lost minutes)

Train 333, T-294, reported a propulsion fault with speed restriction on car 1151.

6/24/2019 10:07:00 PM - Incident# 3166661 (0 lost trips, 23 lost minutes) CHARGEABLE

Train 337 lost air pressure EB Tk-2 departing Douglas Station at 2207 hours.

T-277

Train 337

Cars: (227)-207

EB Tk-2 Douglas

Reset:

6/10/2019 5:25:00 AM - Incident# 3160505 (1 lost trip, 78 lost minutes)

Train reported Prop fault with speed restriction, then no movement.

T-260

Train 336

Cars (217) - 203

SouthBound Tk-2 MP12.5

6/27/2019 3:22:00 PM - Incident# 3167948 (0 lost trips, 10 lost minutes) CHARGEABLE

Train 351 reports loss of cab signal and unable to engage stop and proceed

T-255

Train: 351

Car: (1168)-1177

WB Tk-1 Norwalk IL.

6/28/2019 8:38:00 PM - Incident# 3168472 (0 lost trips, 6 lost minutes) CHARGEABLE

Cars (1143-1155) with Trainline problems/loses movement.

T-393

Train 356

Norwalk Station, Track 1, westbound.

6/30/2019 10:11:00 PM - Incident# 3168988 (0 lost trips, 10 lost minutes)

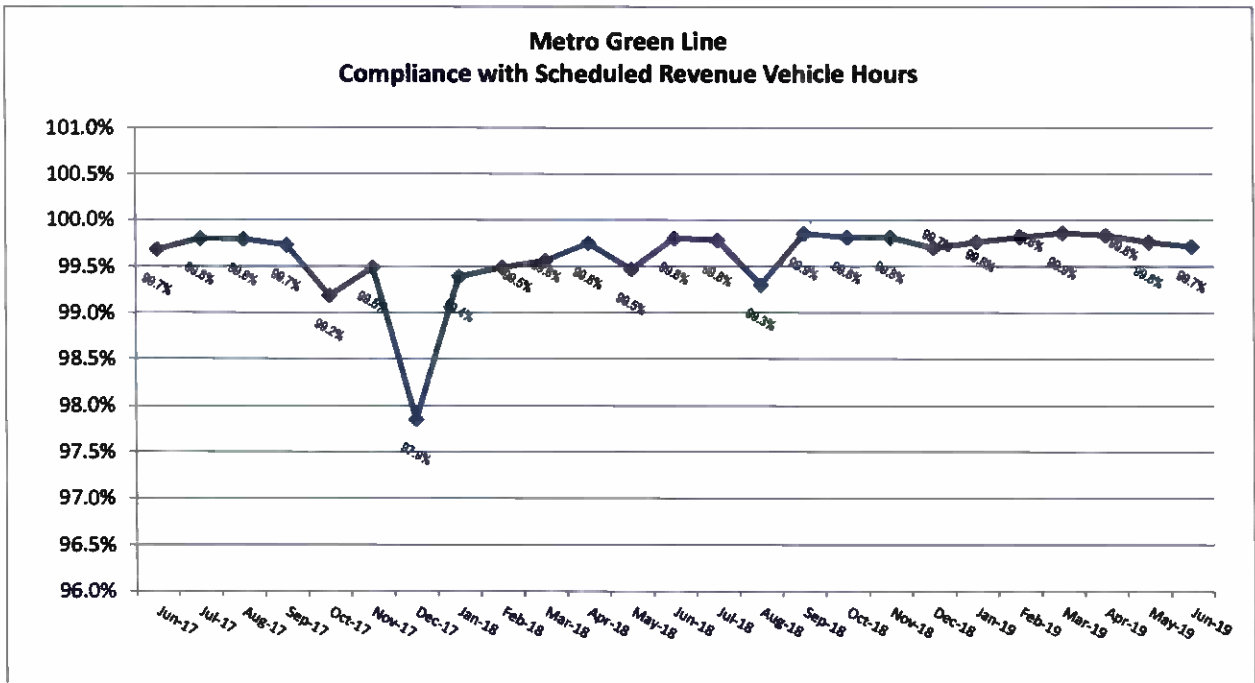
Loss of Cab Signal

Train #33S, T-269

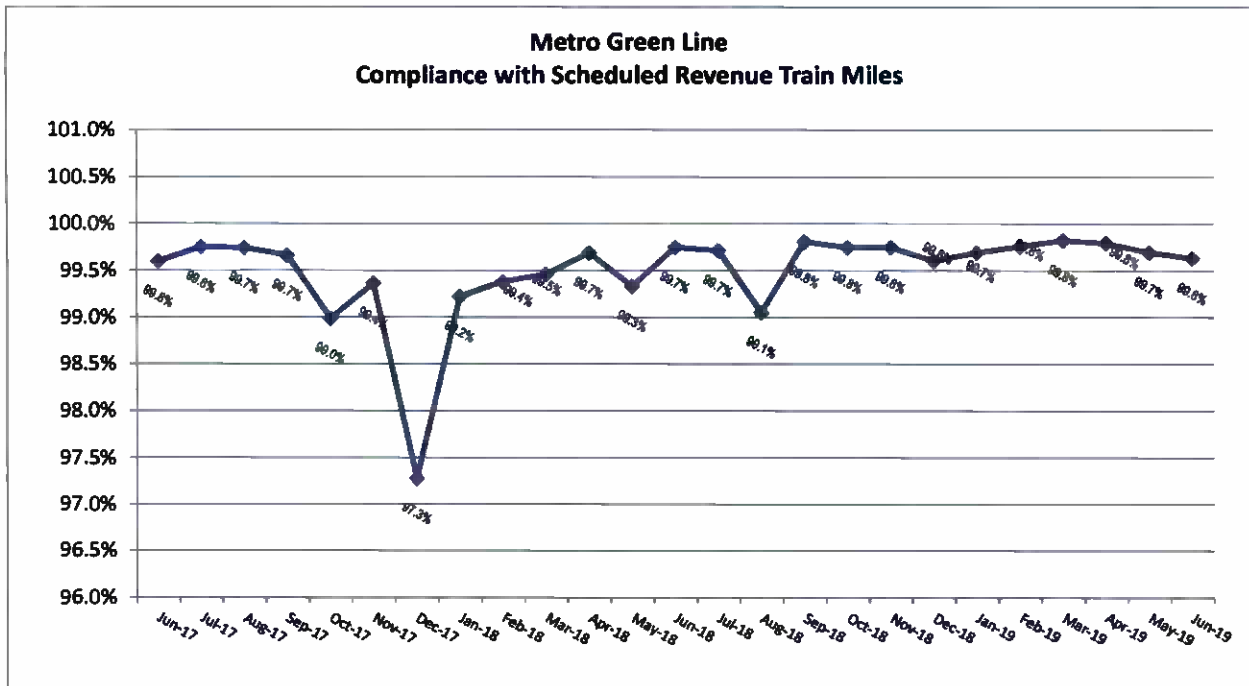
(1176B)-1151

WB, Norwalk Station, Track #1

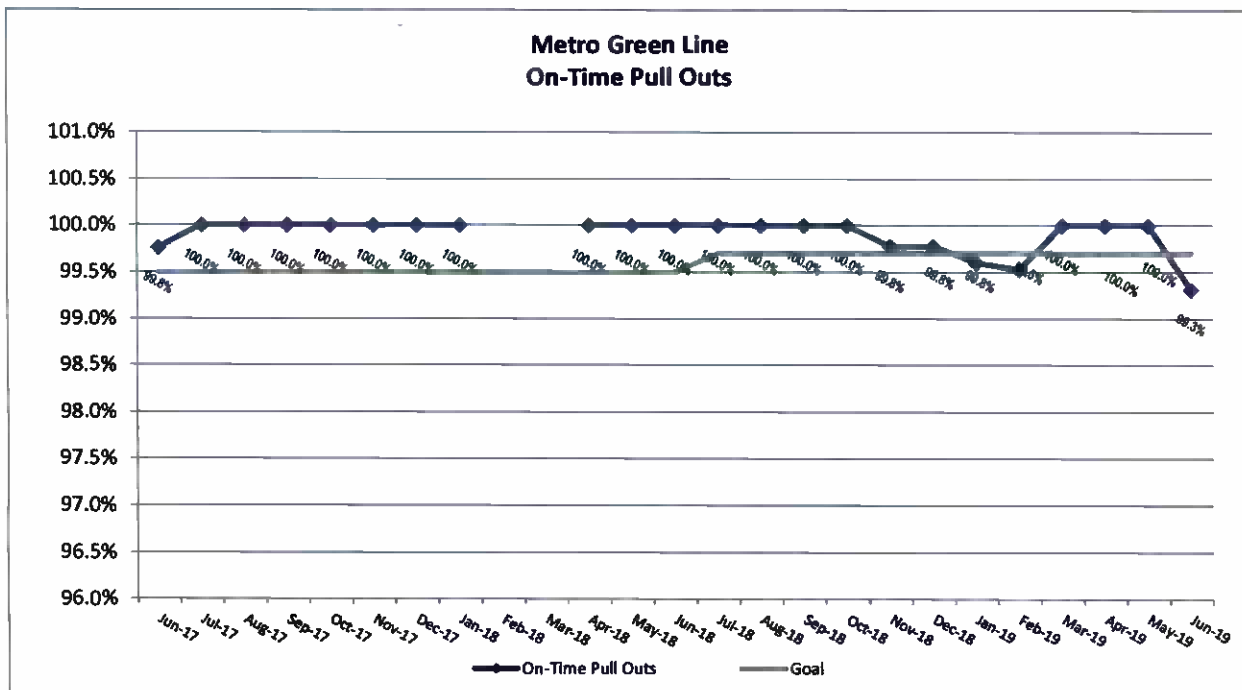
MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS
COMPLIANCE WITH SCHEDULED VEHICLE HOURS
Jun 2019



COMPLIANCE WITH SCHEDULED TRAIN MILES

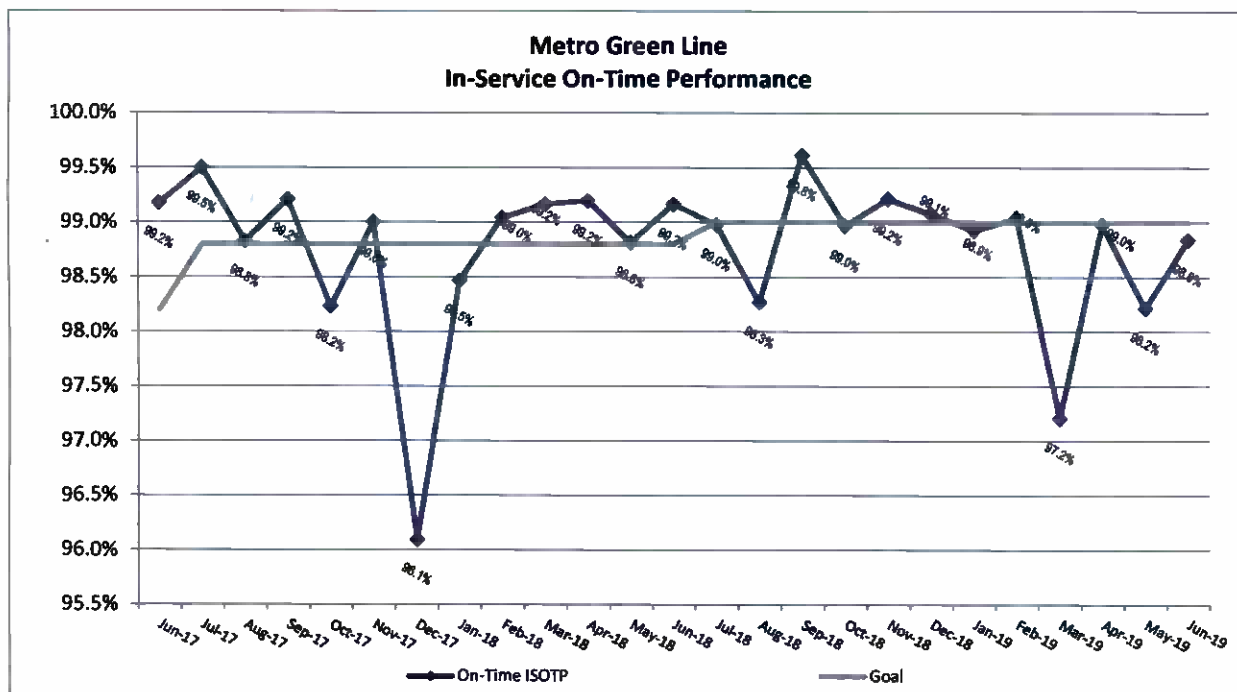


ON-TIME PULL OUTS

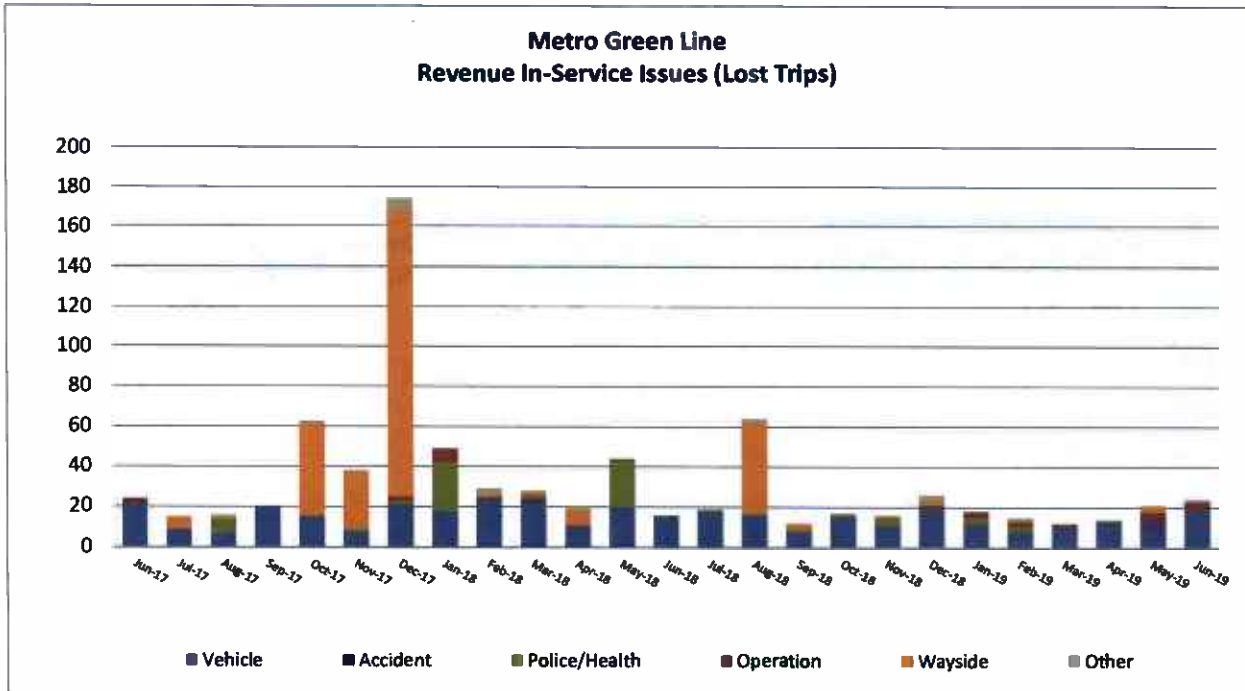


Due to the Crenshaw line link construction in Feb and March 2018, Green Line trains did not pull in or pull out, trains stayed on the tracks.

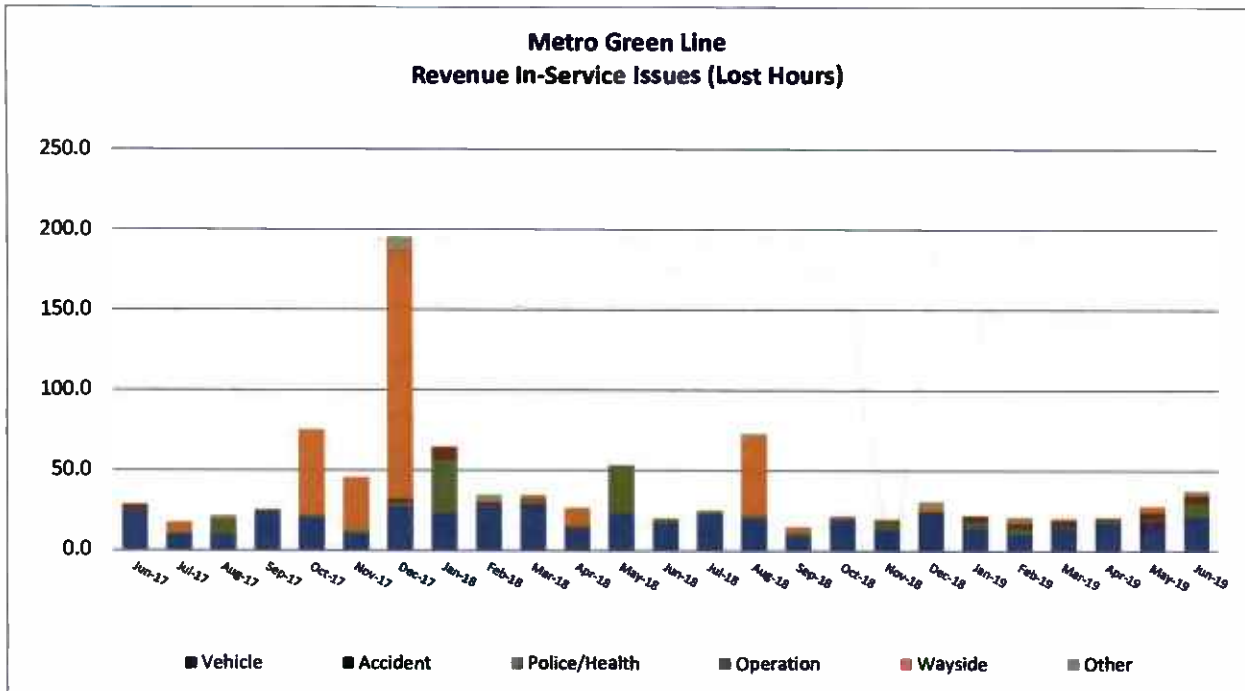
IN-SERVICE ON-TIME PERFORMANCE



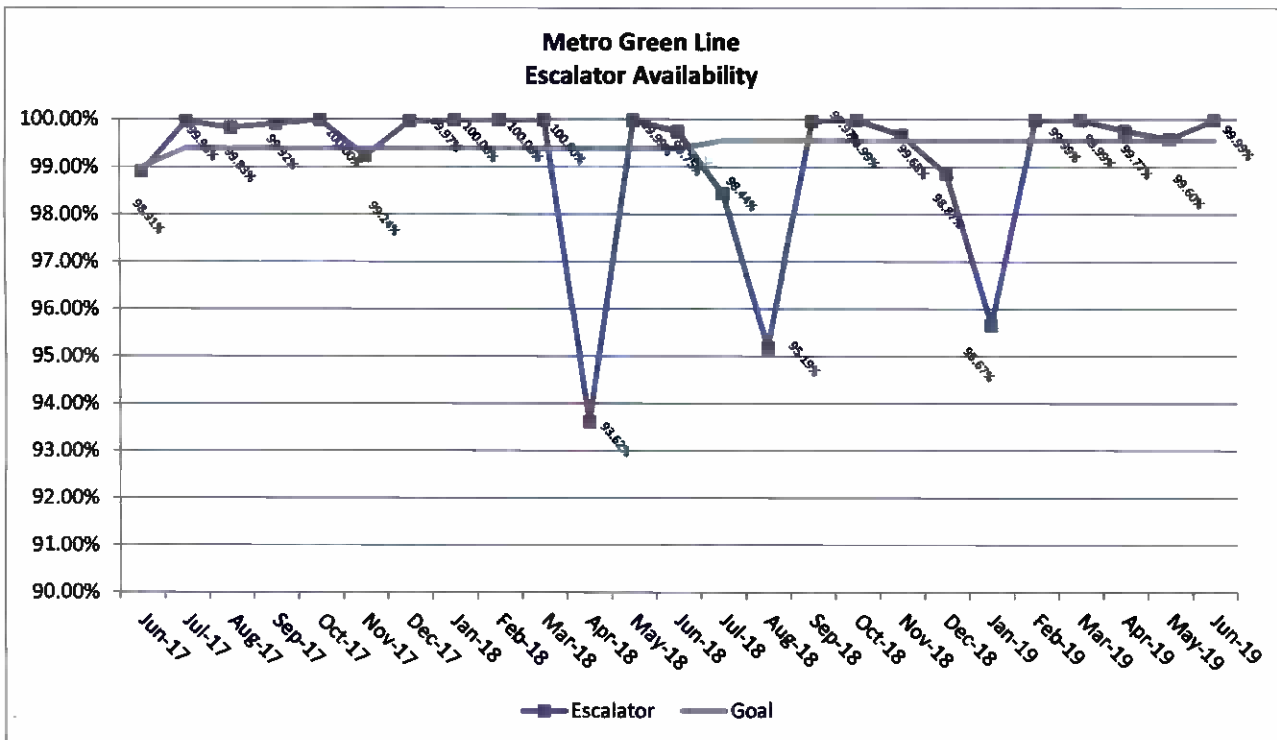
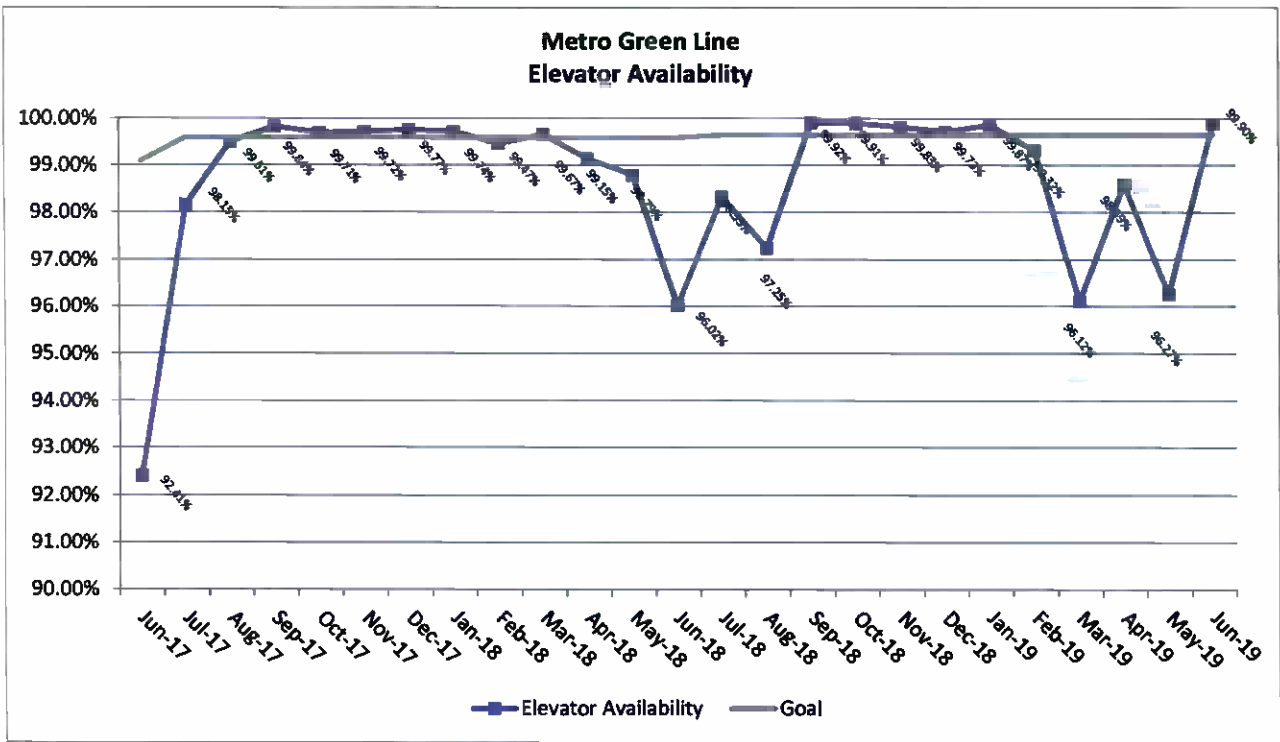
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



GOLD LINE

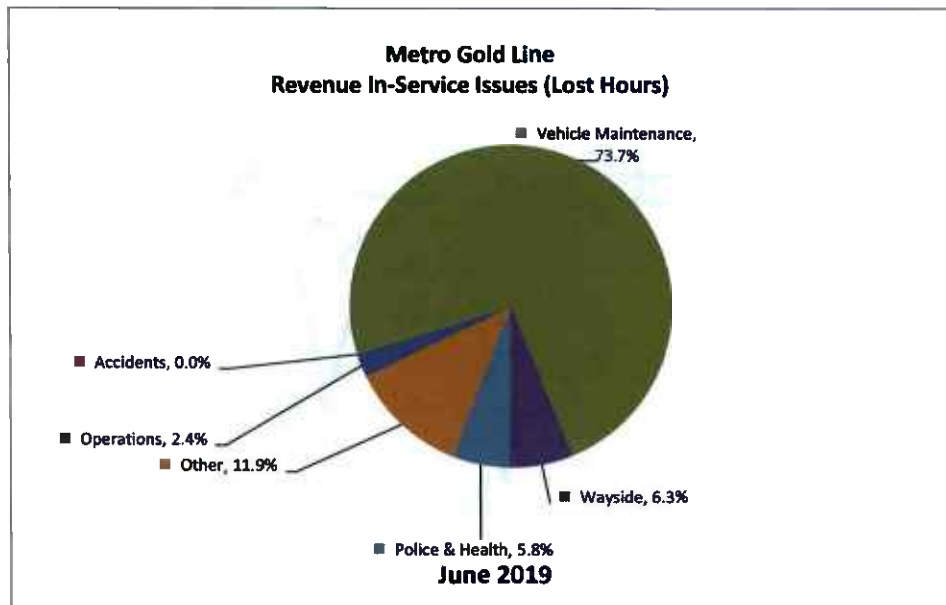
Out of a total of 24,263 hours operated, there were approximately 68 total hours of service delays.

June 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	24,195	99.7%
Cancelled + Delayed Hours	68	0.3%
Total Revenue Hours	24,263	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	5	1.6	2.4%
Accidents	0	0.0	0.0%
Vehicle Maintenance	22	49.9	73.7%
Wayside	4	4.3	6.3%
Police & Health	9	3.9	5.8%
Other	8	8.0	11.9%
Total	48	67.7	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



June 2019 Gold Line incidents causing delay were as follows:

Operations Incidents:

6/4/2019 10:20:00 PM - Incident# 3158622 (0 lost trips, 6 lost minutes)

T-107 requests to enter the main line with burn in train.

6/5/2019 5:30:00 AM - Incident# 3158712 (0 lost trips, 10 lost minutes)

Train Operator reported late to motorman's

T-338 working alpha Q

6/10/2019 5:56:00 AM - Incident# 3160515 (0 lost trips, 8 lost minutes)

Only one car

Train418

T-156

LRV cars 1157-1179

APU/Citrus Station southbound track 2

6/13/2019 12:29:00 AM - Incident# 3162051 (0 lost trips, 60 lost minutes)

Train 430 (721,707,732) T-441, Allen Station, track 2 unable to provide proper read backs between Allen Station and Del Mar Interlocking.

6/15/2019 8:20:00 AM - Incident# 3163037 (0 lost trips, 12 lost minutes)

Operator pulls out the Monrovia Yard and reports a 10mph speed restrictions, due to an over-speed while operating.

Train#411

T#280

1162A,1163

Track#1,Northbound,Buena Vista Grade Crossing.

Vehicle Maintenance Incidents:

6/3/2019 2:06:00 PM - Incident# 3157971 (1 lost trip, 219 lost minutes)

Operator report LVPS fault on trailing car.

Del Mar Station, track 2, S/bound.

Cars: (724) 713 732.

Train 401.

T-223.

6/5/2019 3:03:00 PM - Incident# 3158970 (0 lost trips, 8 lost minutes) CHARGEABLE

Re-occurring ATP Failure on car (1055A).

Train 403

T-421

(1055)-1167-1163

Downtown Azusa Station, Track 2, Southbound.

6/5/2019 6:15:00 PM - Incident# 3159055 (3 lost trips, 667 lost minutes)

Car 738A propulsion fault/smoking brakes.

T-160

Train 453

Cars (738A)-749-750

Heritage Square Station, Track 2, southbound.

6/6/2019 2:54:00 PM - Incident# 3159425 (0 lost trips, 6 lost minutes) CHARGEABLE

Train 452 reporting horn on LRV 737B is not working

Train 452

T-340

LRV'S (737B) 742-706

Allen Interlocking track 2 southbound.

6/6/2019 4:05:00 PM - Incident# 3159526 (1 lost trip, 231 lost minutes) CHARGEABLE

Operator reports propulsion fault on all three cars.

Train-425

T-340

Cars 1012, 1185, 1011

Track 1, NB, Little Tokyo

6/6/2019 5:37:00 PM - Incident# 3159503 (1 lost trip, 249 lost minutes) CHARGEABLE

Operator reports horn and gong not working.

Train-454

T-195

Cars (704A),735,707

6/7/2019 4:43:00 PM - Incident# 3159858 (0 lost trips, 10 lost minutes) CHARGEABLE

Operator reports a LVPS fault.

Train 407

T-192

Cars(705), 718,728

Track 1, NB Duarte Station

6/8/2019 8:39:00 PM - Incident# 3160167 (1 lost trip, 146 lost minutes) CHARGEABLE

T-518 reports no movement south of Indiana Station track #2.

Train 412

Cars 728-718

Indiana track 2.

6/9/2019 10:39:00 PM - Incident# 3160438 (0 lost trips, 2 lost minutes) CHARGEABLE

Car 1178B dirty Windshield/windows

T-323

Train 403

Cars (1178B)-1190

Citrus Station, Track 1, southbound.

6/10/2019 12:00:00 PM - Incident# 3160696 (0 lost trips, 10 lost minutes)

Train 408 experienced minor propulsion faults going southbound into Atlantic Station.

6/10/2019 4:22:00 PM - Incident# 3160920 (1 lost trip, 228 lost minutes)

Train 401, car 710 has LVPS faults.

6/12/2019 6:10:00 AM - Incident# 3161662 (1 lost trip, 219 lost minutes) CHARGEABLE

Train 402 reports no cab signals at Atlantic Station track 1.

T-304

Cars (1189)-1006-1057

Atlantic Station

6/12/2019 6:17:00 AM - Incident# 3161659 (1 lost trip, 219 lost minutes) CHARGEABLE

Train 41S reports major propulsion faults at Chinatown track #2.

T-144

Cars 1191-1175-1012

Chinatown track 2.

6/12/2019 4:05:00 PM - Incident# 3161962 (0 lost trips, 3 lost minutes) CHARGEABLE

Train 40S

T-186

LRV Cars 1178-1190-1182

Track 1 at APU/Citrus

Operator reporting of a HOT train with no AC. Controller began to bump the line.

6/12/2019 8:10:00 PM - Incident# 3162028 (1 lost trip, 219 lost minutes) CHARGEABLE

Train 453 (744,740,741) T-159, Duarte Station, track 2 reports propulsion fault with speed restriction.

6/13/2019 4:42:00 PM - Incident# 3162411 (0 lost trips, 10 lost minutes)

Emergency brakes applied just before arriving at station (728A)701,706, no movement.

250 feet prior to Allen Station

Train #424, T-263, track #1, northbound.

6/16/2019 9:50:00 AM - Incident# 3163255 (0 lost trips, 12 lost minutes) CHARGEABLE

Malfunctioning horn and gong.

Train#407

T#540

(704A),732

Track#1,Mariachi Station,Northbound.

6/20/2019 12:16:00 AM - Incident# 3164885 (0 lost trips, 20 lost minutes) CHARGEABLE

Major prop fault (718-B)

731 715 (718-B)

Train 430

T-441

Sierra Madre Station, tk 2 SB

6/23/2019 1:42:00 PM - Incident# 3166104 (1 lost trip, 158 lost minutes) CHARGEABLE

T-156 reported propulsion faults on car 1163B.

6/28/2019 10:06:00 AM - Incident# 3168238 (1 lost trip, 200 lost minutes)

Reports door problem.

Train # 409

T-158

1172-1191-1111

Union Station, Track #1, NB

6/28/2019 11:42:00 AM - Incident# 3168290 (0 lost trips, 8 lost minutes)

Train 406 reports that he was not able to engage Street Run Mode

Train 406

T-280

LRV'S (1189) 1124

Atlantic track 1, northbound.

6/30/2019 1:48:00 PM - Incident# 3168899 (1 lost trip, 150 lost minutes)

ATP/Cab Signal Issues.

Train#408

T#536

(1172/A),1191

Track#2,Duarte Station,Southbound.

Wayside Incidents:

6/1/2019 7:36:00 AM - Incident# 3157180 (0 lost trips, 22 lost minutes)

Metro Track Dept will be performing urgent repairs at the Allen IL (Switch 1B) to replace a broken bolt.

6/17/2019 7:41:00 AM - Incident# 3163500 (0 lost trips, 12 lost minutes)

False Occupancy Irwindale Interlocking Track 2 (12S2)(1202)

6/25/2019 8:54:00 PM - Incident# 3167122 (1 lost trip, 201 lost minutes)

Rail Comm perform Reg-4 testing at Azusa TPSS caused AO breakers to open and lockout

6/30/2019 5:25:00 AM - Incident# 3168815 (0 lost trips, 22 lost minutes)

Train #403 T-323 car#1006B-1175

operator minutes late eastbound, false occupancy at duarte track #2, train departed 22 minutes late northbound from Alantic, operator went 10-100.

Police & Health Incidents:

6/1/2019 2:10:00 PM - Incident# 3157308 (1 lost trip, 156 lost minutes)

Assault onboard Train#407.

Train#407

T#441

(11S9A),1186

Track#2,Southbound,Lake Station.

6/11/2019 4:49:00 AM - Incident# 3161074 (0 lost trips, 12 lost minutes)

MTA Bus 9480 blocked track 1 and track 2.

Train 412 southbound and Train 401 northbound could not proceed.

6/13/2019 10:57:00 PM - Incident# 3162482 (0 lost trips, 10 lost minutes)

Individual rolling around the station Platform on the North end

Train 940 Tk#1

T-107

(1187)

6/15/2019 5:34:00 PM - Incident# 3163124 (0 lost trips, 8 lost minutes)

LAPD Sargent White holding northbound Train 410 from fully berthing at Chinatown Station due to a "suspicious package".

6/19/2019 1:45:00 PM - Incident# 3164720 (0 lost trips, 12 lost minutes)

Per LAPD Dispatcher #413, passenger reports another passenger has a knife on car 750, Train 452.

6/21/2019 4:55:00 PM - Incident# 3165676 (0 lost trips, 8 lost minutes)

Altercations aboard trains, cars #1166-(1188)_1157

Train #409

T-106

Lincoln Cypress, Track #2, Southbound.

6/25/2019 10:50:00 PM - Incident# 3167156 (0 lost trips, 10 lost minutes)

LAPD Operator reports assault aboard train 409 and the perpetrators pulled the T handle and jumped off at 1st/Vignes.

6/27/2019 8:19:00 AM - Incident# 3167756 (0 lost trips, 8 lost minutes)

White Female suffering a seizure

Train 461

T-88

Car 744A

Lake Station Track 1 Northbound

6/27/2019 5:44:00 PM - Incident# 3167988 (0 lost trips, 10 lost minutes)

Operator reports a female patron requesting medical attention with unknown conditions.

Train-442

T-002

Cars 718, 719, (734A)

Track 1, MPM 4.5

Other Incidents:

Unable To Duplicate:

6/11/2019 4:48:00 PM - Incident# 3161491 (1 lost trip, 219 lost minutes) CHARGEABLE

ABS fault.

T-93

Train 451

1161-(1163)-1126

Arcadia Station Tk 2 S/B

6/26/2019 5:08:00 PM - Incident# 3167544 (1 lost trip, 201 lost minutes)

Unable to clear propulsion fault. Car 736A

Train 462

T-347

(736A)-743-739

Track 2

Southbound

Duarte station

6/27/2019 6:32:00 PM - Incident# 3168002 (0 lost trips, 10 lost minutes)

Operator reports recurring propulsion faults. Doors are also cut out on two cars.

Train-443

T-245

Cars (735A), (714B), (703)

Track 1, NB, Downtown Azusa

Reset:

6/25/2019 3:17:00 PM - Incident# 3167033 (0 lost trips, 6 lost minutes)

No movement, Atlantic Station, due to the coupling of a third car (743).

Train#461

T#122

746,745,(743)

Track#1,Atlantic Station,Northbound.

6/4/2019 11:04:00 PM - Incident# 3158633 (0 lost trips, 22 lost minutes) CHARGEABLE

Train 404 (704,735-707) T-459, Duarte Station, track 2 reports car 707 with various propulsion faults with speed restriction of 35MPH.

6/26/2019 4:03:00 PM - Incident# 3167539 (0 lost trips, 6 lost minutes) CHARGEABLE

Unable to clear propulsion fault. car 729A

T-161

(729A)-703

Train 443

Track 2

Duarte station

Southbound

6/27/2019 11:25:00 AM - Incident# 3167867 (0 lost trips, 8 lost minutes)

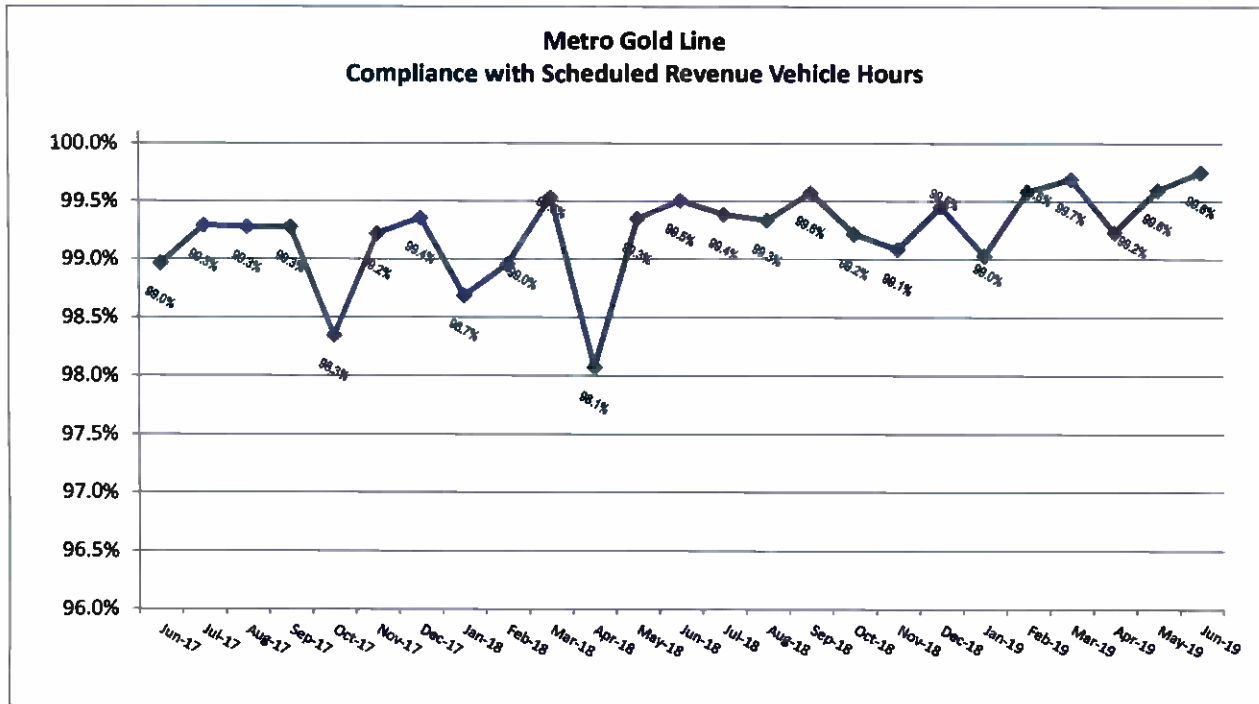
T-131 on Train 409 states the whole bank of doors on car 1111 will not open at Memorial Park Station.

Train 409, cars 1006-1191-1111, Memorial Park Station, Track 2, Southbound.

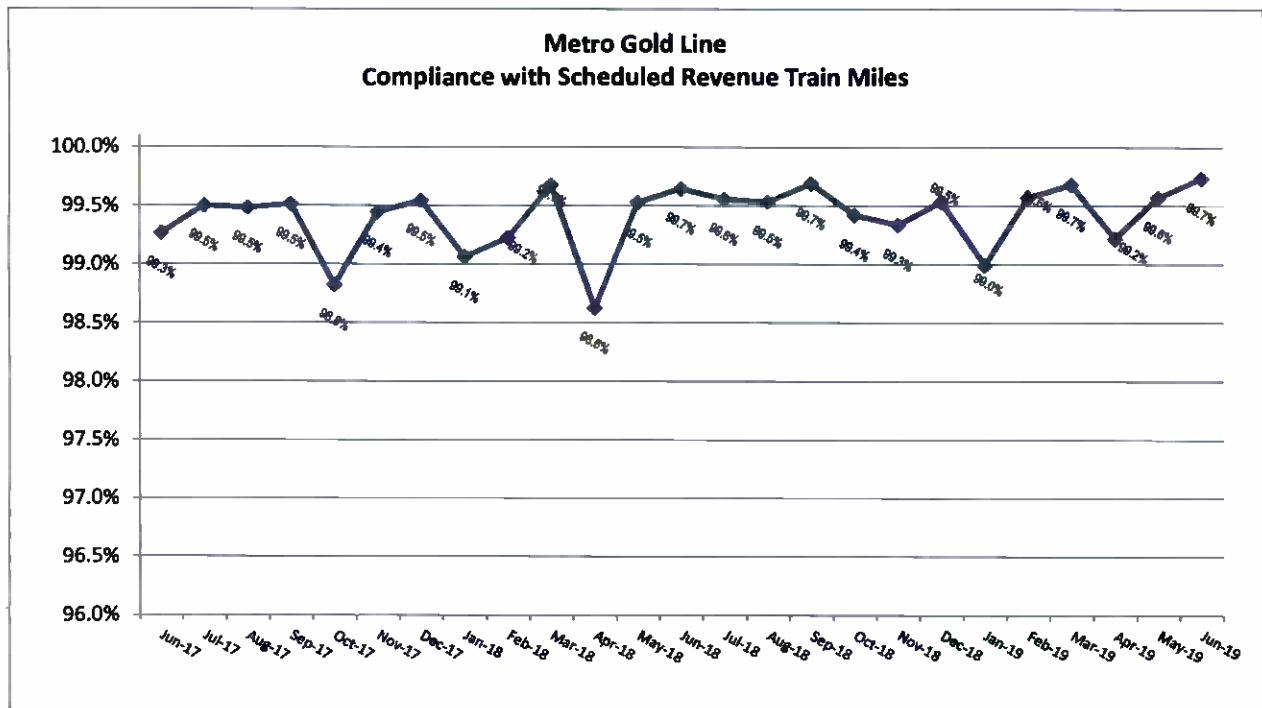
6/12/2019 8:32:00 PM - Incident# 3162023 (0 lost trips, 10 lost minutes) CHARGEABLE

Train 423 (1124, 1172, 1104) T-445, Atlantic Station, track 1 reports ATP fault, no movement.

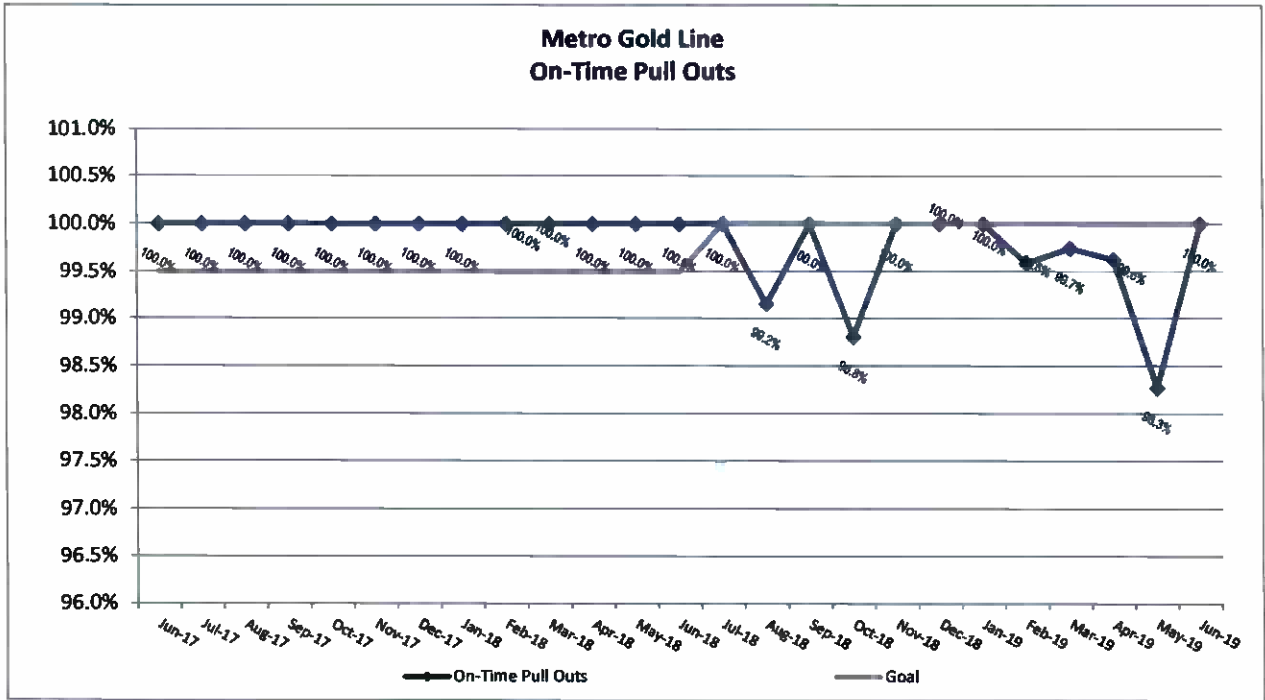
**MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS
COMPLIANCE WITH SCHEDULED VEHICLE HOURS
Jun 2019**



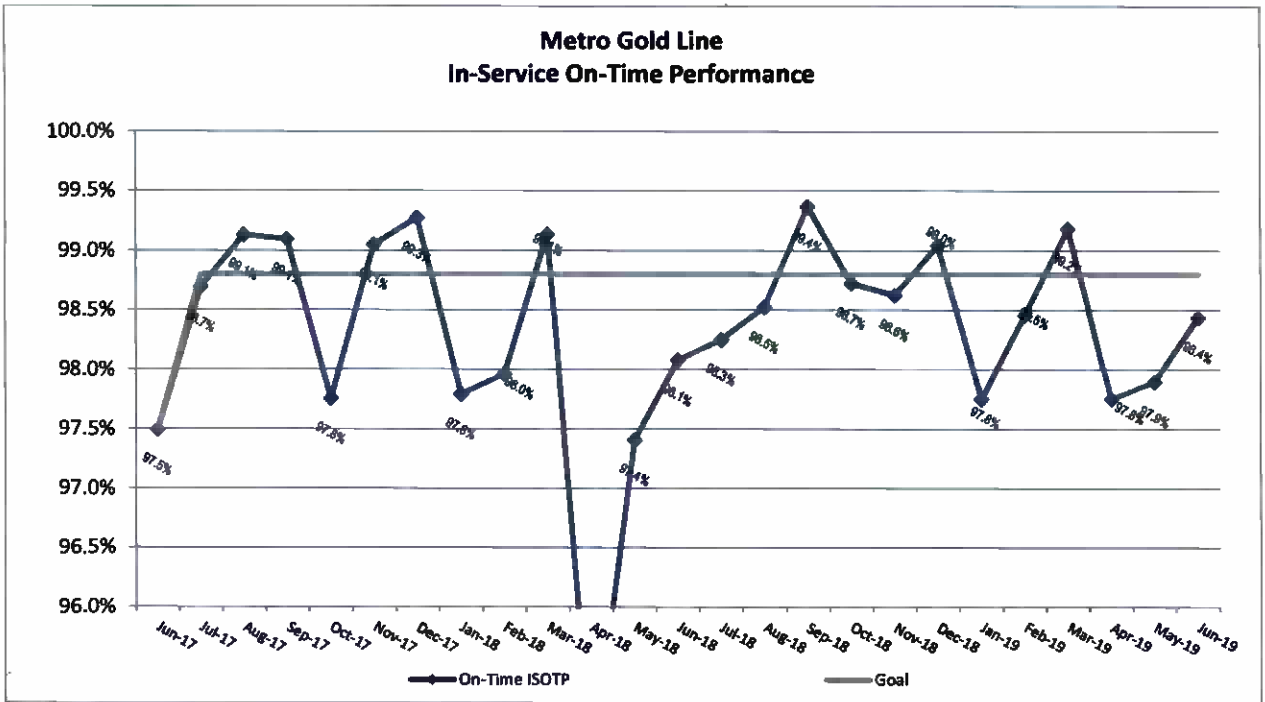
COMPLIANCE WITH SCHEDULED TRAIN MILES



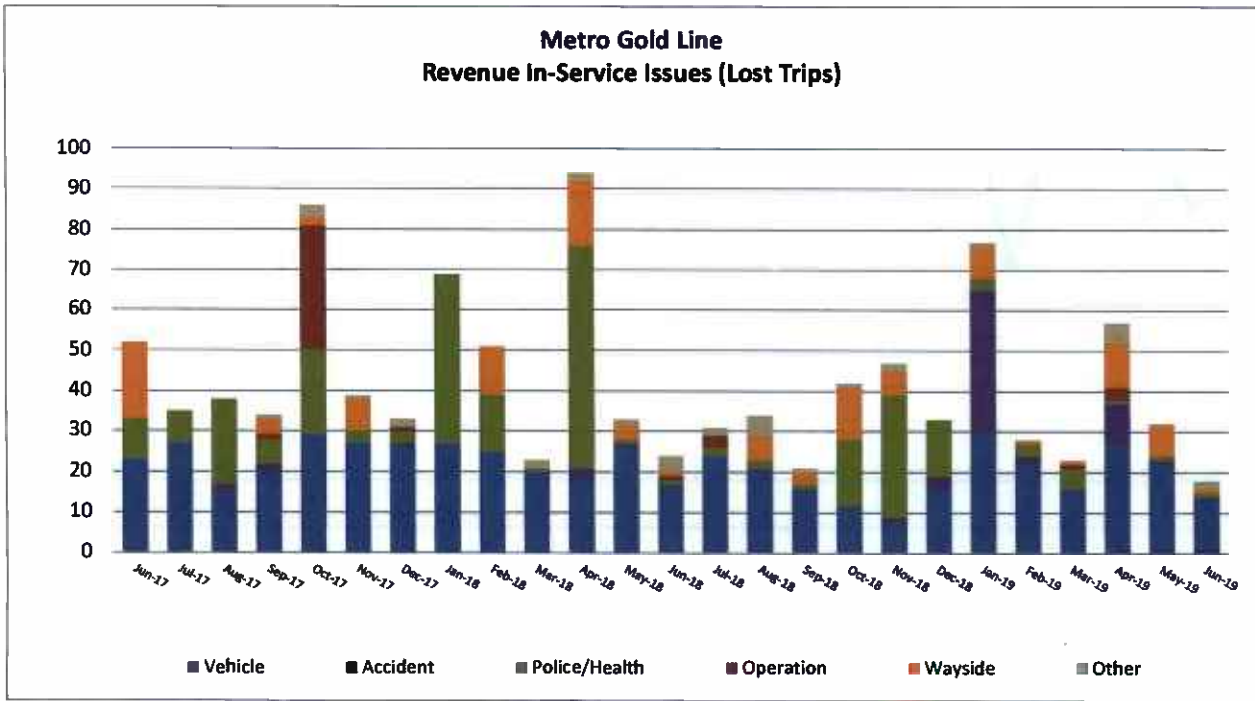
ON-TIME PULL OUTS



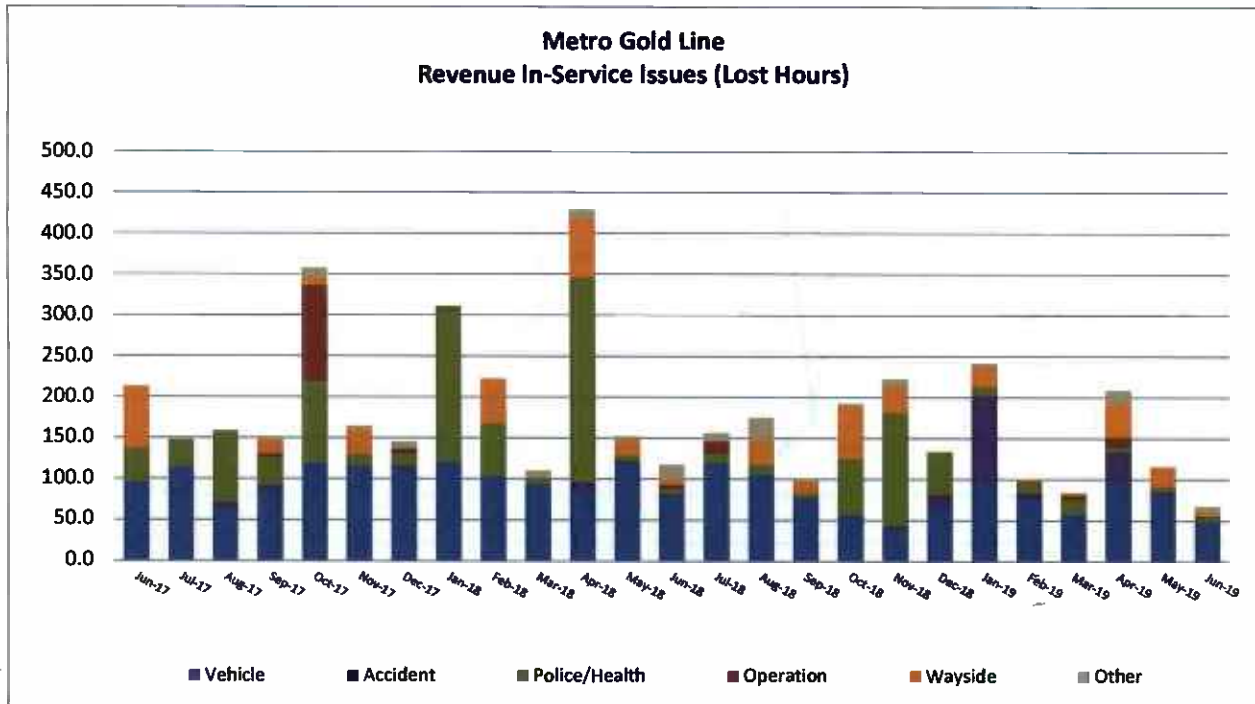
IN-SERVICE ON-TIME PERFORMANCE



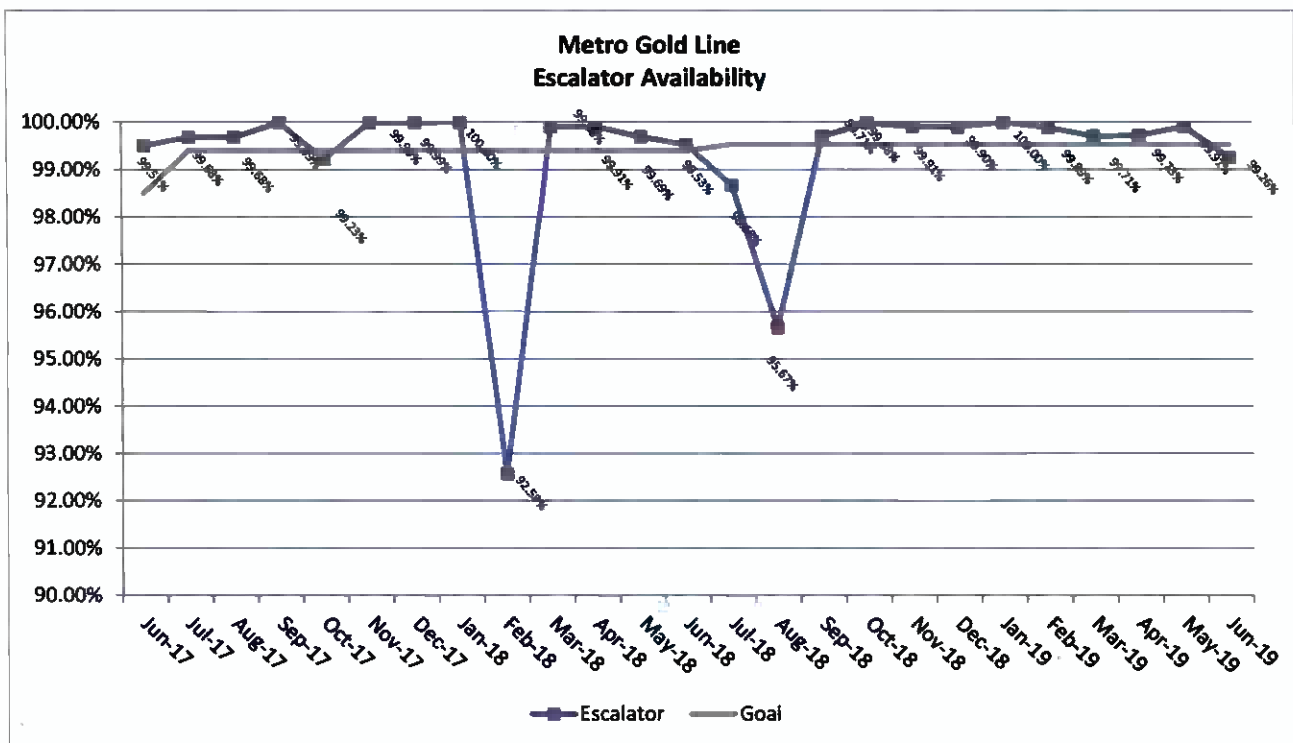
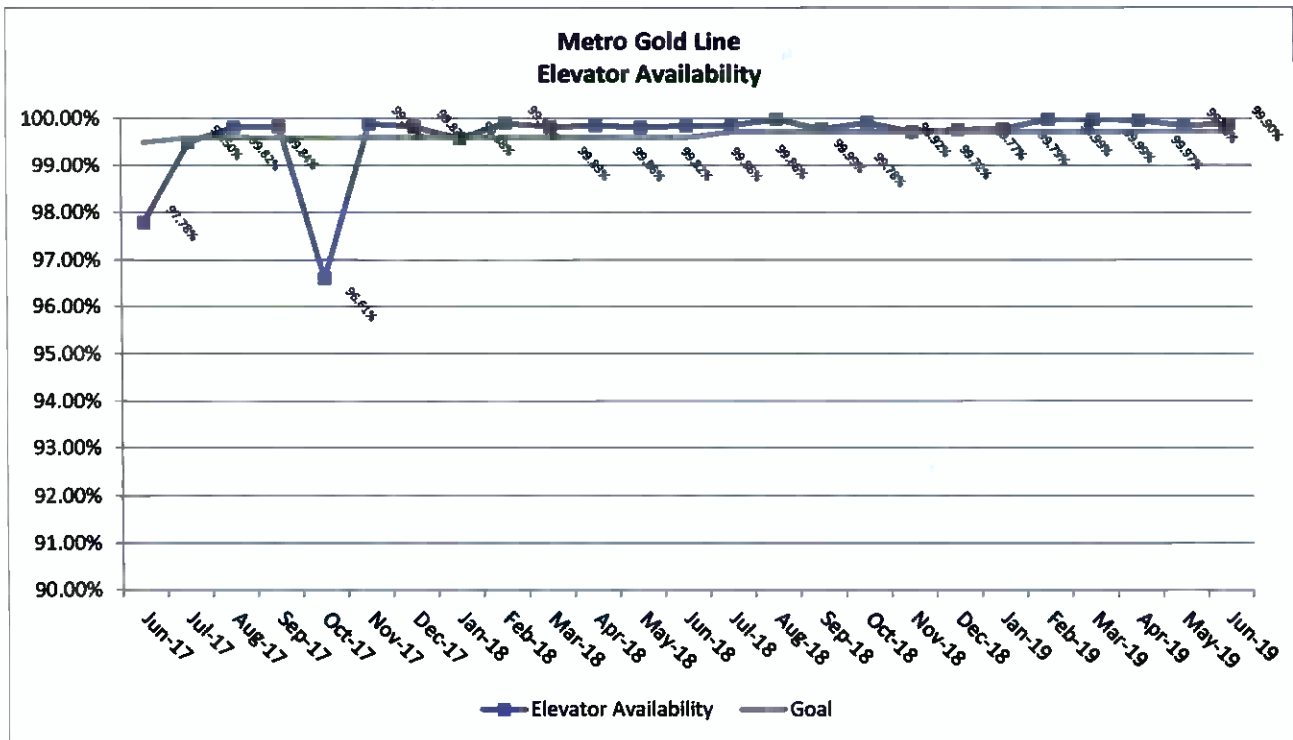
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



EXPO LINE

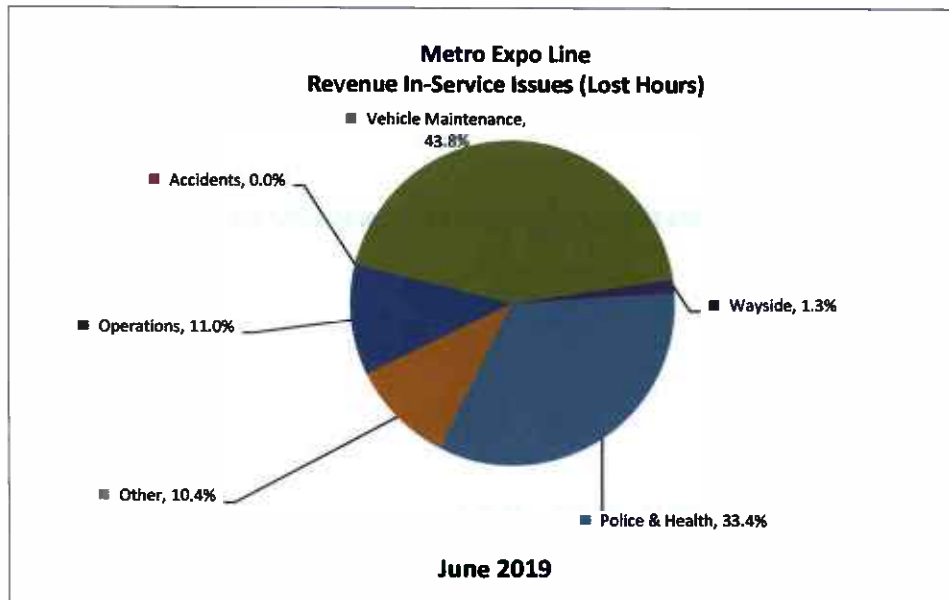
Out of a total of 20,334 hours operated, there were approximately 23 total hours of service delays.

June 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	20,310	99.9%
Cancelled + Delayed Hours	23	0.1%
Total Revenue Hours	20,334	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	3	2.6	11.0%
Accidents	0	0.0	0.0%
Vehicle Maintenance	8	10.1	43.8%
Wayside	2	0.3	1.3%
Police & Health	5	7.7	33.4%
Other	1	2.4	10.4%
Total	19	23.1	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



June 2019 Expo Line incidents causing delay were as follows:

Operations Incidents:

6/3/2019 5:49:00 PM - Incident# 3158070 (1 lost trip, 141 lost minutes) CHARGEABLE

Signal overrun at 5n Pico

Train 606

T-142

(1042B)-1024-1027

Track 1

Northbound

6/7/2019 4:07:00 PM - Incident# 3159840 (0 lost trips, lost minutes) CHARGEABLE

Late pull out.

Expo Yard Interface

Train #626, T-381, northbound.

6/14/2019 12:53:00 AM - Incident# 3162501 (0 lost trips, 12 lost minutes)

Train 625 departed Downtown Santa Monica Station 4 minutes early.

Vehicle Maintenance Incidents:

6/4/2019 9:35:00 AM - Incident# 3158366 (1 lost trip, 141 lost minutes) CHARGEABLE

Operator T-303 reports of prop faults with a speed restriction on car 237B.

T-303

Tr#615

Cars(237B)-245-238

Southbound Trk#4

Bundy St.

6/4/2019 4:35:00 PM - Incident# 3158543 (1 lost trip, 141 lost minutes) CHARGEABLE

Propulsion fault unable to clear.

Train 620

(239A)-248-246

T-325

Track 3

Bundy station

Northbound

6/4/2019 7:03:00 PM - Incident# 3158575 (1 lost trip, 141 lost minutes)

Propulsion fault unable to clear.

Train 620

T-392

246-248

Track 2

Southbound

Pico station

6/11/2019 4:01:00 PM - Incident# 3161473 (0 lost trips, 15 lost minutes)

Train 626

Northbound

Track #3

T-392

(1060A)-1021-1023

Operator reports ADU display went dark with a speed restriction.

6/18/2019 7:50:00 AM - Incident# 3164014 (0 lost trips, 6 lost minutes)

T-349 reported door issues in trailing car 1070B.

T-349

Train 614

1067-1048-(1070)

Northbound, Track 3

26th Street Station

6/18/2019 6:00:00 PM - Incident# 3164317 (0 lost trips, 7 lost minutes)

Train 610

Northbound

Bundy Station

Track 3

T-290

(240A)-248-250

Operator reports a door problem with a propulsion fault and a speed restriction.

6/20/2019 4:22:00 AM - Incident# 3164917 (0 lost trips, 15 lost minutes)

Reports door problem.

Train #413

T-204

1067-1048-(1070B)

Farmdale Station, Track #3, SB

6/20/2019 6:23:00 PM - Incident# 3165253 (1 lost trip, 141 lost minutes)

T-162.

Train 626.

7th & MC, Track #1, Southbound.

(246), 240.

Operator reported misaligned mirror bracket. Unable to operate train do to mirror failure.

Wayside Incidents:

6/17/2019 10:30:00 AM - Incident# 3163586 (0 lost trips, 10 lost minutes)

TP-176 EIC for Hi-Rail Train 961 working from 2S Degnan to 2N Catalina on Track 4.

6/26/2019 9:33:00 AM - Incident# 3167328 (0 lost trips, 8 lost minutes)

TP-121 doing maintenance at 17th TPSS and opened all breakers. Breakers at Sth Street TPSS also opened by it self loosing power on tracks 1 and 2.

Police & Health Incidents:

6/2/2019 8:36:00 PM - Incident# 3157584 (0 lost trips, 8 lost minutes)

Train 601
Southbound
7th Metro
(1068)-1047-1039

Operator reports the consist has a large puddle of urine on the cab door and floor.

6/7/2019 3:27:00 PM - Incident# 3159824 (3 lost trips, 439 lost minutes)

T-230 reports an altercation on board the train resulting in blood in car #1037.

6/7/2019 5:41:00 PM - Incident# 3159896 (0 lost trips, 4 lost minutes)

Altercation on board consist (1036)1021,1046.
Vermont Station
Train #607, T-142, track #3, northbound.

6/14/2019 12:38:00 AM - Incident# 3162498 (0 lost trips, 4 lost minutes)

Train 620 with reported patron requested LAPD.

6/30/2019 5:18:00 PM - Incident# 3168935 (0 lost trips, 8 lost minutes)

Train 606
T-412
Southbound
Track 4
23rd Street Station
R-110
Reports a spill on the train and passengers were transferred from Track 4 platform to track 3 platform.

Other Incidents:

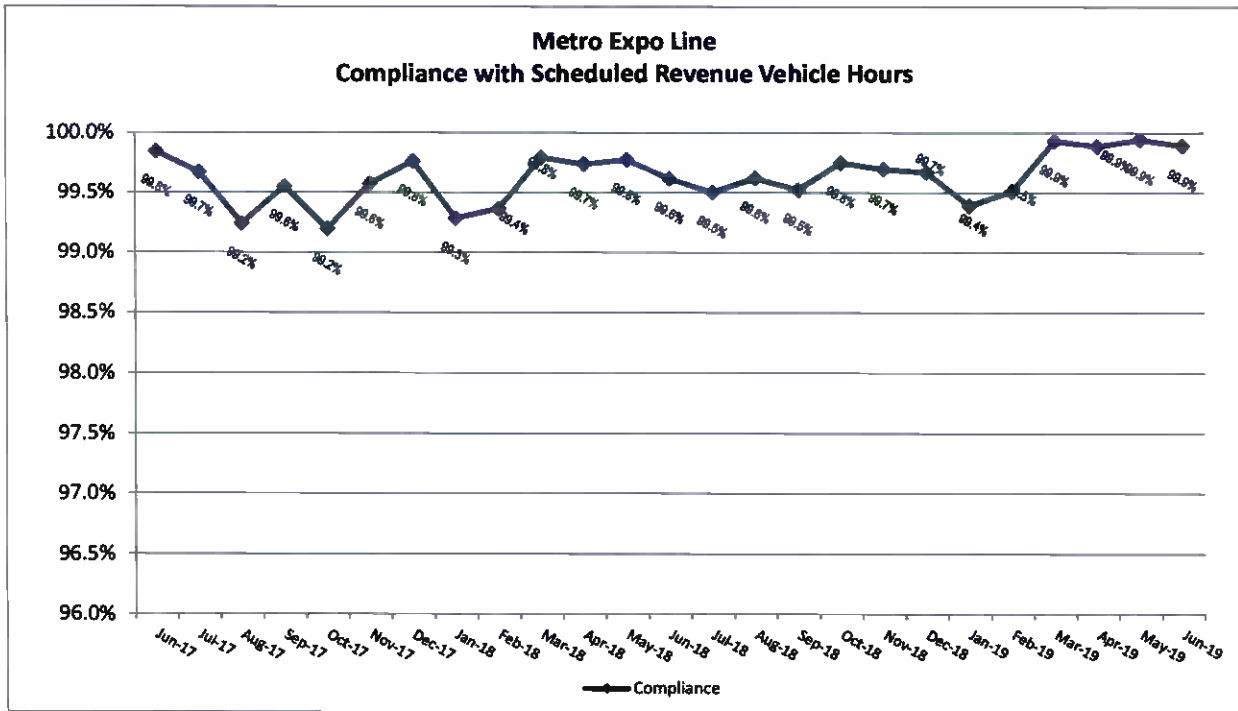
Unable To Duplicate:

6/8/2019 6:48:00 PM - Incident# 3160151 (1 lost trip, 146 lost minutes) CHARGEABLE

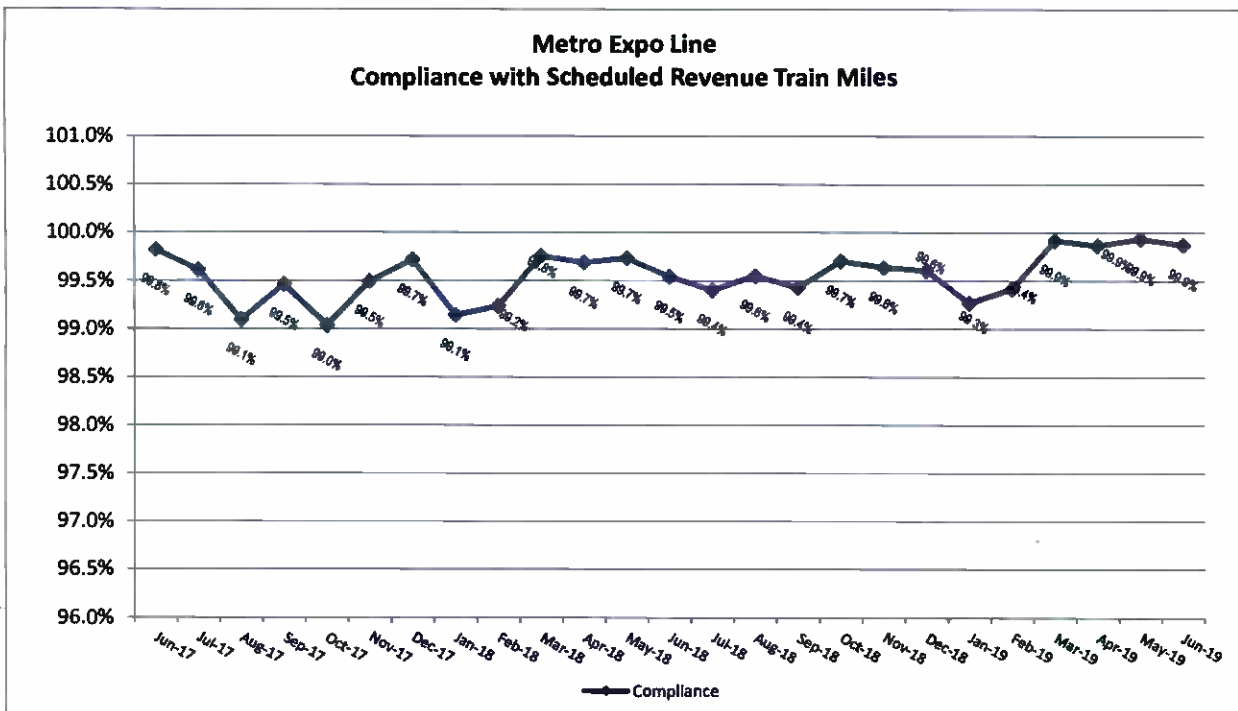
Report self apply friction brake, no movement.

T-243
Train 606
Cars (301B)-249-240
23rd track 4 southbound.

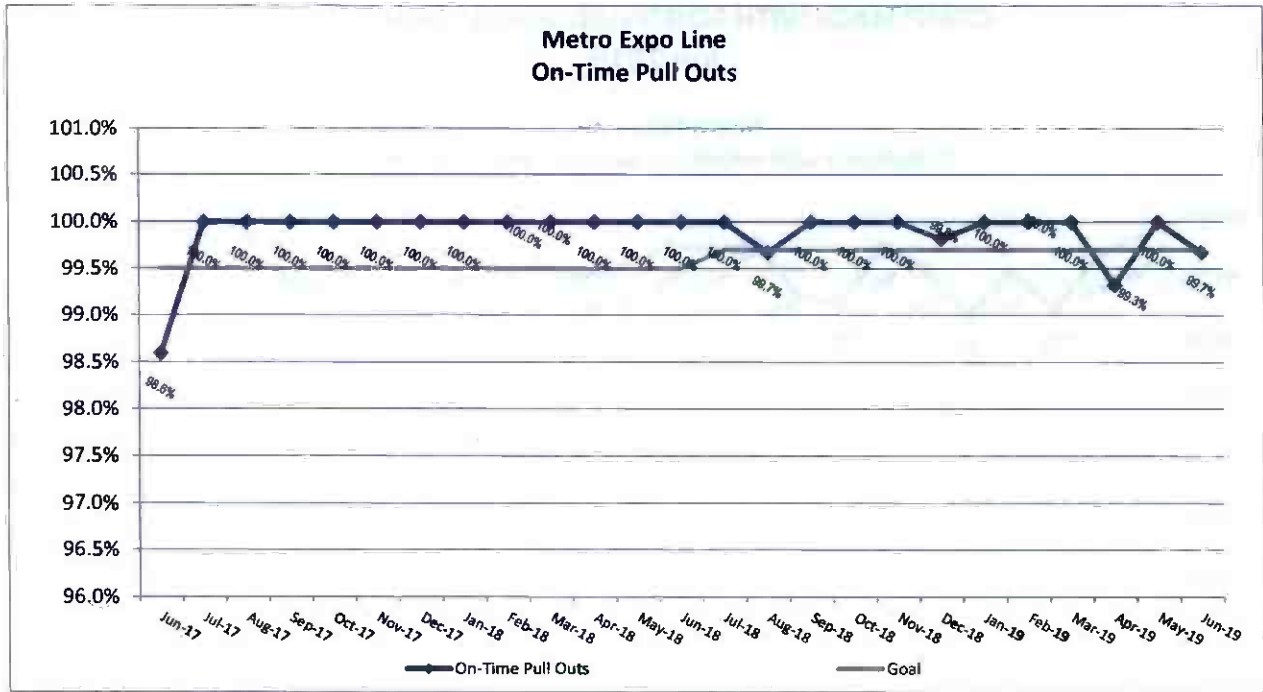
MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS
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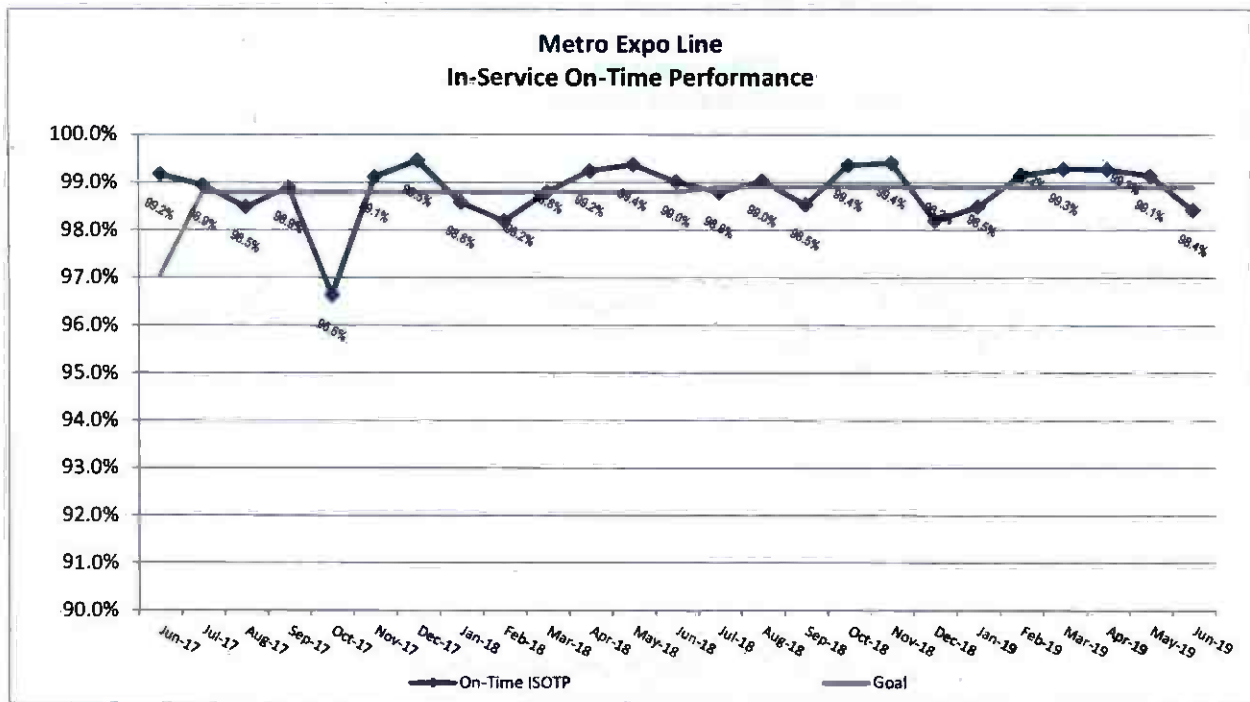
COMPLIANCE WITH SCHEDULED TRAIN MILES



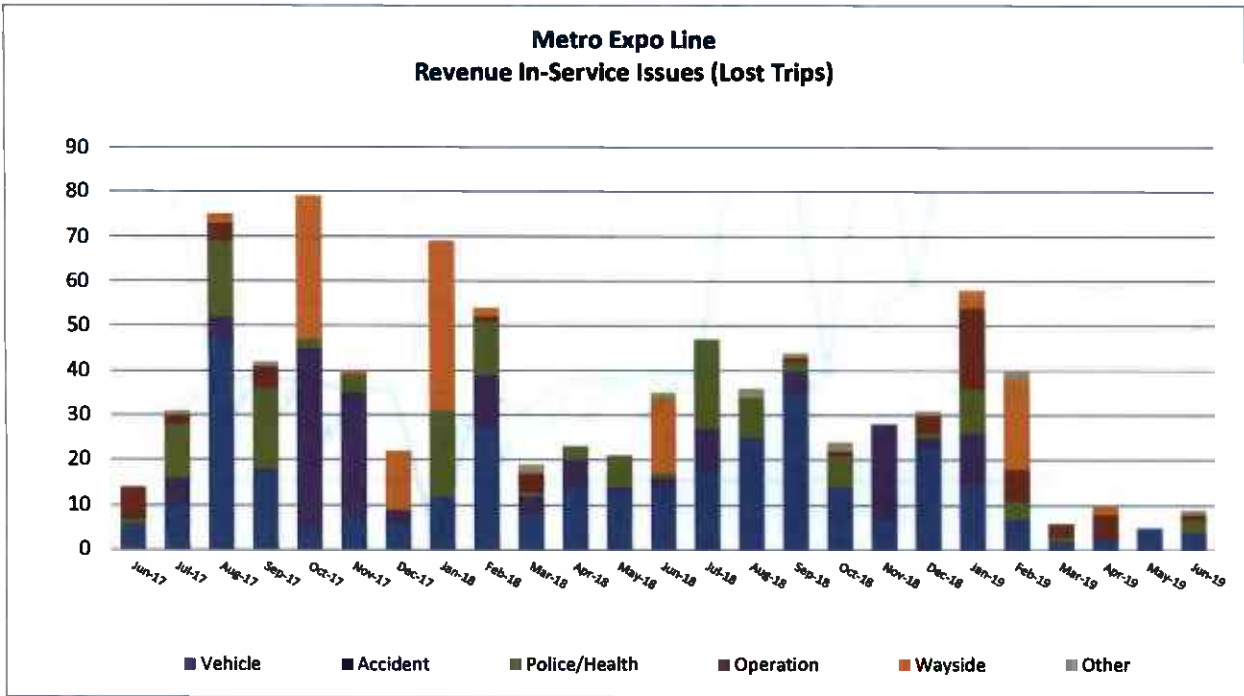
ON-TIME PULL OUTS



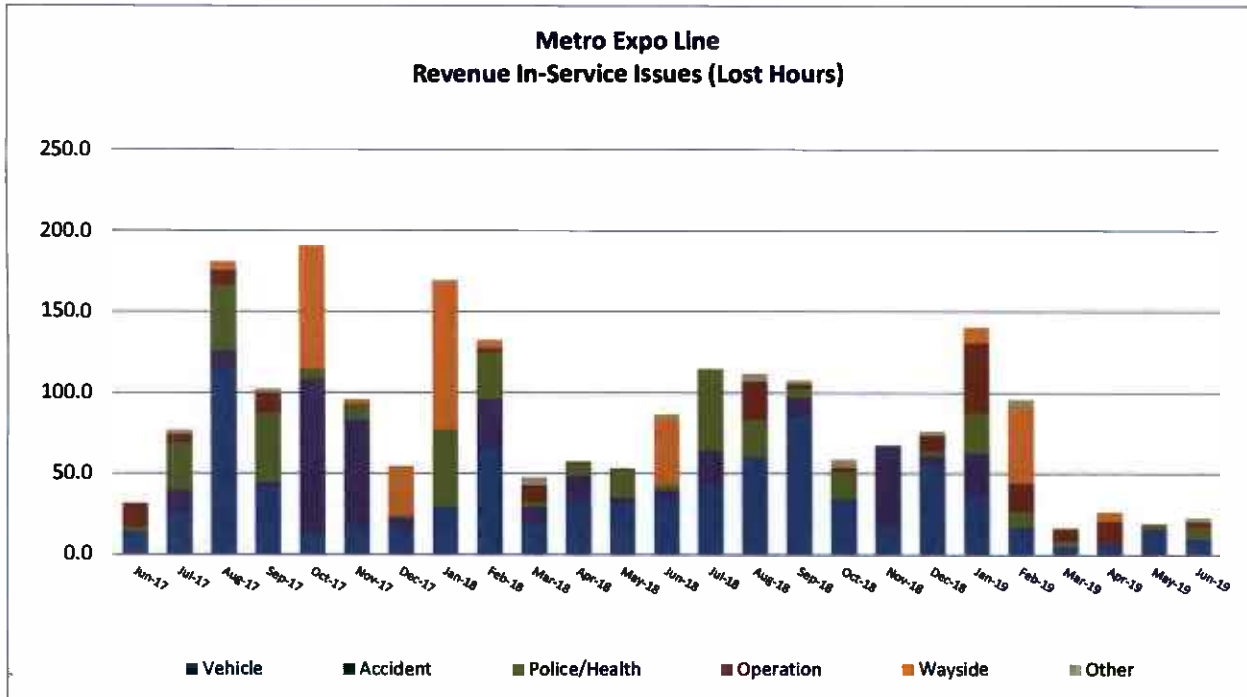
IN-SERVICE ON-TIME PERFORMANCE



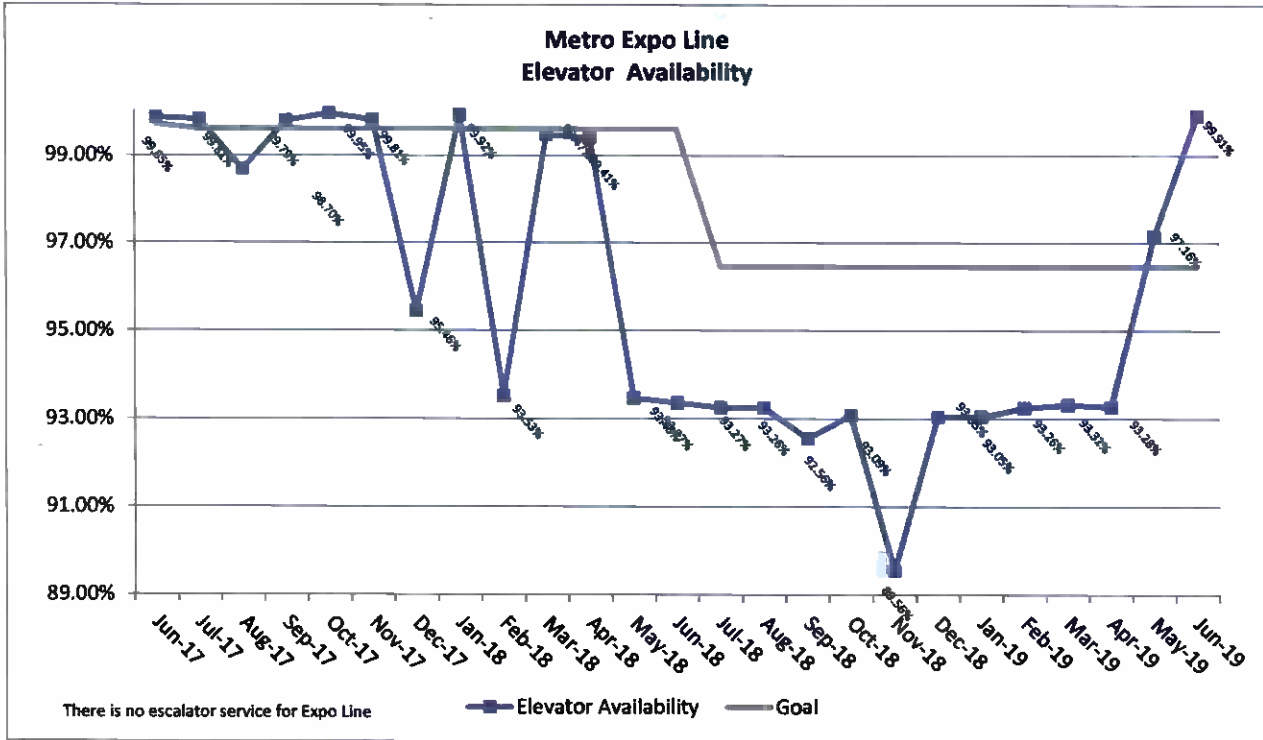
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



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

Financial Status

June 2019

FTA Quarterly Review
September 2019



Metro

Excellence in Service and Support

FY19 – Indicators

- **FY19 actual cash receipts from locally imposed sales tax revenues (PA, PC, MR, MM) totaled \$809M during Q4 of the fiscal year, an increase of 6.9%. For the year receipts totaled \$3.5B, an increase of 12.6%. Excluding Measure M effects, tax receipts averaged 7.4%.**
- **Both the County of Los Angeles and the State of California unemployment rates have remained virtually unchanged in the last 12 months while the national rate has declined slightly from June 2018.**
LA 4.5%, CA 4.2% and US 3.7%
- **Inflation in the Los Angeles Metropolitan Area increased to 3.3% for the 12 month period ended June '19**
 - **Excluding Food and Energy, core inflation equaled 3.5%**
- **Transit indicators – FY 19**
 - Ridership versus prior year**
 - Bus: -2.5%**
 - Rail: -6.7%**
 - Total: -3.7%**



Metro

Fare revenues – FY19 – 11.7% vs FY 18

FY19 – Highlights

- Sought to re-imagine the County through the Next-Gen bus study, and the rigorous discussion of the 20 x 2028 proposal.
- Invested in the future workforce of the County through the support of Los Angeles County's first school focused on transportation and infrastructure.
- Completed the southern segment of the New Blue rehabilitation project – the first major overhaul of the line since its opening.
- Advanced the Crenshaw/LAX, Purple Line Extension, Regional Connector, ESFV light rail alignment, and Orange Line BRT construction, safety, and operational improvements.
- Issued \$545M in new borrowing to support Metro's capital program.



FY20 – Look Ahead

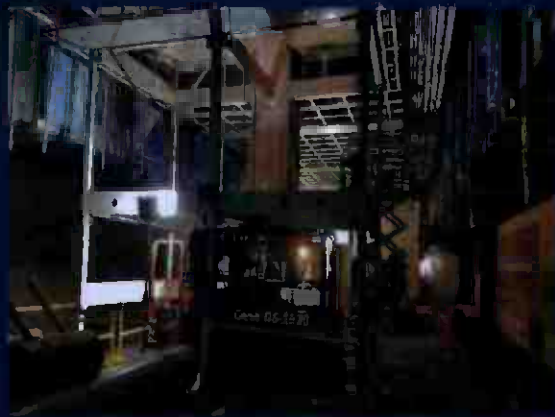
- **Deploy electric buses on the Orange Line BRT corridor.**
- **Advance the understanding and development of additional Congestion Management tools and concepts.**
- **Prepare for the opening of the Crenshaw/LAX line.**
- **Advance LINK US and West Santa Ana Branch projects and continue to support the extension of the Foothill Gold Line Extension 2B**
- **Initiate Next Gen service concepts and system redesign.**

Los Angeles County
Metropolitan Transportation Authority

METRO CONSTRUCTION SAFETY FTA Quarterly Review Meeting September 4, 2019



CONSTRUCTION SAFETY QUARTERLY REPORT



Crenshaw/LAX Transit Project

CRENSHAW/LAX TRANSIT PROJECT

- Metro participated in WSCC Tool-Box Safety Huddle Meetings in April, May and June 2019.
- WSCC participated in Metro's All Hands Safety and Security Meetings in April, May and June 2019.
- Metro's Executive Safety Team participated in Safety Walks in April, May and June 2019.
- Project-to-Date Total Work Hours: 8,379,070
- Recordable Injuries as of June 2019: 94
- Project Rate per 200,000 Labor Hours: 2.2
- BLS National Heavy Construction Incident Rate: 2.5
- Total Days Away Cases: 4
- Total Restrictive Duty Cases: 12

CONSTRUCTION SAFETY QUARTERLY REPORT



Westside Purple Line Extension
Section 1 Project



Regional Connector Transit Project

WESTSIDE PURPLE LINE EXTENSION SECTION 1 PROJECT

<input type="checkbox"/> Project to Date Total Work Hours:	3,685,972
<input type="checkbox"/> Recordable Injuries as of June 2019:	21
<input type="checkbox"/> Project Rate per 200,000 Labor Hours:	1.1
<input type="checkbox"/> BLS National Heavy Construction Incident Rate:	2.5
<input type="checkbox"/> Total Days Away Cases:	6

REGIONAL CONNECTOR TRANSIT PROJECT

<input type="checkbox"/> Project to Date Total Work Hours:	3, 842,750
<input type="checkbox"/> Recordable Injuries as of June 2019:	17
<input type="checkbox"/> Project Rate per 200,000 Labor Hours:	.88
<input type="checkbox"/> BLS National Heavy Construction Incident Rate:	2.5
<input type="checkbox"/> Total Days Away Cases:	0



Metro

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

FTA Quarterly Planning Update September 4, 2019

Metro Planning Report

- Major Capital Projects

- 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

- Small Starts Projects

- Metro Rapid System Gap Closure Lines

- Ladders of Opportunity Grant Project

- Cesar Chavez Bus Stop Improvements Project



East San Fernando Valley Transit Corridor

Project Status

- Administrative Final EIS/EIR being prepared for FTA review incorporating:
 - SHPO Consultation
 - Grade Crossing Safety Analysis
 - Orange Line Station Connection
 - First/Last Mile Station Area Plans
- Engineering
 - July 25, 2019 – Board Award of Engineering Design Contract



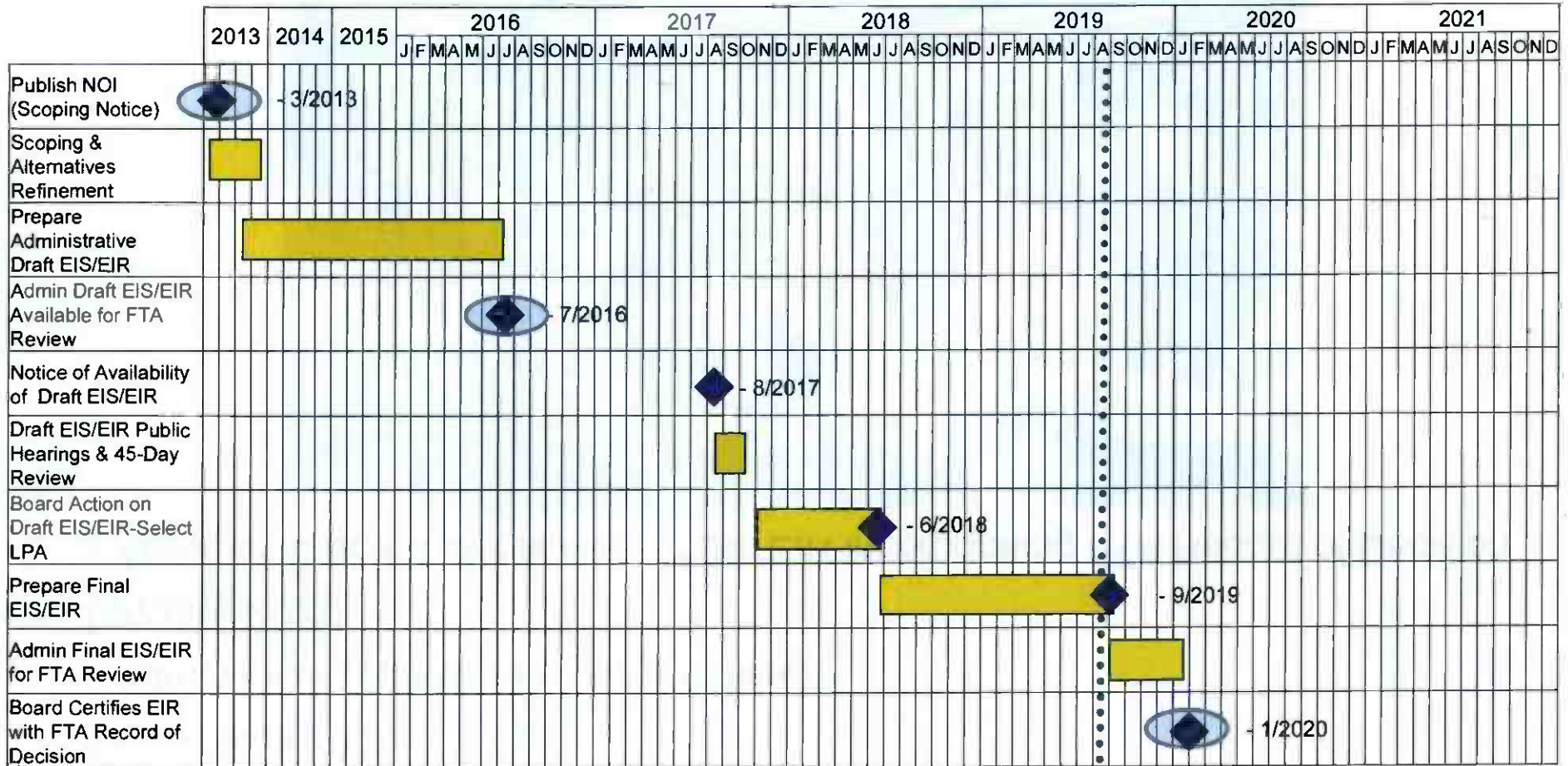
East San Fernando Valley Transit Corridor

Next Steps

- September 2019
 - Admin Final EIS/EIR to FTA for review
- January 2020
 - Anticipated Board certification of the EIR incorporating FTA Record of Decision



East San Fernando Valley Transit Corridor Schedule



◆ = Milestone Date

○ = FTA Action

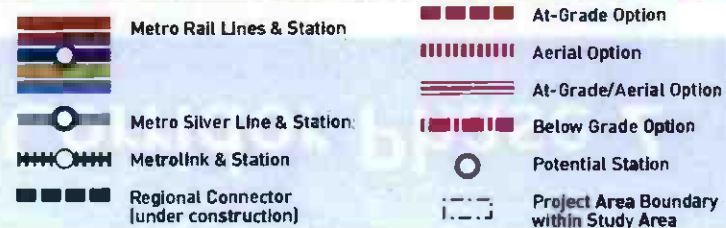
* = Pending FTA Concurrence

Last Revised: 8/2019

Eastside Transit Corridor Phase 2

Study Corridor

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



Eastside Transit Corridor Phase 2

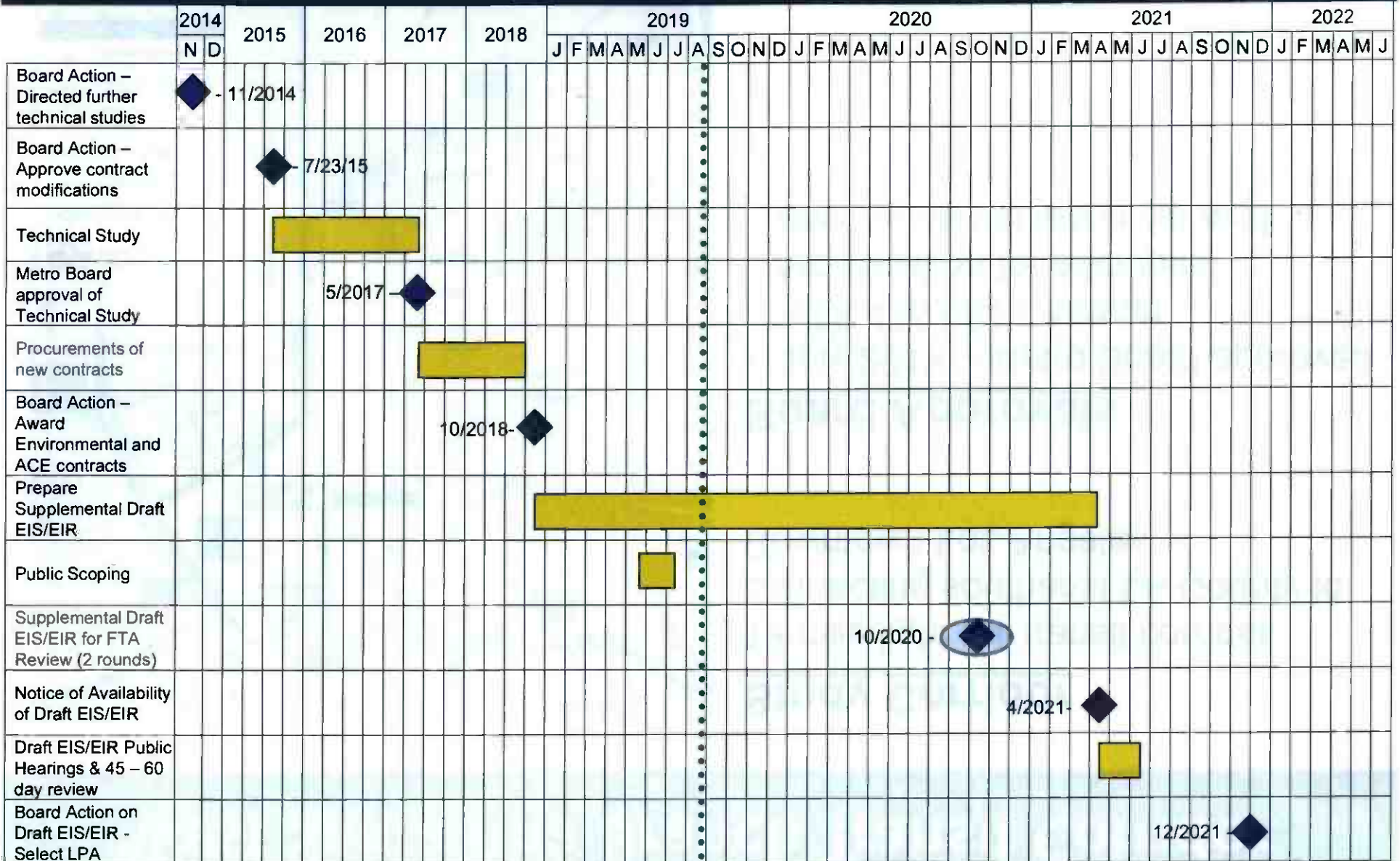
Status

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

Next Steps

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

Eastside Transit Corridor Phase 2 Schedule

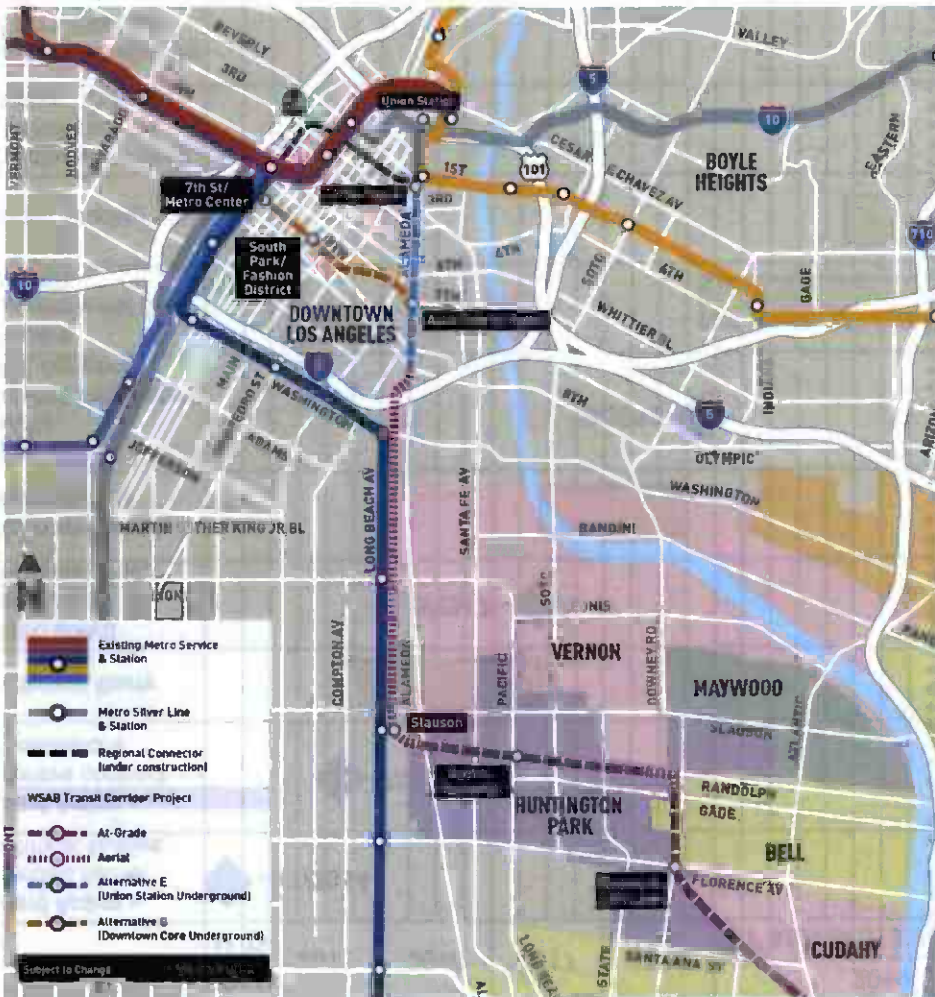


= Milestone Date



= FTA Action

West Santa Ana Branch Transit Corridor



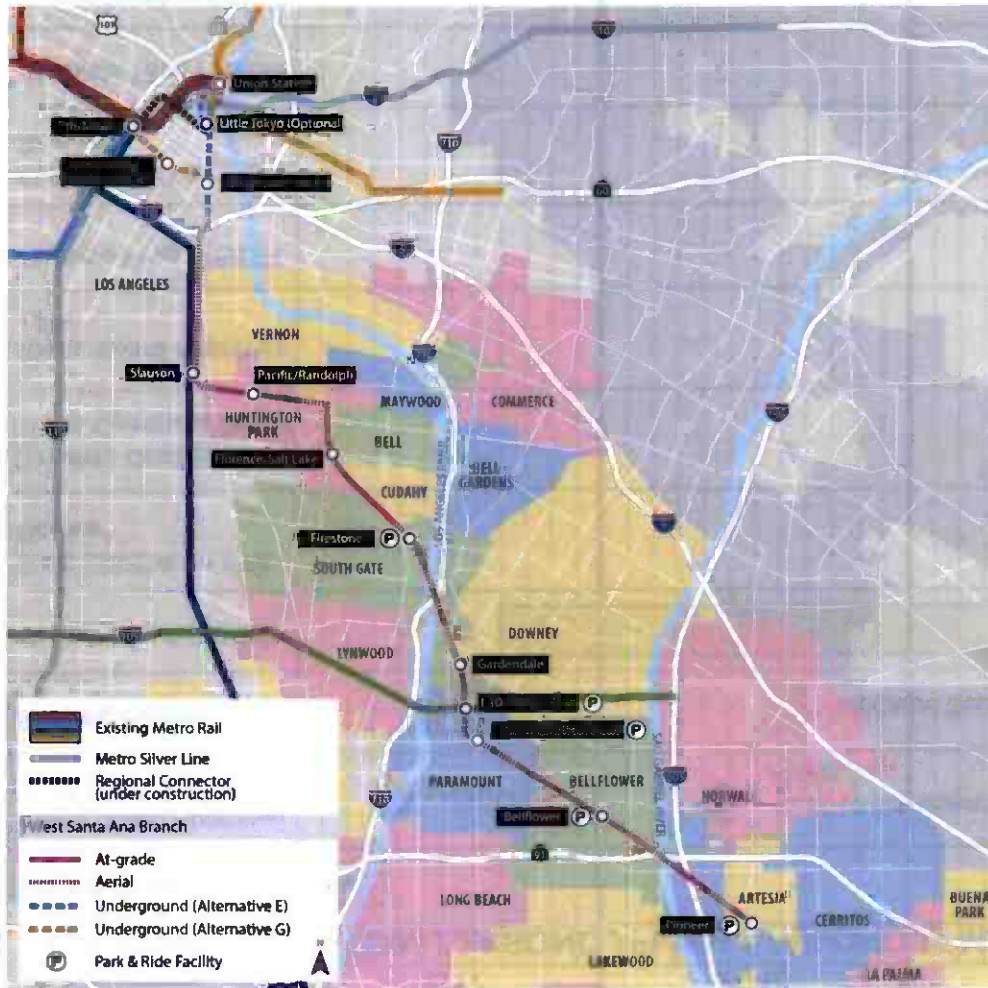
Study Corridor

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

Board Approvals

- July 2019 – Metro Board approved a \$6,476,982 Contract Modification for additional environmental technical work

West Santa Ana Branch Transit Corridor



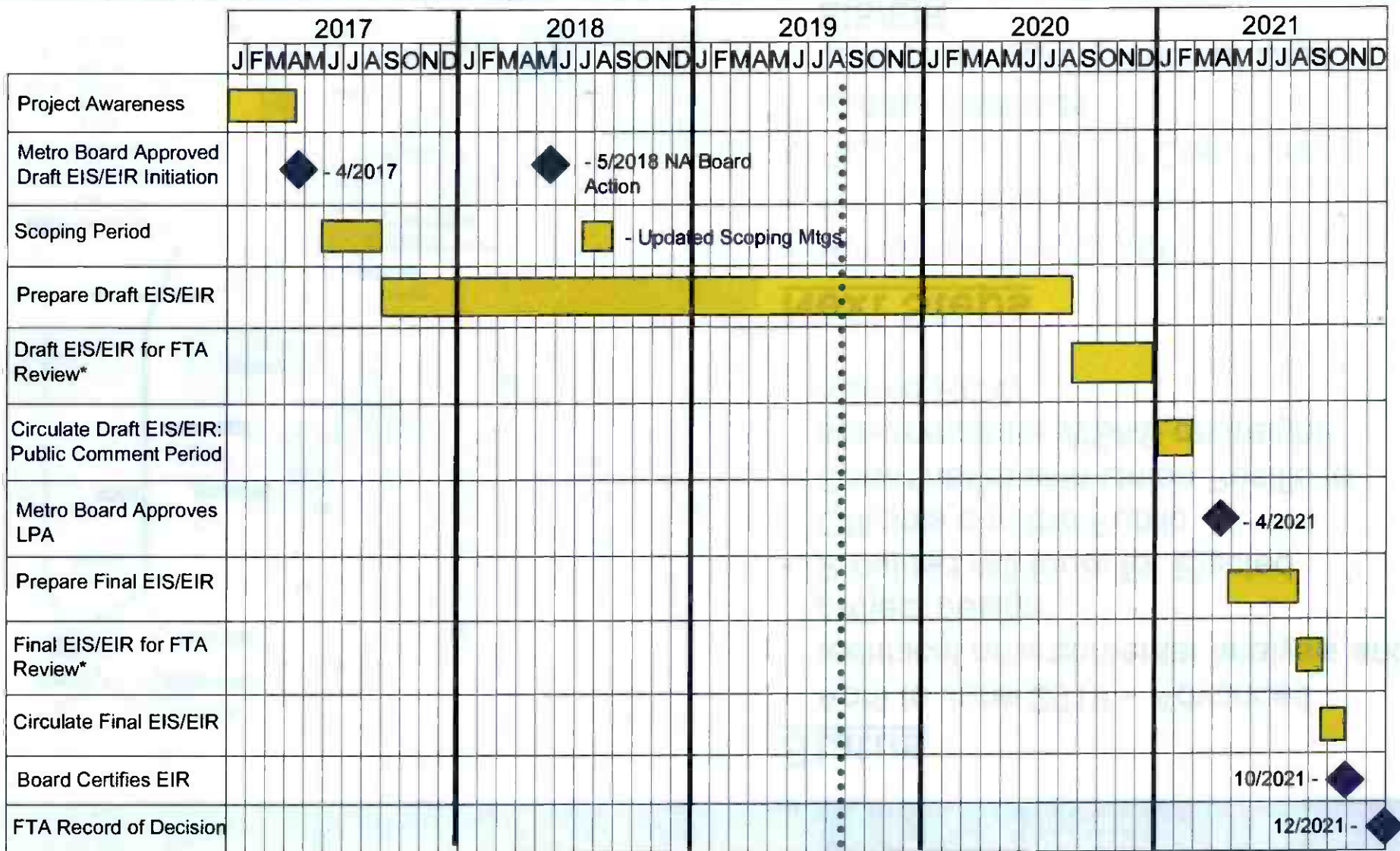
Status

- April to June 2019 – Advanced technical environmental analysis and project design
- Provided rail tours for Elected Officials and the Public
- Coordinated with Union Pacific to accommodate WSAB on freight-owned ROW

Next Steps

- Advance/refine design
- First/Last Mile Planning
- Fall 2019 – Round 2 Community update meetings
- Late 2020 – Completion of Draft EIS/EIR
- Support FTA staff resource needs to accelerate environmental review

West Santa Ana Branch Transit Corridor Schedule



*FRA review to be coordinated.

◆ = Milestone Date

Last Revised: 8/2019

Green Line Extension to Torrance

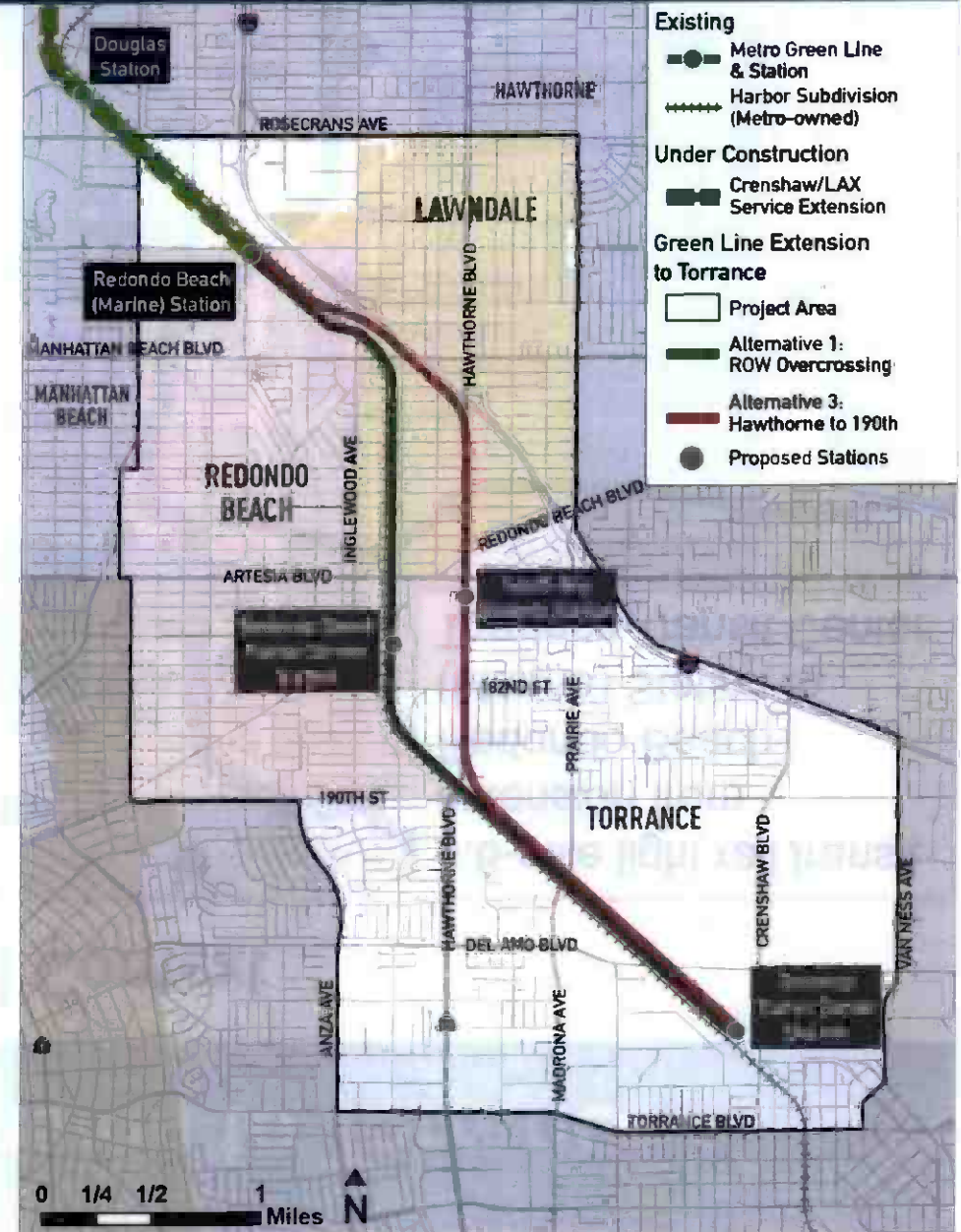
Regional Context



Green Line Extension to Torrance

Status

- September 2018 – Metro Board approved carrying forward the following two alternatives for environmental clearance:
 - ROW Alternative
 - Hawthorne Boulevard Alternative
- July 31, 2019 – Proposals received 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

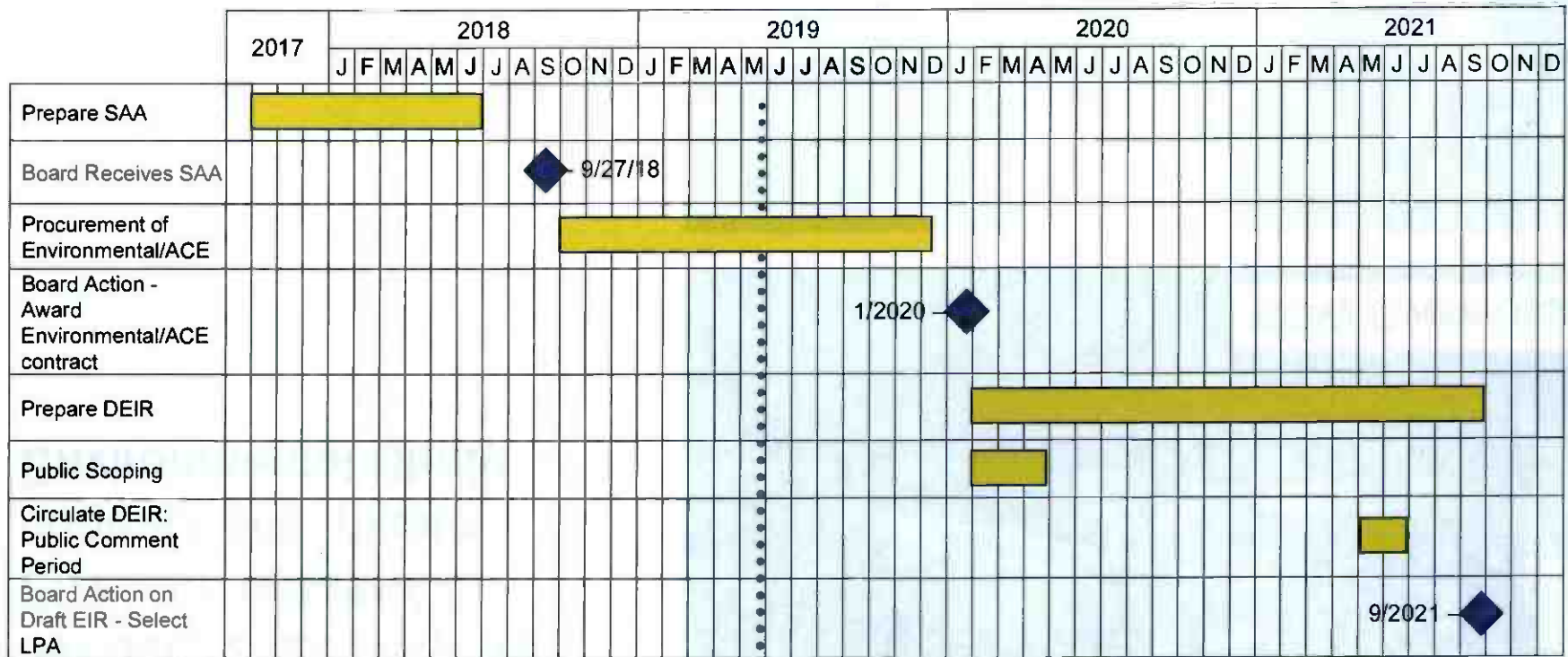


ROW Overcrossing



Hawthorne Boulevard

Green Line Extension to Torrance Schedule



◆ = Milestone Date

Last Revised: 8/2019

Milestones

PROJECT		NOI/NOP	Admin Draft to FTA	NOA	LPA	Admin Final to FTA
CEQA/ NEPA	East San Fernando Valley Transit Corridor	Mar-13	Jul-16	Aug-17	Jun-18	Sep-19
	Eastside Transit Corridor Phase 2	Jan-10 ^[1]	Dec-13 ^[1]	Aug-14 ^[1]	Dec-21 ^[2]	Sep-22
	West Santa Ana Branch Transit Corridor	Jun-17	Aug-19	Apr-20	Jul-20	Aug-20
	Green Line Extension to Torrance	Feb-20 ^[3]	TBD ^[4]	TBD ^[4]	Sep-21	TBD ^[4]

[1] Dates for the Original Draft EIS/R

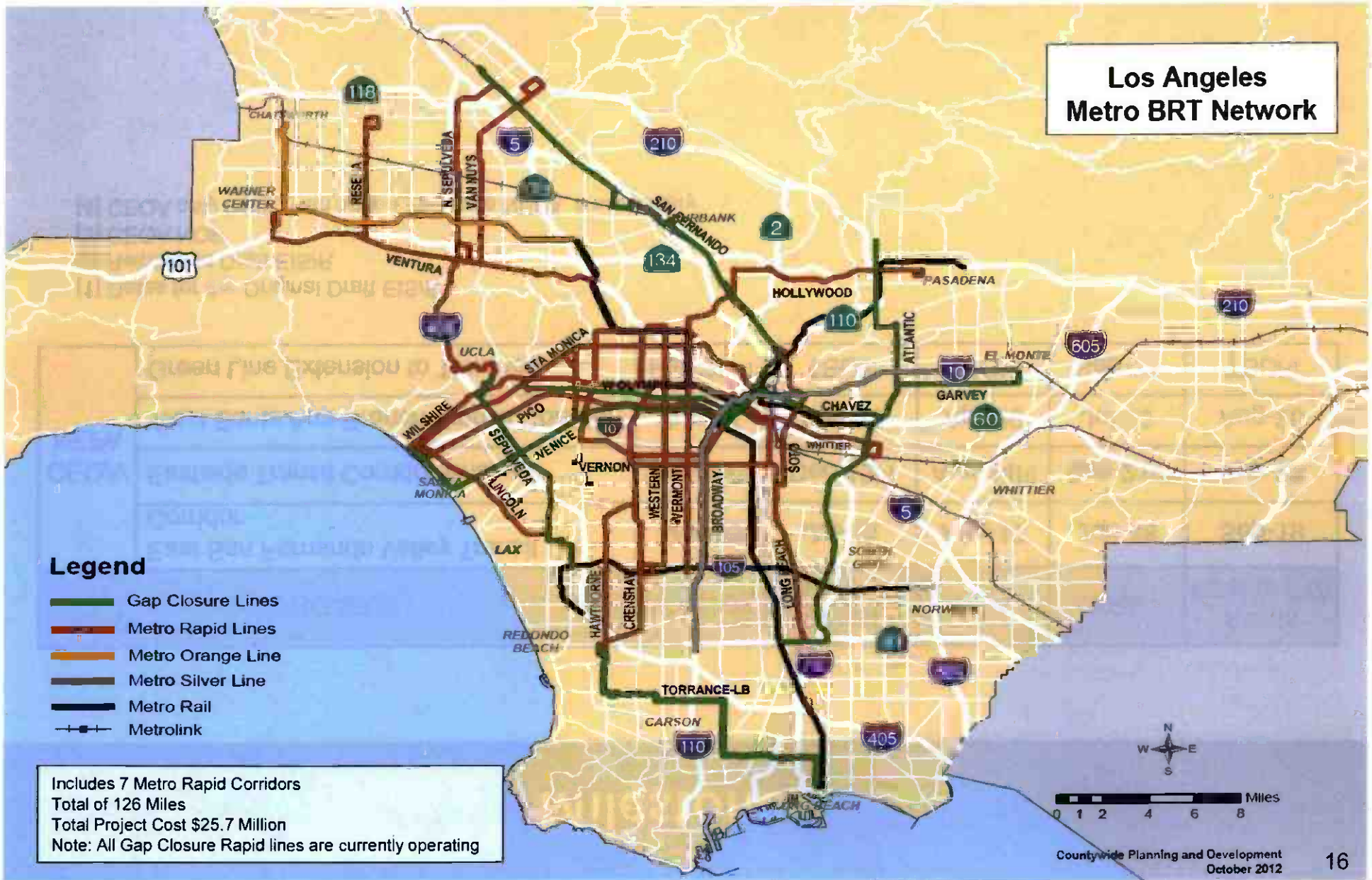
[2] Reinitiated Draft EIS/R

[3] CEQA NOP

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

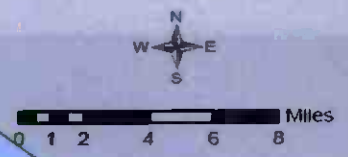
Metro Rapid System Gap Closure Lines

Los Angeles Metro BRT Network



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

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



Metro Rapid System Gap Closure Lines

Transit Signal Priority

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

Status

- Completed 123 miles or 97% to date
 - No change from last quarter
- Last 3.3 miles in Culver City
 - This last small segment was deferred from August 2019 to March 2020 due to delays associated with having separate solicitations for design and installation



Metro

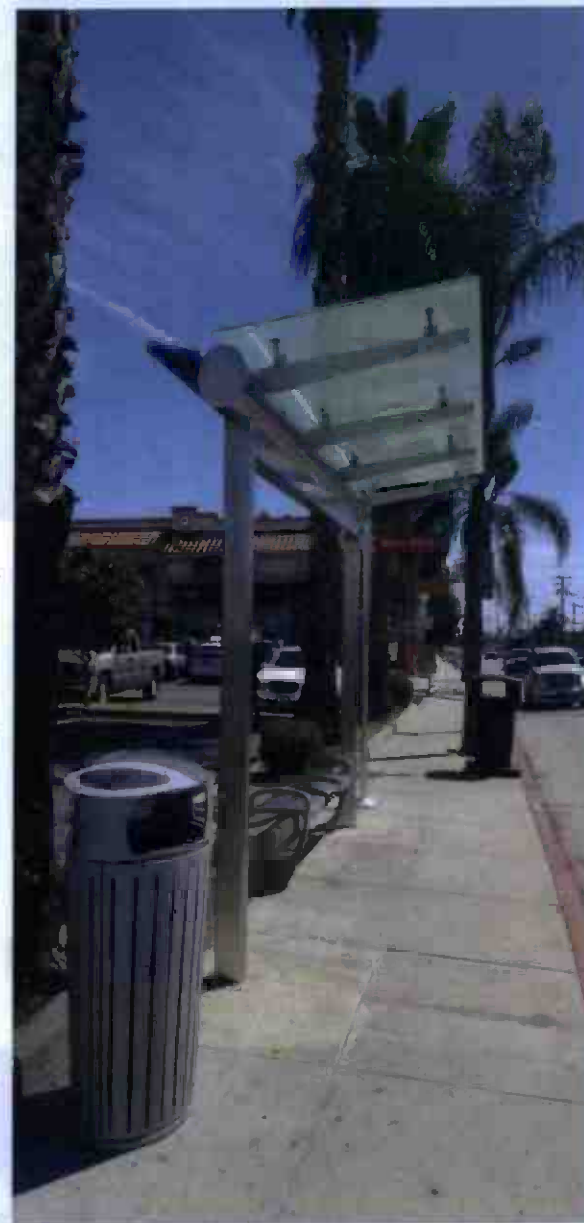


Metro Rapid System Gap Closure Lines Shelter Implementation

Status

- 150 total station locations
- 113 stations completed in 17 jurisdictions
- Completion dates deferred to Winter 2019/20 because of scope changes negotiated between cities and their contractors
- 37 stations remaining:

Number of Stations	Agency	Completion Date	Notes
29	City of Torrance	Extended from Fall to Winter 2019/20	Site planning underway
8	Culver City	Extended from Spring to Winter 2019/20	City amended contract with vendor in July
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

- Construction bids under review for procurement
- City approvals for work in City streets are underway



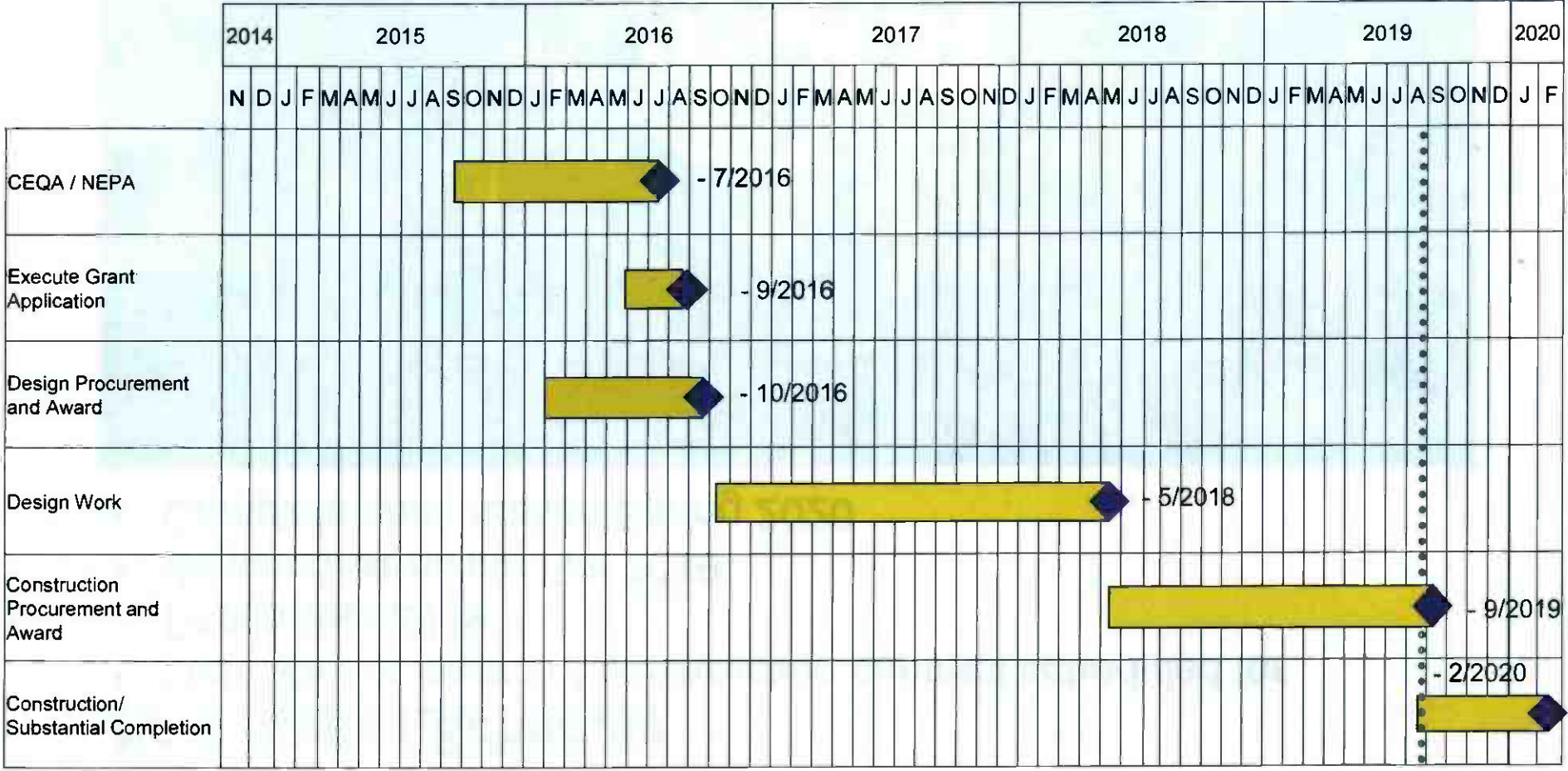
Cesar Chavez Bus Stop Improvements Project

Next Steps / Schedule

- Metro Board award of construction contract scheduled for September 2019
- Begin construction Fall 2019
- Complete construction Spring 2020



Cesar Chavez Bus Stop Improvements Project Schedule (est.)



= Milestone Date

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 – September 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
- Contractor Award Date = August 01, 2013
- Current Revenue Service = October 30, 2019
- Forecast Revenue Service = Summer 2020
- Final Design progress = 100%
- Construction progress = 93%
- Federal Funds = \$227.6 million
- Local Funds = \$1,615.2 million
- State Funds = \$215.3 million



Key Project Updates

- 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.
- Working with 3rd parties to complete power drops for traction power substations in support of testing systems equipment.
- The safety recordable rate is at 2.2 (June 2019), which is less than the national average of 2.8 (based on 200,000 work hours).
- The estimated jobs created to-date is 22,168 with 135 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



Guideway Between UG1 and 104th St. – Installing wire fence



Traction Power Substation (TPSS) #1 – Performing transfer trip test

Construction Update Segment B



UG3 – Continued finish work on U-channel walls of southbound portal

UG4 – Systems installation work looking north toward Leimert Park Station



Construction Update Segment C



Exposition/Crenshaw Station – Continued installation of elevator frames 3 & 4 at the platform level



Leimert Park Station – Continued tile installation from mid-landing to plaza

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

- DBE Goal – Design 20.00%
- Current DBE Commitment \$25,157,579 20.00%
- Current DBE Participation \$29,454,834 23.54%

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) \$295,718,623 26.21%

309 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.

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	-	440,747,649	679,322	428,775,001	-	440,747,649	(9,606,726)
20	STATIONS, STOPS, TERMINALS, INTERMODAL	153,906,000	-	315,050,000	125,000	310,409,580	3,865,416	267,132,831	125,000	310,409,580	(4,640,420)
30	SUPPORT FACILITIES (SOUTHWEST YARD)	66,673,000	-	71,164,000	-	67,338,361	20,300	65,500,821	-	67,338,361	(3,825,639)
40	SITWORK/SPECIAL CONDITIONS	235,576,000	-	395,798,361	1,720,137	403,521,514	1,783,909	345,489,514	1,720,137	403,521,514	7,723,153
50	SYSTEMS	125,132,000	-	169,436,000	13,998	174,845,165	4,312,341	124,046,502	13,998	174,845,165	5,409,165
	CONSTRUCTION SUBTOTAL (10-50)	1,052,622,000	-	1,401,802,736	1,859,135	1,396,862,270	10,661,289	1,230,844,667	1,859,135	1,396,862,270	(4,940,466)
60	RIGHT-OF-WAY	132,294,000	-	127,490,000	569,033	132,614,319	575,607	132,370,236	569,033	132,614,319	5,124,319
70	VEHICLES / BUSES	87,780,000	-	83,571,544	-	83,571,544	-	78,832,400	-	83,571,544	(0)
80	PROFESSIONAL SERVICES	273,147,000	-	368,734,466	934,596	407,539,092	2,593,537	359,404,789	934,649	407,539,168	38,804,702
	SUBTOTAL (10-80)	1,545,843,000	-	1,981,598,746	3,362,764	2,020,587,225	13,830,433	1,801,552,093	3,362,817	2,020,587,301	38,988,555
90	UNALLOCATED CONTINGENCY	177,157,000	-	50,401,254	-	-	-	-	(3,362,817)	11,412,699	(38,988,555)
	TOTAL PROJECT 865512 (10-100)	1,723,000,000	-	2,032,000,000	3,362,764	2,020,587,225	13,830,433	1,801,552,093	-	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	-	25,549,031	-	26,000,000	-
	TOTAL PROJECTS 405512, 465512 & 865512	1,749,000,000	-	2,058,000,000	3,362,764	2,046,136,256	13,830,433	1,827,101,124	-	2,058,000,000	-

1. Expenditures are Cumulative through June 28, 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.

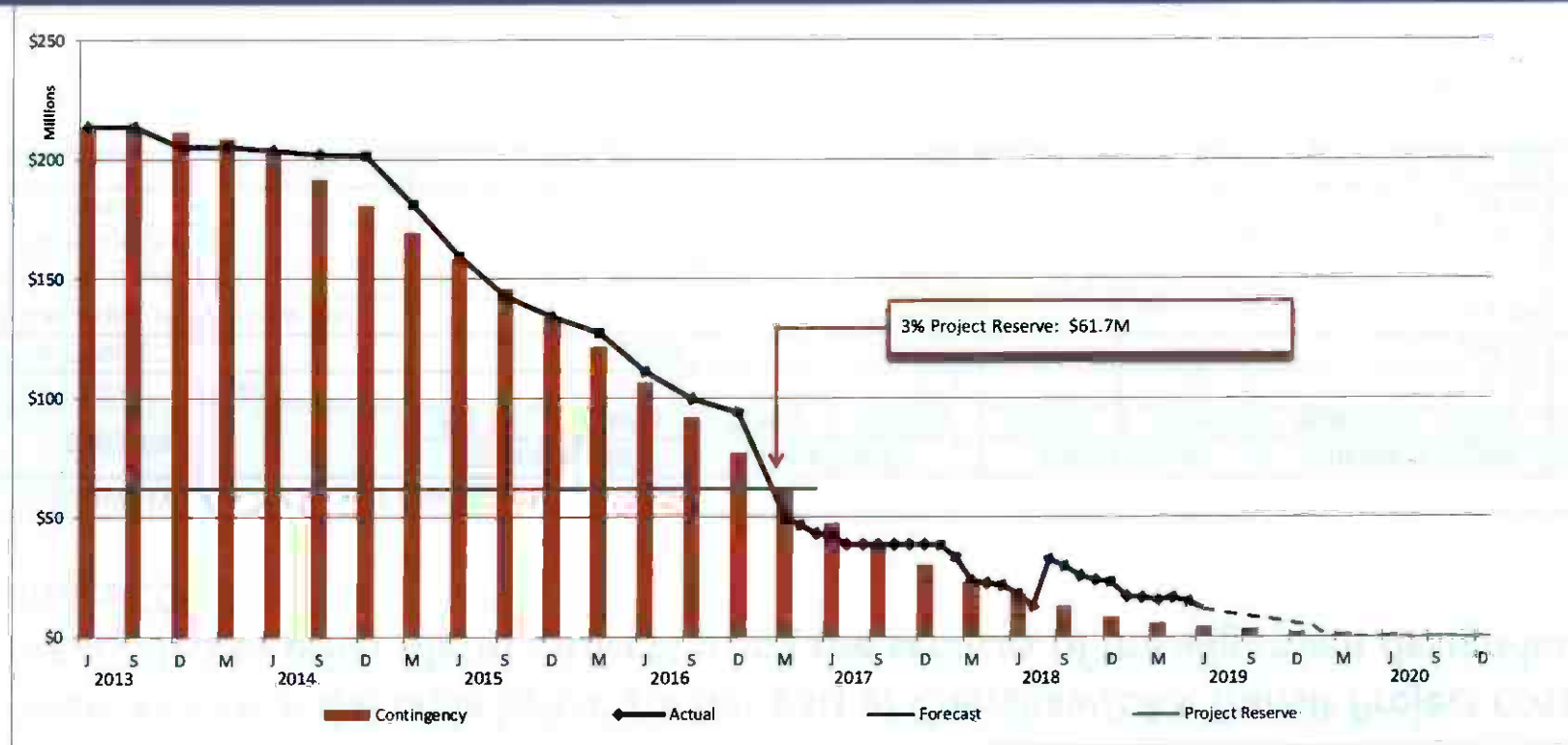
3. Expenditures exclude \$5.5 million for various right-of-way and professional services costs that are being reallocated to other local funding.

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	-	2,566,226	-	2,081,126	-	2,566,226	-
210152 CRENSHAW/LAX BUS TRANSFER FACILITY	-	2,200,000	-	2,200,000	-	403,334	-	2,200,000	-
460303 AIRPORT METRO CONNECTOR	-	37,914,465	-	37,047,674	87,360	37,022,426	-	37,914,465	-
500013 C/LAX LAWA SCOPE OF WORK	-	1,575,362	-	1,114,613	-	545,439	-	1,575,362	-
405522 HIGHWAY PLANNING	-	1,935,000	-	1,935,000	-	719,503	-	1,935,000	-
TOTAL	-	46,511,088	-	45,183,548	87,360	41,091,863	-	46,511,088	-

Budget Contingency Drawdown

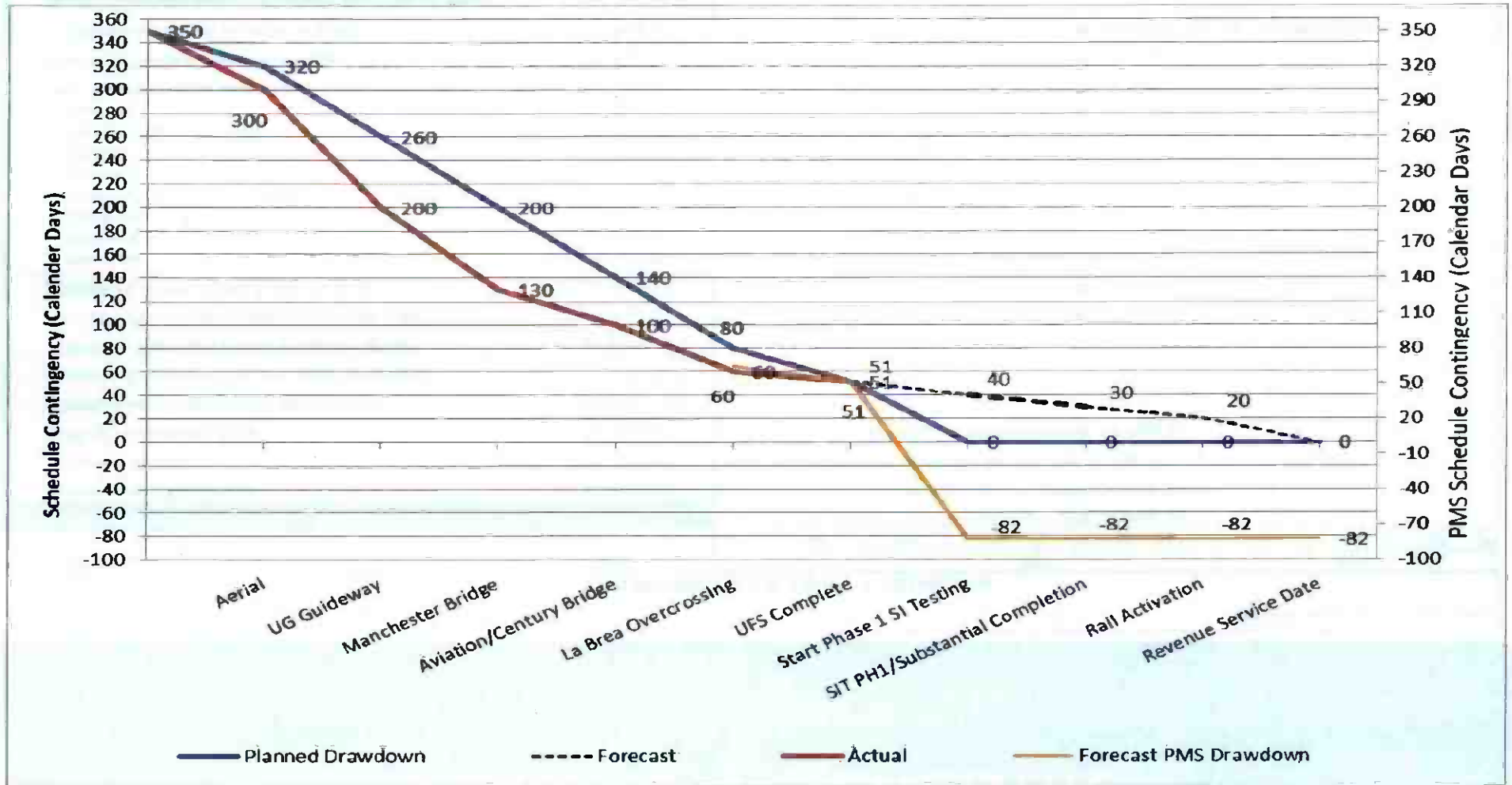


PROJECT COST CONTINGENCY (through 28-Jun-2019)					
UNITS IN DOLLARS					
	Original Contingency	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	173,500,000	(158,724,485)	(3,362,817)	(162,087,302)	11,412,698
Allocated Contingency	40,366,792	(40,366,792)	-	(40,366,792)	-
Total Contingency	213,866,792	(199,091,276)	(3,362,817)	(202,454,094)	11,412,698

Summary Schedule

Crenshaw/LAX Transit Corridor - Master Schedule June 2019		Crenshaw/LAX Level 1 Schedule								MASTER SCHEDULE JUNE 2019			
Activity Name	Finish	2020								2021			
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Crenshaw/LAX Transit Corridor - Master Schedule	14-Aug-20	▼ 14-Aug-20											
Milestones & Key Dates	14-Aug-20	▼ 14-Aug-20											
Program Elements	31-Jul-20	▼ 31-Jul-20											
865512 - Crenshaw/LAX	14-Aug-20	▼ 14-Aug-20											
C0990 - Advanced Utility Relocation	27-May-16 A												
C0992 - Concrete Ties and Assembly Items	15-Aug-14 A												
C0992A - Running Rail & Bumping Post	08-May-15 A												
C0988 - Pre-Construction Crenshaw/LAX	14-Aug-20	▼ 14-Aug-20											
C0988 - Construction & Installation	14-Aug-20	▼ 14-Aug-20											
Sitework	01-Jun-20	▼ 01-Jun-20											
Stations	23-Dec-19	▼ 23-Dec-19											
Guideway & Track	08-Nov-19	▼ 08-Nov-19											
System-Wide Components	18-Feb-20	▼ 18-Feb-20											
Systems	06-Jan-20	▼ 06-Jan-20											
Testing	02-Mar-20	▼ 02-Mar-20											
Substantial Completion	02-Mar-20	▼ 02-Mar-20											
Start Up	14-Aug-20	▼ 14-Aug-20											
Pre - Revenue Operations	14-Aug-20	▼ 14-Aug-20											
Revenue Service Summer of 2020	14-Aug-20	▼ 14-Aug-20											
Revenue Service Summer of 2020	14-Aug-20	◆ Revenue Service Summer of 2020											
860003 - Southwestern Yard and Paint Body Shop	30-Jan-19 A												
Milestone	30-Jan-19 A												
Preliminary Engineering	18-Dec-12 A												
Right of Way	31-Oct-17 A												
Design Build Procurement	29-Jun-15 A												
Final Design	11-Jan-17 A												
Construction & Installation	30-Jan-19 A												

Budget 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.

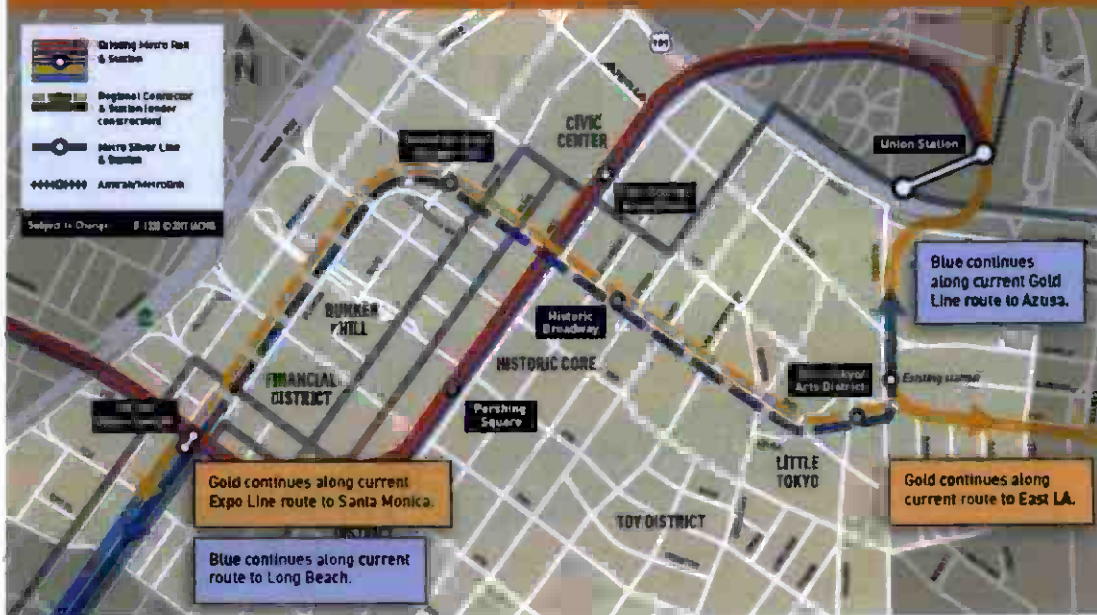
Regional Connector Transit Project

FTA Quarterly Review Meeting

September 4, 2019



Project Description



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

- FFGA Budget – \$1,402.93M
- FFGA Forecast – \$1,670.83M
- FFGA Proposed RSD – 02/2023
- Forecast RSD – 09/2022
- FFGA Contingency (Proposed Budget) – 2.53%
- 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 – 57.5%
- Final Design Progress – 99.9%
- Construction Progress – 55.0%

Key Project Updates

1. 50% Risk Refresh completed
2. Project remains on-schedule and within budget
3. Recognize that monthly billings must ramp-up to remain on-schedule
4. Construction focus remains on station concrete construction for next six months
5. Project staff witnessing various testing of fabricated materials and equipment

Construction Update Tunnels



Concrete pour in progress for Floating Slab Track curb



Installing water standpipe in Right Tunnel, Reach 2

- Continue work on floating slab track curb and standpipe installation in tunnel and cross passages

Construction Update

Little Tokyo/Arts District Station

- Excavation and related support of excavation and structural concrete operations continue throughout the Wye, 1st Street Leg, Station, and portions of the Fan Plant



1st Street Cut & Cover HDPE installation

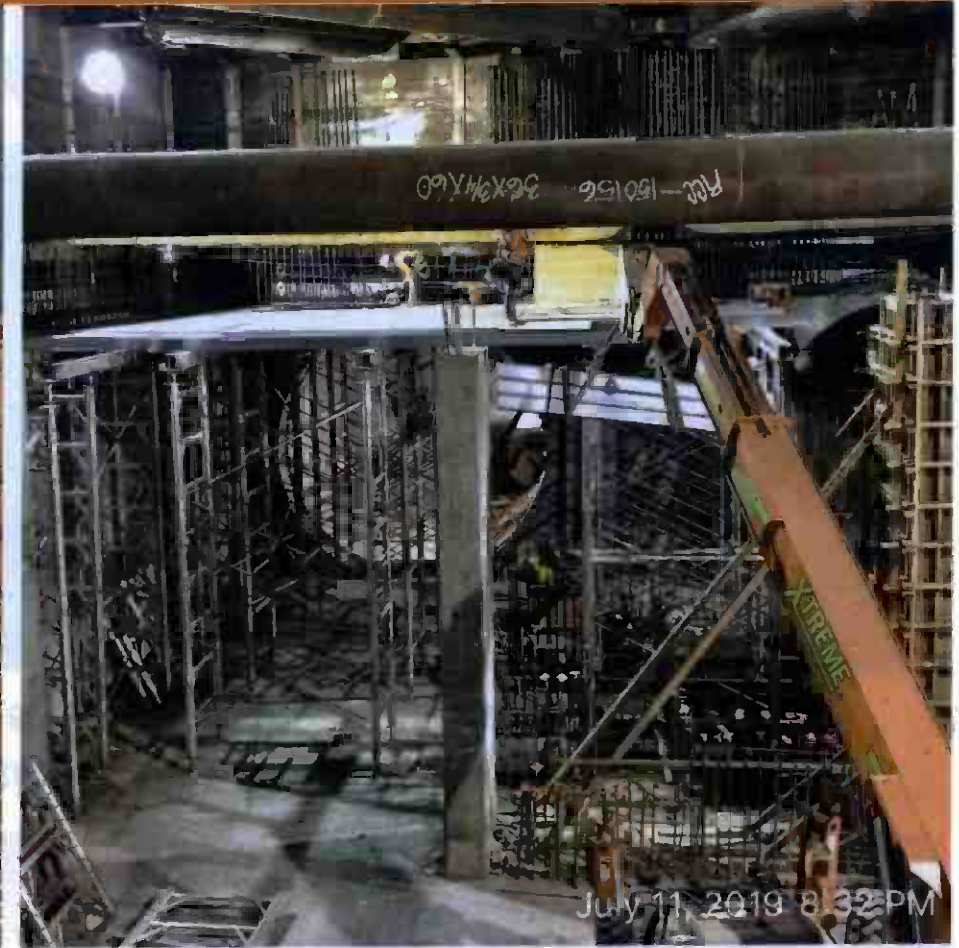


Decking installation at Central Station

Construction Update Historic Broadway Station



Interior wall formwork at Entrance Structure



Shoring tower installation at West Hammerhead

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

Construction Update SEM Cavern



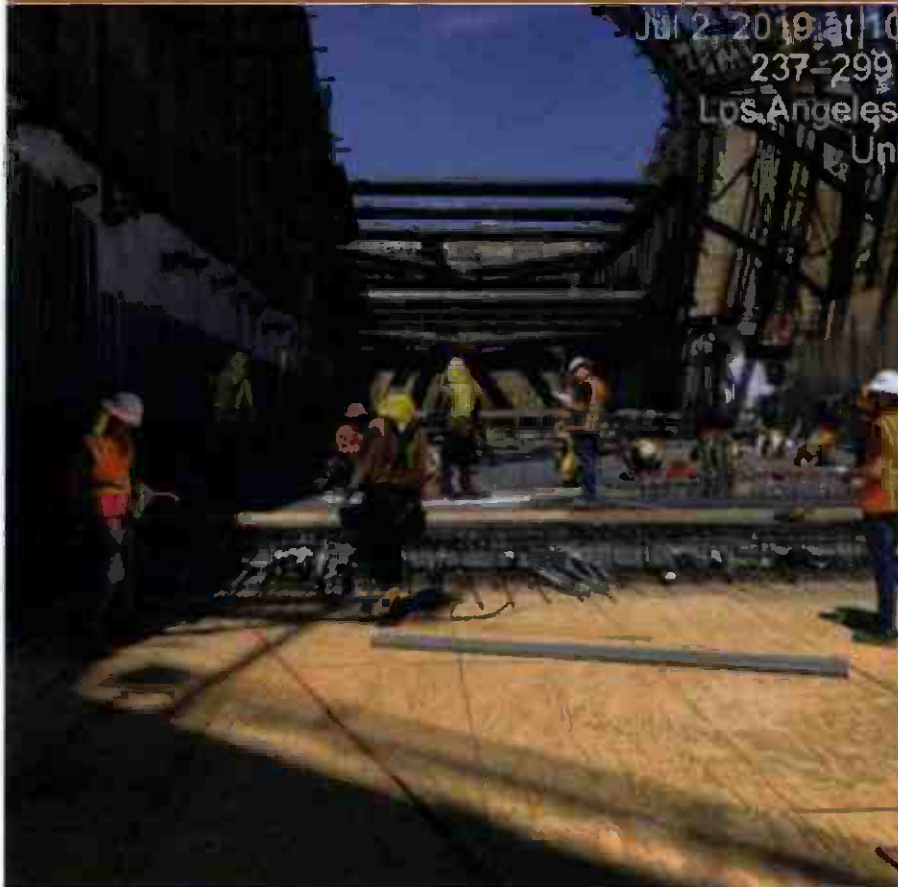
Top mat rebar installation at SEM Cavern invert



Wall form installation at right track

- Final liner work is underway with varied trades working in SEM Cavern

Construction Update Grand Av Arts/Bunker Hill Station



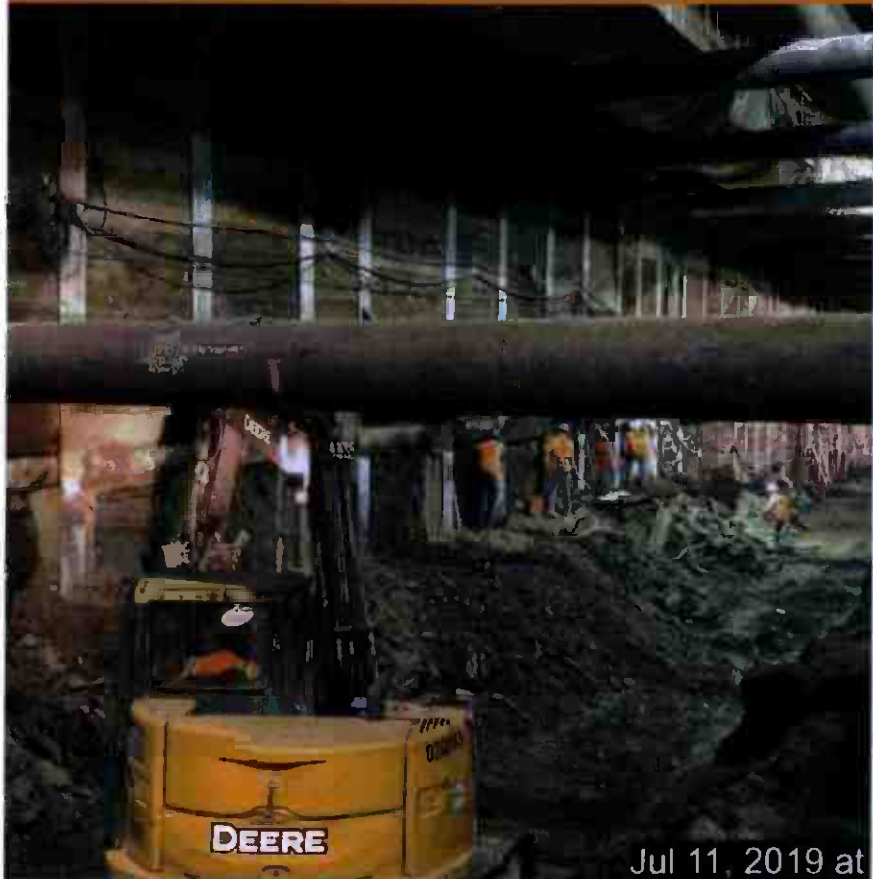
Rebar shear ties installation at Ancillary Deck Slab



Concrete placement at Ancillary Deck

- Structural concrete walls continue to be erected at multiple levels

Construction Update Flower Street



Jul 11, 2019 at

Excavation and lagging under Flower Street



Jul 11, 2019 at 9:28

Dust barrier installed at 7th/Metro bulkhead

- Excavation and utility protection south of 5th continues
- 7th/Metro break-through proceeding slow but well

Disadvantaged Business Enterprises

Contract C0980 Regional Connector Transit Corridor Design-Build (Reporting Data as of May 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>\$14.4M (22.63%)</p> <p>26.99%</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>\$194M (18%)</p> <p>\$135M (12.56%)</p>

FFGA Project Cost Status Above the Line

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT (860228)
PERIOD ENDING JUN 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	245,969	176,061	267,363	22,432
20	STATIONS, STOPS, TERMINALS, INTERMODAL	354,268	220,966	221,040	64,765	221,584	618
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	0	0	0	0	0	0
40	SITWORK & SPECIAL CONDITIONS	141,785	578,180	566,144	457,832	596,683	18,503
50	SYSTEMS	69,667	72,674	67,593	16,733	78,962	6,287
	CONSTRUCTION SUBTOTAL (10-50)	846,343	1,116,752	1,100,747	715,391	1,164,592	47,840
60	ROW, LAND, EXISTING IMPROVEMENTS	115,889	90,629	52,498	52,439	69,189	-21,440
70	VEHICLES	16,275	16,275	16,275	6,145	16,275	0
80	PROFESSIONAL SERVICES	261,455	350,272	290,898	277,381	364,181	13,910
	SUBTOTAL (10-80)	1,239,963	1,573,927	1,460,418	1,051,357	1,614,237	40,310
90	UNALLOCATED CONTINGENCY	135,399	82,600	0	0	42,290	-40,310
100	FINANCE CHARGES	27,571	14,301	0	0	14,301	0
	TOTAL PROJECT (10-100)	1,402,932	1,670,828	1,460,418	1,051,357	1,670,828	0

NOTE: TOTAL INCURRED COST TO DATE \$1,062,714,487. JUNE 2019 ACTUALS HAVE NOT BEEN FINALIZED DUE TO FISCAL YEAR-END.

*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 JUN 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	245,969	176,061	267,363	22,432
20	STATIONS, STOPS, TERMINALS, INTERMODAL	354,268	220,966	221,040	64,765	221,584	618
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	0	0	0	0	0	0
40	SITWORK & SPECIAL CONDITIONS	141,789	578,190	566,144	457,832	596,683	18,503
50	SYSTEMS	69,667	72,674	67,593	16,733	78,962	6,287
	CONSTRUCTION SUBTOTAL (10-50)	846,343	1,116,752	1,100,747	715,391	1,164,592	47,840
60	ROW, LAND, EXISTING IMPROVEMENTS	115,809	90,629	92,496	52,439	68,189	21,440
70	VEHICLES	16,275	16,275	16,275	6,145	16,275	0
80	PROFESSIONAL SERVICES	261,456	350,272	290,698	277,381	364,181	13,910
	SUBTOTAL (10-80)	1,239,903	1,573,927	1,480,416	1,051,357	1,614,237	40,310
90	UNALLOCATED CONTINGENCY	136,399	82,500	0	0	42,250	40,310
100	FINANCE CHARGES	27,571	14,301	0	0	14,301	0
	TOTAL PROJECT (10-100)	1,402,832	1,670,828	1,480,416	1,051,357	1,670,828	0

NOTE: TOTAL INCURRED COST TO DATE \$1,062,714,487. JUNE 2019 ACTUALS HAVE NOT BEEN FINALIZED DUE TO FISCAL YEAR-END.

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

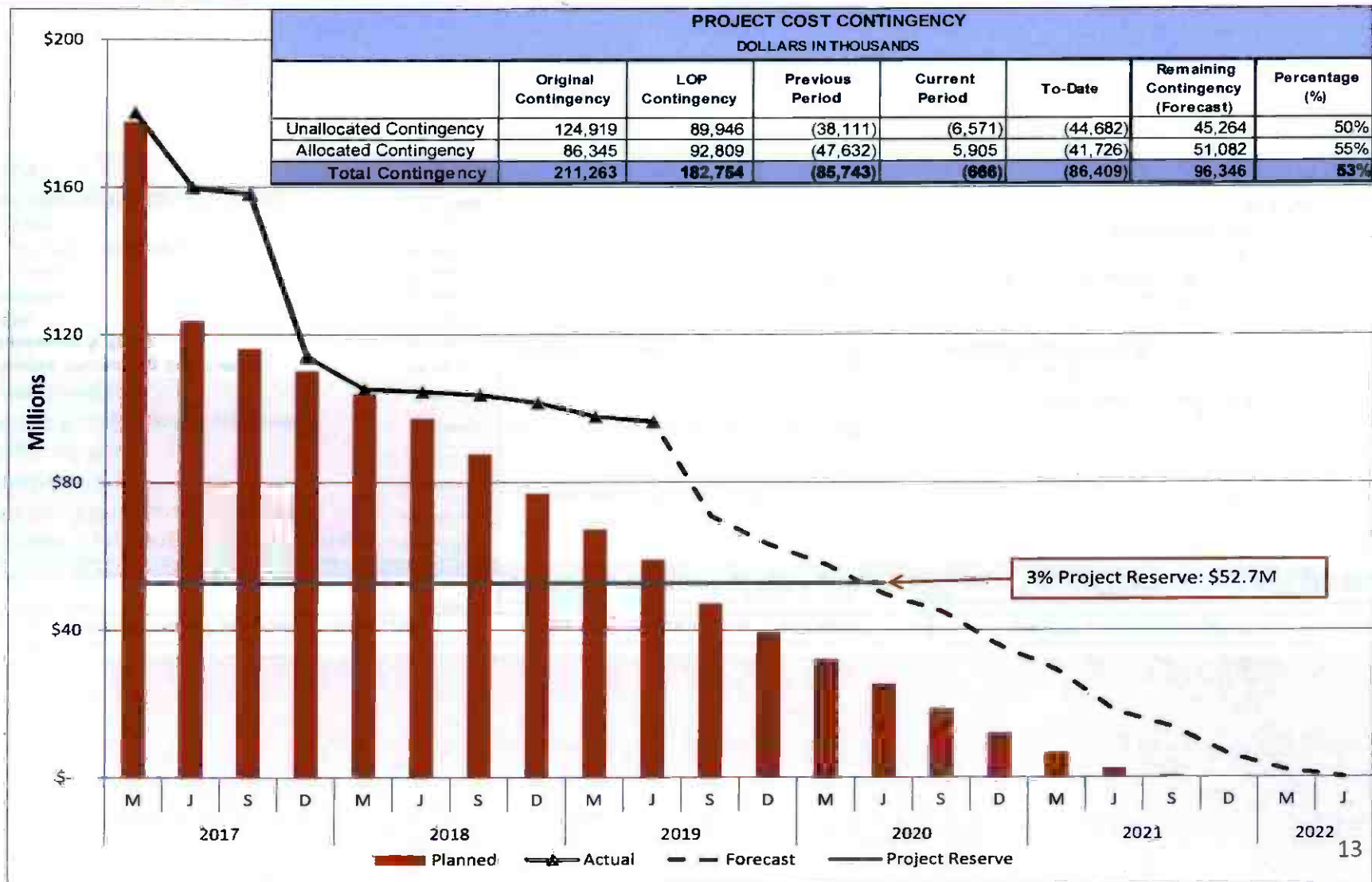
**CURRENT PROJECT BUDGET LESS NON-FFGA ACTIVITIES.

SCC CODE	DESCRIPTION	ORIGINAL NON FFGA BUDGET	PROPOSED NON FFGA BUDGET	COMMITMENTS	EXPENDITURES	PROPOSED NON FFGA FORECAST AT COMPLETION	VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS		4,360	5,113	1,172	2,175	-2,175
20	STATIONS, STOPS, TERMINALS, INTERMODAL		8,953	8,953	7,344	10,770	1,818
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS		0	0	0	0	0
40	SITWORK & SPECIAL CONDITIONS		20,237	12,336	4,774	28,695	8,458
50	SYSTEMS		750	120	19	900	150
	CONSTRUCTION SUBTOTAL (10-50)		34,289	26,532	13,310	42,540	8,251
60	ROW, LAND, EXISTING IMPROVEMENTS		2,113	0	0	0	-2,113
70	VEHICLES		0	0	0	0	0
80	PROFESSIONAL SERVICES		29,096	14,713	10,570	27,217	-1,849
	SUBTOTAL (10-80)		66,498	41,245	23,880	80,757	4,289
90	UNALLOCATED CONTINGENCY		7,348	0	0	3,057	-4,289
100	FINANCE CHARGES		0	0	0	0	0
	TOTAL NON-FFGA (10-100)		72,814	41,245	23,880	72,814	0
	ENVIRONMENTAL/PLANNING		26,500	26,500	26,063	26,500	0
	TOTAL NON-FFGA (INCL. ENV./PLANNING)		99,314	67,744	49,943	99,314	0

NOTE: JUNE 2019 ACTUALS HAVE NOT BEEN FINALIZED DUE TO FISCAL YEAR-END. METRO AND TRIBUNE AGREED ON REIMBURSEMENT OF \$1.6 MILLION RELATED TO 2ND/BROADWAY OVERBUILD.

TOTAL PROJECT	1,402,932	1,770,142	1,528,162	1,100,300	1,770,142	0
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Budget Contingency Drawdown



Summary Schedule

Regional Connector Master Schedule Current (June 2019)			Regional Connector Level 1 Schedule																MASTER SCHEDULE JUNE 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			
	Regional Connector Master Schedule Current (June 2019)	14-Aug-22																								
	Project Planning & Development	29-Jun-12 A																								
	FFGA / TIFIA Loan Approved	20-Feb-14 A																								
	Engineering	20-Jun-19 A																								
	Right of Way	01-Jul-19																								
	Metro Furnished Equipment	14-Apr-20																								
	Construction	13-Apr-22																								
	Utilities (Including 3rd Parties)	22-Apr-21																								
	Guideway & Track	07-Sep-21																								
	SEM	10-Feb-20																								
	Stations	24-Nov-21																								
	Systems	08-Dec-21																								
	Substantial Completion	25-Mar-22																								
	Testing	13-Apr-22																								
	Pre-Revenue Operations	2022																								
	RSD	2022																								

Remaining Work Milestone	1 of 1 Regional Connector Level 1 Summary Schedule Los Angeles County Metropolitan Transportation Authority	Data Date : 29-Jun-19 Current Date : 15-Jul-19
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Top Risks & Mitigations

July 2019

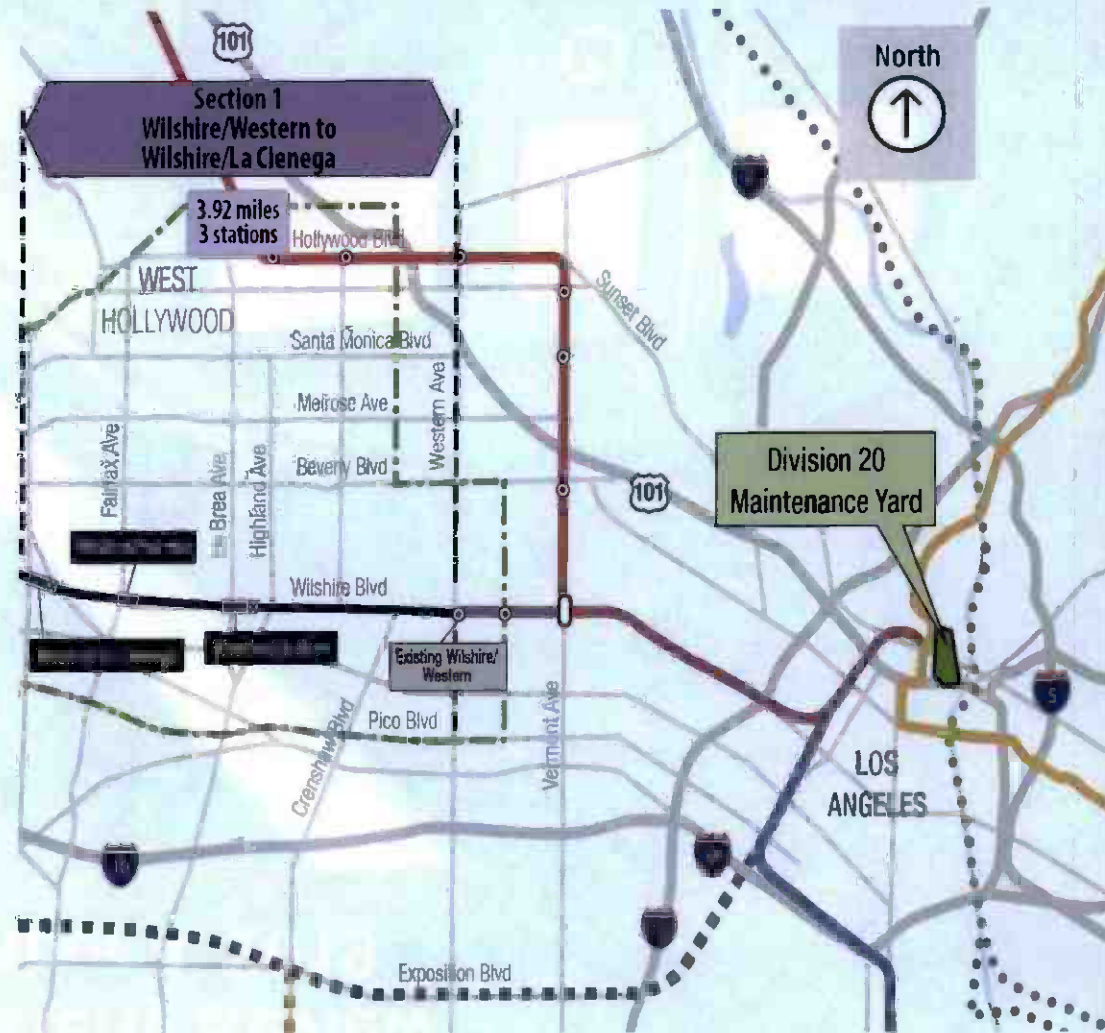
Risk ID	Risk Description	Risk Score	Action Items
304	Unknown obstructions may be encountered during station or cut/cover guideway excavation, or Support of Excavation installation; delays may ensue.	9	1. Familiarize RE Team to potential issues at/on Alameda
311	Commonwealth Agreement may impact costs 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	1. Define specific change conditions and estimate accordingly in anticipation of RFC
514	Fan Plant final modification negotiated above 12M. Costs shown are above the current forecast and adjustment	8	1. Hold fact finding meeting to review technical analysis

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



Westside Purple Line Extension Section 1 Project (Wilshire/Western to Wilshire/La Cienega) 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: 2023
- Design Progress: 100% (Final Design Complete)
- Construction Progress: 50%
- Daily Project Transit Trips: 33,694
- Daily New Transit Trips: 9,841
- Current Contingency Forecast (SCC 10-80): 6%
- Current Contingency Forecast of Cost-to-Go (SCC 10-80): 12%
- 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 Project

Key Project Updates

- The current job creation estimates as extrapolated from the Los Angeles Economic Development Corporation (LAEDC) analysis of job impacts are the following:
 - June 2019: 639 estimated jobs
 - Fourth Quarter of FY 2019: 1,100 estimated jobs
 - To Date: 16,511 estimated jobs

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

Current Activities:

- Transportation of Purple TBM to La Brea North Yard.

Status:

- Both TBMs broke through at Western in June 2019.
- The transfer of TBMs to the La Brea Station Yard commenced on July 8, 2019. Transportation of the Purple TBM and gantries commenced on July 29, 2019.
- Continued maintenance of sump and dewatering pumps.



Transporting Shield to La Brea Station Yard



TBM Gantry Shield at Western Shaft



TBM Cutter Shield at Western Shaft

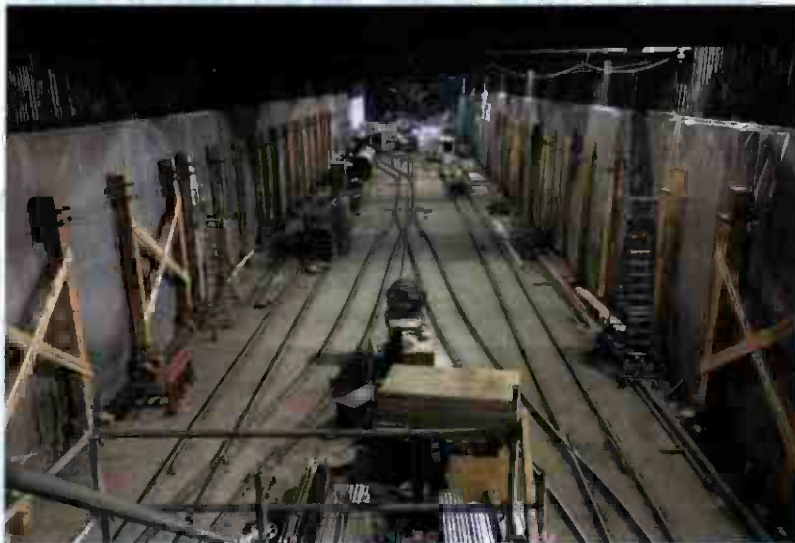
Westside Purple Line Extension Section 1 Project Construction Update Wilshire/La Brea Station

Current Activities:

- Prep for TBM arrivals/relaunch.
- Continued concourse construction.

Status:

- HDPE and rebar installation for exterior walls above concourse slab continues. Placement of 2nd lift exterior wall concrete is scheduled for August 2019.
- Work on the concourse level high bay area is scheduled in December 2019.



Installation of Shoring Frames for Concourse Level Temporary Deck



HDPE Installation at Concourse Exterior Walls



Rebar Installation at Concourse Exterior Walls

Westside Purple Line Extension Section 1 Project Construction Update Wilshire/Fairfax Station

Current Activities:

- Station invert concrete placement.

Status:

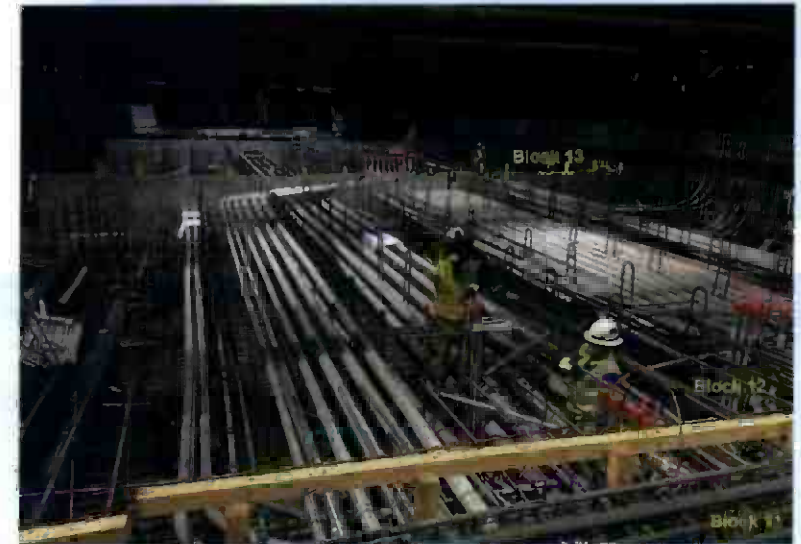
- Continued invert rebar, MEP and concrete placement move forward. Invert slab placement scheduled to complete in September 2019.



Fairfax Station Looking West



Invert Slab Concrete Placement at Level D, Block 10



Block 12 & 13 Electrical Conduit

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

Current Activities:

- Station excavation, waler/strut installation, maintenance of dewatering wells.

Status:

- Continued excavation below Level D, along with Level D strut installation.
- Bottom of excavation remains for August 2019 with French drains, grounding system and mud slabs to follow.
- Maintenance items per the COBH MOA is ongoing.



Welding Packing Steel at Level D



Level D Excavation / Removal of Crane Mats



La Cienega Station Facing East

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

Current Activities:

- Transport of TBMs and equipment from Western to La Brea Station.
- Re-assembly of TBMs at La Brea Station.

Status:

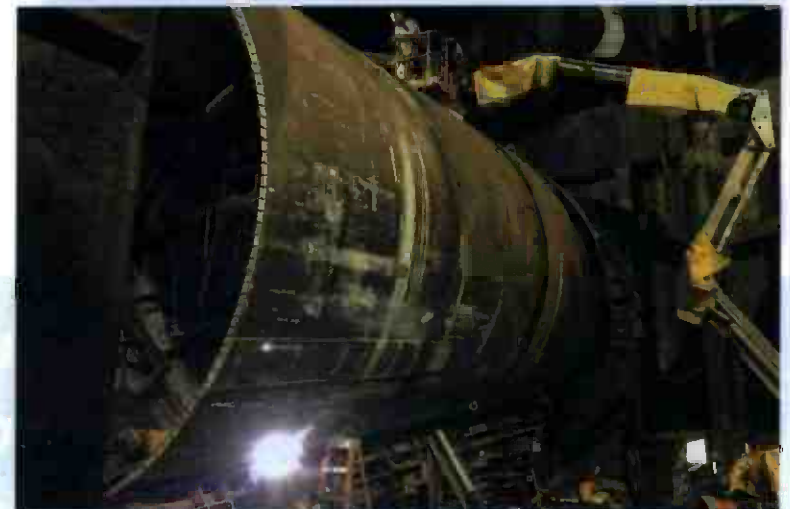
- All Red TBM shields are at the La Brea Station yard. Assembly of Red TBM is underway.
- Reach 2 TBM launch is scheduled for late September / early October 2019.
- Reach 1 cross passage work is scheduled to start in October 2019.



Lowering TBM Cradle



TBM Cradle at Reach 2 Tunnel



Welding Red TBM Shield

Westside Purple Line Extension Section 1 Project Real Estate Acquisition Status

Purple Line Extension Section 1 - Real Estate Status Summary								
Description	Number of Parcels	Certified	Appraisals Completed	Offers Made	Agreements/ Settlements Signed	Relocations		Parcels Available
						Required	Completed	
Full Takes	9	9	9	9	9	109	109	9
Part Takes	6	6	6	6	6	0	0	6
TCE	4	4	4	4	3	0	0	4
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. A Mandatory Settlement Conference has been held, and a tentative settlement is being considered by both parties.

Westside Purple Line Extension Section 1 Project Project Cost Status

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	386,598	207,592	390,478	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	570,051	522,582	485,365	195,486	522,582	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	39,086	38,092	37,505	37,107	38,092	-
40	SITWORK & SPECIAL CONDITIONS	139,820	813,058	785,453	573,186	813,058	-
50	SYSTEMS	123,579	118,561	101,033	28,846	118,561	-
CONSTRUCTION SUBTOTAL (10-50)		1,437,616	1,882,771	1,795,953	1,042,217	1,882,771	-
60	ROW, LAND, EXISTING IMPROVEMENTS	212,475	190,036	190,036	172,927	190,036	-
70	VEHICLES	160,196	108,302	98,118	16,061	108,302	-
80	PROFESSIONAL SERVICES	410,342	507,489	376,556	339,469	507,489	-
SUBTOTAL (10-80)		2,220,629	2,688,597	2,460,663	1,570,674	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	2,460,663	1,570,674	3,090,101	-

NOTE: TOTAL INCURRED COST TO DATE \$1,573,738

* 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 Project FFGA / Non-FFGA Cost Status

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	386,598	207,592	390,478	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	570,051	522,582	485,365	195,486	522,582	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	39,086	38,092	37,505	37,107	38,092	-
40	SITework & SPECIAL CONDITIONS	139,820	813,058	785,453	573,186	813,058	-
50	SYSTEMS	123,579	118,561	101,033	28,846	118,561	-
	CONSTRUCTION SUBTOTAL (10-50)	1,437,616	1,882,771	1,795,953	1,042,217	1,882,771	-
60	ROW, LAND, EXISTING IMPROVEMENTS	212,475	190,036	190,036	172,927	190,036	-
70	VEHICLES	160,196	108,302	98,118	16,061	108,302	-
80	PROFESSIONAL SERVICES	410,342	507,489	376,556	339,469	507,489	-
	SUBTOTAL (10-80)	2,220,629	2,688,597	2,460,663	1,570,674	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	2,460,663	1,570,674	3,090,101	-

NOTE: TOTAL INCURRED COST TO DATE \$1,573,738

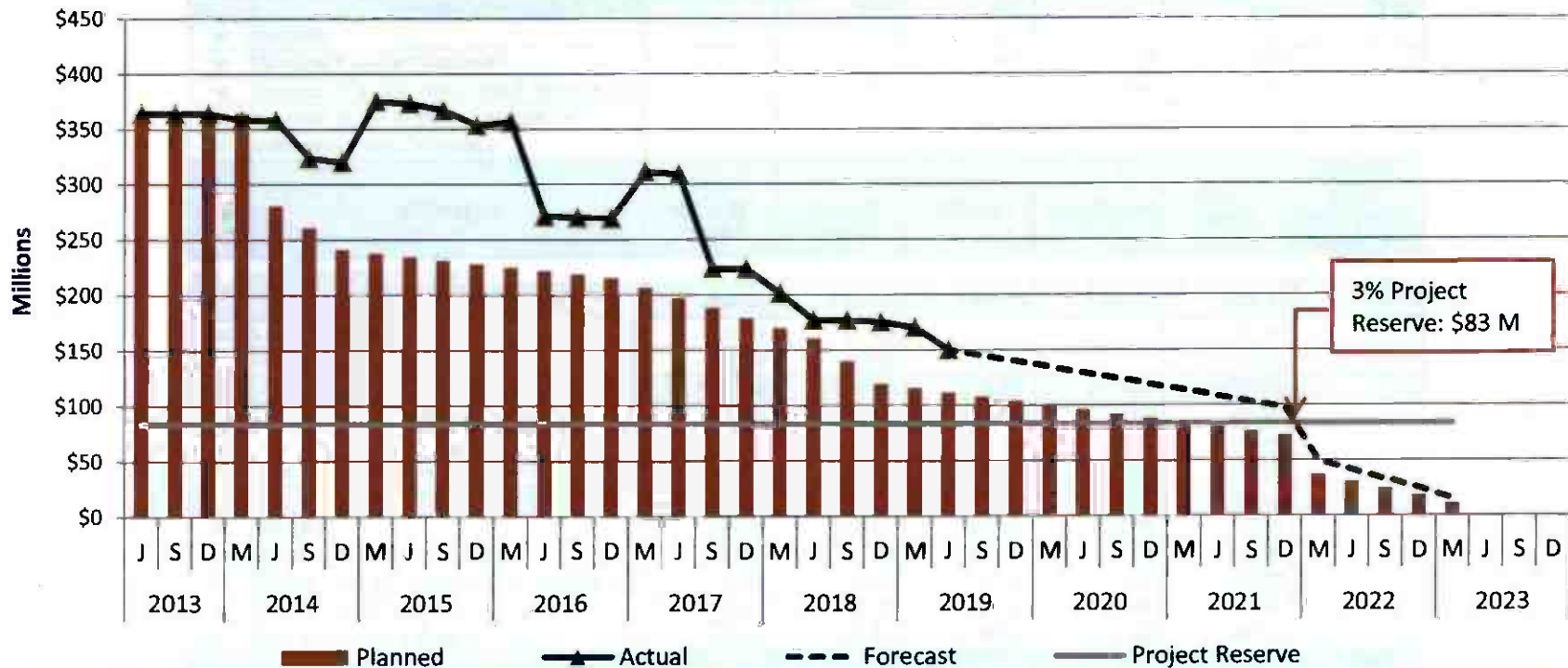
SCC CODE	DESCRIPTION	ORIGINAL NON FFGA BUDGET	CURRENT NON FFGA BUDGET	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	CURRENT NON FFGA BUDGET/ FORECAST VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	-	-	-	-	-	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	-	-	-	-	-	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	2,925	5,073	5,073	5,260	2,335
40	SITework & 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	2,888	3,284	3,628	53
	SUBTOTAL (10-80)	14,305	19,305	21,390	19,022	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	21,390	19,022	24,879	-
	ENVIRONMENTAL/PLANNING	39,370	39,370	39,370	39,357	39,370	-
	TOTAL NON-FFGA (INCL. ENV./PLANNING)	55,674	64,248	60,760	58,379	64,248	-

NOTE: TOTAL INCURRED COST TO DATE \$58,380

	TOTAL PROJECT	2,838,262	3,154,350	2,521,422	1,629,053	3,154,350	-
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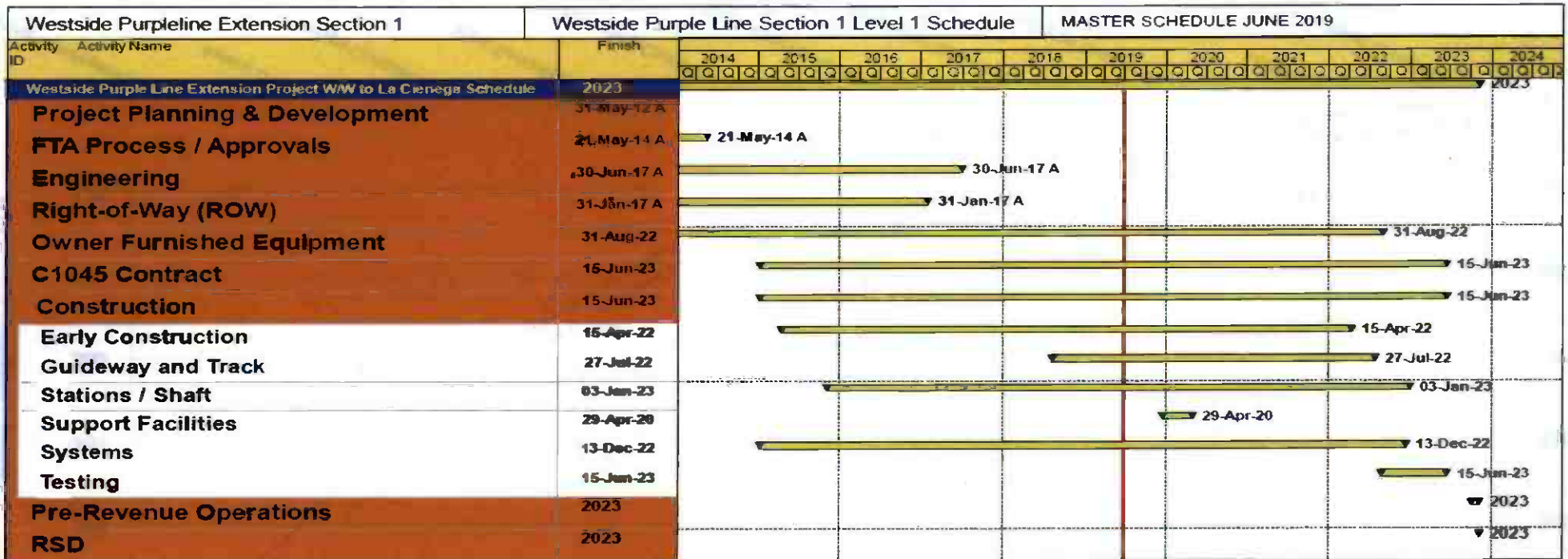
NOTE: TOTAL INCURRED COST TO DATE \$1,632,118

Westside Purple Line Extension Section 1 Project Budget Contingency Drawdown

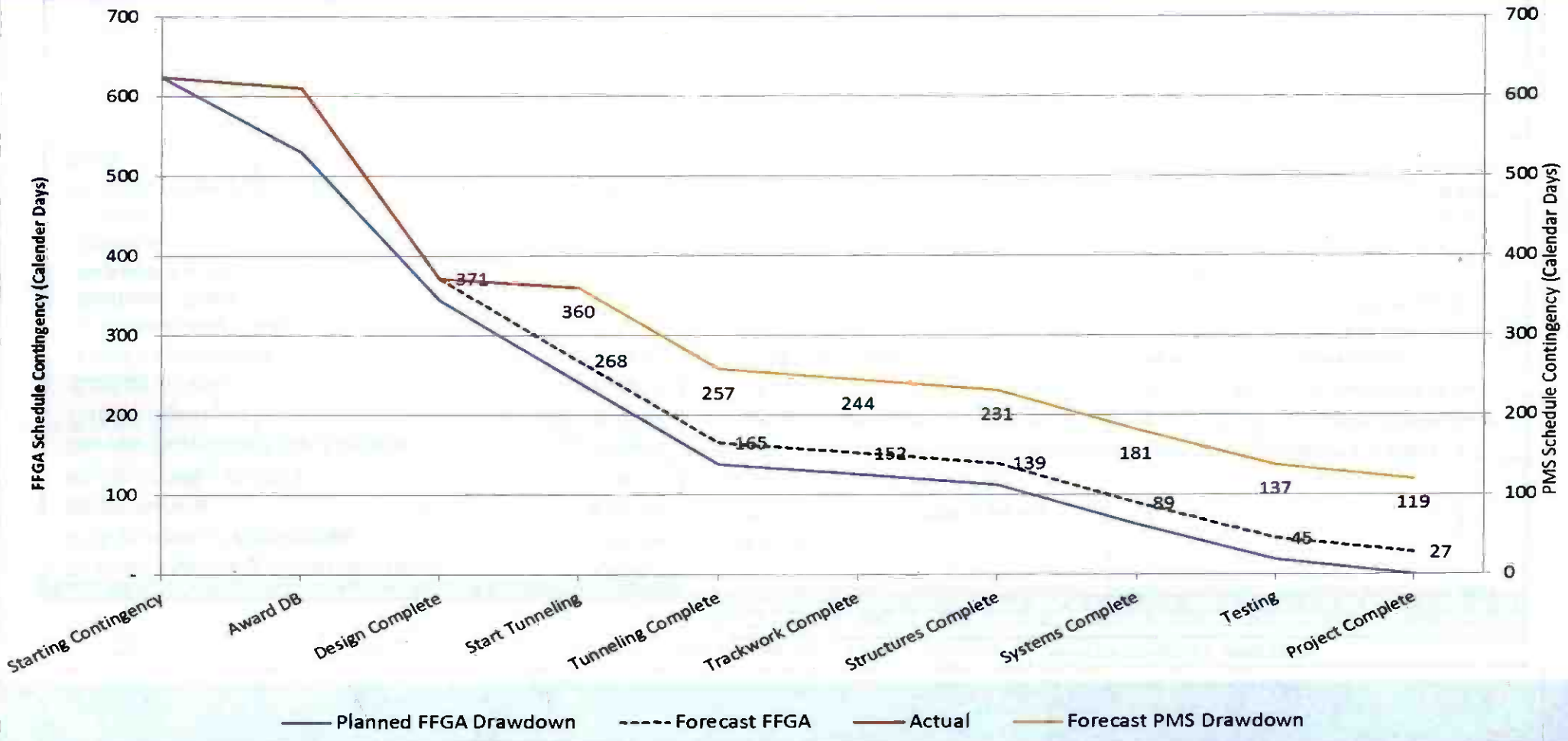


PROJECT COST CONTINGENCY					
DOLLARS IN THOUSANDS					
	Original Contingency (Budget)	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	248,592	(136,721)	(40,417)	(177,138)	71,454
Allocated Contingency	71,963	(15,670)	22,376	6,705	78,669
Total Contingency	320,555	(152,391)	(18,041)	(170,432)	150,123

Westside Purple Line Extension Section 1 Project Summary Schedule



Westside Purple Line Extension Section 1 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 October 2024 and Metro's Project Master Schedule (PMS) forecast of fall 2023.

Westside Purple Line Extension Section 1 Project 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 July 2019 Risk Register

~ Risk #85.1 CLOSED (Potential to run into tie-backs in station area)

~ Risk #257 CLOSED (La Cienega station gas beneath street decking-enclosed space may lead to schedule/cost impacts)

~ Risk #670.1 CLOSED (La Cienega – SCE changes location for permanent power equipment)

Westside Purple Line Extension Section 1 Project Disadvantaged Business Enterprise (DBE) Status

(Reported Data as of May 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	\$13.4 M 20.25%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime:	\$12.5 20.4%

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	\$108.1M 6.86%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime:	\$115.0M 14.37%

One hundred-nineteen (119) Construction DBE sub-contractors have been identified to date.

Westside Purple Line Extension Section 1 Project Quality Assurance

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.
- Engaged in oversight for the excavation and installation of structural steel members for the Wilshire/La Cienega Station SOE.
- Engaged in Wilshire/Fairfax Station oversight for HDPE and invert base slab.
- Engaged in Wilshire/La Brea Station in reshoring of previously cast concourse deck.
- Processed 30 surveillances, 19 Quality Action Requests and 21 Nonconformance Reports and 1 Corrective Action Request.

C1078 – Division 20 MOW and NRV Building Location 64

- Contractor in the process of submitting remaining project deliverables such as rebar mill certifications, concrete test data and daily inspection reports.
- Closeout and completion of punch list items in progress
- Processed 2 surveillances, 11 Quality Action Requests (all closed), 17 Nonconformance Reports and one Corrective Action Request.

Westside Purple Line Extension Section 1 Project Environmental Mitigation Status

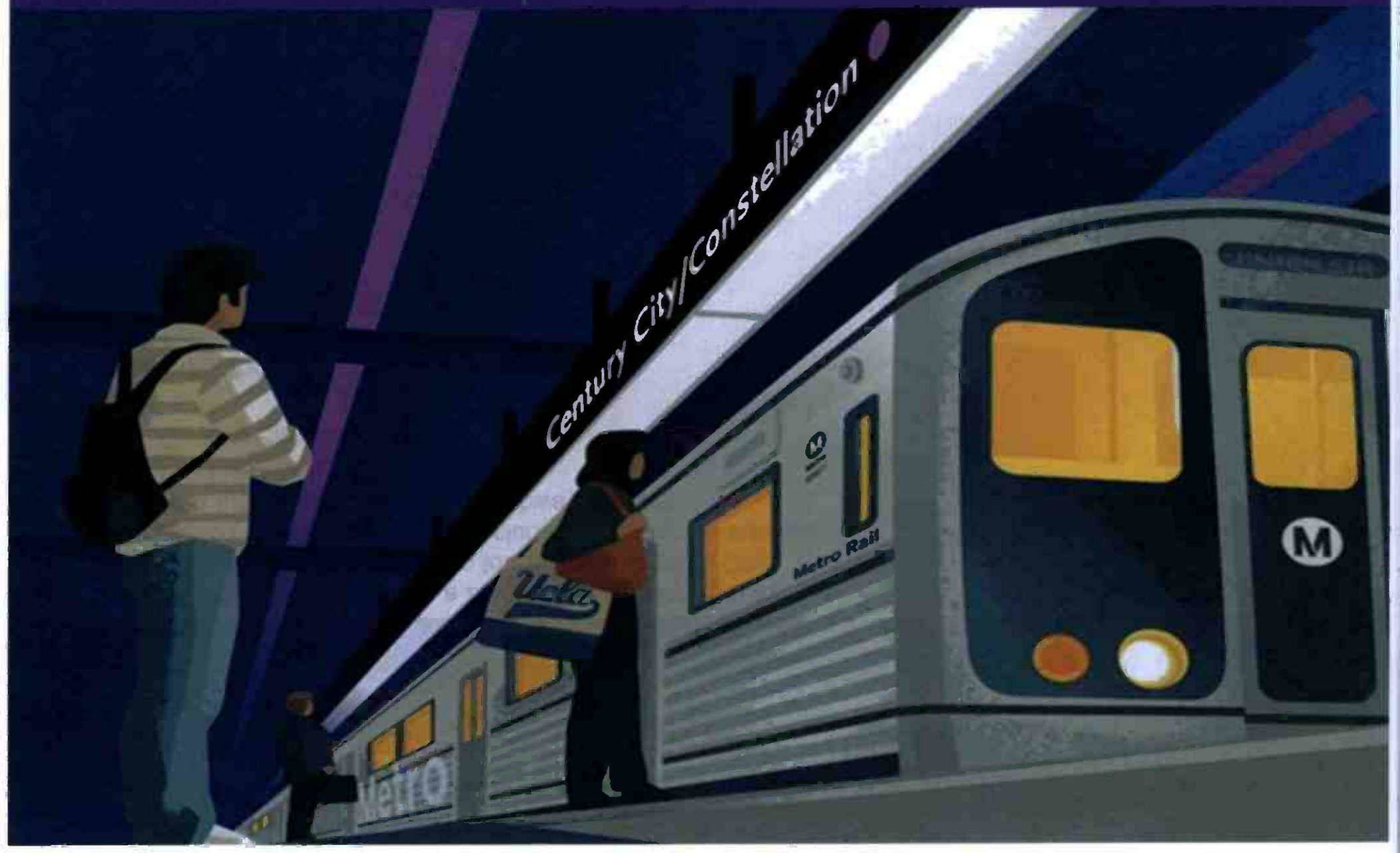
- Ongoing review of noise and vibration levels, including groundborne impacts attributed to TBM operations and additional targeted mitigation measures at Wilshire/La Cienega Station yards.
- Conducted field environmental monitoring and spot inspections for construction noise, vibration, stormwater BMPs, dust and cultural resources for contracts C1045/C1078 and third party work activities.
- Cogstone is continuing laboratory preparation of the backlog of recovered fossil specimens.
- Continuing to evaluate noise impacts during late night ventilation and excavation activities.
- Cogstone is continuing laboratory preparation of the backlog of recovered fossil specimens.
- Reviewed Reach 2 soil conditions (tar-sands) and TBM performance on Reach 1 to prepare for anticipated soil profiles, manifest demand, trucking operations, and landfill capacity.

Westside Purple Line Extension Section 1 Project Questions



C1045 Design/Build Contract Computer-Generated Rendering of Wilshire/La Cienega Station 19

Westside Purple Line Extension Section 2 Project
FTA Quarterly Review
September 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: 2025
- Design/Builder: Tutor Perini/O&G, a Joint Venture (TPOG)
- Design Progress: 94%
- Construction Progress: 19%
- 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



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% Invert Slab Design for the TBM Launch Box
 - 100% Wilshire/Rodeo Station Structural Design
 - IFC Temporary Street and Temporary Utility Design at Wilshire/Rodeo Station
- The current job creation estimates as extrapolated from the Los Angeles Economic Development Corporation (LAEDC) analysis of job impacts is as follows:
 - To date: 6,818 estimated jobs
 - June 2019: 283 estimated jobs
- 2,639 of 4,100 Tunnel Rings have been produced as of July 27, 2019.

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

- Sound wall pile installation at Canon Yard is ongoing.
- Potholing for underground utilities are ongoing.
- Pre-Construction condition surveys are ongoing.



Sound Wall Piles



Utility Potholing Activities

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

- TBM launch box excavation is at 59ft below street level
The installation of the fourth level bracing has commenced.
- Tunnel shaft excavation and installation of walers/struts is ongoing.
- LABOE granted an extension for the full street closure of Constellation Blvd until December 2019.
- Sound wall pile installation at the AT&T property commenced this period and is complete.
- The ceremonial TBM naming and unveiling event was on June 17, 2019. The names “Harriet” and “Ruth” were selected as the names for the two TBM’s.
- Cable pulling and splicing for AT&T and LADWP is anticipated to complete prior to the start of piling activities west of the TBM Launch Box.
- Santa Monica bus layover construction is complete
TPOG is resolving punch list items from the City of Los Angeles.



TBM Launch Box Excavation



Tunnel Shaft Excavation

Westside Purple Line Extension Section 2 Project 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	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	0	0	0	0	0	0	0	0
Total Parcels	33	32	32	32	14	9	25	25	15

Westside Purple Line Extension Section 2 Project FFGA Cost Status

PERIOD ENDING: JUNE 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	307,056	62,044	321,703	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	517,378	454,245	410,368	20,823	454,245	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	-	-	-	-	-	-
40	SITWORK & SPECIAL CONDITIONS	406,955	564,989	545,608	298,482	564,989	-
50	SYSTEMS	96,734	83,025	68,661	7,637	83,025	-
	CONSTRUCTION SUBTOTAL (10-50)	1,406,389	1,423,962	1,331,693	388,986	1,423,962	-
60	ROW, LAND, EXISTING IMPROVEMENTS	312,422	419,396	223,081	198,303	419,396	-
70	VEHICLES	85,351	42,000	-	-	42,000	-
80	PROFESSIONAL SERVICES	383,941	386,642	238,064	181,518	386,642	-
	SUBTOTAL (10-80)	2,188,104	2,272,000	1,792,838	768,807	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	1,792,838	768,807	2,499,240	-

NOTE: TOTAL FFGA INCURRED COST TO DATE \$782,266

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: JUNE 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	307,056	62,044	321,703	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	517,378	454,245	410,368	20,823	454,245	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-	-
40	SITWORK & SPECIAL CONDITIONS	406,955	564,989	545,608	298,482	564,989	-
50	SYSTEMS	96,734	83,025	68,661	7,637	83,025	-
	CONSTRUCTION SUBTOTAL (10-50)	1,406,389	1,423,962	1,331,693	388,966	1,423,962	-
60	ROW, LAND, EXISTING IMPROVEMENTS	312,422	419,396	223,081	198,303	419,396	-
70	VEHICLES	85,351	42,000	-	-	42,000	-
80	PROFESSIONAL SERVICES	383,941	386,642	238,064	181,518	386,642	-
	SUBTOTAL (10-80)	2,188,104	2,272,000	1,792,838	768,807	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	1,792,838	768,807	2,499,240	-

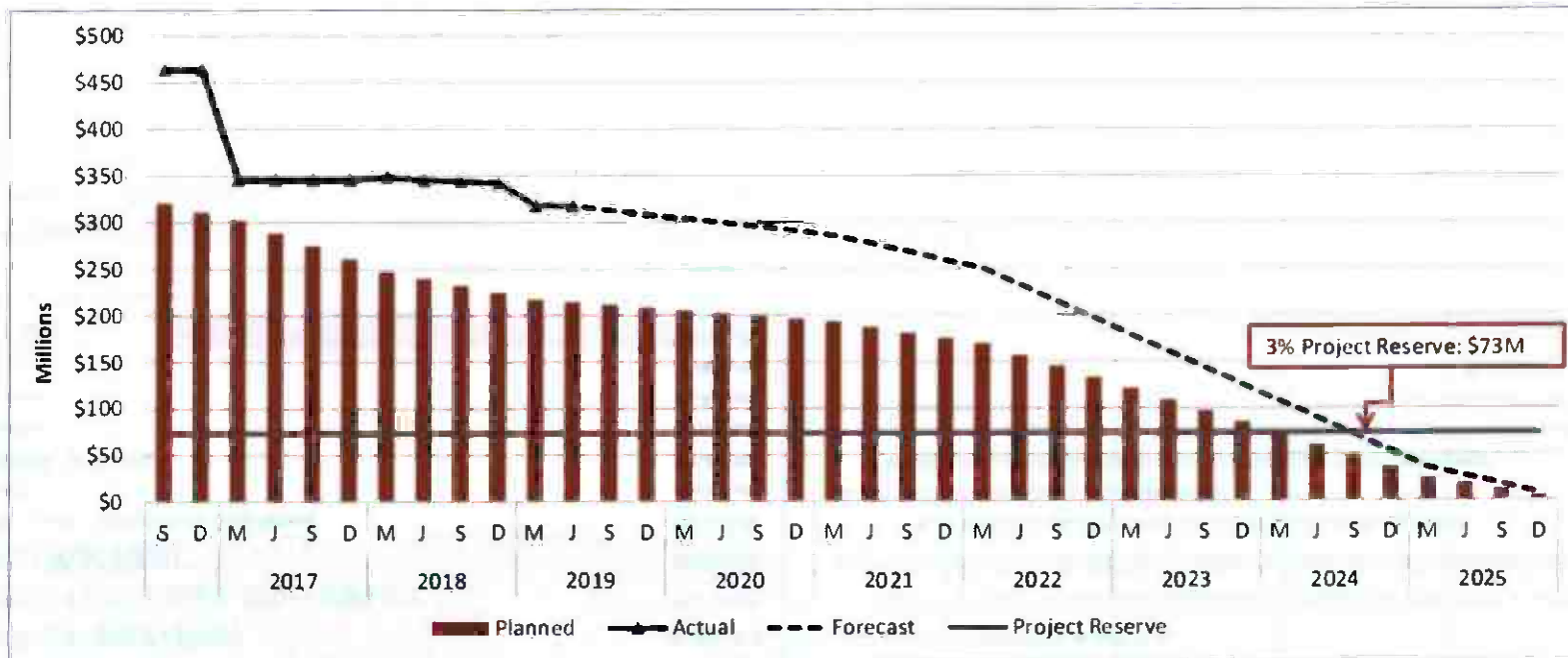
NOTE: TOTAL FFGA INCURRED COST TO DATE \$782,266

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	14,997	-
50	SYSTEMS	-	-	-	-	-	-
	CONSTRUCTION SUBTOTAL (10-50)	16,175	14,997	8,065	4,715	14,997	-
60	ROW, LAND, EXISTING IMPROVEMENTS	7,000	7,000	7,000	6,993	7,000	-
70	VEHICLES	-	-	-	-	-	-
80	PROFESSIONAL SERVICES	1,400	1,400	665	152	1,400	-
	SUBTOTAL (10-80)	24,575	23,397	15,729	11,860	23,397	-
90	UNALLOCATED CONTINGENCY	1,500	2,678	-	-	2,678	-
100	FINANCE CHARGES	-	-	-	-	-	-
	TOTAL NON-FFGA (10-100)	26,075	26,075	15,729	11,860	26,075	-
	ENVIRONMENTAL/PLANNING	4,349	4,349	3,770	3,487	4,349	-
	TOTAL NON-FFGA (INCL. ENV./PLANNING)	30,424	30,424	19,500	15,347	30,424	-

NOTE: TOTAL NON-FFGA INCURRED COST TO DATE \$15,347

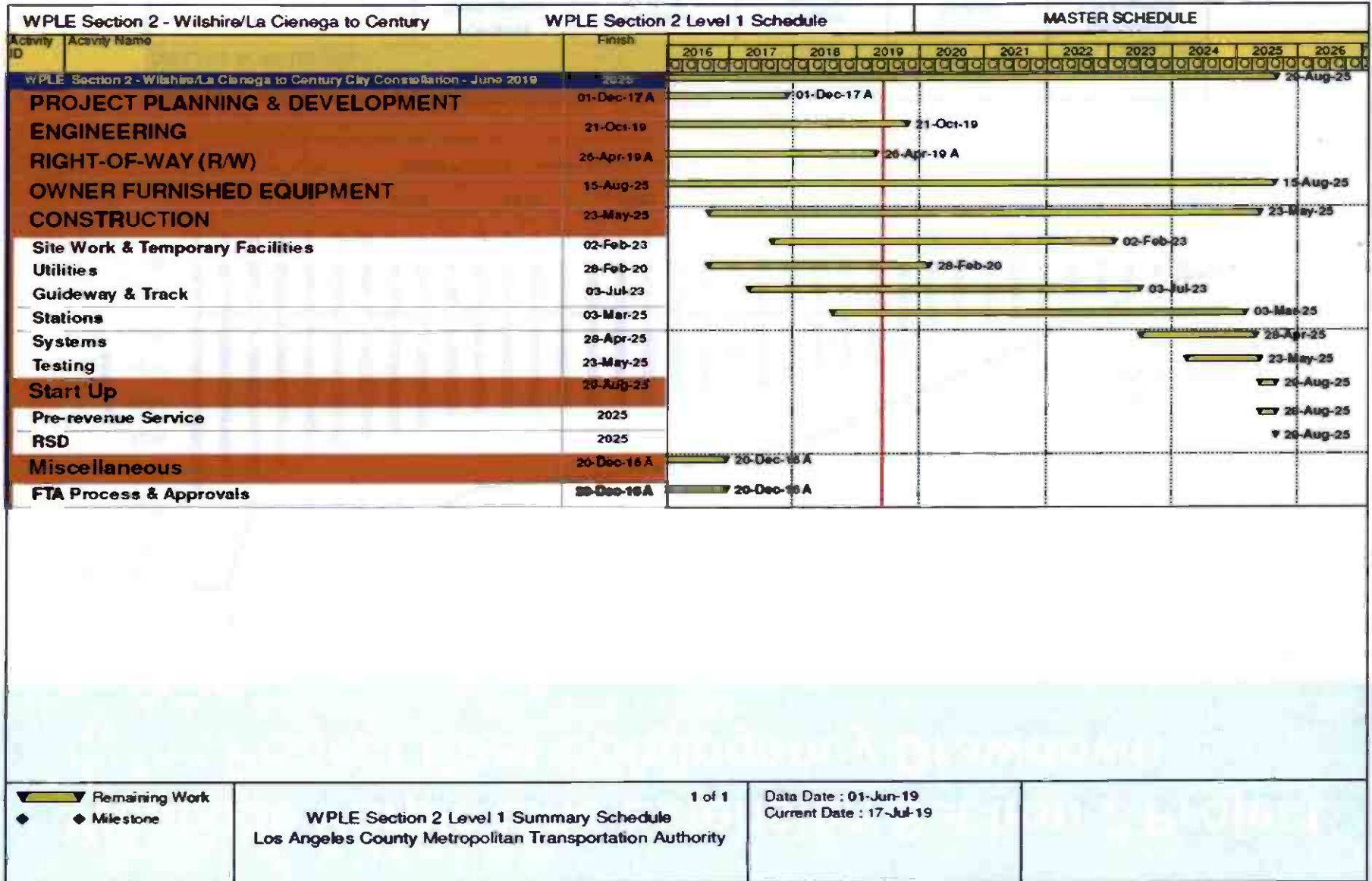
TOTAL PROJECT		2,529,664	2,529,664	1,812,338	784,154	2,529,664	-
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Westside Purple Line Extension Section 2 Project Project Cost Contingency Drawdown

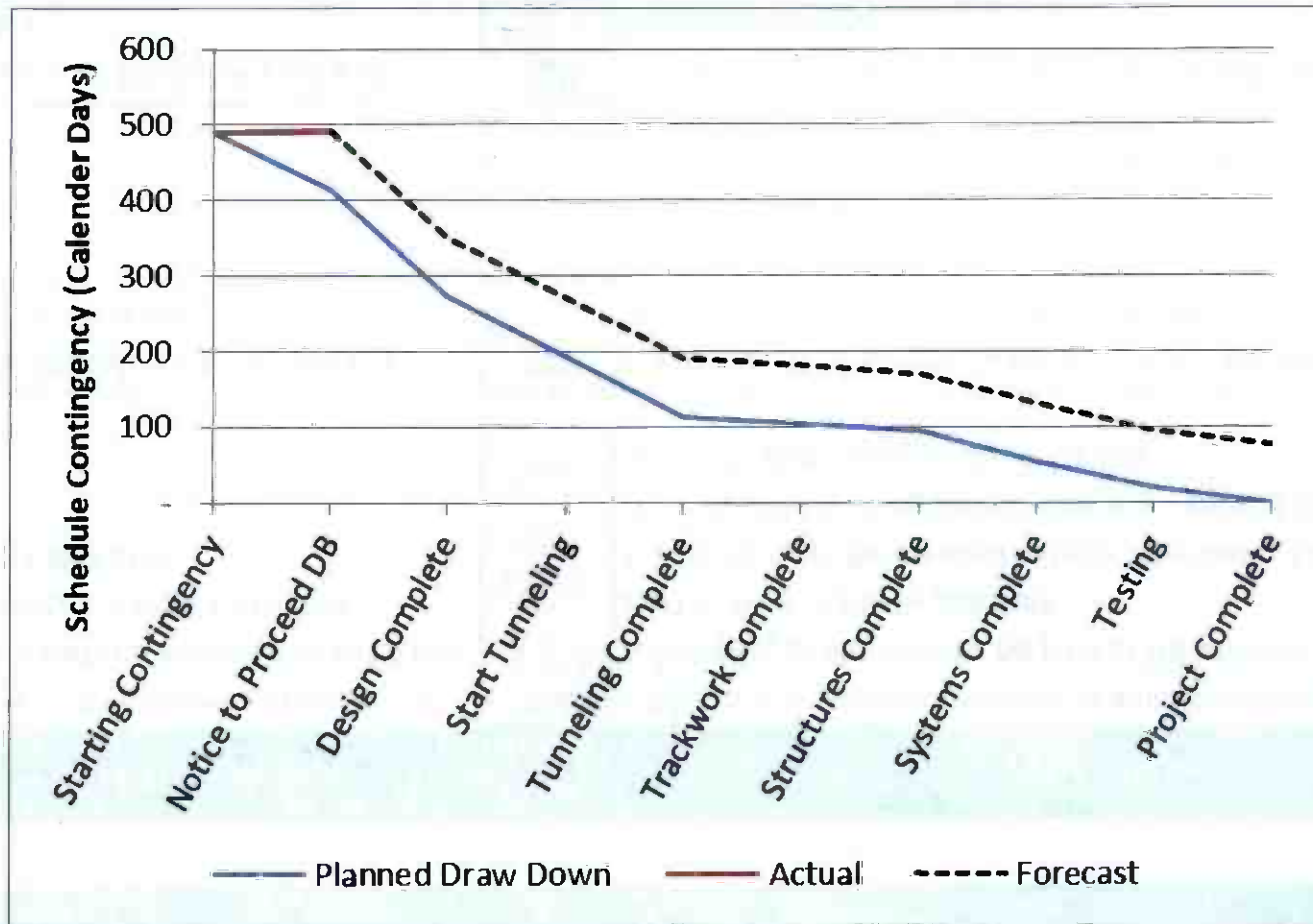


PROJECT COST CONTINGENCY					
DOLLARS IN THOUSANDS					
	Original Contingency (LOP Budget)	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	177,176	(35,953)	-	(35,953)	141,223
Allocated Contingency	168,534	7,648	(124)	7,523	176,057
Total Contingency	345,710	(28,306)	(124)	(28,430)	317,280

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 3rd 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 and AT&T 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 communities.
PLE-135	CMSS difficulty finding key resources (Mgmt. Personnel)	10.0	<ol style="list-style-type: none"> 1. Assigning personnel to different areas on an on needed basis.

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

As of June 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	\$15.6M 25.31%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$17.3M 32.83%

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	\$120M 9.21%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime:	\$30.0M 8.45%

Twenty-two (22) Construction DBE sub-contractors have been identified to date.

Westside Purple Line Extension Section 2 Project Quality Control

- Attended weekly Project staff meetings and progress meetings with the TPOG. 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 for the current construction work activity.
- Attended weekly meeting with TPOG and ASC for geotechnical instrumentation installation/readings taken to confirm that quality requirements are implemented for the current work elements at TBM Launch Box.
- Reviewed the following with a disposition For Record Only:
 - Fire protection WPR PQR WQR Project wide;
 - Quality Control plan for Horizontal Directional Drilling CCS.
- Reviewed the following with a disposition of Approved or Approved as Noted:
 - CWP Embedded Conduit Installation CCS;
 - Quality Assurance/Quality Control Manual GSE Manufacturing Geomembranes Project Wide.

Westside Purple Line Extension Section 2 Project Environmental Mitigation Status

- Installed MERV-16 Air Filters at Beverly Hills High School.
- Completed construction of noise barrier walls for the Reeves and N. Canon construction staging areas in Beverly Hills.
- Submitted the Mitigation Measures Status Report for the period of April through July 2019 to FTA.
- Conducted ongoing archeological/paleontological monitoring for excavation activities at the TBM Launch Box and Access Shaft locations. Three fossils were recovered at the launch box excavation in June.
- Completed abatement activities for 2010 Century Park East parking lot demolition activities.
- Implemented fugitive dust control measures at all work sites.
- Ongoing noise and vibration monitoring for all work areas.

Westside Purple Line Extension Section 2 Project Questions



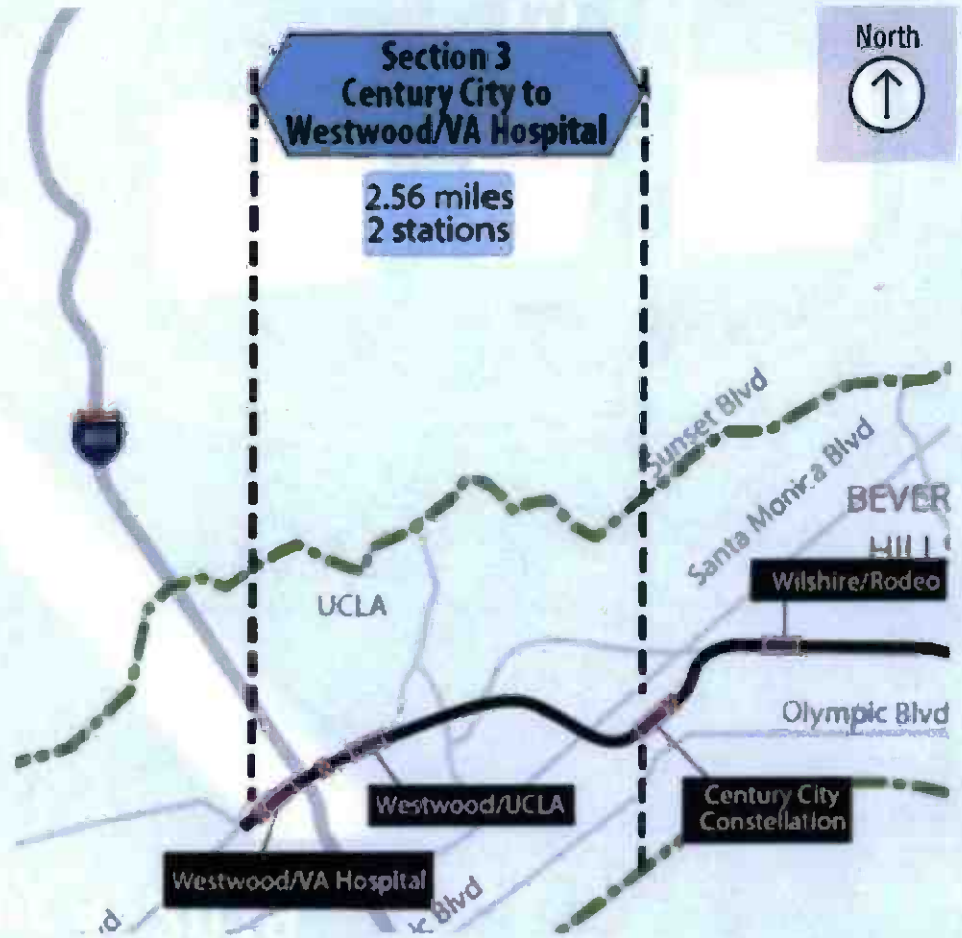
Wilshire/Rodeo Station

Westside Purple Line Extension Section 3 Project FTA Quarterly Review September 4, 2019



Westside Purple Line Extension Section 3 Project (Century City Constellation to Westwood/VA Hospital) 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:
 - Forecast – 2027
 - Proposed FFGA – December, 2028
- Design Progress: 7%
- Construction Progress: 4%
- Daily Project Transit Trips: 42,903
- Daily New Transit Trips: 9,386
- Federal Funds: \$1.438 Billion
- Local Funds: \$2.161 Billion



Westside Purple Line Extension Section 3 Project

Key Project Updates

- C1151 Tunnels Contract
 - Geotechnical borings started in late April 2019 and are ongoing.
 - Coordination with SCE to design and install power is ongoing.
 - Veterans Affairs (VA) Memorandum of Agreement (MOA) and associated Historic Resources Monitoring and Discovery Plan (HRMDP) reviews continue.
 - Real Estate negotiations for access to VA property are ongoing. Draft Access Easement Agreement (AEA) is under review.
- C1152 Stations, Trackwork, Systems and Testing Contract
 - Contract was awarded on May 28, 2019.
 - NTP commenced on July 16, 2019.
- C1153 Advanced Utility Relocations (AUR) Contract
 - Achieved substantial completion on June 30, 2019.
- Other Third Party Utility Work
 - DWP cable pulling is ongoing.
 - Joint Trench conduit and vault relocations are ongoing.
- The current job creation as extrapolated from the Los Angeles Economic Development Corporation (LAEDC) analysis of job impacts is the following:
 - June 2019: 261 estimated jobs
 - Fourth Quarter of FY 2019: 713 estimated jobs
 - To Date: 1934 estimated jobs

Westside Purple Line Extension Section 3 Project Westwood/UCLA Station AUR and Third Party Relocation Update

- C1153 Advanced Utility Relocations achieved substantial completion on June 30, 2019.
- Joint trench activities for combining Verizon and Frontier telecommunications started in February 2019 and are ongoing. Conduit installation is approximately 50% complete.
- LADWP Cable pulling started in early March 2019 and is ongoing.



Fiber Optic Installation



Westwood Blvd. at Wilshire Blvd. Main Line A Excavation and Potholing

Westside Purple Line Extension Section 3 Project 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	2	0	0	0	0	0	0	0
SSE	75	44	0	0	0	0	0	0	0
Permanent Easements	1	1	0	0	0	0	0	0	0
Total Parcels	83	49	0	0	0	0	0	0	0

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

Westside Purple Line Extension Section 3 Project Project Cost Status

PERIOD ENDING: JUNE 2019

DOLLARS IN THOUSANDS

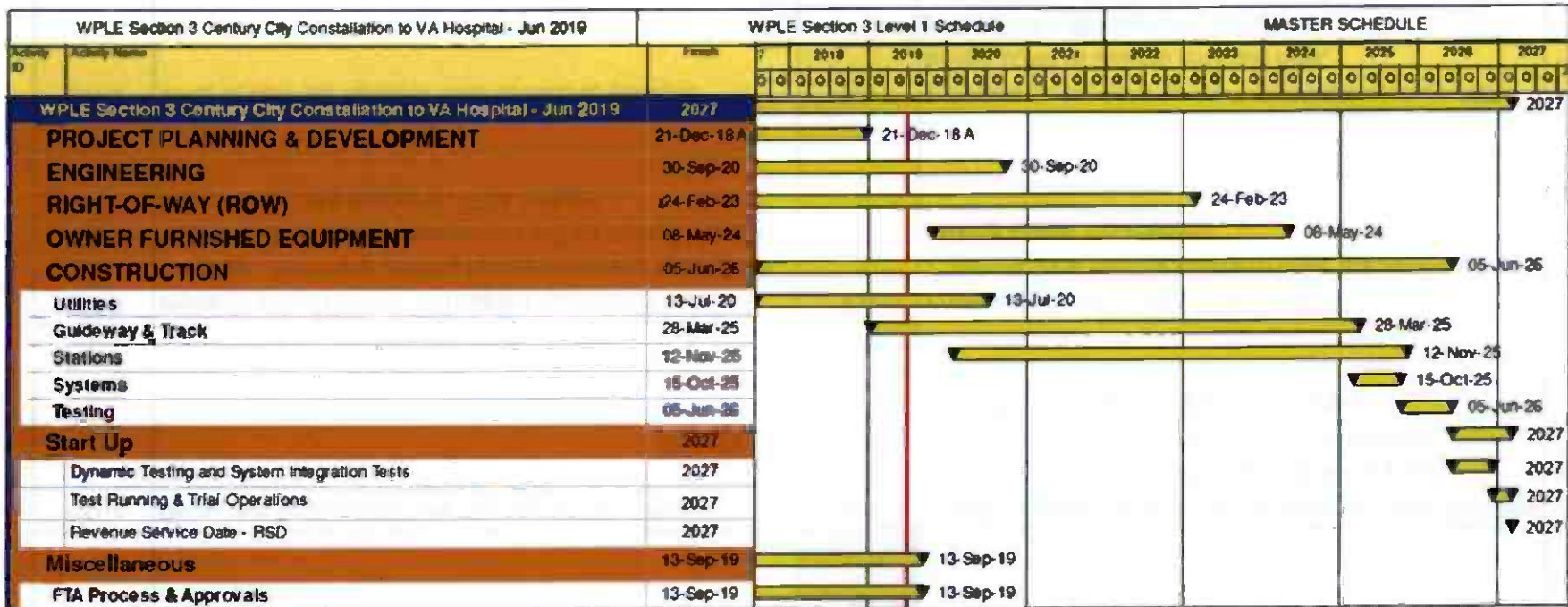
SCC CODE	DESCRIPTION	LIFE OF PROJECT BUDGET ¹	PROPOSED FFGA BUDGET ²	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	PROPOSED FFGA BUDGET / FORECAST VARIANCE
10	GUIDEWAY & TRACK ELEMENTS	490,712	490,712	407,391	31,407	490,712	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	624,995	624,995	591,735	-	624,995	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	-	-	-	-	-	-
40	SITWORK & SPECIAL CONDITIONS	491,805	491,805	646,070	59,527	491,805	-
50	SYSTEMS	130,778	130,778	57,041	-	130,778	-
CONSTRUCTION SUBTOTAL (10-50)		1,738,291	1,738,291	1,702,237	90,934	1,738,291	-
60	ROW, LAND, EXISTING IMPROVEMENTS	466,874	466,874	120,885	45	466,874	-
70	VEHICLES	38,092	38,092	-	-	38,092	-
80	PROFESSIONAL SERVICES	504,493	504,493	189,252	70,923	504,493	-
SUBTOTAL (10-80)		2,747,750	2,747,750	2,012,373	161,902	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	2,012,373	161,902	3,599,267	-

TOTAL FFGA INCURRED COST TO DATE IS \$171,657,995

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 Project Preliminary Summary Schedule



- Remaining Work
- Milestone
- Summary

Westside Purple Line Extension Section 3 Project 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.
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 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.
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. 2. Received LONP and 150c documents. 3. Review schedule interface between Tunnel and Stations Contracts.
648	Construction activities may cause significant disruption to the communities and businesses along the alignments and could potentially drive onerous mitigation to satisfy the public.	7.5	<ol style="list-style-type: none"> 1. Community outreach sessions. 2. Develop additional mitigation plans to reduce traffic impacts, and provide safe access. 3. Provisional Sums (based on sound wall - can be quantified).

Westside Purple Line Extension Section 3 Project Disadvantaged Business Enterprises

Contract C1151 (Tunnels) as of June 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	\$1.9M 11.19%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$360K 13.76%

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	\$15.4M 4.03%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime:	\$387K 0.66%

Eight (8) Construction DBE sub-contractors have been identified to date.

Westside Purple Line Extension Section 3 Project Quality Assurance

- Attended weekly project staff meetings and biweekly progress meetings with SBCC and FTKP.
 - Reviewed Daily Inspection Reports by SBCC and Metro inspectors (CMSS) as well as California testing & inspections independent test reports for completeness and correctness.
- Requested SBCC submit the following punch list items to be considered for substantial completion:
 - Red line as-built drawings for the completed VDS and Water line work.
 - April, May and June 2019 QC reports.
 - Hydrostatic water line test results.
- Reviewed SBCC's AUR C1153 contract LADWP Power work as-built red line drawings. Checked for as-built compliance per contract and General Requirements Section 01 78 39.
- Discussed with FTKP for upcoming audits for 2019. Metro planning to perform annual audit on C1151 Tunnel's contract 60% & 85% design and sub-contractor interface. Audit kickoff meeting to be chaired on July 16, 2019.
- Reviewed and provided the following dispositions:
 - Project Quality Program Manual – Rev 2 (Tunnels) - Approved
 - Site Specific Health and Safety Plan (Tunnels) – Approved As Noted (AAN)
 - Design Unit 3.3 60% Western VA Staging Area – AAN

Westside Purple Line Extension Section 3 Project Environmental Mitigation Status

- Conducted field environmental monitoring and inspections for construction noise, stormwater, fugitive dust Best Management Practices, and Metro's Green Construction Policy for advanced utility relocations and joint trench activities.
- Participated in tunnels contract coordination meetings with FKTP. Evaluated progress and schedules for environmental compliance and sustainability efforts.
- Conducted field inspection surveys for nesting birds prior to geotechnical drilling.
- Completed a site visit for the inspection of the VA Hospital HVAC system as part of the MOU with the VA.
- Inspected for hazardous materials in an existing UCLA structure to be demolished for the Westwood/UCLA Station.

Westside Purple Line Extension Section 3 Project Questions



Patsaouras Plaza Busway Station

FTA Quarterly Review – September 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	23,907,000	19,402,000	31,494,000	(1,000)
S	SPECIAL CONDITIONS	750,000	1,917,000	1,568,000	1,112,000	1,913,000	(4,000)
R	RIGHT-OF-WAY	-	-	-	-	-	-
P	PROFESSIONAL SERVICES	7,425,000	16,501,000	13,884,000	13,094,000	15,864,000	(637,000)
PC	PROJECT CONTINGENCY	2,817,000	1,000,000	-	-	1,642,000	642,000
TOTAL PROJECT		30,984,000	50,913,000	39,359,000	33,608,000	50,913,000	-



Expenditures through June 30, 2019



Patsaouras Plaza Busway Station

Issues With Potential to go Above \$100,000



- Settlement for the Global Time Impact Analysis for Design-related Delays
Negotiated but the Contract Modification is not yet Executed
- Differing Site Conditions (Man-Made Buried Objects at Bents)
Negotiated but the Contract Modification is not yet Executed
- Archeological/Paleontological Monitoring
Almost \$600,000 worth of Task Orders issued since initial discovery
Total value of Task Orders exceeds \$1,100,000



Patsaouras Plaza Busway Station Project Schedule

M C0970 - Union/Patsaouras Plaza Station		June 2019 vs. Approved Re-Baseline 2017					18-Jul-19
Activity ID	Activity Name	Orig. Dur	Start	Finish	Start	Finish	
C0970 - Union/Patsaouras Plaza Station - April 2019 1648							
Key Milestones 1618							
Contract Milestones / Summary 1519							
A1000	Contract Award	1	28-Feb-14	28-Feb-14	28-Feb-14 A	28-Feb-14 A	
A1010	Notice to Proceed (NTP)	1	31-Mar-14	31-Mar-14	31-Mar-14 A	31-Mar-14 A	
A1090	Final Design Complete	0				28-Feb-16 A	
A1100	Construction Start	0			03-Jan-17 A		
A1090	Substantial Completion	0				12-May-20	
Required & Furnishes, Permits 42							
A1020	Caltrans Encroachment Permit Survey	20	28-May-14	11-Aug-14	28-May-14 A	11-Aug-14 A	
A1040	Caltrans Encroachment Permit Construction	5	08-Oct-14	03-Dec-14	08-Oct-14 A	03-Dec-14 A	
A1030	Caltrans Encroach Permit Parade	5	16-Aug-14	30-Apr-15	16-Aug-14 A	30-Apr-15 A	
Final Design 565							
A1020	Final Design	259	31-Mar-14	28-Feb-15	31-Mar-14 A	28-Feb-15 A	
A1110	Permits and Traffic Control Plans	5			01-Mar-16 A	03-Jan-17 A	
Construction 922							
A1120	Demolition	5			03-Jan-17 A	06-Apr-17 A	
A1140	El Monte Busway Bridge Widening: COH	5			27-Mar-17 A	28-Jun-17 A	
A1130	Utility Relocating and Relocations	5			08-Feb-17 A	04-Aug-17 A	
A1150	El Monte Busway Bridge Widening: Substructure	5			25-Apr-17 A	15-Nov-17 A	
A1160	El Monte Busway Bridge Widening: Superstructure	5			25-Sep-17 A	25-May-18 A	
A1180	Relocate IC Refl on the Bridge	1			20-May-18 A	20-May-18 A	
A1210	DELAY - Construction Suspended - Discovery of Human Bones	5			24-Apr-18 A	19-May-19 A	
A1220	Mobile Drilling Contractor (Critical Path)	14			13-May-18 A	03-Jun-19 A	
A1170	Pedestrian Over-Crossing Substructure	65			03-Jun-19 A	30-Aug-19	
A1190	Pedestrian Overcrossing Superstructure & Enclosure	150			08-Sep-19	27-Mar-20	
A1050	Construction	263	03-Jan-17	05-Sep-18	03-Jan-17 A	12-May-20	
A1200	Pedestrian Overcrossing Amenities	32			30-Mar-20	12-May-20	
Project Substantial Completion 22							
A1070	Project Substantial Completion	22	05-Sep-18	05-Oct-18	10-Apr-20	12-May-20	

Contractor's current schedule assuming delay does not extend past May 13.



Patsaouras Plaza Busway Station

Design/Build Contract C0970 - Current Quarter Update



Construction

- Began Bent 1 micropiling underneath roadway
- Excavated for Bent C3, and trenched for Column C4,
- Installed rebar cages for Columns C1, C2 and poured Bent 5 column
- Stripped forms from the emergency stairway

Administration

- Board approved settlement for global time impacts
- Continued identifying and recording the Environmentally Sensitive Area (ESA) features



Patsaouras Plaza Busway Station

Design/Build Contract C0970 – Top Risks and Mitigations

Risk	Impact	Mitigation
Potential for differing site conditions at Pedestrian ramp micropiles and elevator foundations	Budget/ Schedule	Immediate direction to contractor to do changed work. Metro reallocating savings from Special Conditions to pay for work. 3 rd Party Agents on Project Team.
Delays due to Cultural Resources at Pedestrian Ramp Micropiles and Austin Vault	Budget/ Schedule	None at this point. Contractor has re-sequenced the work he could and has now completed it.



Patsaouras Plaza Busway Station

Activities for Next Quarter



- Execute Contract Modification for Board Approved Settlement
- Continue micropiling the foundations for the pedestrian overcrossing
- Continue Mechanical/Electrical/Plumbing (MEP) work
- Continue to form and pour canopy columns
- Pour the retaining wall



Patsaouras Plaza Busway Station

Construction Photos



Protected Archeological Feature (Zanja)



Bent 5 Concrete Base Column Pour



Setting Rebar Cage for C-2



Stripping Forms from the Emergency Stairway Exit



Metro



HR4000 Heavy Rail Vehicle Procurement



Los Angeles County
Metropolitan Transportation Authority

Metro



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



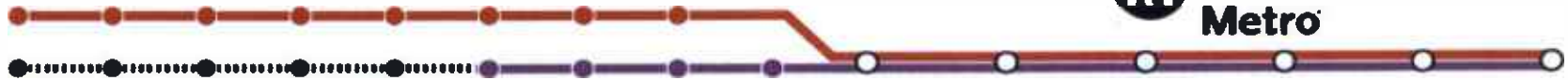
Agenda

- **Current Key Project Issues:**
 - Fire Mist Suppression System (FMSS)
 - Vehicle Weight Status
 - Vehicle Option Status
 - Seat Status -- GINYO Substitution
- **Design Update:**
 - Pre-Production Configuration Review (PPCR) Status
 - Test Carshell Status
 - Planned Versus Actual Progress
 - Mock Up Review Status
- **Local Assembly Site Status**
- **Budget & Schedule Update**
 - Budget Update
 - Pilot/Production Vehicle Delivery Status
 - Change Order/Contract Modification Update
- **Risk Register Review**



Current Key Project Issues

- Fire Mist Suppression System (FMSS)
 1. Metro anticipates to unilaterally execute this Contract Modification by September. Metro is waiting for CRRC to sign the contract.
- Vehicle Weight Status
 1. As of June 2019:
 - A. A car weight is currently at 82,395 (+3 from last report) lbs.
 - B. B car weight is currently at 82,856 (-97 from last report) lbs.
 2. HR4000 Project has submitted Deviation Request (DR) to Metro Construction Engineering review to increase AWO weight to 84,000 lbs.
- Vehicle Option Status
 1. Currently, Metro is weighing our options.
- Seat Status -- GINYO Substitution
 1. CRRC MA and GINYO has submitted the request for supplier changed to Metro; Metro is currently reviewing the request.



Design Update

- Pre-Production Configuration Review (PPCR) Status
- Test Carshell Status
- Planned Versus Actual Progress
- Mock Up Review Status

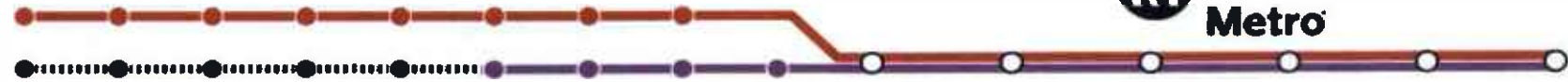


Pre-Production Configuration Review (PPCR) Status

- PPCR is complete (Metro still has two remaining systems to review).

System	Rev	PPCR Package Status
Carbody	B	Accepted As Noted
Couplers	A	Accepted As Noted
Operator Cab	B	Accepted As Noted
Doors	B	Accepted As Noted
HVAC	C	Accepted As Noted
Lighting	C	Accepted As Noted
APE	B	Accepted As Noted
Propulsion	A	CRRC to resubmit
Trucks	B	Accepted As Noted
Friction Brakes	B	Under Review
COM & PIS	A	Accepted As Noted
INT	A	Accepted As Noted
ATC	C	Accepted As Noted
Event Recorder	C	Accepted As Noted
MDS	D	Accepted As Noted
Trainlines & Network	D	Accepted As Noted

No.	System	Completion % May 2019	Completion % June 2019	Submission % PPCR
1	Carshell	90%	93%	100%
2	Interior Structure	92%	93%	90%
3	Door & Window	94%	95%	95%
4	Coupler & Draftgear	93%	95%	100%
5	Gangway	94%	95%	100%
6	HVAC	92%	95%	100%
7	Interior Equipment	88%	91%	93%
8	Truck	90%	92%	100%
9	Cab Structural Equipment	90%	90%	100%
10	Cab Electrical Equipment	87%	87%	100%
11	Passenger Area Electrical Equipment	89%	90%	100%
12	Underframe Electrical Equipment	87%	88%	88%
13	Propulsion	79%	80%	93%
14	Friction Brake	80%	81%	93%
15	APS	79%	79%	97%
16	Trainline&Network	88%	89%	100%
17	MDS	89%	90%	100%
18	Event Recorder	89%	89%	100%
19	ATC&TWC	89%	90%	100%
20	Communication & Passenger Information	86%	86%	100%
21	Lighting	92%	92%	100%
22	Vehicle Electrical Schematics	92%	92%	100%
23	FMSS	75%	76%	90%



Test Carshell Status

- The Test Carshell will begin testing on August 13, 2019 through September 2, 2019.
- Metro will support this testing in China with Consultant Subject Matter Experts (SMEs); there will be two (2) SMEs on-site.
- CRRC MA will start manufacturing of the production carshells towards early September 2019.



Test Carshell





Test Carshell





Test Carshell





Test Carshell





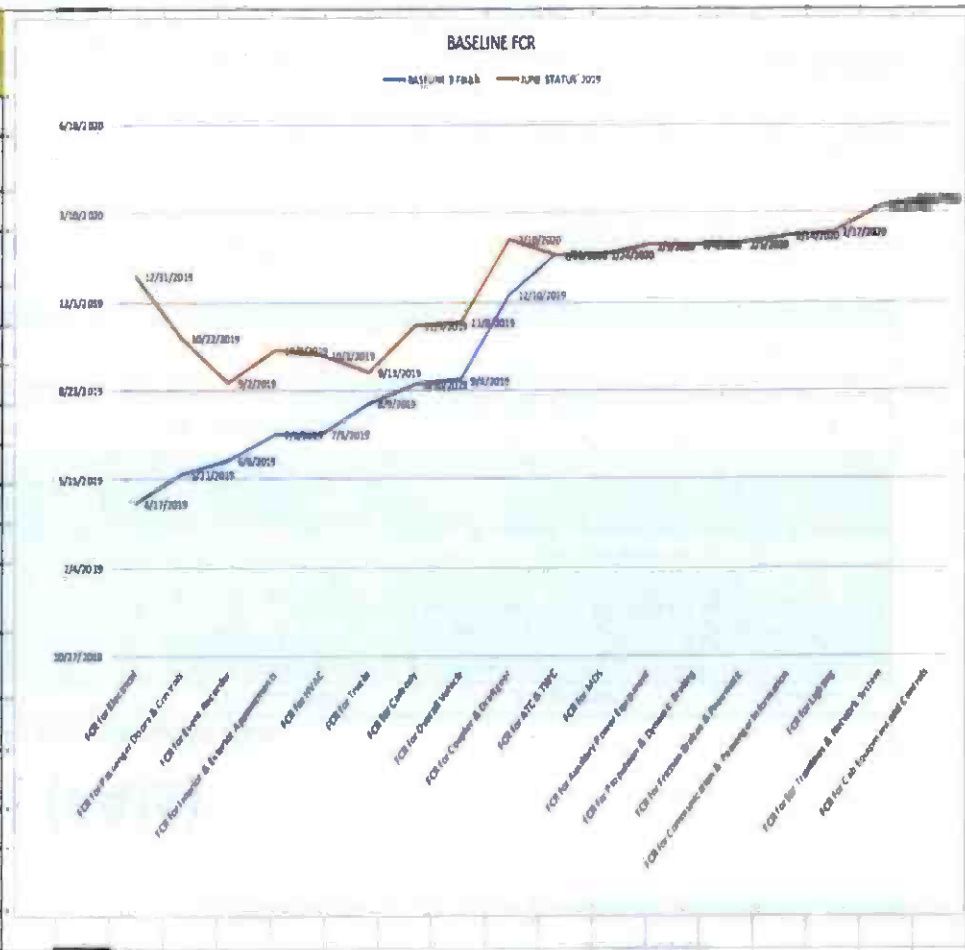
First Article Inspection(s) (FAIs)

HR4000 FAI Schedule Plan					
System	Start	Finish	FAI Location	Supplier	Status
Friction Brakes	6/5/2019	6/6/2019	1 Arthur Peck Drive Westminster, MD 21157	Knorr Brake Co, LLC	Completed
Flooring (CRRC MA only, Metro Walved)	Waive	Waive	110 J.E. Lemieux, Windsor, (Quebec) J1S 0A4, CANADA	Baultar	Completed
ATC & TWC System	6/11/2019	6/12/2019	645 Russell St, Batesburg SC 29006	Ansaldo STS	Completed
Passenger Information System (PIS)	9/4/2019	9/5/2019	Montgomery, Alabama	(VT Electronics) ST Electronics (Shanghai) Co., Ltd.	Pending
Doors	9/16/2019	9/20/2019	1 Arthur Peck Drive Westminster, MD 21157	IFE, NA	Pending
Auxiliary System	9/17/2019	9/19/2019	300 International Drive, Suite 2, Mt. Olive, NJ 07828	Times Electric	Pending
HVAC	1/31/2020	1/31/2020	City of Industry, Los Angeles	Shijiazhuang King Transportation Equipment Co., Ltd.	Pending
Coupler & Draftgear	1/9/2020	1/9/2020	129 Ridgeview Center Drive Duncan, SC 29334	Wabtec	Pending
Lighting Assembly	1/28/2020	1/31/2020	City of Industry, Los Angeles	Shenzhen Hengzhiyuan Electric Appliance Co., Ltd.	Pending
Traction inverter\Insulated Switch Box	1/30/2020	1/31/2020	City of Industry	Times Electric	Pending
Truck	8/28/2020	8/31/2020	655 Page Blvd. Springfield, MA 01104	Bradken	Pending
Vehicle	10/30/2020	10/30/2020	655 Page Blvd. Springfield, MA 01104	CRRC MA	Pending



Final Configuration Review (FCR) Status

ID	Unique ID	%	BASELINE Finish	JUNE STATUS 2019
112	4180	0%	4/17/2019	12/31/2019
423	4491	0%	5/21/2019	10/22/2019
360	4464	0%	6/6/2019	9/2/2019
878	1685	0%	7/5/2019	10/9/2019
472	4183	0%	7/5/2019	10/3/2019
783	4437	0%	8/9/2019	9/13/2019
177	4891	0%	8/30/2019	11/5/2019
115	5687	0%	9/4/2019	11/8/2019
381	4891	0%	12/10/2019	2/10/2020
918	4455	0%	1/23/2020	1/23/2020
81	4473	0%	1/24/2020	1/24/2020
567	4419	0%	2/3/2020	2/3/2020
629	4428	0%	2/4/2020	2/4/2020
761	4086	0%	2/5/2020	2/5/2020
814	4446	0%	2/14/2020	2/14/2020
618	4416	0%	2/17/2020	2/17/2020
88	5299	0%	3/18/2020	3/18/2020
358	4382	0%	3/26/2020	3/26/2020





Mock Up Review Status

- 1/3 Vehicle Mock-up was reviewed by Metro in March 2019 (Project Team) and April 2019 (Metro Management).
- Metro submitted RFI to modify and add some additional stanchions. This should not have any affect to the schedule.
- Anticipated Final Review to take place in September 2019.



Metro

Mock Up Review Status





Mock Up Review Status -- RFI





Metro

Local Assembly Site Status

SUMMARY TOTAL BY CONTRACTOR/SUBCONTRACTOR

CONTRACTOR/SUBCONTRACTOR	PROJECTIONS TO DATE	ACTUALS TO DATE	VARIANCE
CRRC MA CORPORATION (Rail Vehicles)	\$276,517	\$905,306	\$628,789
CRRC TIMES ELECTRIC (Propulsion Supplier)	\$183,824	\$285,838	\$102,014
SHENZHEN HENGZHIYUAN ELECTRIC APPLIANCE CO. LTD. (Lighting Supplier)	\$0	\$0	\$0
CRRC MA CORPORATION (HVAC)	\$0	\$0	\$0
KNORR BRAKE COMPANY (Doors, Brakes)	\$0	\$0	\$0
FACILITY INVESTMENTS	\$3,050,000	\$2,884,967	-\$165,033
Total LEP Value	\$3,510,341	\$4,076,111	\$565,769

Total LEP Contract Commitment:	\$18,838,528
Less Actuals to date:	\$4,076,111
Balance of LEP to be Attained:	\$14,762,417
Targeted Hiring Commitment \$ to Date:	\$843,852.80
Achieved Hiring Commitment \$ on Disadvantaged Worker to Date	\$154,725
% Achieved to Date:	18.34%

A. As of June 30, 2019:

- CRRC MA has paid a total of \$905,306 of Wages and Benefits
- CRRC Times Electric USA LLC has paid a total of \$285,838 of Wages and Benefits
- The actual paid amount is \$730,803 higher than the contract projected amount to date.
- Among the actual paid to date amount, \$154,725 that has been paid to Disadvantage Worker, which is 18.34% of the total committed amount to Disadvantage workers on Base Order.



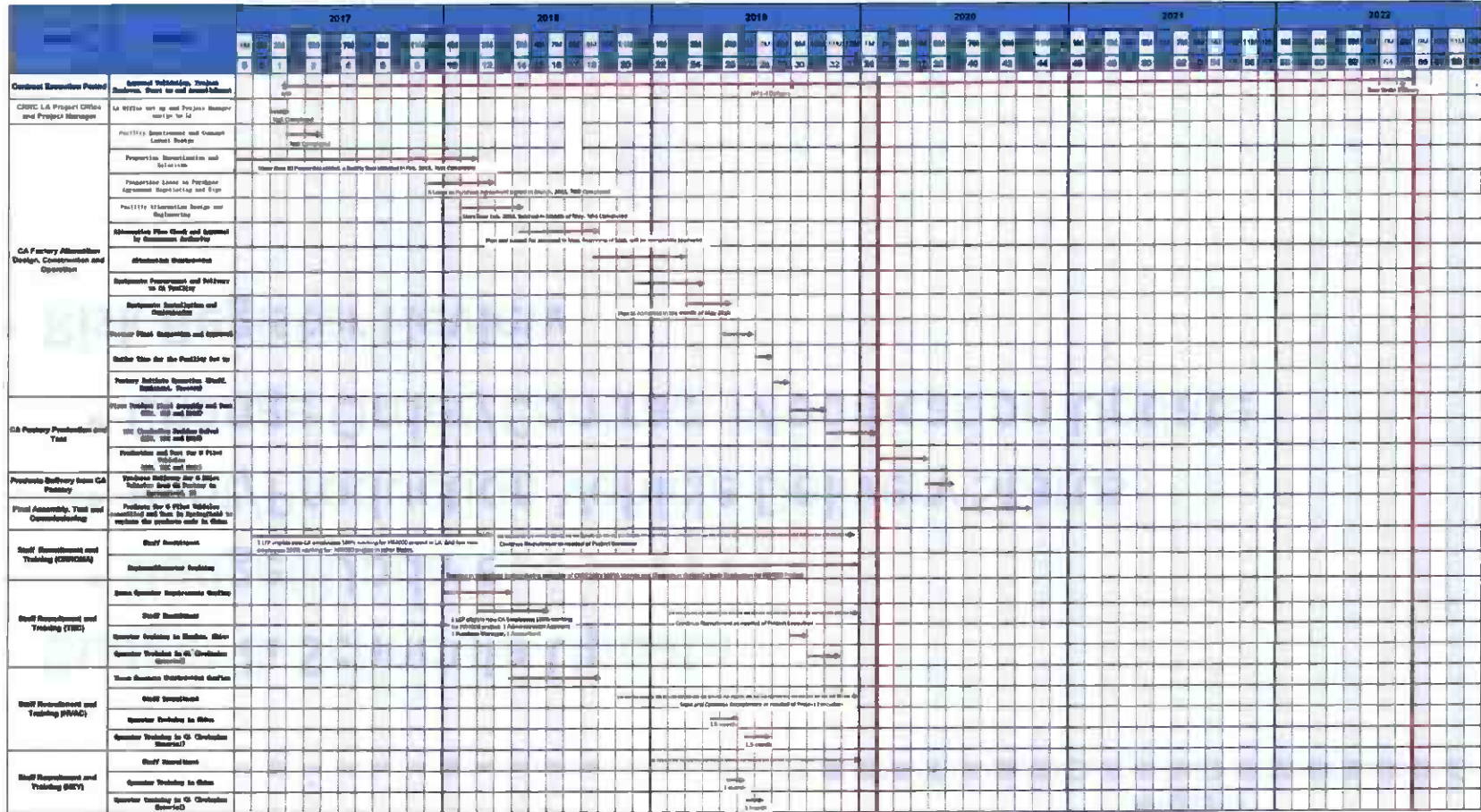
Local Assembly Site Status-LEP Schedule

- Improvement work of LA facility was started in November 2018, which is on-going according to the schedule.
- CRRC MA will continue to lead LEP suppliers to contact with LATTC and Local Union to negotiate cooperation agreement.
- Installation of production equipment is planned to be started in July 2019, and to be completed in October, 2019.
- CRRC MA moved from its downtown office to the new facility located at 801 Echelon Court, City of Industry on June 24, 2019.
- FAIs to be conducted in early 2020.



Local Assembly Site Status-LEP Schedule

HR4000 Project Localization Schedule-Rev. B





- **Budget & Schedule Update**
 - Budget Update
 - Pilot/Production Vehicle Delivery Status
 - Change Order/Contract Modification Update
- **Risk Register Review**



Budget Update

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	\$28,935,163	\$423,615	\$178,819,484
PROFESSIONAL SERVICES	\$20,938,375	\$20,938,375	\$9,344,040	\$0	\$20,938,375
MTA ADMINISTRATION	\$11,960,055	\$11,960,055	\$3,150,000	\$0	\$11,960,055
VEHICLE SUBTOTAL	\$211,294,299	\$211,294,299	\$41,429,202		\$211,294,299
CONTINGENCY	\$21,926,767	\$21,926,767	\$0	\$423,615	\$21,503,152
TOTAL PROJECT	\$233,221,066	\$233,221,066	\$41,429,202	\$423,615	\$232,797,451

Contract Modification Pending Negotiations



Change Order/Contract Modification Update

- Metro anticipates to have the pending Change Order/Contract modification completed by September 2019 for the FMSS.
- The RFI for Stanchion Changes is still pending CRRC’s response.
- Metro will exercise the Alternative Technology under TS 13-02 Advanced Passenger Counting

Metro Requested Changes	Status	Credit to CRRC
Addition of Low Beam	In-Process	\$106,487.45
FMSS Increased Cost	In-Process	\$246,130.38
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		\$1,152,884.83
CRRC Requested Changes	Status	Credit to Metro
IP Ratings of Underfloor Enclosures	In-Process	\$8,736.00
Fuse vs HSCB/APE	In-Process	\$286,375.38
Single Sided Interior Announcement Sign	In-Process	\$134,226.96
Door System Recycle Button and Trainline Elimination	In-Process	\$12,953.50
Leveling Valves	In-Process	\$286,978.00
Total		\$729,269.84
	Variance	\$423,614.99



Pilot/Production Vehicle Delivery Status

D	Uni	Task Name	%	Baseline3	Baseline3	Baseline3	Duration	Start	Finish	Finish	Variance	
D	D		mpk	Duration	Start	Finish						
261	5724	Carbody Drawing & EBOM	100%	197 days	Thu 3/1/18	Fri 11/30/18	348 days	Thu 3/1/18	Mon 7/1/19	151 days		1720182019202020212022
323	5687	Carshell Production	90%	41 days	Fri 2/1/19	Fri 3/29/19	62 days	Tue 4/16/19	Wed 7/10/19	73 days		34123412341234123412341
324	5688	Carbody Strength Test Plan	100%	0 days	Thu 1/31/19	Thu 1/31/19	6 days	Wed 7/3/19	Wed 7/10/19	114 days		
325	7164	FAI for Test Carshell in Changchun	0%	0 days	NA	NA	1 day	Thu 7/11/19	Thu 7/11/19	0 days		
326	459	Carbody Structure Static Strength Test	0%	45 days	Mon 4/1/19	Fri 5/31/19	37 days	Thu 7/11/19	Fri 8/30/19	65 days		
2902	3023	Stamping Production for MP1	0%	23 days	Wed 5/1/19	Fri 5/31/19	15 days	Mon 7/15/19	Fri 8/2/19	45 days		
2903	3033	Stamping Production for MP2	0%	23 days	Wed 5/1/19	Fri 5/31/19	15 days	Mon 7/15/19	Fri 8/2/19	45 days		
2908	3043	Stamping Production for MP3	0%	23 days	Wed 5/1/19	Fri 5/31/19	15 days	Mon 7/15/19	Fri 8/2/19	45 days		
2903	3024	Carbody Production for MP1	0%	54 days	Mon 6/3/19	Thu 8/15/19	41 days	Mon 8/5/19	Mon 9/30/19	32 days		
2906	3034	Carbody Production for MP2	0%	54 days	Mon 6/3/19	Thu 8/15/19	52 days	Mon 8/5/19	Tue 10/15/19	43 days		
2909	3044	Carbody Production for MP3	0%	54 days	Mon 6/3/19	Thu 8/15/19	52 days	Mon 8/5/19	Tue 10/15/19	43 days		
2978	3344	Assembly for MP1	0%	82 days	Fri 8/16/19	Mon 12/9/19	89 days	Tue 10/1/19	Fri 1/31/20	39 days		
2979	3684	Assembly for MP2	0%	82 days	Fri 8/16/19	Mon 12/9/19	89 days	Tue 10/1/19	Fri 1/31/20	39 days		
2980	3683	Assembly for MP3	0%	82 days	Fri 8/16/19	Mon 12/9/19	89 days	Tue 10/1/19	Fri 1/31/20	39 days		
2981	3685	CRRC - Changchun Type and Routine Tests	0%	114 days	Tue 12/10/19	Fri 5/15/20	75 days	Mon 2/3/20	Fri 5/15/20	0 days		
2982	5099	Design Verification No. 435 Qingyin Road Changchun City, Jilin Province, China	0%	0 days	Fri 5/15/20	Fri 5/15/20	11 days	Fri 5/15/20	Fri 5/29/20	10 days		



Pilot/Production Vehicle Delivery Status

Uni	%	Baseline3	Baseline3	Baseline3	Duration	Start	Finish	Finish	Variance	1720182019202020212022
D	D	mpk	Duration	Start	Finish	Duration	Start	Finish	Variance	1720182019202020212022
Task Name										1720182019202020212022
2983 3345	0%	10 days	Mon 5/18/20	Fri 5/29/20	10 days	Mon 5/18/20	Fri 5/29/20	0 days		5/18 5/29
2984 3347	0%	10 days	Mon 5/18/20	Fri 5/29/20	10 days	Mon 5/18/20	Fri 5/29/20	0 days		5/18 5/29
2985 3349	0%	10 days	Mon 5/18/20	Fri 5/29/20	10 days	Mon 5/18/20	Fri 5/29/20	0 days		5/18 5/29
3016 3381	0%	45 days	Mon 6/1/20	Fri 7/31/20	45 days	Mon 6/1/20	Fri 7/31/20	0 days		6/1 7/31
3017 3382	0%	45 days	Mon 6/1/20	Fri 7/31/20	45 days	Mon 6/1/20	Fri 7/31/20	0 days		6/1 7/31
3018 3383	0%	45 days	Mon 6/1/20	Fri 7/31/20	45 days	Mon 6/1/20	Fri 7/31/20	0 days		6/1 7/31
3050 3416	0%	21 days	Mon 8/3/20	Mon 8/31/20	21 days	Mon 8/3/20	Mon 8/31/20	0 days		8/3 8/31
3052 3419	0%	21 days	Mon 8/3/20	Mon 8/31/20	21 days	Mon 8/3/20	Mon 8/31/20	0 days		8/3 8/31
3054 3422	0%	21 days	Mon 8/3/20	Mon 8/31/20	21 days	Mon 8/3/20	Mon 8/31/20	0 days		8/3 8/31
3051 5727	0%	44 days	Tue 9/1/20	Fri 10/30/20	44 days	Tue 9/1/20	Fri 10/30/20	0 days		9/1 10/30
3053 5728	0%	44 days	Tue 9/1/20	Fri 10/30/20	44 days	Tue 9/1/20	Fri 10/30/20	0 days		9/1 10/30
3055 5729	0%	44 days	Tue 9/1/20	Fri 10/30/20	44 days	Tue 9/1/20	Fri 10/30/20	0 days		9/1 10/30
3056 5820	0%	1 day	Fri 10/30/20	Fri 10/30/20	1 day	Fri 10/30/20	Fri 10/30/20	0 days		10/30 10/30
3087 3417	0%	44 days	Mon 11/2/20	Thu 12/31/20	44 days	Mon 11/2/20	Thu 12/31/20	0 days		11/2 12/31
3088 3420	0%	44 days	Mon 11/2/20	Thu 12/31/20	44 days	Mon 11/2/20	Thu 12/31/20	0 days		11/2 12/31
3089 3423	0%	44 days	Mon 11/2/20	Thu 12/31/20	44 days	Mon 11/2/20	Thu 12/31/20	0 days		11/2 12/31
2158 4155	0%	0 days	Thu 12/31/20	Thu 12/31/20	0 days	Thu 12/31/20	Thu 12/31/20	0 days		12/31 12/31



Metro

Pilot/Production Vehicle Delivery Status

Unit ID	Task Name	% complete	Baseline3 Duration	Baseline3 Start	Baseline3 Finish	Duration	Start	Finish	Finish Variance
2158 4155	<i>Pilot cars delivery</i>	0%	0 days	Thu 12/31/20	Thu 12/31/20	0 days	Thu 12/31/20	Thu 12/31/20	0 days
3120 3455	<i>Test & Commissioning for MP1 (Milestone SP-23) (Milestone Payment Q R)</i>	0%	107 days	Fri 1/1/21	Mon 5/31/21	107 days	Fri 1/1/21	Mon 5/31/21	0 days
3123 3456	<i>Test & Commissioning for MP2 (Milestone SP-23)</i>	0%	107 days	Fri 1/1/21	Mon 5/31/21	107 days	Fri 1/1/21	Mon 5/31/21	0 days
3124 3457	<i>Test & Commissioning for MP3 (Milestone SP-23)</i>	0%	107 days	Fri 1/1/21	Mon 5/31/21	107 days	Fri 1/1/21	Mon 5/31/21	0 days
1792 919	<i>Mock-up Delivery (Due first acceptance - 60)</i>	0%	42 days	Tue 2/2/21	Wed 3/31/21	42 days	Tue 2/2/21	Wed 3/31/21	0 days
2161 4157	<i>Delivery of last Base Buy Order production Vehicle to LACMTA in Los Angeles County</i>	0%	0 days	Thu 6/30/22	Thu 6/30/22	0 days	Thu 6/30/22	Thu 6/30/22	0 days



Risk Register

Risk ID	Risk Type	Risk Description	Date	Updated	Cost	Time	Prob	Risk Score	Risk Owner	Mitigation Strategy	Action Items	Cost	Time	Prob	Risk Score After Mitigation
1	External	U.S. Government tariffs on steel, aluminum and other products could result in a cost change order	06-Apr-18	26-Jul-19	5	1	5	15	Contractor	Accept	1. LACMTA is in discussions with other affected Agencies, MBTA, SEPTA & CTA. 2. LACMTA Gov't Affairs is closely monitoring 3. LACMTA will request a cost mitigation plan from CRRC 4. LACMTA is exploring mitigation measures that will be discussed with CRRC 5. LACMTA is concerned tariffs may affect the Cab Simulator as well, no update from CRRC.	5	1	4	11
2	Engineering/Production	The Contractor may not effectively manage their suppliers during design and production	15-Nov-16	10-Jun-19	3	4	4	14	LACMTA	Mitigate	1. Closely monitor the Contractor and their management of its suppliers. Arrange a bi-weekly meeting between LACMTA support staff and responsible CRRC staff to discuss progress. 2. Encourage intermediate "over-the-shoulder design reviews."	2	4	4	12
3	Operations	Resources and track availability may be a constraint for LACMTA and delay the Contractor in commissioning Vehicles	25-Jan-16	10-Jun-19	3	4	4	14	LACMTA	Mitigate	1. LACMTA will coordinate closely with competing projects to avoid conflicts and resource availability. 2. LACMTA will consider some preliminary testing to be performed in the yard. 3. Contractor to perform static, functional and dynamic testing before delivering Vehicles to ensure that LACMTA yard is a Commissioning Site.	4	3	3	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	06-Aug-19	3	3	4	12	LACMTA	Mitigate	1. LACMTA to work and coordinate with Contractor to plan and mitigate risks. 2. LACMTA to work and coordinate with Consultants to leverage and apply best practices/lessons learned to plan and mitigate risks. 3. LACMTA to meet with CRRC Senior Execs to push for necessary resources 4. CRRC has proposed changing seat supplier from U.S. based to China based, LACMTA is ensuring CRRC justify the change, demonstrate how they will make up for it for BA content.	2	3	4	10
5	Commercial	Local Employment Program and Facility Commitment (Hiring, Technology Transfer, and Production)	09-May-17	10-Jun-19	5	3	3	15	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

Eastside Access Improvements 1st and Central Station FTA Quarterly Meeting September 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.)

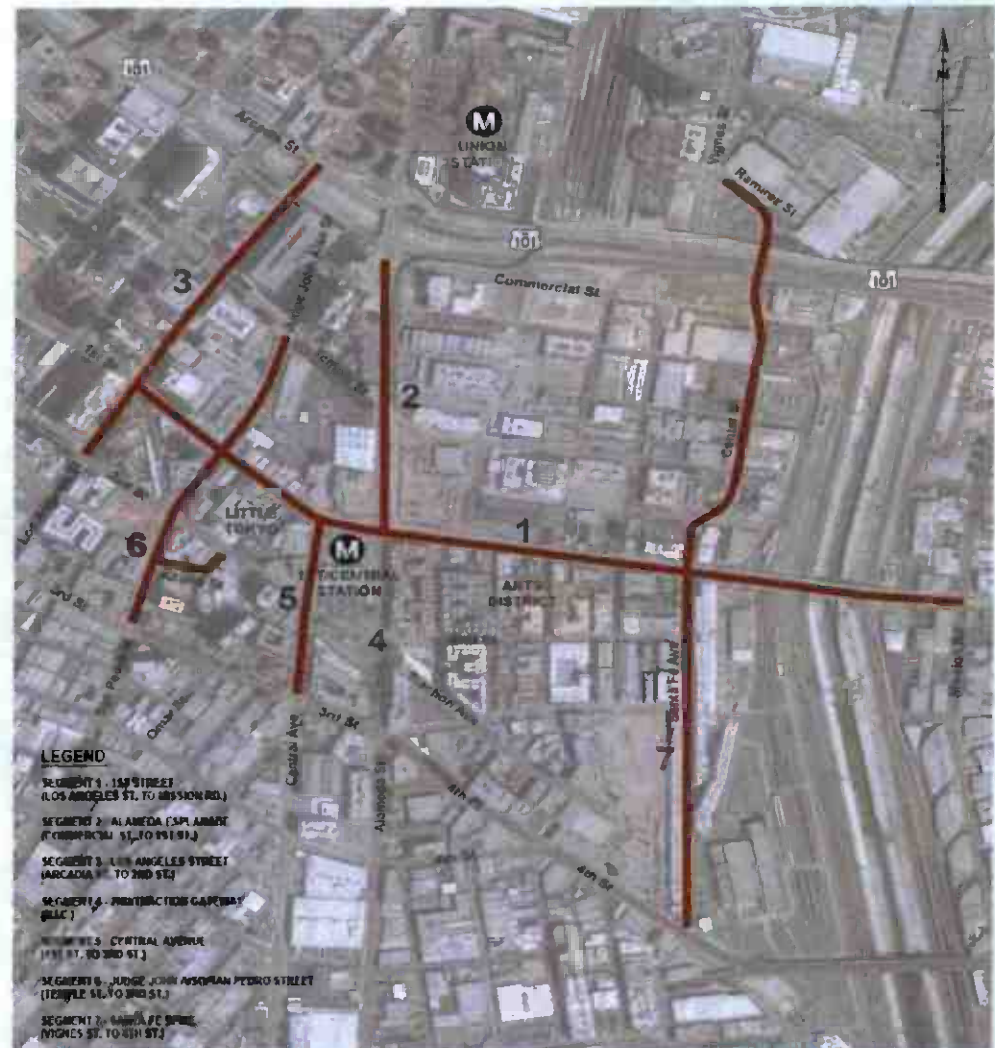
Segment 3 - Los Angeles Street
(Arcadia St. to 2nd St.)

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 includes construction Contingency of 30%

- Design Status: 100% Plan submitted to COLA. Currently under review

- Construction Status: Scheduled to start in early 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	ORIGINAL BUDGET	CURRENT FORECAST	GRANT - FORECAST VARIANCE	EXPENDITURES
1	1st Street: From Los Angeles Street to Mission Road	\$2,896,108	\$1,844,700	\$1,051,408	\$0
2	Alameda Esplanade	\$1,290,531	\$4,494,900	-\$3,204,369	\$0
3	Los Angeles Street Esplanade: From the Plaza to 2nd Street	\$3,698,730	\$705,300	\$2,993,430	\$0
4	2nd Traction Street	\$1,038,816	\$237,400	\$801,416	\$0
5	Central Avenue: From 1st Street to 3rd Street	\$310,438	\$324,400	-\$13,962	\$0
6	Judge John Aiso/San Pedro Street: From Temple to 3rd Street	\$691,711	\$361,000	\$330,711	\$0
7	Santa Fe Spine	\$1,163,645	\$2,845,800	-\$1,682,155	\$0
	Funda.Ped. Improvements for the Project	\$386,999	\$314,200	\$72,799	\$0
	General Sit Access and Staging (Mob/Demob etc.)	\$0	\$1,000,000	-\$1,000,000	\$0
	Subtotal:	\$11,476,978	\$12,127,700	-\$650,722	\$0
	Preliminary Engineering/Professional Services	N/A	\$2,960,492		\$2,422,932
	Third Party	N/A	\$900,000		\$659,826
	Metro Project Labor and Construction Management	N/A	\$3,000,000		\$206,271
	Escalation	\$1,423,022	\$0		\$0
	Mobilization/Traffic Control	\$1,100,000	\$0		\$0
	Construction Contingency (@30%)	\$2,800,000	\$3,638,310		\$0
	Total Project Cost:	\$16,800,000	\$22,626,502	-\$5,826,502	\$3,289,028

8/1/2019 **Notes:**

Expenditures cumulative through July 31, 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	
				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	11-Nov-19
End Date:	30-Sep-16	30-Jun-19			
Procurement:					
IFB Issue:	6-Aug-19	6-Aug-19		27-Apr-20	24-Jun-20
Bid Opening:	3-Oct-19	3-Oct-19		24-Jun-20	
NTP:	12-Mar-20	12-Mar-20		10-Nov-20	
Owner Developed Construction Schedule		START	END	START	END
Submittals		13-Mar-20	13-Apr-20	12-Nov-20	15-Dec-20
Segment 1		14-Apr-20	2-Jun-20	16-Dec-20	21-Feb-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	15-Jan-21	23-Jun-21
Segment 4		3-Jun-20	3-Aug-20	6-Feb-21	8-Apr-21
Segment 5		4-Aug-20	7-Dec-20	9-Apr-21	10-Aug-21
Segment 6		28-Apr-20	17-Sep-20	31-Dec-20	24-May-21
Segment 7		27-May-20	27-Apr-21	24-Aug-20	9-Sep-21
Punch List for all Segments (except Seg 2)				8-Feb-21	30-Sep-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

8/1/2019

NOTES:

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

Eastside Access Improvements Risk Register

Score	Low (1)	Med (2)	High (3)	Very High (4)	Significant (5)	Risk Score P(C+T)/2
Probability (P)	< 10%	10-50%	50-70%	75-90%	> 90%	1-10
Cost Impact (C)	< \$20K	\$20K - \$1M	\$1 - 3M	\$3 - 10M	> \$10M	3 - 10
Time Impact (T)	< 1 Mo	1 - 3 Mos	3 - 6 Mos	6 - 12 Mos	> 12 Mos	1 - 10

Risk Register by SCC

Eastside Access Improvements Project Risk

Register Version: Jan 2019

Risk ID	Risk Description	SCC	Status	Assessment			Risk Score	Mitigation Strategy	Risk Owner	Action Items	Action by Date	Most Recent Comments
				Risk Category	Prob	Cost						
ESIP-001	Initial Grant Budget shortfall due to forecasted cost increase	90	Active	5	4	1	13	Mitigate	1. Metro to identify additional funding sources for Board approval 2. Finalize funding sources based on LOP	1. 09/01/2019 2. 11/01/2020	5/7/2019 - Internal construction cost estimate will be available by August 2019 5/21/2019 - Initiate process to identify additional funding in Sept 2019 after delivery of ICE. Full action on additional funding will not be taken until bid opening in Apr 2020. 7/8/2019 - Full action on additional funding will not be taken until bid opening in now Fall 2020.	
ESIP-002	RCC Change Order could exceed allotted budget	90	Active	5	2	1	8	Mitigate	1. EAIP to coordinate with RC prior to confirming the Mod	1. 12/01/2019	2/4/2019 - CN to be issued to RCC by end of Feb 2019. RCC delay may impact scope and cost. 5/7/2019 - Awaiting contractor response on CN 7/8/2019 - Still awaiting contractor response.	
ESIP-008	Segment 2 Construction delays could extend project beyond TIGER deadline	10	Active	5	2	3	13	Mitigate	1. Explore possibility of using Metro funds for Segment 2 construction 2. PM to coordinate with RC on Project process	1. 12/01/2019 2. Ongoing	2/4/2019 - Risk Scoring changed as RCC schedule has slipped 9 months from July '21 to April '22 5/7/2019 - Action dates updated 7/8/2019 - Construction start will be April '22	
ESIP-009	Metro procurement process for construction could delay contract award	90	Active	1	1	2	3	Mitigate	1. Metro project team to complete as much documentation as possible	1- 12/01/2019	5/7/2019 - Prepare requisition for assignment of Metro CA. 5/21/2019 - Process for requisition initiated as of 5/20. This will trigger assignment of CA. 7/8/2019 - Action Date added	
ESIP-011	Unanticipated utility work could delay project and increase cost	40	Active	1	1	2	3	Accept	1. Revisit design during construction	1. 04/30/2020	5/7/2019 - Design phase investigations completed. 5/21/2019 - Design consultant has identified utilities utilizing as-built. Contractor will re-verify prior to start of construction 7/8/2019 - Full impact to be determined at start of construction in August 2022.	
ESIP-015	Lack of bidders delays project and increases cost	90	Active	3	2	3	8	Mitigate	Metro		12/20/2018 - Construction outreach workshop will be conducted upon completion of 100% design plans to gauge the responses from the contractors 5/7/2019 - Contact with four potential bidders. 7/8/2019 - No change.	
ESIP-016	CoLA requirements may add additional scope	90	Active	2	3	2	5	Mitigate	Metro	1. Elevate situation to senior management when necessary 2. Conduct over the shoulder reviews with CoLA	1. Ongoing 2. Ongoing	5/7/2019 - Actions updated to Ongoing 5/21/2019 - Comments from CoLA on Pre-AFC set expected by 08/10. Those comments will define extra work. Probability increased from 1 to 2. Cost score increased from 1 to 3. 7/8/2019 - Metro Senior Management and CoLA Senior Management working to resolve. Scope determination will be confirmed upon AFC approval.
ESIP-017	Resolution of O&M responsibility with CoLA for the Alameda esplanade could result in delay of the project or rejection of final plans (AFC) by CoLA	40	Active	1	2	4	12	Mitigate	Metro	1. Elevate to Metro senior management 2. Elevate to Mayor office if necessary		5/7/2019 - New Risk Added. Have met internally with Metro management who informed Mayor's office of situation. 5/21/2019 - Met and elevated concern to CD14 and Mayor's Office 7/8/2019 - Metro Senior Management and CoLA Senior Management working to resolve.
ESIP-018	Delay in plan approval by CoLA due to requirement for prior design approval of concurrent (RC and Div 20) projects.		Active	1	2	3	13	Accept	Metro	1. Work closely with overlapping project teams	1. Ongoing	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. 07/31/2019

Eastside Access Improvements

Current Quarter Update

Major Activities During Last Quarter (April '19 – June'19)

Design Development

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

Other activities:

- Coordinating with overlapping projects

Eastside Access Improvements

Activities for Next Quarter

Major Activities Planned During July '19 to September '19

Design Development

- Pre-AFC Plans comments resolution and approval
- Coordinate with overlapping projects to prepare AFC plans

Other:

- Meet with City of Los Angeles officials and Community leaders

Los Angeles County Metropolitan Transportation Authority



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



Rail to Rail Active Transportation Corridor Connector Project



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)



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

CITYWORKS DESIGN TEAM
| TYP - 1

Hyde Park / Chesterfield Square Segment

Mid-block Concept (Typical 30' ROW)

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

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

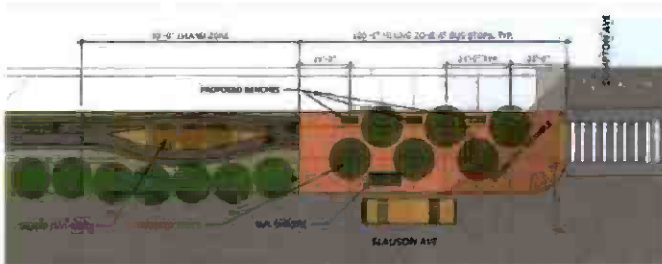


Before photo of Metro ROW at Hyde Park / Chesterfield Square segment



Mixing Zones

Slauson Corridor Concept at Bus Stop



Concept plan at bus stop mixing zones



Existing photo of Slauson/Compton intersection



Example of diverter planted with drought tolerant flax



Example of street bond graphic (Auckland, NZ)



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

CITYWORKS DESIGN TEAM
| MIX - 1

RAIL TO RAIL ACTIVE TRANSPORTATION CORRIDOR CONNECTOR PROJECT

Projected Milestones

D-B-B Project Delivery:

- AFC Design: August 2019
- Procurement Complete: March 2020
- NTP to Contractor: May 2020
- Construction Start: June 2020
- Substantial Completion: December 2022
- Project Close-Out: July 2023

RAIL TO RAIL ACTIVE TRANSPORTATION CORRIDOR CONNECTOR PROJECT

April – June 2019 Key Activities

- Advance Design on Metro right of way to 90% level
- Advance Design on City and County right of way to 90% level
- Advance southside curb improvement Design to 80%
- Continue seeking COLA approval for “Raised Crosswalk”
- Nearing negotiation agreement with BNSF
- Initiated Soil Treatment Work Plan development
- Coordinate with Metro Real Estate Department
- Initiated Community / Construction Relations strategies

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:	\$87,925,000(**)
• Contingency:	\$8,792,500
<u>Projected LOP Total:</u>	<u>\$139,717,500</u>

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

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



Thank you



Metro



P3010 Light Rail Vehicle Acquisition

FTA Quarterly Review – September 4, 2019



Reporting Month: April 2019 - June 2019

Presentation Date: September 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

- KI continues to deliver P3010 vehicles per contractual requirement.
- The delivery of Option 2 Cars has begun.
- 0 Cars shipped during the reporting period; totaling 185 Cars shipped to Metro's site as of the end of the reporting period.
- 12 Cars were Conditionally Accepted; 181 Cars Conditionally Accepted total.
- 46 Cars in Revenue Service at the Gold/Foothill Extension Line; remaining 135 Cars in Expo, Blue, Green Lines.
- Car 1224 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	\$12,583,698.00	\$7,327,896.00	\$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	\$266,983,540.00	\$32,078,287.00	\$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	\$274,038,883.00	\$41,100,953.00	\$0.00
PROFESSIONAL SERVICES (ELEMENT A)	\$21,208,749.00	\$21,208,749.00	\$21,208,749.00	\$18,996,126.00	\$2,212,623.00	\$0.00
PROFESSIONAL SERVICES (ELEMENT B)	\$8,378,885.00	\$8,378,885.00	\$8,378,885.00	\$3,965,065.00	\$4,413,820.00	\$0.00
PROFESSIONAL SERVICES SUB-TOTAL	\$29,587,634.00	\$29,587,634.00	\$29,587,634.00	\$22,961,191.00	\$6,626,442.00	\$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: April 2019 – June 2019

Presentation Date: September 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	\$13,305,750.00	\$14,026,250.00	\$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	\$333,104,005.00	\$33,217,639.00	\$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	\$346,759,288.00	\$38,166,731.00	\$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

Reporting Month: April 2019 – June 2019

Presentation Date: September 2019

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	\$76,221,923.00	\$135,014,054.00	\$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	\$76,221,923.00	\$155,801,299.00	\$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	\$80,501,577.00	\$175,286,455.00	\$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

Reporting Month: April 2019 – June 2019

Presentation Date: September 2019

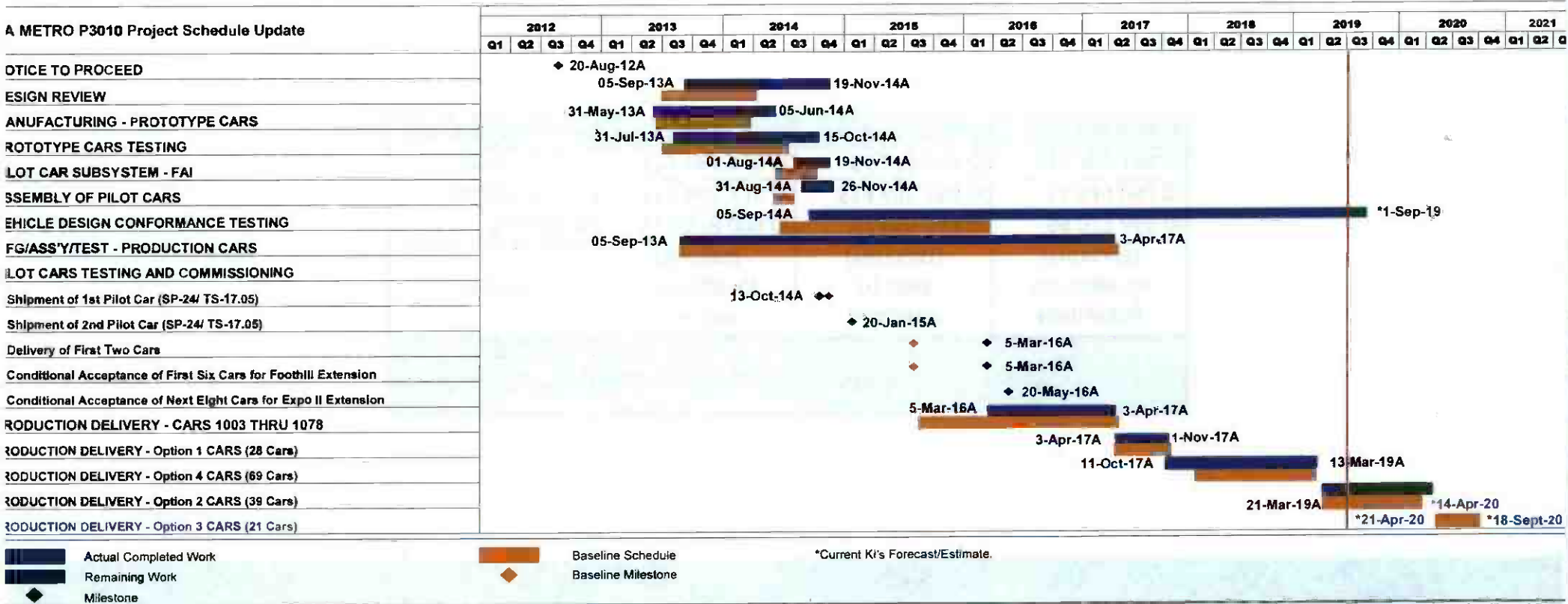
Budget Contingency Drawdown

PROJECT COST CONTINGENCY (through June 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

June 2019



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.

HR4000 Heavy Rail Vehicle Procurement



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



Agenda

- **Current Key Project Issues:**
 - Fire Mist Suppression System (FMSS)
 - Vehicle Weight Status
 - Vehicle Option Status
 - Seat Status -- GINYO Substitution
- **Design Update:**
 - Pre-Production Configuration Review (PPCR) Status
 - Test Carshell Status
 - Planned Versus Actual Progress
 - Mock Up Review Status
- **Local Assembly Site Status**
- **Budget & Schedule Update**
 - Budget Update
 - Pilot/Production Vehicle Delivery Status
 - Change Order/Contract Modification Update
- **Risk Register Review**



Current Key Project Issues

- Fire Mist Suppression System (FMSS)
 1. Metro anticipates to unilaterally execute this Contract Modification by September. Metro is waiting for CRRC to sign the contract.
- Vehicle Weight Status
 1. As of June 2019:
 - A. A car weight is currently at 82,395 (+3 from last report) lbs.
 - B. B car weight is currently at 82,856 (-97 from last report) lbs.
 2. HR4000 Project has submitted Deviation Request (DR) to Metro Construction Engineering review to increase AWO weight to 84,000 lbs.
- Vehicle Option Status
 1. Currently, Metro is weighing our options.
- Seat Status -- GINYO Substitution
 1. CRRC MA and GINYO has submitted the request for supplier changed to Metro; Metro is currently reviewing the request.



Design Update

- Pre-Production Configuration Review (PPCR) Status
- Test Carshell Status
- Planned Versus Actual Progress
- Mock Up Review Status



Pre-Production Configuration Review (PPCR) Status

- PPCR is complete (Metro still has two remaining systems to review).

System	Rev	PPCR Package Status
Carbody	B	Accepted As Noted
Couplers	A	Accepted As Noted
Operator Cab	B	Accepted As Noted
Doors	B	Accepted As Noted
HVAC	C	Accepted As Noted
Lighting	C	Accepted As Noted
APE	B	Accepted As Noted
Propulsion	A	CRRC to resubmit
Trucks	B	Accepted As Noted
Friction Brakes	B	Under Review
COM & PIS	A	Accepted As Noted
INT	A	Accepted As Noted
ATC	C	Accepted As Noted
Event Recorder	C	Accepted As Noted
MDS	D	Accepted As Noted
Trainlines & Network	D	Accepted As Noted

No.	System	Completion % May 2019	Completion % June 2019	Submission % PPCR
1	Carshell	90%	93%	100%
2	Interior Structure	92%	93%	90%
3	Door & Window	94%	95%	95%
4	Coupler & Draftgear	93%	95%	100%
5	Gangway	94%	95%	100%
6	HVAC	92%	95%	100%
7	Interior Equipment	88%	91%	93%
8	Truck	90%	92%	100%
9	Cab Structural Equipment	90%	90%	100%
10	Cab Electrical Equipment	87%	87%	100%
11	Passenger Area Electrical Equipment	89%	90%	100%
12	Underframe Electrical Equipment	87%	88%	88%
13	Propulsion	79%	80%	93%
14	Friction Brake	80%	81%	93%
15	APS	79%	79%	97%
16	Trainline&Network	88%	89%	100%
17	MDS	89%	90%	100%
18	Event Recorder	89%	89%	100%
19	ATC&TWC	89%	90%	100%
20	Communication & Passenger Information	86%	86%	100%
21	Lighting	92%	92%	100%
22	Vehicle Electrical Schematics	92%	92%	100%
23	FMSS	75%	76%	90%



Test Carshell Status

- The Test Carshell will begin testing on August 13, 2019 through September 2, 2019.
- Metro will support this testing in China with Consultant Subject Matter Experts (SMEs); there will be two (2) SMEs on-site.
- CRRC MA will start manufacturing of the production carshells towards early September 2019.



Test Carshell





Test Carshell





Test Carshell





Test Carshell



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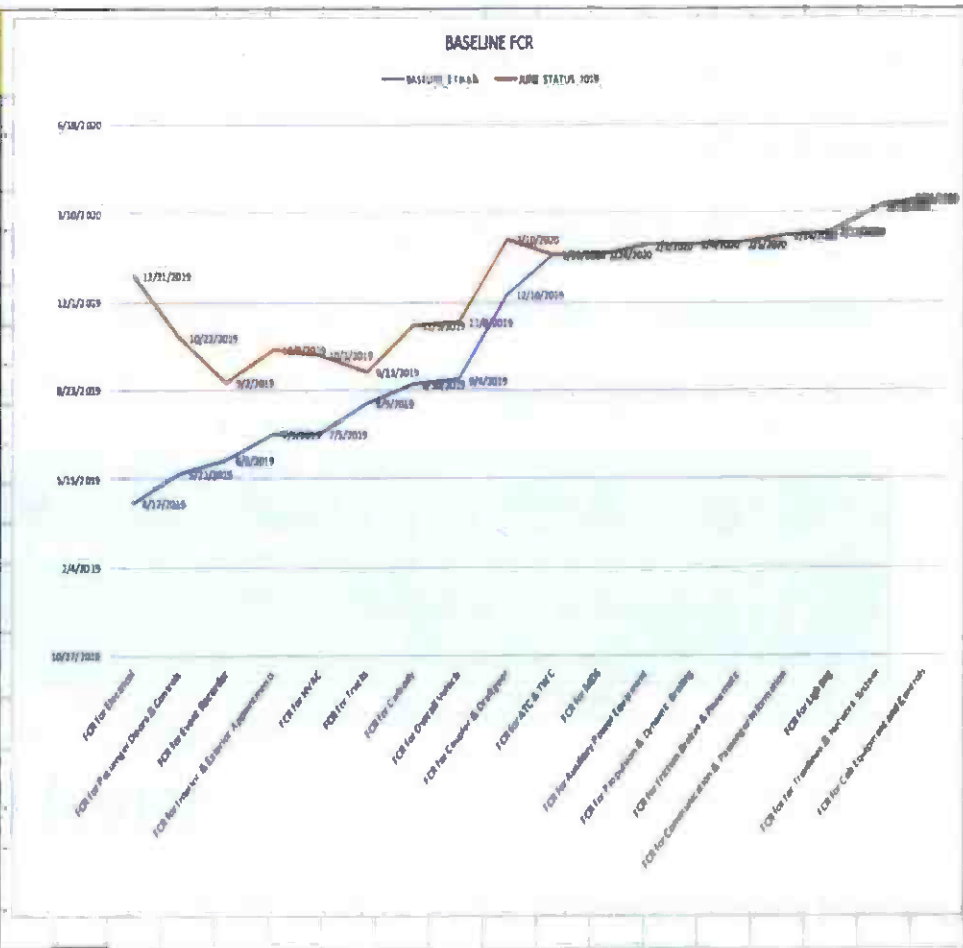
First Article Inspection(s) (FAIs)

HR4000 FAI Schedule Plan					
System	Start	Finish	FAI Location	Supplier	Status
Friction Brakes	6/5/2019	6/6/2019	1 Arthur Peck Drive Westminster, MD 21157	Knorr Brake Co, LLC	Completed
Flooring (CRRC MA only, Metro Waived)	Waive	Waive	110 J.E. Lemieux, Windsor, (Quebec) J1S 0A4, CANADA	Baultar	Completed
ATC & TWC System	6/11/2019	6/12/2019	645 Russell St, Batesburg SC 29006	Ansaldo STS	Completed
Passenger Information System (PIS)	9/4/2019	9/5/2019	Montgomery, Alabama	(VT Electronics) ST Electronics (Shanghai) Co., Ltd.	Pending
Doors	9/16/2019	9/20/2019	1 Arthur Peck Drive Westminster, MD 21157	IFE, NA	Pending
Auxillary System	9/17/2019	9/19/2019	300 International Drive, Suite 2, Mt. Olive, NJ 07828	Times Electric	Pending
HVAC	1/31/2020	1/31/2020	City of Industry, Los Angeles	Shijiazhuang King Transportation Equipment Co., Ltd.	Pending
Coupler & Draftgear	1/9/2020	1/9/2020	129 Ridgeview Center Drive Duncan, SC 29334	Wabtec	Pending
Lighting Assembly	1/28/2020	1/31/2020	City of Industry, Los Angeles	Shenzhen Hengzhiyuan Electric Appliance Co., Ltd.	Pending
Traction Inverter/Insulated Switch Box	1/30/2020	1/31/2020	City of Industry	Times Electric	Pending
Truck	8/28/2020	8/31/2020	655 Page Blvd. Springfield, MA 01104	Bradken	Pending
Vehicle	10/30/2020	10/30/2020	655 Page Blvd. Springfield, MA 01104	CRRC MA	Pending



Final Configuration Review (FCR) Status

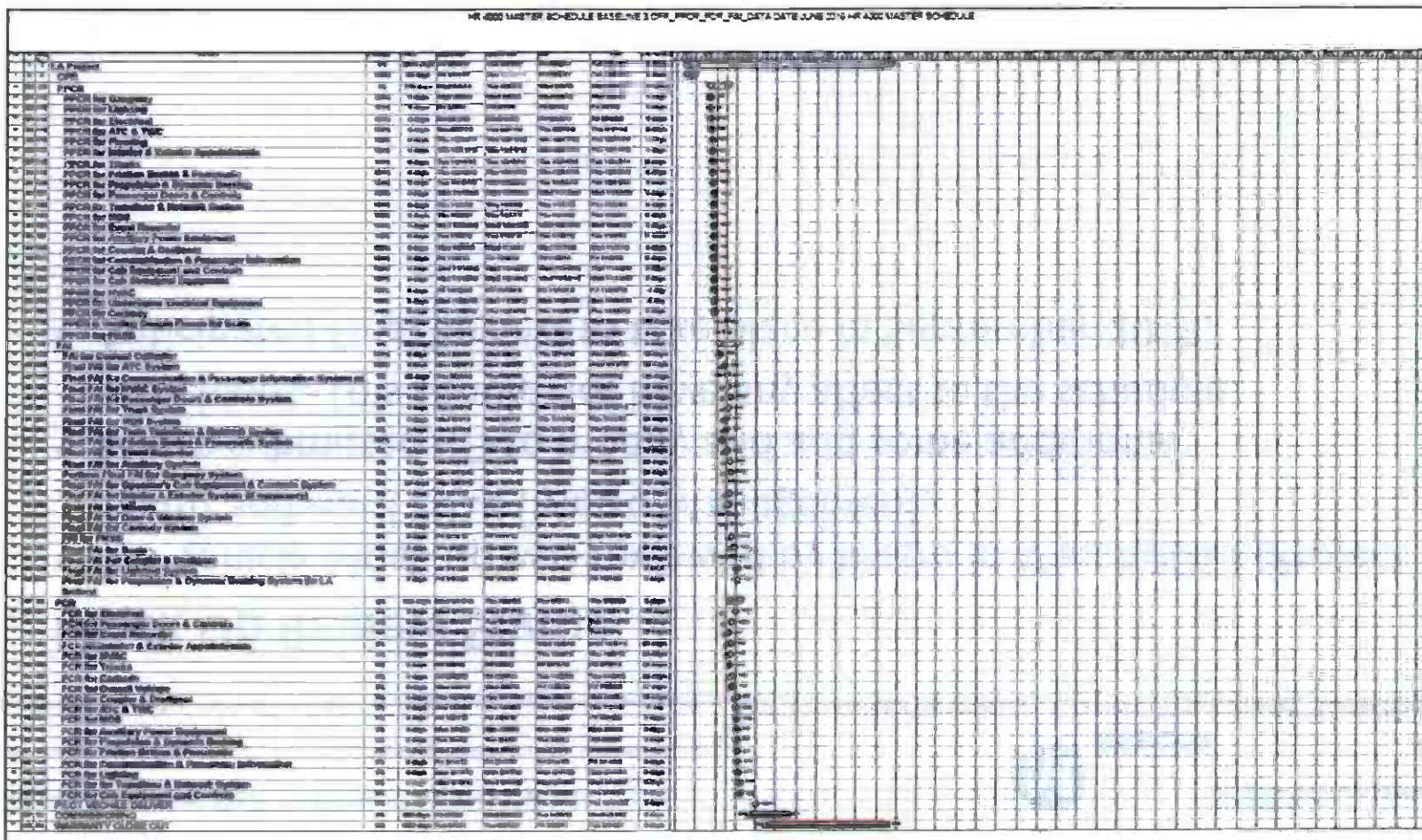
ID	Unique ID	%	BASELINE 3 Finish	JUNE STATUS 2019
112	4100	0%	4/17/2019	12/31/2019
423	4401	0%	5/21/2019	10/22/2019
960	4464	0%	6/6/2019	9/2/2019
870	4085	0%	7/5/2019	10/9/2019
472	4193	0%	7/5/2019	10/3/2019
703	4437	0%	8/9/2019	9/13/2019
177	4001	0%	8/30/2019	11/5/2019
116	5607	0%	9/4/2019	11/8/2019
301	4091	0%	12/10/2019	2/10/2020
910	4455	0%	1/23/2020	1/23/2020
00	4473	0%	1/24/2020	1/24/2020
067	4419	0%	2/3/2020	2/3/2020
623	4428	0%	2/4/2020	2/4/2020
761	4106	0%	2/5/2020	2/5/2020
014	4446	0%	2/14/2020	2/14/2020
519	4410	0%	2/17/2020	2/17/2020
00	5293	0%	3/18/2020	3/18/2020
360	4392	0%	3/26/2020	3/26/2020

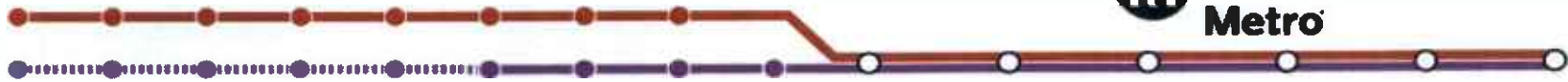




Planned Versus Actual Progress

- Please refer to attachment (HR4000 MASTER BASELINE SCHEDULE 3).



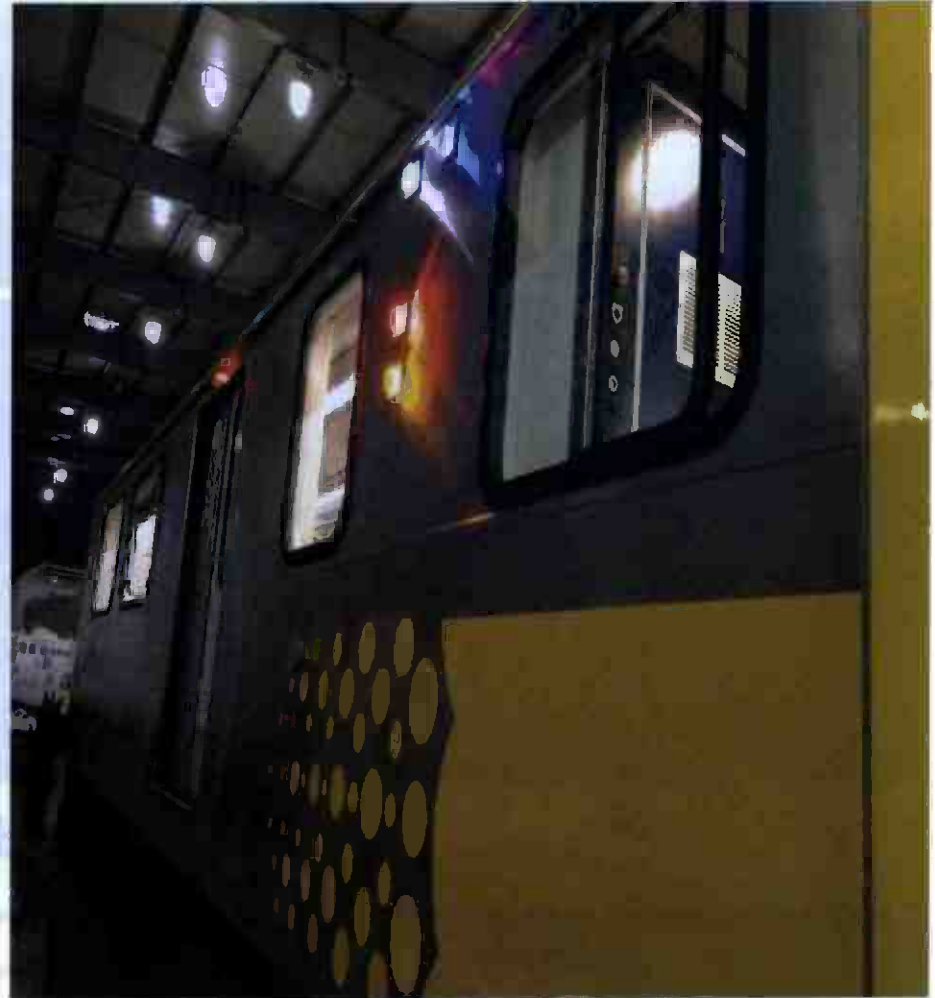


Mock Up Review Status

- 1/3 Vehicle Mock-up was reviewed by Metro in March 2019 (Project Team) and April 2019 (Metro Management).
- Metro submitted RFI to modify and add some additional stanchions. This should not have any affect to the schedule.
- Anticipated Final Review to take place in September 2019.



Mock Up Review Status





Mock Up Review Status -- RFI





Local Assembly Site Status

SUMMARY TOTAL BY CONTRACTOR/SUBCONTRACTOR

CONTRACTOR/SUBCONTRACTOR	PROJECTIONS TO DATE	ACTUALS TO DATE	VARIANCE
CRRC MA CORPORATION (Rail Vehicles)	\$276,517	\$905,306	\$628,789
CRRC TIMES ELECTRIC (Propulsion Supplier)	\$183,824	\$285,838	\$102,014
SHENZHEN HENGZHIYUAN ELECTRIC APPLIANCE CO. LTD. (Lighting Supplier)	\$0	\$0	\$0
CRRC MA CORPORATION (HVAC)	\$0	\$0	\$0
KNORR BRAKE COMPANY (Doors, Brakes)	\$0	\$0	\$0
FACILITY INVESTMENTS	\$3,050,000	\$2,884,967	-\$165,033
Total LEP Value	\$3,510,341	\$4,076,111	\$565,769

Total LEP Contract Commitment:	\$18,838,528
Less Actuals to date:	\$4,076,111
Balance of LEP to be Attained:	\$14,762,417
Targeted Hiring Commitment \$ to Date:	\$843,852.80
Achieved Hiring Commitment \$ on Disadvantaged Worker to Date	\$154,725
% Achieved to Date:	18.34%

A. As of June 30, 2019:

- CRRC MA has paid a total of \$905,306 of Wages and Benefits
- CRRC Times Electric USA LLC has paid a total of \$285,838 of Wages and Benefits
- The actual paid amount is \$730,803 higher than the contract projected amount to date.
- Among the actual paid to date amount, \$154,725 that has been paid to Disadvantage Worker, which is 18.34% of the total committed amount to Disadvantage workers on Base Order.



Local Assembly Site Status-LEP Schedule

- Improvement work of LA facility was started in November 2018, which is on-going according to the schedule.
- CRRC MA will continue to lead LEP suppliers to contact with LATTC and Local Union to negotiate cooperation agreement.
- Installation of production equipment is planned to be started in July 2019, and to be completed in October, 2019.
- CRRC MA moved from its downtown office to the new facility located at 801 Echelon Court, City of Industry on June 24, 2019.
- FAIs to be conducted in early 2020.

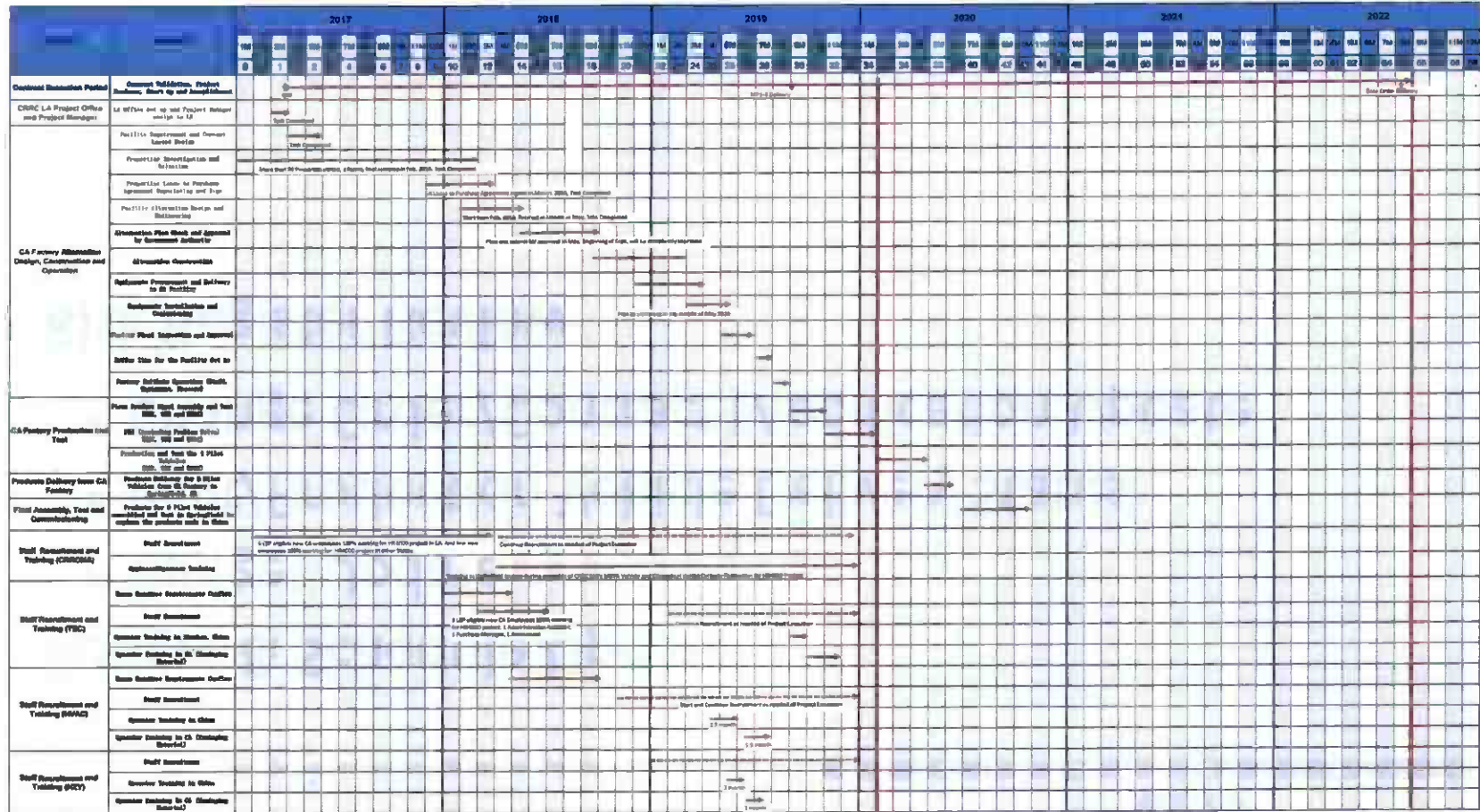
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Local Assembly Site Status-LEP Schedule

HR4000 Project Localization Schedule-Rev. B





- **Budget & Schedule Update**
 - Budget Update
 - Pilot/Production Vehicle Delivery Status
 - Change Order/Contract Modification Update
- **Risk Register Review**

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Budget Update

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	\$28,935,163	\$423,615	\$178,819,484
PROFESSIONAL SERVICES	\$20,938,375	\$20,938,375	\$9,344,040	\$0	\$20,938,375
MTA ADMINISTRATION	\$11,960,055	\$11,960,055	\$3,150,000	\$0	\$11,960,055
VEHICLE SUBTOTAL	\$211,294,299	\$211,294,299	\$41,429,202		\$211,294,299
CONTINGENCY	\$21,926,767	\$21,926,767	\$0	\$423,615	\$21,503,152
TOTAL PROJECT	\$233,221,066	\$233,221,066	\$41,429,202	\$423,615	\$232,797,451

Contract Modification Pending Negotiations



Change Order/Contract Modification Update

- Metro anticipates to have the pending Change Order/Contract modification completed by September 2019 for the FMSS.
- The RFI for Stanchion Changes is still pending CRRC’s response.
- Metro will exercise the Alternative Technology under TS 13-02 Advanced Passenger Counting

Metro Requested Changes	Status	Credit to CRRC
Addition of Low Beam	In-Process	\$106,487.45
FMSS Increased Cost	In-Process	\$246,130.38
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		\$1,152,884.83
CRRC Requested Changes	Status	Credit to Metro
IP Ratings of Underfloor Enclosures	In-Process	\$8,736.00
Fuse vs HSCB/APE	In-Process	\$286,375.38
Single Sided Interior Announcement Sign	In-Process	\$134,226.96
Door System Recycle Button and Trainline Elimination	In-Process	\$12,953.50
Leveling Valves	In-Process	\$286,978.00
Total		\$729,269.84
	Variance	\$423,614.99



Metro

Pilot/Production Vehicle Delivery Status

ID	Uni ID	Task Name	% mpk	Baseline3 Duration	Baseline3 Start	Baseline3 Finish	Duration	Start	Finish	Finish Variance	1720182019202020212022
261	5724	Carbody Drawing & EBOM	100%	197 days	Thu 3/1/18	Fri 11/30/18	348 days	Thu 3/1/18	Mon 7/1/19	151 days	7/1
323	3687	Carshell Production	90%	41 days	Fri 2/1/19	Fri 3/29/19	62 days	Tue 4/16/19	Wed 7/10/19	73 days	4/16 7/10
324	3688	Carbody Strength Test Plan	100%	0 days	Thu 1/31/19	Thu 1/31/19	6 days	Wed 7/3/19	Wed 7/10/19	114 days	7/3 7/10
325	7164	FAI for Test Carshell in Changchun	0%	0 days	NA	NA	1 day	Thu 7/11/19	Thu 7/11/19	0 days	7/11 7/11
326	459	Carbody Structure Static Strength Test	0%	45 days	Mon 4/1/19	Fri 5/31/19	37 days	Thu 7/11/19	Fri 8/30/19	65 days	7/11 8/30
2902	3023	Stamping Production for MP1	0%	23 days	Wed 5/1/19	Fri 5/31/19	15 days	Mon 7/15/19	Fri 8/2/19	45 days	7/15 8/2
2905	3033	Stamping Production for MP2	0%	23 days	Wed 5/1/19	Fri 5/31/19	15 days	Mon 7/15/19	Fri 8/2/19	45 days	7/15 8/2
2908	3043	Stamping Production for MP3	0%	23 days	Wed 5/1/19	Fri 5/31/19	15 days	Mon 7/15/19	Fri 8/2/19	45 days	7/15 8/2
2903	3024	Carbody Production for MP1	0%	54 days	Mon 6/3/19	Thu 8/15/19	41 days	Mon 8/5/19	Mon 9/30/19	32 days	8/5 9/30
2906	3034	Carbody Production for MP2	0%	54 days	Mon 6/3/19	Thu 8/15/19	52 days	Mon 8/5/19	Tue 10/15/19	43 days	8/5 10/15
2909	3044	Carbody Production for MP3	0%	54 days	Mon 6/3/19	Thu 8/15/19	52 days	Mon 8/5/19	Tue 10/15/19	43 days	8/5 10/15
2978	3344	Assembly for MP1	0%	82 days	Fri 8/16/19	Mon 12/9/19	89 days	Tue 10/1/19	Fri 1/31/20	39 days	10/1 1/31
2979	3684	Assembly for MP2	0%	82 days	Fri 8/16/19	Mon 12/9/19	89 days	Tue 10/1/19	Fri 1/31/20	39 days	10/1 1/31
2980	3683	Assembly for MP3	0%	82 days	Fri 8/16/19	Mon 12/9/19	89 days	Tue 10/1/19	Fri 1/31/20	39 days	10/1 1/31
2981	3685	CRRC - Changchun Type and Routine Tests	0%	114 days	Tue 12/10/19	Fri 5/15/20	75 days	Mon 2/3/20	Fri 5/15/20	0 days	2/3 5/15
2982	5099	Design Verification No. 435 Qingyin Road Changchun City, Jilin Province, China	0%	0 days	Fri 5/15/20	Fri 5/15/20	11 days	Fri 5/15/20	Fri 5/29/20	-10 days	5/15 5/29



Pilot/Production Vehicle Delivery Status

Uni	Task Name	%	Baseline3	Baseline3	Baseline3	Duration	Start	Finish	Finish	Variance	172018201920202021202221
D	D	mpl	Duration	Start	Finish	Duration	Start	Finish	Variance		0 3412341234123412341
2983 3345	Disassembly for MP1	0%	10 days	Mon 5/18/20	Fri 5/29/20	10 days	Mon 5/18/20	Fri 5/29/20	0 days		5/18 5/29
2984 3347	Disassembly for MP2	0%	10 days	Mon 5/18/20	Fri 5/29/20	10 days	Mon 5/18/20	Fri 5/29/20	0 days		5/18 5/29
2985 3349	Disassembly for MP3	0%	10 days	Mon 5/18/20	Fri 5/29/20	10 days	Mon 5/18/20	Fri 5/29/20	0 days		5/18 5/29
3016 3361	Transportation for MP1	0%	45 days	Mon 6/1/20	Fri 7/31/20	45 days	Mon 6/1/20	Fri 7/31/20	0 days		6/1 7/31
3017 3382	Transportation for MP2	0%	45 days	Mon 6/1/20	Fri 7/31/20	45 days	Mon 6/1/20	Fri 7/31/20	0 days		6/1 7/31
3018 3383	Transportation for MP3	0%	45 days	Mon 6/1/20	Fri 7/31/20	45 days	Mon 6/1/20	Fri 7/31/20	0 days		6/1 7/31
3050 3416	Final Assembly for MP1	0%	21 days	Mon 8/3/20	Mon 8/31/20	21 days	Mon 8/3/20	Mon 8/31/20	0 days		8/3 8/31
3052 3419	Final Assembly for MP2	0%	21 days	Mon 8/3/20	Mon 8/31/20	21 days	Mon 8/3/20	Mon 8/31/20	0 days		8/3 8/31
3054 3422	Final Assembly for MP3	0%	21 days	Mon 8/3/20	Mon 8/31/20	21 days	Mon 8/3/20	Mon 8/31/20	0 days		8/3 8/31
3051 5727	Commissioning Tests for MP1	0%	44 days	Tue 9/1/20	Fri 10/30/20	44 days	Tue 9/1/20	Fri 10/30/20	0 days		9/1 10/30
3053 5728	Commissioning Tests for MP2	0%	44 days	Tue 9/1/20	Fri 10/30/20	44 days	Tue 9/1/20	Fri 10/30/20	0 days		9/1 10/30
3055 5729	Commissioning Tests for MP3	0%	44 days	Tue 9/1/20	Fri 10/30/20	44 days	Tue 9/1/20	Fri 10/30/20	0 days		9/1 10/30
3056 5820	Vehicle Level FAI in Springfield (Customer Witness)	0%	1 day	Fri 10/30/20	Fri 10/30/20	1 day	Fri 10/30/20	Fri 10/30/20	0 days		10/30 10/30
3087 3417	Deliver MP1 to LACMTA	0%	44 days	Mon 11/2/20	Thu 12/31/20	44 days	Mon 11/2/20	Thu 12/31/20	0 days		11/2 12/31
3088 3420	Deliver MP2 to LACMTA	0%	44 days	Mon 11/2/20	Thu 12/31/20	44 days	Mon 11/2/20	Thu 12/31/20	0 days		11/2 12/31
3089 3423	Deliver MP3 to LACMTA	0%	44 days	Mon 11/2/20	Thu 12/31/20	44 days	Mon 11/2/20	Thu 12/31/20	0 days		11/2 12/31
2158 4155	Pilot cars delivery	0%	0 days	Thu 12/31/20	Thu 12/31/20	0 days	Thu 12/31/20	Thu 12/31/20	0 days		12/31 12/31



Pilot/Production Vehicle Delivery Status

Unit ID	Task Name	% Complete	Baseline3 Duration	Baseline3 Start	Baseline3 Finish	Duration	Start	Finish	Finish Variance
2150 4155	<i>Pilot cars delivery</i>	0%	0 days	Thu 12/31/20	Thu 12/31/20	0 days	Thu 12/31/20	Thu 12/31/20	0 days
3120 3455	<i>Test & Commissioning for MP1 (Milestone SP-23) (Milestone Payment Q R)</i>	0%	107 days	Fri 1/1/21	Mon 5/31/21	107 days	Fri 1/1/21	Mon 5/31/21	0 days
3123 3456	<i>Test & Commissioning for MP2 (Milestone SP-23)</i>	0%	107 days	Fri 1/1/21	Mon 5/31/21	107 days	Fri 1/1/21	Mon 5/31/21	0 days
3124 3457	<i>Test & Commissioning for MP3 (Milestone SP-23)</i>	0%	107 days	Fri 1/1/21	Mon 5/31/21	107 days	Fri 1/1/21	Mon 5/31/21	0 days
1792 519	<i>Mock-up Delivery (Due first acceptance - 60)</i>	0%	42 days	Tue 2/2/21	Wed 3/31/21	42 days	Tue 2/2/21	Wed 3/31/21	0 days
2161 4157	<i>Delivery of last Base Buy Order production Vehicle to LACMTA in Los Angeles County</i>	0%	0 days	Thu 6/30/22	Thu 6/30/22	0 days	Thu 6/30/22	Thu 6/30/22	0 days



Risk Register

Risk ID	Risk Type	Risk Description	Date	Updated	Cost	Time	Prob	Risk Score	Risk Owner	Mitigation Strategy	Action Items	Cost	Time	Prob	Risk Score After Mitigation
1	External	U.S. Government tariffs on steel, aluminum and other products could result in a cost change order	06-Apr-18	26-Jul-19	5	1	5	15	Contractor	Accept	1. LACMTA is in discussions with other affected Agencies, MBTA, SEPTA & CTÁ. 2. LACMTA Gov't Affairs is closely monitoring 3. LACMTA will request a cost mitigation plan from CRRC 4. LACMTA is exploring mitigation measures that will be discussed with CRRC 5. LACMTA is concerned tariffs may affect the Cab Simulator as well, no update from CRRC.	5	1	4	12
2	Engineering/Production	The Contractor may not effectively manage their suppliers during design and production	15-Nov-16	10-Jun-19	3	4	4	14	LACMTA	Mitigate	1. Closely monitor the Contractor and their management of its suppliers. Arrange a bi-weekly meeting between LACMTA support staff and responsible CRRC staff to discuss progress. 2. Encourage intermediate "over-the-shoulder design reviews."	2	4	4	12
3	Operations	Resources and track availability may be a constraint for LACMTA and delay the Contractor in commissioning Vehicles	25-Jan-16	10-Jun-19	3	4	4	14	LACMTA	Mitigate	1. LACMTA will coordinate closely with competing projects to avoid conflicts and resource availability. 2. LACMTA will consider some preliminary testing to be performed in the yard. 3. Contractor to perform static, functional and dynamic testing before delivering Vehicles to ensure that LACMTA yard is a Commissioning Site.	4	3	3	10.5
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	06-Aug-19	3	3	4	12	LACMTA	Mitigate	1. LACMTA to work and coordinate with Contractor to plan and mitigate risks. 2. LACMTA to work and coordinate with Consultants to leverage and apply best practices/lessons learned to plan and mitigate risks. 3. LACMTA to meet with CRRC Senior Execs to push for necessary resources 4. CRRC has proposed changing seat supplier from U.S. based to China based, LACMTA is ensuring CRRC justify the change, demonstrate how they will make up for it for BA content.	2	3	4	10
5	Commercial	Local Employment Program and Facility Commitment (Hiring, Technology Transfer, and Production)	09-May-17	10-Jun-19	5	3	3	12	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

FTA Quarterly Review Action Item Report – May 29, 2019

Item No.	Status	Description	Responsible Agency	Responsible Staff	Due Date
		There were no New FTA Action Items resulting from the May 29, 2019 FTA Quarterly Review Meeting.			
1-2/27	Closed	County Counsel to provide FTA Regional Counsel and the TIFIA Office a status of TIFIA legal actions.	County Counsel	Joanne Nielsen/ Charles Safer	3/27/19