

Los Angeles County
Metropolitan Transportation Authority

FTA Quarterly Review

Briefing Book

DECEMBER 13, 2018



Metro

FTA QUARTERLY REVIEW MEETING AGENDA

Los Angeles County Metropolitan Transportation Authority

Thursday, December 13, 2018 – 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
- F. Office of Extraordinary Innovation

PRESENTER

Edward Carranza
Phillip Washington
Drew Phillips
Charles Safer
Greg Kildare
Joshua Schank

II. METRO PLANNING REPORTS

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

Therese McMillan

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
Michael McKenna

IV. FTA ACTION ITEMS

FTA / PMOC

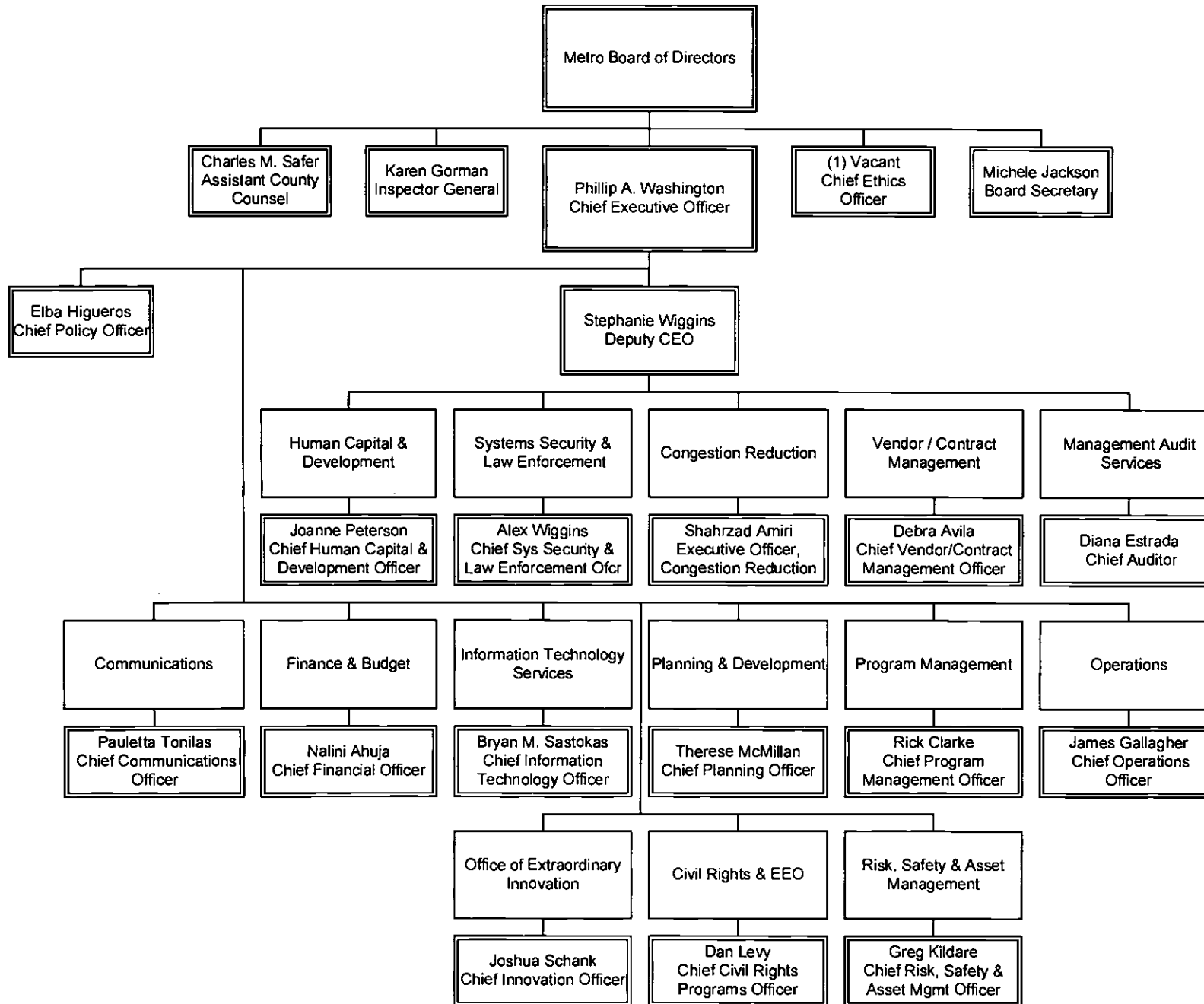
PROPOSED SCHEDULE AND LOCATION OF NEXT MEETING

Los Angeles County Metropolitan Transportation Authority

Wednesday, February 27, 2019

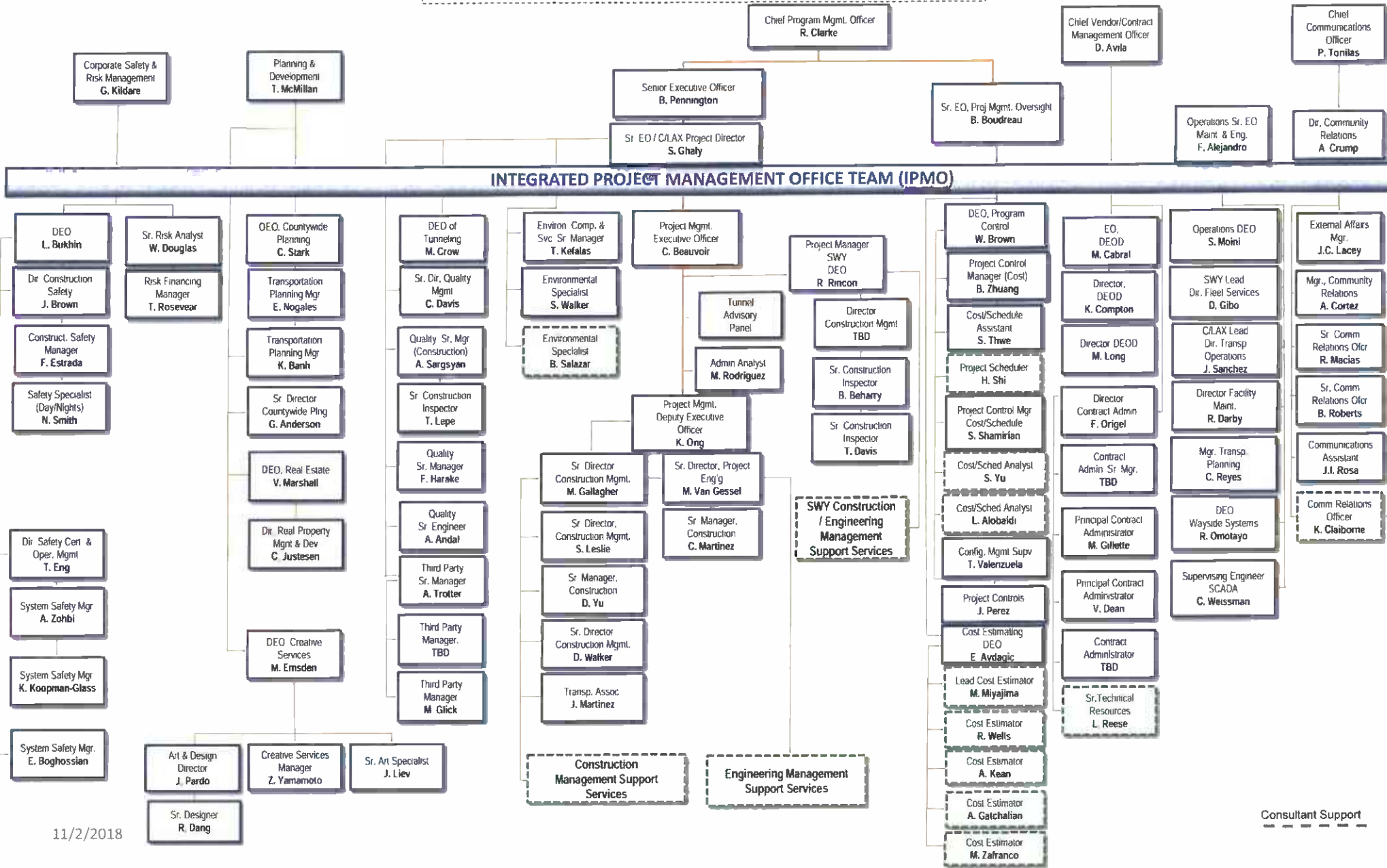
William Mulholland Conference Room - 15th Floor

Metro Organization Chart

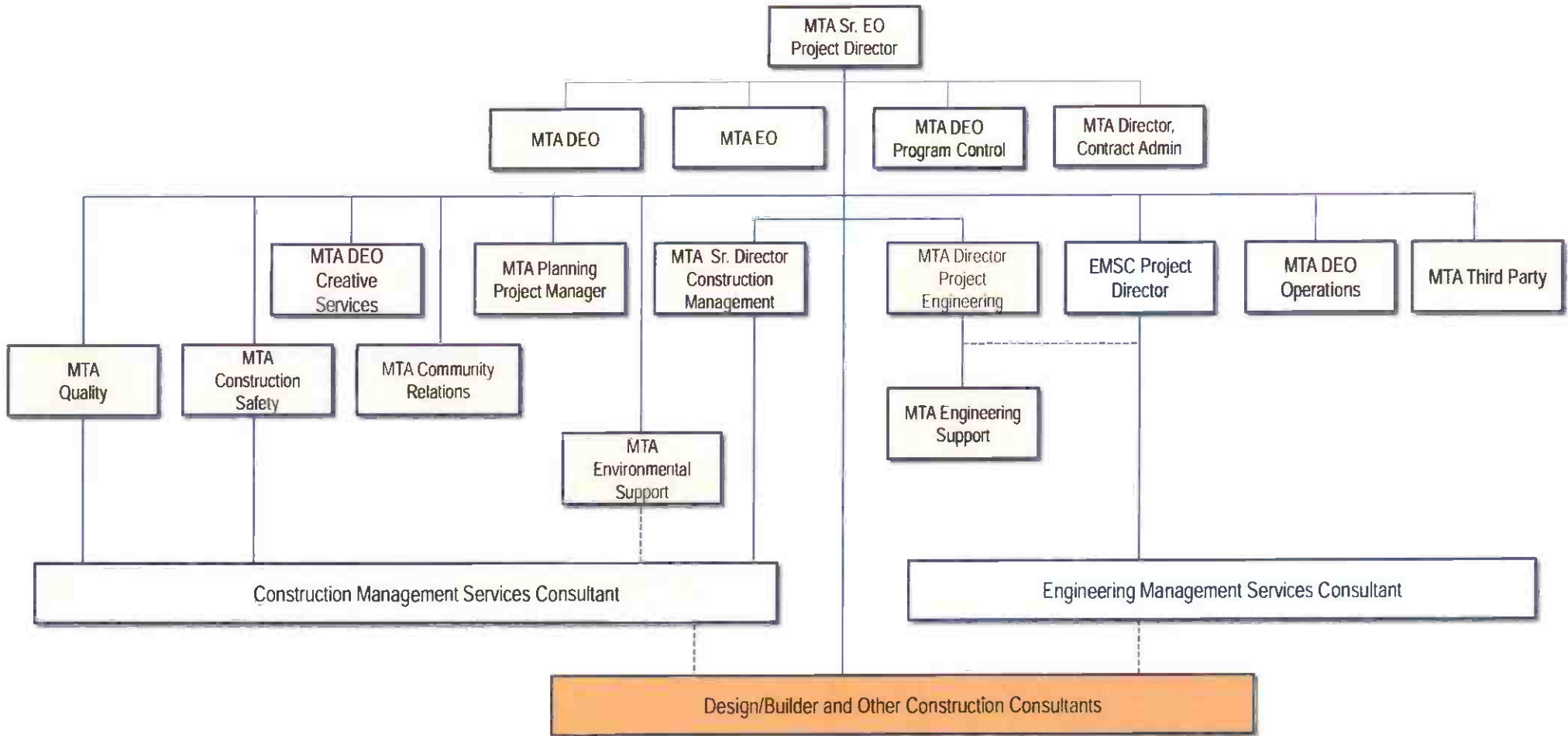


CRENSHAW/LAX TRANSIT PROJECT MATRIX ORGANIZATION

Metro Executive Management Organization and Staff

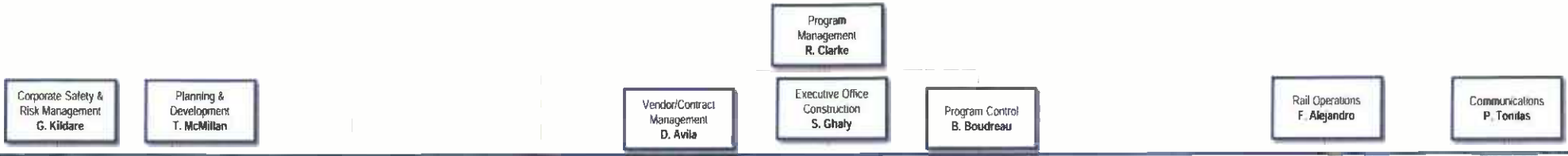


**CRENSHAW/LAX TRANSIT PROJECT
Responsibility and Reporting Matrix**

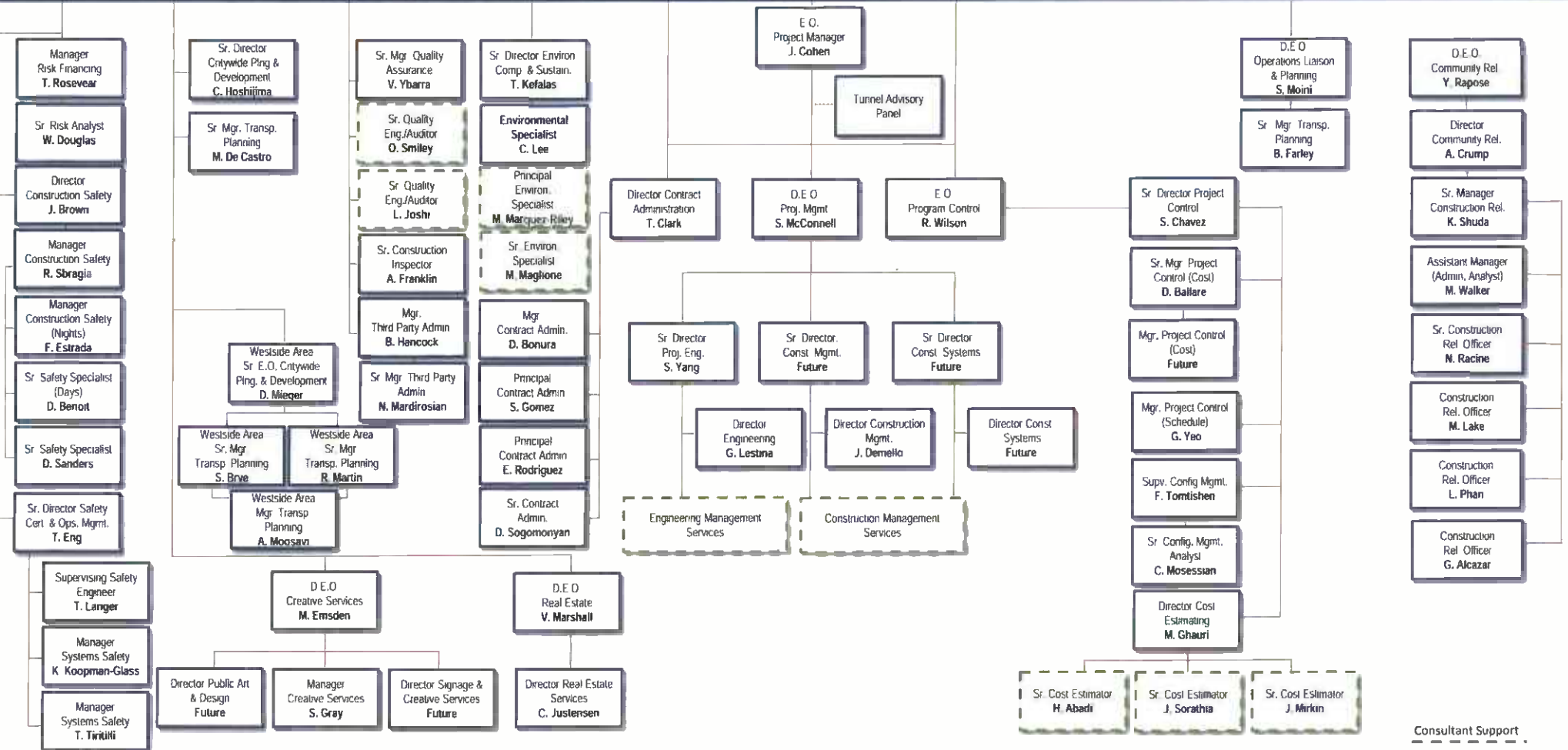


WESTSIDE PURPLE LINE EXTENSION SECTION 1 Matrix Organization

Metro Executive Management Organization and Staff

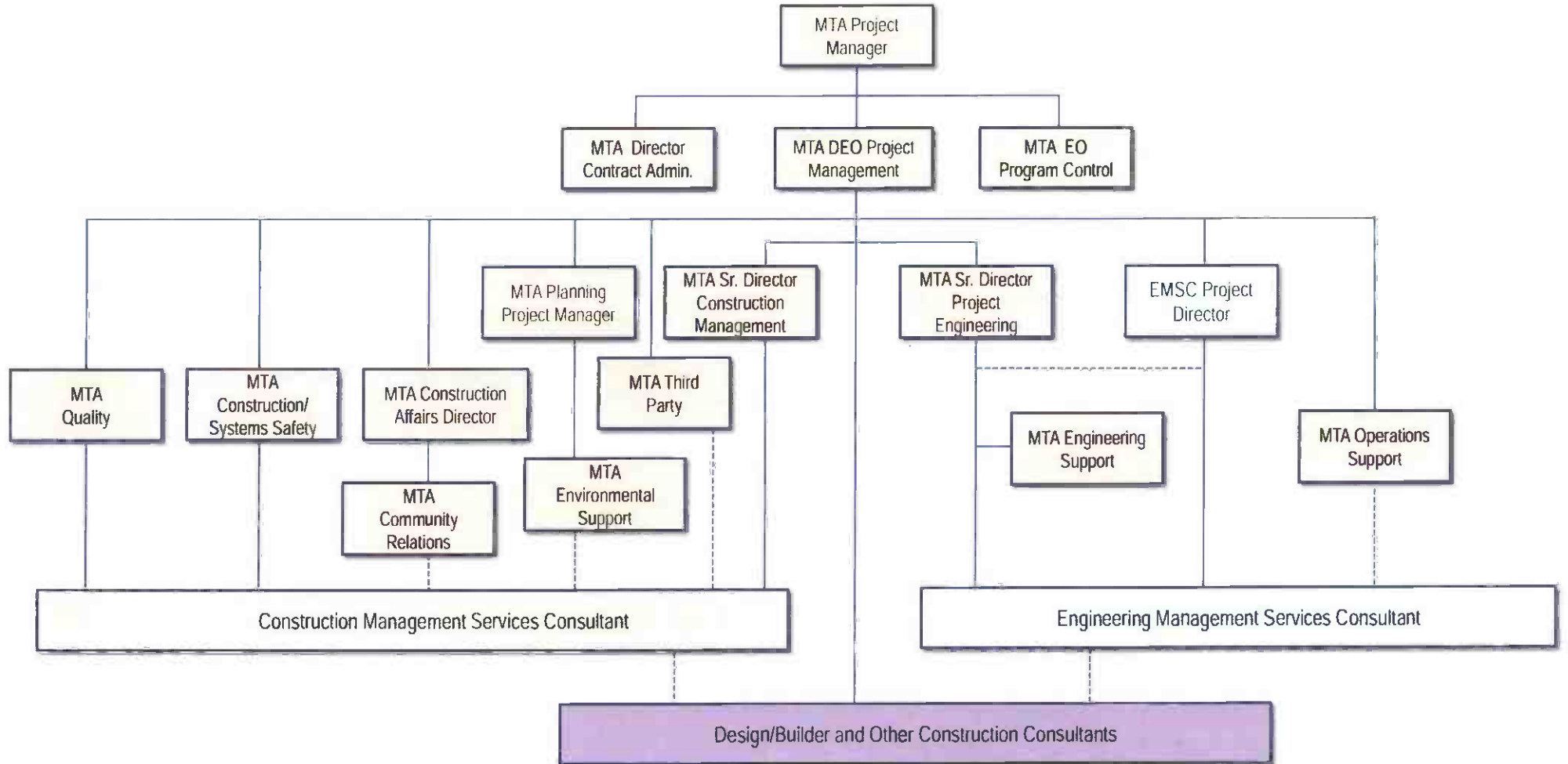


INTEGRATED PROJECT MANAGEMENT OFFICE TEAM (IPMO)



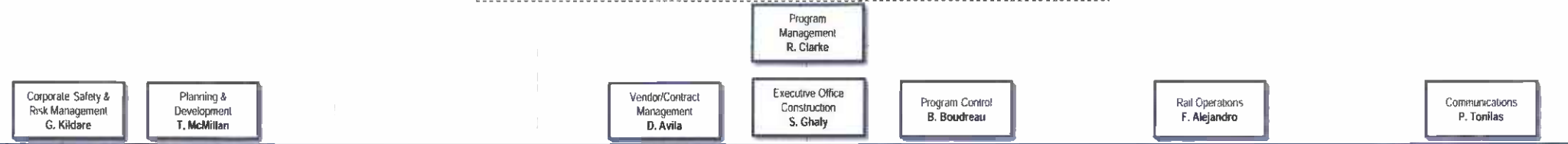
Consultant Support

Westside Purple Line Extension Section 1 Responsibility and Reporting Matrix

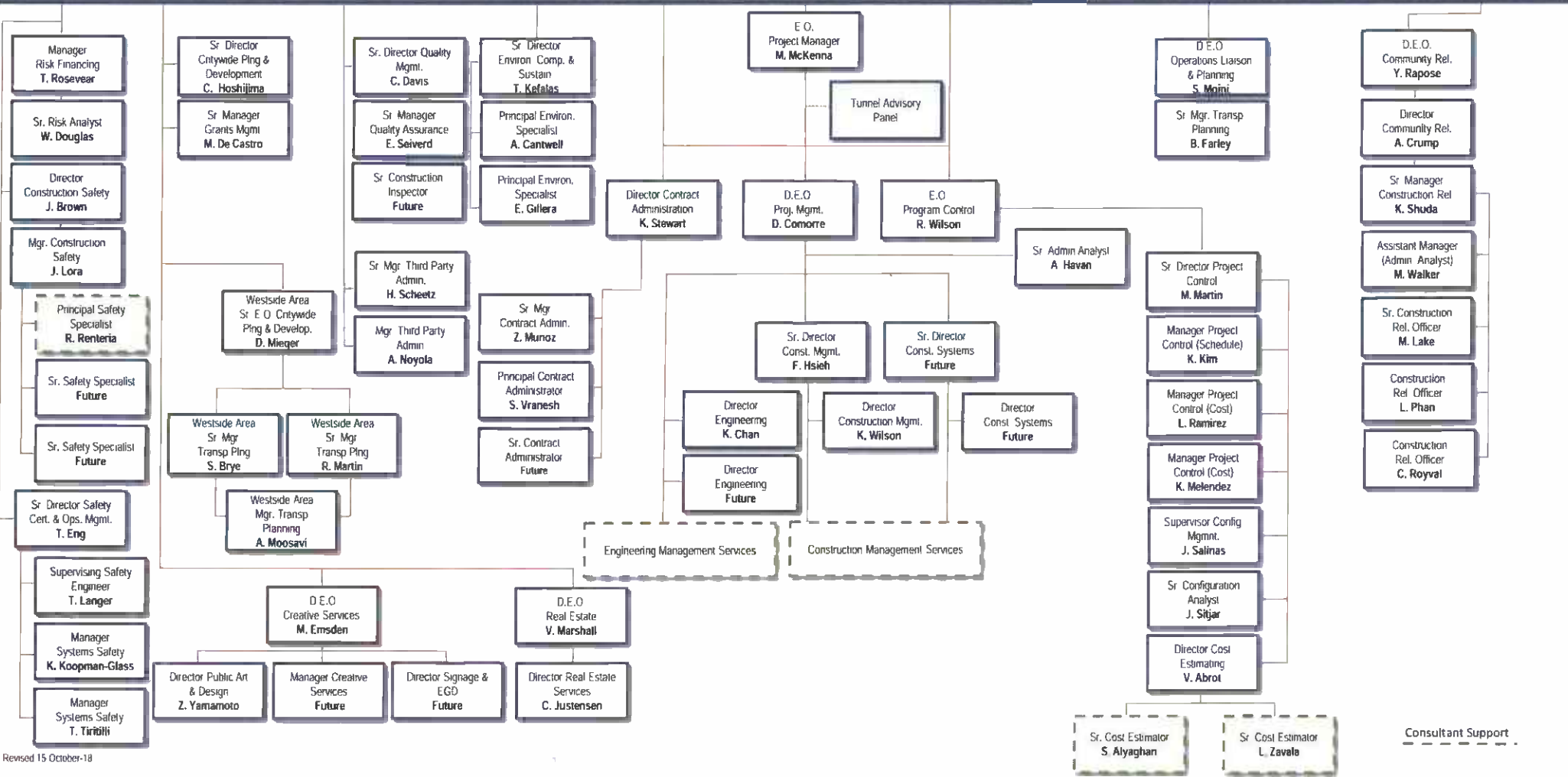


WESTSIDE PURPLE LINE EXTENSION SECTION 2 Matrix Organization

Metro Executive Management Organization and Staff

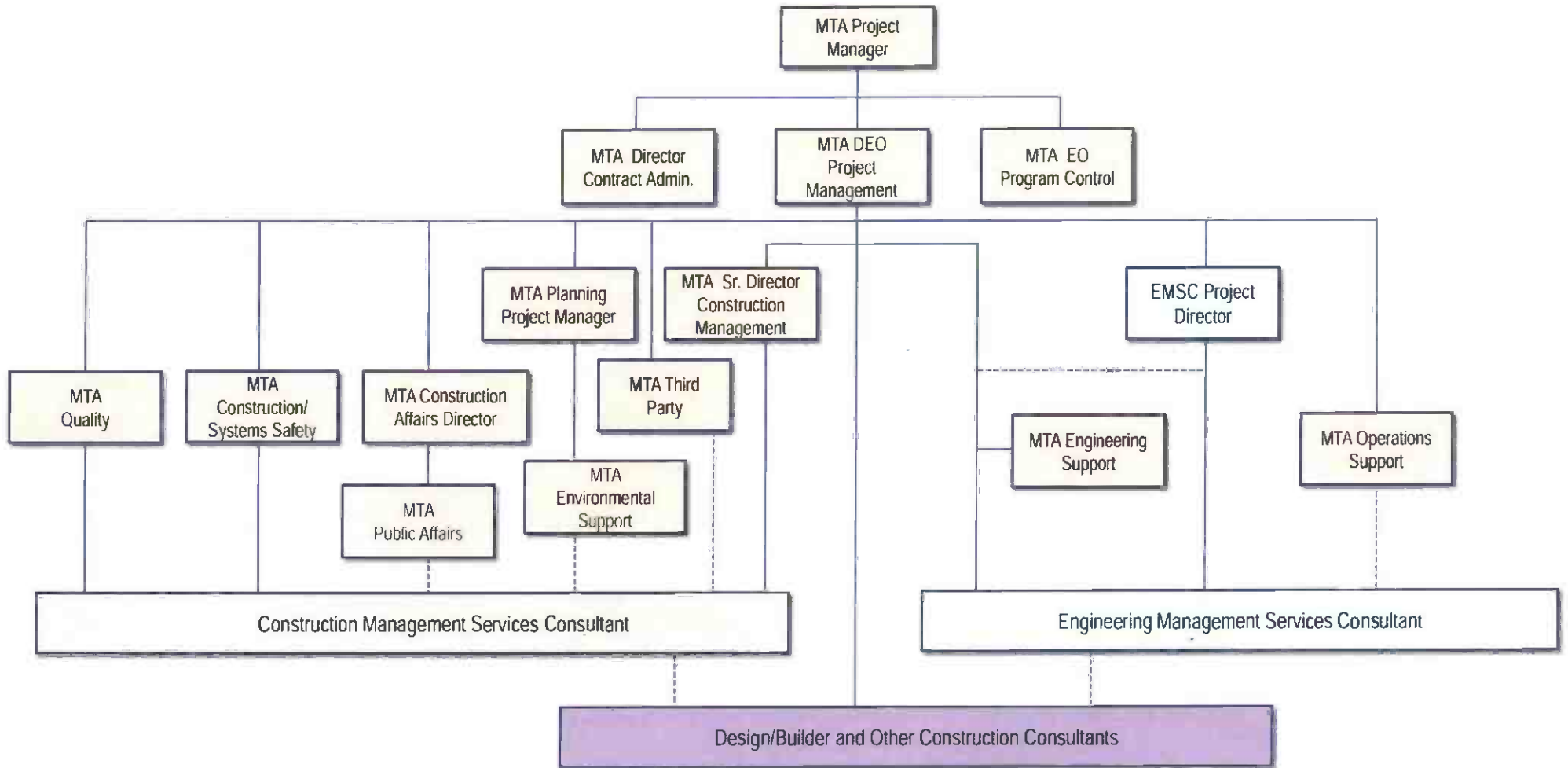


INTEGRATED PROJECT MANAGEMENT OFFICE TEAM (IPMO)



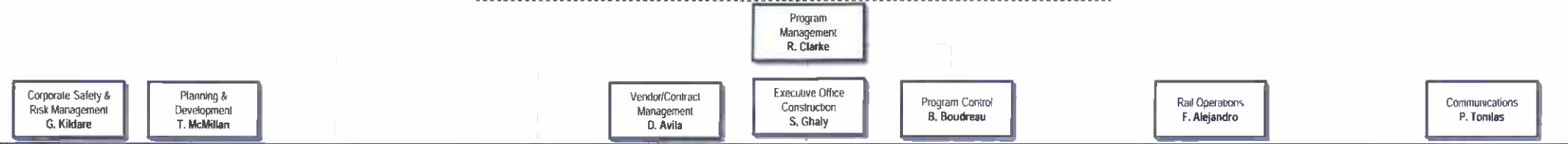
Consultant Support

Westside Purple Line Extension Section 2 Responsibility and Reporting Matrix

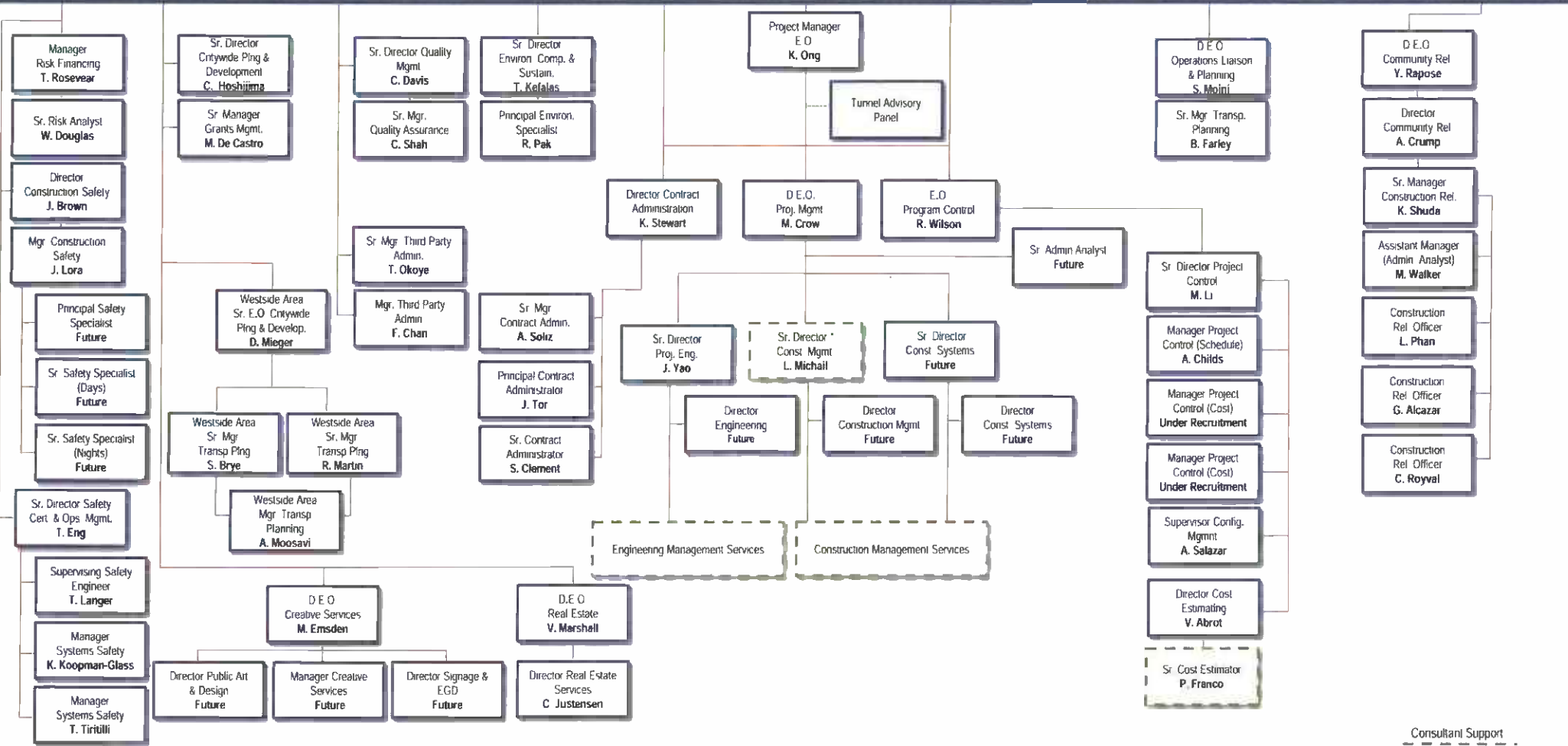


WESTSIDE PURPLE LINE EXTENSION SECTION 3 Matrix Organization

Metro Executive Management Organization and Staff

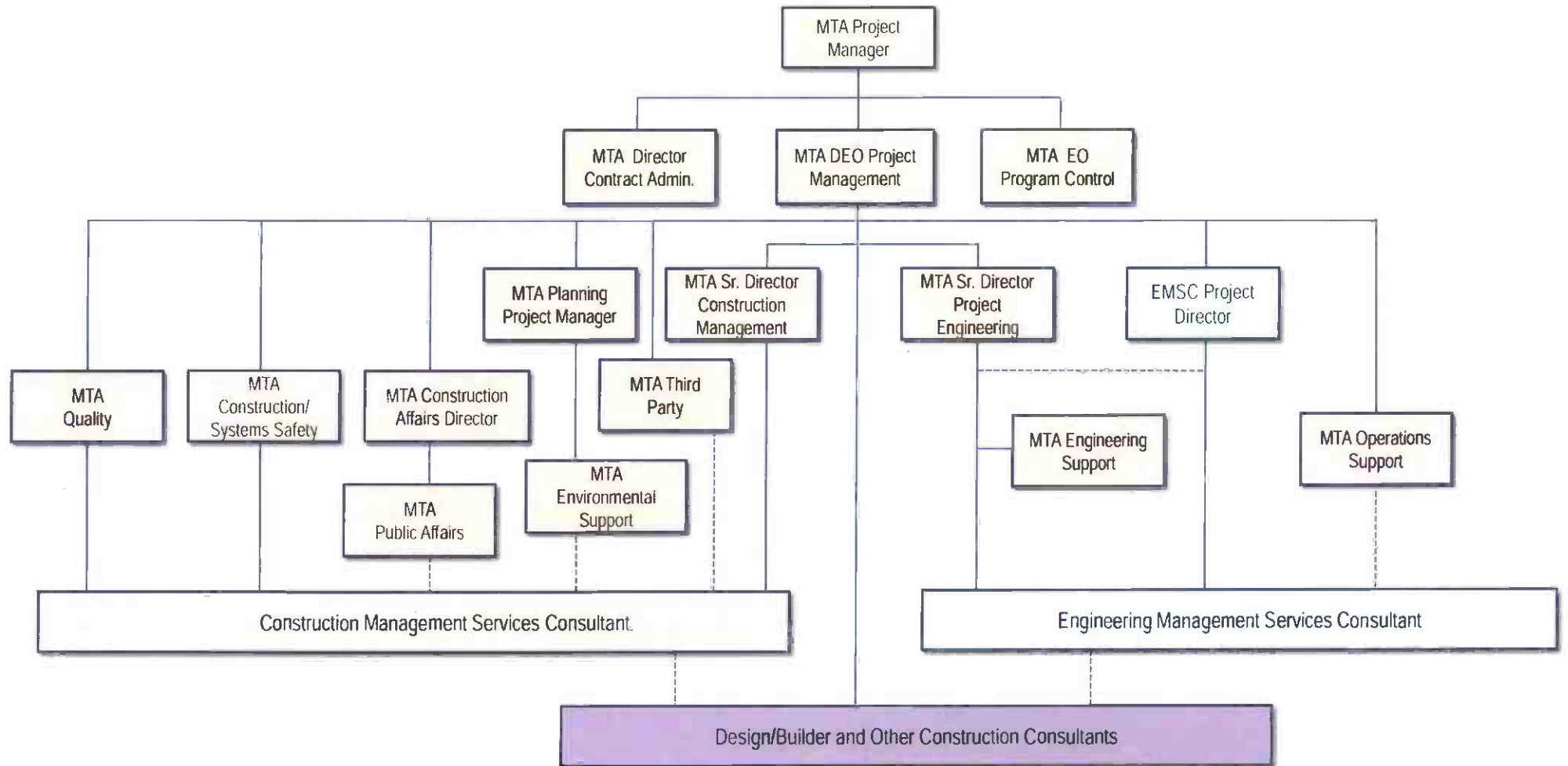


INTEGRATED PROJECT MANAGEMENT OFFICE TEAM (IPMO)



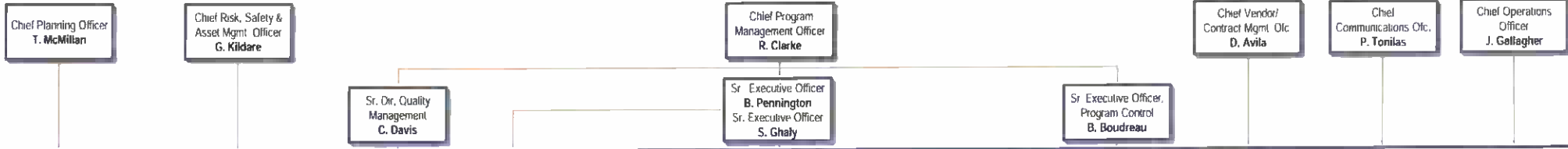
Consultant Support
* Metro position under recruitment

Westside Purple Line Extension Section 3 Responsibility and Reporting Matrix

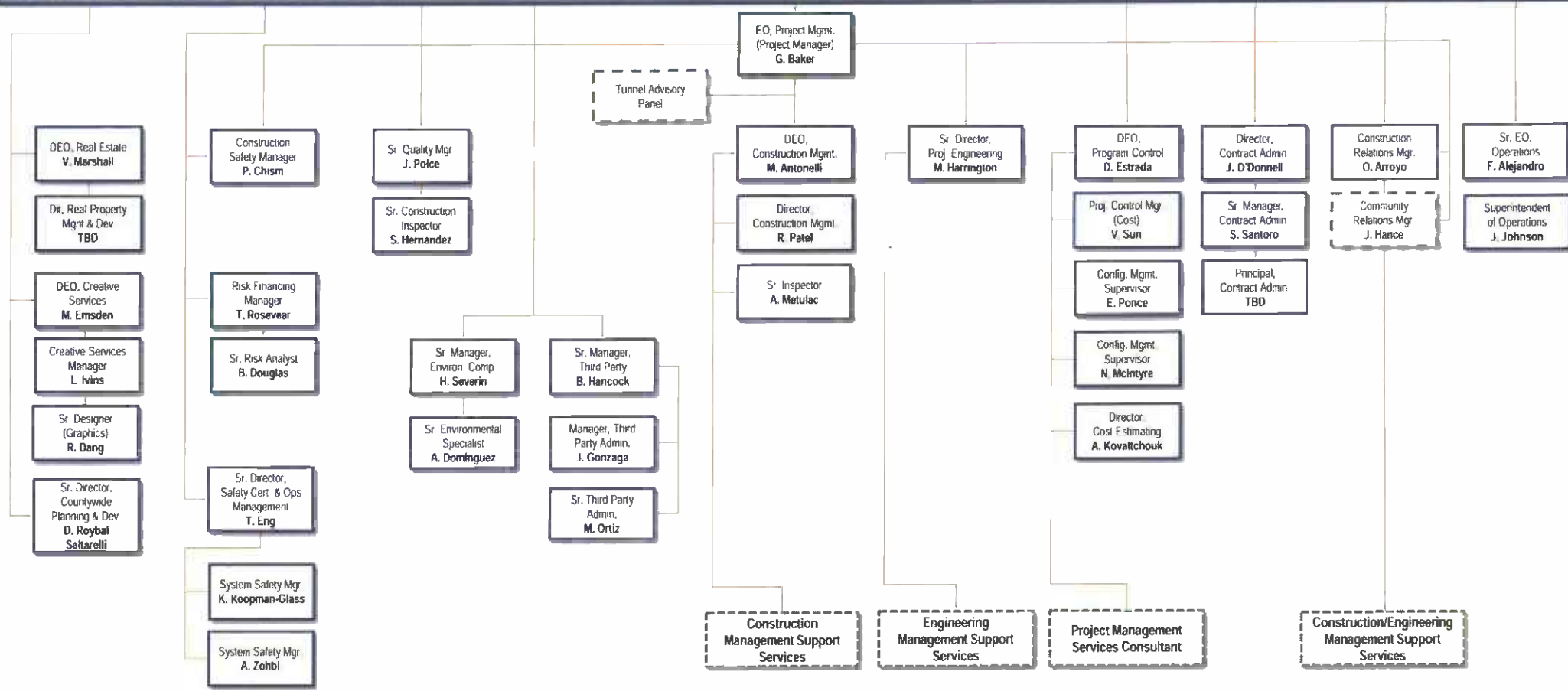


REGIONAL CONNECTOR TRANSIT PROJECT MATRIX ORGANIZATION

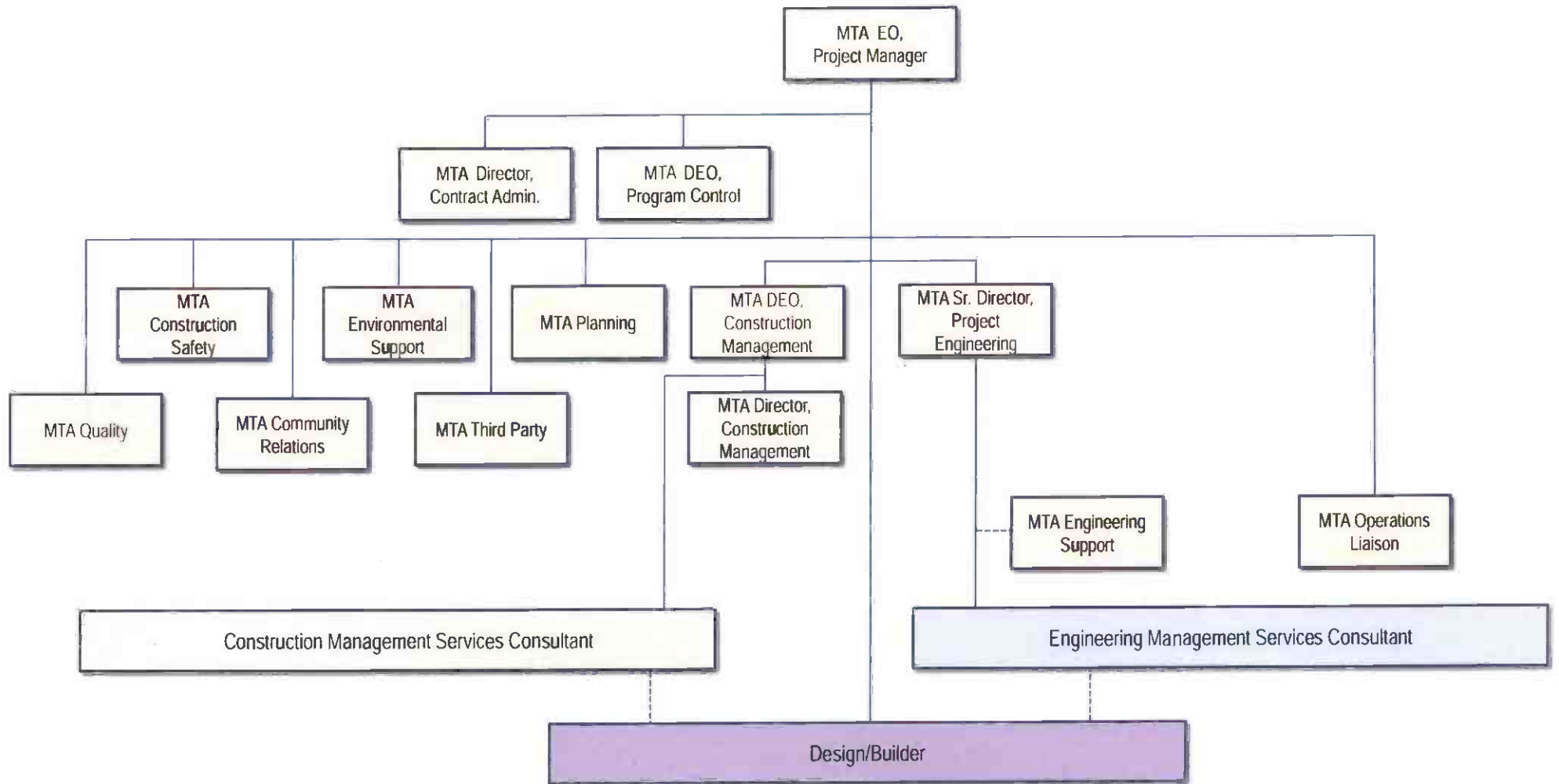
Metro Executive Management Organization and Staff



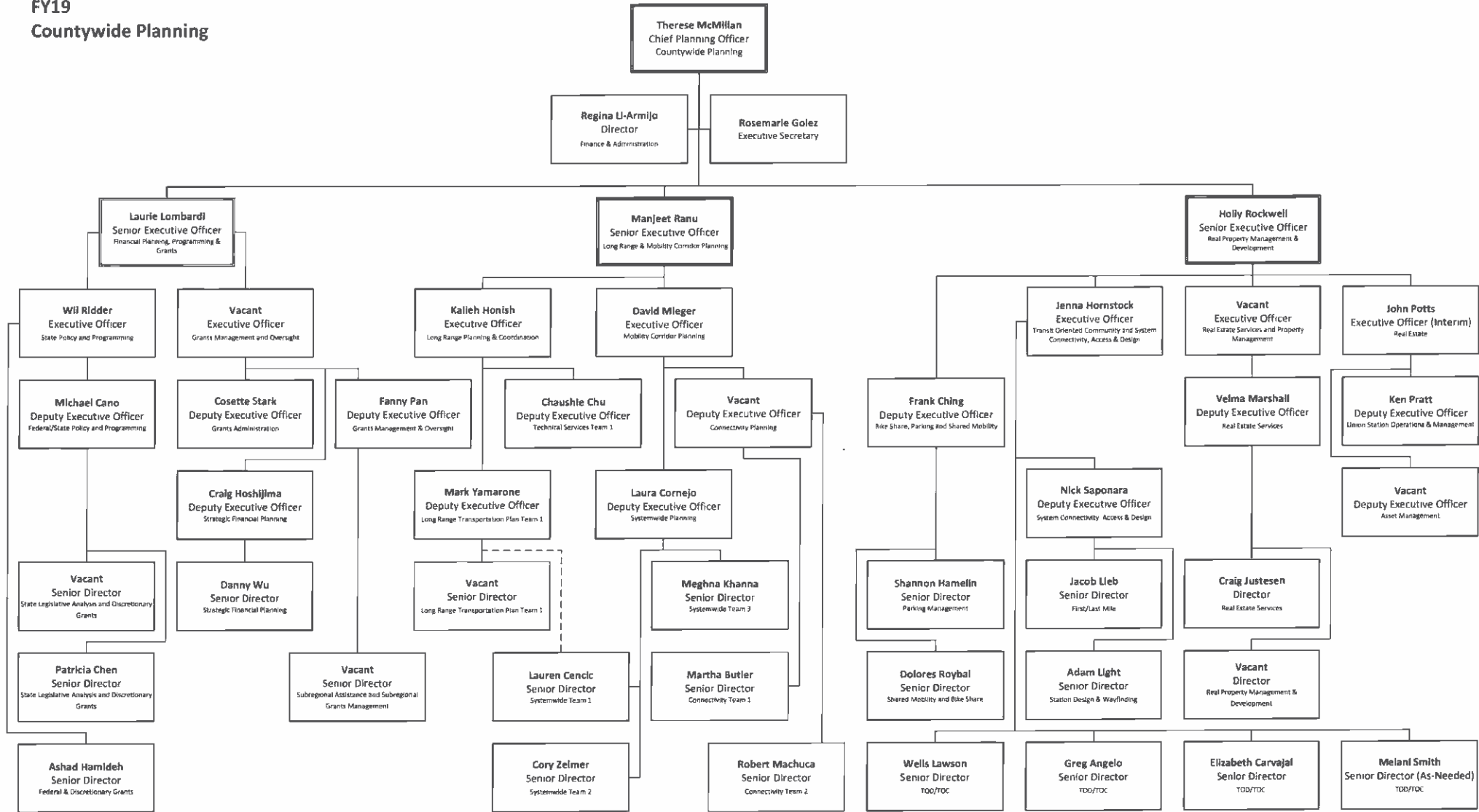
INTEGRATED PROJECT MANAGEMENT TEAM



Regional Connector Transit Project Responsibility and Reporting Matrix

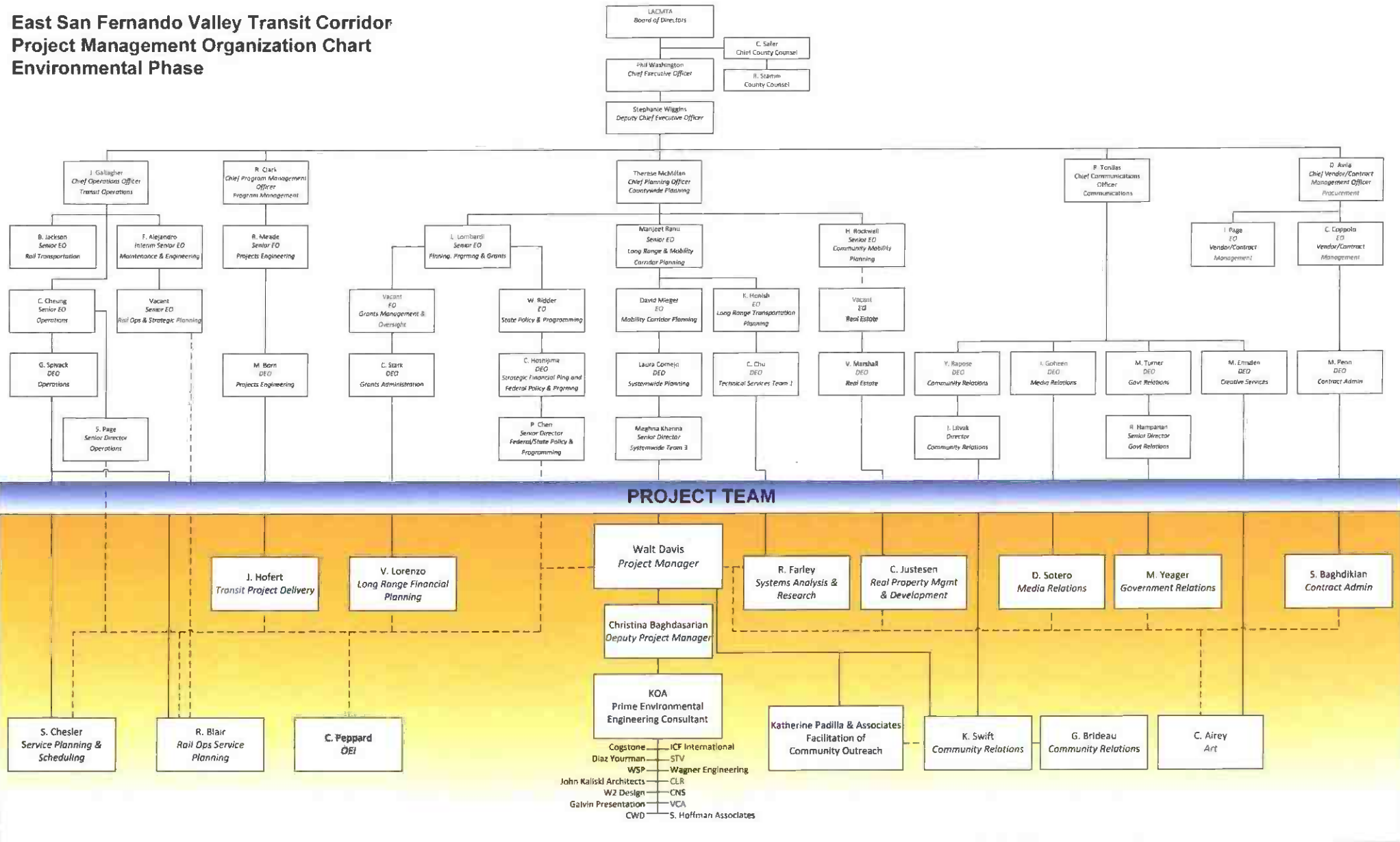


**FY19
Countywide Planning**



October 29, 2018

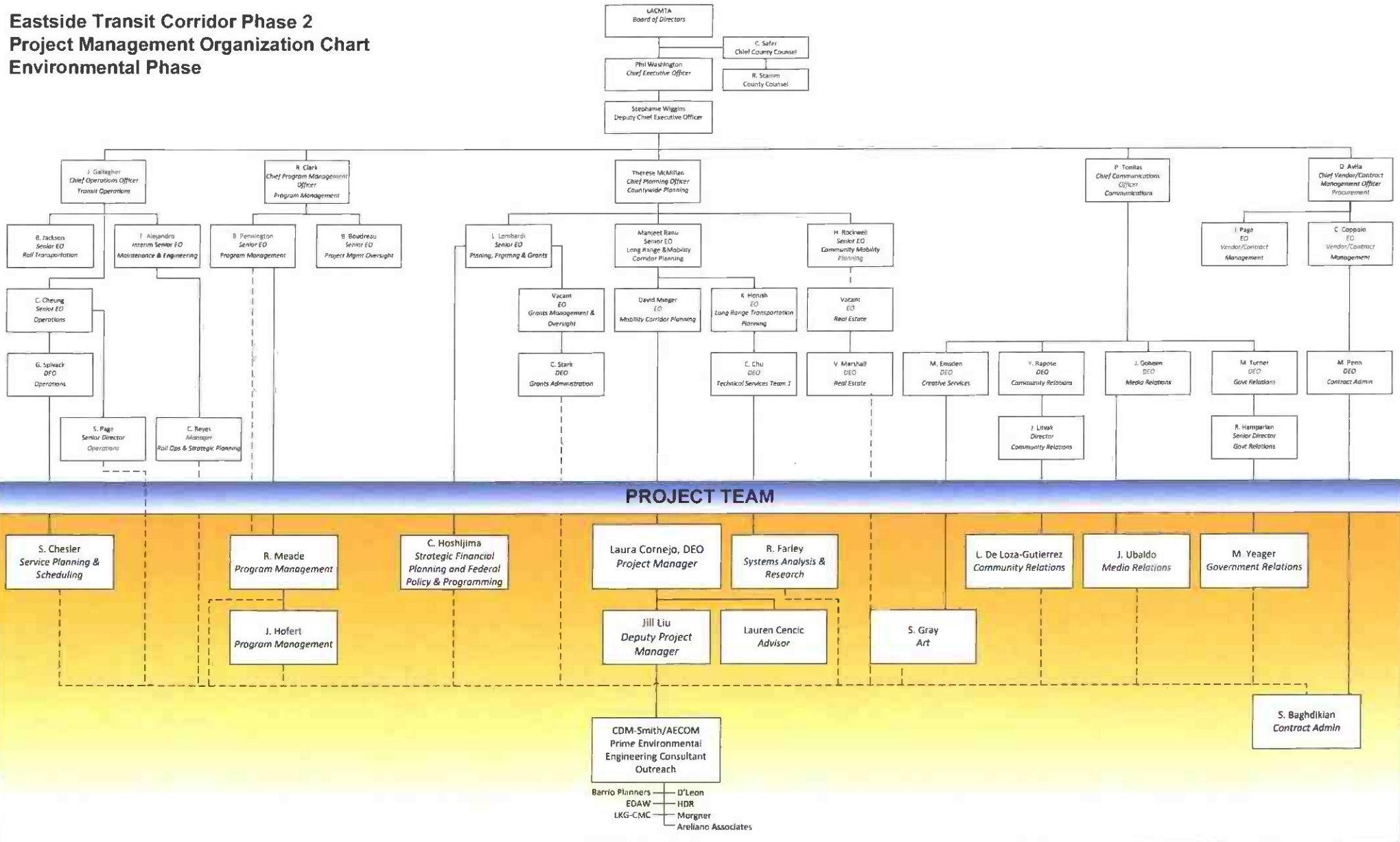
East San Fernando Valley Transit Corridor Project Management Organization Chart Environmental Phase



October 29, 2018

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

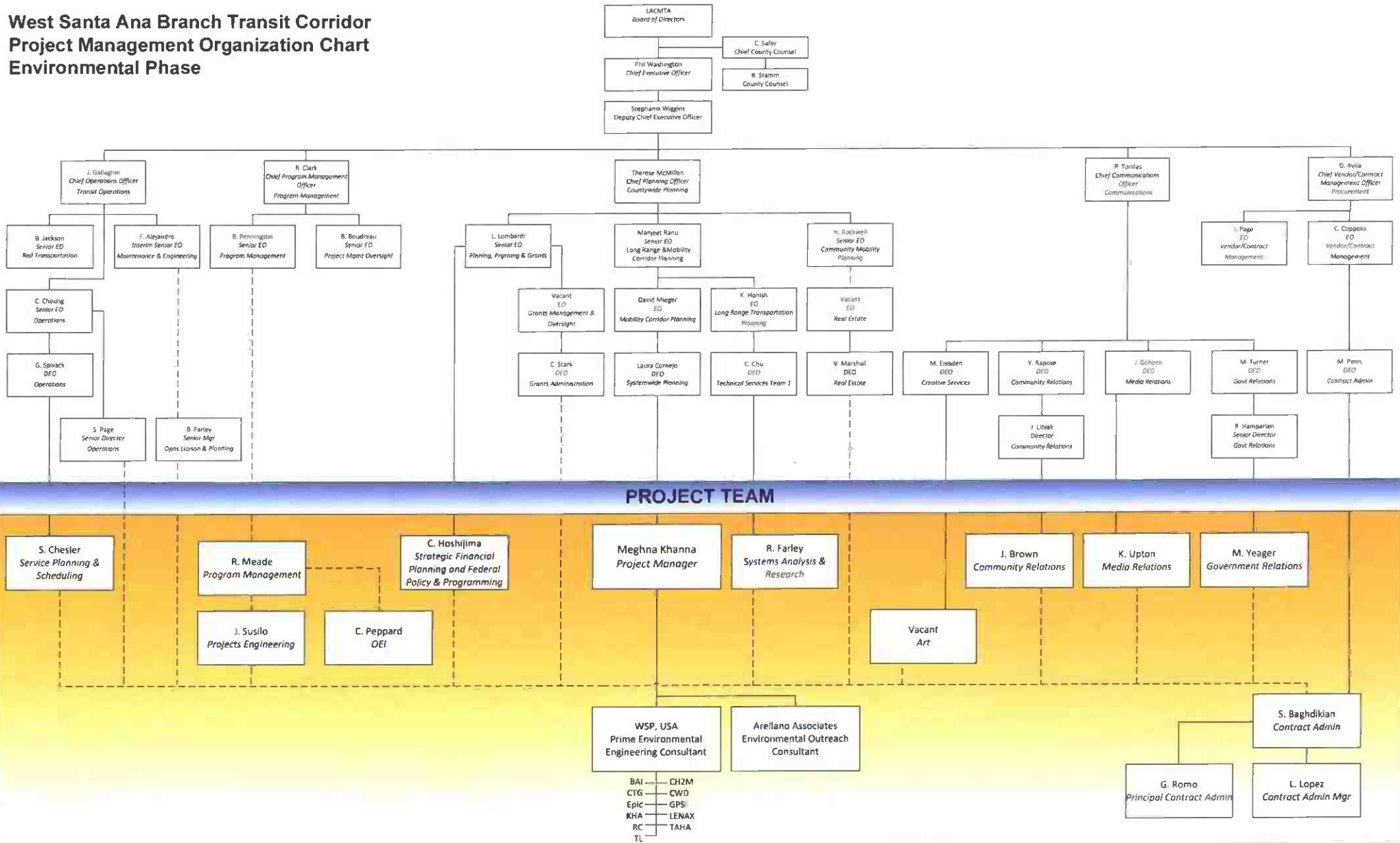
Eastside Transit Corridor Phase 2 Project Management Organization Chart Environmental Phase



October 29, 2018

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

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



October 29, 2018

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

**Los Angeles County Metropolitan Transportation Authority (Metro)
State and Federal Legislative Matrix – Board Approved Positions
NOVEMBER 2018
Metro Government Relations**

STATE LEGISLATION

Bill ID/Topic	Location	Summary	Position
AB 327 Gipson D South Coast Air Quality Management District: fleets.	In Senate T& H committee: Set, first hearing. Held without recommendation.	Existing law authorizes the governing board of the South Coast Air Quality Management District to adopt rules and regulations that require specified operators of public and commercial fleet vehicles consisting of 15 or more vehicles, when adding vehicles or replacing vehicles in an existing fleet or forming a new fleet, to purchase vehicles that are capable of operating on methanol or other equivalently clean-burning alternative fuel and that require these vehicles to be operated, to the maximum extent feasible, on the alternative fuel when operating in the south coast district. This bill instead would authorize the governing board of the south coast district to adopt rules and regulations that require specified operators of public and commercial fleet vehicles consisting of 15 or more vehicles to purchase the cleanest commercially available vehicles, as defined, that will meet the operator's operational needs; to require the replacement of no more than 15% of existing vehicles per calendar year, as specified; and to require those cleanest commercially available vehicles to be operated, to the maximum extent feasible, in the south coast district. This bill would make legislative findings and declarations as to the necessity of a special statute for the south coast district.	Oppose Unless Amended
AB 1205 Jones-Sawyer D Los Angeles County Metropolitan Transportation Authority: contracting.	05/16/18 Read second time. Ordered to third reading.	Existing law creates the Los Angeles County Metropolitan Transportation Authority (LACMTA), with various powers and duties with respect to transportation planning, programming, construction, and operations. Existing law authorizes LACMTA to award contracts under certain circumstances to small business enterprises with respect to work that is set aside for competition among certified small business enterprises, as long as price quotations are obtained by LACMTA from 3 or more small business enterprises, and requires LACMTA to report to the Legislature by December 31, 2017, regarding any contracts awarded in this regard. This bill would instead authorize LACMTA to award contracts in this manner as long as it solicits rather than obtains price quotations from 3 or more small business enterprises. The bill would delete the requirement that LACMTA report to the Legislature regarding contracts awarded to small business enterprises in this regard. This bill would similarly authorize LACMTA to award contracts under similar circumstances to medium business enterprises with respect to work that is set aside for competition among medium business enterprises.	SUPPORT (Sponsor)
AB 1912 Rodriguez D Public employees' retirement: joint powers agreements: liability.	Re-referred to Com. on APPR.	1) Existing law establishes various public agency retirement systems, including, among others, the Public Employees' Retirement System, the State Teachers' Retirement System, the Judges' Retirement System II, and various county retirement systems pursuant to the County Employees Retirement Law of 1937. These systems provide defined pension benefits to public employees based on age, service credit, and amount of final compensation. The Joint Exercise of Powers Act generally authorizes 2 or more public agencies, by agreement, to jointly exercise any common power. Under the act, if an agency is not one or more of the parties to the agreement but is a public entity, commission, or board constituted pursuant to the agreement, the debts, liabilities, and obligations of the agency are the debts, liabilities, and obligations of the parties to the agreement, unless the agreement specifies otherwise. The act also authorizes a party to a joint powers agreement to separately contract for, or assume responsibilities for, specific debts, liabilities, or obligations of the agency. This bill would eliminate that authorization, and would specify that if an agency established by a joint powers agreement	Oppose Unless Amended

**Los Angeles County Metropolitan Transportation Authority (Metro)
State and Federal Legislative Matrix – Board Approved Positions
NOVEMBER 2018
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Bill ID/Topic	Location	Summary	Position
		<p>participates in, or contracts with, a public retirement system, member agencies, both current and former to the agreement, would be required, upon prior to a termination or a decision to dissolve or cease the operations of the agency, to mutually agree as to the apportionment of the agency's retirement obligations among themselves, within 60 calendar days, themselves, provided that the agreement equals the total 100% of the retirement liability of the agency. If the member agencies are unable to mutually agree to the apportionment, the bill would require them to be jointly and severally liable for the retirement liability of the agency, the board to apportion the retirement liability of the agency to each member agency based on the share of service received from the agency, or the population of each member agency, as specified, and would establish procedures allowing a member agency to challenge the board's determination through the arbitration process. The bill would also provide that if a judgment is rendered against an agency or a party to the agreement for a breach of its obligations to the retirement system, the time within which a claim for injury may be presented or an action commenced against the other party that is subject to the liability determined by the judgment begins to run when the judgment is rendered. The bill would specify that those provisions apply both retroactively to all parties, both current and former, to the joint powers agreement, a member agency, or current and former member agency, that has an agreement with the board on or before January 1, 2019, and to new agreements with the board on or after that date.</p> <p>(2) The Public Employees' Retirement Law (PERL) creates the Public Employees' Retirement System (PERS), which provides a defined benefit to members of the system, based on final compensation, credited service, and age at retirement, subject to certain variations. PERL vests management and control of PERS in its Board of Administration.</p> <p>(3) Existing</p> <p>Existing law authorizes the governing board of a contracting agency to terminate its membership with PERS, subject to specified criteria. Existing law requires the PERS board to enter into a specified agreement with the governing body of a terminating agency, upon request of that agency, to ensure that final compensation is calculated in the same manner as benefits of nonterminating agencies, and that related necessary adjustments in the employer's contribution rate are made and benefits adequately funded, including a lump-sum payment at termination, if agreed to by the terminating agency and the board. Existing law requires a terminating agency to notify the PERS board of its intention to enter into this agreement within a specified period of time. Existing law authorizes the PERS board to choose not to enter into an agreement to terminate if the board determines that it is not in the best interests of PERS. Existing law requires all plan assets and liabilities of a terminating agency to be deposited in a single pooled account, the terminated agency pool subaccount within the Public Employees' Retirement Fund, a continuously appropriated fund.</p> <p>This bill would also require the PERS board to enter into the above-described agreement upon request of a member agency of a terminating agency formed under the Joint Exercise of Powers Act, and would require a member agency to notify the PERS board of its intention to enter into this agreement within a specified period of time. The bill would authorize the board, if it determines that it is not in the best interests of the retirement system, to choose not to enter into that agreement. To the extent that the bill would increase any lump-sum payments made by a terminating agency and deposited into a subaccount</p>	

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Bills highlighted in ████████ 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
NOVEMBER 2018
Metro Government Relations**

Bill ID/Topic	Location	Summary	Position
		<p>within the Public Employees' Retirement Fund, the bill would make an appropriation. The bill would also provide that if the governing body of a terminating agency or the governing bodies of its member agencies do not enter into an agreement, the member agencies would then assume the retirement obligations for their retirement systems.</p> <p>(4)</p> <p>(3) Existing law makes a terminated agency liable to the system for any deficit in funding for earned benefits, interest, and for reasonable and necessary costs of collection, including attorney's fees. Existing law provides that the board has a lien on the assets of a terminated contracting agency, as specified, and that assets shall also be available to pay actual costs, including attorney's fees necessarily expended for collection on the lien.</p> <p>This bill would extend that liability and lien to all of the parties of a terminating agency that was formed under the Joint Exercise of Powers Act. To the extent that these changes would increase deposits in the Public Employees' Retirement Fund, the bill would make an appropriation.</p> <p>(5)</p> <p>(4) Existing law authorizes the board of PERS to elect not to impose a reduction, or to impose a lesser reduction, on a terminated plan if the board has made all reasonable efforts to collect the amount necessary to fully fund the liabilities of the plan and the board finds that not reducing the benefits, or imposing a lesser reduction, will not impact the actuarial soundness of the terminated agency pool.</p> <p>This bill would eliminate that provision. The bill would require the board, prior to exercising its authority to reduce benefits, to consider and exhaust all options and necessary actions, including evaluating whether to bring a civil action against any member agencies to a terminated agency formed by an agreement under the Joint Exercise of Powers Act to compel payment of the terminated public agency's pension obligations. The bill would also specify that the board is entitled to reasonable attorney's fees in addition to other costs. The bill would also set forth related legislative findings. AMENDED July 3, 2018</p>	

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**Los Angeles County Metropolitan Transportation Authority (Metro)
State and Federal Legislative Matrix – Board Approved Positions
NOVEMBER 2018
Metro Government Relations**

Bill ID/Topic	Location	Summary	Position
<p>AB 1721 Committee on Revenue and Taxation</p> <p>Los Angeles County Metropolitan Transportation Authority: transactions and use tax.</p>	<p>SENATE RLS. 6/1/2017 - Referred to Com. on RLS. (Set for hearing) (1/23/2018 - Immune to Deadlines according to JR61(f). Deadlines do not apply to bills in a Rules committee.)</p>	<p>Existing law authorizes the Los Angeles County Metropolitan Transportation Authority (MTA) to impose an additional transportation transactions and use tax at a maximum rate of 0.5% as long as a specified existing 0.5% transactions and use tax is in effect, and at a maximum rate of 1% thereafter, as specified, for a period of time determined by the MTA, if certain conditions exist and subject to various requirements, including the adoption of an expenditure plan and voter approval, as specified. This bill would correct an erroneous cross-reference in these provisions. This bill contains other existing laws.</p>	Support
<p>AB 2417 Rodriguez D</p> <p>Metro Gold Line Foothill Extension Construction Authority.</p>	<p>05/23/18 In committee: Set, first hearing. Hearing canceled at the request of author.</p>	<p>(1) Existing law creates the Metro Gold Line Foothill Extension Construction Authority, governed by a board of 5 voting members and 3 nonvoting members, appointed as specified, for purposes relating to the development of a light rail project extending from the City of Los Angeles to the Cities of Pasadena and Montclair, and authorizes the authority to accept grants, fees, and allocations from federal, state, local agencies, and private entities, and to accept transfers of funds from federal, state, and local agencies.</p> <p>This bill would increase to 6 the voting members of the board by adding one voting member appointed by the City of Montclair. Because this bill would require a local authority to assume additional responsibilities, it would create a state-mandated local program.</p> <p>(2) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.</p> <p>This bill would provide that, if the Commission on State Mandates determines that the bill contains costs mandated by the state, reimbursement for those costs shall be made pursuant to the statutory provisions noted above.</p>	Oppose

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**Los Angeles County Metropolitan Transportation Authority (Metro)
State and Federal Legislative Matrix – Board Approved Positions
NOVEMBER 2018
Metro Government Relations**

Bill ID/Topic	Location	Summary	Position
AB 2548 Friedman D Commute benefit policies: Los Angeles County Metropolitan Transportation Authority.	07/05/18 In Assembly. Concurrence in Senate amendments pending. May be considered on or after August 3 pursuant to Assembly Rule 77.	Existing law declares that the fostering, continuance, and development of public transportation systems are a matter of statewide concern. Existing law creates the Los Angeles County Metropolitan Transportation Authority, with various powers and duties with respect to transportation planning, programming, construction, and operations. This bill would authorize the authority to adopt a commute benefit ordinance that requires covered employers operating within the authority's area with a specified number of employees to offer certain employees commute benefits, as specified, except that the bill would prohibit the ordinance from affecting employers covered by certain South Coast Air Quality Management District rules or regulations. The bill would require the ordinance to specify certain matters, including any consequences for noncompliance. The bill would, if the authority adopts a commute benefit ordinance, require the authority, before January 1, 2022, to submit a report to the transportation policy committees of each house of the Legislature that includes specified elements. Last Amended on 6/25/2018	SUPPORT (Sponsor)

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**Los Angeles County Metropolitan Transportation Authority (Metro)
State and Federal Legislative Matrix – Board Approved Positions
NOVEMBER 2018
Metro Government Relations**

Bill ID/Topic	Location	Summary	Position
<p>AB 3124 Bloom D</p> <p>Vehicles: length limitations: buses: bicycle transportation devices.</p>	<p>06/01/18 Chaptered by Secretary of State - Chapter 22, Statutes of 2018.</p>	<p>Existing law imposes a 40-foot limitation on the length of vehicles that may be operated on the highways, with specified exemptions. Existing law exempts from this limitation an articulated bus or articulated trolley coach that does not exceed a length of 60 feet, and authorizes the bus or trolley to be equipped with a folding device attached to the front of the bus or trolley if the device is designed and used exclusively for transporting bicycles. Existing law prohibits the above-described device from extending more than 36 inches from the front body of the bus when fully deployed, and prohibits a bicycle that is transported on that device from having the bicycle handlebars extend more than 42 inches from the front of the bus. This bill would additionally authorize an articulated bus or articulated trolley coach that does not exceed a length of 60 feet to be equipped with a folding device attached to the front of the bus or trolley if the device is designed and used exclusively for transporting bicycles as long as the device does not extend more than 40 inches from the front body of the bus when fully deployed. The bill would require a public agency operating transit services to establish a route review committee, as specified, in order to operate that articulated bus or articulated trolley coach, and would require the committee, by a majority vote, to make a determination of which routes are suitable for the safe operation of that articulated bus or articulated trolley coach. The bill would also make technical, nonsubstantive changes and a conforming change in a related provision. Last Amended on 4/2/2018</p>	<p>Support</p>
<p>AB 3201 Daly D</p> <p>California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program.</p>	<p>05/25/18 In committee: Held under submission.</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 act authorizes the state board to include the use of market-based compliance mechanisms. Existing law requires all moneys, except for fines and penalties, collected by the state board as part of a market-based compliance mechanism to be deposited in the Greenhouse Gas Reduction Fund and to be available upon appropriation by the Legislature. This bill would add large-scale deployments of transit buses to the program's list of eligible projects, require the annual framework and plan for the program to instead be a 3-year framework and plan, and revise the definition of zero- and near-zero-emission to include infrastructure that reduces greenhouse gas emissions and improves air quality when compared with conventional or fully commercialized alternatives. This bill contains other existing laws. Last Amended on 5/1/2018</p>	<p>Support</p>

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<p>SB 268 Mendoza D</p> <p>Los Angeles County Metropolitan Transportation Authority.</p>	<p>ASSEMBLY L. GOV. 9/5/2017 - From committee with author's amendments. Read second time and amended. Re-referred to Com. on L. GOV.</p>	<p>Existing law creates the Los Angeles County Metropolitan Transportation Authority with specified powers and duties relative to transportation planning, programming, and operations in the County of Los Angeles. The authority is governed by a 14-member board of directors that consists of the Mayor of the City of Los Angeles, 2 public members and one Los Angeles City Council member appointed by the mayor, 4 members appointed from the other cities in the county, the 5 members of the Los Angeles County Board of Supervisors, and a nonvoting member appointed by the Governor. This bill would require the authority, the Los Angeles County Division of the League of California Cities, the California Contract Cities Association, and the Los Angeles County City Selection Committee to prepare and provide to the Legislature by December 1, 2018, a plan agreed to by at least 3 of these entities, for reorganizing the membership of the authority to include 22 members, and to provide equitable and proportional voting representation for each area of the county on the authority, including more representation for cities other than the City of Los Angeles. The bill would require the plan to provide for the reconstitution of the authority no later than January 1, 2020. The bill, commencing on January 1, 2020, would require the membership of the authority to be reconstituted pursuant to the plan. The bill, if a plan is not submitted or is not implemented, would, commencing on January 1, 2020, provide for the authority to consist of 22 members, including the 5 members of the Los Angeles County Board of Supervisors, the Mayor of the City of Los Angeles, 5 members of the Los Angeles City Council and one public member appointed by the mayor, one member appointed by the City of Long Beach, 8 members from cities other than Los Angeles appointed by the Los Angeles County City Selection Committee, and one nonvoting member appointed by the Governor. The bill would require every appointee to serve a 4-year term without limitation or until the expiration of the term of his or her elected office. The bill would also delete, on January 1, 2020, the requirement for the authority to submit a plan to the Legislature if the number of members of the board of supervisors is increased. This bill contains other related provisions and other existing laws. Last Amended on 9/5/2017</p>	<p>Oppose</p>

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**Los Angeles County Metropolitan Transportation Authority (Metro)
State and Federal Legislative Matrix – Board Approved Positions
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Bill ID/Topic	Location	Summary	Position
<p>SB 1434 Leyva D</p> <p>Transportation electrification: electricity rate design.</p>	<p>07/02/18 Read second time and amended. Re-referred to Com. on APPR.</p>	<p>Under existing law, the Public Utilities Commission (PUC) has regulatory authority over public utilities, including electrical corporations Existing law, enacted as part of the Clean Energy and Pollution Reduction Act of 2015, requires the PUC, in consultation with the State Energy Resources Conservation and Development Commission and State Air Resources Board, to direct electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification to reduce dependence on petroleum, meet air quality standards, achieve the goals set forth in the Charge Ahead California Initiative, and reduce emissions of greenhouse gases to 40% below 1990 levels by 2030 and to 80% below 1990 levels by 2050. That law requires that the programs proposed by electrical corporations seek to minimize overall costs and maximize overall benefits. The PUC is required to approve, or modify and approve, programs and investments in transportation electrification, including those that deploy charging infrastructure, through a reasonable cost recovery mechanism, if they are consistent with the above-described purposes, do not unfairly compete with nonutility enterprises, include performance accountability measures, and are in the interests of ratepayers. This bill would require the PUC to direct electrical corporations with more than 100,000 service connections in California to file rate design applications, specific to transit agencies as commercial customers, that support and accelerate the deployment of zero-emission transit buses to reduce dependence on petroleum, meet air quality standards, and reduce emissions of greenhouse gases to 40% below 1990 levels by 2030 and to 80% below 1990 levels by 2050. The bill would authorize an electrical corporation with 100,000 or fewer service connections in California to file rate design applications for those purposes. The bill would require that a rate design proposed by an electrical corporation seek to minimize overall costs and maximize overall benefits to transit agencies and would require the commission to approve, or modify and approve, rate design applications, if they are consistent with this requirement and are in the interests of ratepayers. This bill contains other existing laws. Last Amended on 7/2/2018</p>	<p>Support</p>

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Metro Government Relations**

Bill ID/Topic	Location	Summary	Position
<p>SB 1479 Stern D</p> <p>Los Angeles County Metropolitan Transportation Authority: billing requirement.</p>	<p>SENATE E. U., & C. 4/23/2018 - April 25 set for first hearing canceled at the request of author.</p>	<p>Existing law creates the Los Angeles County Metropolitan Transportation Authority with certain powers and duties relative to transportation planning and programming, and the operation of transit service. Existing law provides that the authority is the successor agency to the Southern California Rapid Transit District and the Los Angeles County Transportation Commission. This bill would adopt electricity billing requirements applicable to the Los Angeles County Metropolitan Transportation Authority that are similar to the above-described requirements applicable to BART, but would also impose those requirements applicable to an electrical corporation in the BART statute on a local publicly owned electric utility. The bill would declare that, due to the special circumstances applicable only to the Los Angeles County Metropolitan Transportation Authority, a general statute cannot be made applicable within the meaning of Section 16 of Article IV of the California Constitution, and the enactment of a special statute is therefore necessary. This bill contains other existing laws. Last Amended on 4/2/2018</p>	<p>Sponsor - Support</p>

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**Los Angeles County Metropolitan Transportation Authority (Metro)
State and Federal Legislative Matrix – Board Approved Positions
NOVEMBER 2018
Metro Government Relations**

FEDERAL

BILL/AUTHOR	DESCRIPTION	STATUS
SENATE BILL 2320 Senator John Cornyn (R-TX) And Senator Mark Warner (D-VA)	“BUILDING AMERICAN INFRASTRUCTURE AND LEVERAGING DEVELOPMENT ACT” or BUILD ACT The U.S. Department of Transportation (USDOT) currently has a statutory cap (\$15 billion) on the amount of Private Activity Bonds available for approval to finance infrastructure projects. USDOT has approved \$10.8 billion in Private Activity Bonds, currently leaving just under \$5 billion available nationwide. It is expected that future project approvals throughout the nation will continue to decrease the amount of Private Activity Bonds available. S. 2320 raises the statutory cap by \$5.8 billion on Private Activity Bonds available to USDOT for approval.	SENATE – REFERRED TO THE COMMITTEE ON FINANCE
HOUSE RESOLUTION 1458 REPRESENTATIVE EARL BLUMENAUER (D-OR)	“RAISE IT ACT” The federal government’s Highway Trust Fund is facing solvency issues and is increasingly reliant on general fund transfers from the U.S. Treasury. According to the Congressional Budget Office, the “trust fund will have insufficient resources to meet all of its obligations, resulting in steadily accumulating shortfalls.” Furthermore, the Congressional Budget Office estimates that the Highway Trust Fund will incur negative balances by the end of Fiscal Year 2020. Approving a solution to ensure solvency of the Highway Trust Fund will be a critical task for Congress to address as the current surface transportation authorization bill expires September 30, 2020.	HOUSE – REFERRED TO THE COMMITTEE ON WAYS AND MEANS

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**Los Angeles County Metropolitan Transportation Authority (Metro)
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<p>H.R. 6016</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>7/29/18 – Metro Board approves Support Work With Author position</p> <p>House - 06/07/2018 Referred to the Subcommittee on Highways and Transit</p>
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**Los Angeles County Metropolitan Transportation Authority (Metro)
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<p>H.R. 3305</p> <p>U.S. House of Representative Earl Blumenauer (D-Portland)</p>	<p>THE BIKESHARE TRANSIT ACT OF 2017</p> <p>Which would, if enacted into federal law, clarify the definition of bikeshare projects that qualify as an “associated transit improvement” under Title 49 of U.S. Code, add bikeshare projects to the definition of “capital project” under Title 49 of U.S. Code, and make bikeshare projects eligible for funding under the Congestion Mitigation and Air Quality Improvement Program (CMAQ) under Title 23 of U.S. Code. The legislation seeks to add bikeshare projects to the formal definitions of transit projects as well as make clear to states that administer FHWA funding that bikeshare is eligible to receive federal funding.</p>	<p>7/29/18 - Metro Board approves Support position (previous Metro support in 2016)</p> <p>House - 07/20/2017 Referred to the Subcommittee on Highways and Transit.</p>
<p>H.R. 3001</p> <p>U.S. Representative Alan Lowenthal (D-Long Beach)</p>	<p>ECONOMY IN MOTION: THE NATIONAL MULTIMODAL AND SUSTAINABLE FREIGHT INFRASTRUCTURE ACT</p> <p>Would establish a Freight Transportation Infrastructure Trust Fund and create freight specific formula and competitive grant program for multimodal projects. In 2015, Congress passed the bipartisan Fixing America’s Surface Transportation (FAST) Act, which for the first time outlined a national freight policy and set up both formula and competitive programs to invest in these systems. The FAST Act funded both of these programs through 2021, but because the Highway Trust Fund is not able to provide the amount of funding necessary to keep up with the nation’s infrastructure needs, it is important to identify and support sustainable funding sources that will be dedicated to specific uses that will improve infrastructure.</p>	<p>House - 06/23/2017 Referred to the Subcommittee on Water Resources and Environment.</p>

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<p>H.R. 3388</p> <p>U.S. Representative Robert e. Latta (R-Ohio)</p>	<p>SELF DRIVE Act Designating Each Car's Automation Level Act or the DECAL Act</p> <p>This bill requires the Department of Transportation (DOT) to: complete research to determine the most cost effective method and terminology for informing consumers about the capabilities and limitations of each highly automated vehicle or each vehicle that performs partial driving automation; and determine whether such information includes terminology as defined by SAE International in Recommended Practice Report J3016 (published September 2016) or alternative terminology. After completion of such research, DOT shall initiate a rulemaking proceeding to require manufacturers to inform consumers about such information.</p> <p>The bill defines: (1) a "highly automated vehicle" as a motor vehicle, other than a commercial motor vehicle, that is equipped with an automated driving system; and (2) an "automated driving system" as the hardware and software of a vehicle that are collectively capable of performing the entire dynamic driving task on a sustained basis, regardless of whether such system is limited to a specific operational design domain.</p>	<p>Senate - 09/07/2017 Received in the Senate and Read twice and referred to the Committee on Commerce, Science, and Transportation</p>
<p>S. 1885</p> <p>U.S. Senator John Thune (R-South Dakota)</p>	<p>AV START Act The American Vision for Safer Transportation Through Advancement of Revolutionary Technologies (AV START) Act</p> <p>To support the development of highly automated vehicle safety technologies, and for other purposes. The legislation outlines provisions related to: safety oversight, federal state and local rules, using provisions from HR 3388, deployment, rulemaking, cyber security, data sharing and vehicle safety standards, consumer education and ADA considerations. Directs additional research and coordination with state and local governments on traffic safety and law enforcement. Creates requirements for manufacturers to ensure that all self-driving vehicles account for state and local traffic laws.</p>	<p>Senate - 11/28/2017 Placed on Senate Legislative Calendar under General Orders. Calendar No. 268</p>

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**Los Angeles County Metropolitan Transportation Authority (Metro)
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<p>H.R 1625 – the Consolidated Appropriations Act, FY 2018</p>	<p>On March 23, 2018, the U.S. Senate passed H.R.1625, the Consolidated Appropriations Act, 2018 by a vote of 65 – 32. The measure was signed later that day by President Trump, averting a government shutdown slated for the end of that day. The House previously passed this bill by a vote of 256 – 167. Overall, the bill provides about \$13.5 billion in budgetary resources for the Federal Transit Administration (FTA), which is an increase of more than \$1 billion as compared to FY 2017 enacted levels. Programs funded by Mass Transit Account (MTA) of the Highway Trust Fund received \$9.733 billion, as authorized by the Fixing America's Surface Transportation (FAST) Act for FY 2018. A handful of programs traditionally funded by the MTA also received an additional \$834 million from the general fund, including \$400 million for Bus and Bus Facilities grant programs, \$400 million for State of Good Repair, and \$30 million for High Density States. Of the Bus and Bus Facilities funding, \$209.1 million is allocated to formula grants, \$161.45 for competitive grants, and \$29.45 for no or low emissions grants.</p> <p>The Capital Investment Grants (CIG) program was appropriated \$2.645 billion, up from \$2.413 billion in FY 2017. This total includes more than \$1.5 billion for New Starts, almost \$716 million for Core Capacity projects, and almost \$401 million for Small Starts. The bill also contains strong, legislative language to ensure the future of the CIG program.</p> <p>This bill provides \$1.9 billion for Amtrak overall. Of this, \$650 million goes to Amtrak’s Northeast Corridor (NEC), which is \$322 million more than FY 2017 enacted levels, and \$1.29 billion for Amtrak’s National Network. Finally, the TIGER program is funded at a level of \$1.5. billion, \$1 billion more than FY 2017 enacted levels.</p>	<p>3/23/18 Congress approved to fund the Federal Government at through September 30, 2018.</p> <p>The President then signed the bill shortly after Congress held the vote.</p>
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<p>H.R. 5857</p> <p>U.S. Representative Peter DeFazio (D-Oregon)</p>	<p>STOP SEXUAL ASSAULT AND HARASSMENT IN TRANSPORTATION ACT</p> <p>Would require transportation providers to adopt a formal policy providing that sexual assault and harassment in transportation is unacceptable under any circumstance. These providers must prominently display, on their websites or otherwise, a statement that they have adopted such a policy as well as the procedures their passengers can follow for reporting incidents of sexual assault and harassment. The policy must facilitate the reporting of these incidents; establish procedures for employees to follow if such an incident is reported; and require all appropriate employees to be trained on the policy. Additionally, the bill requires the Secretary of Transportation to annually collect data on incidents of sexual assault and harassment and make this data publicly available.</p>	<p>October 2018: Metro Board approved Support position</p> <p>House – referred to the Transportation and Infrastructure Subcommittee on Railroads, Pipelines and Hazardous Materials</p>
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MARY C. WICKHAM
County Counsel

October 30, 2018

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

Re: Quarterly Update on Status of Key Legal Actions


Dear Ms. Fox:

Attached please find the Los Angeles County Metropolitan Transportation Authority's quarterly update as of September 30, 2018, 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
Transportation Division

CMS:kh

Attachments

c: Brian Boudreau
Emma Nogales
Leslie Rogers
Cindy Smouse
Cosette Stark

Los Angeles County Metropolitan Transportation Authority
 Status of Key MTA Litigation Related to Federally Funded MTA Projects
 As of September 30, 2018

CASE NAME	CASE NUMBER	GRANT NUMBER	NARRATIVE	CASE STATUS
Beverly Hills Unified School District	2:18-cv-00716		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. MTA and FTA supplemented the administrative record (AR) on 10/25/18, in accordance with the Court's Order filed 9/21/18. If Plaintiff requests further supplementation, a status conference regarding the AR will be held on 11/5/18. If Plaintiff accepts the AR is complete, the parties will submit a proposed briefing schedule to the court for a hearing on the merits of Plaintiff's complaint.
Brentwood Residents Coalition v. MTA	BS173523		This lawsuit is against the City of Los Angeles, with MTA named as a real party in interest. The lawsuit alleges that the City approved a categorical exemption for the Boring Company's proof of concept tunnel on Sepulveda Boulevard in West Los Angeles in violation of CEQA. Petitioners contend an Environmental Impact Report should have been prepared instead.	Further Case Management Conference set for 11/30/18. The administrative record will be completed by 1/19/19. MTA will file a responsive pleading within 20 days after certification of the administrative record. Trial is set for 4/5/19.
Crenshaw Subway Coalition v. MTA, et al.	CV11-9603	TIFIA3 Loan	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. MTA	BS144164		Petitioner alleges that MTA accelerated funding for the subway without CEQA clearance.	Petitioner filed a Request for Dismissal with prejudice on 10/9/18.
City of Beverly Hills v. FTA, MTA	2:18-cv-03891		This lawsuit is against both MTA and the Federal Transit Administration ("FTA"), and their respective officials. The lawsuit alleges that the	MTA will file a responsive pleading by 12/14/18.

CASE NAME	CASE NUMBER	GRANT NUMBER	NARRATIVE	CASE STATUS
			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.	
Today's IV. Inc. v. MTA	BS160846		Petitioner alleges that MTA is not maintaining access to the hotel and complying with applicable noise standards in violation of the MMRP.	Plaintiff's applications for various TROs were denied; discovery is ongoing. Trial will be reset for summer 2019. MTA's demurrer to Third Amended Complaint sustained with leave to amend. Plaintiff intends to file a Fourth Amended Complaint.
West Adams Heritage Association	BS173732		This lawsuit is against Caltrans, with MTA named as a real party in interest. The lawsuit alleges that Caltrans approved a Mitigated Negative Declaration for its I-110 Flyover Project in downtown Los Angeles in violation of CEQA. Petitioners contend an Environmental Impact Report should have been prepared instead.	CEQA settlement meeting held on 7/19/18. Settlement discussions are 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.	In 2016, MTA initiated summary proceedings to contest plaintiff's patent claims. On 11/17/17, the Patent Trial and Appeal Board ("PTAB") issued a decision in favor of MTA finding that the claims on which plaintiff sued MTA are unpatentable. On 1/17/18, plaintiff filed an appeal in the United States Federal Circuit Court; however, pending a contrary decision on the appeal, MTA and other transportation agencies are free to continue using the ExpressLanes

CASE NAME	CASE NUMBER	GRANT NUMBER	NARRATIVE	CASE STATUS
				and the transponder devices associated with the ExpressLanes. The appeal process continues to make its way through the Federal Circuit Court, and a hearing on the appeal is expected to be scheduled in late 2018/early 2019.
Wheelchair-Disability-Discrimination Cases				
Rosa Miller v. MTA	BC674571		This is a personal injury case in which the plaintiff alleged an ADA violation when she could not sit in seating area designated for disabled passengers because those seats were occupied by what she perceived to be non-disabled passengers.	FSC 2/13/19 Trial 2/27/19 OSC re dismissal for failure to prosecute 9/1/20
Leo Jordan v. MTA	BC710101		This is a personal injury case wherein the plaintiff, a wheelchair passenger, alleged he was traveling on an Access van when the van collided with another vehicle and caused him injuries as a result of the accident. The plaintiff also alleged an ADA violation because the Access van driver failed to properly secure and transport him.	MTA tendered this case to Access on 8/17/18 pursuant to the MOU between MTA and Access. Tender was accepted on 9/27/18. FSC 12/2/19 Trial 12/16/19 OSC re dismissal 6/14/21

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

September 30, 2018

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. 11.18 acres of this property was acquired with federal assistance.

In May 2017, the Metro Board authorized an Exclusive Negotiation Agreement (“**ENA**”) 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 of the site will include 1,000 – 1,200 market rate for-rent apartment units, 250 – 325 affordable rate for-rent apartment units, 300,000 - 400,000 square feet of office space, and 80,000 – 150,000 square feet of retail uses. TCLA and the project team are working closely with Metro Operations and Engineering to determine the optimal configuration of the new transit center and replacement transit parking. In October 2018, FTA approved Metro’s joint development project request subject to final review of, and concurrence with, the JDA and ground leases. Further community outreach, environmental clearance and entitlement work is expected to start in 2019.

In the interim, Metro is leasing a portion of the 1.8-acre site to an adjacent business for parking.

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 the Phase B site expired, leaving it available for development, and 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, and following its initial evaluation, requested a Phase 2 Detailed Proposal from the proposer. Such a proposal was submitted to Metro on August 31, 2018 and is currently under review.

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 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) - NO CHANGE

These parcels encompass the Metro Gold Line's 1.3-acre Mariachi Plaza station site.

In March 2017, Metro released a Request for Proposals (RFP) 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 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. During the 18-month ENA period, ELACC, 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.

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 (RFP) for joint development 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)

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 ("ENA") with respect to the development of the Soto station site and the 0.29-acre parcel. Under the framework of the ENA, and a prior Short Term Exclusive

Agreement and Planning Document (the “**Interim Agreement**”), 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 that will be constructed on a portion of 1.09-acre Soto station site and will provide 66 apartments, 65 of which will be affordable, to families earning 30-50% of Area Median Income, along with approximately 5,000 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 agreement from Metro, is being considered for community space and other community serving uses as part of the proposed development.

In December 2017, Metro and Bridge/ELACC extended the term of the ENA through December 22, 2018 and the parties intend to extend the ENA again through December 31, 2019, subject to Metro Board of Directors approval. During the quarter, the parties refined the project’s design to a point where it was ready for submittal to the City of Los Angeles as part of Bridge/ELACC’s entitlement package. The parties also conducted outreach that sought community input regarding the refined design. This outreach included the Boyle Heights Neighborhood Council and the Metro-established Boyle Heights Design Review Advisory Committee. Additionally, the project met a key funding milestone when it was recommended for inclusion in City of Los Angeles Housing and Community Investment Department’s affordable housing funding pipeline in August 2018.

The next steps for the project include submittal of an entitlements/CEQA package to the City of Los Angeles for their review and approval, 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 set forth in a Joint Development Agreement and ground lease.

The Bridge/ELACC team was selected via a competitive procurement process to explore development of Metro’s Soto station sites in March 2015.

1st/Lorena (Parcel EG-409) - NO CHANGE

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 ENA to explore the feasibility of constructing and operating a mixed-use, transit-oriented development on this site. Unless extended, the ENA will expire in June 2019. The proposed development will contain 49 apartments (24 of which will provide supportive housing for veterans) 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.

Cesar E. Chavez/Soto (Parcels EE-220 and EE-272 through EE-274) – NO CHANGE

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 key terms and conditions consistent with Metro Board-approved key terms and conditions.

Abode was selected via a competitive procurement process for development of the site in March 2015 and prior to execution of the Joint Development Agreement had been advancing the project under a Short-Term Exclusive Negotiation Agreement and Planning Document (executed in March 2015) and an Exclusive Negotiation Agreement and Planning Document (executed in December 2015).

The project will provide 77 apartments, 76 of which will be affordable to families earning between 30% and 50% of the area median income, and will include approximately 8,000 square feet of ground floor retail space.

Cesar E. Chavez/Fickett (Parcels EE-276 through EE-283) - NO CHANGE

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 an RFP 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 and Planning Document ("**ENA**") with one of the proposers, Abode Communities ("**Abode**"), who had the highest scoring proposal.

During the 18-month ENA period, 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 will provide 60 apartments, 59 of which will be affordable for families earning between 30% and 50% of Area Median Income. It will also include 25,000 square feet for a community serving grocery store and a 6,500 square foot community park.

Throughout the quarter, Metro leased this site to a community organization for parking.

Los Angeles County
Metropolitan Transportation Authority
California

OPERATIONS MONTHLY RAIL PERFORMANCE REPORT

SEPTEMBER 2018



METRO RAIL PERFORMANCE – SEPTEMBER 2018

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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	Jul Month	Aug Month	Sep Month
Systemwide									
On-Time Pullouts	99.63%	99.61%	99.68%	99.80%	99.81%	●	99.97%	99.66%	99.83%
Mean Miles Between Chargeable Mechanical Failures ³	30,482	29,711	31,146	37,615	37,980	●	37,105	36,652	40,532
In-Service On-time Performance	98.10%	98.24%	98.48%	99.10%	98.71%	●	98.48%	98.51%	99.18%
Service Delivery Ratio	99.22%	99.23%	99.22%	99.70%	99.43%	●	99.39%	99.33%	99.57%
Traffic Accidents Per 100,000 Train Miles	1.17	1.01	0.96	0.85	0.49	●	0.53	0.39	0.55
CPUC Reportable Accidents per 100,000 Train Miles	0.60	0.36	0.54	0.37	0.18	●	0.13	0.00	0.41
Passenger Accidents per 100,000 Boardings	0.016	0.023	0.022	0.010	0.019	●	0.011	0.022	0.023
Complaints per 100,000 Boardings	1.43	1.98	1.81	1.10	1.86	●	2.02	1.70	1.88
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours ^{1,2}	10.97	12.27	11.17	11.53	11.14	●	8.60	13.83	10.88
Lost Work Days per 200,000 Exposure Hours ^{1,2}	482	733	886	988.45	1,006	●	1,062	951	-
OSHA Injuries per 200,000 Exposure Hours ^{1,2}	6.32	8.53	7.61	7.17	6.57	●	4.78	8.30	-
Wayside									
Past-Due Preventive Maintenance - Aging of Outstanding Work Orders	1	3	82	N/A	94	N/A	17	18	59
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	4.77	5.35	5.02	5.40	6.24	●	11.64	7.18	0.00
Lost Work Days per 200,000 Exposure Hours ¹	148	194	312	296	917	●	1,586	298	-
OSHA Injuries per 200,000 Exposure Hours ¹	4.40	4.01	4.01	4.13	5.59	●	7.76	3.59	-
Blue Line									
On-Time Pullouts	99.59%	99.60%	99.39%	99.50%	99.77%	●	99.86%	100.00%	99.42%
Mean Miles Between Chargeable Mechanical Failures ³	19,240	15,405	13,772	18,555	19,191	●	15,062	21,868	22,639
In-Service On-time Performance	96.10%	96.44%	97.11%	98.80%	97.33%	●	96.52%	96.97%	98.55%
Service Delivery Ratio	98.41%	98.54%	98.42%	99.40%	99.05%	●	98.81%	99.10%	99.25%
Traffic Accidents Per 100,000 Train Miles	2.38	2.18	1.63	1.84	0.65	●	0.66	0.63	0.67
CPUC Reportable Accidents per 100,000 Train Miles	1.39	0.71	1.03	0.40	0.00	●	0.00	0.00	0.00
Passenger Accidents per 100,000 Boardings	0.016	0.046	0.033	0.010	0.042	●	0.000	0.000	0.132
Complaints per 100,000 Boardings	1.33	1.67	2.22	1.40	2.36	●	3.19	1.86	2.04
New Workers' Compensation Indemnity Claims per	15.08	16.74	13.95	11.90	17.91	●	5.43	25.39	22.57
Lost Work Days per 200,000 Exposure Hours ¹	797	836	1,016	953	985	●	898	1,066	-
OSHA Injuries per 200,000 Exposure Hours ¹	6.79	10.40	8.10	5.93	10.50	●	0.00	20.31	-

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	Jul Month	Aug Month	Sep Month
Red Line									
On-Time Pullouts	99.79%	99.95%	99.88%	100.00%	99.80%	●	100.00%	99.61%	99.79%
Mean Miles Between Chargeable Mechanical Failures ³	94,312	104,637	68,407	94,035	78,939	●	73,024	116,113	63,545
In-Service On-time Performance	99.45%	99.39%	99.33%	99.70%	99.50%	●	99.50%	99.32%	99.69%
Service Delivery Ratio	99.71%	99.72%	99.65%	100.00%	99.63%	●	99.68%	99.42%	99.80%
Traffic Accidents Per 100,000 Train Miles	0.75	0.57	0.64	0.57	0.57	●	0.85	0.00	0.87
CPUC Reportable Accidents per 100,000 Train Miles	0.07	0.14	0.21	0.21	0.28	●	0.00	0.00	0.87
Passenger Accidents per 100,000 Boardings	0.002	0.004	0.000	0.000	0.000	●	0.000	0.000	0.000
Complaints per 100,000 Boardings	0.57	1.19	1.16	0.55	1.12	●	1.17	1.34	0.83
New Workers' Compensation Indemnity Claims per	16.43	12.68	11.80	10.80	13.11	●	15.65	5.69	18.01
*Lost Work Days per 200,000 Exposure Hours	526	992	827	809	770	●	755	786	-
*OSHA Injuries per 200,000 Exposure Hours	7.99	7.52	4.99	3.89	8.17	●	10.43	5.69	-

Green Line									
On-Time Pullouts	99.49%	99.69%	99.59%	99.70%	100.00%	●	100.00%	100.00%	100.00%
Mean Miles Between Chargeable Mechanical Failures ³	19,238	16,375	21,614	22,562	25,135	●	28,264	18,484	34,414
In-Service On-time Performance	98.52%	98.69%	98.72%	99.00%	98.94%	●	98.98%	98.27%	99.62%
Service Delivery Ratio	99.59%	99.61%	99.38%	100.00%	99.60%	●	99.74%	99.26%	99.84%
Traffic Accidents Per 100,000 Train Miles	0.42	0.48	0.34	0.35	0.00	●	0.00	0.00	0.00
CPUC Reportable Accidents per 100,000 Train Miles	0.07	0.07	0.00	0.40	0.00	●	0.00	0.00	0.00
Passenger Accidents per 100,000 Boardings	0.034	0.048	0.010	0.010	0.043	●	0.131	0.000	0.000
Complaints per 100,000 Boardings	1.54	2.08	1.69	1.20	1.62	●	0.65	1.72	2.46
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	7.18	9.14	12.87	11.52	6.10	●	8.99	0.00	9.50
*Lost Work Days per 200,000 Exposure Hours	228	712	984	930	1,100	●	975	1,225	-
*OSHA Injuries per 200,000 Exposure Hours	3.19	6.65	9.84	8.70	0.00	●	0.00	0.00	-

Gold Line									
On-Time Pullouts	99.68%	99.82%	99.84%	100.00%	99.70%	●	100.00%	99.15%	100.00%
Mean Miles Between Chargeable Mechanical Failures ³	40,426	38,427	43,588	49,303	39,517	●	51,792	32,978	38,279
In-Service On-time Performance	97.60%	97.61%	98.19%	98.80%	98.70%	●	98.25%	98.52%	99.37%
Service Delivery Ratio	99.11%	98.88%	99.07%	99.50%	99.41%	●	99.37%	99.32%	99.56%
Traffic Accidents Per 100,000 Train Miles	0.99	0.61	0.55	0.51	0.15	●	0.00	0.43	0.00
CPUC Reportable Accidents per 100,000 Train Miles	0.60	0.25	0.26	0.40	0.00	●	0.00	0.00	0.00
Passenger Accidents per 100,000 Boardings	0.039	0.030	0.086	0.010	0.051	●	0.000	0.146	0.000
Complaints per 100,000 Boardings	2.73	2.77	2.65	1.80	3.12	●	3.96	3.00	2.34
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	11.87	14.31	14.24	11.67	12.88	●	0.00	31.82	5.66
*Lost Work Days per 200,000 Exposure Hours	766	1,055	1,146	993	1,223	●	1,078	1,360	-
*OSHA Injuries per 200,000 Exposure Hours	9.29	9.69	11.87	8.94	8.18	●	0.00	15.91	-

Expo Line									
On-Time Pullouts	99.53%	98.76%	99.71%	99.70%	99.89%	●	100.00%	99.68%	100.00%
Mean Miles Between Chargeable Mechanical Failures ³	18,114	33,402	57,013	49,557	97,830	●	119,724	91,376	87,864
In-Service On-time Performance	98.61%	98.48%	98.72%	98.90%	98.80%	●	98.79%	99.04%	98.54%
Service Delivery Ratio	99.56%	99.46%	99.54%	99.80%	99.49%	●	99.48%	99.50%	99.50%
Traffic Accidents Per 100,000 Train Miles	0.74	1.26	1.78	1.26	1.37	●	1.64	0.81	1.68
CPUC Reportable Accidents per 100,000 Train Miles	0.50	0.63	1.30	0.40	0.82	●	0.82	0.00	1.68
Passenger Accidents per 100,000 Boardings	0.019	0.018	0.010	0.010	0.000	●	0.000	0.000	0.000
Complaints per 100,000 Boardings	3.38	3.68	2.20	1.40	2.13	●	1.79	1.30	3.37
New Workers' Compensation Indemnity Claims per	8.44	19.26	12.57	11.84	10.60	●	8.10	7.50	16.59
*Lost Work Days per 200,000 Exposure Hours	73	887	1,470	1,343	1,161	●	737	1,553	-
*OSHA Injuries per 200,000 Exposure Hours	5.63	16.60	9.92	9.92	3.89	●	8.10	-	-

* There is One Month lag in reporting this data

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

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

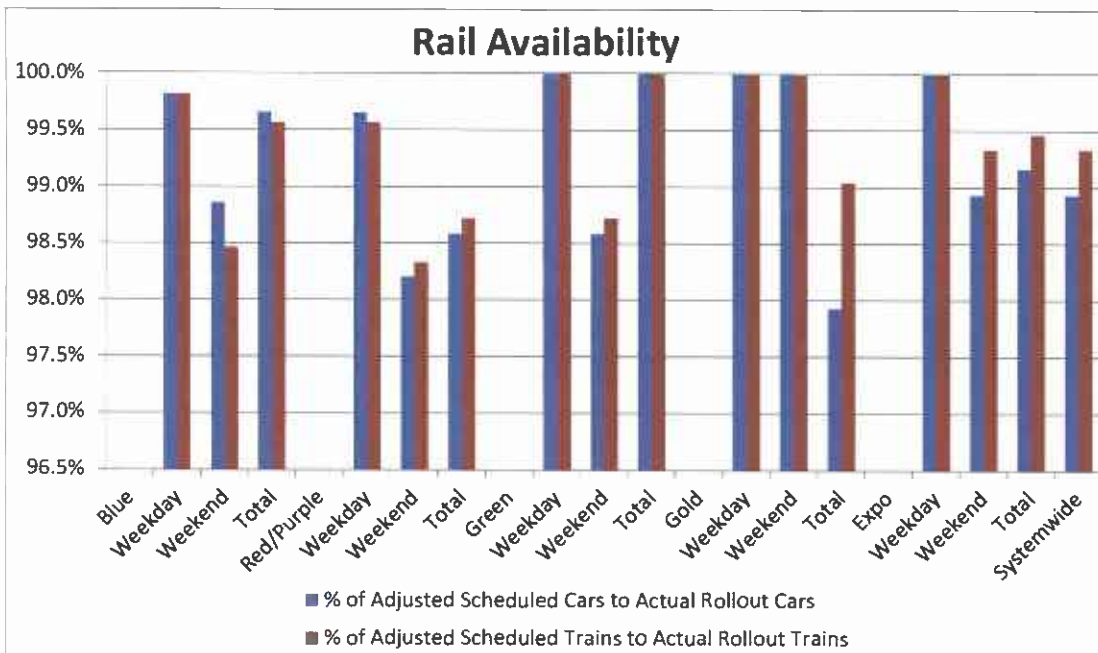
○ Yellow - Uncertain if the target will be achieved -- slight problems, delays or management issues. Falls below Target 70 - 99%.

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

N/A = Not Available

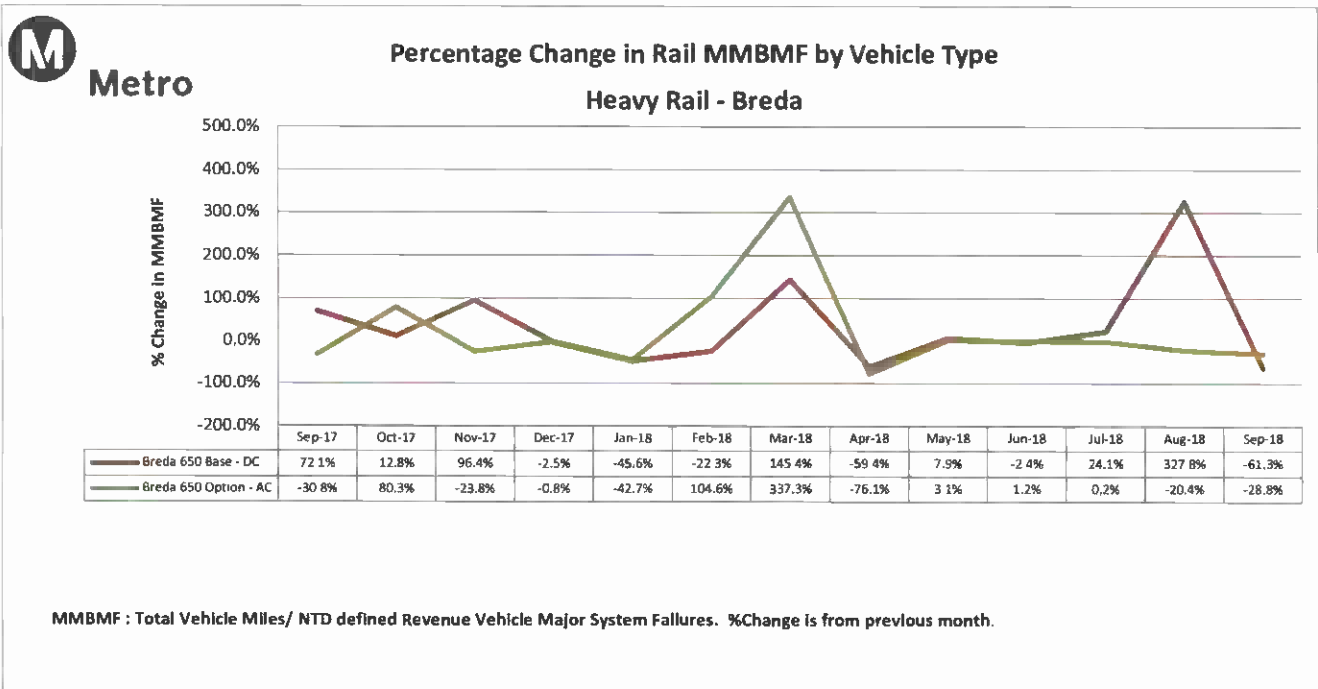
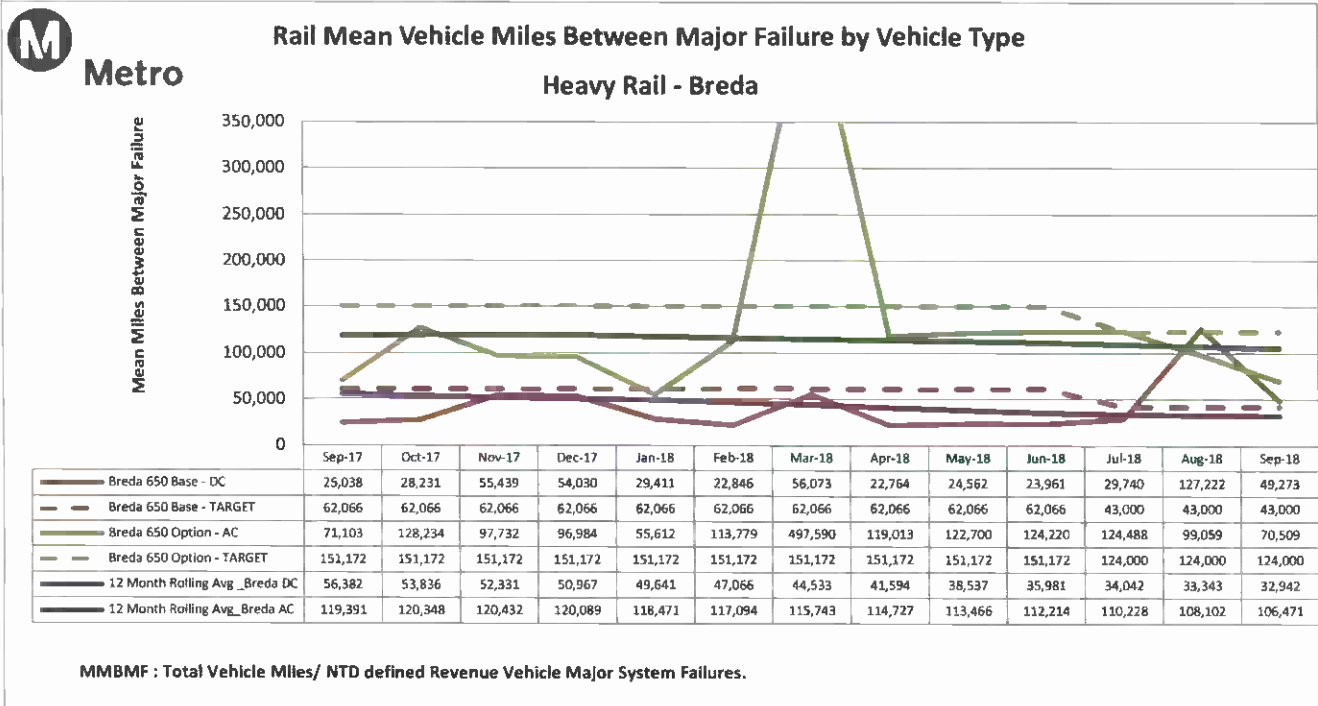
Vehicle Availability Sep 2018

Day Type	% of Adjusted Scheduled Cars to Actual Rollout Cars	% of Adjusted Scheduled Trains to Actual Rollout Trains
Blue		
Weekday	99.82%	99.82%
Weekend	98.86%	98.47%
Total	99.66%	99.57%
Red/Purple		
Weekday	99.66%	99.57%
Weekend	98.21%	98.34%
Total	98.59%	98.73%
Green		
Weekday	100.00%	100.00%
Weekend	98.59%	98.73%
Total	100.00%	100.00%
Gold		
Weekday	100.00%	100.00%
Weekend	100.00%	100.00%
Total	97.93%	99.05%
Expo		
Weekday	100.00%	100.00%
Weekend	98.94%	99.34%
Total	99.17%	99.47%
Systemwide	98.94%	99.34%



METRO RAIL PERFORMANCE – SEPTEMBER 2018

Rail Performance by Vehicle Type

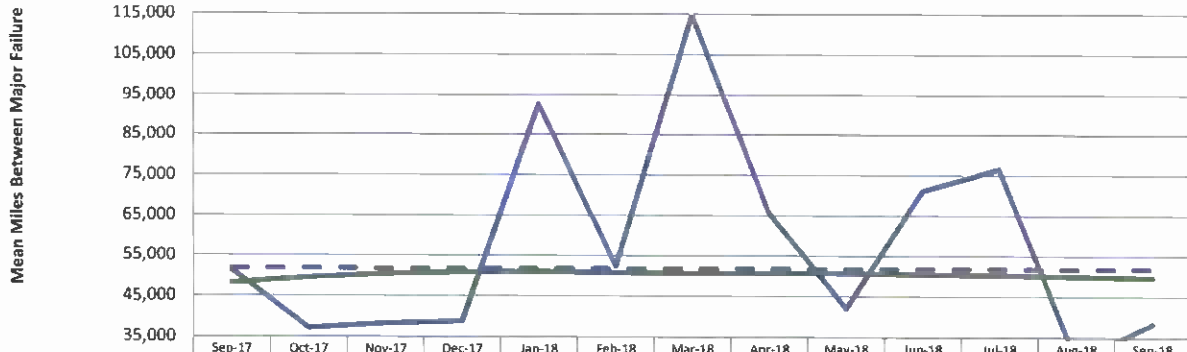




Metro

Rail Mean Vehicle Miles Between Major Failure by Vehicle Type

Light Rail - Breda



	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
— AnsaldoBreda 2550 Base - AC	51,475	37,331	38,376	38,933	92,854	52,534	114,997	65,940	42,253	71,408	76,730	29,623	38,403
- - - AnsaldoBreda 2550 Base - TARGET	51,977	51,977	51,977	51,977	51,977	51,977	51,977	51,977	51,977	51,977	52,000	52,000	52,000
— 12 Month Rolling Avg	48,318	49,674	50,500	51,042	51,204	50,959	50,773	50,874	50,847	50,638	50,429	50,179	49,789

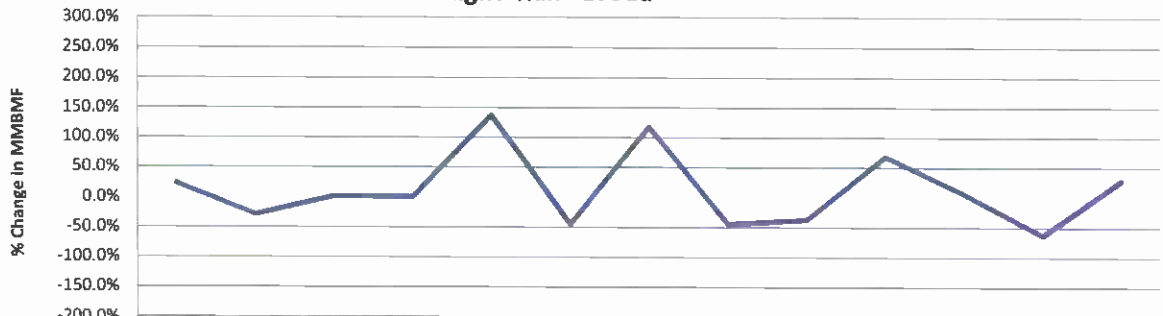
MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.



Metro

Percentage Change in Rail MMBMF by Vehicle Type

Light Rail - Breda



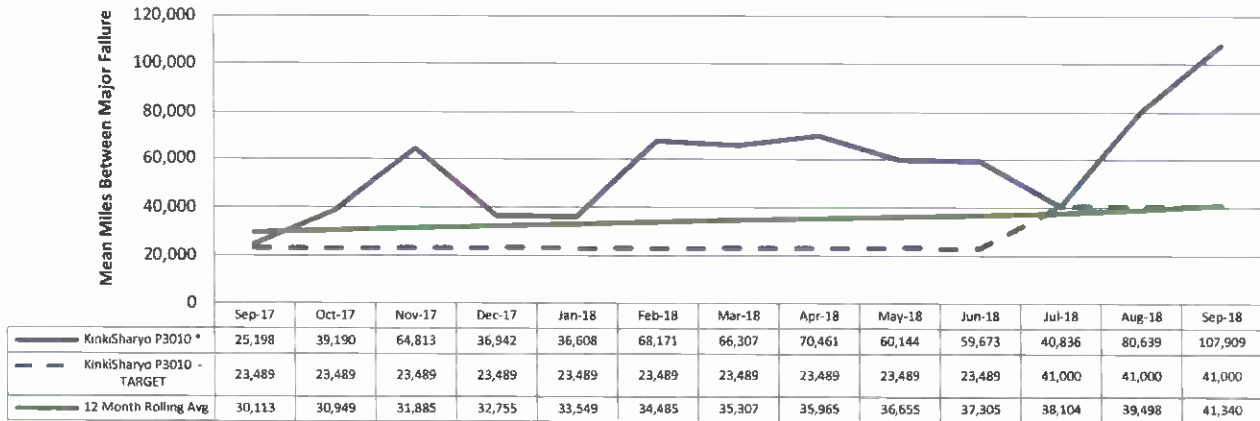
	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
— AnsaldoBreda 2550 Base - AC	24.4%	-27.5%	2.8%	1.5%	138.5%	-43.4%	118.9%	-42.7%	-35.9%	69.0%	7.5%	-61.4%	29.6%

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



Metro

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

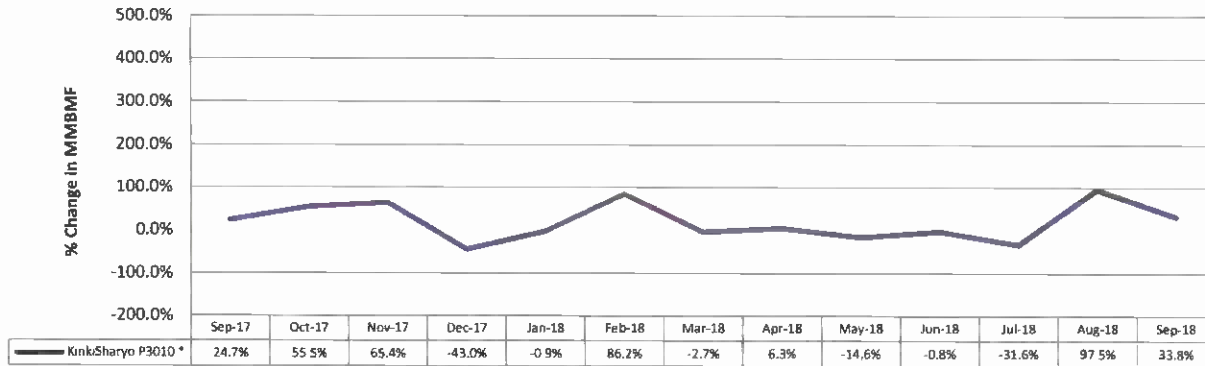


MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.



Metro

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



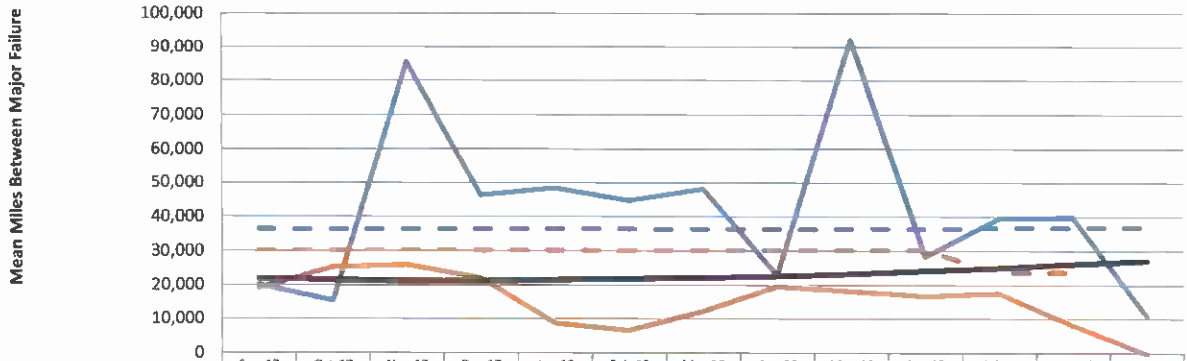
MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures. %Change is from previous month.

* KinkiSharyo rolling stock began service March 2016



Metro

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



	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
Nippon Sharyo 2020 - DC	20,372	15,702	85,687	46,539	48,643	44,981	48,401	23,206	92,295	28,597	39,850	40,025	11,089
Nippon Sharyo 2020 - TARGET	36,599	36,599	36,599	36,599	36,599	36,599	36,599	36,599	36,599	36,599	37,000	37,000	37,000
Nippon Sharyo 865 - DC	19,460	25,590	26,271	22,400	9,003	6,818	12,587	19,850	18,498	17,122	17,816	8,346	N/A
Nippon Sharyo 865 - TARGET	30,478	30,478	30,478	30,478	30,478	30,478	30,478	30,478	30,478	30,478	24,000	24,000	N/A
12 Month Rolling Avg - Nippon 2020 DC	22,157	21,789	21,370	21,409	21,774	22,028	22,334	22,762	23,454	24,363	25,272	26,348	27,348

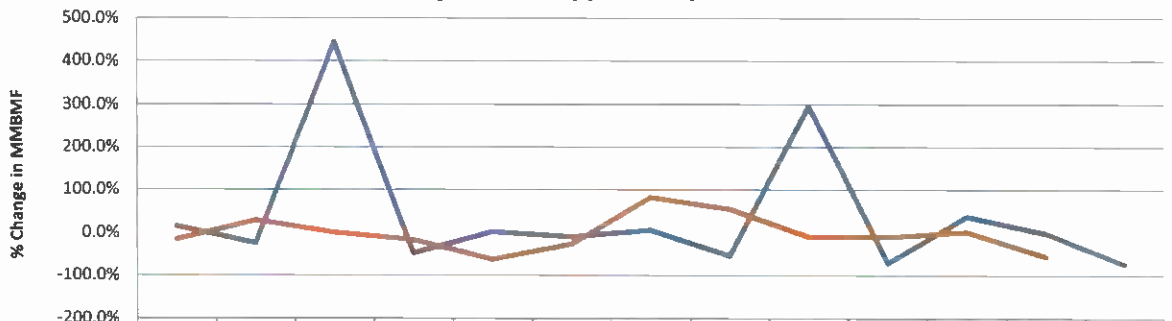
N/A - Nippon Sharyo 865 -DC Cars have been retired starting September 2018

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



Metro

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



	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
Nippon Sharyo 2020 - DC	17.3%	-22.9%	445.7%	-45.7%	4.5%	7.5%	7.6%	-52.1%	297.7%	-69.0%	39.4%	0.4%	-72.3%
Nippon Sharyo 865 - DC	-13.6%	31.5%	2.7%	-14.7%	-59.8%	-24.3%	84.6%	57.7%	-6.8%	-7.4%	4.1%	-53.2%	N/A

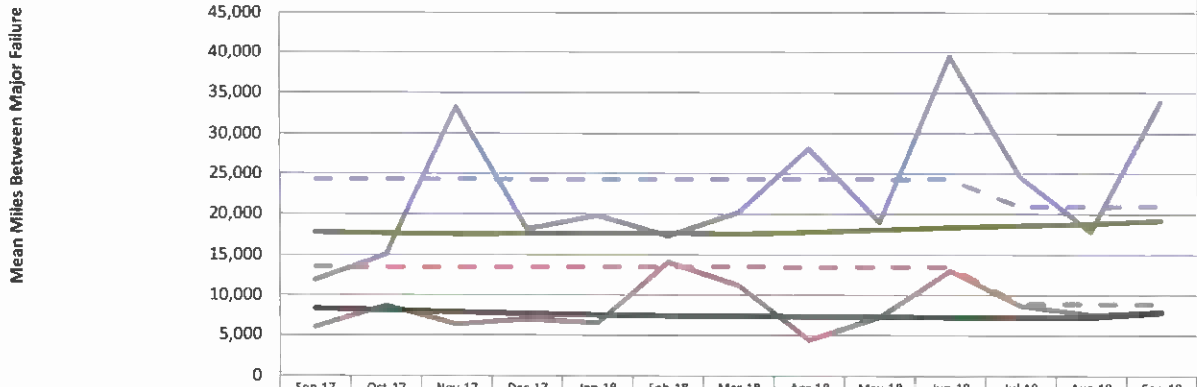
N/A - Nippon Sharyo 865 -DC Cars have been retired starting September 2018

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



Metro

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



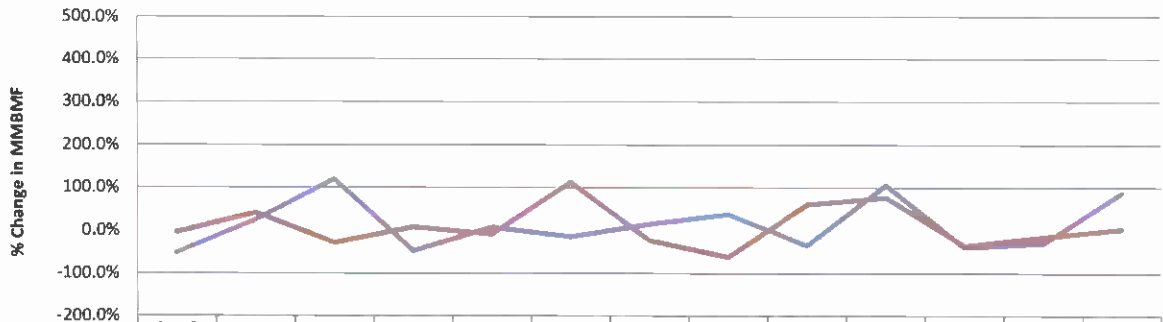
	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
Siemens 2000 Base - AC	11,972	15,109	33,352	18,247	19,891	17,415	20,271	28,221	19,061	39,557	24,742	17,919	33,989
Siemens 2000 Base - TARGET	24,373	24,373	24,373	24,373	24,373	24,373	24,373	24,373	24,373	24,373	21,000	21,000	21,000
Siemens 2000 GE/ATP - AC	6,121	8,769	6,445	7,074	6,617	14,195	11,299	4,519	7,347	13,129	8,775	7,657	8,052
Siemens 2000 GE/ATP - TARGET	13,620	13,620	13,620	13,620	13,620	13,620	13,620	13,620	13,620	13,620	9,000	9,000	9,000
12 Month Rolling Avg - Siemens 2000 GE/ATP - AC	8,372	8,169	7,935	7,754	7,592	7,494	7,459	7,416	7,368	7,317	7,295	7,313	7,912
12 Month Rolling Avg - Siemens 2000 BASE - AC	17,836	17,721	17,659	17,679	17,729	17,770	17,652	17,898	18,163	18,491	18,719	18,906	19,320

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



Metro

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



	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
Siemens 2000 Base - AC	-50.1%	26.2%	120.7%	-45.3%	9.0%	-12.5%	16.4%	39.2%	-32.5%	107.5%	-37.5%	-27.6%	89.7%
Siemens 2000 GE/ATP - AC	-1.9%	43.3%	-26.5%	9.8%	-6.5%	114.5%	-20.4%	-60.0%	62.6%	78.7%	-33.2%	-12.7%	5.1%

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

Mean Miles Between Major Failures

	FY 2018	FY 2019 Goal	FY 2019 YTD
AnsaldoBreda2550Base - AC	49,423	52,000	41,474
Breda 650 Base - DC	27,568	43,000	57,454
Breda 650 Option - AC	107,839	124,000	92,926
Kinkisharyo P3010	42,626	41,000	65,821
Nippon Sharyo 2020 - DC	31,703	37,000	22,628
Nippon Sharyo 865 - DC	8,089	24,000	0
Siemens 2000 Base - AC	21,014	21,000	23,764
Siemens 2000 GE/ATP - AC	7,376	9,000	8,117

Rail Fleet Distribution – SEPTEMBER 2018

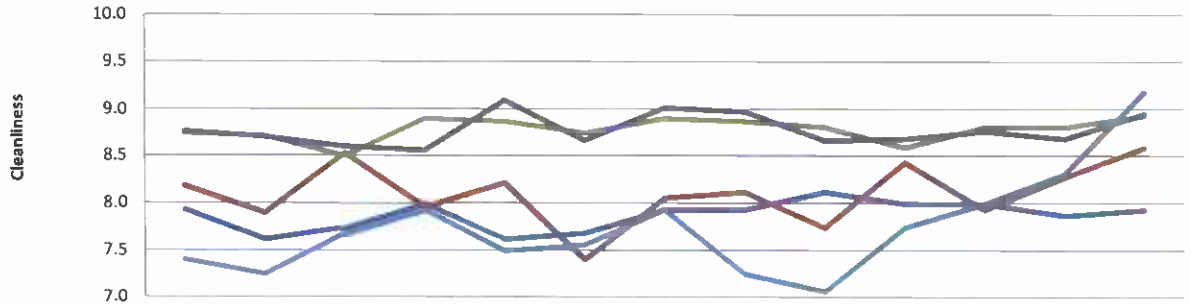
Number of Rail Vehicle Type by Division	Blue	Red / Purple	Green	Gold	Expo
AnsaldoBreda 2550 Base - AC				50	
Breda 650 Base - DC		30			
Breda 650 Option - AC		68			
KinkiSharyo P3010	48		15	22	56
Nippon Sharyo 2020 - DC	15				
Nippon Sharyo 865 - DC					
Siemens 2000 Base - AC	22				
Siemens 2000 GE/ATP - AC			25		
TOTALS	85	98	40	72	56

Cleanliness by Vehicle Type



Metro

Rail Cleanliness by General Vehicle Type

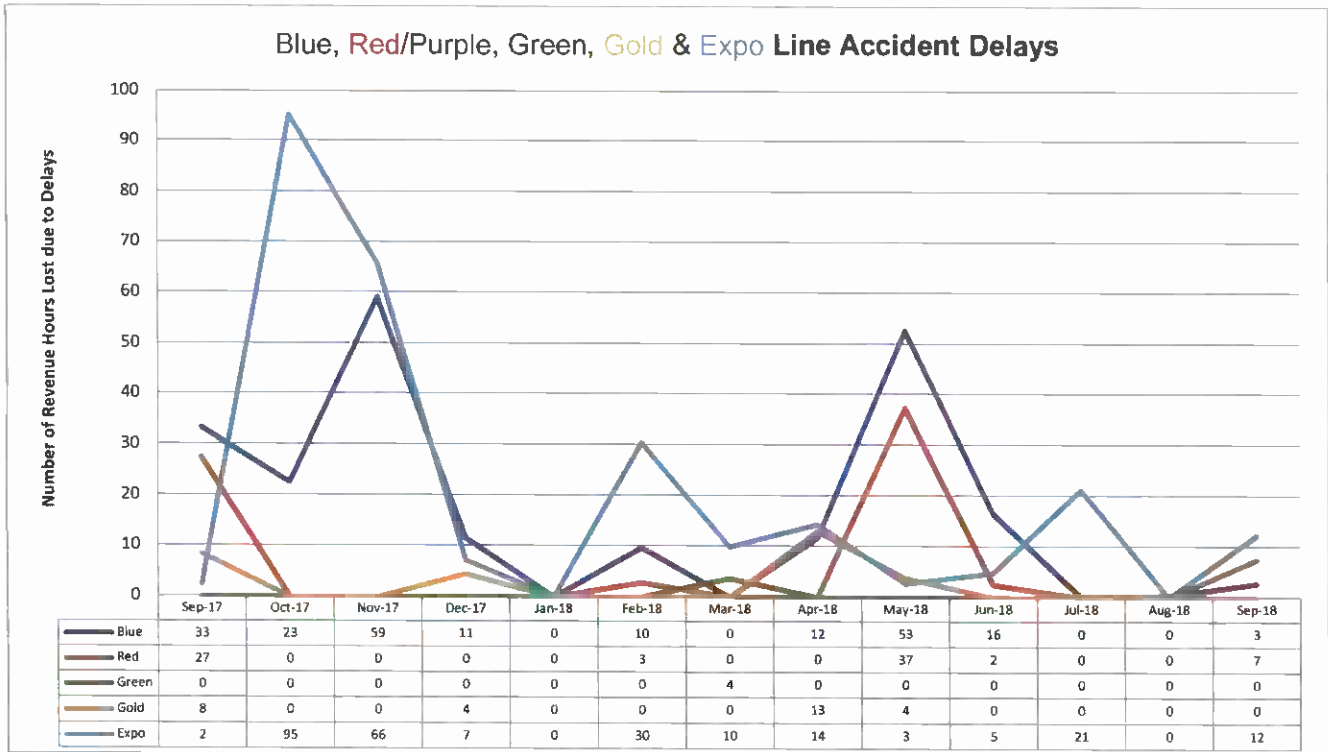


	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul 18	Aug 18	Sep-18
A650	7.9	7.6	7.8	8.0	7.6	7.7	7.9	7.9	8.1	8.0	8.0	7.9	7.9
P2000	8.2	7.9	8.5	8.0	8.2	7.4	8.1	8.1	7.8	8.4	7.9	8.3	8.6
P2550	8.8	8.7	8.5	8.9	8.9	8.8	8.9	8.9	8.8	8.6	8.8	8.8	8.9
P3010	8.8	8.7	8.6	8.6	9.1	8.7	9.0	9.0	8.7	8.7	8.8	8.7	9.0
P865/P2020	7.4	7.3	7.7	7.9	7.5	7.6	7.9	7.3	7.1	7.8	8.0	8.3	9.2

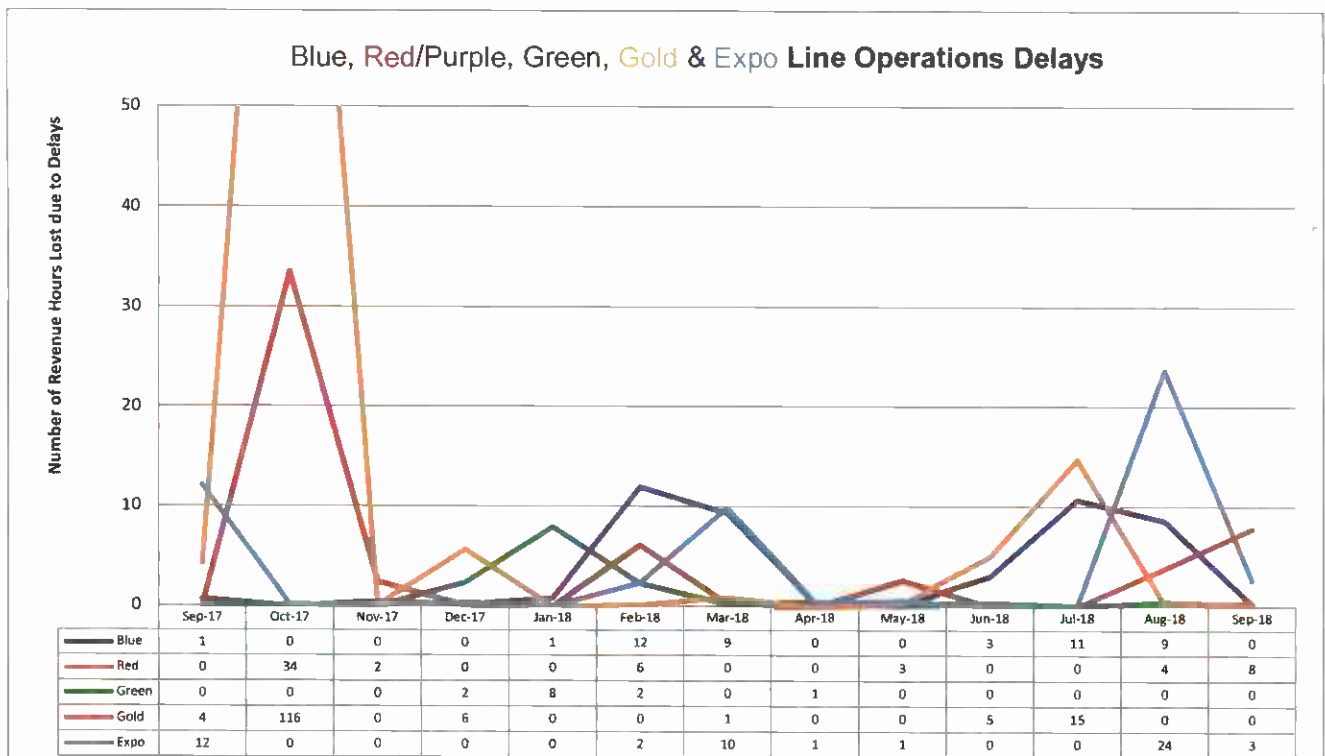
Note: Data Collection Began September 2016

RAIL DELAYS BY CATEGORY - SYSTEMWIDE

Revenue Hours Lost Related to - ACCIDENTS

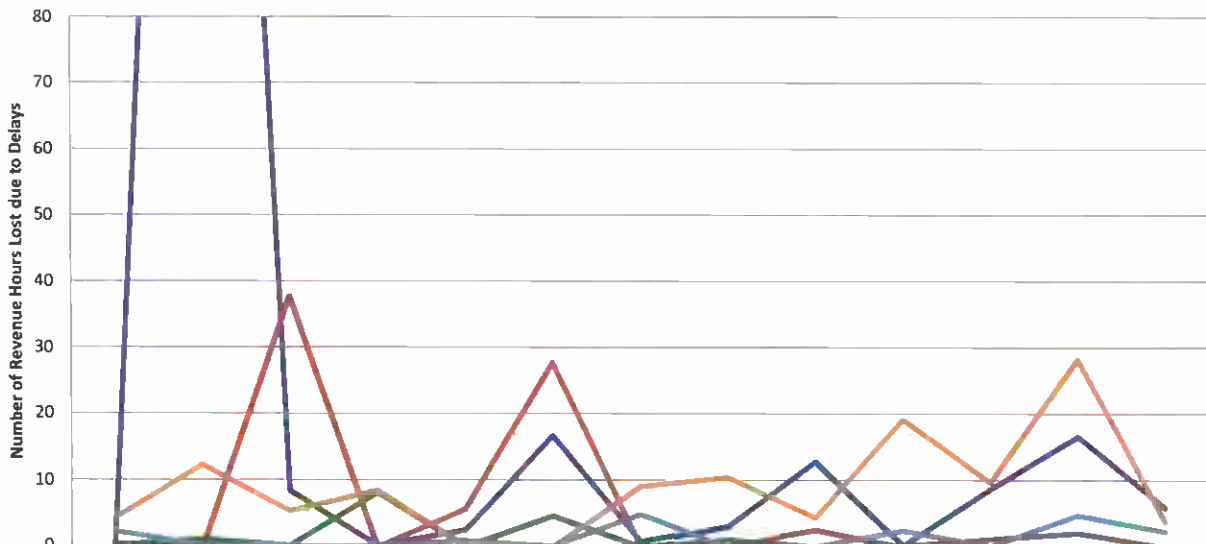


Revenue Hours Lost Related to - OPERATIONS



Revenue Hours Lost Related to - OTHER

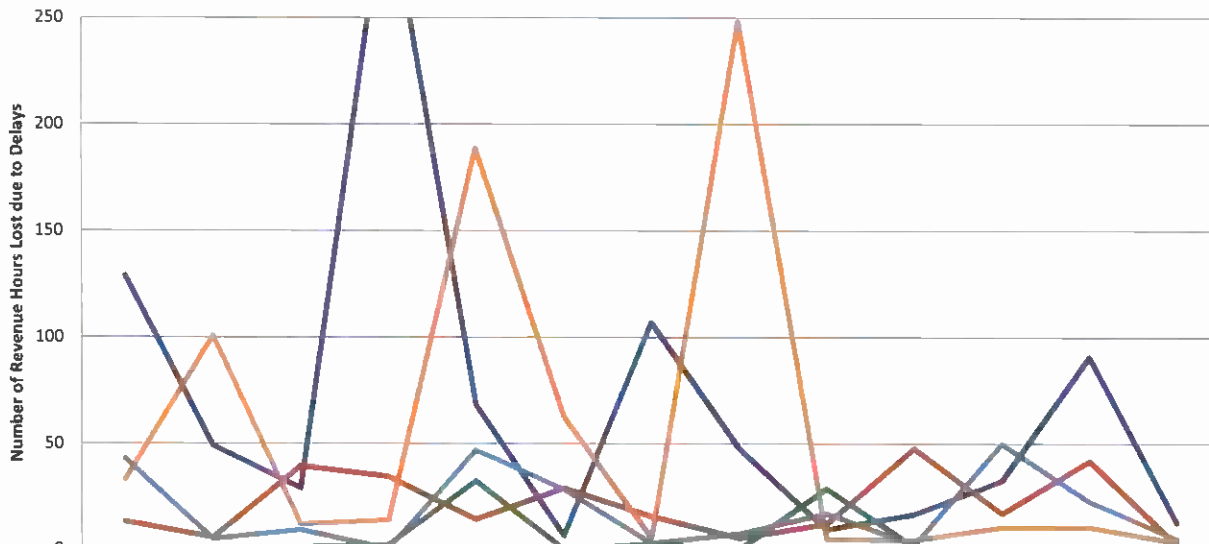
Blue, Red/Purple, Green, Gold & Expo Line Other Delays



	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
Blue	0	271	9	0	3	17	1	3	13	0	9	17	6
Red	0	0	38	0	6	28	0	0	3	0	0	0	0
Green	0	1	0	8	0	5	0	1	0	0	1	2	0
Gold	4	12	5	9	0	0	9	11	4	19	10	28	4
Expo	2	0	0	0	1	0	5	0	0	3	0	5	2

Revenue Hours Lost Related to - POLICE & HEALTH

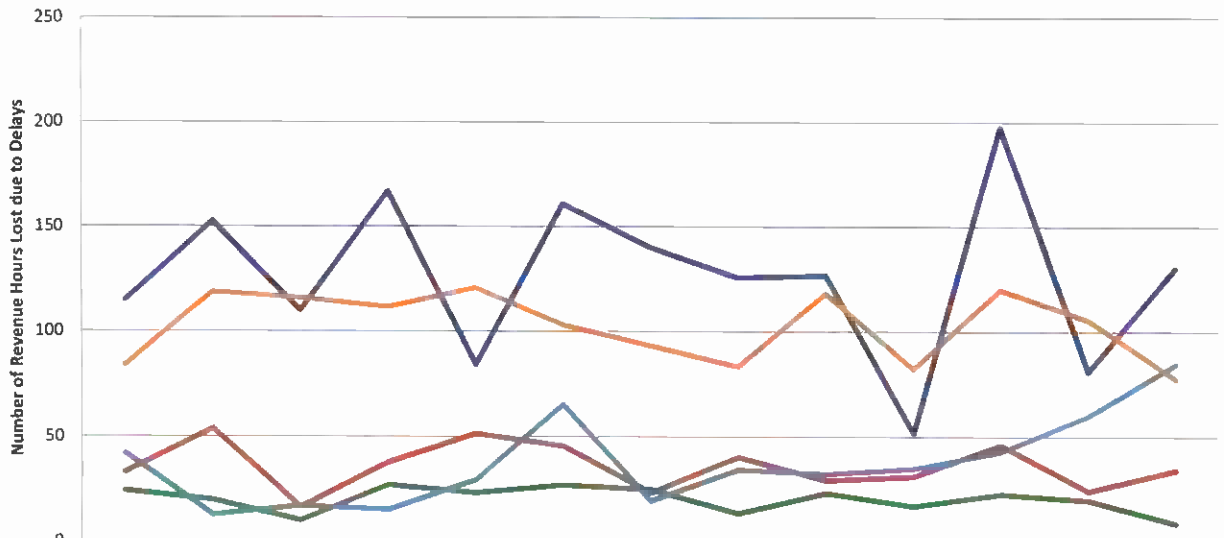
Blue, Red/Purple, Green, Gold & Expo Line Police & Health Delays



	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
Blue	129	49	30	314	69	7	107	48	10	17	33	91	13
Red	14	6	40	35	15	30	16	6	13	48	18	42	3
Green	1	1	2	3	33	1	3	0	29	2	1	1	1
Gold	34	101	13	15	189	63	6	249	6	5	11	11	4
Expo	43	6	10	1	47	29	4	8	18	3	50	23	6

Revenue Hours Lost Related to - Vehicle Delays

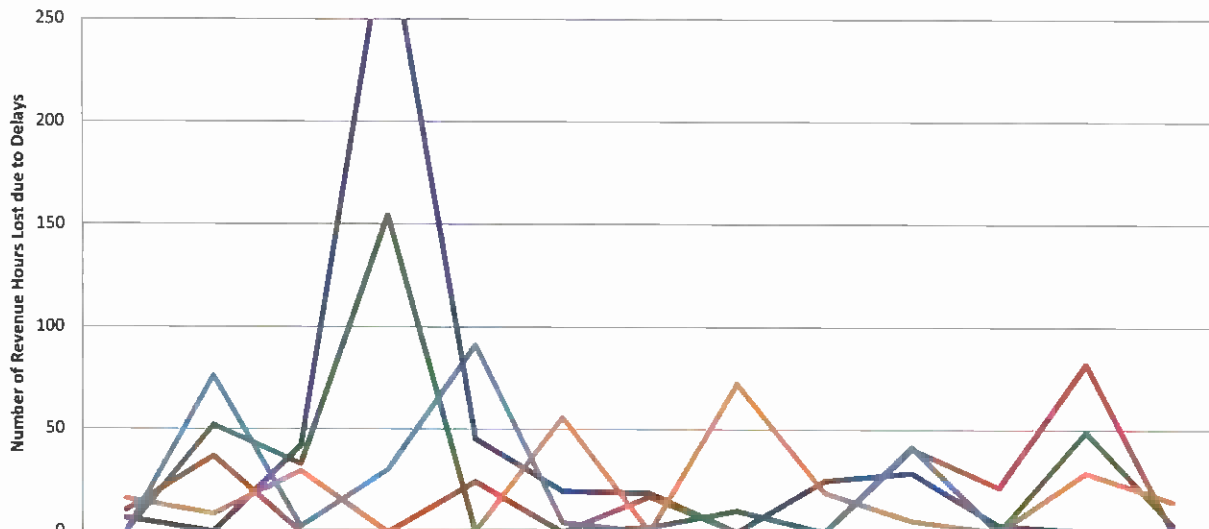
Blue, Red/Purple, Green, Gold & Expo Line Vehicle Delays



	Sep 17	Oct 17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
Blue	115	153	110	167	85	161	141	126	127	52	198	81	131
Red	33	54	17	38	52	46	24	41	30	31	46	25	35
Green	24	20	13	27	24	27	25	14	24	17	23	20	9
Gold	84	120	117	112	121	104	94	84	119	83	121	106	78
Expo	42	13	17	16	30	66	20	34	32	35	43	60	85

Revenue Hours Lost Related to - WAYSIDE

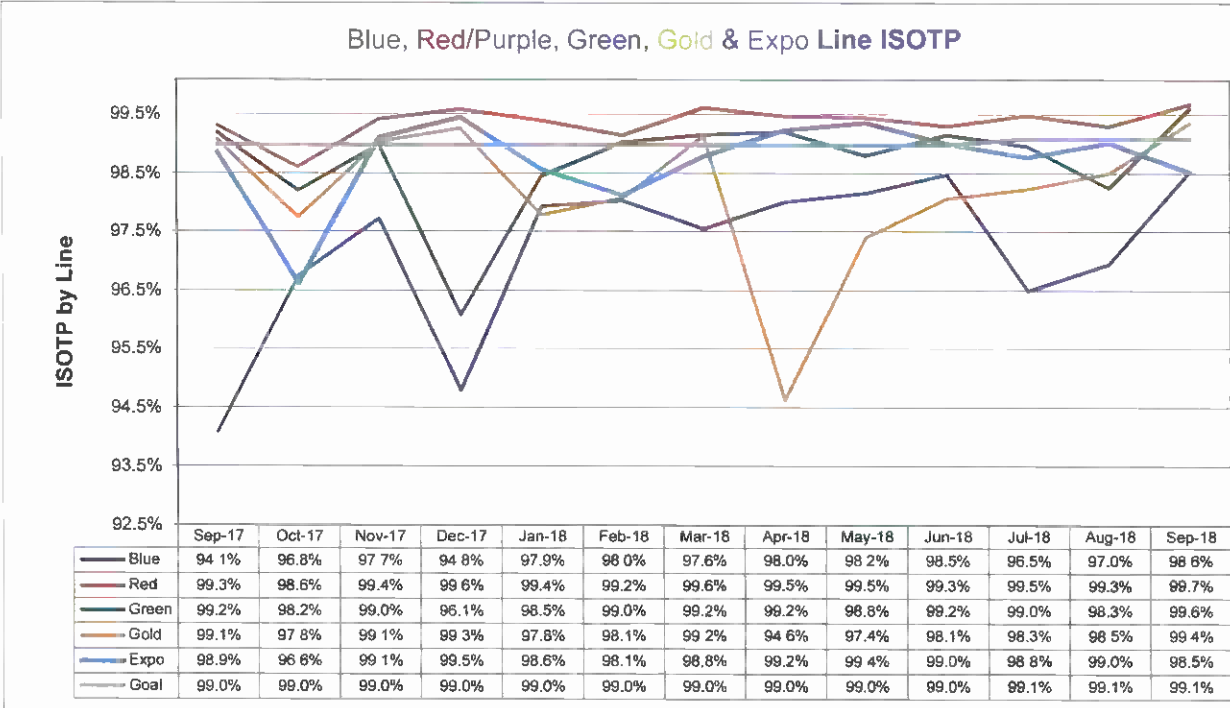
Blue, Red/Purple, Green, Gold & Expo Line Wayside Delays



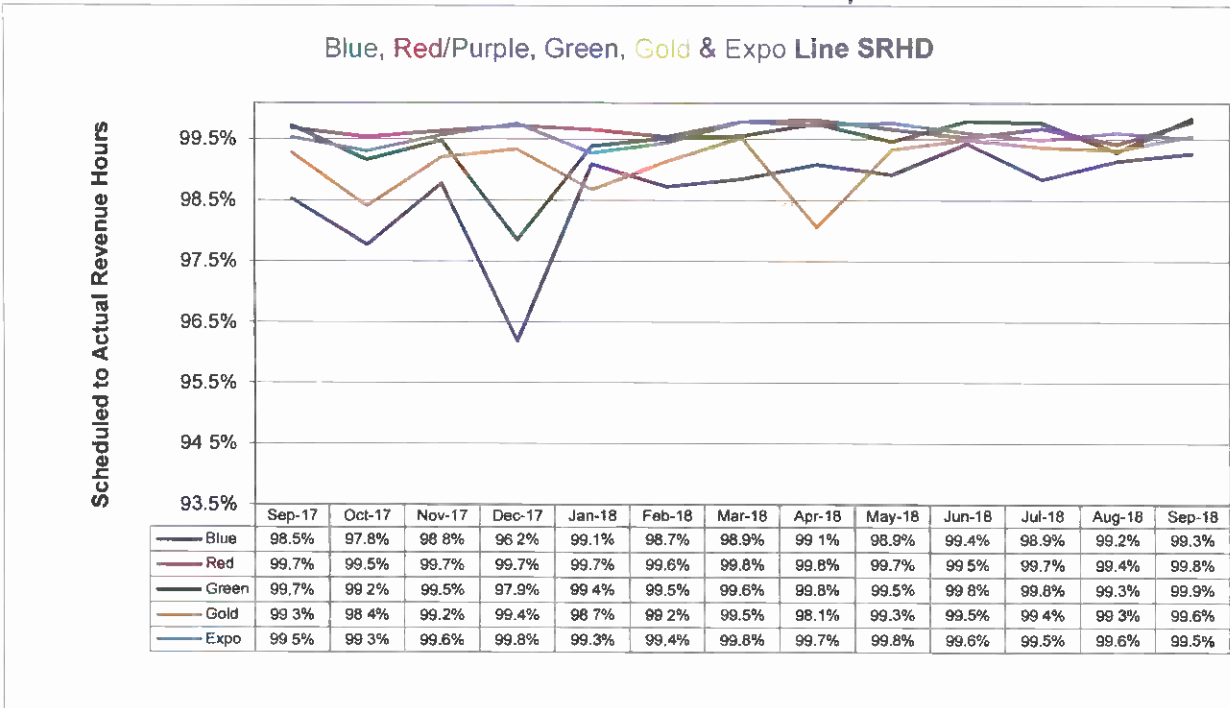
	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
Blue	7	0	42	299	46	20	19	0	25	29	4	1	0
Red	11	37	0	0	25	0	18	0	0	41	22	83	0
Green	0	52	33	155	0	0	2	10	0	0	0	49	4
Gold	17	9	30	0	0	56	0	73	20	6	0	29	15
Expo	0	76	3	31	91	5	0	0	0	42	0	0	0

Rail Service Performance

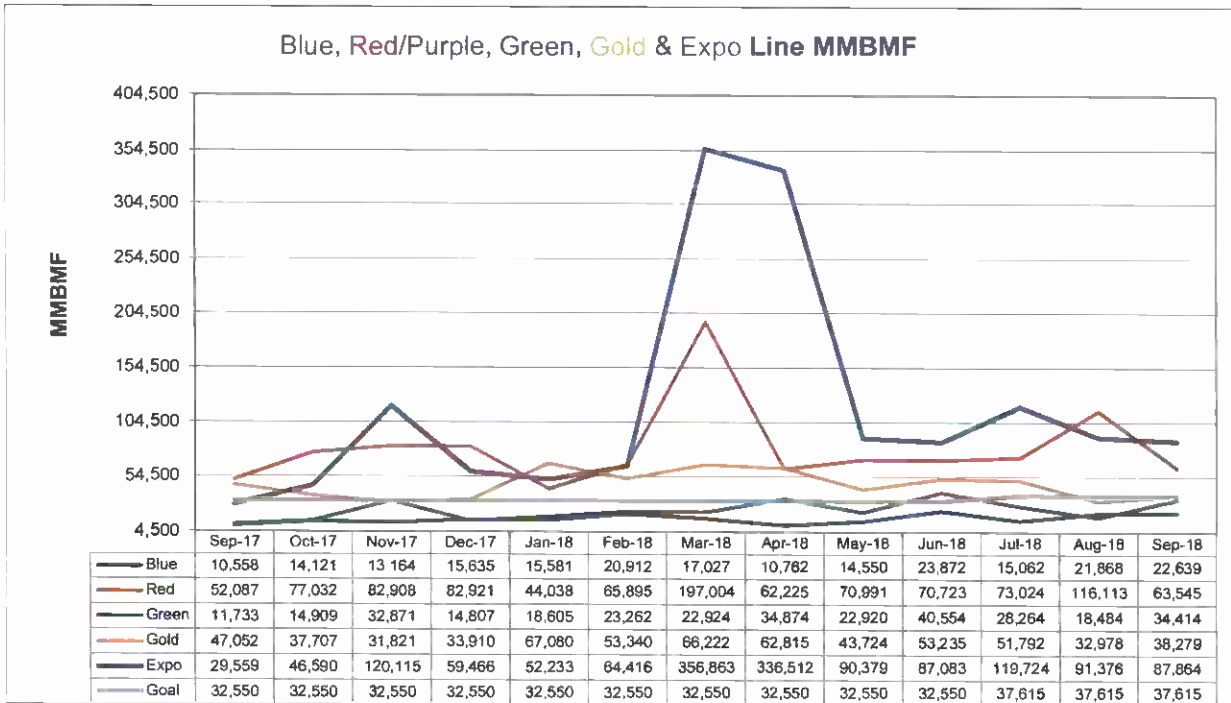
In Service On Time Performance by Line



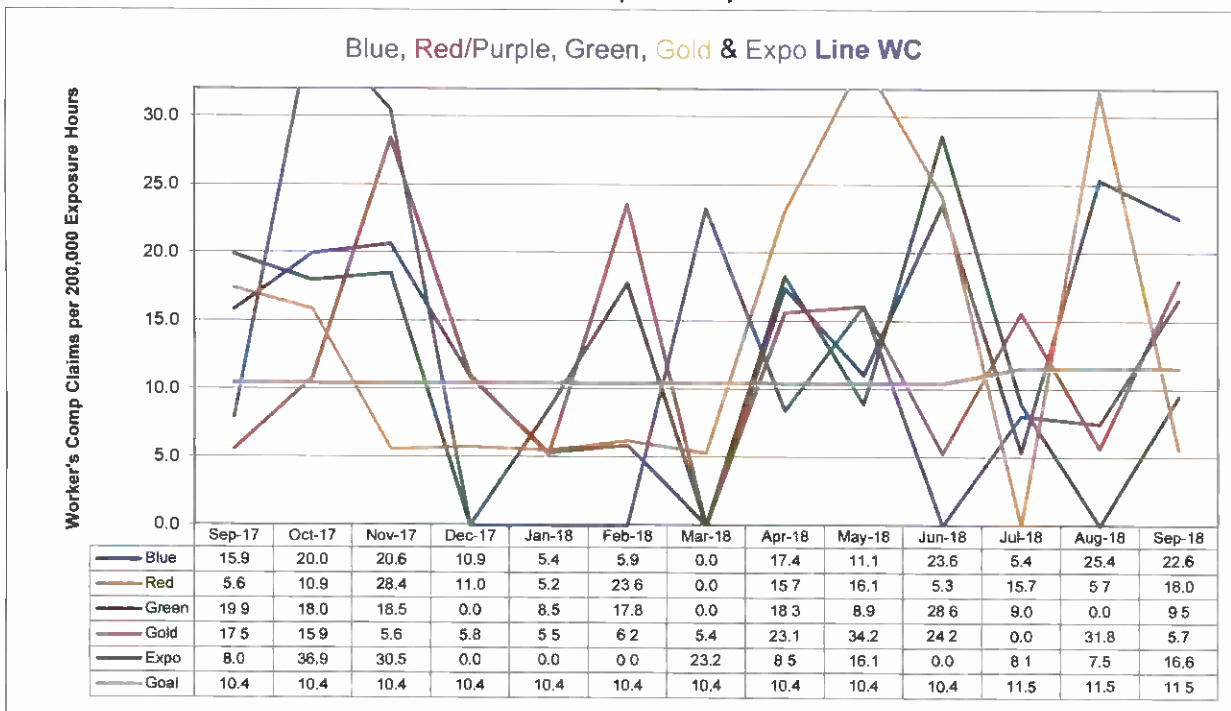
Ratio of Scheduled to Revenue Hours Delivered by Line



Mean Miles Between Mechanical Failures by Line

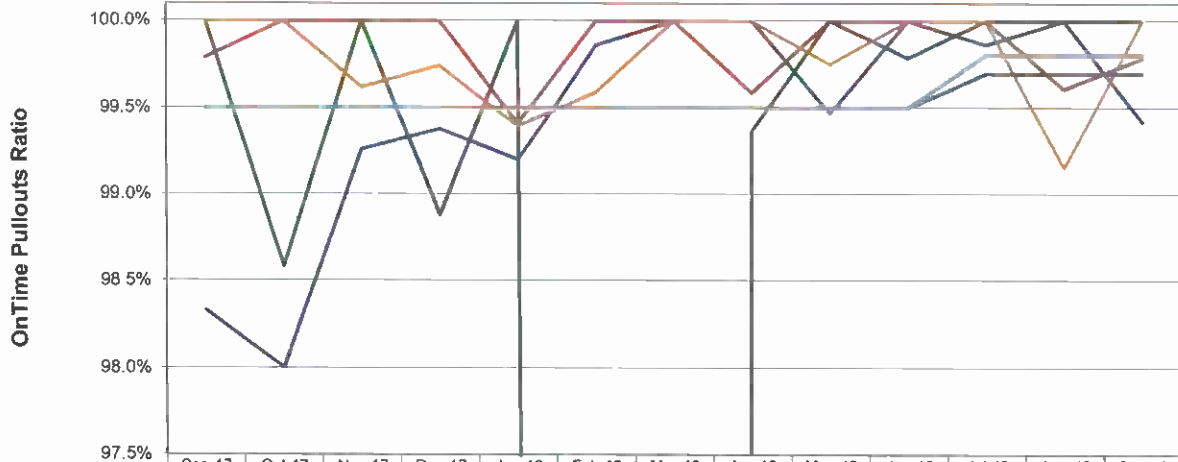


Workers Comp Claims by Line



On-Time Pullouts Ratio by Line

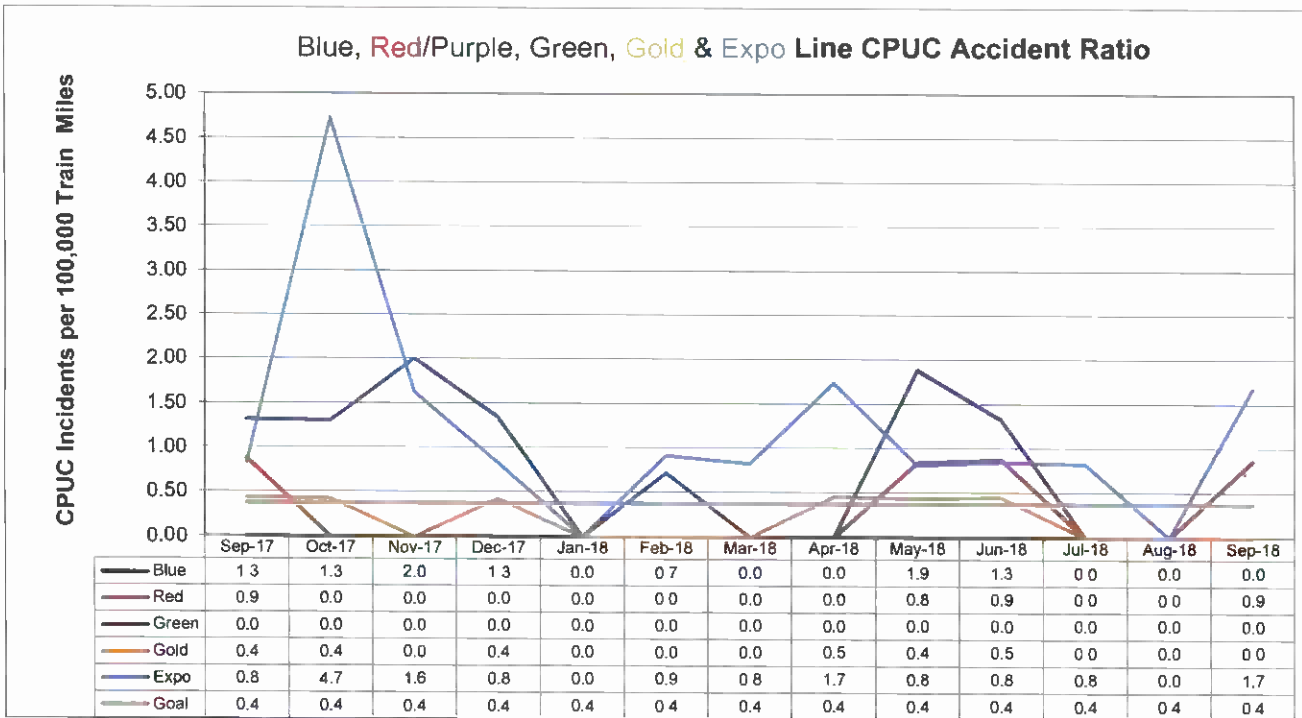
Blue, Red/Purple, Green, Gold & Expo Line OTP



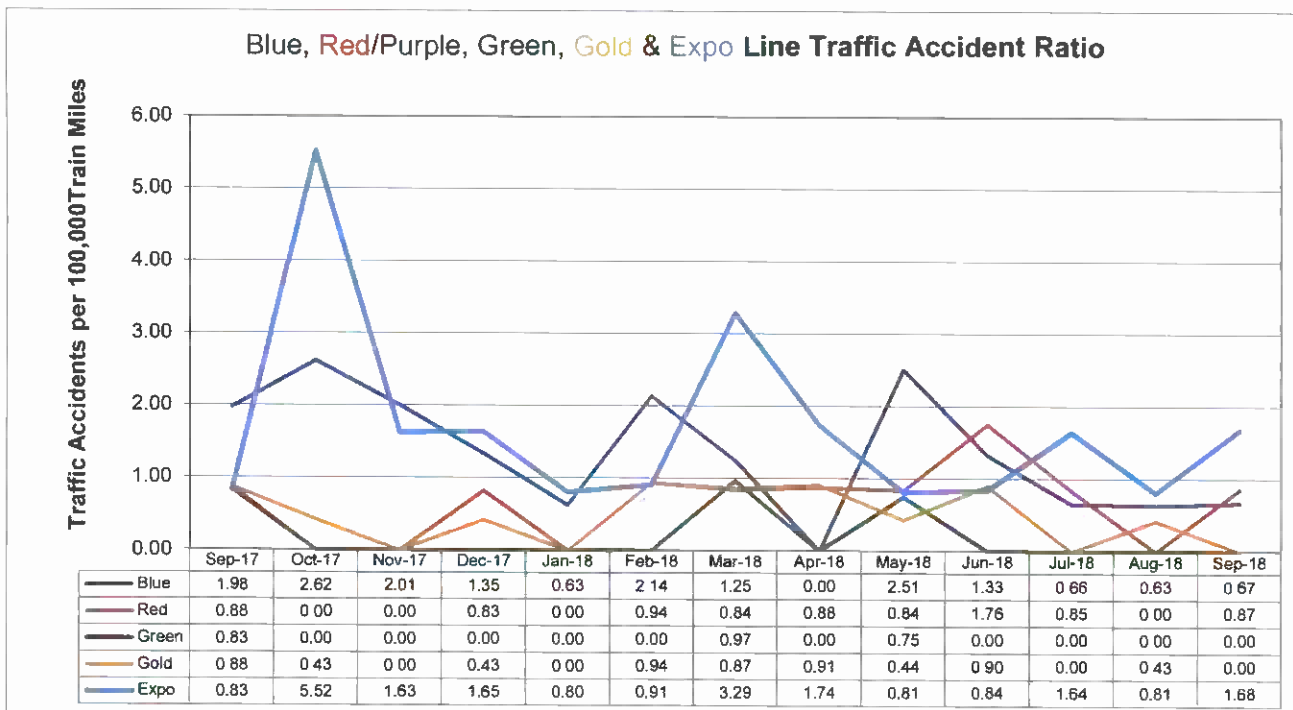
	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
Blue	98.3%	98.0%	99.3%	99.4%	99.2%	99.9%	100.0%	100.0%	99.5%	100.0%	99.9%	100.0%	99.4%
Red	99.8%	100.0%	100.0%	100.0%	99.4%	100.0%	100.0%	99.6%	100.0%	100.0%	100.0%	99.6%	99.8%
Green	100.0%	98.6%	100.0%	98.9%	100.0%	0.0%	0.0%	99.4%	100.0%	99.8%	100.0%	100.0%	100.0%
Gold	100.0%	100.0%	99.6%	99.7%	99.4%	99.6%	100.0%	100.0%	99.8%	100.0%	100.0%	99.2%	100.0%
Expo	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.7%	99.7%	99.7%
Goal	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.8%	99.8%	99.8%

Rail Safety Performance

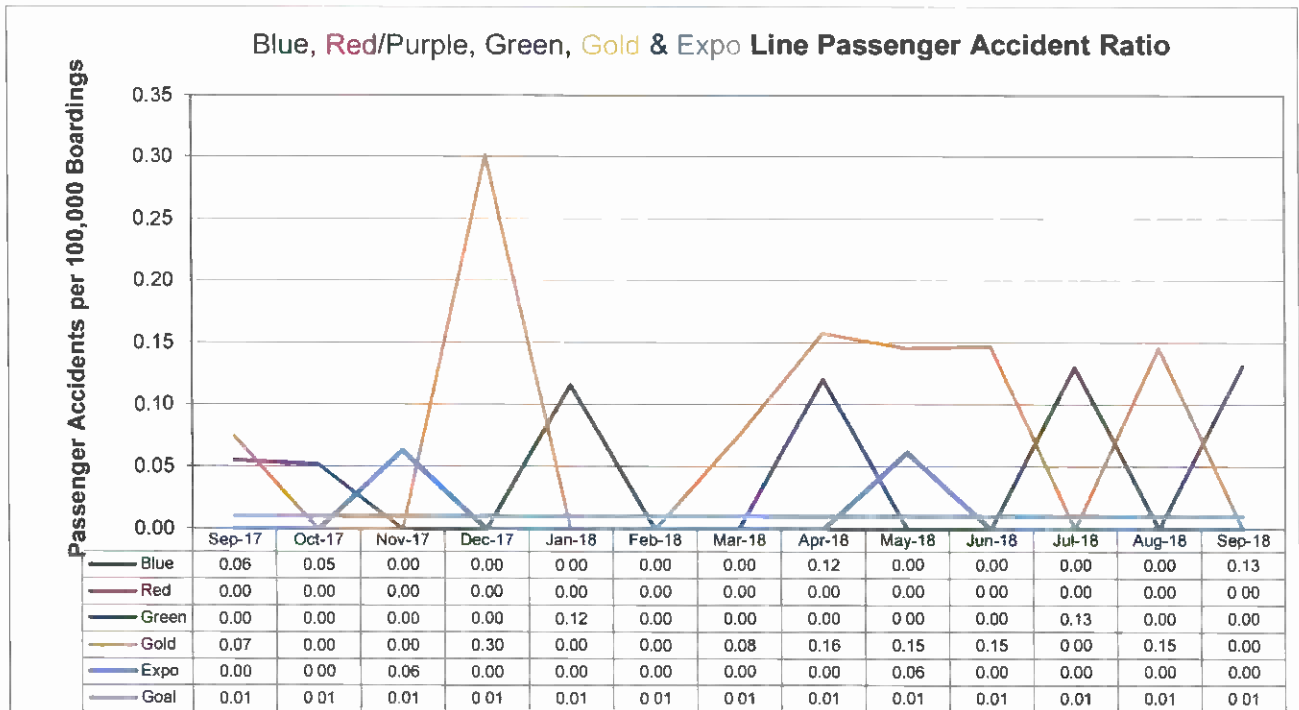
CPUC REPORTABLE INCIDENTS PER 100,000 TRAIN MILES



TRAFFIC ACCIDENTS PER 100,000 TRAIN MILES

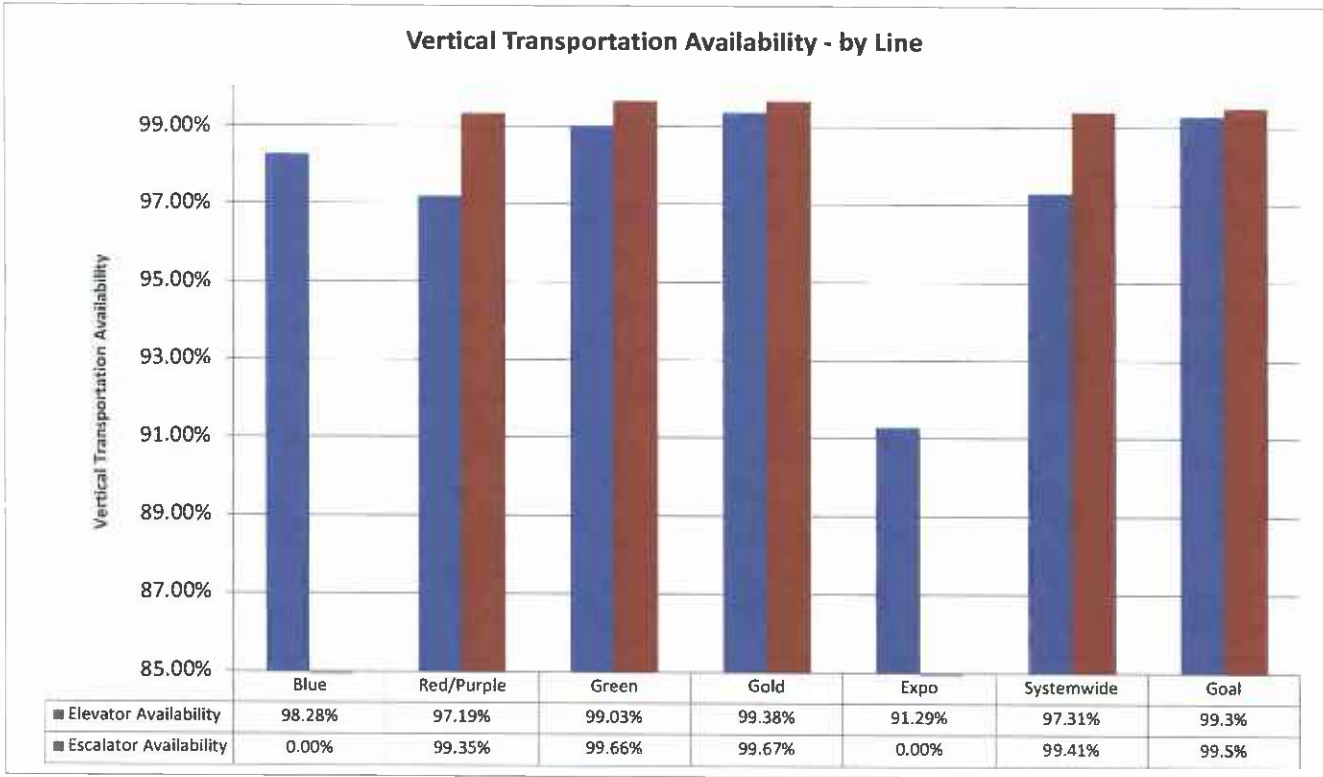


PASSENGER ACCIDENTS PER 100,000 BOARDINGS



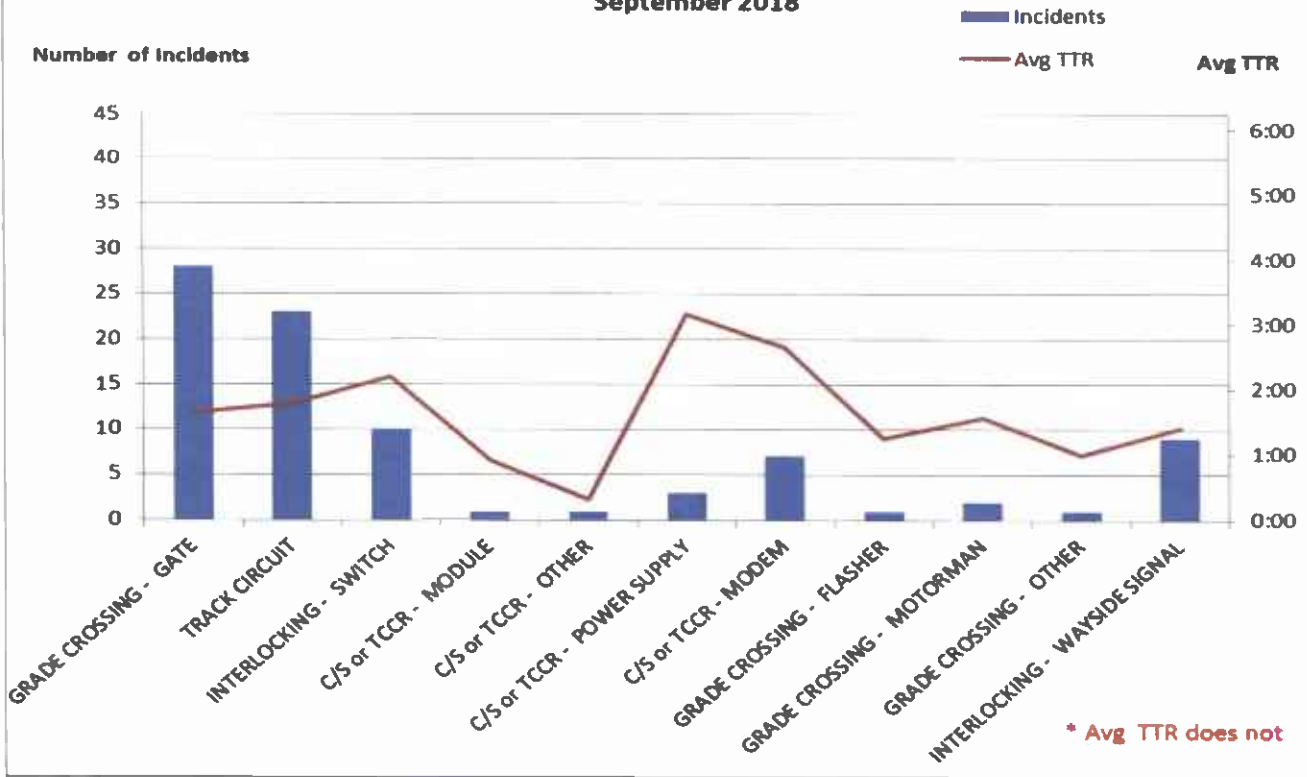
Systemwide Vertical Transportation Availability by Line

Sep 2018

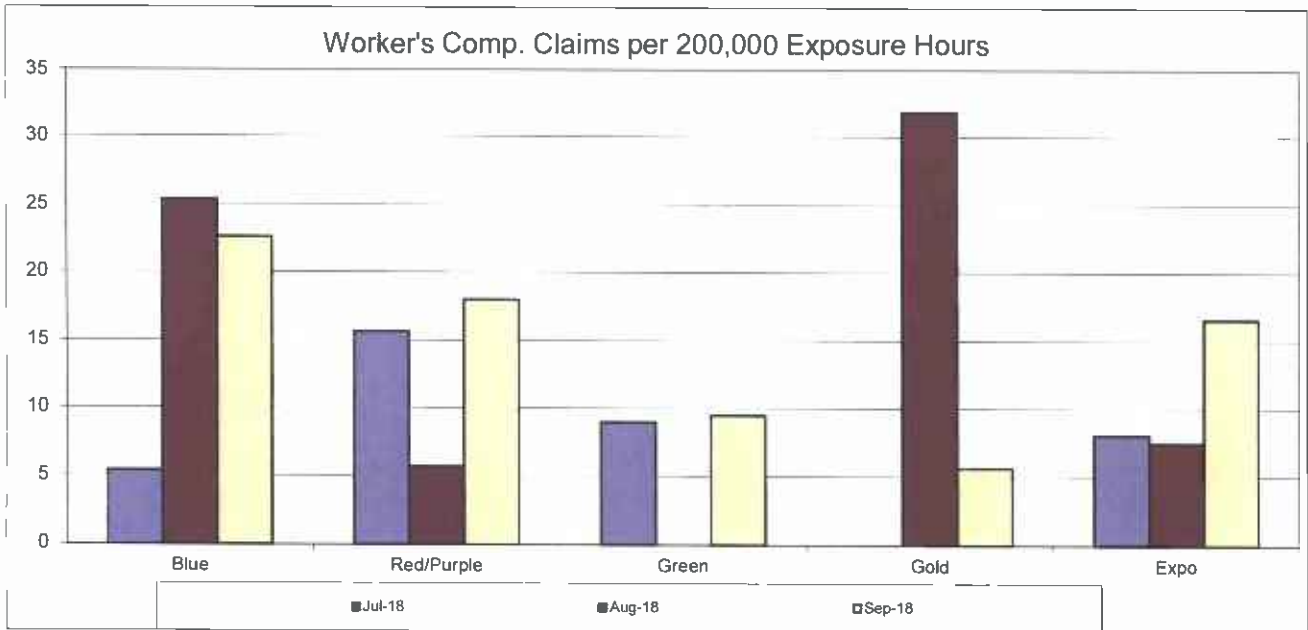


Note: No Escalators at Blue and Expo Lines

**Wayside Signal Maintenance
[Incidents & Avg Time-To-Repair (TTR)]
September 2018**



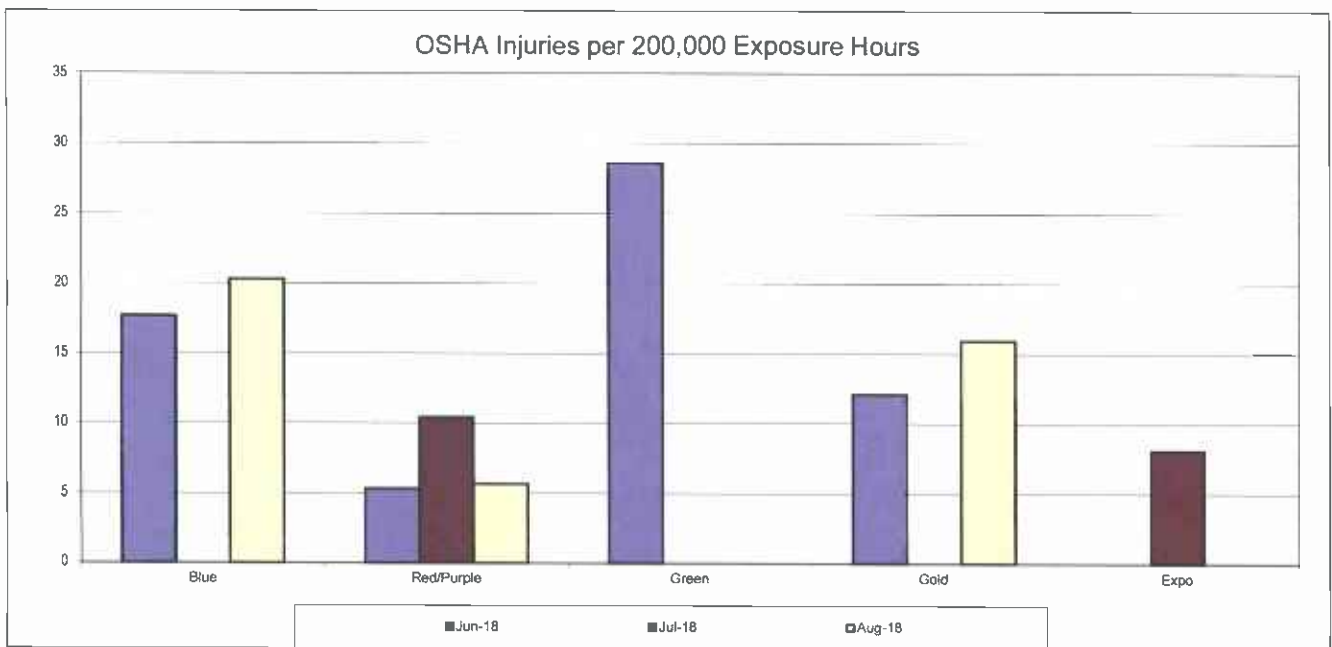
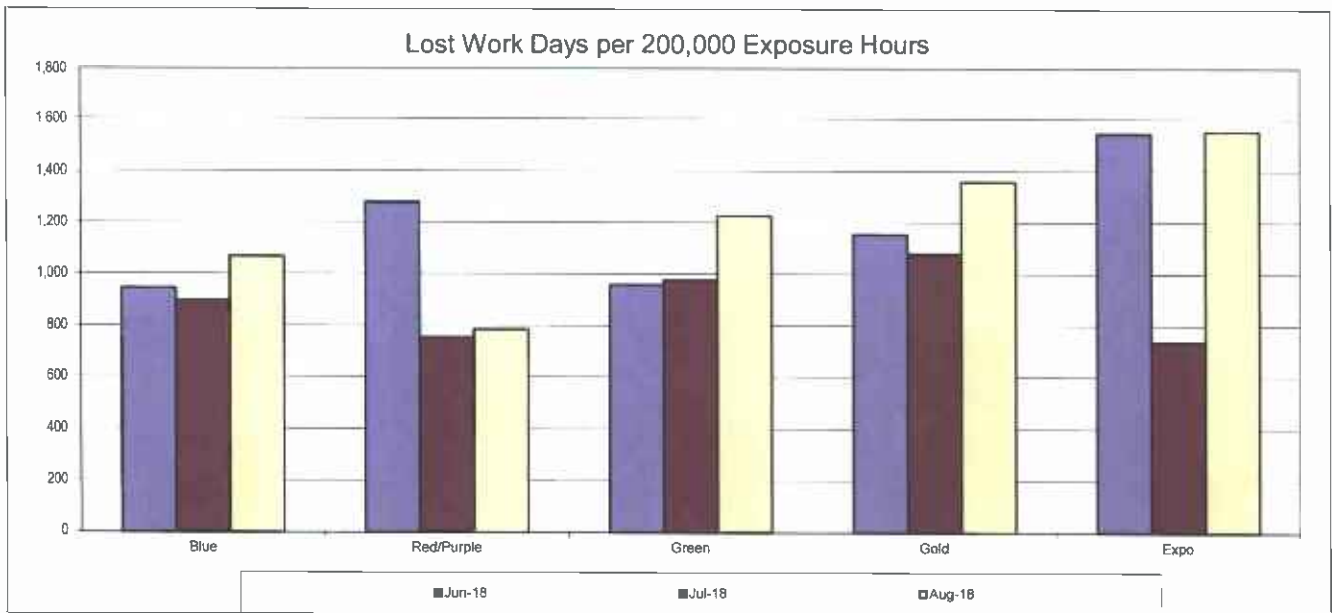
Worker's Comp. Claims
Jul 2018 - Sep 2018
3 Month Comparison



Lost Work Days and OSHA Injuries

Jun 2018 - Aug 2018

3 Month Comparison



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

BLUE LINE

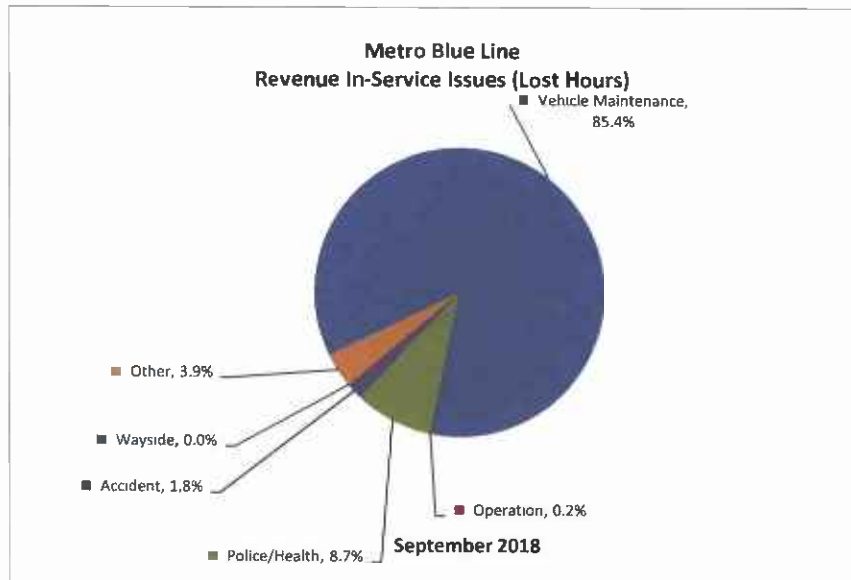
Out of a total of 20,469 hours operated, there were approximately 153 total hours of service delays.

September 2018 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	20,315	99.3%
Cancelled + Delayed Hours	153	0.7%
Total Revenue Hours	20,469	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	2	0.3	0.2%
Accidents	1	2.8	1.8%
Vehicle Maintenance	30	130.9	85.4%
Wayside	0	0.0	0.0%
Police & Health	8	13.4	8.7%
Other	3	6.0	3.9%
Total	44	153.3	100.0%

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

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



September 2018 Blue Line incidents causing delay were as follows:

Operations Incidents:

9/5/2018 5:59:00 AM - Incident# 3049826 (0 lost trips, 6 lost minutes)

Service delay due to a 10-100

T-37

Train 113

Metro Center Station

consist 1141-1137-1073

9/8/2018 1:41:00 PM - Incident# 3051263 (0 lost trips, 10 lost minutes)

T-211 violated rule 5008 failure to monitor her radio and 4260 late arrival.

Accidents:

9/20/2018 6:40:00 AM - Incident# 3055795 (1 lost trip, 167 lost minutes)

Train 106 reports a 10-73 with a bicyclist at 1st & pacific.

T-200

LRV'S (1094A) 1113-1142

Transit Mall Station (south side) 1st & Pacific

Vehicle Maintenance Incidents:

9/1/2018 5:30:00 AM - Incident# 3048520 (0 lost trips, 10 lost minutes)

Operator reports of a propulsion fault

Train 104

T-259

(167A)166-155

Washington Station, Trk. 2, Southbound

9/5/2018 5:42:00 AM - Incident# 3049802 (0 lost trips, 5 lost minutes)

Car 242 re-occurring friction brakes

Train 602

T-549

San Pedro Station track 1 Northbound

Consist 242-248-249

9/5/2018 6:07:00 PM - Incident# 3050145 (1 lost trip, 166 lost minutes)

Self applying brakes on car 165A.

9/9/2018 12:50:00 PM - Incident# 3051461 (1 lost trip, 186 lost minutes)

Disable train at 1st street station lead car 246A lost PSI no movement. 10:37 at 13:50 hours.

9/12/2018 9:13:00 AM - Incident# 3052733 (2 lost trips, 349 lost minutes)

5 mph speed restrictions.

Train#105

T#249

(168A),161,104

Track#2, Southbound, Slauson Station

9/12/2018 7:25:00 PM - Incident# 3052956 (1 lost trip, 167 lost minutes)

Train124 self applying brakes. Conducted a 90 second shut down.

10:37 at 19:32 hours.

9/13/2018 9:27:00 AM - Incident# 3053165 (1 lost trip, 167 lost minutes)

Propulsion / Dynamic Brakes

(240A)-250-244

Train 106

T-26

Vernon, Southbound, Track 2

9/14/2018 3:33:00 PM - Incident# 3053804 (2 lost trips, 330 lost minutes)

Operator reports of a propulsion brake fault and a 25 mph speed restriction .

T-353

Train #102

Car(154A)-157-160

Southbound Trk#2

Willowbrook St.

9/15/2018 5:04:00 AM - Incident# 3053908 (1 lost trip, 159 lost minutes)
Pull out Train 111 (1137,1116,1098), Willow turn back generated propulsion failure in the yard, pulled out north for on time service from Del Amo Station.

9/15/2018 3:04:00 PM - Incident# 3054051 (0 lost trips, 12 lost minutes)
Radio: cars #(236A)-249-237
Train #106
T-332
Washington Station, Track #002, Southbound.

9/16/2018 4:24:00 AM - Incident# 3054127 (0 lost trips, 7 lost minutes)
Train 103 reports that he was not able to key down LRV 237A at Willow Station for his turn back.
Train 103
T-042
LRV'S (237A) 249-236
Willow Station, track 2, southbound

9/17/2018 5:08:00 PM - Incident# 3054700 (0 lost trips, 20 lost minutes)
Auto Train Protection (Speed Limit)
Train 602
T-1180
Cars 242-230-302
Pico station track1 N/B

9/18/2018 7:00:00 AM - Incident# 3054905 (0 lost trips, 10 lost minutes)
Train 116, Cars 250, 240, and 238.
7th and Metro Platform 2 south.
No movement, no prop fault.

9/18/2018 5:23:00 PM - Incident# 3055212 (0 lost trips, 12 lost minutes)
Train 109 had no movement NB at Compton.

9/19/2018 6:35:00 AM - Incident# 3055353 (20 lost trips, 3,336 lost minutes)
Train 103, Cars 229, 236, and 247.
6N Mainyard, Track 2 southbound.
Friction Brakes locked.

9/19/2018 6:52:00 AM - Incident# 3055375 (3 lost trips, 520 lost minutes)
Operator reported that the train could not proceed more than 10 miles per hour.
T-204
Train#604
Cars239-237-(233B)
Southbound Trk#4
23rd St.Station

9/20/2018 5:14:00 AM - Incident# 3055751 (0 lost trips, 5 lost minutes)
Train 601 friction brakes applied with no movement.
Train 601
T-293
LRV'S (302) 230-(234)
Florence Interlocking, track 1 northbound.

9/20/2018 7:00:00 AM - Incident# 3055844 (2 lost trips, 340 lost minutes)
Train 111 reports no Cab Signals departing Willow Station northbound.
Train 111
T-034
LRV'S (249A) 242-244
Willow Station, track 1, northbound.

9/20/2018 1:04:00 PM - Incident# 3055968 (0 lost trips, 10 lost minutes)
Train losing air pressure on car (246A).
Train 105
T-352
18th/Flower, track #1, northbound
245 241 (246)

9/21/2018 7:00:00 AM - Incident# 3056231 (1 lost trip, 167 lost minutes)
operator reports of losing cab signal upon entering the Willow pocket and could not regain.
T-34
Train#111
Cars(242B)-245-241
Northbound Trk#1
Wardlow St.

9/21/2018 4:41:00 PM - Incident# 3056504 (1 lost trip, 167 lost minutes)
Train #109 track #2 Compton station reported Propulsion fault speed restriction.
lead car (244A)- 237-247
t-332

9/21/2018 9:16:00 PM - Incident# 3056541 (0 lost trips, 20 lost minutes)
Friction Brakes will not release.
Train 111
T-075
(1075A)-1105-1077
Southbound, Track 2 Willow station.

9/24/2018 7:42:00 AM - Incident# 3057235 (3 lost trips, 506 lost minutes)
System Check Audio Alarm.
Train #604.
T-443.
LRV- (233A), (242), (249).
Crenshaw Station, Track #3, Northbound.

9/26/2018 6:53:00 PM - Incident# 3058365 (1 lost trip, 167 lost minutes)
Missing left side mirror on 235A

9/27/2018 2:23:00 PM - Incident# 3058679 (1 lost trip, 184 lost minutes)
T-370
Train-106
(233A)-239-249
Grand Station, Trk 2, Southbound
Reports the continuous loss of streetrun operation.

9/27/2018 2:56:00 PM - Incident# 3058693 (1 lost trip, 174 lost minutes)
T-264
Train 106
(246)-250-237
Willow Station, Trk 1, Northbound
T-264 on train 106 reported a Propulsion fault with a speed restriction.

9/28/2018 4:08:00 PM - Incident# 3059218 (0 lost trips, 12 lost minutes)
No Movement
Train 604
T-379
(164A), 154, 157
Pico Station, Track 2, Southbound

9/28/2018 9:34:00 PM - Incident# 3059309 (2 lost trips, 341 lost minutes)
Upon uncoupling the trailing car from train #107, the car lost power and lost all movement.
T-291
Train#107
Cars (109S)-1112-1102
Willow Station Trk#2
Southbound

9/29/2018 8:32:00 PM - Incident# 3059517 (2 lost trips, 301 lost minutes)
Operator reports of friction brake fault and HSCB failure.
T-307
Train#109
Cars(162B)-156
Southbound Trk#2
Grand St.

9/30/2018 7:57:00 PM - Incident# 3059761 (0 lost trips, 5 lost minutes)
Train 111 (110S,1100,1074) T-353 Del Amo Station, track 2 reports intermittent gong failure.

Police & Health Incidents:

9/3/2018 11:11:00 AM - Incident# 3049094 (0 lost trips, 12 lost minutes)
R-048 reported information to Blue line Control that individual was transported due to sickness.

9/4/2018 6:23:00 PM - Incident# 3049654 (0 lost trips, 7 lost minutes)
Possible seizure on board train 65S
(1071)-1069-1042
track 1
T-425
Metro Center
South bound

9/7/2018 6:33:00 PM - Incident# 3051050 (0 lost trips, 5 lost minutes)
Stalled vehicle track 1 El Segundo grade crossing.

9/8/2018 10:10:00 AM - Incident# 3051195 (0 lost trips, 8 lost minutes)
Blockade reported at Washington and Long Beach.

9/8/2018 12:21:00 PM - Incident# 3051228 (0 lost trips, 12 lost minutes)
Operator says a man is talking crazy on her train.

9/18/2018 2:05:00 PM - Incident# 3055117 (2 lost trips, 346 lost minutes)
Train 604 reporting a fire underground at Pico and Flower.

9/23/2018 12:28:00 AM - Incident# 3056827 (2 lost trips, 408 lost minutes)
Car stuck at the Junction Interlocking.

9/27/2018 3:40:00 PM - Incident# 3058703 (0 lost trips, 6 lost minutes)

X-2 (R-142) Reports possible need for medical attention for a patron at 7th and Metro Station Track 2 on board train 106.

Other Incidents:

9/14/2018 3:33:00 PM - Incident# 3053821 (0 lost trips, 15 lost minutes)
Operator T-69 reports that his train went into emergency braking and had no movement.

T-69
Train #101
Cars(1141B)-1138-1072
Southbound Trk#2
Willow St.

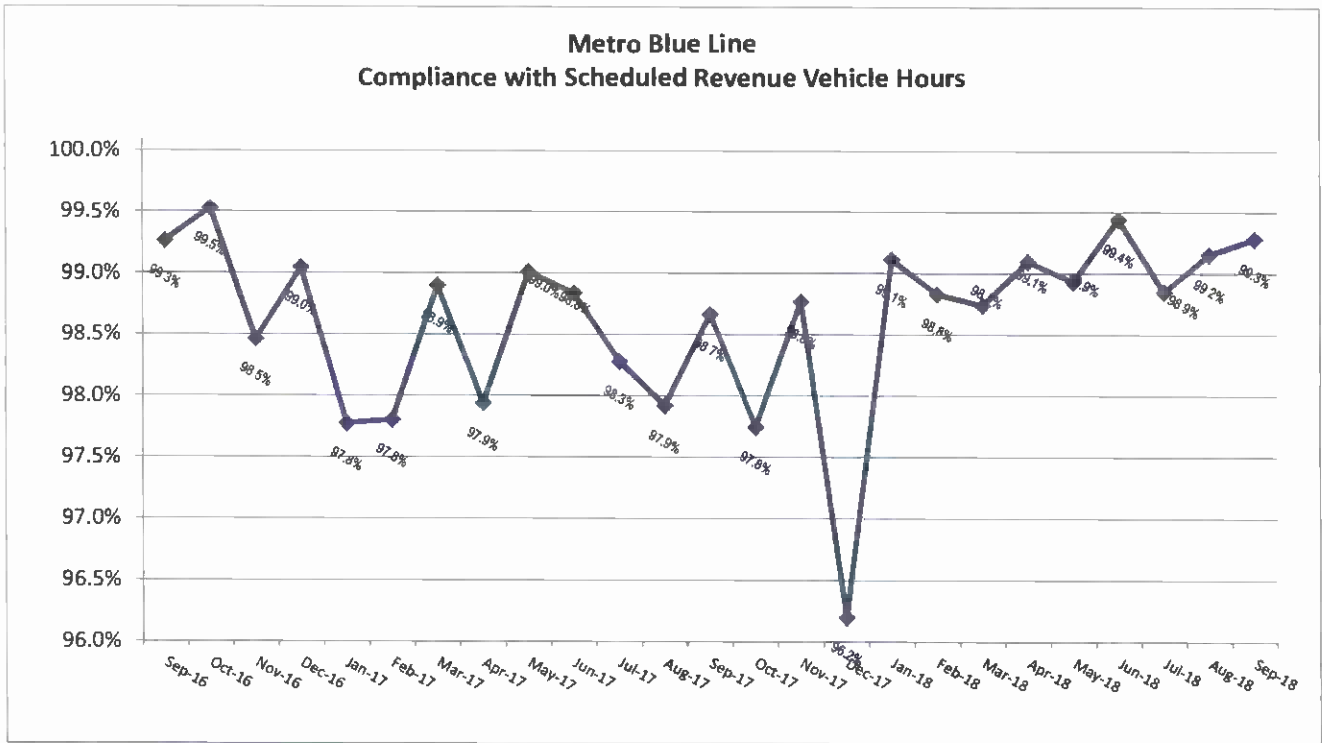
9/16/2018 5:53:00 PM - Incident# 3054248 (1 lost trip, 174 lost minutes)
T-59 Train #110 reported his train went into emergency braking departing Washington Station . Operator T-59 reported two passengers claimed injury.

9/28/2018 7:44:00 AM - Incident# 3059037 (1 lost trip, 170 lost minutes)

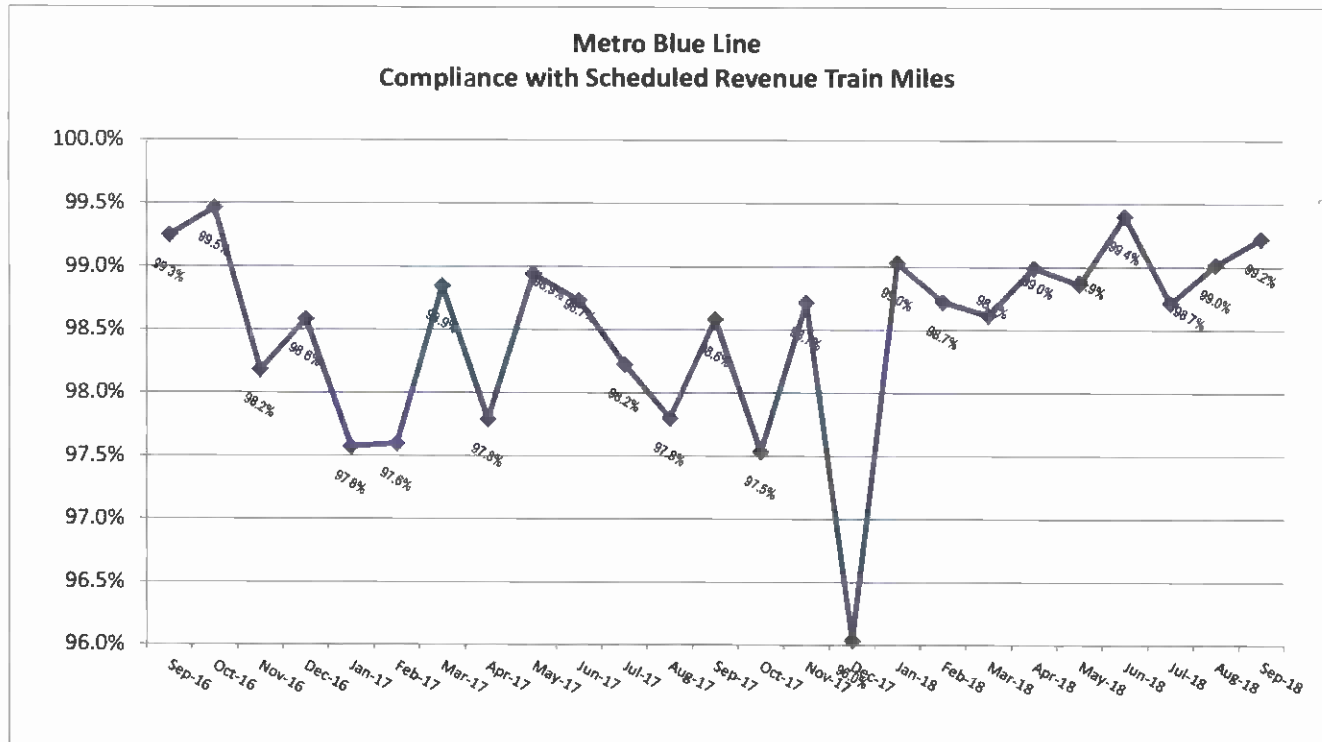
Capt. Ysais(LAFD),reported a gas leak affecting Imperial Station and the station be closed for service. The incident lasted about 5 minutes before the Station was reopened. Train#101 was a Willow Turn-back and continued service to Transit Mall.

MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

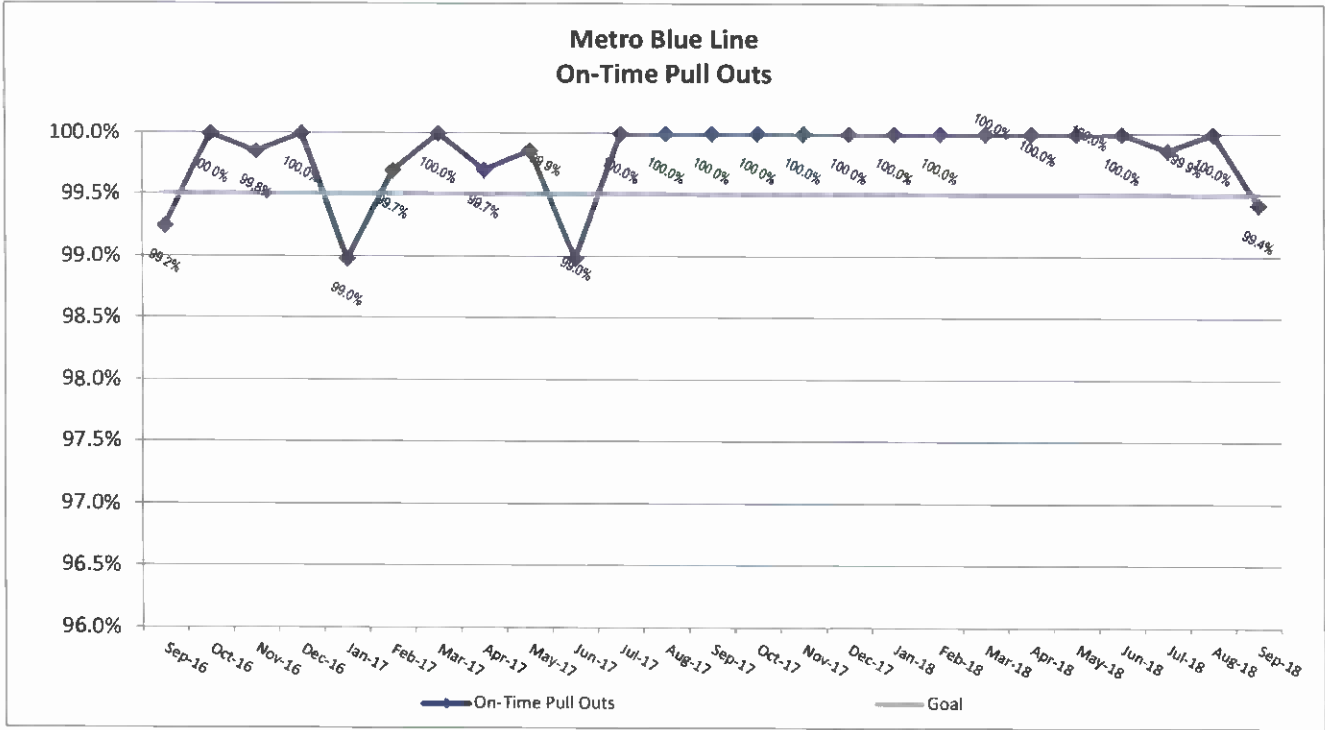
COMPLIANCE WITH SCHEDULED VEHICLE HOURS



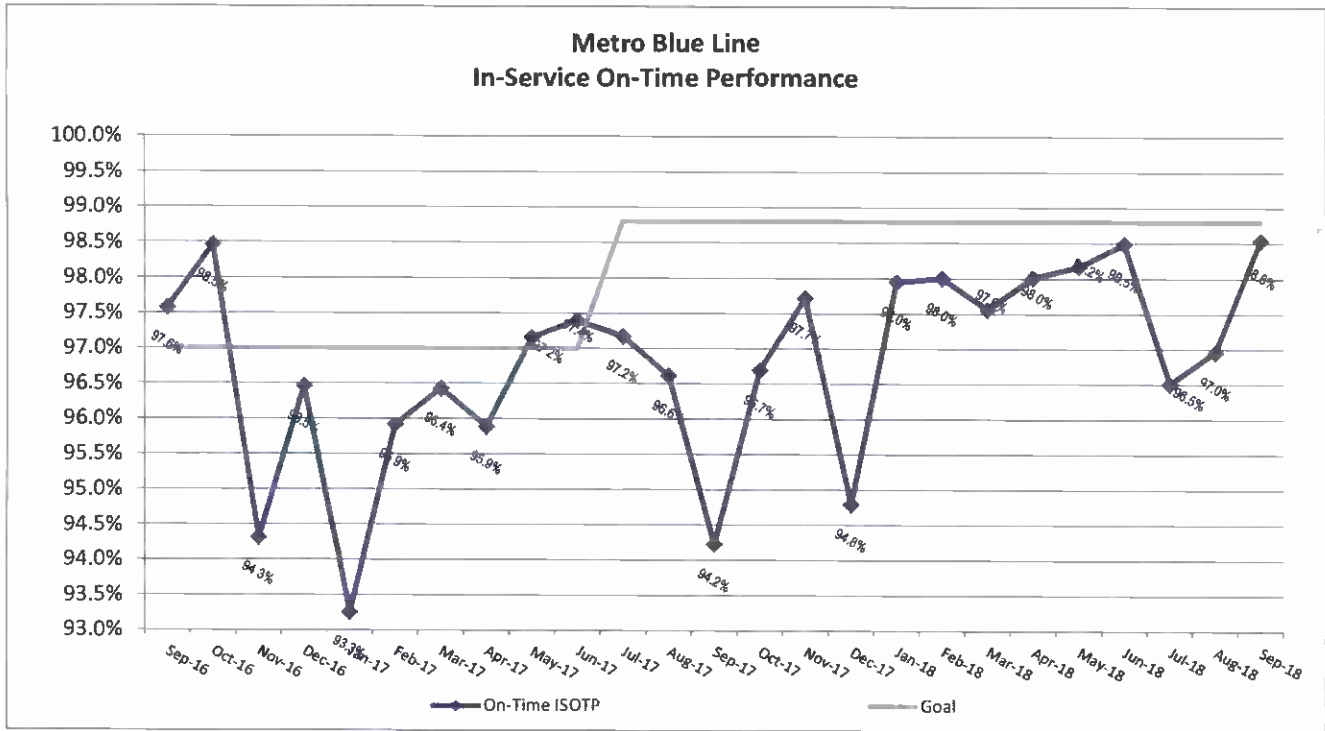
COMPLIANCE WITH SCHEDULED TRAIN MILES



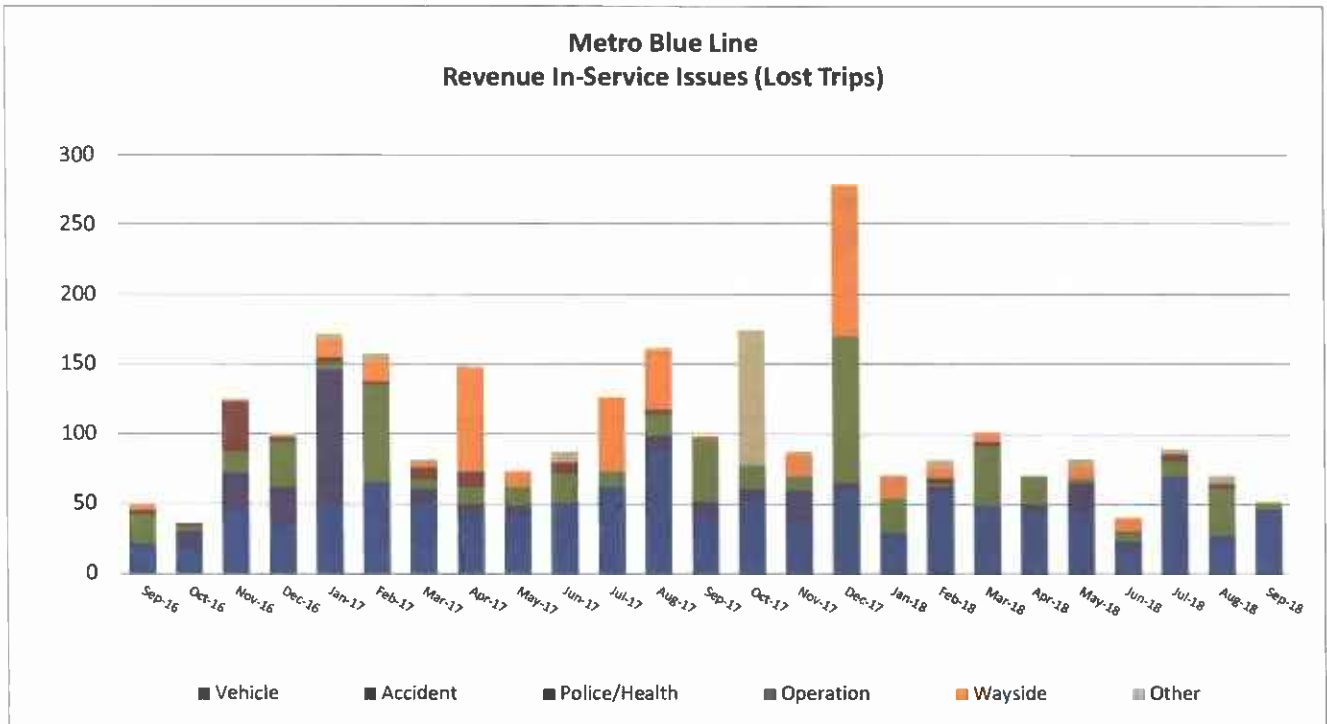
ON-TIME PULL OUTS



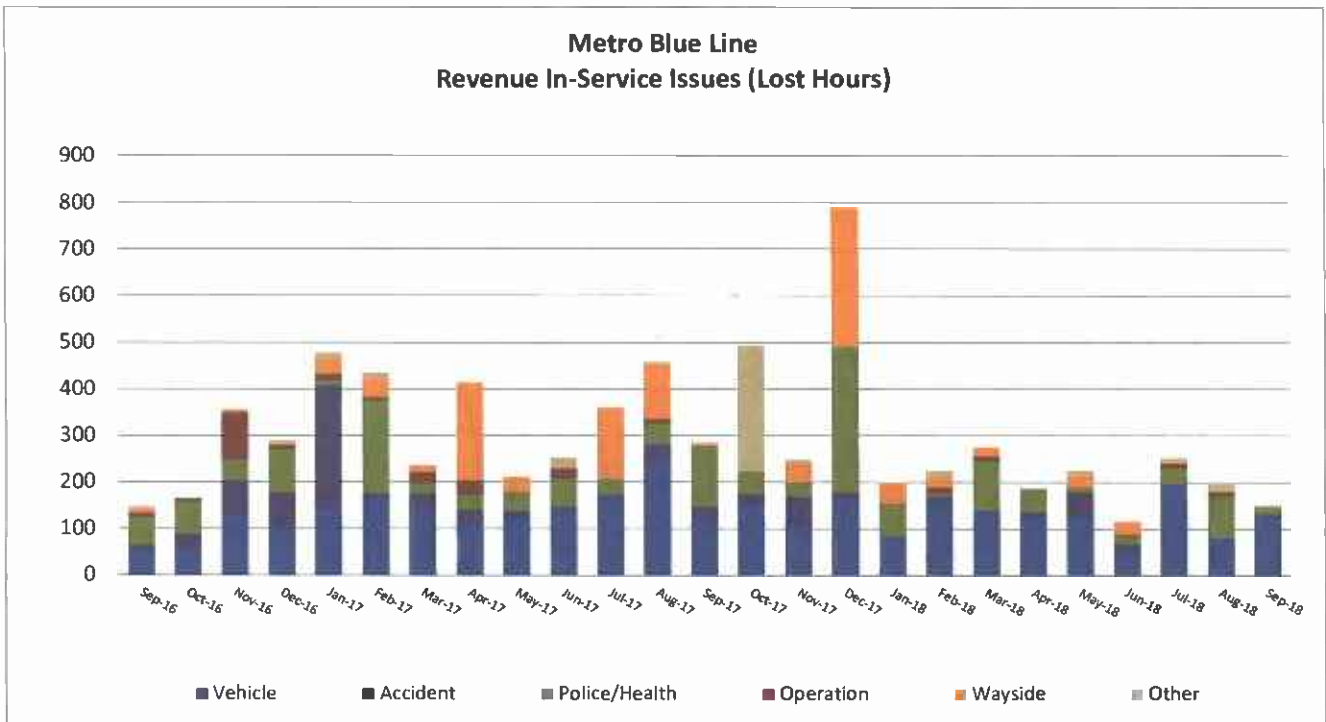
IN-SERVICE ON-TIME PERFORMANCE CHART



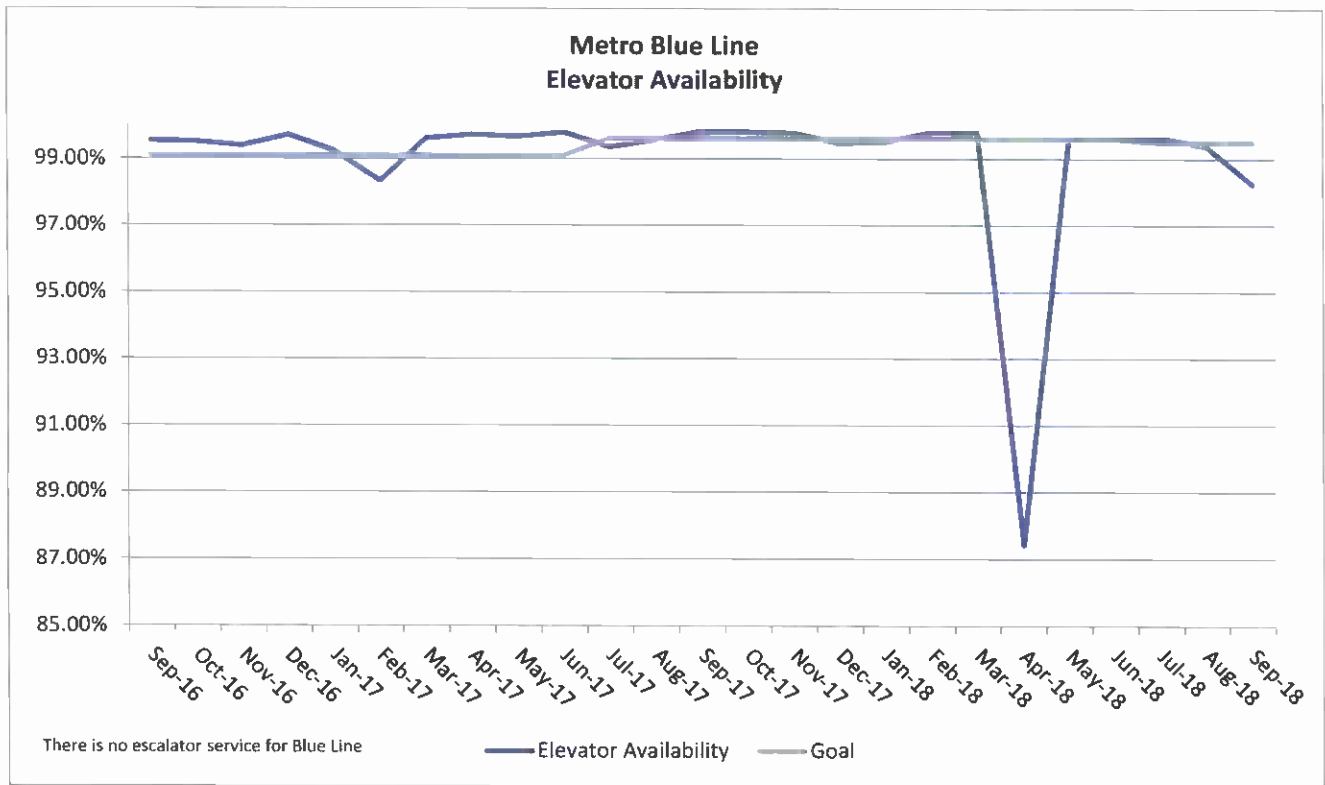
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



RED LINE

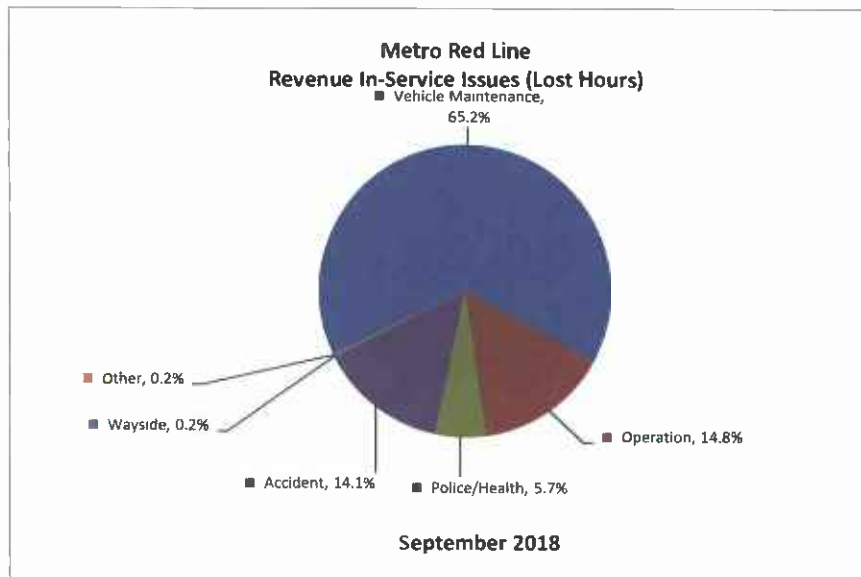
Out of a total of 26,221 hours operated, there were approximately 53 total hours of service delays.

September 2018 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	26,168	99.8%
Cancelled + Delayed Hours	53	0.2%
Total Revenue Hours	26,221	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	1	7.8	14.8%
Accidents	1	7.5	14.1%
Vehicle Maintenance	15	34.5	65.2%
Wayside	1	0.1	0.2%
Police & Health	5	3.0	5.7%
Other	1	0.1	0.2%
Total	24	53.0	100.0%

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

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



September 2018 Red Line incidents causing delay were as follows:

Operations Incidents:

9/2/2018 12:26:00 AM - Incident# 3048770 (4 lost trips, 470 lost minutes)

Train 204

T-351

Operator reports having friction brakes applied to consist. Later T-351 states it is emergency brake application instead of friction brakes.

North Hollywood AR east

539, 540, 583, 584, 541, (542)

Accidents:

9/17/2018 12:08:00 PM - Incident# 3054552 (3 lost trips, 448 lost minutes)

T-378 reports 10-72 at Westlake Station on the AR Track Westbound. Train 201 cars 533-534-573-574.

Vehicle Maintenance Incidents:

9/1/2018 12:17:00 PM - Incident# 3048643 (0 lost trips, 4 lost minutes)

Excessive arcing when requesting propulsion in ATO Mode.

Train #207

T-422

Cars #515-516-527-522-521-(530).

E/Bound Vermont Santa Monica Station A/R Track.

9/7/2018 12:42:00 AM - Incident# 3050642 (1 lost trip, 150 lost minutes)

Flashing cab signals and emergency brake application car 568

North Hollywood AL East

Train 214 T-447

Car # 561-562-583-584-567-(568)

9/7/2018 5:29:00 AM - Incident# 3050677 (0 lost trips, 5 lost minutes)

Train 206 disabled in the Yard.

9/10/2018 8:49:00 AM - Incident# 3051693 (1 lost trip, 149 lost minutes)

Car 548 ATP Failure, loss of cab signals over speed at 5 MPH with a speed code of 70

Train 207

T-333

North Hollywood Interlocking

Consist 549-550-593-594-547-548

9/11/2018 12:13:00 PM - Incident# 3052366 (2 lost trips, 298 lost minutes)

T-172 reports train 205 lead car 593 has no headlights. Train 205, cars 593-594-563-564, AR Track, Civic Center, Westbound.

9/11/2018 7:27:00 PM - Incident# 3052541 (2 lost trips, 315 lost minutes)

Friction Brakes fail to release.

Train #202

T-116

Cars #537-538-545-(546).

E/Bound Union Station West Interlocking.

9/13/2018 5:25:00 PM - Incident# 3053390 (0 lost trips, 8 lost minutes)

Report propulsion and service brake failure.

T-532

Train-219

Cars 595-596-537-538-559-(560)

North Hollywood AR east bound.

9/21/2018 8:20:00 AM - Incident# 3056264 (2 lost trips, 299 lost minutes)

Friction brakes will not release on HRV 567

T-271, Train 208

Union, AR, East

(567)-568-579-580

9/22/2018 12:32:00 PM - Incident# 3056705 (0 lost trips, 5 lost minutes)

Doors fails to open with the use berthing by pass.

Train #206

T-329

Cars #513-514-517-(518).

E/Bound Union Station A/R Platform.

9/23/2018 6:14:00 AM - Incident# 3056853 (0 lost trips, 15 lost minutes)

T-364

Train 202

Universal City Station AL east

Operator states door 513, 514 and 508 were not opening T-364 attempted to cutout cars and had to cut them back in due to no movement.

(513), (514), 509, (508), 511, 512

9/26/2018 5:07:00 PM - Incident# 3058342 (0 lost trips, 4 lost minutes)

Propulsion failure.

Train #217

M-165

Cars #(5050-506-511-512-517-518.

E/Bound Weslake Station A/L Track.

9/28/2018 6:27:00 PM - Incident# 3059265 (0 lost trips, 7 lost minutes)

Flashing cab signaling and recurring emergency brake application.

Train #213

T-145

Cars # 545-546-599-600-583-(584).

E/Bound Wilshire Vermont Station A/L.

9/29/2018 3:01:00 PM - Incident# 3059465 (1 lost trip, 116 lost minutes)

Service brake failure in car 581.

9/30/2018 11:07:00 AM - Incident# 3059641 (1 lost trip, 174 lost minutes)

Full cab signals with 3 mph movement

Train 207

T-323

Cars 5007-510-503-504-527-(522)

Vermont Sunset AL East

9/30/2018 11:14:00 PM - Incident# 3059801 (3 lost trips, 522 lost minutes)

Flashing cab signals car #568

Westlake AL East

Train 208 T-320

Car # 587-588-579-580-583-(584)

Wayside Incidents:

9/26/2018 12:41:00 PM - Incident# 3058219 (0 lost trips, 5 lost minutes)

Westlake East Interlocking False Occupancy Track Circuits.

1. WM-1A
2. WM-3A
3. WM-1B
4. WM-3B
5. M5-103 Employee In Charge
6. M5-104 Watch Person with a Pro Trans

Police & Health Incidents:

9/1/2018 1:09:00 AM - Incident# 3048488 (0 lost trips, 13 lost minutes)

CCTV reports an individual was scene by patron ride the outside of the back of train 214 as it departed North Hollywood on the AR.

9/5/2018 9:08:00 AM - Incident# 3049870 (0 lost trips, 5 lost minutes)

Train 206 reports trespasser @ WV area AR

T-145, Train 206

WV, West, AR

(509)-508-519-526

9/6/2018 3:40:00 PM - Incident# 3050515 (0 lost trips, 5 lost minutes)

Train 203 T-378 Union Station on the AR has a non responsive female patron aboard car 527.

9/12/2018 9:52:00 PM - Incident# 3052990 (1 lost trip, 149 lost minutes)

CCTV/R-441 reports a male individual climbed on top of train 201 couplers as it departed Wilshire/Western station BR.

9/22/2018 6:25:00 AM - Incident# 3056632 (0 lost trips, 8 lost minutes)

Vermont Sunset Train 202 car 569 T-147 states there is a African American male with all black clothing appears to be experiencing a seizure.

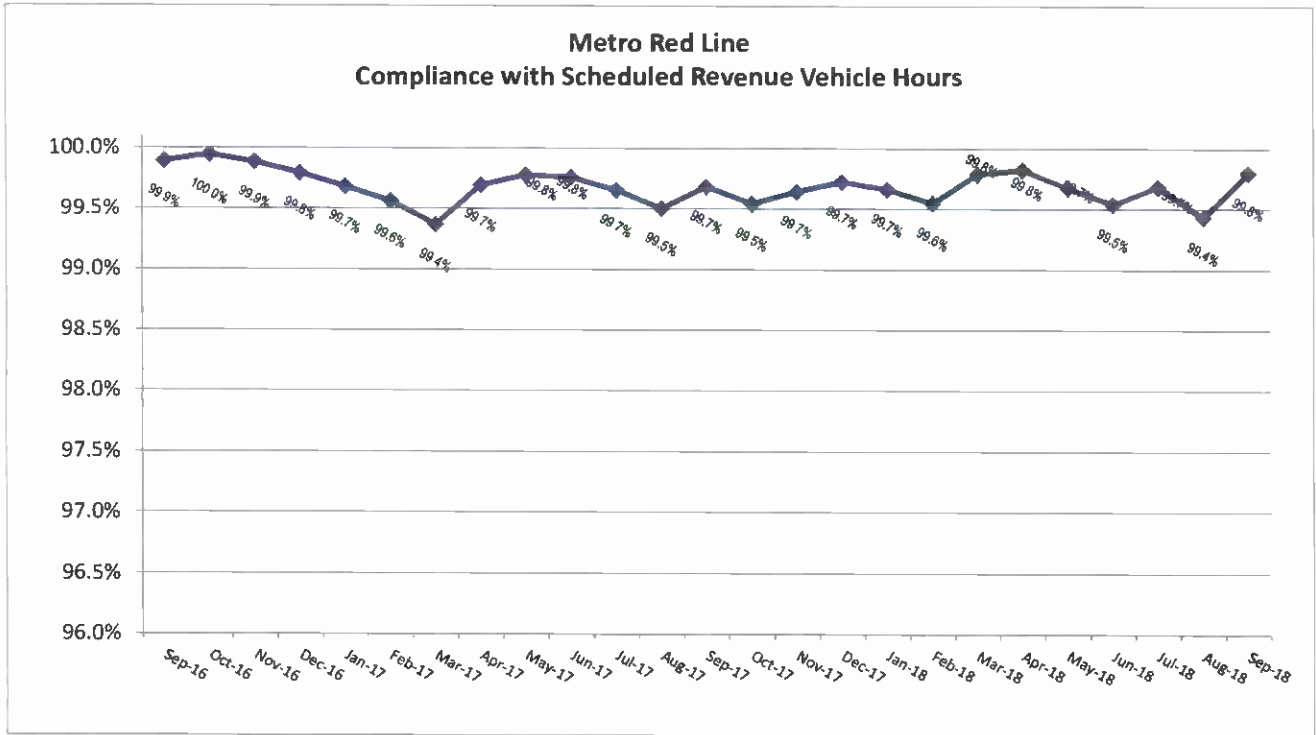
Other Incidents:

9/4/2018 2:40:00 PM - Incident# 3049567 (0 lost trips, 5 lost minutes)

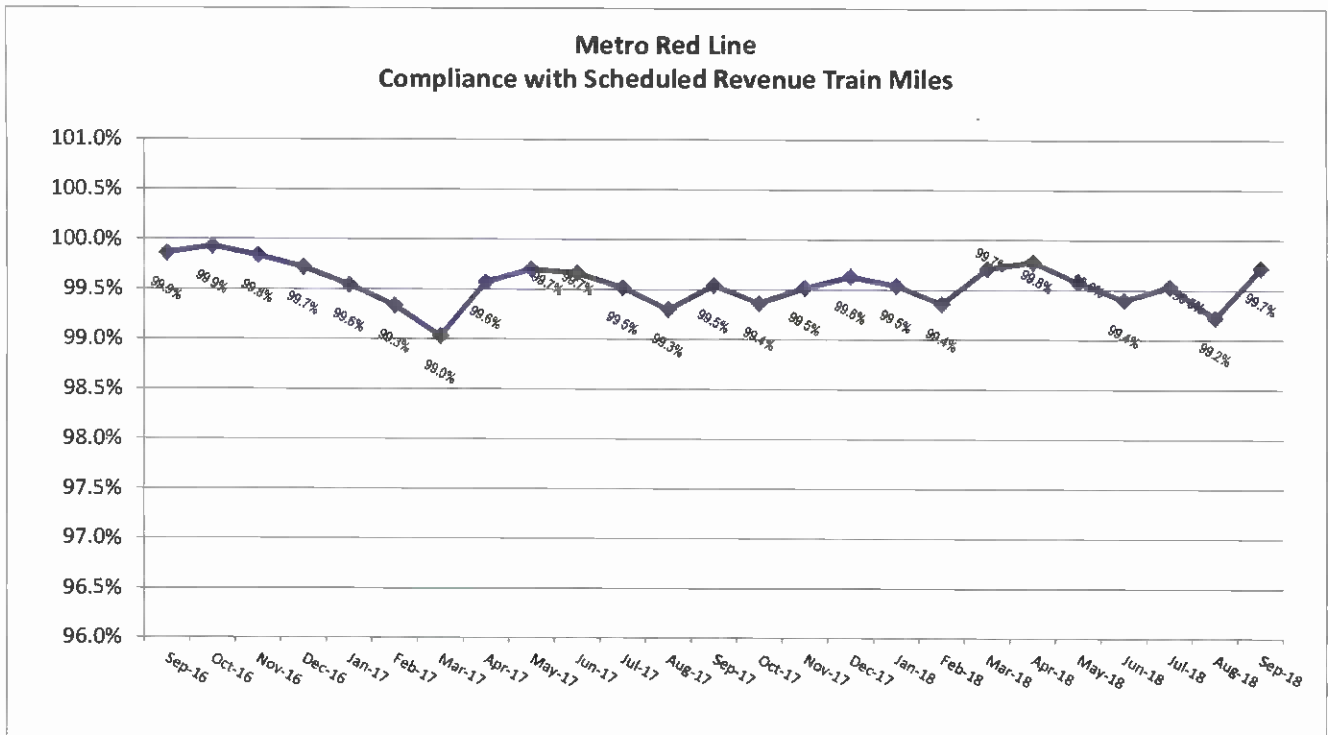
Train 207 Car 520 the door was kicked by a patron, the kick caused it to come off its track.

MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

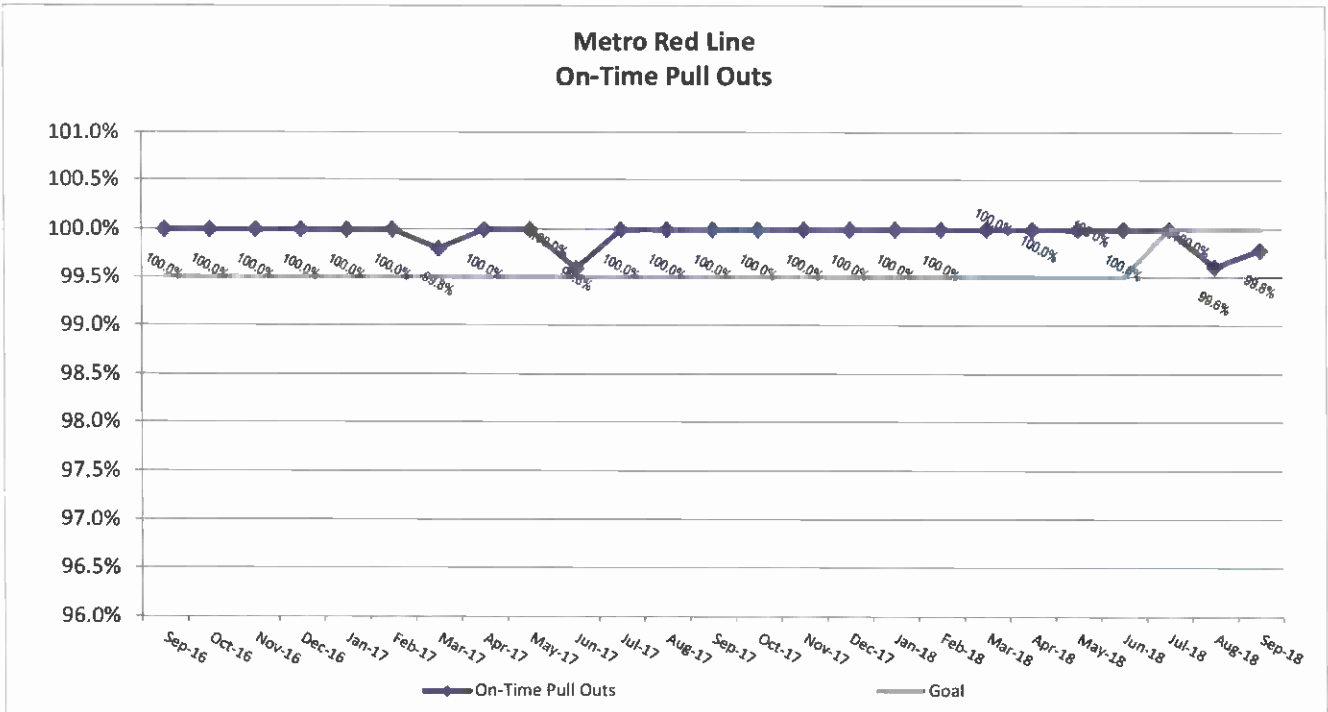
COMPLIANCE WITH SCHEDULED VEHICLE HOURS



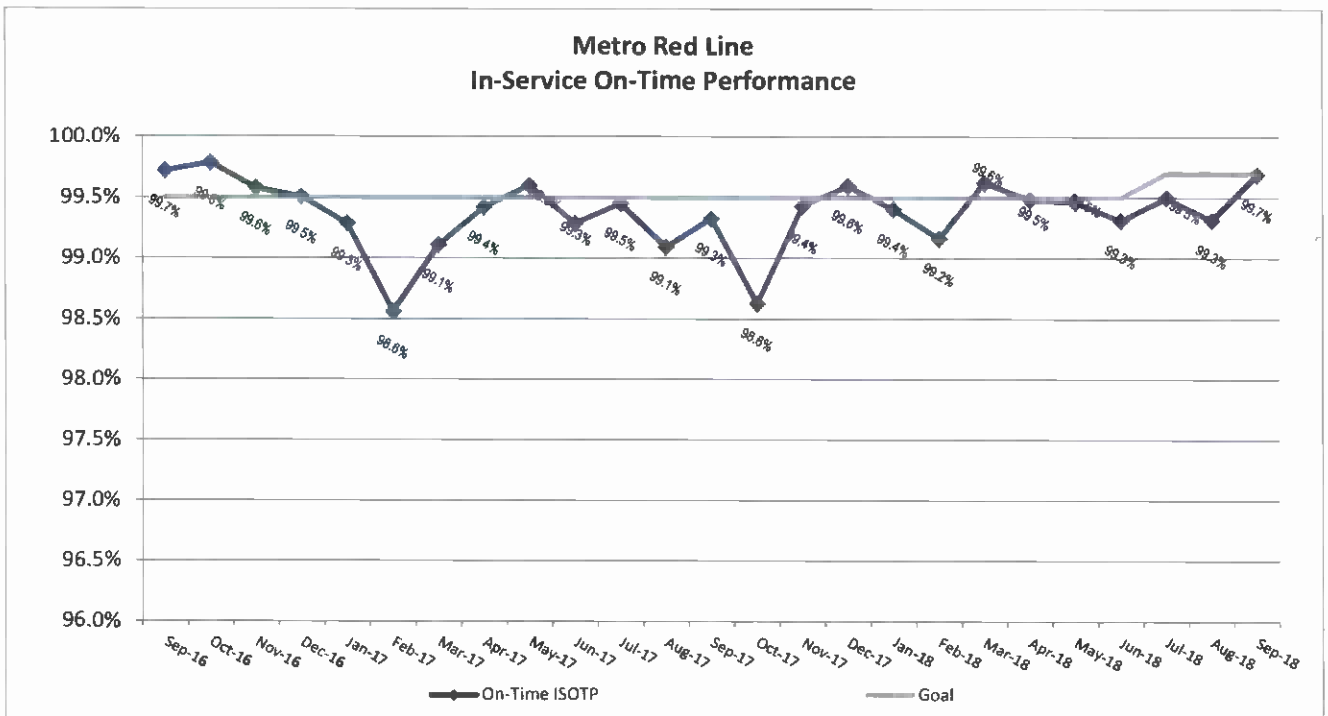
COMPLIANCE WITH SCHEDULED TRAIN MILES



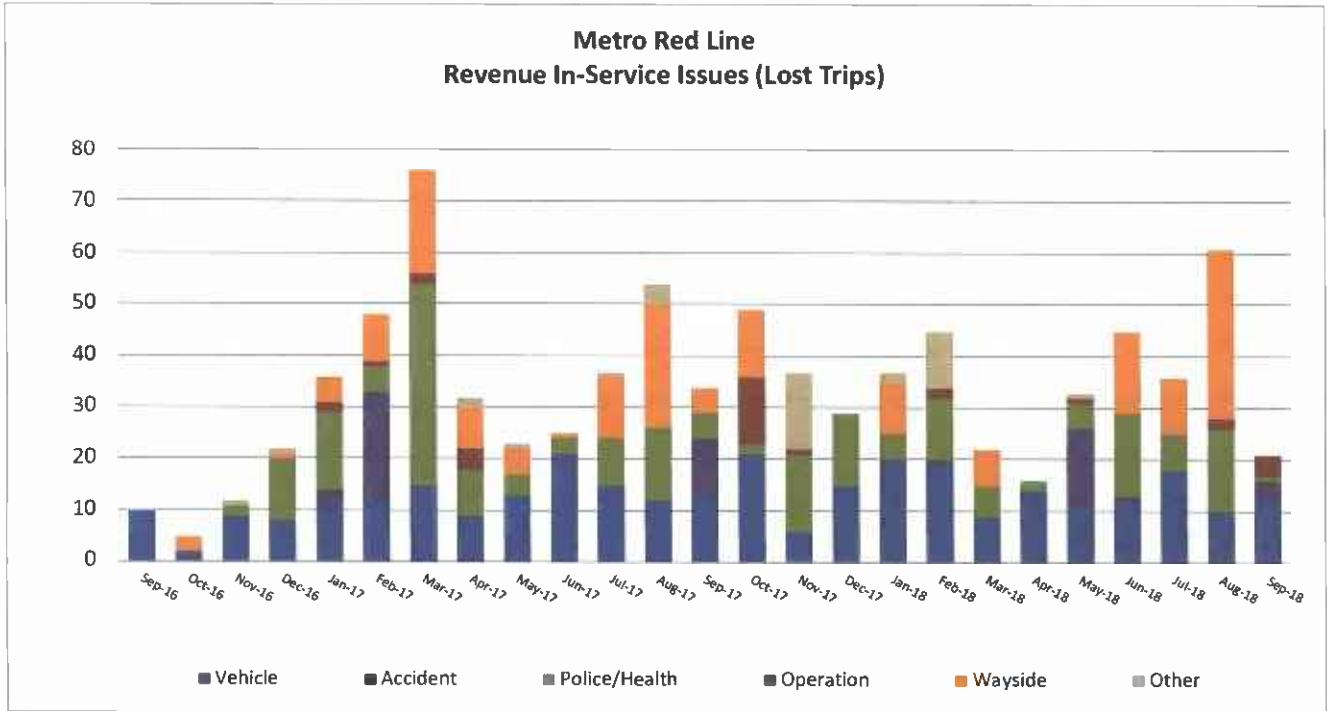
ON-TIME PULL OUTS



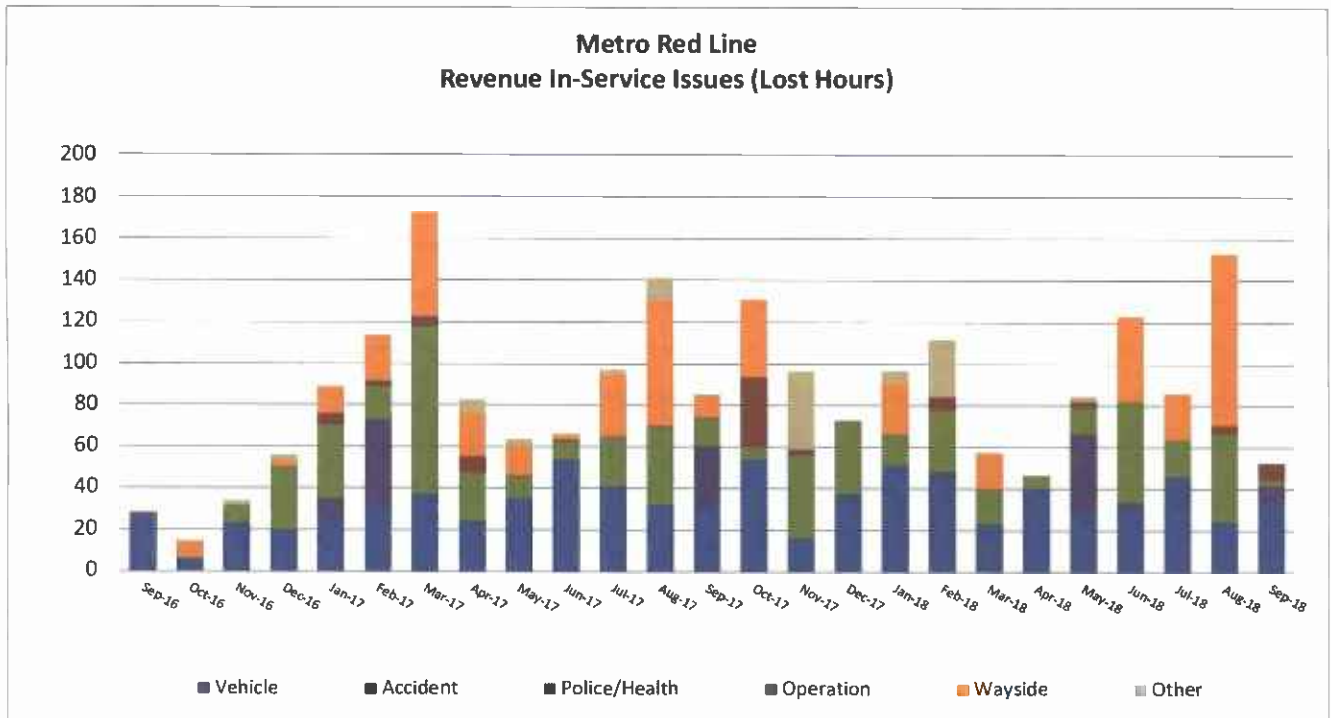
IN-SERVICE ON-TIME PERFORMANCE



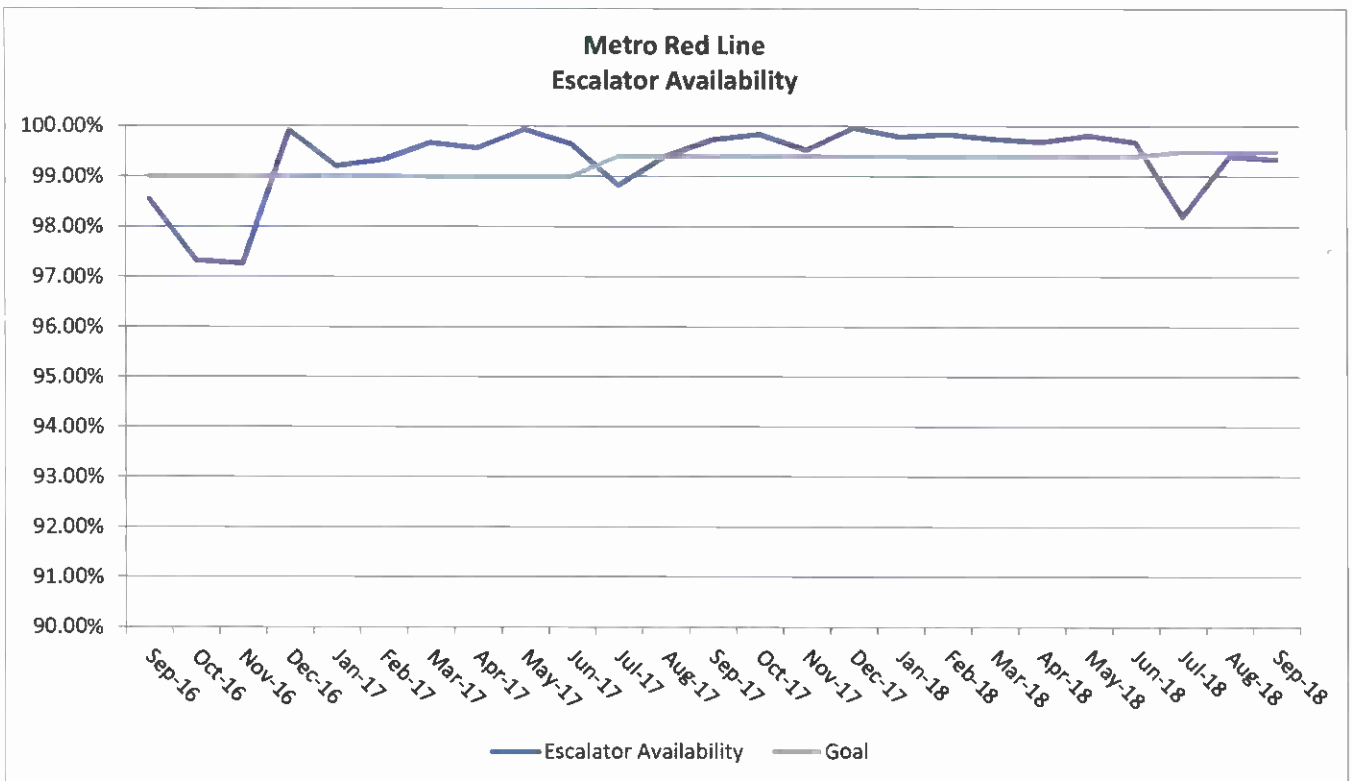
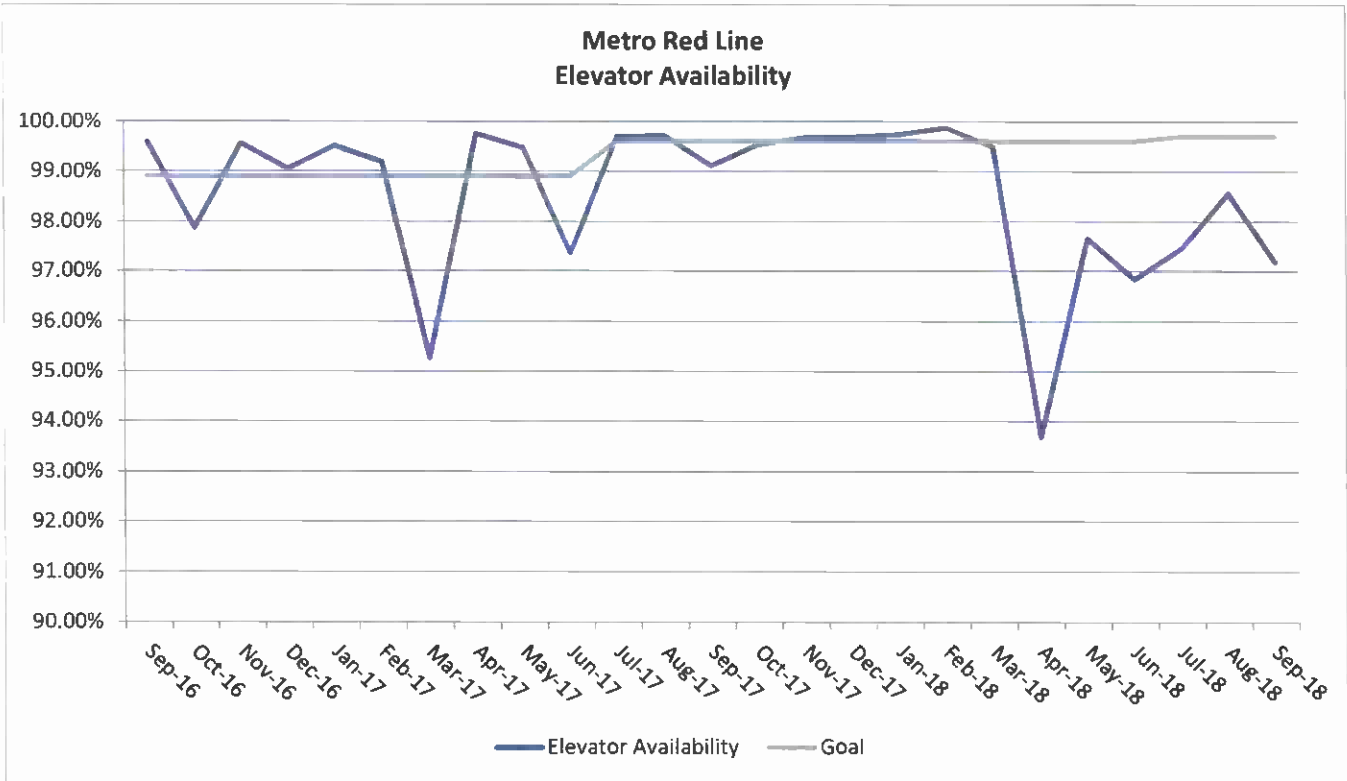
LOST TRIPS



LOST TRIPS



VERTICAL TRANSPORTATION AVAILABILITY



GREEN LINE

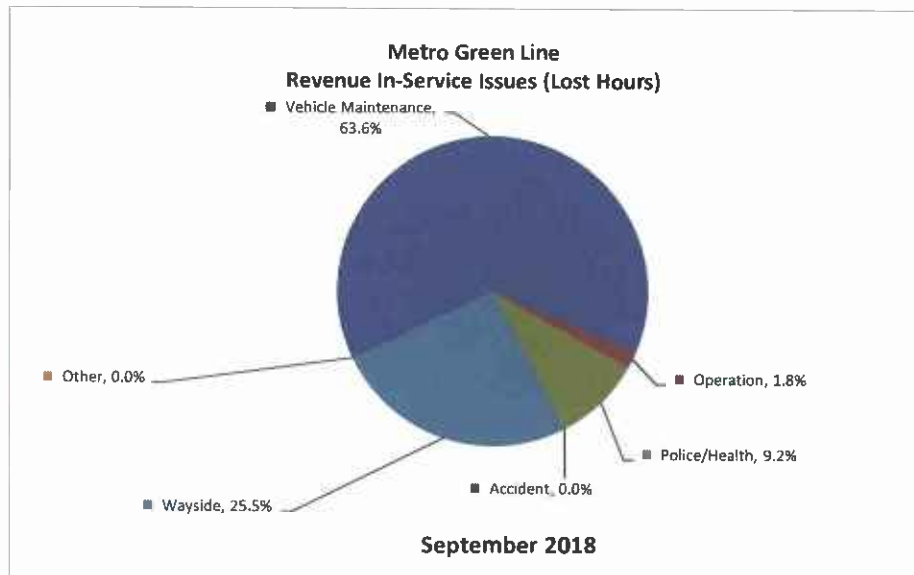
Out of a total of 9,074 hours operated, there were approximately 15 total hours of service delays.

September 2018 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	9,059	99.8%
Cancelled + Delayed Hours	15	0.2%
Total Revenue Hours	9,074	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	3	0.3	1.8%
Accidents	0	0.0	0.0%
Vehicle Maintenance	11	9.4	63.6%
Wayside	2	3.8	25.5%
Police & Health	3	1.4	9.2%
Other	0	0.0	0.0%
Total	19	14.8	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



September 2018 Green Line incidents causing delay were as follows:

Operations Incidents:

9/15/2018 1:39:00 PM - Incident# 3054037 (0 lost trips, 5 lost minutes)

Train 342, alpha Mary, no westbound relief by alpha William at 1334 hours, track 1.

9/21/2018 10:28:00 AM - Incident# 3056375 (0 lost trips, 5 lost minutes)

10-100, cars (1080-1086)

Train #335

T-297

Marine Station, Track #02, Eastbound.

9/26/2018 5:19:00 AM - Incident# 3058011 (0 lost trips, 6 lost minutes)

10-100 T-57, Train 346 at Marine Station.

Vehicle Maintenance Incidents:

9/11/2018 6:43:00 AM - Incident# 3052164 (0 lost trips, 10 lost minutes)

Operator reports that he had a red aspect at the Vermont #2 signal and the train came to a stop and caused no movement.

T-183

Train#331

Cars(220A)-223

Eastbound Trk#2

Vermont West Int.

9/13/2018 1:41:00 PM - Incident# 3053304 (1 lost trip, 66 lost minutes)

Train reports flashing ATP

T-96, Train 337

Track 2, Douglas, East

(225A)-220

9/14/2018 5:03:00 AM - Incident# 3053493 (0 lost trips, 6 lost minutes)

Train Operator T-409 reports no movement.

Train 332

T-409

Cars (1149B)-1085

Westbound, Aviation Station, Track 1

9/20/2018 4:43:00 PM - Incident# 3056055 (2 lost trips, 132 lost minutes)

Prop Fault, Speed Restriction and AC Fault on EB train 355.

9/24/2018 5:40:00 AM - Incident# 3057148 (0 lost trips, 6 lost minutes)

T-409 reports of low air pressure on car 208 train 343.

9/25/2018 2:05:00 PM - Incident# 3057851 (0 lost trips, 7 lost minutes)

Train 334

T-344

LRV Cars (222)-220

El Segundo Track 2

Operator reports of Prop Fault with Speed restriction and unable to open the doors.

9/25/2018 3:20:00 PM - Incident# 3057868 (2 lost trips, 132 lost minutes)

Train no movement no fault

Train 337

T-20

Cars (218)-202

Crenshaw tk 2 eastbound.

9/27/2018 1:17:00 AM - Incident# 3058433 (1 lost trip, 66 lost minutes)

Friction Brake Activation

Train 336

T-24

226B

Aviation Station, Track 2, Westbound

9/28/2018 5:32:00 AM - Incident# 3058985 (1 lost trip, 70 lost minutes)

T-343 reports re occurring propulsion fault.
Train 331
T-343
Cars (220A)-213
Eastbound, track 2, Long Beach Freeway

9/29/2018 12:01:00 PM - Incident# 3059414 (0 lost trips, 5 lost minutes)

Propulsion / Dynamic Brakes, cars #(203B)-201
Train #333
T-394
Paramount interlocking, Track #1, Westbound.

9/29/2018 11:36:00 PM - Incident# 3059545 (1 lost trip, 63 lost minutes)

Train 331,
Operator T-020,
Car 213,
El Segundo track 2.
No air pressure.

Wayside Incidents:

9/12/2018 12:05:00 PM - Incident# 3052844 (2 lost trips, 132 lost minutes)

Scada alarms indicate loss of Local Fiber Optic link failure at the following locations.
Harbor
Avalon
Wilmington West
Wilmington East
Long Beach

9/15/2018 3:16:00 AM - Incident# 3053909 (1 lost trip, 93 lost minutes)

Trains delayed due to Traction Power issues Track 1 and 2 between El Segundo to Aviation Station.
Trains resumed normal operation at 0500 hours.

Police & Health Incidents:

9/8/2018 12:14:00 PM - Incident# 3051220 (0 lost trips, 5 lost minutes)

LASD Deputy Carbohale notified Green line to stop service into Lakewood station due to a call for a person shooting a bee bee gun at passengers.

9/9/2018 1:21:00 AM - Incident# 3051360 (0 lost trips, 10 lost minutes)

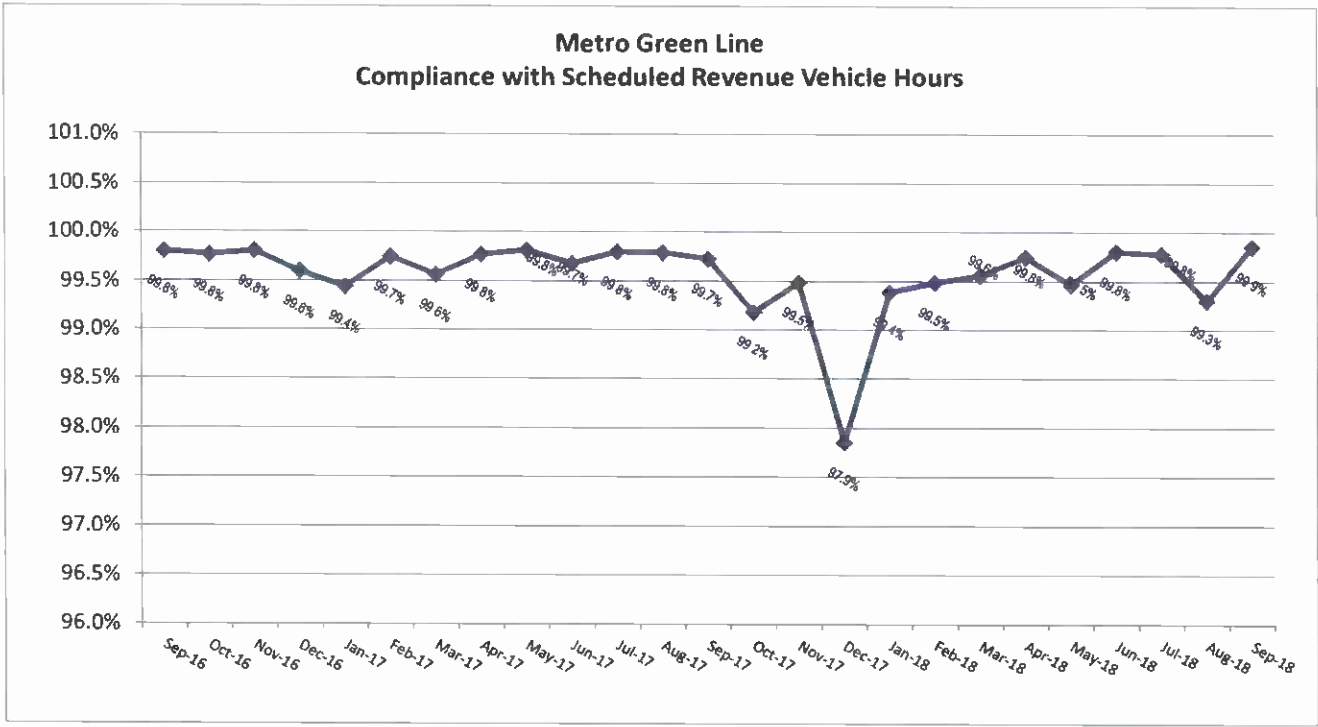
Sick Individual/ Trouble breathing
Train#333, T-548
Wilmington West, WB

9/11/2018 10:01:00 PM - Incident# 3052579 (1 lost trip, 66 lost minutes)

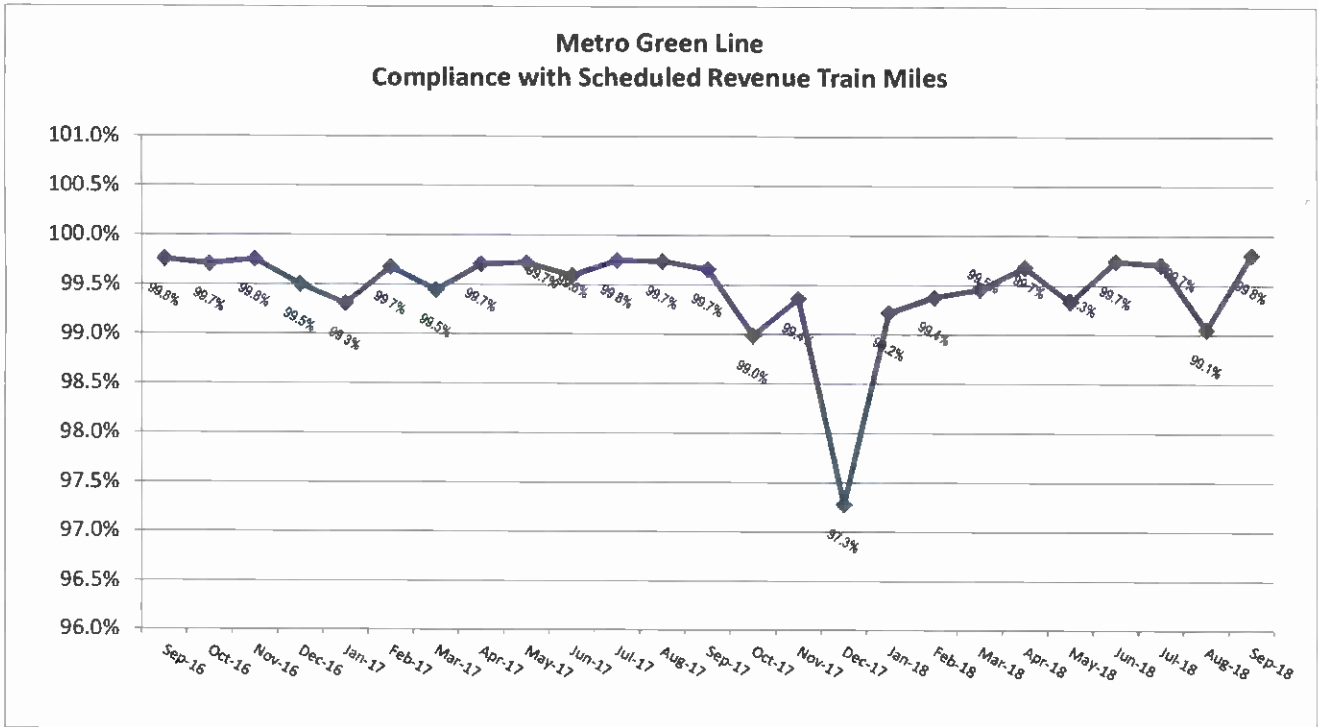
Sick Individual
Train 337
T-20
Cars 1081
Marine station

MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

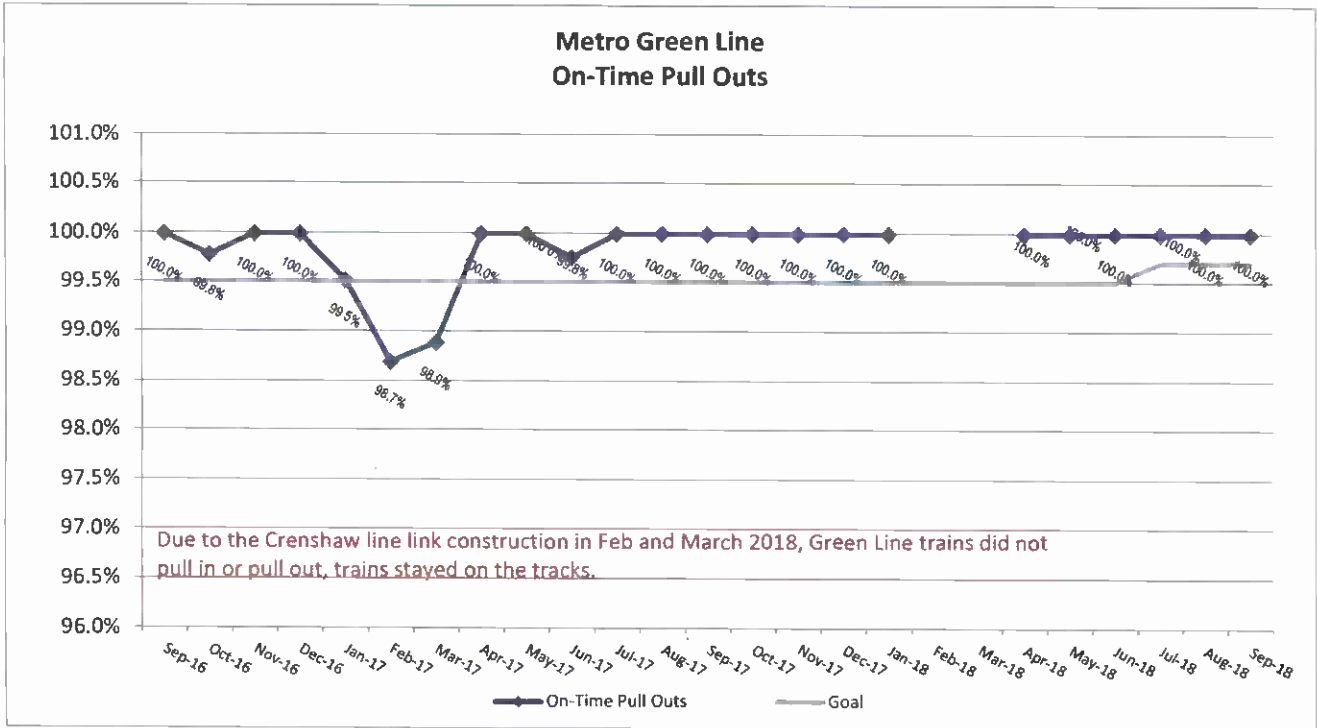
COMPLIANCE WITH SCHEDULED VEHICLE HOURS



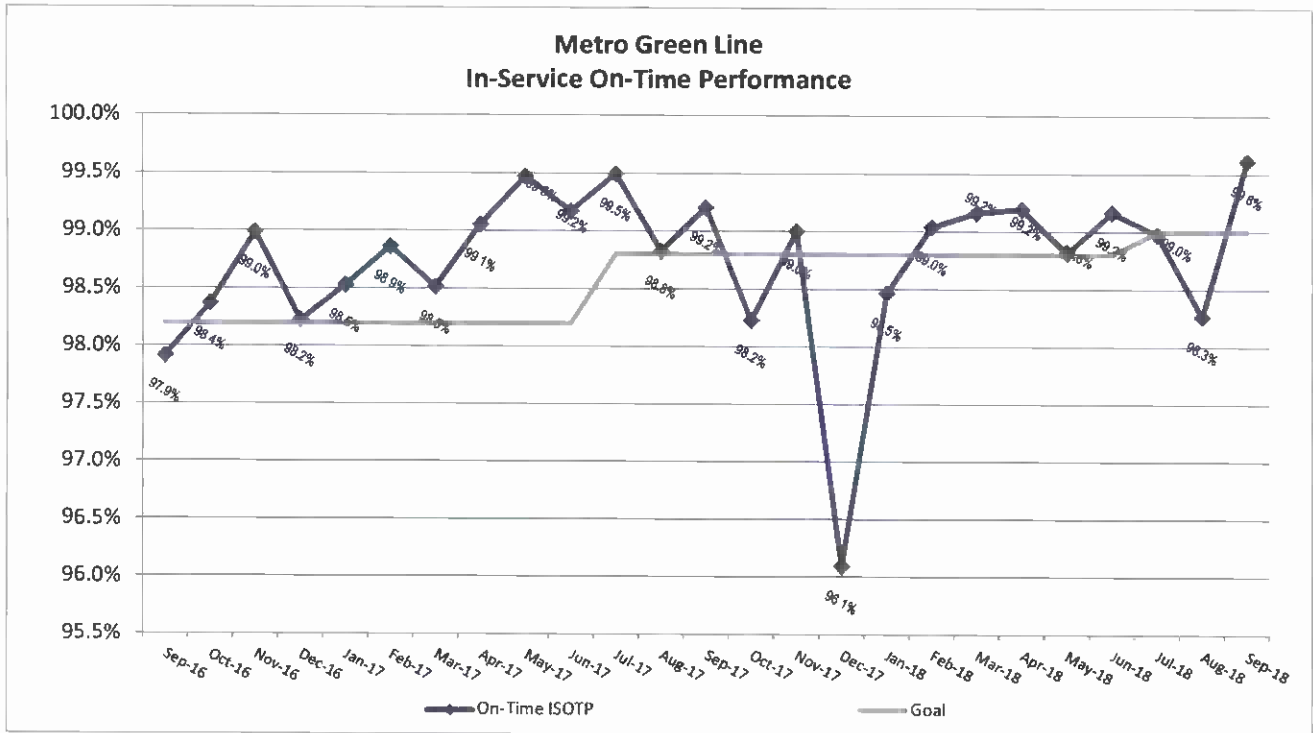
COMPLIANCE WITH SCHEDULED TRAIN MILES



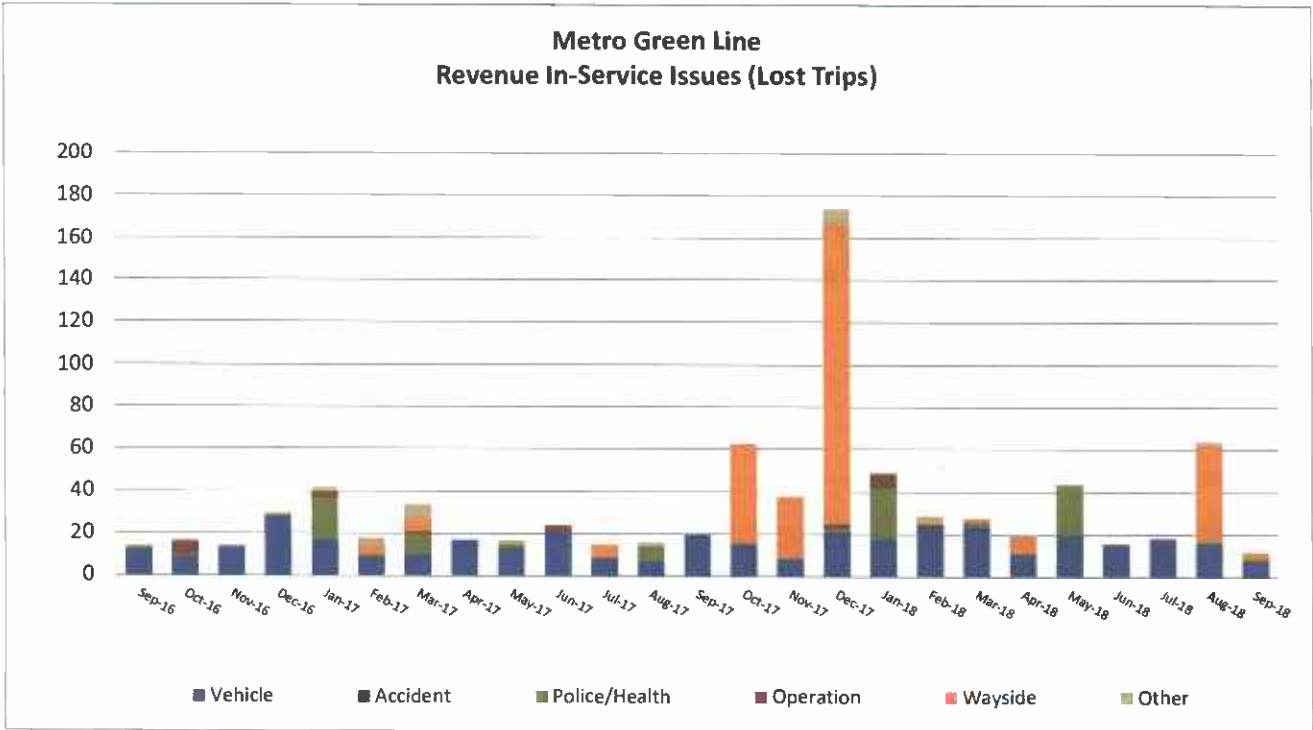
ON-TIME PULL OUTS



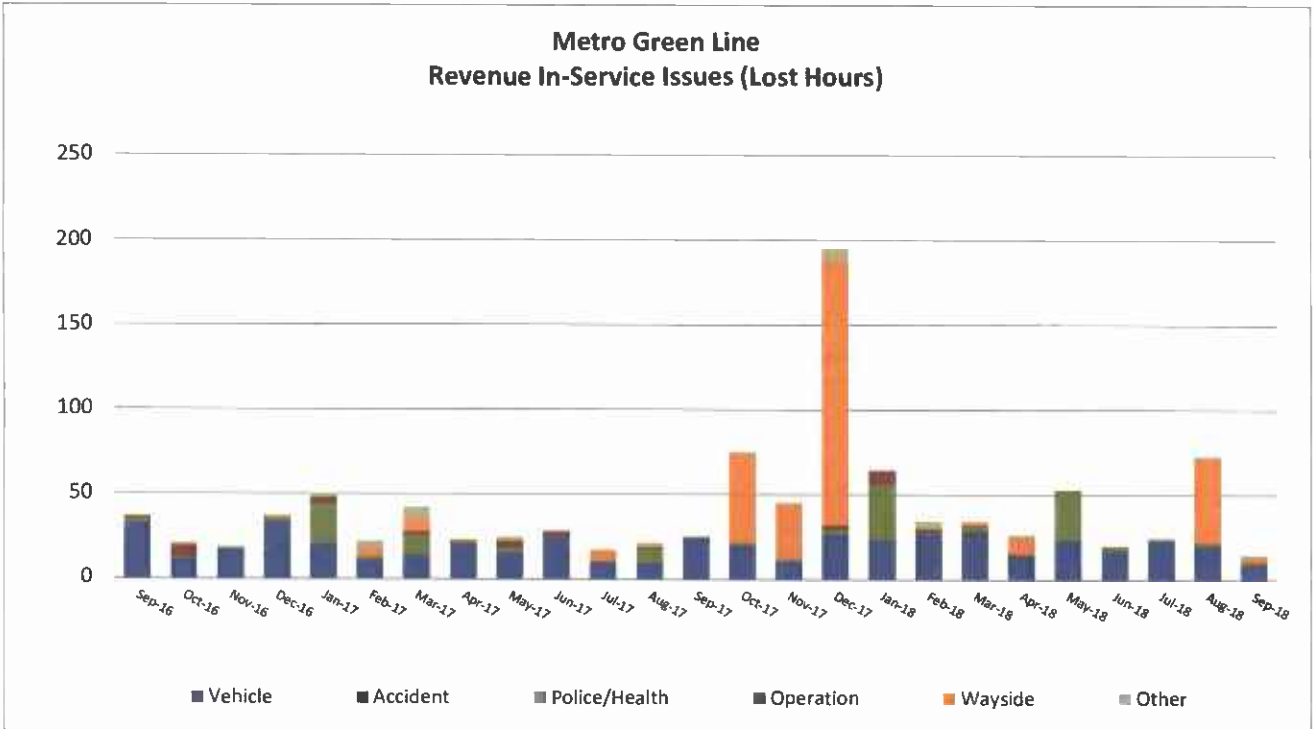
IN-SERVICE ON-TIME PERFORMANCE



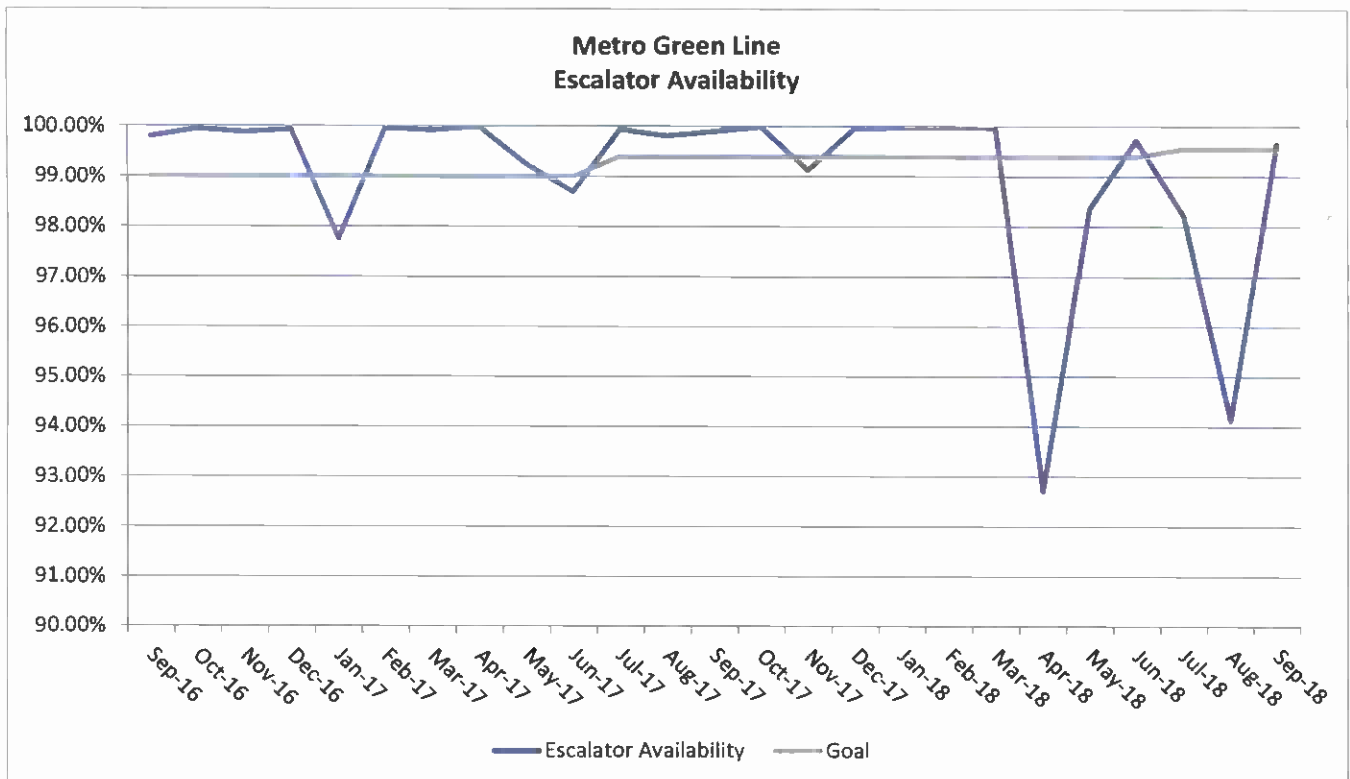
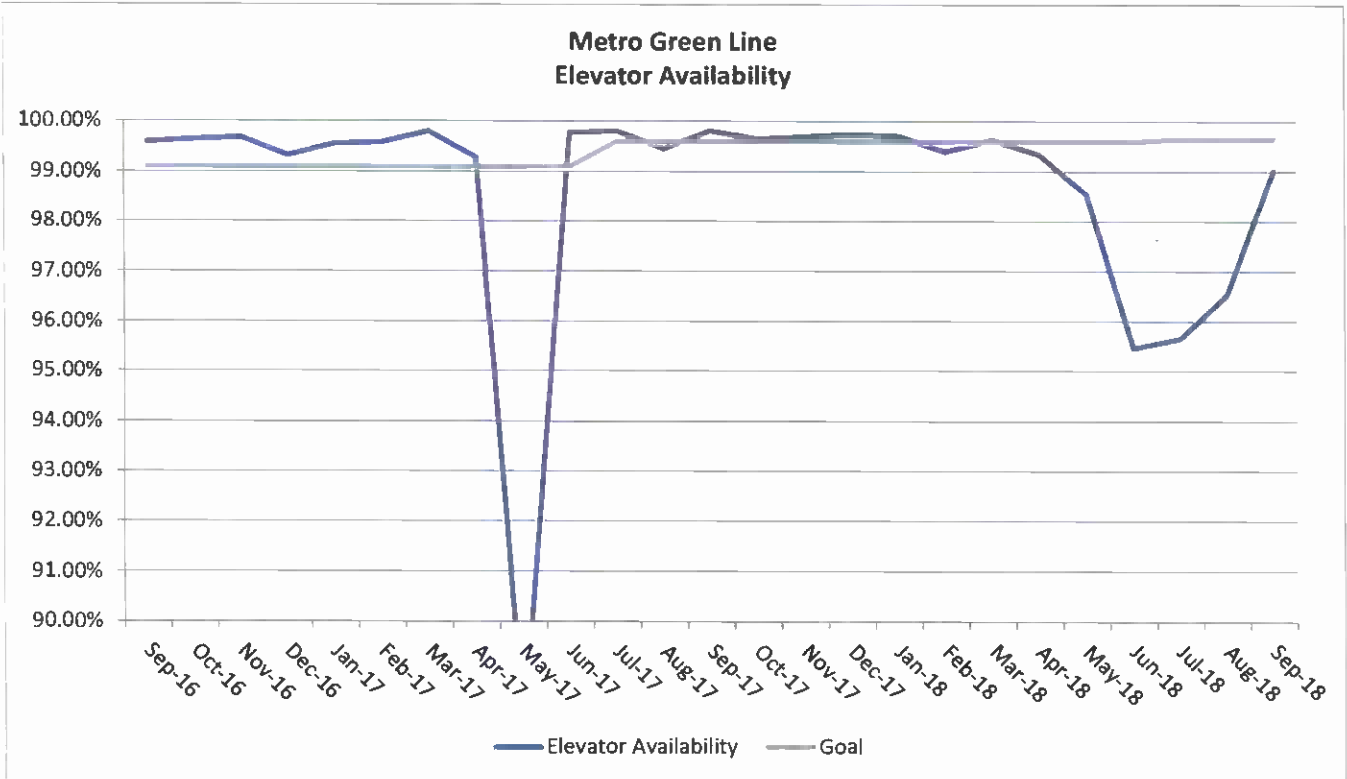
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



GOLD LINE

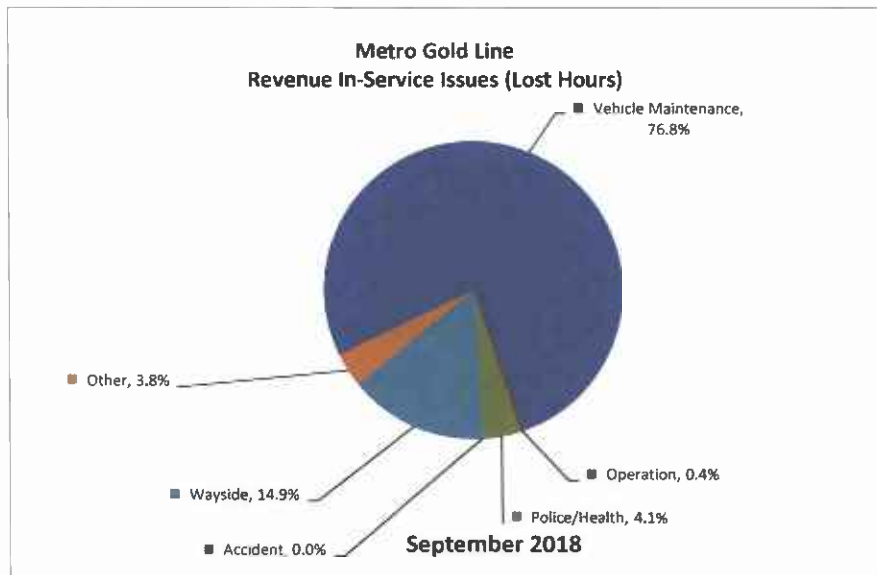
Out of a total of 23,237 hours operated, there were approximately 102 total hours of service delays.

September 2018 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	23,135	99.6%
Cancelled + Delayed Hours	102	0.4%
Total Revenue Hours	23,237	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	2	0.4	0.4%
Accidents	0	0.0	0.0%
Vehicle Maintenance	20	78.3	76.8%
Wayside	2	15.2	14.9%
Police & Health	3	4.2	4.1%
Other	2	3.8	3.8%
Total	29	101.9	100.0%

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

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September 2018 Gold Line incidents causing delay were as follows:

Operations Incidents:

9/12/2018 11:36:00 AM - Incident# 3052808 (0 lost trips, 14 lost minutes)

CCTV (R-411) received report from patrons at Allen Station, Train 401 did not open the doors and service the station.

Operating Car 1058A

9/17/2018 10:19:00 AM - Incident# 3054528 (0 lost trips, 12 lost minutes)

Train#405 was delayed due to Alpha-Paul/T#100 not being at Azusa Citrus Station per schedule.

Vehicle Maintenance Incidents:

9/1/2018 5:21:00 AM - Incident# 3048531 (1 lost trip, 351 lost minutes)

Train 409 Car 734 developed a friction brake fault, train unable to move North or South.

9/4/2018 5:39:00 AM - Incident# 3049325 (1 lost trip, 288 lost minutes)

O PSI reported

Train 406

T-017

Cars 1059-1057-(1009)

Indiana Interlocking Track 2 South

9/5/2018 11:53:00 AM - Incident# 3049951 (1 lost trip, 292 lost minutes)

Possible smoking brakes.

Train#401

T#98

(1056),1007,1008

Track#2,Soto Station,Southbound

9/5/2018 12:30:00 PM - Incident# 3049994 (1 lost trip, 292 lost minutes)

Brake axle faults.

Train:451

T:273

742,749,(739)

Track#2,Heritage Square Station,Southbound

9/6/2018 2:50:00 PM - Incident# 3050505 (1 lost trip, 288 lost minutes)

Train 404

T-228

LRV Cars 732-722-(714)

track 1 at Irwindale Station North

Operator reports of doors 5/6 on trailing LRV Car 714 will not close.

9/7/2018 4:25:00 AM - Incident# 3050663 (1 lost trip, 286 lost minutes)

Train 404 Car 710 door not opening.

9/8/2018 5:43:00 AM - Incident# 3051153 (1 lost trip, 322 lost minutes)

Train 407 Car 1010 developed a speed restriction and propulsion fault.

9/9/2018 11:01:00 PM - Incident# 3051580 (0 lost trips, 7 lost minutes)

AUX fault

(701) 721

T-316

Train 404

Track 2 Irwindale South

9/14/2018 6:43:00 PM - Incident# 3053843 (1 lost trip, 290 lost minutes)

ATP failure/Speed restriction.

T-440

Train 429

720-707-(733)

Monrovia Station Tk 2 S/B

9/20/2018 8:28:00 AM - Incident# 3055851 (0 lost trips, 10 lost minutes)

Propulsion fault with speed restriction.

Train 453

T-223

740, (750B), 741

Southwest Museum Station, Track 1, Northbound

9/20/2018 4:07:00 PM - Incident# 3056029 (0 lost trips, 6 lost minutes)

Train 428

T-426

LRV Cars 722-(728)-719

South Allen Station Track 2

Operator reports of a Propulsion Fault with a Speed Restriction, Will troubleshoot at Lake Station.

9/23/2018 6:48:00 PM - Incident# 3057052 (2 lost trips, 626 lost minutes)

Friction Brakes

Train 413

T-150

(726)-725

Southbound, Track 2 Allen station.

9/25/2018 6:22:00 AM - Incident# 3057664 (0 lost trips, 10 lost minutes)

Propulsion / Dynamic Brakes

(750)-748-747

Train 454

T-103

Arcadia, Northbound, Track 1

9/26/2018 4:05:00 PM - Incident# 3058341 (1 lost trip, 293 lost minutes)

Train unable to proceed, car 710A.

Train 405.

T-92.

9/27/2018 4:25:00 AM - Incident# 3058480 (0 lost trips, 18 lost minutes)

T-098 Train 404 (728)704 706 Monrovia North Interlocking.

9/27/2018 5:56:00 AM - Incident# 3058497 (1 lost trip, 292 lost minutes)

Train 411 (1055) 1005 T-261 reports propulsion fault at Maravilla Station Track 1 .

9/29/2018 9:40:00 AM - Incident# 3059394 (1 lost trip, 229 lost minutes)

Recurring propulsion faults.

Train:405

T#245

(723A),730

Track#1,Fillmore Station,Northbound

9/29/2018 11:10:00 AM - Incident# 3059404 (1 lost trip, 224 lost minutes)

Recurring propulsion faults.

Train#403

T#224

(710A),725

Track#1,South Pasadena Station,Northbound

9/29/2018 12:00:00 PM - Incident# 3059419 (1 lost trip, 224 lost minutes)

Propulsion faults.

Train#405

T#192

713,714

Track# 1,Chinatown,Northbound

9/30/2018 10:30:00 AM - Incident# 3059633 (1 lost trip, 348 lost minutes)

Friction brakes over heating.

Train#404

T#100

Cars# 709,(726A/B)702

Track#2,Union Station,Southbound

Wayside Incidents:

9/8/2018 4:27:00 AM - Incident# 3051141 (0 lost trips, lost minutes)

TP-189 requested to open Breaker at Corson and Walnut TPSS to support contractor Dyna Electric.

9/13/2018 2:08:00 PM - Incident# 3053326 (2 lost trips, 586 lost minutes)

ARINC Alarms reports The Monrovia Yard has lost Traction power of the whole yard.

9/25/2018 2:38:00 PM - Incident# 3057861 (1 lost trip, 326 lost minutes)

Monrovia Interlocking switch #5, out of correspondence.

Police & Health Incidents:

9/9/2018 9:58:00 AM - Incident# 3051428 (0 lost trips, 17 lost minutes)

Report of a male trespasser laying on track #1, just south of Del Mar Station.

Train # 408

T-100

Del Mar Interlocking, track #1, northbound

1056 1008

9/29/2018 2:02:00 AM - Incident# 3059333 (1 lost trip, 224 lost minutes)

T-159 notified control of a traffic accident at 3rd and Rowan.

9/30/2018 1:15:00 PM - Incident# 3059666 (0 lost trips, 10 lost minutes)

Sick individual at Azusa Citrus Station.

Train#408

T#280

Cars#{720B},707,706

Track#1,Azusa Citrus Station,Northbound.

Other Incidents:

9/16/2018 6:36:00 AM - Incident# 3054148 (1 lost trip, 224 lost minutes)

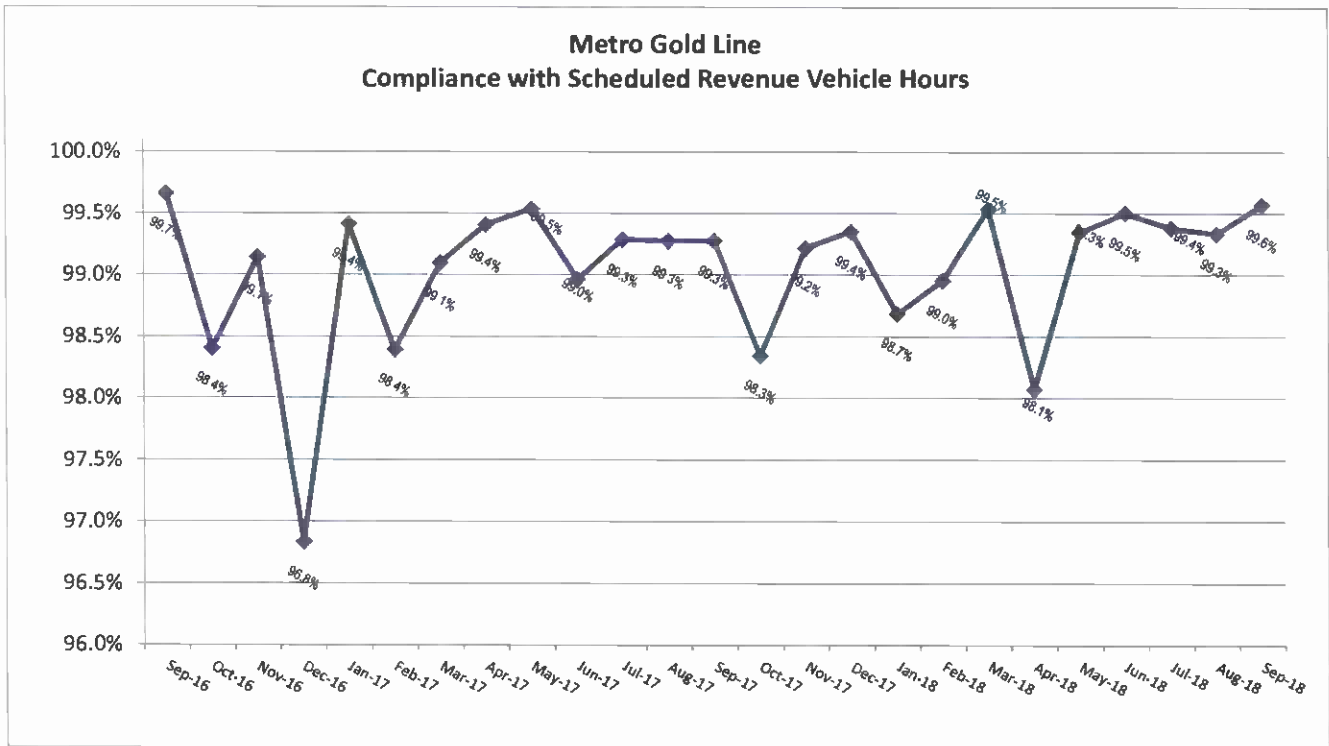
Train 402 had no operator for the revenue train southbound to Atlantic. The southbound trip from Azusa Citrus was cancelled.

9/25/2018 5:43:00 AM - Incident# 3057629 (0 lost trips, 6 lost minutes)

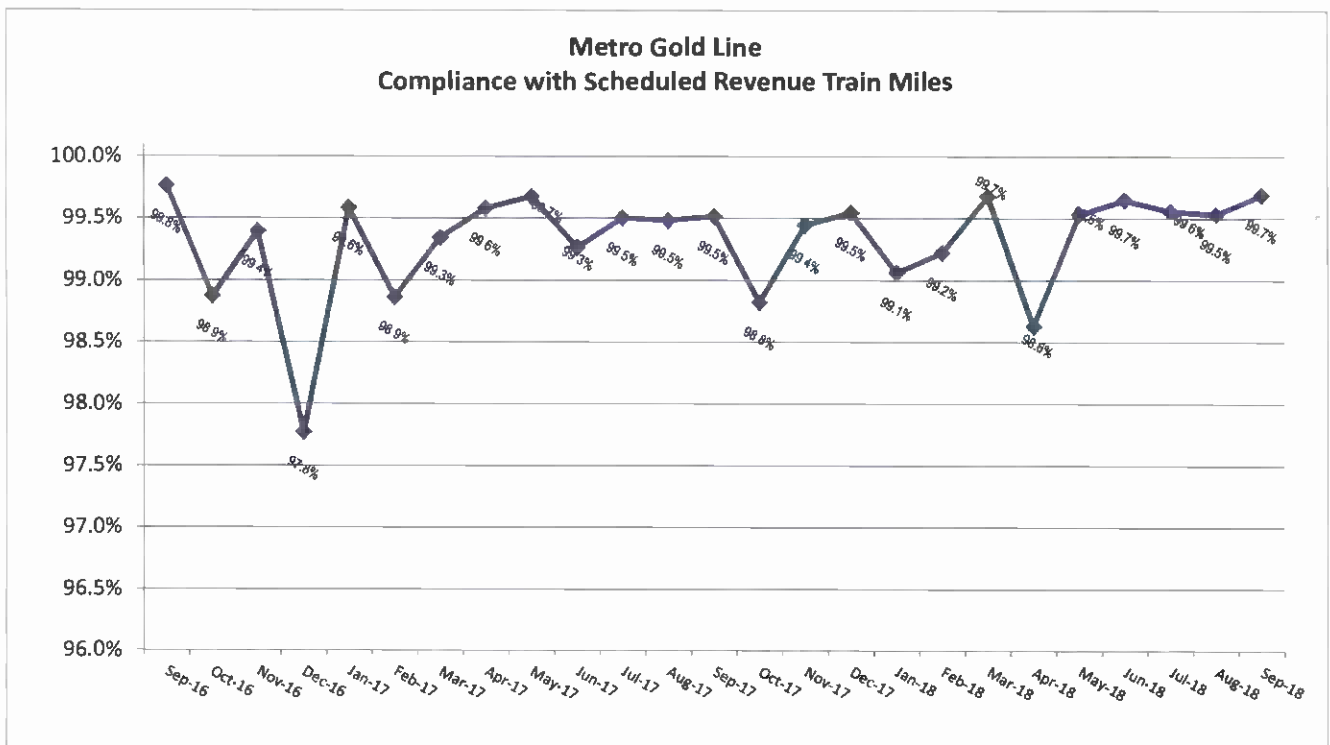
Pulling Emergency Door Release or T at Highland Park Station

MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

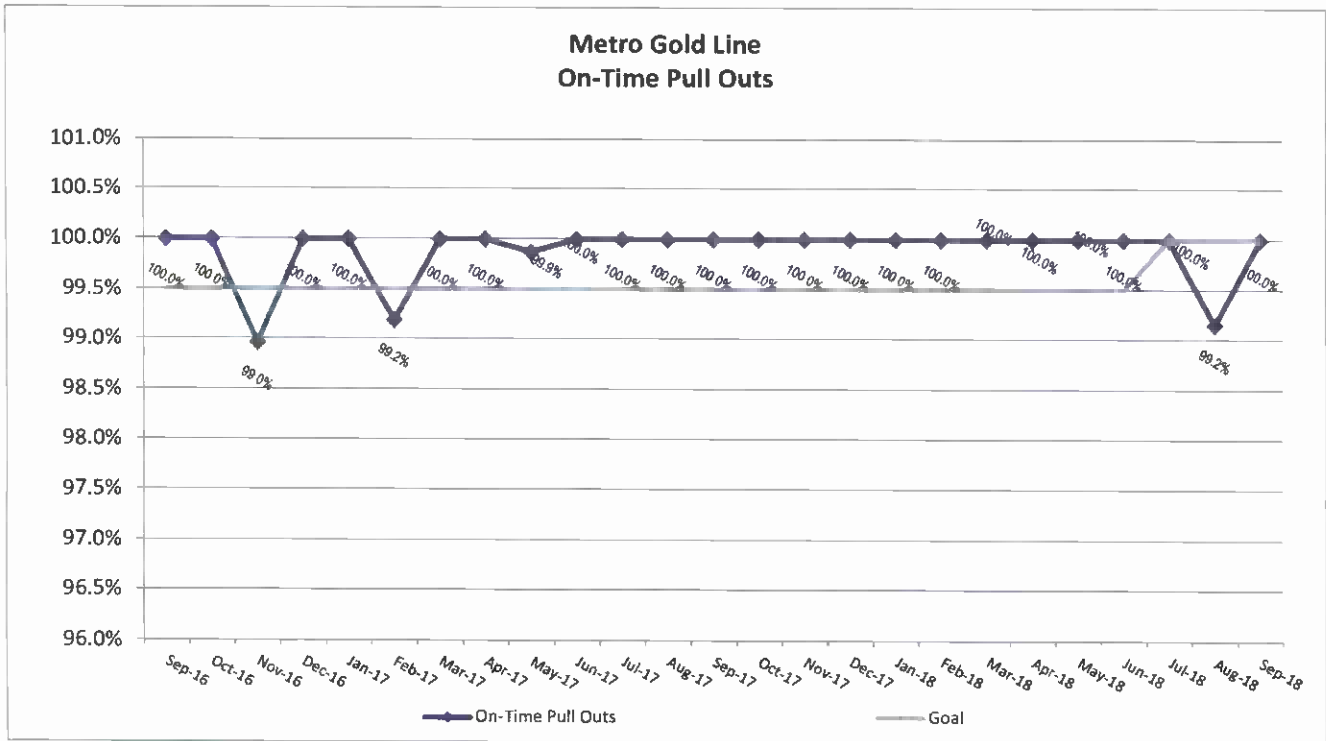
COMPLIANCE WITH SCHEDULED VEHICLE HOURS



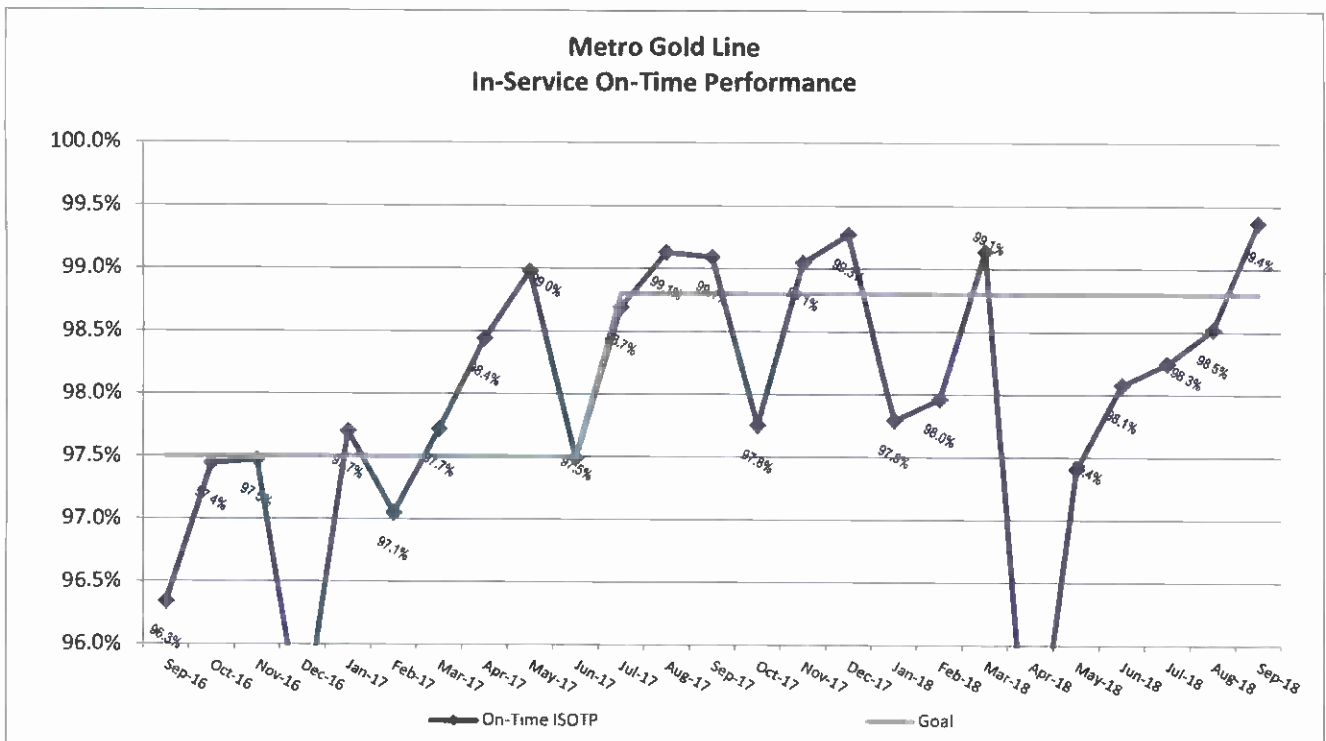
COMPLIANCE WITH SCHEDULED TRAIN MILES



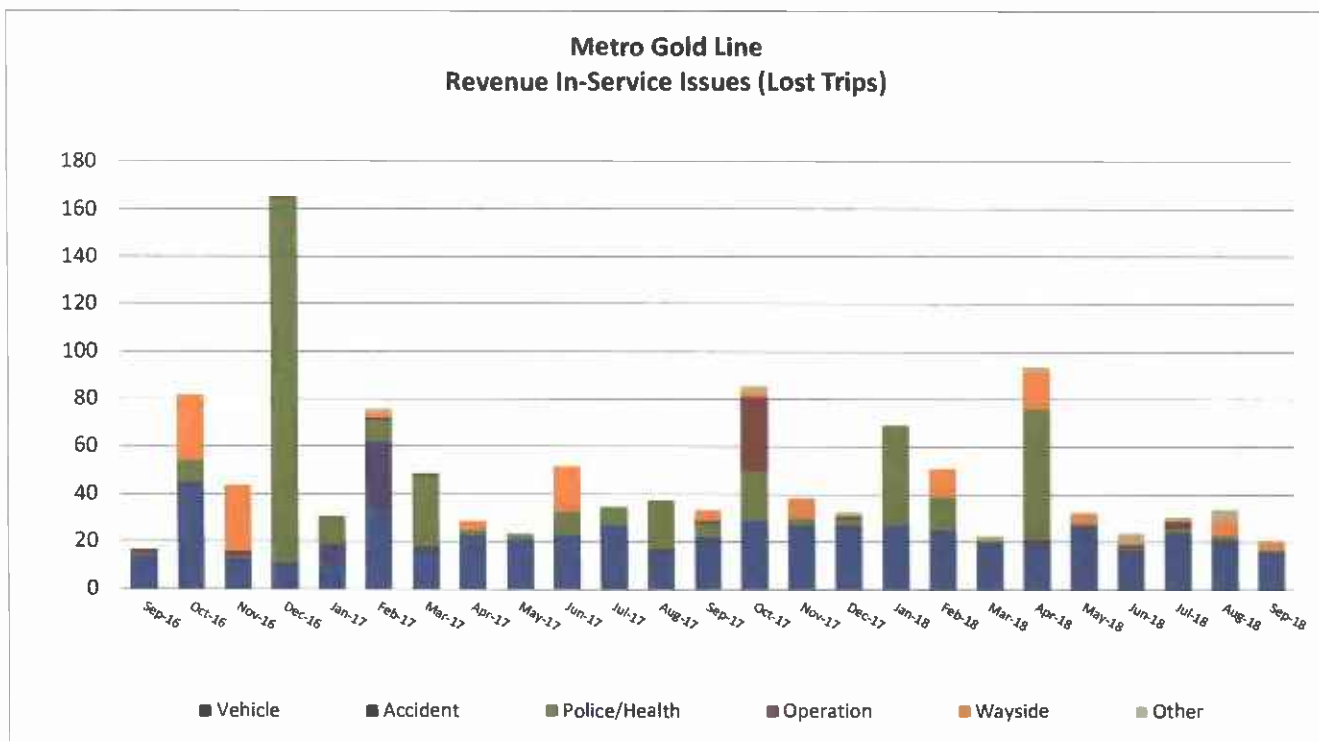
ON-TIME PULL OUTS



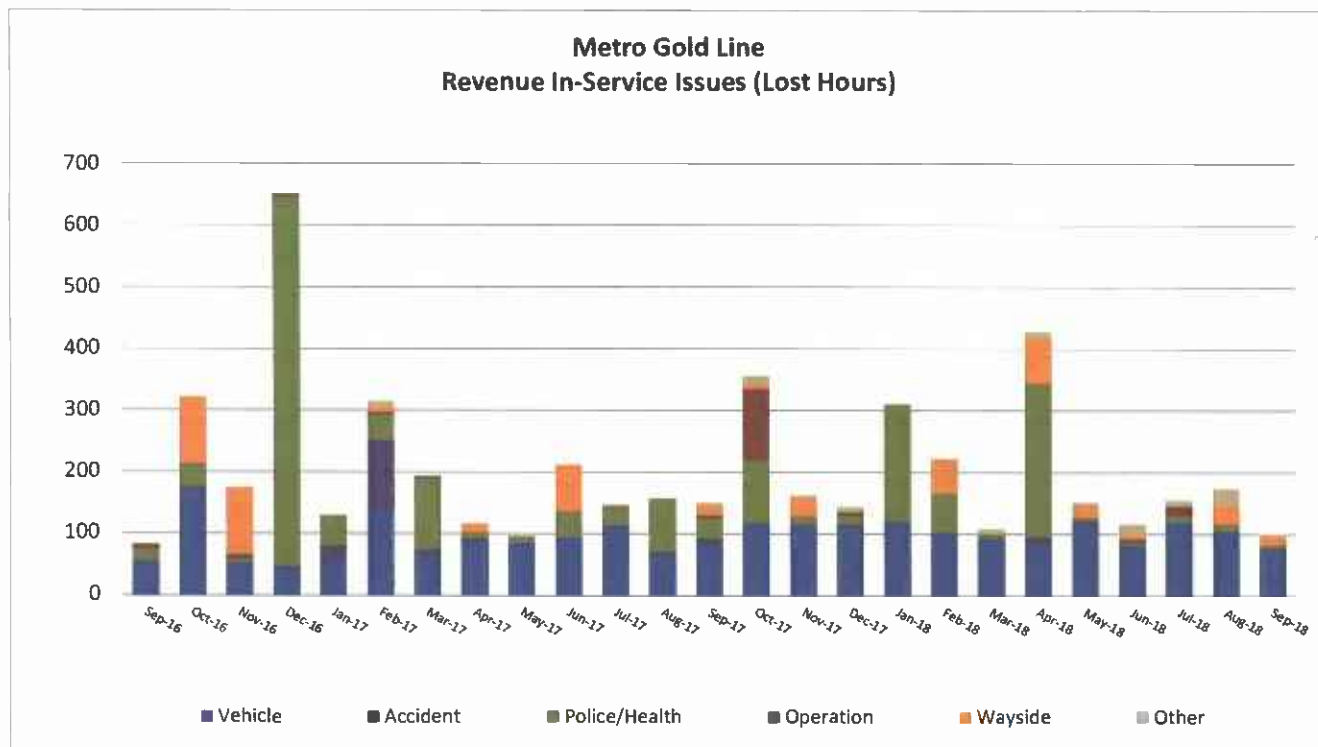
IN-SERVICE ON-TIME PERFORMANCE



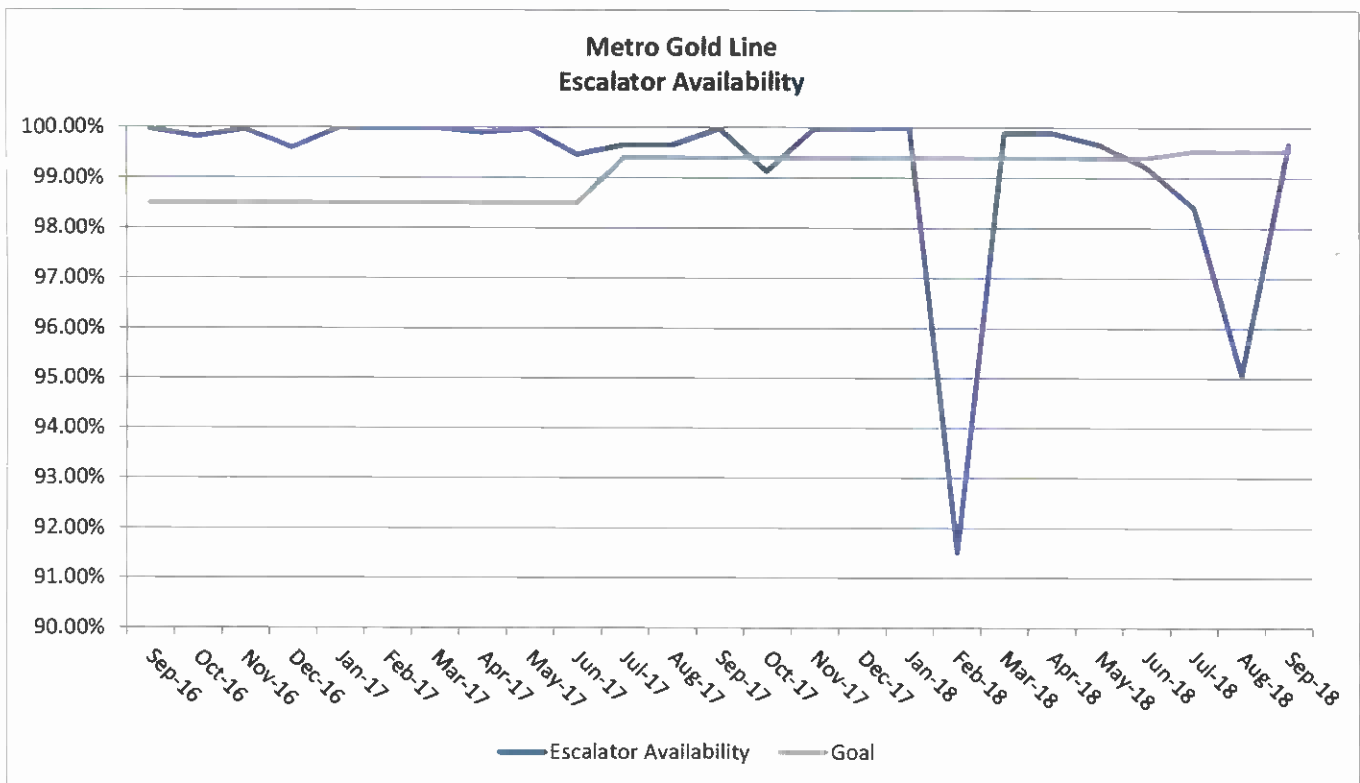
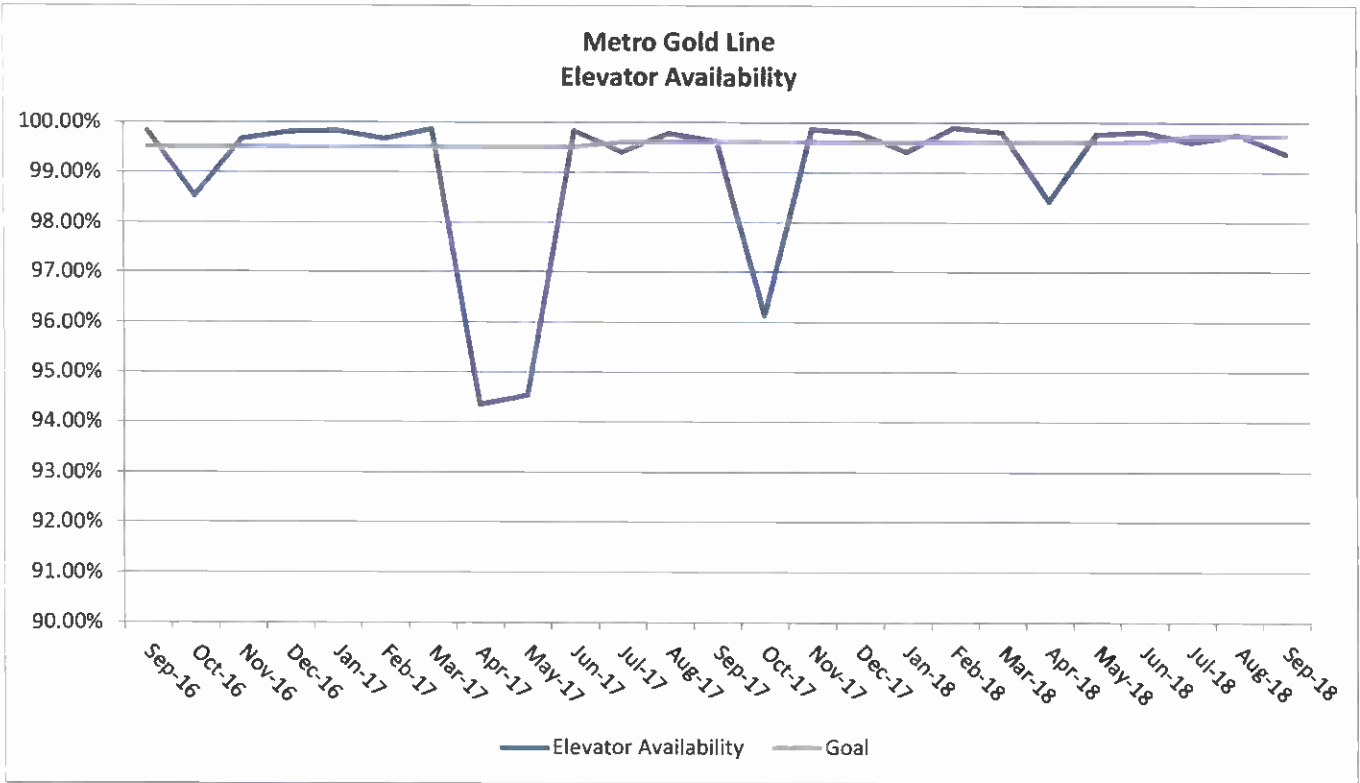
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



EXPO LINE

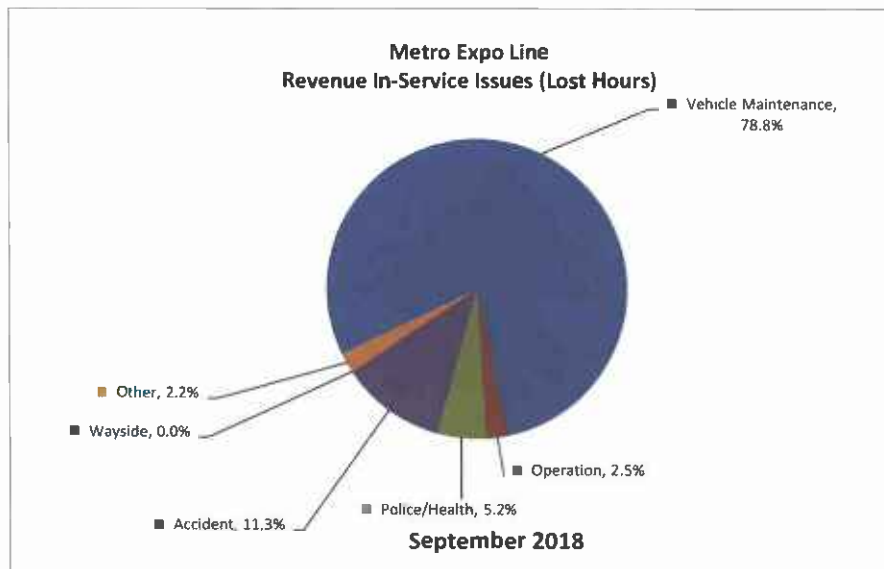
Out of a total of 21,629 hours operated, there were approximately 108 total hours of service delays.

September 2018 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	21,522	99.5%
Cancelled + Delayed Hours	108	0.5%
Total Revenue Hours	21,629	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	3	2.7	2.5%
Accidents	2	12.2	11.3%
Vehicle Maintenance	20	85.0	78.8%
Wayside	0	0.0	0.0%
Police & Health	7	5.6	5.2%
Other	1	2.4	2.2%
Total	33	107.9	100.0%

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

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



September 2018 Expo Line incidents causing delay were as follows:

Operations Incidents:

9/13/2018 9:28:00 PM - Incident# 3053431 (0 lost trips, 5 lost minutes)

Sick individual and sick car

Train 669

T-265

K1068, (K1001), K1041

7TH/METRO, Track 1, Southbound

9/19/2018 1:44:00 PM - Incident# 3055557 (1 lost trip, 141 lost minutes)

Train 655

Track 4 SB

Bundy T-443

(250A)-240-238

9/19/2018 4:14:00 PM - Incident# 3055622 (0 lost trips, 13 lost minutes)

Operator error slow operations train delay. Turned train back at 23rd St Station.

Accidents:

9/2/2018 11:02:00 AM - Incident# 3048857 (2 lost trips, 297 lost minutes)

10-73 track 3 Denker grade crossing.

9/24/2018 10:20:00 AM - Incident# 3057261 (3 lost trips, 435 lost minutes)

Pedestrian struck by train. Cause unknown at this time.

T-423.

Train 654

Northbound, Track 3, 23rd St. Station.

(302A), 236, 240

Vehicle Maintenance Incidents:

9/3/2018 10:13:00 PM - Incident# 3049233 (1 lost trip, 148 lost minutes)

Friction Brakes

Train 653

T-455

Cars (1040)-1016-1036

Western station track 3 N/B

9/5/2018 7:22:00 AM - Incident# 3049836 (1 lost trip, 147 lost minutes)

Train 657, Cars 242, 248, 249.

Buckingham Crossing, Track 3 northbound.

No movement

9/7/2018 6:47:00 AM - Incident# 3050700 (15 lost trips, 2,121 lost minutes)

Train 660, Cars (1042A), 1069, 1071.

Culver City Station, Track 3 northbound.

Doors would not open and then lost propulsion.

9/10/2018 4:42:00 AM - Incident# 3051608 (0 lost trips, 15 lost minutes)

Train out late due to Vehicle problems.

T-424

Train#662

Cars(1070)-1018-1026

Southbound Trk#4

Expo Yard

9/10/2018 10:53:00 PM - Incident# 3052066 (0 lost trips, 20 lost minutes)

No movement from south cab
Car 1044
Train 666
7th and Metro
Southbound.

9/12/2018 6:22:00 PM - Incident# 3052943 (3 lost trips, 443 lost minutes)

Doors
Train 655
T-265
302-(250)-240
Southbound, Track4 Jefferson station.

9/14/2018 5:49:00 PM - Incident# 3053830 (1 lost trip, 141 lost minutes)

Operator 142 in train 673 was unable to berth properly. M-326 responded. Train had an inoperable brake fault.

9/16/2018 2:17:00 PM - Incident# 3054214 (0 lost trips, 12 lost minutes)

Car 241A unable to reset street run mode
T-454
Train 663
Departing Santa Monica Station Track 3 northbound
Consist 241-245-235

9/16/2018 4:26:00 PM - Incident# 3054247 (0 lost trips, 10 lost minutes)

Auto Train Protection (Speed Limit)
Train 655
T-360
Cars (1003)-1014-1039
7th Metro Center platform 1

9/20/2018 3:55:00 PM - Incident# 3056021 (0 lost trips, 5 lost minutes)

ATP fault on car (1069)
Train #674
T-362
Santa Monica, platform #3.
1054 1067 (1069)

9/20/2018 4:01:00 PM - Incident# 3056025 (0 lost trips, 5 lost minutes)

Doors cut out on car (1094) doors 1/2.
Train # 674
T-362
Santa Monica, platform #3
(1094) 1113 1142

9/21/2018 8:12:00 AM - Incident# 3056257 (1 lost trip, 166 lost minutes)

Operator reports propulsion fault with no movement
Train 602
T-230
230-302-236
Culver City, Trk. 4, southbound

9/21/2018 4:14:00 PM - Incident# 3056493 (2 lost trips, 282 lost minutes)

Train 602 no movement track 4 La Cienega.

9/22/2018 5:22:00 PM - Incident# 3056780 (2 lost trips, 294 lost minutes)

Low Air Pressure
Train 651
T-511
1036B-(1016)-1039
Northbound, Track 3 I10 Box.

9/24/2018 4:37:00 PM - Incident# 3057489 (2 lost trips, 282 lost minutes)

Self test no movement. 231A-237-250

T-405

Train 603

Track 3

Northbound

26th street station

9/25/2018 7:01:00 AM - Incident# 3057659 (1 lost trip, 141 lost minutes)

Operator reports that she had no movement .

T-377

Train#604

Cars(250A)-248-249

Southbound Trk#4

4th/Colorado

9/25/2018 1:26:00 PM - Incident# 3057819 (2 lost trips, 282 lost minutes)

T-380 reports losing cab signal when pulling back on the master controller. Train 604 lead car 249A (249-248-250), Westwood, Track 3, Northbound.

9/26/2018 8:22:00 AM - Incident# 3058079 (0 lost trips, 5 lost minutes)

System check light on no movement without ATP bypass

Train #604 T-226 car#242A-247-241

southbound at Vermont station.

9/27/2018 6:21:00 PM - Incident# 3058851 (3 lost trips, 431 lost minutes)

Train 603 track #4 reported no movement North of Westwood station

9/28/2018 5:03:00 PM - Incident# 3059240 (1 lost trip, 153 lost minutes)

T-379 on train 604 reported car (157A), 154, 164 with a reoccurring propulsion fault with ATP failure while departing Santa Monica northbound, Track 3.

Police & Health Incidents:

9/2/2018 10:15:00 AM - Incident# 3048837 (0 lost trips, 12 lost minutes)

Passenger holding the doors on train 656 at 23rd st station.

9/5/2018 4:14:00 PM - Incident# 3050101 (1 lost trip, 141 lost minutes)

Non-Felony/Misdemeanor

Train 601

T-541

1054B-(1068)-1030

Southbound, Track 4 23rd street station.

9/10/2018 5:14:00 PM - Incident# 3051958 (0 lost trips, 6 lost minutes)

Sick Individual at La Cienega station due to medical.

Train 669

T-162

1049-(1061B)-1050

Northbound, Track 3 La Cienega station.

9/10/2018 5:56:00 PM - Incident# 3051971 (0 lost trips, 6 lost minutes)

Sick Individual at La Cienega station due to medical.

Train 656

T-412

1052-(1033A)-1065

Northbound, Track 3 La Cienega station.

9/18/2018 1:58:00 PM - Incident# 3055129 (0 lost trips, 7 lost minutes)

Train 653 held by LAPD.

9/22/2018 3:20:00 AM - Incident# 3056611 (1 lost trip, 157 lost minutes)

Train 651 reported a pic activation.

Train 651

T-434

Cars (1046-1068)-1065

Track 3, Northbound, Crenshaw Station

9/27/2018 1:42:00 PM - Incident# 3058672 (0 lost trips, 8 lost minutes)

Train 651 Medical Emergency Patron Having a seizure on middle car 1046A at Westwood Station. Operator T-126 called in the medical emergency. Single track 1 train 601 around 651.
Incident Number-873

Other Incidents:

9/12/2018 1:09:00 AM - Incident# 3052618 (1 lost trip, 141 lost minutes)

Spilled Gasoline on board a train

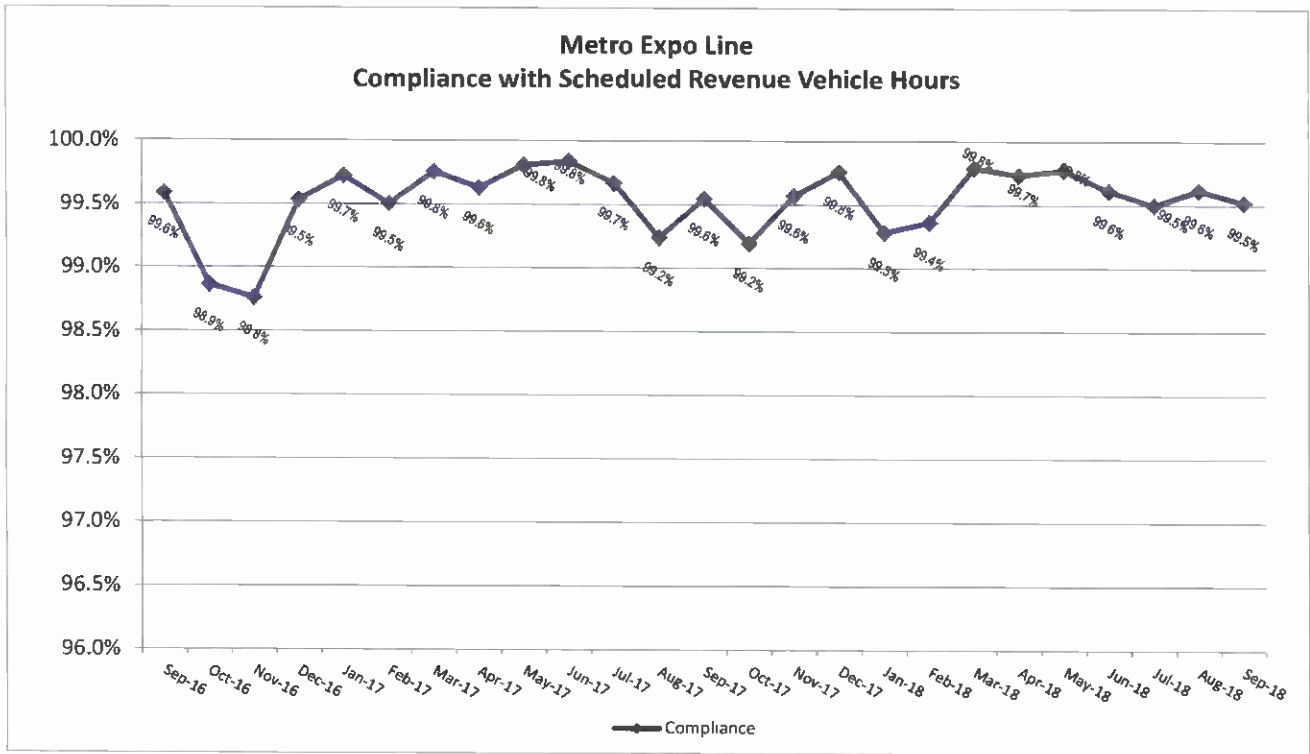
Train #666, T-375

1033-1065-1052

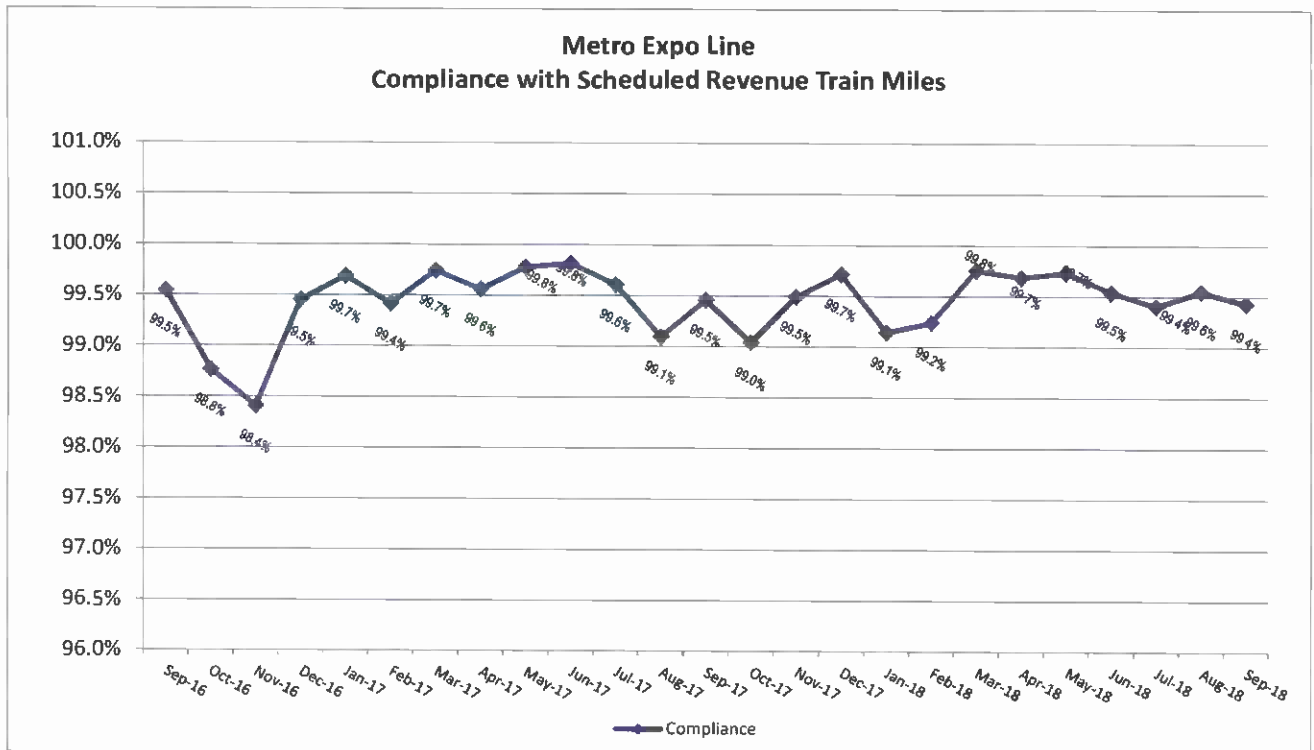
SB,Vermont Station, Track #4

MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

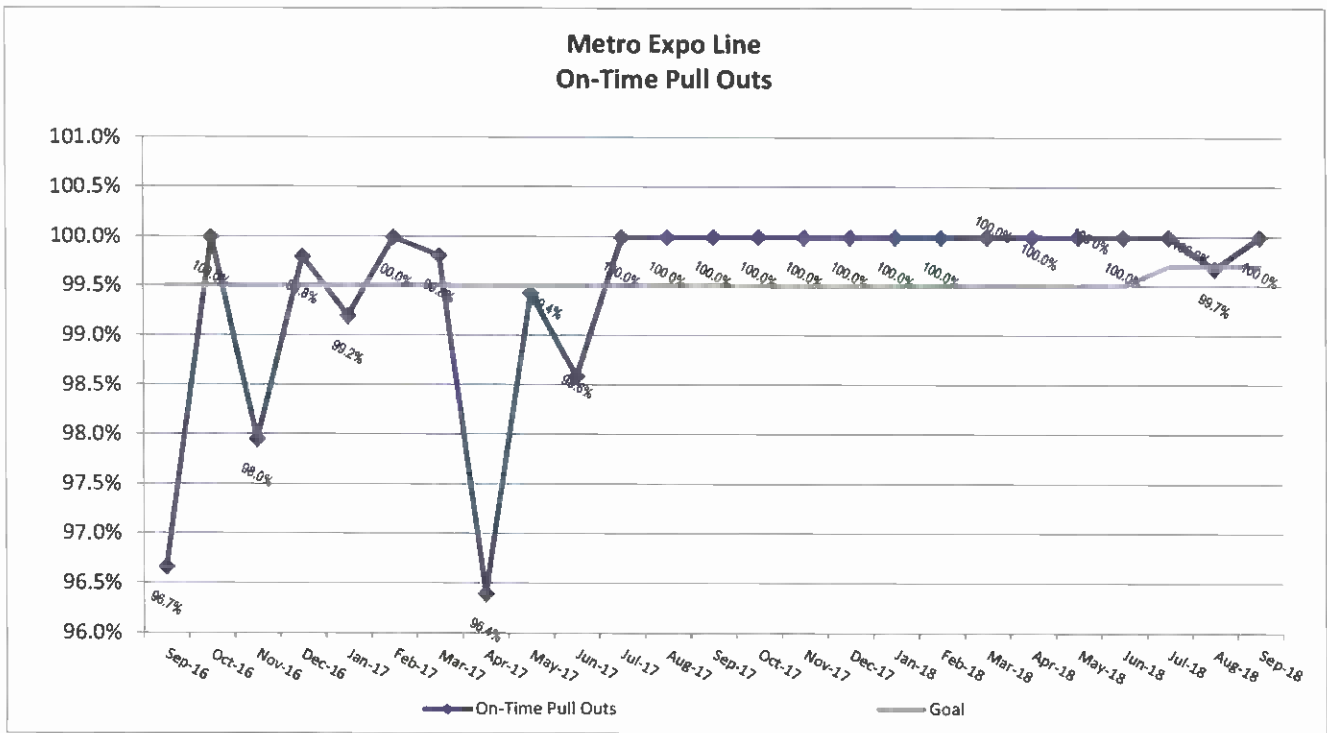
COMPLIANCE WITH SCHEDULED VEHICLE HOURS



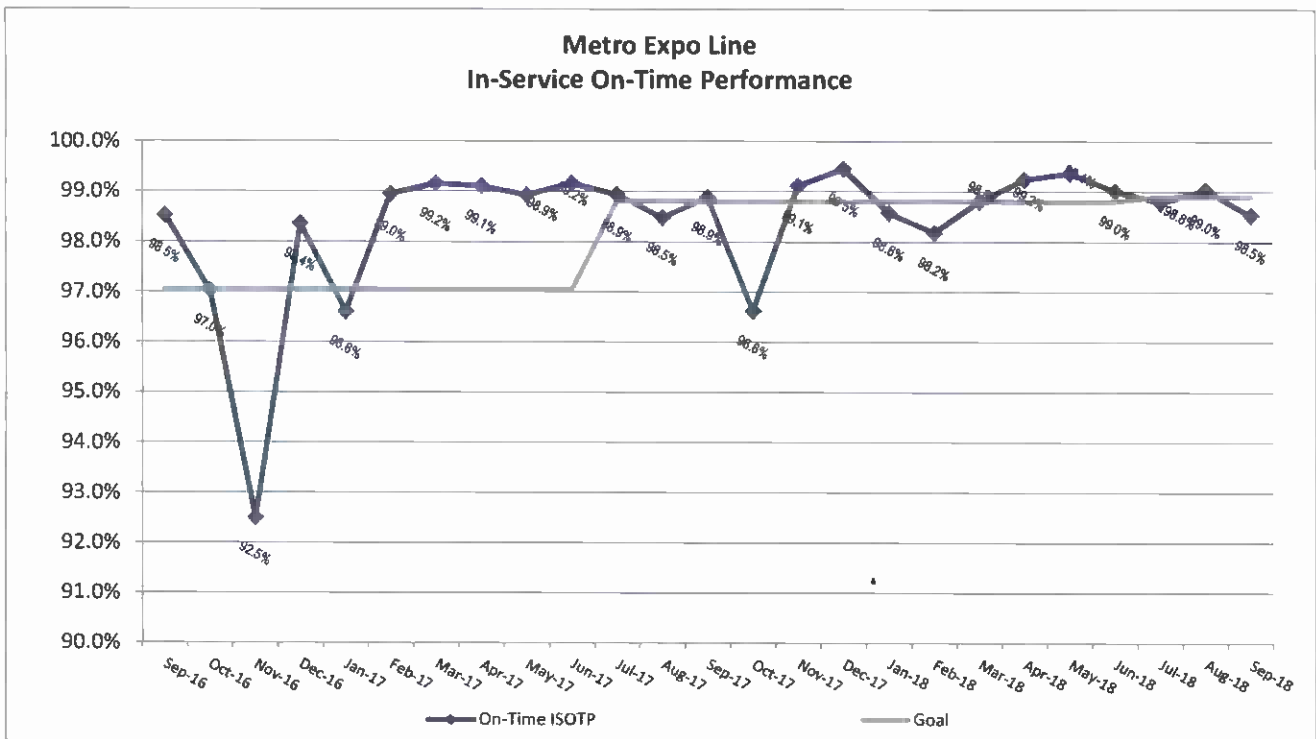
COMPLIANCE WITH SCHEDULED TRAIN MILES



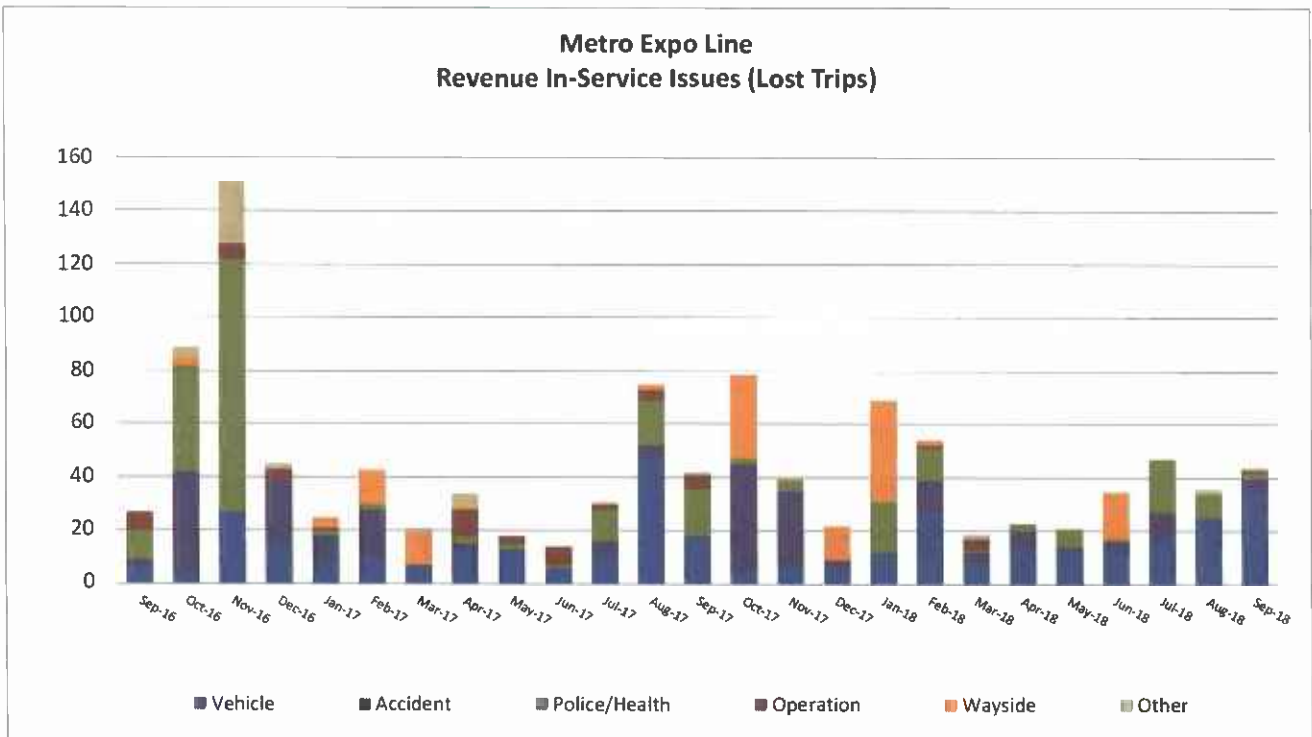
ON-TIME PULL OUTS



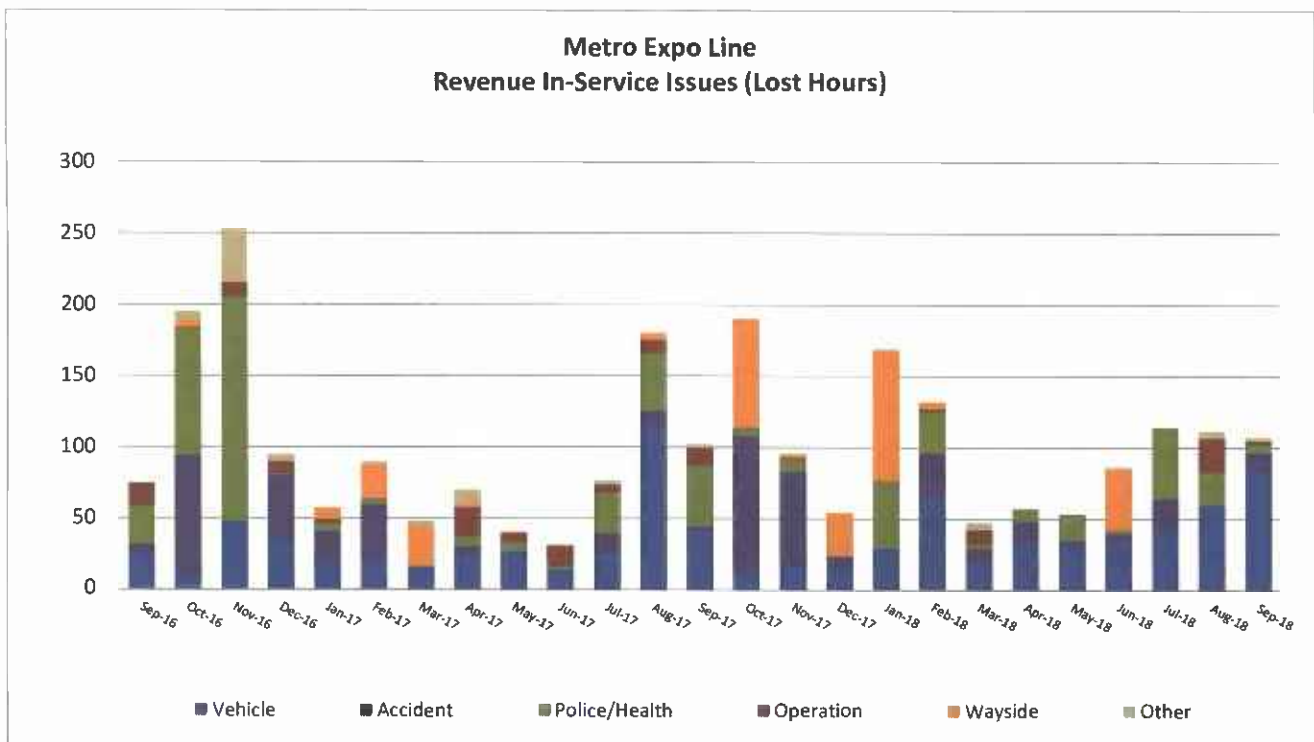
IN-SERVICE ON-TIME PERFORMANCE



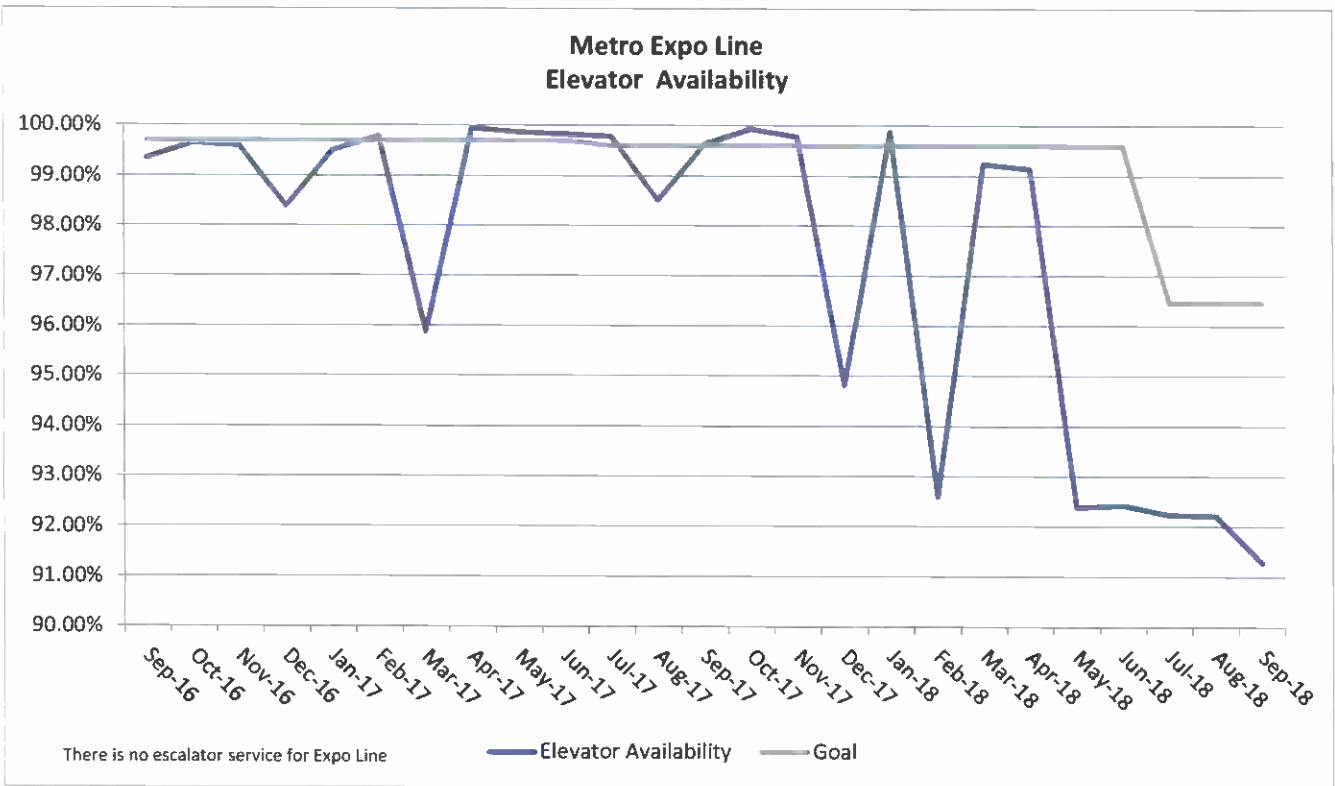
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



Financial Status

September 2018

FTA Quarterly Review

December 13, 2018



Metro

Excellence in Service and Support

FY19 – Indicators

- **FY19 actual cash receipts from locally imposed sales tax revenues (PA, PC, MR, MM) totaled \$893.2M during Q1 of the fiscal year, a nominal increase of 36.2%. Excluding Measure M, sales tax cash receipts increased 9.8%**
- **The Sep 2018 Los Angeles County unemployment rate remained at June level while State and National figures declined slightly.
LA 4.5%, CA 4.1% and US 3.7%**
- **Inflation in the Los Angeles Metropolitan Area continues to remain steady at 3.9% for the period Sep '18 over Sep '17
– Excluding Food and Energy, core inflation equaled 3.8%**
- **Transit indicators – FY 19
Ridership versus prior year
Bus: -3.8%
Rail: -5.3%
Total: -4.2%**



Fare revenues – FY19Q1 -7.5% vs FY 18Q1

FY19 Q1 – Highlights

- **The start of major improvements to the Metro Blue Line's Willowbrook/Rosa Parks Station**
- **Identified two build alternatives to initiate the Draft Environmental Impact Statement/ Environmental Impact Report (EIS/EIR) for the South Bay Extension of the Metro Green Line.**
- **The Metro Board approved the execution of MOU's between LA Metro and RCTC and OCTA to enhance transportation planning for the region as a whole and connectivity across county lines.**

FY19 Q2– Look Ahead

- **Metro Orange Line Improvements Project Groundbreaking**
- **Purple Line Extension Transit Project initiation of tunnel boring of the twin tunnels for the first section underneath Wilshire Boulevard at La Brea**
- **Development of the funding plan for Metro's 28 x 28 project initiative.**

Los Angeles County
Metropolitan Transportation Authority

METRO CONSTRUCTION SAFETY FTA Quarterly Review Meeting December 13, 2018



CONSTRUCTION SAFETY QUARTERLY REPORT

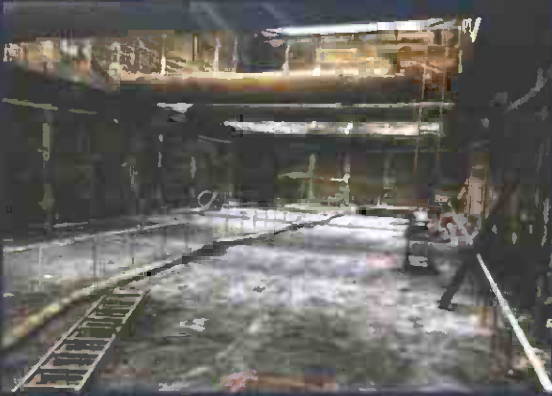


Crenshaw/LAX Transit Project

CRENSHAW/LAX TRANSIT PROJECT

- ❑ Metro participated in WSCC Tool-Box Safety Huddle Meetings in July, August and September 2018.
- ❑ WSCC participated in Metro's All Hands Safety and Security Meetings in July, August and September 2018.
- ❑ Metro's Executive Safety Team participated in Safety Walks in August and September 2018.
- ❑ Project-to-Date Total Work Hours: 7,289,204
- ❑ Recordable Injuries as of September 2018: 87
- ❑ Project Rate per 200,000 Labor Hours: 2.3
- ❑ BLS National Heavy Construction Incident Rate: 2.8
- ❑ Total Days Away Cases: 3
- ❑ Total Restrictive Duty Cases: 11

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:	3,180,358
<input type="checkbox"/> Recordable Injuries as of September 2018:	14
<input type="checkbox"/> Project Rate per 200,000 Labor Hours:	.88
<input type="checkbox"/> BLS National Heavy Construction Incident Rate:	2.8
<input type="checkbox"/> Total Days Away Cases:	4

REGIONAL CONNECTOR TRANSIT PROJECT

<input type="checkbox"/> Project to Date Total Work Hours:	3,204,330
<input type="checkbox"/> Recordable Injuries as of September 2018:	15
<input type="checkbox"/> Project Rate per 200,000 Labor Hours:	.93
<input type="checkbox"/> BLS National Heavy Construction Incident Rate:	2.8
<input type="checkbox"/> Total Days Away Cases:	0



Metro

CONSTRUCTION SAFETY QUARTERLY REPORT



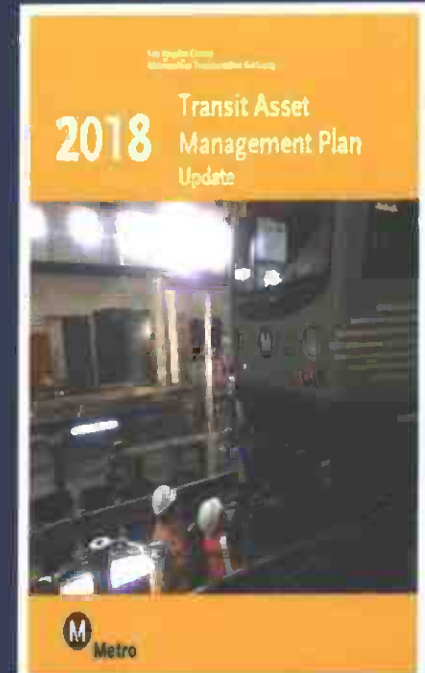
- ❑ Conducted monthly All Hands Safety/Security Meetings with the Westside Purple Line Extension Section 1 Project and Regional Connector Transit Project contractors.
- ❑ Monitored construction activities on a daily basis including nights and weekends to ensure compliance with contract specifications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



Metro

ENTERPRISE TRANSIT ASSET MANAGEMENT QUARTERLY REPORT

- Metro TAM Plan Update Completed October 1, 2018**
- Metro Sponsored Group Plan for 34 Participants Completed October 1, 2018**
- National Transit Database Reporting completed 10-31-18**
- Successfully Coordinated FTA Condition Inspections for Facilities, Buses, Tunnels, Bridges and Stations for TERM Decay Curve Updates**



FTA Quarterly Planning Update

December 13, 2018

Metro Planning Report

- Small Starts Projects
 - Metro Rapid System Gap Closure Lines
- Other Projects
 - East San Fernando Valley Transit Corridor
 - Eastside Transit Corridor Phase 2
 - West Santa Ana Branch Transit Corridor
- Ladders of Opportunity Grant Project
 - Cesar Chavez Bus Stop Improvements Project



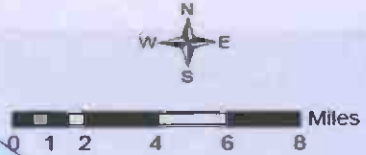
Metro Rapid System Gap Closure Lines

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

- Included total of 126.3 miles of TSP along 7 Metro Rapid corridors:
 - Torrance-Long Beach
 - Venice
 - Atlantic
 - Garvey-Chavez
 - West Olympic
 - South Sepulveda
 - San Fernando
- Completed 123 miles or 97%
- Last 3.3 miles in Culver City*
 - July 2018 – City awarded contract
 - August 2019 – Complete project



Metro Rapid System Gap Closure Lines Shelter Implementation

Status

- 150 total station locations
- 102 stations completed in 13 jurisdictions
- 48 stations remaining:

Number of Stations	Agency	Completion Date	Notes
11	Metro	Fall 2018	Fabrication underway
29	City of Torrance	Summer 2019	Contractor selected
8	Culver City	Fall 2018	Engineering revisions underway
48	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

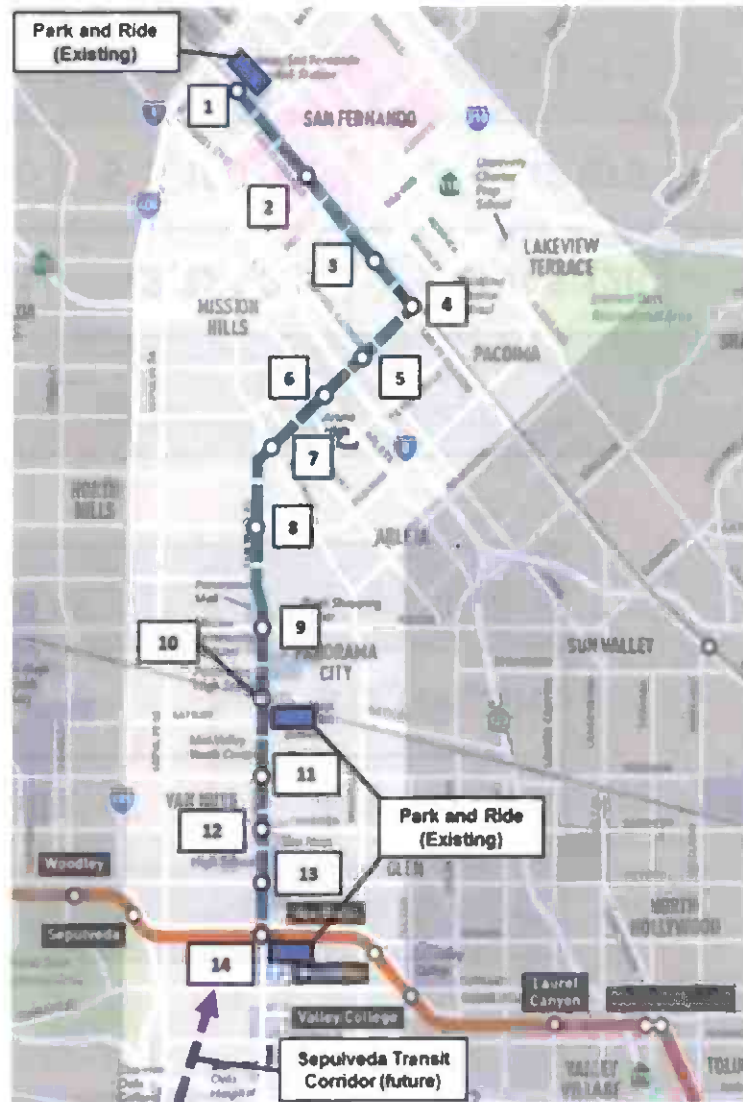
Activities	Approved Budget	Current Budget	Expenditures To Date	Forecast to Complete
Transit Signal Priority	\$24,044,301	\$23,121,925	\$19,106,126	\$4,938,175
Shelters	\$ 5,160,000	\$ 5,160,000	\$ 4,112,676	\$1,047,324
TOTAL	\$29,204,301	\$28,281,925	\$23,218,802	\$5,985,499



East San Fernando Valley Transit Corridor

Project Status

- Work underway on Final EIS/R
 - 1,400 comments
- Executed consultant contract to complete:
 - Advanced Conceptual Engineering (ACE)
 - Rail Grade Crossing Safety Study
 - ROW Coordination with Regional Rail and City of San Fernando
 - Orange Line Connectivity Study



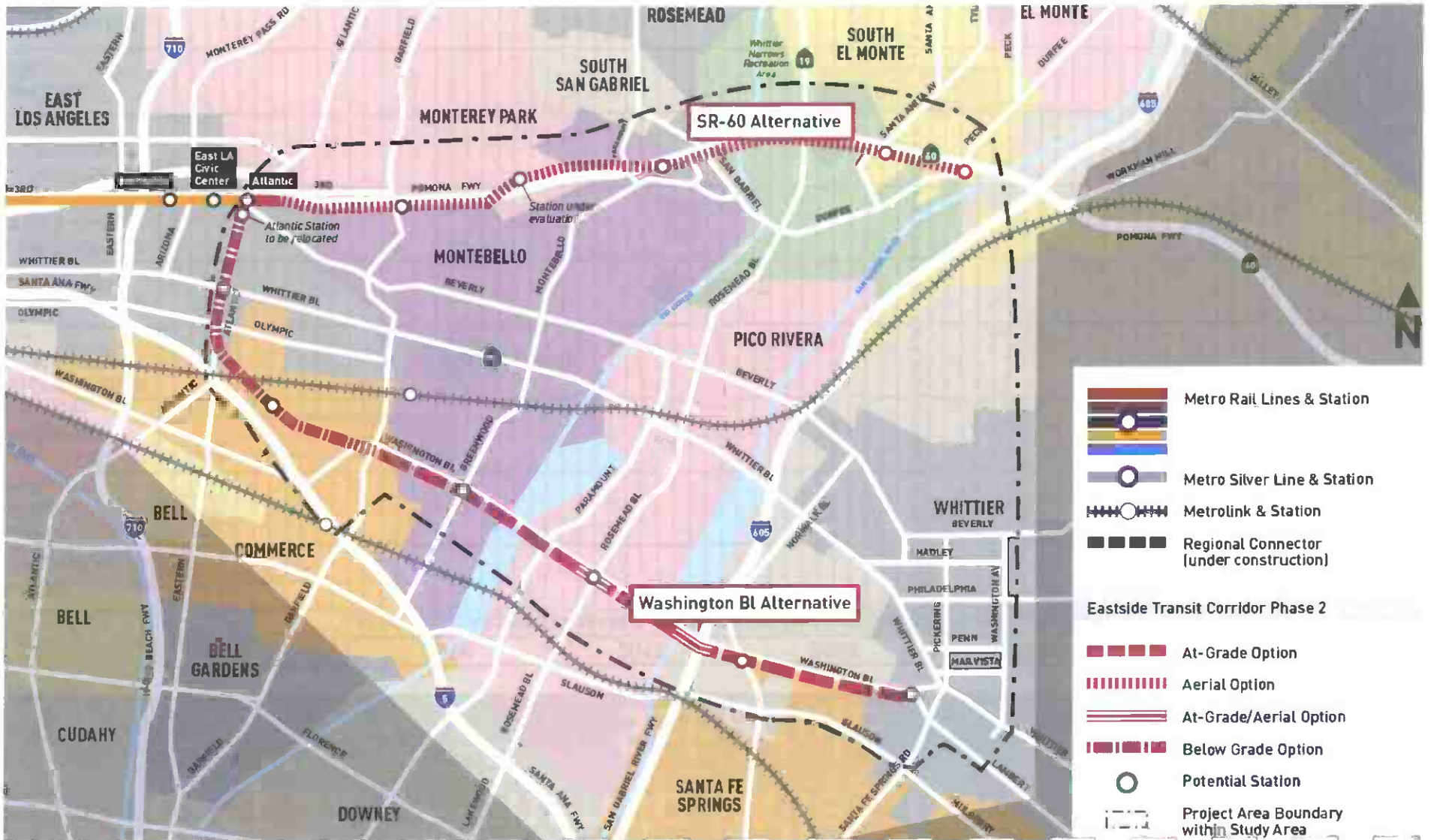
1. Sylmar/San Fernando Metrolink Station
2. Maclay Station
3. Paxton Station
4. Van Nuys/San Fernando Station
5. Laurel Canyon Station
6. Arleta Station
7. Woodman Station
8. Nordhoff Station
9. Roscoe Station
10. Van Nuys Metrolink Station
11. Sherman Way Station
12. Vanowen Station
13. Victory Station
14. Van Nuys Metro Orange Line Station



Eastside Transit Corridor Phase 2

Three (3) Build Alternatives per May 2017 Metro Board Motion:

- SR 60 North Side Design Variation LRT
- Washington Boulevard LRT with Atlantic Below Grade
- Combined Alternative with both SR-60 and Washington Boulevard via Atlantic



Eastside Transit Corridor Phase 2

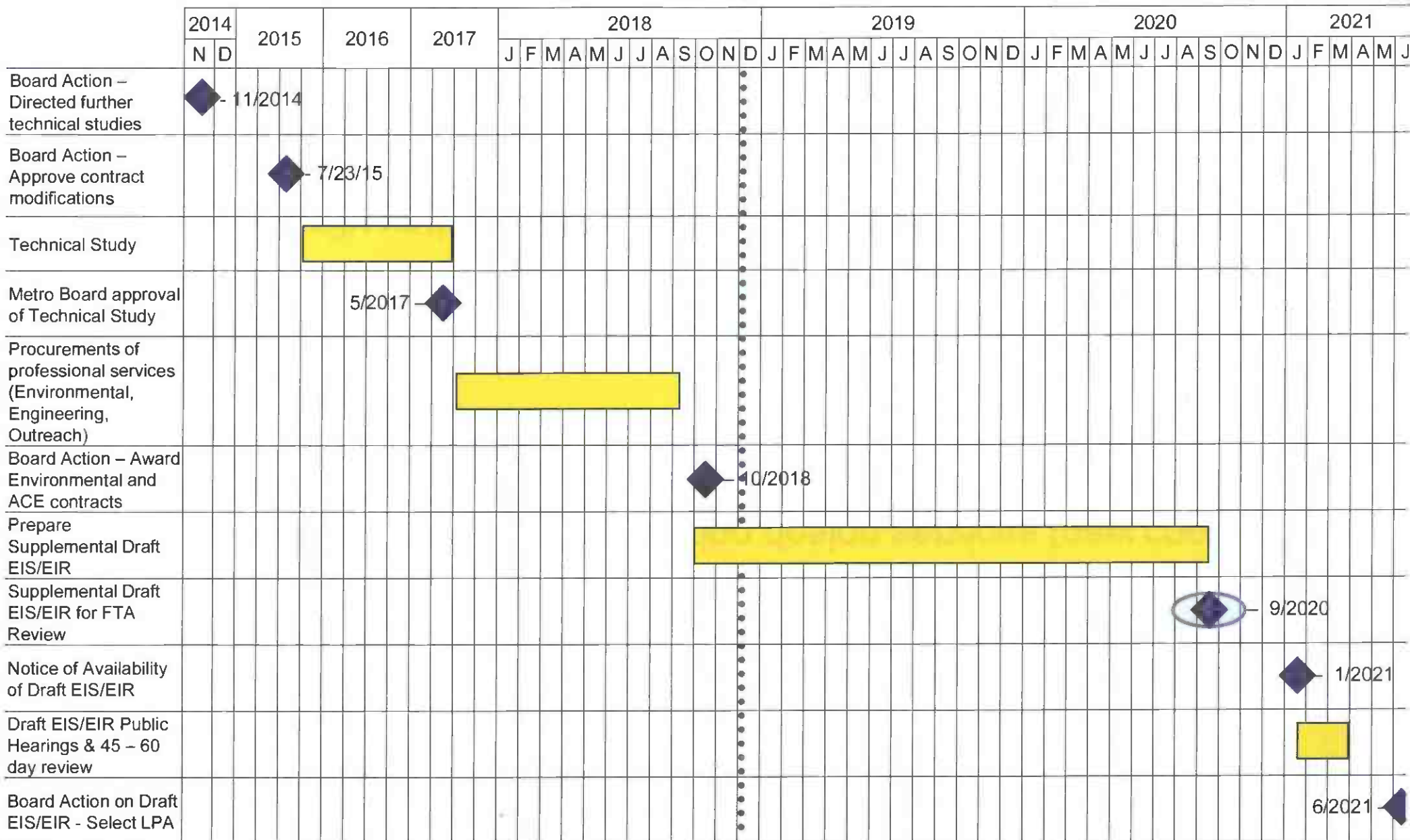
Status

- October – Metro Board awarded contracts for professional services:
 - Reinitiated Environmental Study (contract modification with existing consultant)
 - Advanced Conceptual Engineering design services (new contract)
- November – Project kick-off and agency coordination meetings
- Outreach to cities and key stakeholders

Next Steps

- Winter 2019
 - Community updates and stakeholder outreach

Eastside Transit Corridor Phase 2 Schedule



◆ = Milestone Date

○ = FTA Action

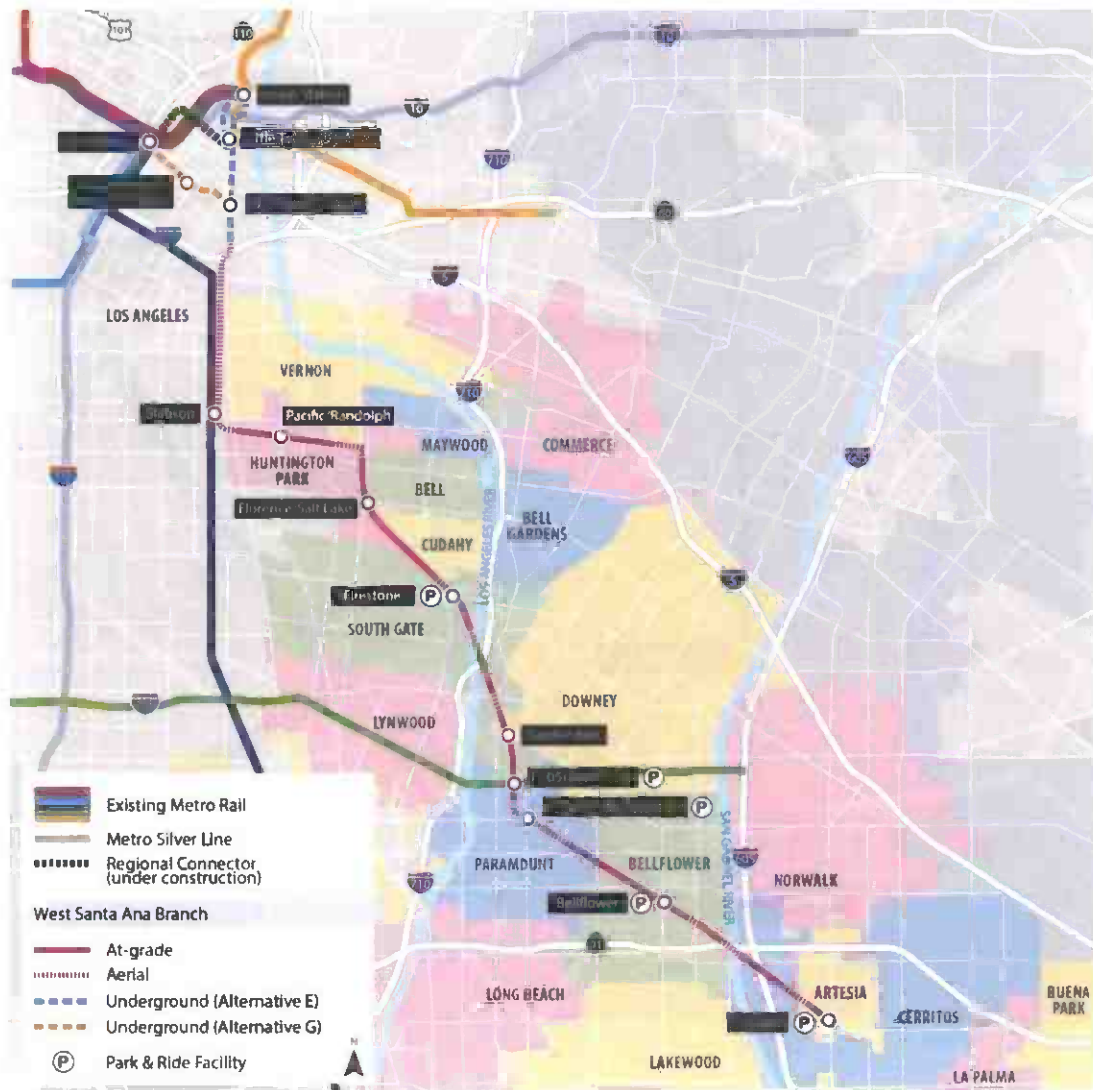
West Santa Ana Branch Transit Corridor



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

- May 2018 Board approvals:
 - Northern Alignment Options
 - Alternative E – Alameda Underground
 - Alternative G – Downtown Transit Core
 - One Southern Alignment
- July 2018 four updated scoping meetings
- August 2018 completion of comment period

West Santa Ana Branch Transit Corridor



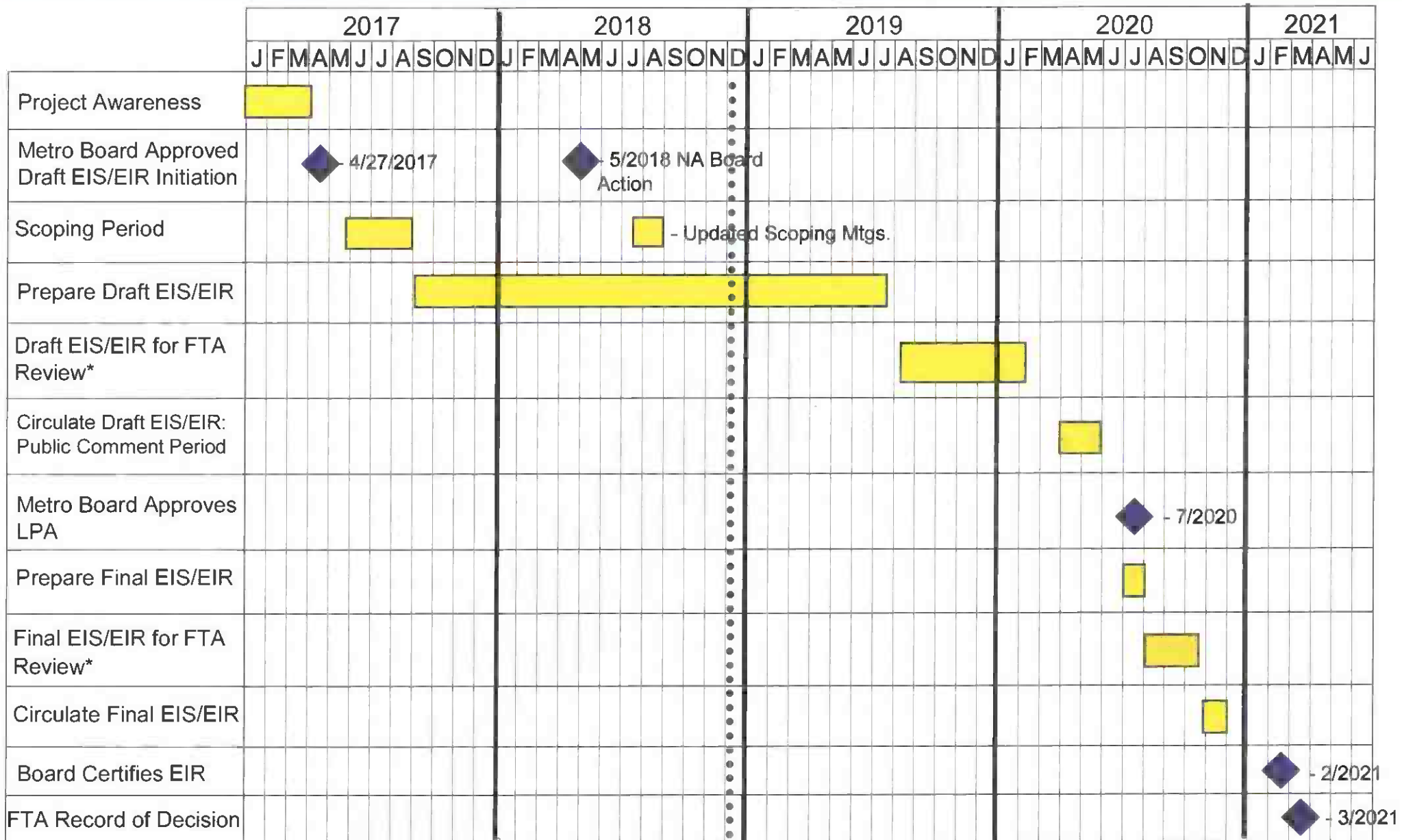
Status

- November 2018 Board action:
 - Updated project definition to address scoping comments, discussion with cities and stakeholders
 - Execution of third-party agreements
 - Contract modifications to advance level of design and outreach services
- Ongoing stakeholder briefings

Next Steps

- Advance design
- Early 2019: Community update meetings
- March 2020: Completion of draft EIS/EIR
- Support FTA staff resource needs to accelerate environmental review process

West Santa Ana Branch Transit Corridor Schedule



*FRA review to be coordinated.

◆ = Milestone Date.

Last Revised: 11/2018

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	Feb-19
	Eastside Transit Corridor Phase 2	Jan-10	Dec-13	Aug-14	Jun-21	Dec-21
	West Santa Ana Branch Transit Corridor	Jun-17	Aug-19	Mar-20	Jul-20	Aug-20

Cesar Chavez Bus Stop Improvements Project

Status

- Bids received for construction procurement and under review
- Piezo electric vendor selected and in negotiations
- City approvals for work in City streets are underway
- Board approval for next steps is in process

Next Steps / Schedule

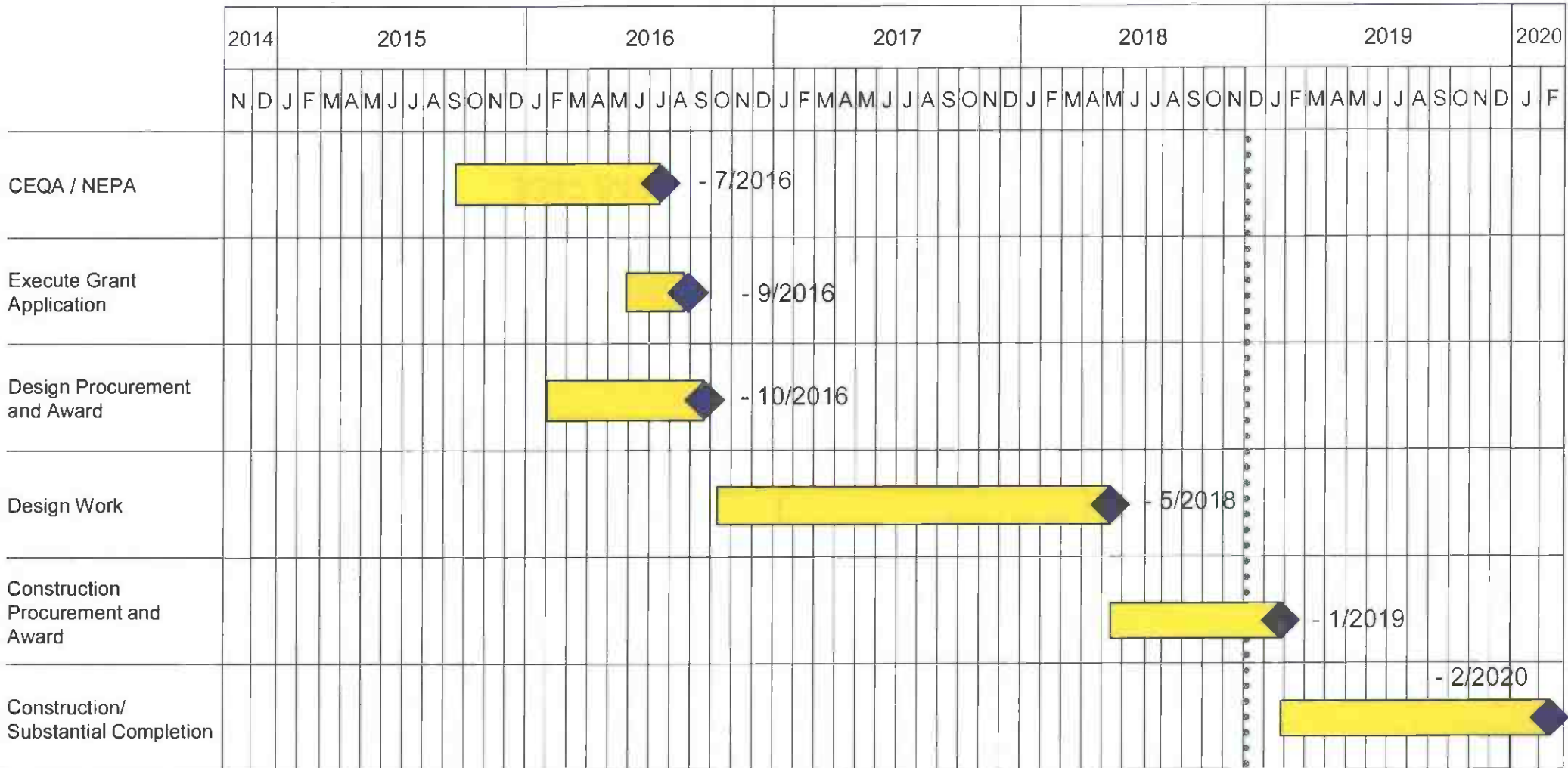
- Board approval December 2018
- Issue notice of intent to award to contractor Winter 2019
- Begin construction Winter 2019
- Complete construction Winter 2020

Cesar Chavez Bus Stop Improvements Project Renderings



Cesar Chavez Bus Stop Improvements Project

Schedule (est.)



◆ = Milestone Date

Last Revised: 11/2018

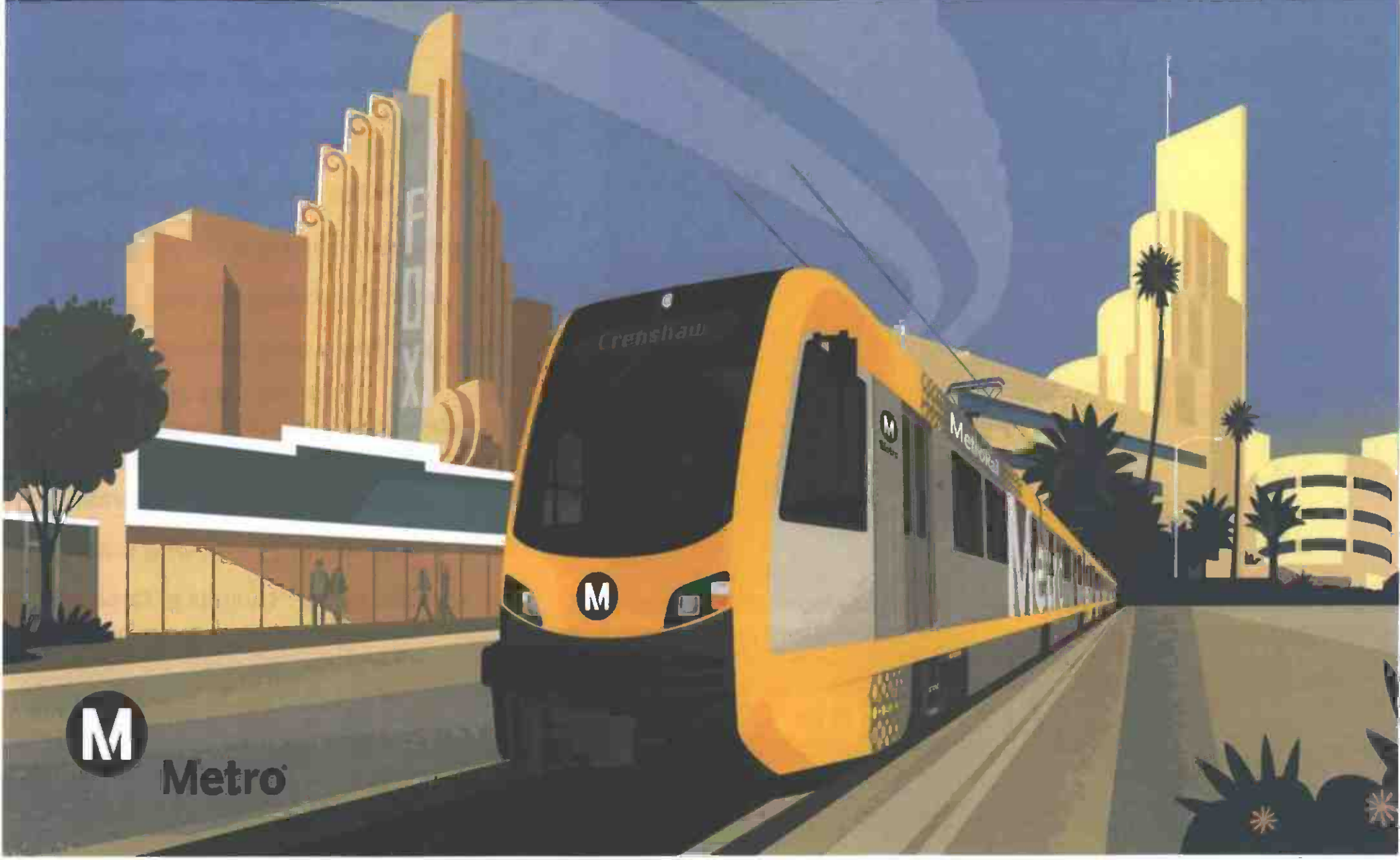
Cesar Chavez Bus Stop Improvements Project

Current Project Budget and Expenditures

Funding Source	Current Budget
FTA Grant	\$1,668,557
Local Funds	\$417,140
TOTAL BUDGET	\$2,085,697

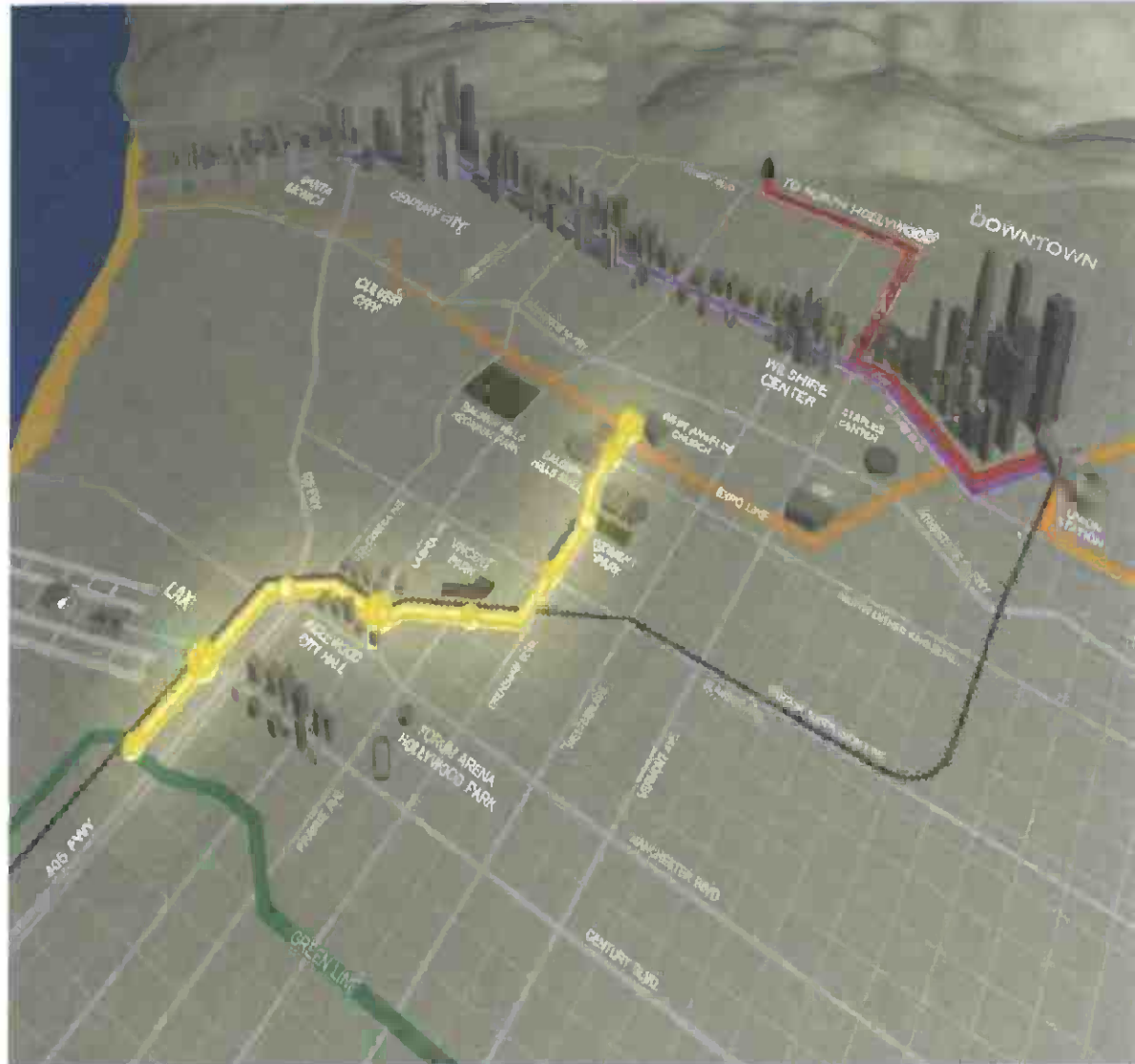
Activities	Approved Budget	Current Budget	Expenditures To Date	Forecast to Complete
Design	\$342,849	\$342,849	\$342,849	-
Construction	\$1,742,848	\$1,742,848	\$4,688	\$1,738,161
TOTAL	\$2,085,697	\$2,085,697	\$347,537	\$1,738,161

Crenshaw/LAX Transit Project FTA Quarterly Review – December 13, 2018



Project Description

- 8.5 miles, 8 stations, 22 LRT vehicles
- Current Budget = \$2,058 million
- Current Forecast = \$2,058 million
- Remaining Unallocated Contingency = 1.5% of Total Project Current Forecast and 9.5% of Total Project Cost-to-Go
- Contractor Award Date = August 01, 2013
- Current Revenue Service = October 30, 2019
- Forecast Revenue Service = Spring 2020
- Final Design progress = 100%
- Construction progress = 87%
- Federal Funds = \$177.6 million
- Local Funds = \$1,665.2 million
- State Funds = \$215.2 million



Key Project Updates

- The restoration of the road areas above the three underground stations began on June 15th and is anticipated to be complete by November 2018.
- The main line contractor continues work through all areas of the alignment but progress is slower than planned.
- The safety recordable rate is at 2.4 (September 2018), which is less than the national average of 2.8 (based on 200,000 work hours).
- The estimated jobs created to-date is 17,507 with 647 estimated jobs created last quarter*.
- The Southwestern Yard (Division 16) contractor is on schedule toward a planned completion in January 2019.

* 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 C



Crenshaw Blvd. restoration and Expo/Crenshaw Station entrance construction near Expo Line.

Construction Update Segment B



Grading for grade beam and slab at the La Brea Station east fare gate

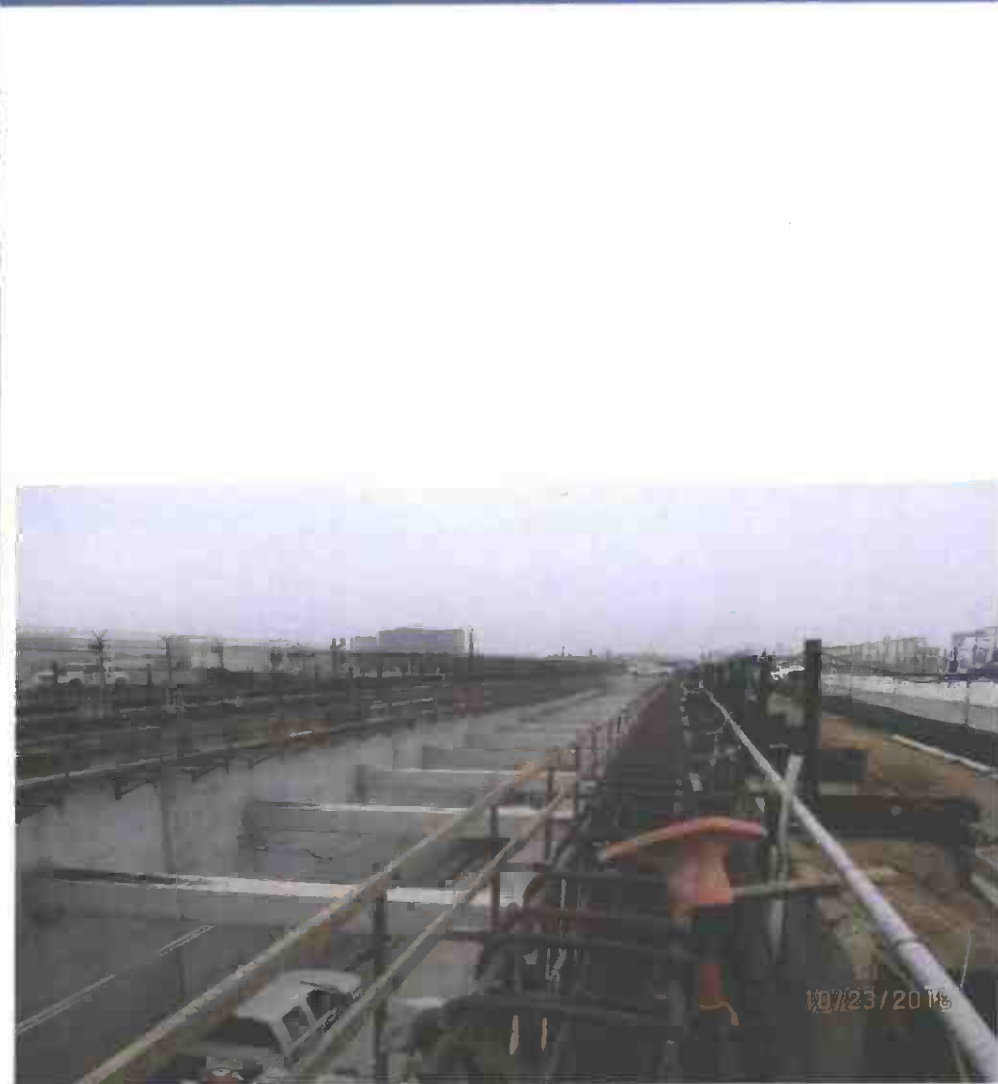


Welding brackets and plates in process at the east fare gate at the Fairview/Heights Station

Construction Update Segment A



Rain gutter installation for the Aviation/Century
Station ticket kiosk canopy



Forming the barrier wall at UG1

Construction Update Southwestern Yard



Southwestern Yard – Four LRT Vehicles moved into yard for support of systems testing

Construction Update Southwestern Yard



Southwestern Yard – Aerial View

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

• DBE Goal – Design		20.00%
• Current DBE Commitment	\$24,892,683	20.00%
• Current DBE Participation	\$28,808,486	24.74%

26 Design subcontractors have been identified to-date.

• DBE Goal-Construction		20.00%
• Current DBE Commitment (contract)	\$251,046,792	20.00%
• Current DBE Participation (paid)	\$262,570,491	25.84%

272 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.

DBE Participation Status for Design and Construction – Southwestern Yard D-B C0991

- DBE Goal – Design 20.00%
 - Current DBE Commitment \$2,467,837 (20.93%)
 - Current DBE Participation \$2,138,538 (19.10%)
- 9 Design subcontractors have been identified to-date

-
- DBE Goal – Construction 16.00%
 - Current DBE Commitment (contract) \$25,930,837 (16.00%)
 - Current DBE Participation (paid) \$21,358,907 (17.08%)
- 87 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

UNITS IN DOLLARS

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	-	452,716,215	12,900	414,798,159	-	452,719,235	2,364,860
20	STATIONS	153,906,000	-	315,050,000	1,080,067	309,479,038	(7,393)	219,083,840	1,080,067	309,479,038	(5,570,962)
30	SUPPORT FACILITIES SOUTHWEST YARD	66,673,000	-	71,164,000	-	68,132,352	1,360,649	59,332,173	-	71,164,000	-
40	SITWORK/SPECIAL CONDITIONS	235,576,000	-	395,798,361	352,381	399,640,177	(244,410)	341,712,200	203,357	406,960,329	11,161,967
50	SYSTEMS	125,132,000	-	169,436,000	1,180,296	168,077,243	(197,079)	93,894,747	1,180,296	172,635,630	3,199,630
CONSTRUCTION SUBTOTAL (10-50)		1,052,622,000	-	1,401,802,736	2,612,744	1,398,045,025	924,667	1,128,821,119	2,463,720	1,412,958,231	11,155,495
60	RIGHT-OF-WAY	132,294,000	-	127,490,000	-	124,964,831	501	125,142,357	-	125,298,865	(2,191,135)
70	LRT VEHICLES	87,780,000	-	83,571,544	-	82,158,061	-	74,446,199	-	83,571,544	-
80	PROFESSIONAL SERVICES	273,147,000	-	368,734,466	2,601,542	373,074,421	2,795,740	336,187,005	245,316	380,400,056	11,665,590
SUBTOTAL (10-80)		1,545,843,000	-	1,981,598,746	5,214,286	1,978,242,339	3,720,908	1,664,596,680	2,709,036	2,002,228,697	20,629,951
90	UNALLOCATED CONTINGENCY	177,157,000	-	50,401,254	-	0	-	-	(2,709,036)	29,771,303	(20,629,951)
TOTAL PROJECT 865512 (10-100)		1,723,000,000	-	2,032,000,000	5,214,286	1,978,242,339	3,720,908	1,664,596,680	-	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	5,214,286	2,003,791,370	3,720,908	1,690,145,711	-	2,058,000,000	-

1. Expenditures are Cumulative through September 28, 2018.

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

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

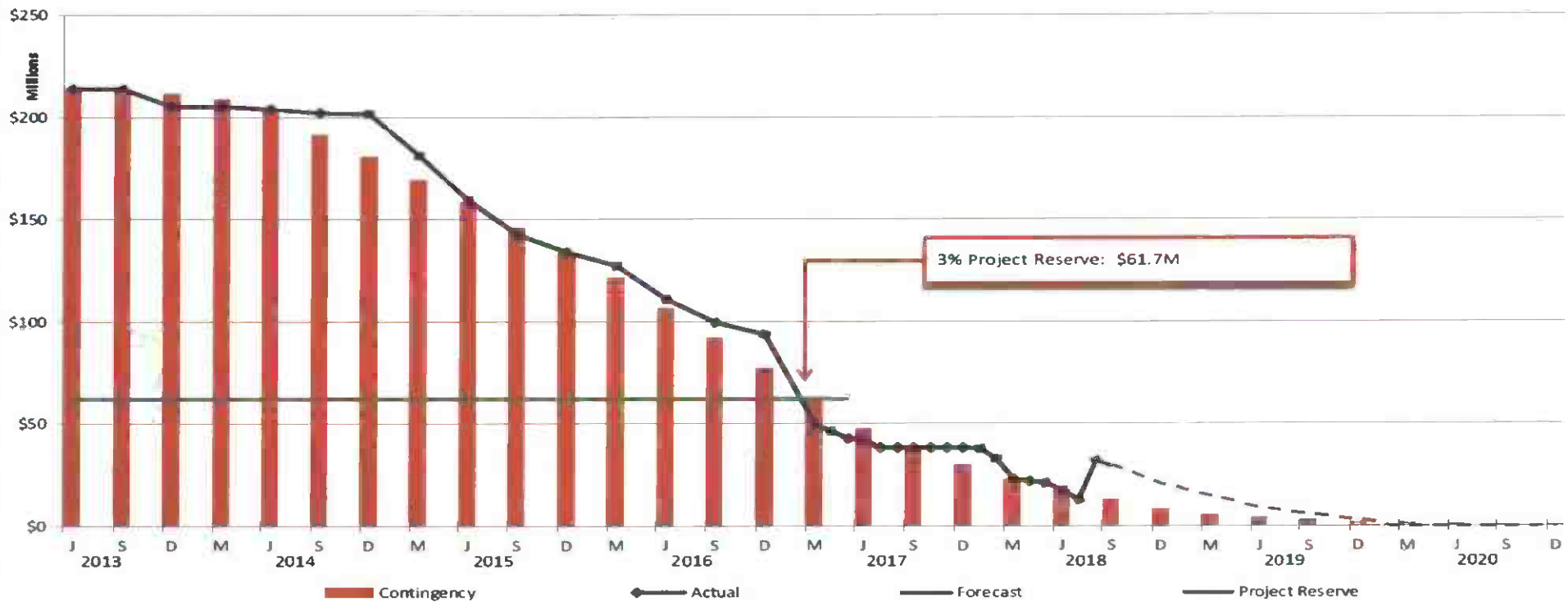
Non-Crenshaw/LAX Transit Project Funded Scope of Work

- 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

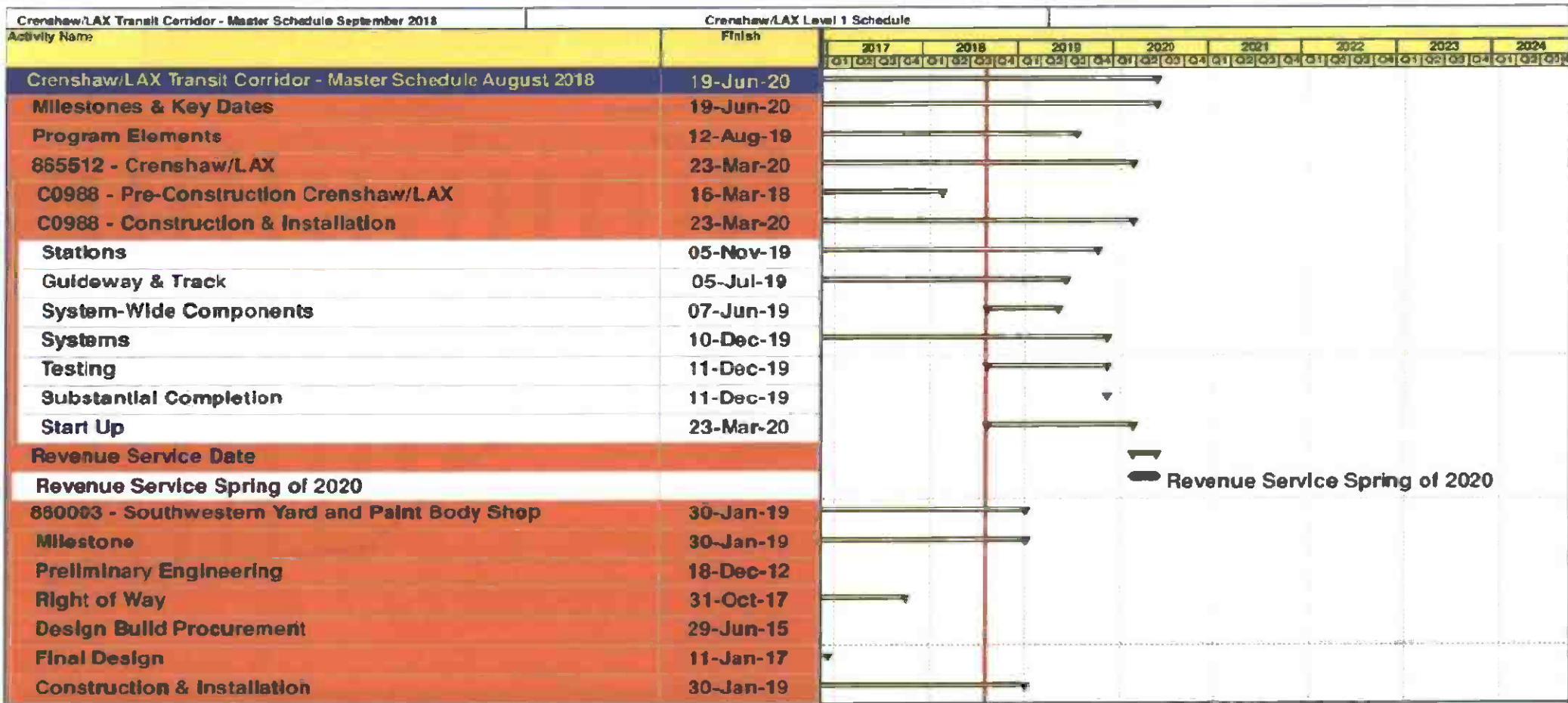
DESCRIPTION	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		FORECAST VARIANCE
	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
405556 SYSTEMWIDE TRANSIT PLANNING	-	175,495	-	320,035	-	320,035	-	175,495	-
210090/93 FARE GATE PROJECT	-	2,566,226	-	2,566,226	396,627	1,415,153	-	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	-	36,379,674	-	37,914,465	-
500013 C/LAX LAWA SCOPE OF WORK	-	1,575,362	-	914,613	-	792,109	-	1,575,362	-
TOTAL	-	44,431,548	-	43,048,548	396,627	39,310,305	-	44,431,548	-

Budget Contingency Drawdown



PROJECT COST CONTINGENCY (through 28-Sep-2018)					
UNITS IN DOLLARS					
	Original Contingency	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	173,500,000	(141,019,661)	(2,709,036)	(143,728,697)	29,771,303
Allocated Contingency	40,366,792	(40,366,792)	-	(40,366,792)	-
Total Contingency	213,866,792	(181,386,453)	(2,709,036)	(184,095,489)	29,771,303

Summary Schedule



Revenue Service Spring of 2020

Top Risks & Mitigations

RISK ID	RISK DESCRIPTION	RISK SCORE	MITIGATION STRATEGIES
124	Main Line testing prior to pre-revenue operations may take longer than expected, resulting in increased Main Line Metro and Consultant costs and potential delay to May 1, 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.
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 contractor letter. 3. Resolve time impacts at the same time as resolving the direct cost of changes. 4. Identify potential critical procurements.
362	Schedule activities that are critical to completion. (Plinth re-work)	16	<ol style="list-style-type: none"> 1. Prepare work around plans for activities behind schedule. 2. Direct contractor on specific critical scope. 3. Identify what scope can be rescheduled for completion after substantial completion.

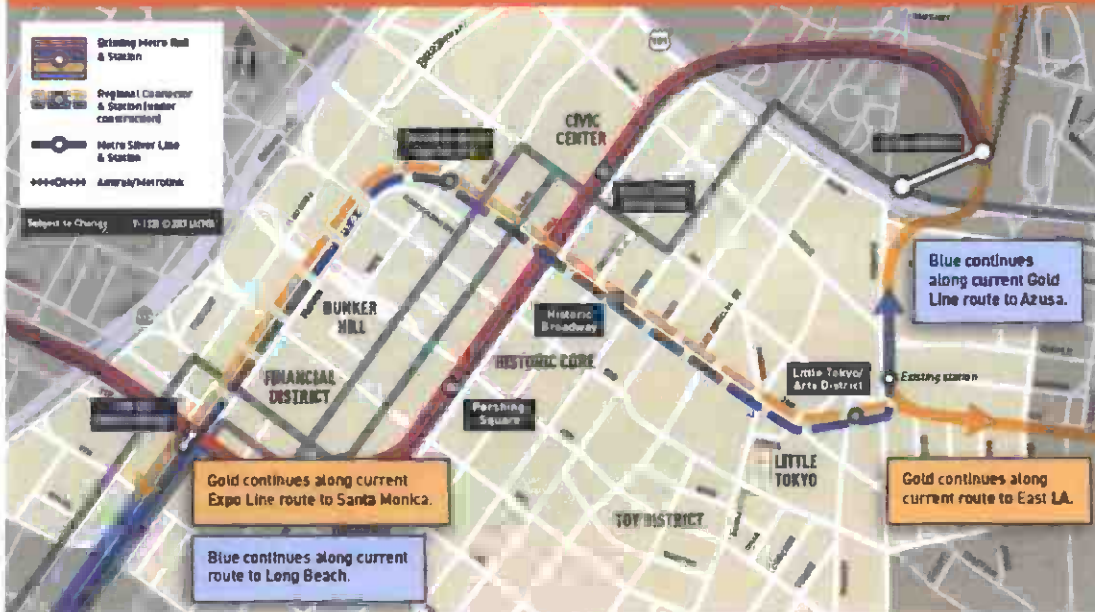
Regional Connector Transit Project

FTA Quarterly Review Meeting

December 13, 2018



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 in 2035
- 17,700 Daily New Transit Trips in 2035

- FFGA Budget – \$1,402.93M
- FFGA Forecast – \$1,670.83M
- FFGA Proposed RSD – 02/2023
- Forecast RSD – *Winter 2021/2022*
- FFGA Contingency (Proposed Budget) – 3.69%
- FFGA Contingency (To Go) – 8.69%
- 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 – 52.9%
- Final Design Progress – 99.8%
- Construction Progress – 49.9%

Key Project Updates

- Focus remains on three schedule related areas of the Project:
 1. Broadway Station / SEM Cavern / Overbuild
 2. Project-wide Level of Effort
 3. Flower Street – North structural concrete
- Total Contractor Recordable Injury Rate (*August 2018*) = 1.08
 - C0980 – 2,491,460 WH / 13 Recordable
 - C0981R – 111,059 WH / 1 Recordable
- Total Aggregated Project Safety Record (*August 2018*) – 0.94*
 - Contractors, Metro and Consultant Staff – 3,204,330 WH / 15 Recordable
- Estimated Jobs Created to Date as of *September 2018* is 11,429 with a Estimated Total Jobs of 20,000.**

*Using RIR method of calculating.

**Estimate methodology per: Cooper, Christine Ph.D. & Mitra, Somjita Ph.D. *Construction Impacts of Metro's Measure R Transportation Projects, 2015 Update*, Institute for Applied Economics, Los Angeles County Economic Development Corporation, February 2016.

Construction Update Tunnels



Concrete placement for Left Tunnel Walkway, Flower to Hope



Concrete placement of Left Tunnel Invert, Hope to Broadway

- Walkway installation ongoing in left and right tunnels – Flower to Hope and Hope to Broadway

Construction Update

Little Tokyo/Arts District Station

- Excavation and related support of utilities continues at both the Station and the Wye Junction
- Preparation for permanent work has begun in Wye, with removal of last of the TBM related equipment and ramp



Oct 16, 2018 at 8:02:31 AM
Installation of mud slab at track level



Oct 19, 2018 at 2:13:52 PM
Excavation/lagging and removal of tunnel segments under Central decking

Construction Update Historic Broadway

- Concrete placement is underway, including HDPE installation at walls, and rebar in station and ancillary



Rebar installation of top mat



HDPE installation around tunnel eyes

Construction Update SEM Cavern



Left drift end wall excavation



SEM face

- SEM Crossover Cavern construction ongoing adjacent to Historic Broadway Station
- Left drift excavation completed October 22, 2018; focus is now on right and center drifts

Construction Update

Grand Av Arts/Bunker Hill Station



Tunnel Eye formwork at East Hammerhead



MEP installation at East Hammerhead

- Permanent structural concrete construction continues at station invert, walls, sumps, and tunnel eye

Disadvantaged Business Enterprises

Contract C0980 Regional Connector Transit Corridor Design-Build

(Reporting Data as of August 2018)

Design	<ul style="list-style-type: none"> • DBE Goal • Current DBE Commitment • Current DBE Participation • Twelve (12) design DBE sub-consultants have been identified to date 	<p>20%</p> <p>\$14.0M (22.63%)</p> <p>26.93%</p>
Construction	<ul style="list-style-type: none"> • DBE Goal • Current DBE Commitment • Current DBE Participation • Seventy-eight (78) construction DBE sub-consultants have been identified to date 	<p>18%</p> <p>\$192M (18%)</p> <p>12.87%</p>

FFGA Project Cost Status Above the Line

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT (860228)
PERIOD ENDING SEP 2018
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	242,966	158,222	250,766	5,835
20	STATIONS, STOPS, TERMINALS, INTERMODAL	354,268	220,966	220,960	49,369	221,130	164
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	0	0	0	0	0	0
40	SITework & SPECIAL CONDITIONS	141,785	578,180	564,605	428,838	594,878	16,697
50	SYSTEMS	69,667	72,674	66,823	16,042	74,082	1,407
	CONSTRUCTION SUBTOTAL (10-50)	846,343	1,116,752	1,095,354	652,471	1,140,855	24,103
60	ROW, LAND, EXISTING IMPROVEMENTS	115,889	90,629	52,470	52,226	74,297	-16,331
70	VEHICLES	16,275	16,275	16,275	1,678	16,275	0
80	PROFESSIONAL SERVICES	261,455	350,272	287,301	255,964	363,526	13,254
	SUBTOTAL (10-80)	1,239,963	1,573,927	1,451,400	962,339	1,594,953	21,026
90	UNALLOCATED CONTINGENCY	135,399	82,600	0	0	61,574	-21,026
100	FINANCE CHARGES	27,571	14,301	0	0	14,301	0
	TOTAL PROJECT (10-100)	1,402,932	1,670,828	1,451,400	962,339	1,670,828	0

NOTE: TOTAL INCURRED COST TO DATE \$971,221,311.

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

**CURRENT PROJECT BUDGET LESS NON-FFGA ACTIVITIES.

Project Cost Status

FFGA / Non-FFGA

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT (860228)
 PERIOD ENDING SEP 2018
 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	242,966	159,227	250,766	5,835
20	STATIONS, STOPS, TERMINALS, INTERMODAL	354,268	220,966	220,960	49,369	221,130	164
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	0	0	0	0	0	0
40	SITWORK & SPECIAL CONDITIONS	141,785	578,180	564,605	429,838	594,878	16,697
50	SYSTEMS	69,667	72,674	66,823	16,042	74,082	1,407
	CONSTRUCTION SUBTOTAL (10-50)	846,343	1,116,752	1,095,354	652,471	1,140,855	24,103
60	ROW, LAND, EXISTING IMPROVEMENTS	115,889	90,529	52,470	52,226	74,297	-16,331
70	VEHICLES	16,275	16,275	16,275	1,578	16,275	0
80	PROFESSIONAL SERVICES	261,455	350,272	287,301	255,964	363,526	13,254
	SUBTOTAL (10-80)	1,239,963	1,573,927	1,451,400	962,339	1,594,953	21,026
90	UNALLOCATED CONTINGENCY	135,399	82,600	0	0	61,574	-21,026
100	FINANCE CHARGES	27,571	14,301	0	0	14,301	0
	TOTAL PROJECT (10-100)	1,402,932	1,670,828	1,451,400	962,339	1,670,828	0

NOTE: TOTAL INCURRED COST TO DATE \$971,221,311.

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

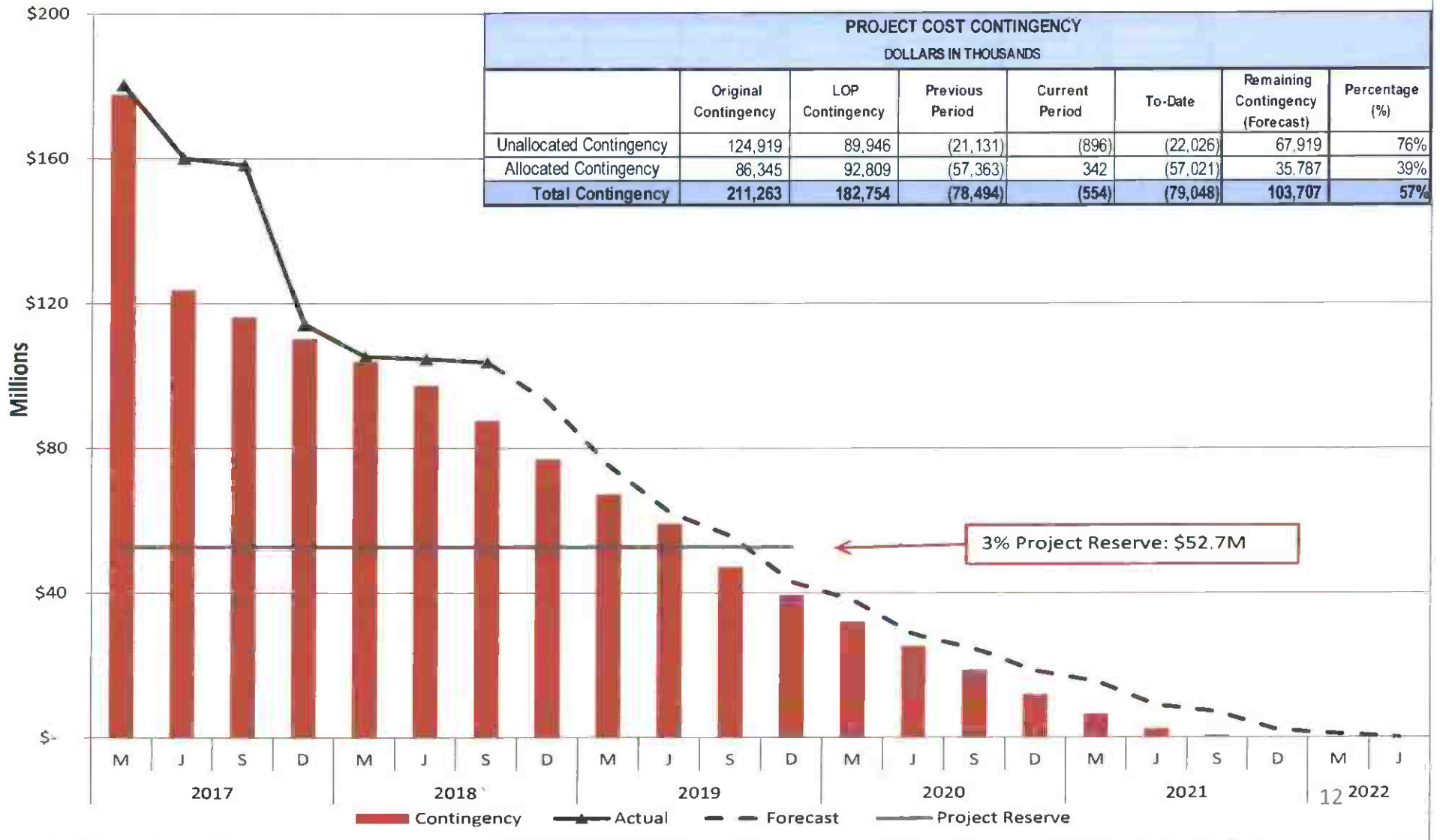
**CURRENT PROJECT BUDGET LESS NON-FFGA ACTIVITIES.

SCC CODE	DESCRIPTION	ORIGINAL NON FFGA BUDGET	PROPOSED NON FFGA BUDGET	COMMITMENTS	EXPENDITURES	PROPOSED NON FFGA FORECAST AT COMPLETION	VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS		4,350	4,350	489	1,488	-2,862
20	STATIONS, STOPS, TERMINALS, INTERMODAL		8,953	8,953	8,453	8,980	28
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS		0	0	0	0	0
40	SITWORK & SPECIAL CONDITIONS		20,237	11,465	3,976	26,185	5,948
50	SYSTEMS		750	129	0	1,135	385
	CONSTRUCTION SUBTOTAL (10-50)		34,289	24,896	12,917	37,788	3,499
60	ROW, LAND, EXISTING IMPROVEMENTS		2,113	0	0	2,113	0
70	VEHICLES		0	0	0	0	0
80	PROFESSIONAL SERVICES		29,066	13,673	9,703	26,567	-2,499
	SUBTOTAL (10-80)		65,468	38,570	22,619	66,468	1,000
90	UNALLOCATED CONTINGENCY		7,346	0	0	6,346	-1,000
100	FINANCE CHARGES		0	0	0	0	0
	TOTAL NON-FFGA (10-100)		72,814	38,570	22,619	72,814	0
	ENVIRONMENTAL PLANNING		26,500	26,500	25,052	26,500	0
	TOTAL NON-FFGA (INCL. ENV./PLANNING)		99,314	65,070	47,672	99,314	0

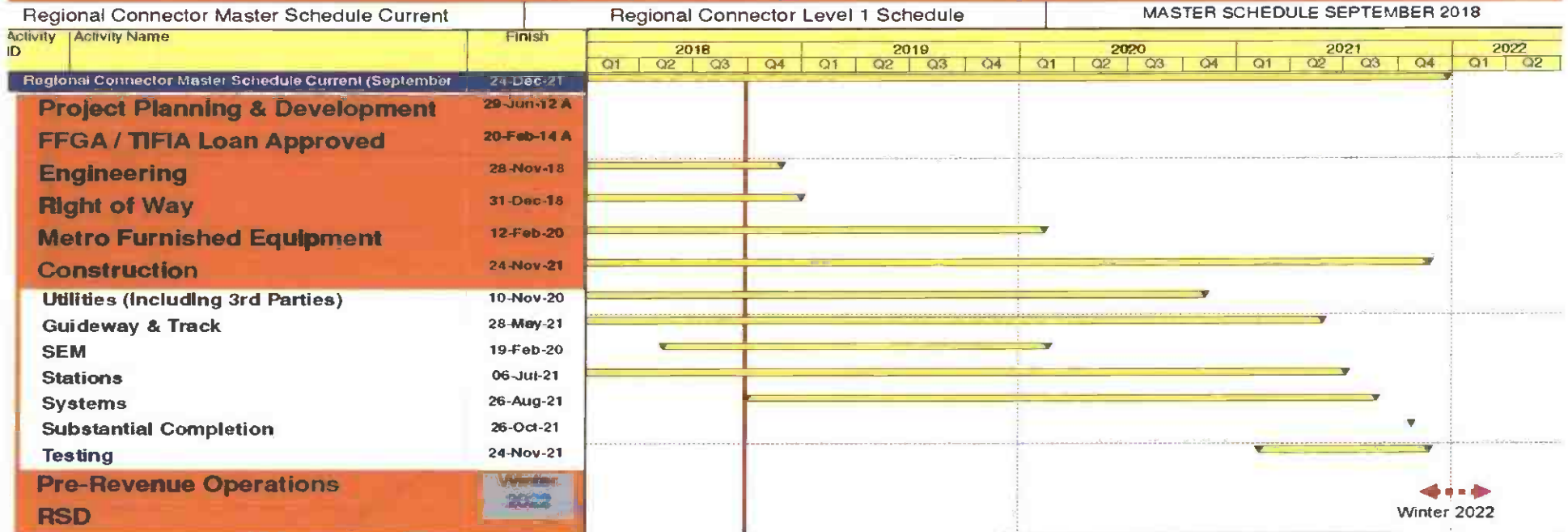
NOTE: TOTAL INCURRED COST TO DATE \$48,446,091. METRO AND TRIBUNE AGREED ON REIMBURSEMENT OF \$1.6 MILLION RELATED TO 2ND/BROADWAY OVERBUILD.


TOTAL PROJECT	1,402,932	1,770,142	1,516,470	1,010,011	1,770,142	0
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Budget Contingency Drawdown

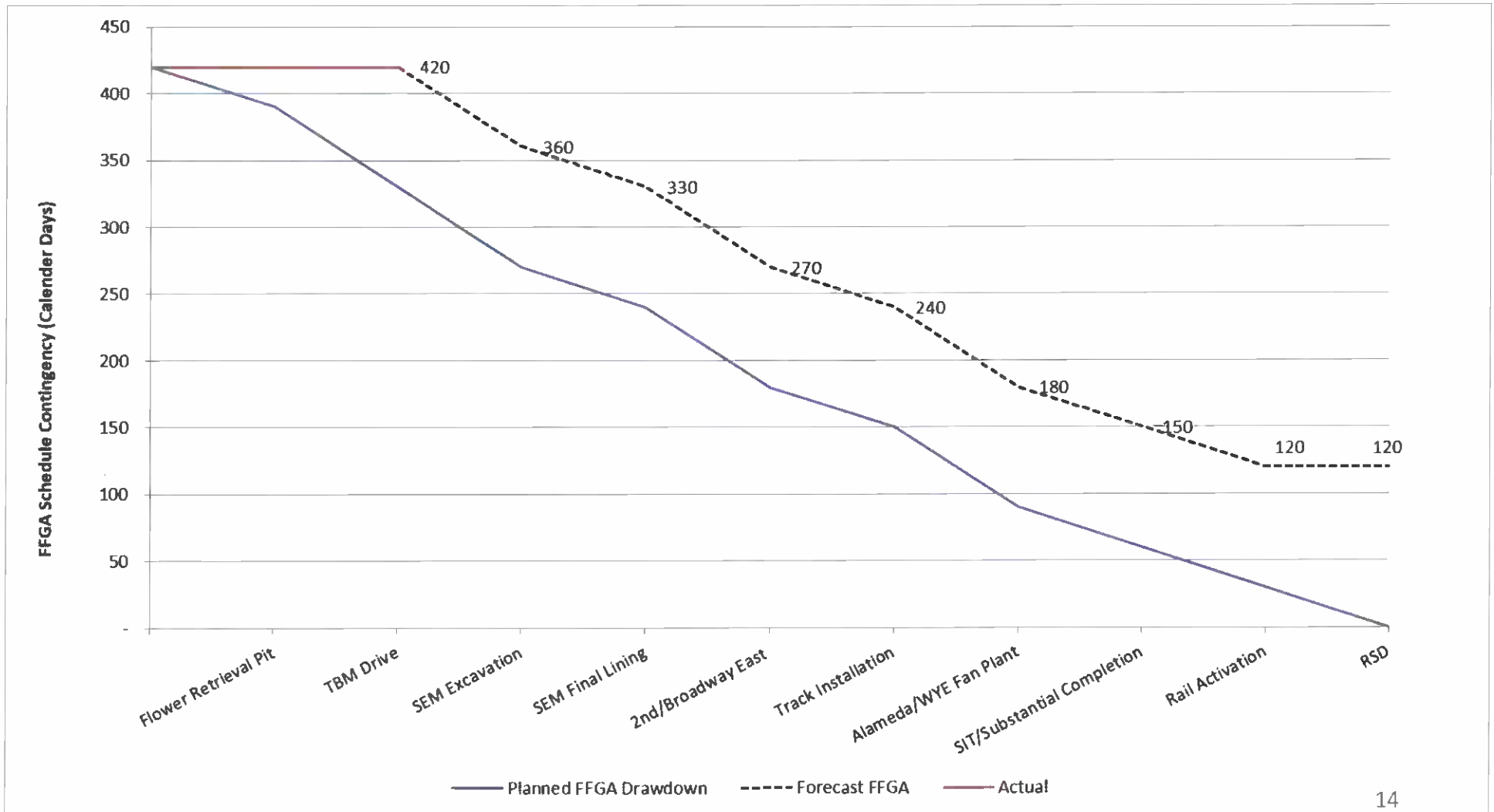


Summary Schedule



 Remaining Work
 Milestone

Schedule Contingency Drawdown (Proposed FFGA RSD)

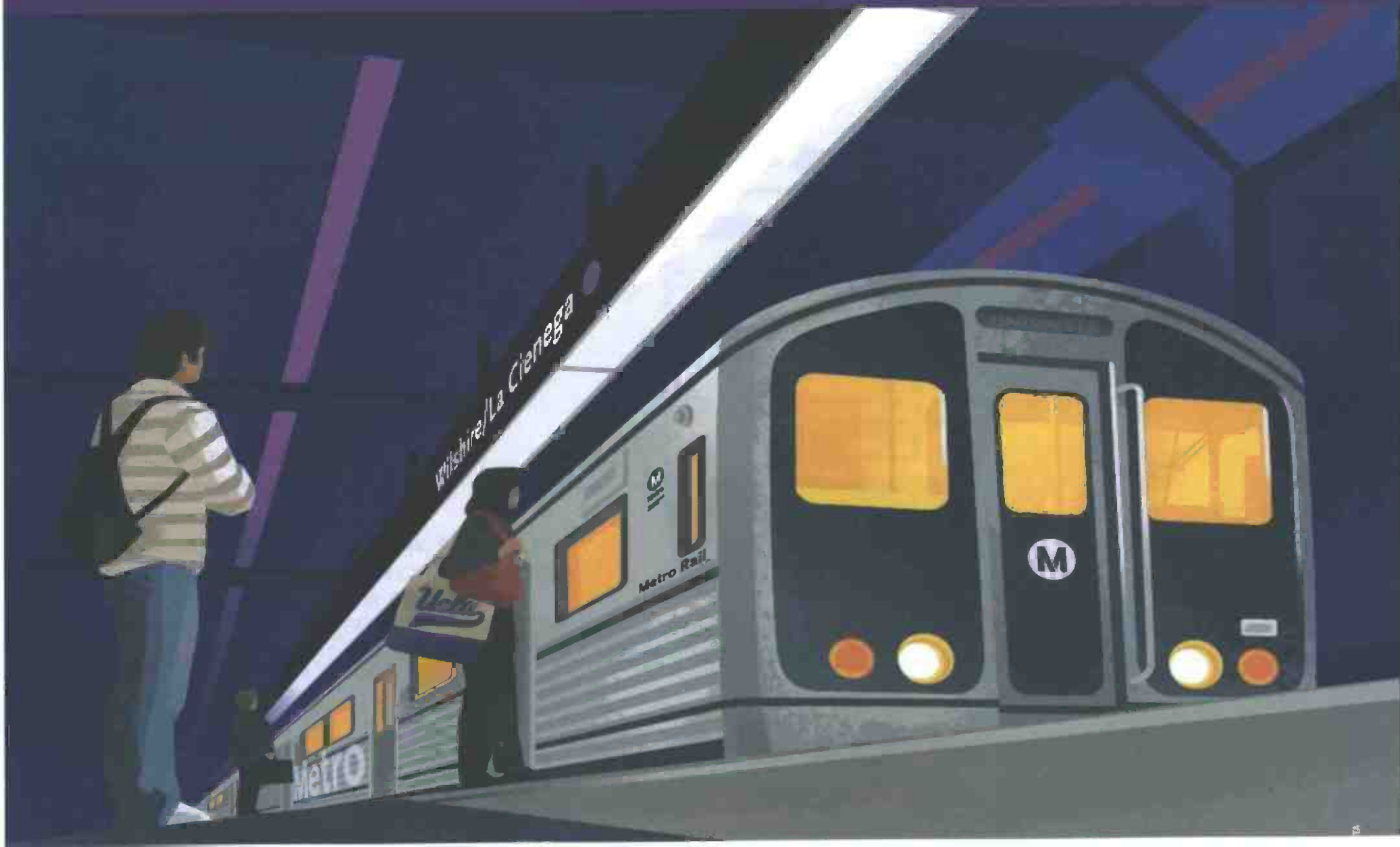


Top Risks & Mitigations

October 2018

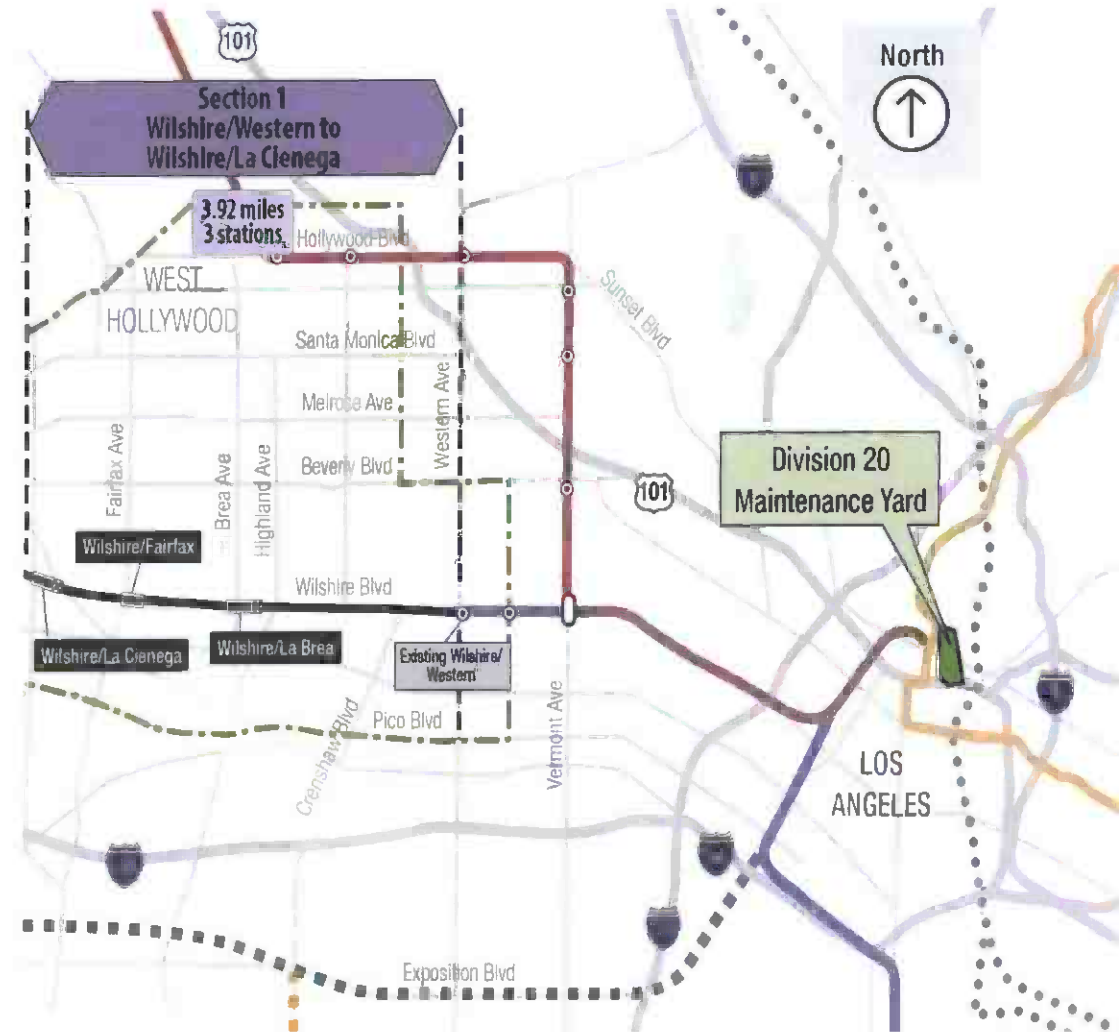
RISK ID	RISK DESCRIPTION	RISK SCORE	ACTION ITEMS
213	Lawsuits at Flower Street may delay the Project and increase costs.	8	<ol style="list-style-type: none"> 1. Strict compliance of Mitigation Monitoring and Reporting Requirements (MMRP) 2. Review of RCC plans and activities 3. Outreach to stakeholders 4. Meeting weekly with Bonaventure to share work plans and discuss concerns/requests 5. Interface with other Flower Street stakeholders to discuss ongoing plans and issues
311	Commonwealth Agreement may impact costs due to extended "construction phase."	8	<ol style="list-style-type: none"> 1. Ensure responsiveness to Commonwealth commitments 2. Refine response to FSP obligations with already budgeted costs 3. Interface with Community Relations regarding Business Assistance 4. Community Relations to provide information to determine schedule updates on Flower Street 5. <i>Continue to maintain stakeholder current and forward-looking interface</i>
365	<i>Operator training requirements may have schedule and cost implications.</i>	7.5	<ol style="list-style-type: none"> 1. <i>Studies among Operation-Liaison and Project staff to optimize activities</i> 2. <i>Respective management review underway</i>
333	Damage to streets throughout the alignment due to volume of work (i.e. potholing, trenching, water and power utility installation) may require additional restoration work.	6	<ol style="list-style-type: none"> 1. Monitor progress of both restoration packages 2. Revisit South of 6th St on Flower for scope requests
363	WYE pin pile removal after backfill and street restoration may have schedule & cost implication beyond the WYE.	6	<ol style="list-style-type: none"> 1. Secure interface plan between pin piles and structure/street restoration 2. Develop TCP specific to the challenges 3. Explore alternate constructability solutions 4. <i>Discuss at next Steering Committee</i>

Westside Purple Line Extension Section 1 Project FTA Quarterly Review December 13, 2018



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: November 8, 2023
- Design Progress: 100% (Final Design Complete)
- Construction Progress: 42%
- Daily Project Transit Trips: 33,694
- Daily New Transit Trips: 9,841
- Current Contingency Forecast (SCC 10-80): 7%
- Current Contingency Forecast of Cost-to-Go (SCC 10-80): 14%
- Federal Funds: \$1.26 Billion
- Local Funds: \$1.56 Billion
- Status: All three (3) stations and WW TBM Shaft under construction



Westside Purple Line Extension Section 1 Project Project Update

- The current job creation estimates as extrapolated from the Los Angeles Economic Development Corporation (LAEDC) analysis of job impacts is the following:
 - September 2018: 275 estimated jobs
 - First Quarter of FY 2019: 608 estimated jobs
 - To date: 14,152 estimated jobs

Westside Purple Line Extension Section 1 Project Project Update Division 20 MOW/NRV Building Location 64

Current Activities:

- Building construction, Sitework

Status:

- **Division 20 MOW Building:** Exterior sheathing and waterproofing has been completed. Overhead electrical rough-in, along with panel/switchgear installation, inside the electrical/communication rooms continues. Work on vertical transportation has commenced.
- **Parts and Storage Expansion:** Fireproofing and exterior metal framing moves forward. Vertical lift module construction inside the building is underway.
- On schedule to complete by March 29, 2019.



Division 20 MOW Building – View Looking North-East



Parts & Storage Area – Storage System Assembly



Division 20 MOW Building – 1st Flr Maintenance Bay

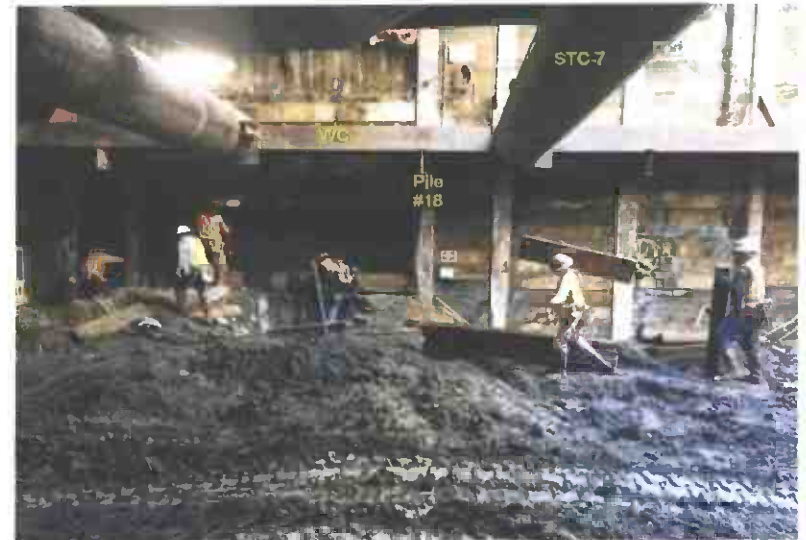
Westside Purple Line Extension Section 1 Project Project Update Wilshire/Western TBM Retrieval Shaft

Current Activities:

- Shaft excavation, dewatering activities

Status:

- Level C excavation/bracing is complete. Excavation to the bottom of the Western Retrieval Shaft is anticipated in October 2018.
- The TBM temporary invert slab is scheduled to be poured in November 2018.



Wilshire/Western Site – Vertical Lagging



Wilshire/Western Excavation below Level C



Wilshire/Western Site Excavation

Westside Purple Line Extension Section 1 Project

Project Update

Wilshire/La Brea Station

Current Activities:

- TBM/Support Equipment Assembly/Testing
- TBM tunneling

Status:

- On October 18, 2018, tunneling with TBM #1 commenced with the installation of the 1st concrete ring.
- Station concrete activities for interior load bearing walls are planned to continue after both TBMs have launched.



Wilshire/La Brea Station – Muck on TBM Belt Ring

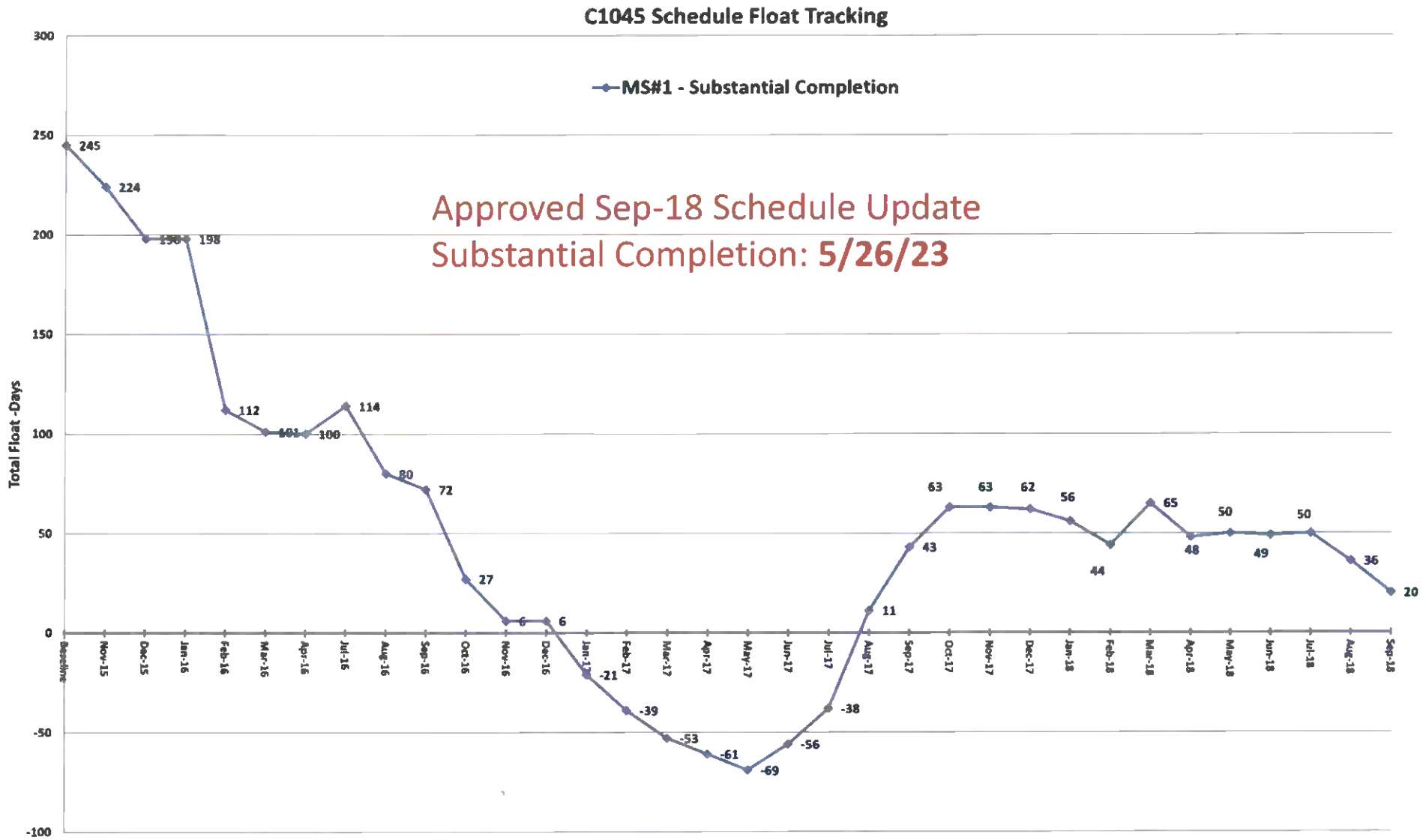


Launching TBM at Wilshire/La Brea Station



Setting Ring #1 at Wilshire/La Brea Station

Westside Purple Line Extension Section 1 Project Project Update Schedule Float Tracking



Westside Purple Line Extension Section 1 Project

Project Update

Wilshire/Fairfax Station

Current Activities:

- Station excavation, waler/strut installation
- Fine grading of subgrade
- Complete installation of canopy/soil nails

Status:

- Level D excavation, waler/strut installation continues. Installation of canopy/soil nails (1st Phase) is nearing completion.
- Fine grading has commenced with mudmat pours scheduled to start in December 2018.



Wilshire/Fairfax Station Level D Looking West



Wilshire/Fairfax Station Geotech Testing



Preparing Forms at Wilshire/Fairfax Station (Ogden Yard) 3

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

Current Activities:

- Shaft excavation, waler/strut installation

Status:

- Level A strut installation is complete. Level B strut installation has commenced. Excavation on the main station box continues.
- Maintenance of surface aesthetics per the COBH MOA is ongoing.



Wilshire/La Cienega Station Excavation



Fabricating Ventilation Ducts at Wilshire/La Cienega Station



Welding Level B Walers - Wilshire/La Cienega Station

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

Current Activities:

- TBM/Support Equipment Assembly/Testing
- TBM tunneling

Status:

- On October 18, 2018, tunneling with TBM #1 commenced with the installation of the 1st concrete ring. TBM #2 is scheduled to launch in November 2018.
- Tunnel instrumentation installation along Reach 1 continues.



Tunnel Segments on Car Passer at Wilshire/La Brea



View of Both TBMs – Looking East



View of South Yard Muck Pit at Wilshire/La Brea

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	387,938	381,233	138,443	387,938	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	570,051	489,322	468,344	165,774	489,322	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	39,086	38,092	36,497	22,888	38,092	-
40	SITework & SPECIAL CONDITIONS	139,820	812,415	780,797	529,008	812,415	-
50	SYSTEMS	123,579	115,199	100,490	25,295	115,199	-
CONSTRUCTION SUBTOTAL (10-50)		1,437,616	1,842,966	1,767,361	881,408	1,842,966	-
60	ROW, LAND, EXISTING IMPROVEMENTS	212,475	190,036	190,036	165,810	190,036	-
70	VEHICLES	160,196	108,302	98,118	14,607	108,302	-
80	PROFESSIONAL SERVICES	410,342	506,876	362,333	302,869	506,876	-
SUBTOTAL (10-80)		2,220,629	2,648,180	2,417,847	1,364,693	2,648,180	-
90	UNALLOCATED CONTINGENCY	225,859	110,856	-	-	110,856	-
100	FINANCE CHARGES	375,470	331,065	-	-	331,065	-
TOTAL PROJECT (10-100)		2,821,957	3,090,101	2,417,847	1,364,693	3,090,101	-

NOTE: TOTAL INCURRED COST TO DATE \$1,387,095

* 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 Costs

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	387,938	381,233	138,443	387,938	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	570,051	489,322	468,344	165,774	489,322	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	39,086	38,092	36,497	22,888	38,092	-
40	SITEWORK & SPECIAL CONDITIONS	139,820	812,415	780,797	529,008	812,415	-
50	SYSTEMS	123,579	115,199	100,490	25,295	115,199	-
	CONSTRUCTION SUBTOTAL (10-50)	1,437,616	1,842,966	1,767,361	881,408	1,842,966	-
60	ROW, LAND, EXISTING IMPROVEMENTS	212,475	190,036	190,036	165,810	190,036	-
70	VEHICLES	160,196	108,302	98,118	14,607	108,302	-
80	PROFESSIONAL SERVICES	410,342	506,876	362,333	302,869	506,876	-
	SUBTOTAL (10-80)	2,220,629	2,648,180	2,417,847	1,364,693	2,648,180	-
90	UNALLOCATED CONTINGENCY	225,859	110,856	-	-	110,856	-
100	FINANCE CHARGES	375,470	331,065	-	-	331,065	-
	TOTAL FFGA PROJECT ACTIVITIES (10-100)	2,821,957	3,090,101	2,417,847	1,364,693	3,090,101	-

NOTE: TOTAL INCURRED COST TO DATE \$1,387,095

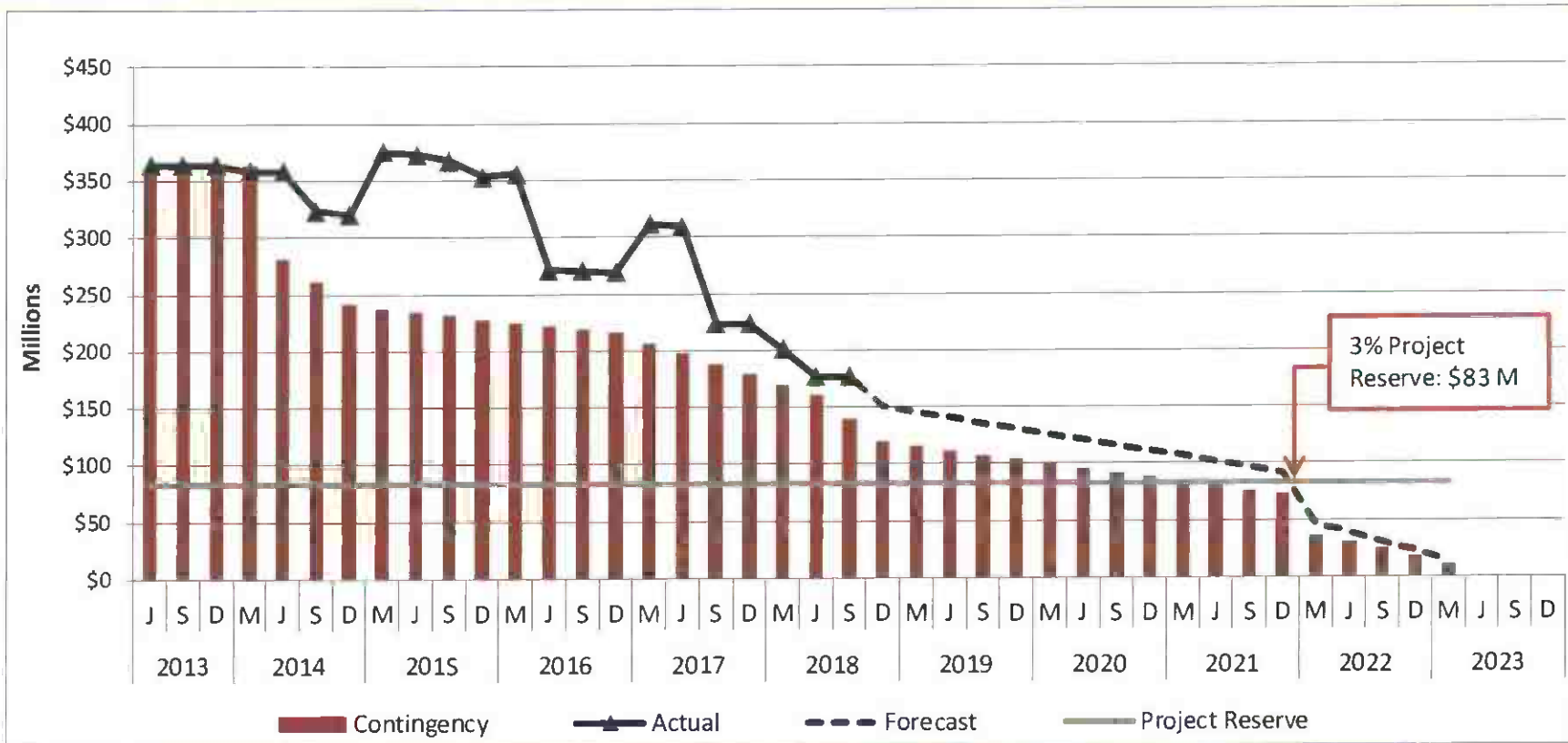
SCC CODE	DESCRIPTION	ORIGINAL NON FFGA BUDGET	CURRENT NON FFGA BUDGET	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	CURRENT NON FFGA BUDGET/ FORECAST VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	-	-	-	-	-	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	-	-	-	-	-	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	2,925	5,073	3,758	5,260	2,335
40	SITEWORK & SPECIAL CONDITIONS	-	-	484	484	2,031	2,031
50	SYSTEMS	-	-	-	-	-	-
	CONSTRUCTION SUBTOTAL (10-50)	-	2,925	5,557	4,243	7,291	4,366
60	ROW, LAND, EXISTING IMPROVEMENTS	12,805	12,805	12,945	8,450	12,945	140
70	VEHICLES	-	-	-	-	-	-
80	PROFESSIONAL SERVICES	1,500	3,575	3,000	3,151	3,628	53
	SUBTOTAL (10-80)	14,305	19,305	21,502	15,843	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	21,502	15,843	24,879	-
	ENVIRONMENTAL/PLANNING	39,370	39,370	39,370	39,357	39,370	-
	TOTAL NON-FFGA (INCL. ENV./PLANNING)	55,674	64,248	60,871	55,200	64,248	-

NOTE: TOTAL INCURRED COST TO DATE \$55,408

TOTAL PROJECT	2,838,262	3,154,350	2,478,719	1,419,893	3,154,350	-
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NOTE: TOTAL INCURRED COST TO DATE \$1,442,503

Westside Purple Line Extension Section 1 Project Project Cost Contingency Drawdown

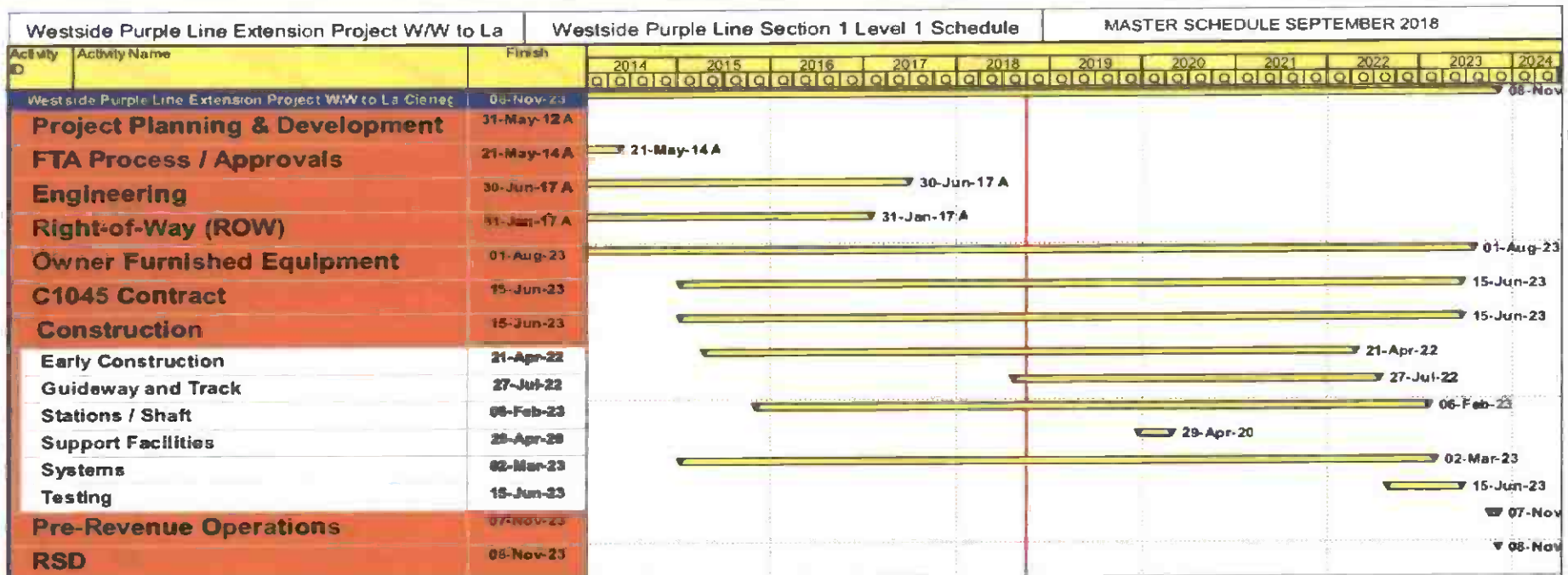




PROJECT COST CONTINGENCY					
DOLLARS IN THOUSANDS					
	Original Contingency (Budget)	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	248,592	(136,721)	-	(136,721)	111,871
Allocated Contingency	71,963	(6,855)	(153)	(7,008)	64,956
Total Contingency	320,555	(143,576)	(153)	(143,728)	176,827

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

DISADVANTAGED BUSINESS ENTERPRISE (DBE)	
DISADVANTAGED BUSINESS ENTERPRISE (DBE)	
Contract C1045 Westside Purple Line Extension - Section 1 <i>(Reported Data as of September 2018)</i>	
<ul style="list-style-type: none"> • DBE Goal – Design A numerically expressed percentage of funds apportioned to Design Contracts and is calculated based upon the relative availability of DBE firms as compared to all firms in the relevant geographic market area. 	20.25%
<ul style="list-style-type: none"> • Current DBE Commitment – Design Total DBE Committed Dollars divided by Total Contract Value for Design or Construction. 	\$13,119,472 (20.25%)
<ul style="list-style-type: none"> • Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime. 	\$12,353,196 (19.34%)
Fourteen (14) Design DBE subcontractors have been identified to-date.	
<ul style="list-style-type: none"> • DBE Goal – Construction A numerically expressed percentage of funds apportioned to Construction Contracts and is calculated based upon the relative availability of DBE firms as compared to all firms in the relevant. 	17.00%
<ul style="list-style-type: none"> • Current DBE Commitment – Construction Contract commitment divided by current contract value for Construction. 	\$266,155,899 (17.00%)
<ul style="list-style-type: none"> • Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime. 	\$103,974,062 (15.87%)
One hundred-ten (110) Construction DBE subcontractors have been identified to-date.	

Westside Purple Line Extension Section 1 Project Master Program Schedule/C1045 Baseline Update

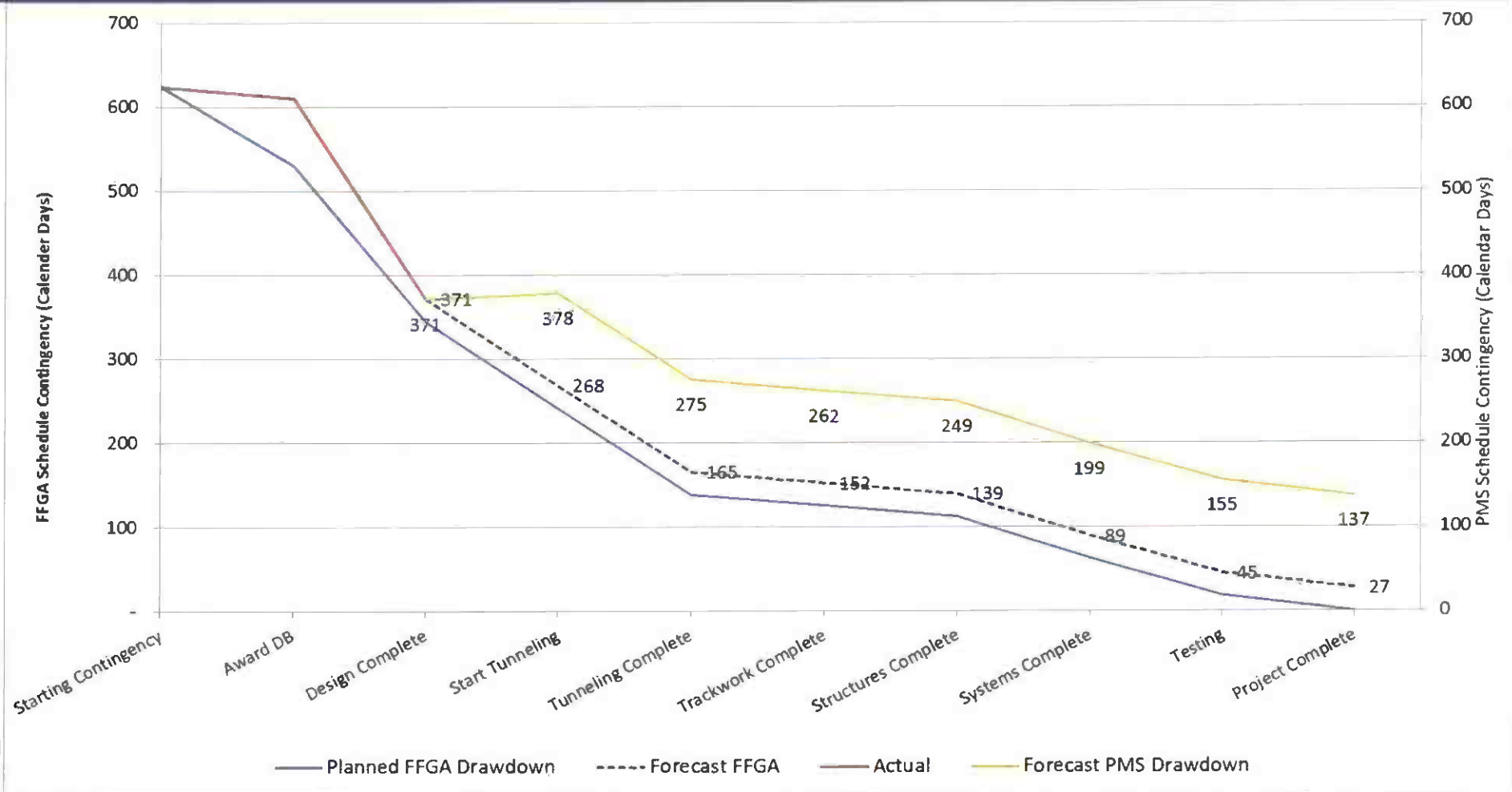


 Remaining Work
 Milestone

1 of 1
 Westside Purple Line Section 1 Level 1 Summary Schedule
 Los Angeles County Metropolitan Transportation Authority

Data Date : 01-Oct-18
 Current Date : 11-Oct-18

Westside Purple Line Extension Section 1 Project Project Schedule Contingency Drawdown



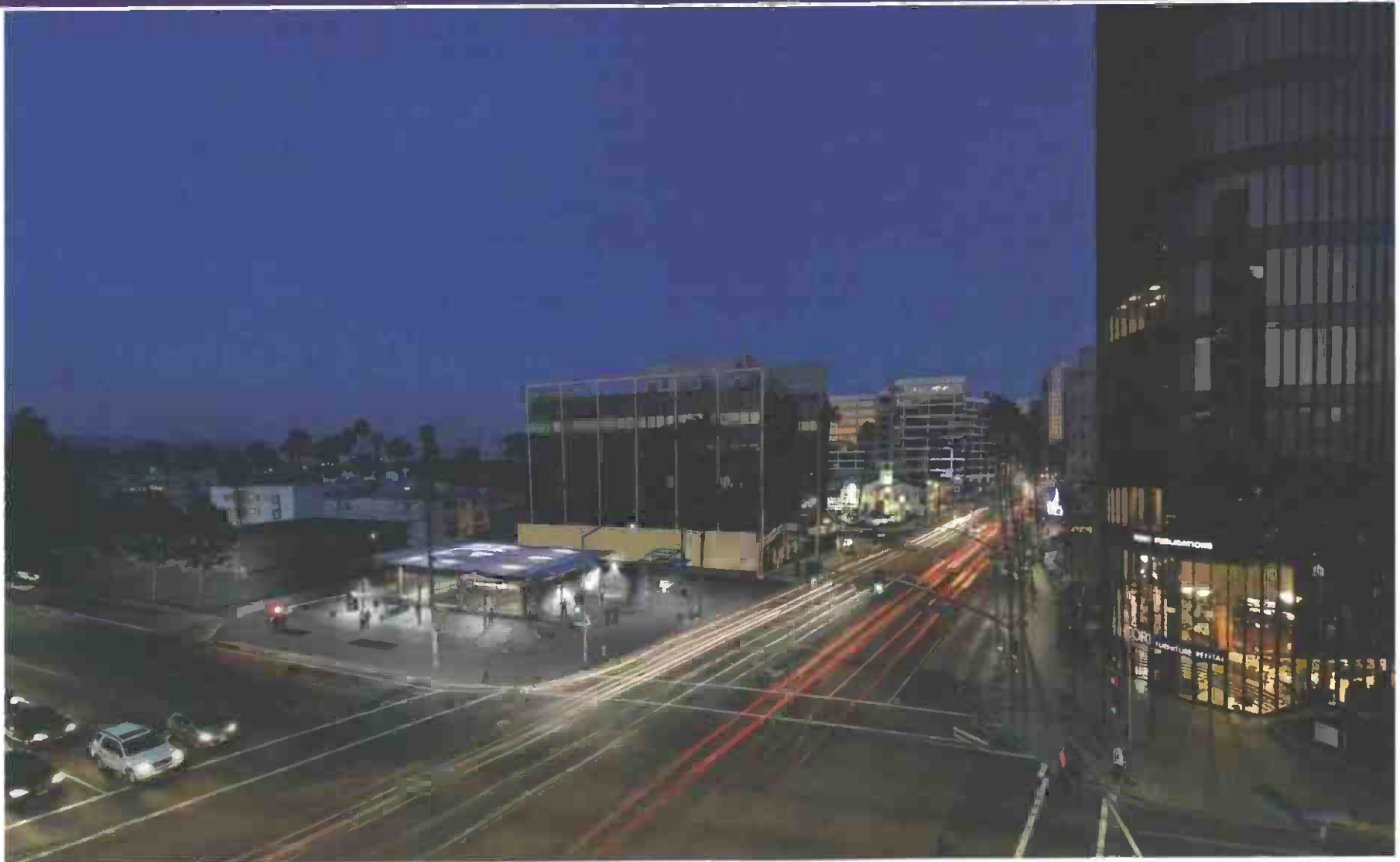
Project Schedule Contingency Drawdown Analysis

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

Westside Purple Line Extension Section 1 Project Top Risks & Mitigations

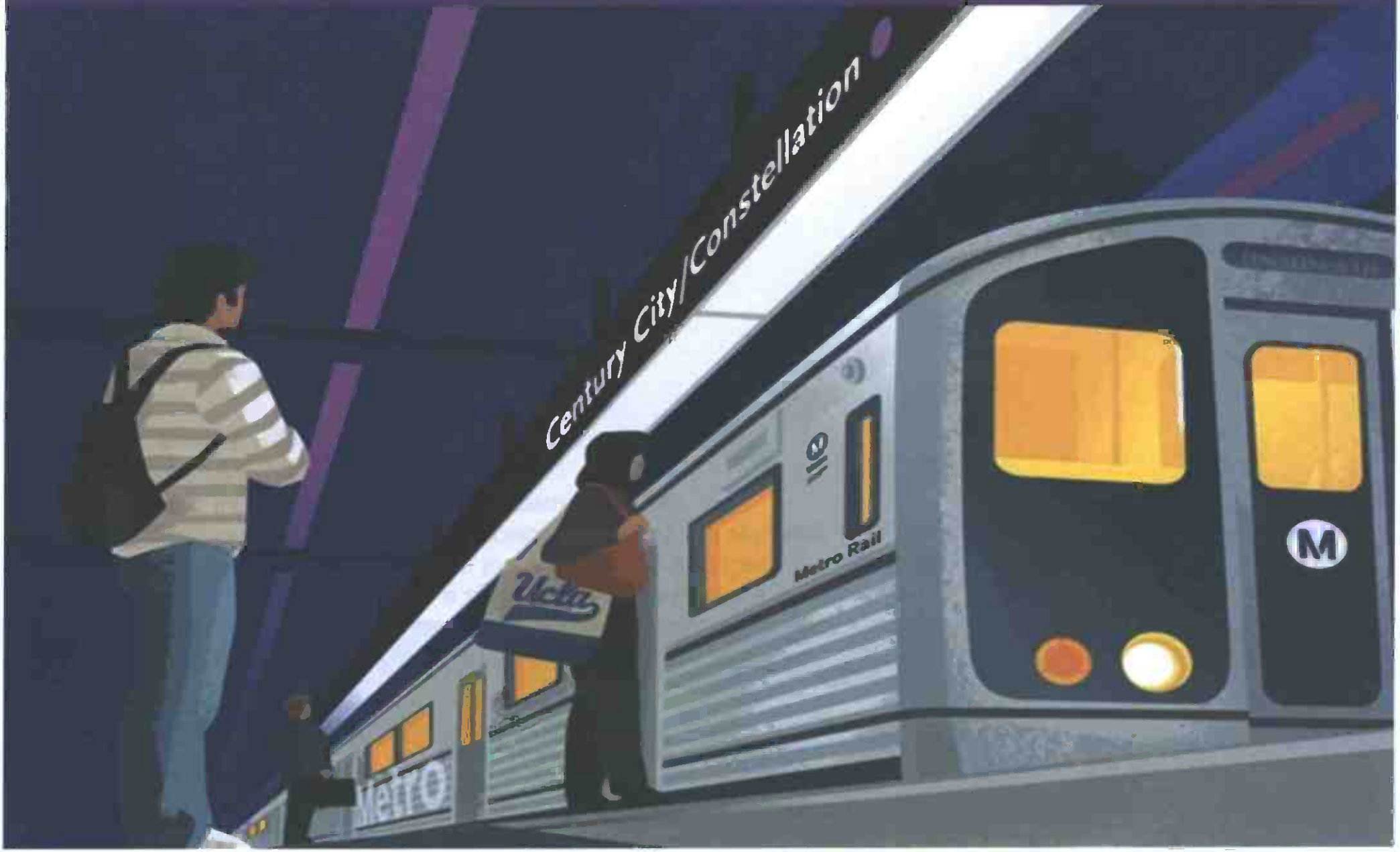
Risk ID	Risk Description	Risk Score	Action Items
633.0	Cost of ROW acquisition exceeds the FFGA SCC Line Item.	15	<ol style="list-style-type: none"> 1. Metro's Life of Project Budget includes contingency that covers the increase. The Risk Score will remain as "high" until the \$3.15 billion Life of Project 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. Reconciliation process is in progress. Targeting the end of year (2018) to complete reconciliation.
676 (New)	Subcontractor ability to get the required resources to perform work.	15	<ol style="list-style-type: none"> 1. Actively manage schedule and resource needs.
674.0	Station subgrade at Fairfax.	13	<ol style="list-style-type: none"> 1. Metro and DB Contractor working on mutual agreement for limited liability text.
677 (New)	Resource (Labor) shortage (Direct and Indirect).	13	<ol style="list-style-type: none"> 1. Actively manage schedule and resource needs.
668.1	Gas may travel into adjacent properties or utilities and result in incident.	9	<ol style="list-style-type: none"> 1. Metro has strict safety requirements in place, which are part of the safety requirements for contractors. Metro will further supplement existing safety requirements based on Geotechnical/Environmental investigations. 2. Re-assemble taskforce. The taskforce is currently meeting on a periodic basis.

Westside Purple Line Extension Section 1 Project Questions



C1045 Design/Build Contract Computer-Generated Rendering of Wilshire/La Cienega Station 18

**Westside Purple Line Extension Section 2 Project
FTA Quarterly Review
December 13, 2018**



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: August 29, 2025
- Design/Builder: Tutor Perini/O&G, a Joint Venture (TPOG)
- Design Progress: 82%
- Construction Progress: 12%
- Daily Project Transit Trips: 36,121
- Daily New Transit Trips: 5,350
- Current Contingency Forecast (SCC 10-80): 16%
- Current Contingency Forecast of Cost-to-Go (SCC 10-80): 23%
- Federal Funds: \$1.36 Billion
- Local Funds: \$1.14 Billion



Westside Purple Line Extension Section 2 Project

Key Project Updates

- The current job creation estimates as extrapolated from the Los Angeles Economic Development Corporation (LAEDC) analysis of job impacts is as follows:
 - September 2018: 155 estimated jobs
 - First Quarter of FY 2019: 408 estimated jobs
 - To date: 5,198 estimated jobs
- The City of Beverly Hills (COBH) City Council approved the Memorandum of Agreement (MOA) for the C1120 Contract on August 21, 2018, but made execution of the agreement contingent on reaching a settlement agreement related to the NEPA lawsuit.

Westside Purple Line Extension Section 2 Project Contract C1120 Design Update

- TPOG is continuing with the required contractual submittals and has recently submitted the following:
 - **Design Package 1**
 - Volume 1A – Temporary Street and Utility Design at Launch Box, IFC
 - Volume 1B – Santa Monica Bus Layover, IFC
 - Volume 1E – Driveways along CPE, 100%
 - **Design Package 3**
 - Volume 1A – Standard Tunnel Liner, IFC
 - Volume 1E –Tunnels and Cross Passages, 85%
 - **Other**
 - Geotechnical instrumentation monitoring, 100%
 - Launch Box SOE, IFC
 - TBM Jacking Frame, 100%

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

- SCG/AT&T (combined) – Utility relocations began on February 12, 2018. Completion for both utilities including cable pulling and splicing was completed on October 17, 2018.
- Geotechnical fault line investigation borings started in late May 2017, and 10 borings have been completed. The 10 remaining contractually required seismic fault line borings started on October 29, 2018.



K-Rail Installation in Beverly Hills



SCG Welding Pipe in Beverly Hills

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

- AT&T is anticipated to complete civil work by November 2018 and continue cable pulling and splicing until November 2019.
- LADWP Power started cable pulling and splicing in August 2018 and will continue until November 2019.
- The nine-month street closure for Constellation Blvd. began on September 21, 2018. A 15-month street closure will be proposed at a future Board of Public Works meeting after FTA approval.
- Site preparation of staging areas is ongoing.
- Removal of oil lines at the Launch Box completed in September 2018.
- Delivery of tunnel boring machines (TBMs) to the staging area started in September 2018.



DWP Power Conduit Work in Century City



TBM Delivery in Century City

Westside Purple Line Extension Section 2 Project Project Cost Status

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	328,836	306,924	24,204	328,836	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	517,378	443,071	410,368	8,813	443,071	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	-	-	-	-	-	-
40	SITWORK & SPECIAL CONDITIONS	406,955	560,625	531,047	251,015	560,625	-
50	SYSTEMS	96,734	81,907	68,537	4,922	81,907	-
	CONSTRUCTION SUBTOTAL (10-50)	1,406,389	1,414,439	1,316,875	288,954	1,414,439	-
60	ROW, LAND, EXISTING IMPROVEMENTS	312,422	419,396	223,081	146,097	419,396	-
70	VEHICLES	85,351	42,000	-	-	42,000	-
80	PROFESSIONAL SERVICES	383,941	374,574	197,119	146,058	374,574	-
	SUBTOTAL (10-80)	2,188,104	2,250,409	1,737,076	581,109	2,250,409	-
90	UNALLOCATED CONTINGENCY	222,441	160,136	-	-	160,136	-
100	FINANCE CHARGES	88,695	88,695	-	-	88,695	-
	TOTAL (10-100)	2,499,240	2,499,240	1,737,076	581,109	2,499,240	-

NOTE: TOTAL FFGA INCURRED COST TO DATE \$594,744

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 Costs

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	328,836	306,924	24,204	328,836	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	517,378	443,071	410,368	8,813	443,071	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-	-
40	SITWORK & SPECIAL CONDITIONS	406,955	560,625	531,047	251,015	560,625	-
50	SYSTEMS	96,734	81,907	68,537	4,922	81,907	-
	CONSTRUCTION SUBTOTAL (10-50)	1,406,389	1,414,439	1,316,875	288,954	1,414,439	-
60	ROW, LAND, EXISTING IMPROVEMENTS	312,422	419,396	223,081	146,097	419,396	-
70	VEHICLES	85,351	42,000	-	-	42,000	-
80	PROFESSIONAL SERVICES	383,941	374,574	197,119	146,058	374,574	-
	SUBTOTAL (10-80)	2,188,104	2,250,409	1,737,076	581,109	2,250,409	-
90	UNALLOCATED CONTINGENCY	222,441	160,136	-	-	160,136	-
100	FINANCE CHARGES	88,695	88,695	-	-	88,695	-
	TOTAL PROJECT (10-100)	2,499,240	2,499,240	1,737,076	581,109	2,499,240	-

NOTE: TOTAL FFGA INCURRED COST TO DATE \$594,744

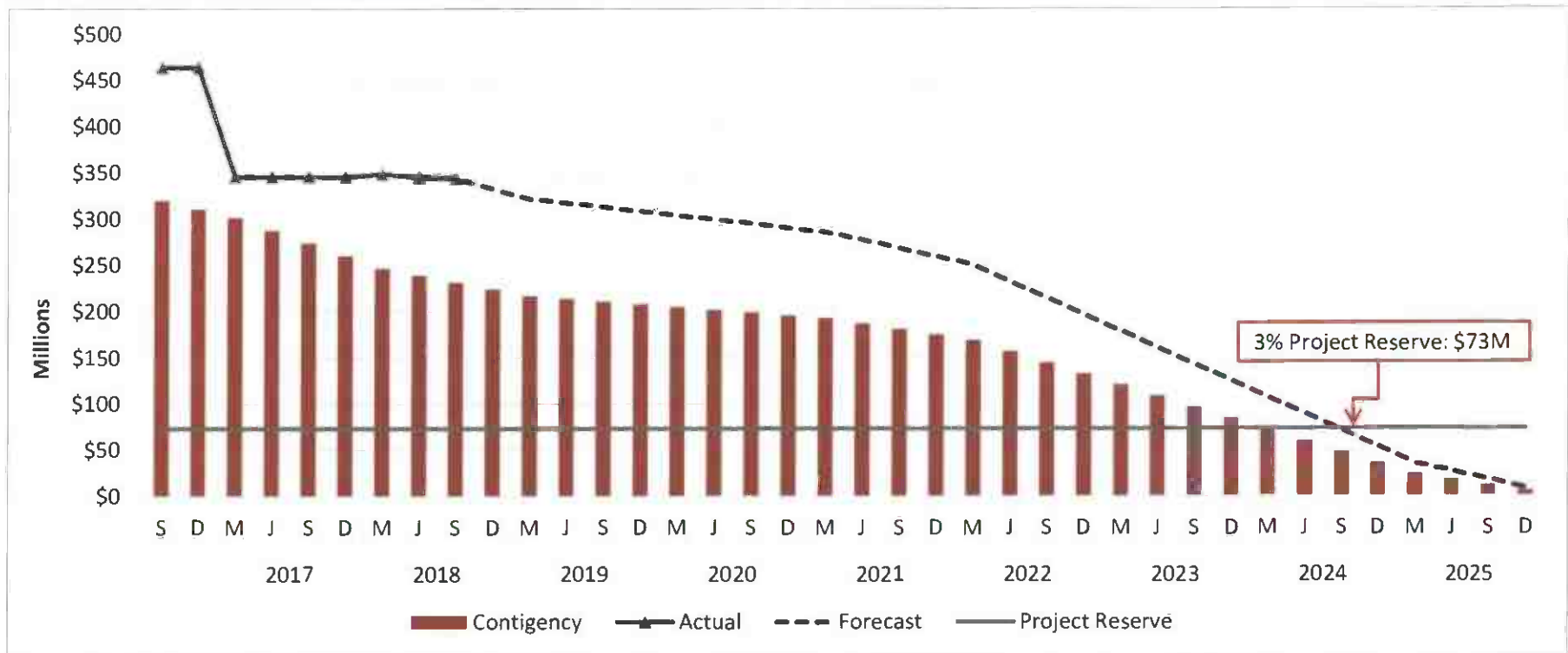
SCC CODE	DESCRIPTION	ORIGINAL NON FFGA BUDGET	CURRENT NON FFGA BUDGET	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	CURRENT NON FFGA BUDGET/ FORECAST VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	-	-	-	-	-	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	-	-	-	-	-	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-	-
40	SITWORK & SPECIAL CONDITIONS	16,175	16,175	8,065	4,715	16,175	-
50	SYSTEMS	-	-	-	-	-	-
	CONSTRUCTION SUBTOTAL (10-50)	16,175	16,175	8,065	4,715	16,175	-
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	97	1,400	-
	SUBTOTAL (10-80)	24,575	24,575	15,729	11,804	24,575	-
90	UNALLOCATED CONTINGENCY	1,500	1,500	-	-	1,500	-
100	FINANCE CHARGES	-	-	-	-	-	-
	TOTAL NON-FFGA (10-100)	26,075	26,075	15,729	11,804	26,075	-
	ENVIRONMENTAL/PLANNING	4,349	4,349	3,770	2,969	4,349	-
	TOTAL NON-FFGA (INCL. ENV./PLANNING)	30,424	30,424	19,500	14,773	30,424	-

NOTE: TOTAL NON-FFGA INCURRED COST TO DATE \$14,773

TOTAL PROJECT	2,529,664	2,529,664	1,756,576	595,882	2,529,664	-
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NOTE: TOTAL INCURRED COST TO DATE \$699,517

Westside Purple Line Extension Section 2 Project Project Cost Contingency Drawdown



PROJECT COST CONTINGENCY

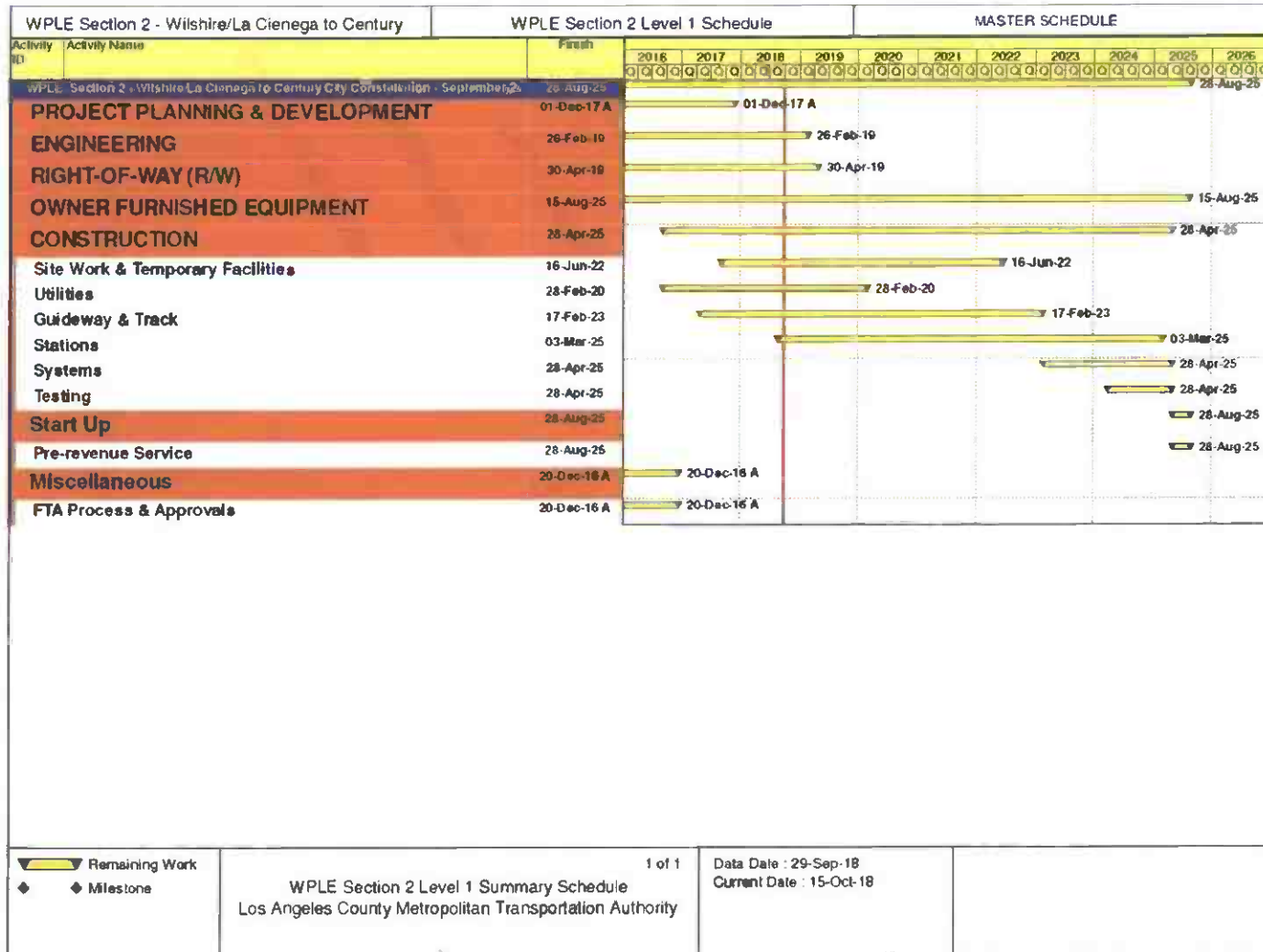
DOLLARS IN THOUSANDS

	Original Contingency (Budget)	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	177,176	(15,540)	-	(15,540)	161,636
Allocated Contingency	168,534	14,281	(517)	13,764	182,298
Total Contingency	345,710	(1,259)	(517)	(1,776)	343,934

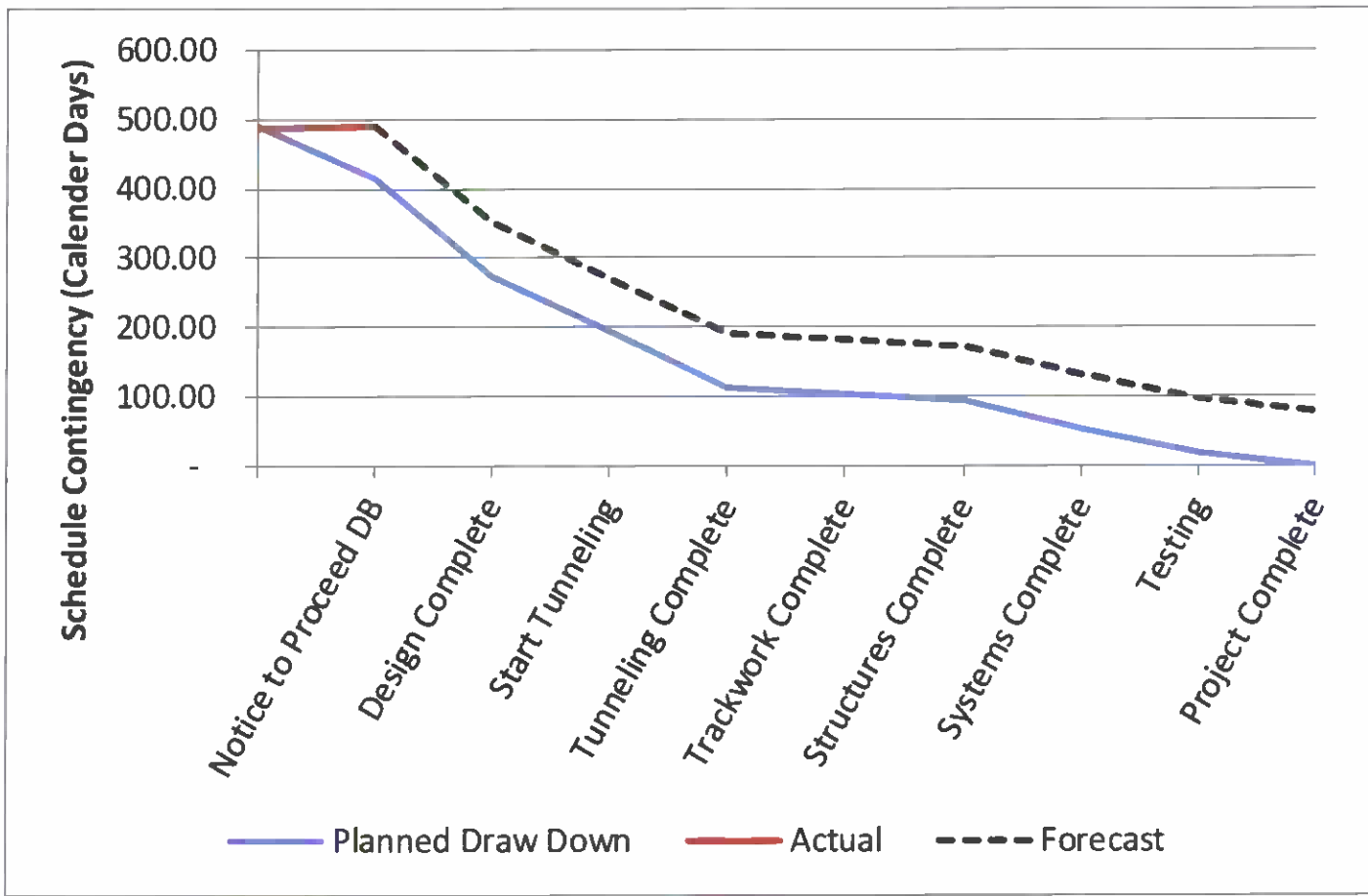
Westside Purple Line Extension Section 2 Project Race-Conscious Disadvantaged Business Enterprise (DBE) Status

<ul style="list-style-type: none"> <p>RC-DBE Goal – Design</p> <p>A numerically expressed percentage of funds apportioned to Design Contracts and is calculated based upon the relative availability of RC-DBE firms as compared to all firms in the relevant geographic market area.</p> 	25.00%
<ul style="list-style-type: none"> <p>Current RC-DBE Commitment – Design</p> <p>Total RC-DBE Committed Dollars divided by Total Contract Value for Design or Construction.</p> 	\$14,731,914 (25.31%)
<ul style="list-style-type: none"> <p>Current RC-DBE Participation</p> <p>Total amount paid to date to RC-DBEs divided by the amount paid to date to Prime.</p> 	\$11,592,079 (19.79%)
<p>Fifteen (15) Design RC-DBE subcontractors have been identified.</p>	
<ul style="list-style-type: none"> <p>RC-DBE Goal – Construction</p> <p>A numerically expressed percentage of funds apportioned to Construction Contracts and is calculated based upon the relative availability of RC-DBE firms as compared to all firms in the relevant geographic market area.</p> 	17.00%
<ul style="list-style-type: none"> <p>Current RC-DBE Commitment – Construction</p> <p>Actual commitments as Construction work is awarded.</p> 	\$80,816,122 (6.22%)
<ul style="list-style-type: none"> <p>Current RC-DBE Participation</p> <p>Total amount paid to date to RC-DBEs divided by the amount paid to date to Prime.</p> 	\$4,566,824 (11.73%)
<p>Nine (9) Construction RC-DBE subcontractors have been identified</p>	

Westside Purple Line Extension Section 2 Project Summary Project Schedule



Westside Purple Line Extension Section 2 Project Project Schedule Contingency Drawdown



The project schedule contingency drawdown curve is based on an August 29, 2025 Forecast Revenue Service Date (RSD).

Westside Purple Line Extension Section 2 Project Top Risks & Mitigations

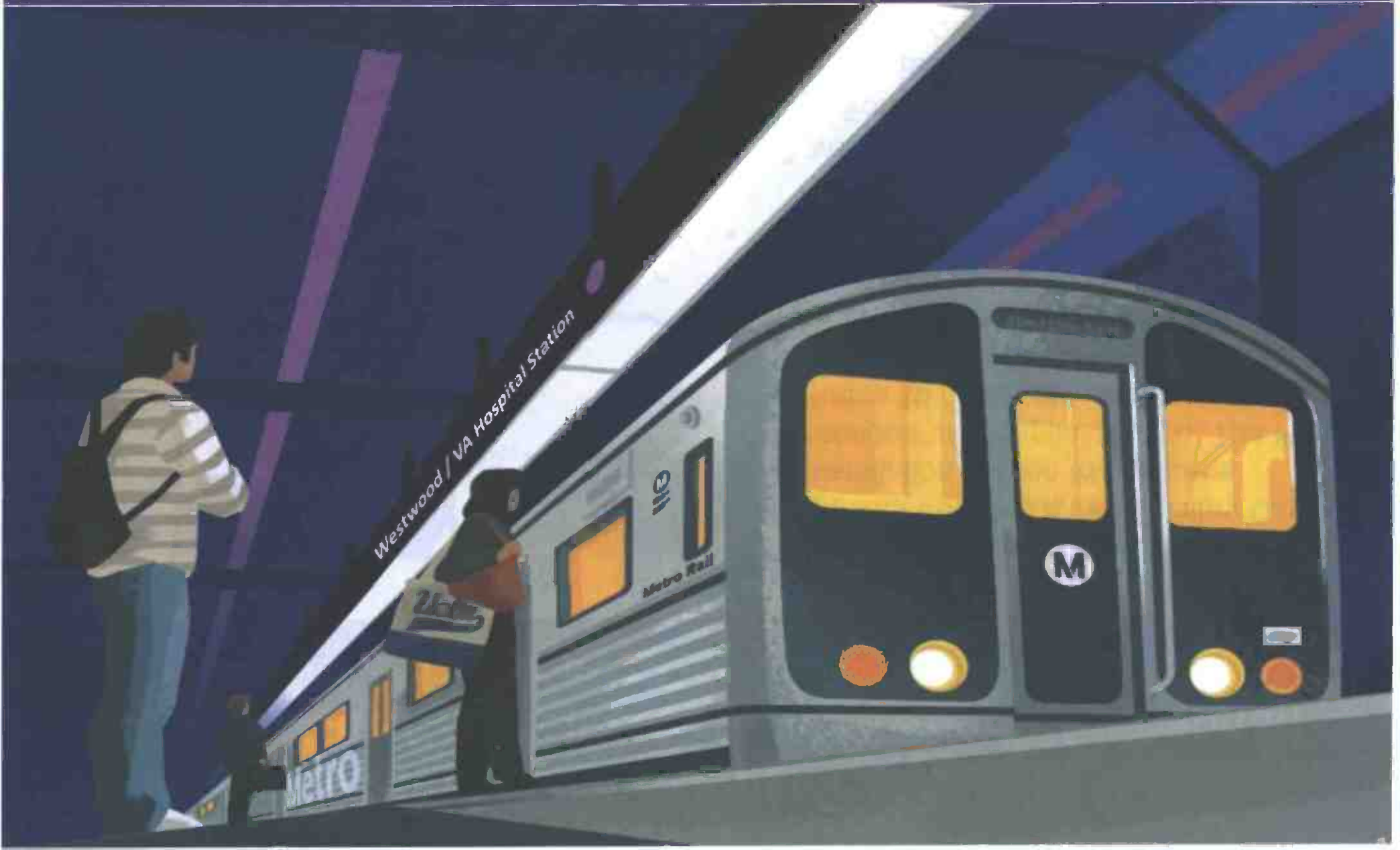
RiskID	Risk Description	Risk Score	Action Items
282.2	Turnover of property to DB contractor is delayed beyond the dates stipulated in the Contract Documents.	15.0	1. Metro to complete property acquisition before the need date.
33.2	Acquisition of property is delayed due to condemnation and/or legal battle.	14.0	1. Current project schedule accounts for additional time required for condemnation.
125.2	3rd party utility relocations delay construction,	13.5	1. Work with COLA and COBH and utility owners to expedite obtaining permits, and complete design and construction on schedule.
395.0	Public protest to the Project causes delays.	12.0	1. Continue working collaboratively with the COLA and COBH communities.
126.2	Resource constraints at private utility companies delay schedule.	9.0	1. Maintain close coordination with utility companies and sequence utility work as necessary.

Westside Purple Line Extension Section 2 Project Questions

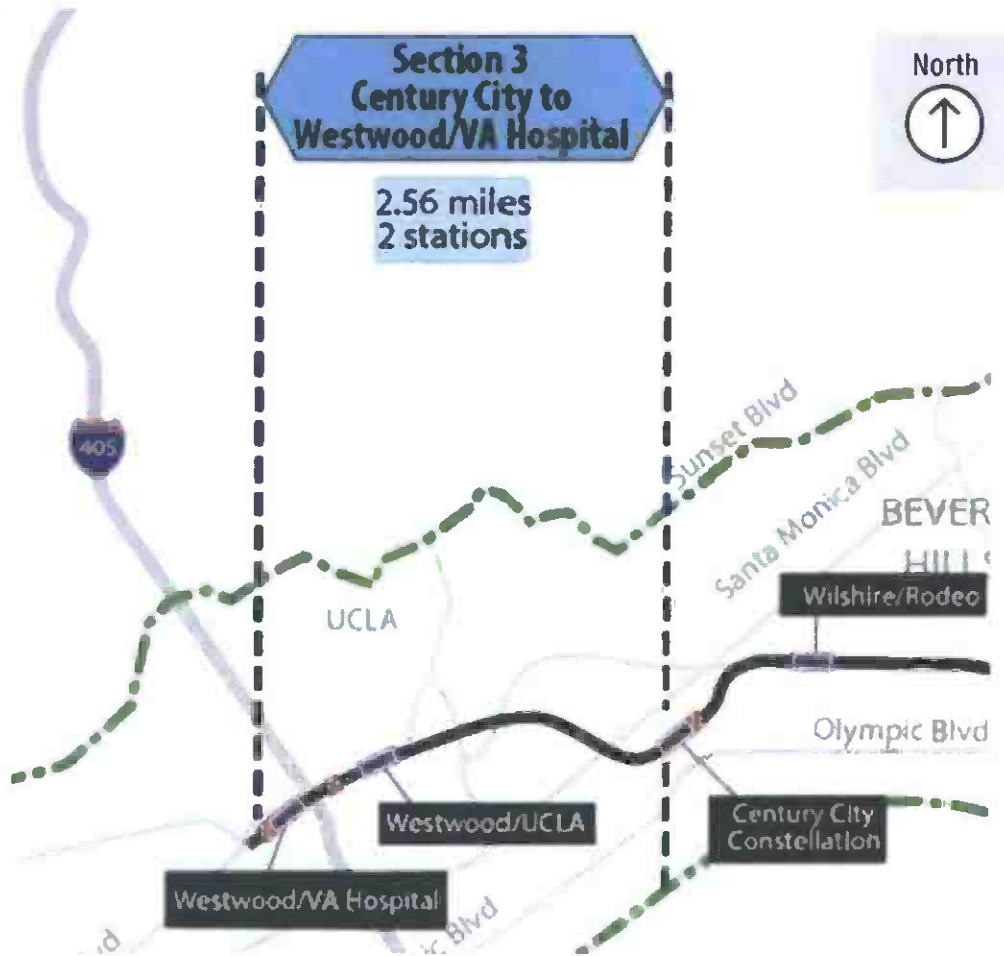


Wilshire/Rodeo Station

Westside Purple Line Extension Section 3 Project FTA Quarterly Review December 13, 2018



Westside Purple Line Extension Section 3 Project (Century City Constellation to Westwood/VA Hospital) Project Description

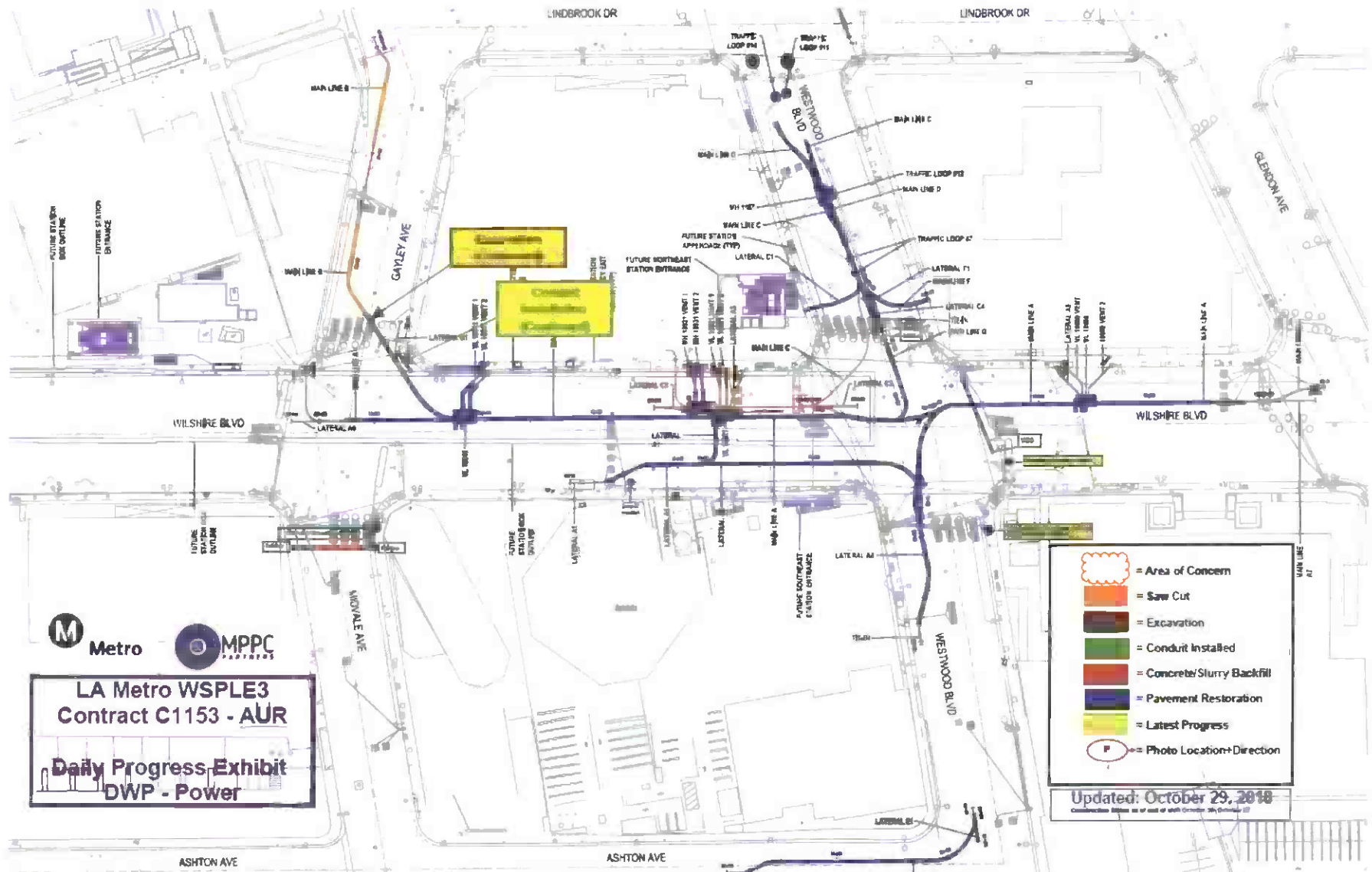


- The WPLE Section 3 Project is a 2.56 mile alignment from the future Century City Constellation Station to the future Westwood/VA Hospital Station. The Project includes 16 heavy rail vehicles, twin-bored tunnels and two (2) new subway stations:
 - Westwood/UCLA
 - Westwood/VA Hospital
- Capital Cost Estimate (Proposed FFGA):
 - \$3.663 Billion
- Revenue Service Date:
 - Forecast – 2027
- Daily Project Transit Trips: 42,903
- Daily New Transit Trips: 9,386

Westside Purple Line Extension Section 3 Project Project Update

- Metro's request to enter into the FTA New Starts Engineering Phase was approved on August 21, 2018.
- Received FTA conditional approval for Letter of No Prejudice (LONP) for the Tunnel Contract on September 19, 2018.
- The monthly meetings for the FFGA Tracking Log are being held, and Metro is nearing completion of all documents in support of an FFGA.
- Procurement
 - C1151 Tunnel Contract – Issued Notice of Intent to Award to Frontier-Kemper/Tutor Perini Joint Venture on June 13, 2018. Notice to Proceed is subject to FTA approval of 130C environmental document. Bid expiration date has been extended 60 days to December 3, 2018.
 - C1152 Stations, Trackwork and Systems Contract – Issued Request for Qualifications (RFQ)/Request for Proposals (RFP) on September 15, 2017. Received qualifications from respondents on November 20, 2017. Received proposals on August 22, 2018, which are under review.
- The current job creation as extrapolated from the Los Angeles Economic Development Corporation (LAEDC) analysis of job impacts is the following:
 - September 2018: 15 estimated jobs
 - First quarter of FY 2019: 41 estimated jobs
 - To date: 669 estimated jobs

Westside Purple Line Extension Section 3 Project Project Update – AUR Contract



Westside Purple Line Extension Section 3 Project Project Update Westwood/UCLA Station



SBCC placing backfill over Ex-Vent at Gayley and Wilshire



Conduit Placement at Gayley and Wilshire



Conduit Placement at Gayley and Wilshire

- C1153 Advanced Utility Relocation (AUR) Contract Construction is 55% complete.
- LADWP power conduit relocations are occurring along Wilshire Boulevard, Gayley Avenue and Westwood Boulevard. All five power vaults have been installed.
- Currently installing Line B on Gayley followed by Line C from Westwood to Wilshire Blvd.
- DWP power relocation is anticipated to be completed by end of November 2018.

Westside Purple Line Extension Section 3 Project Project Cost Status

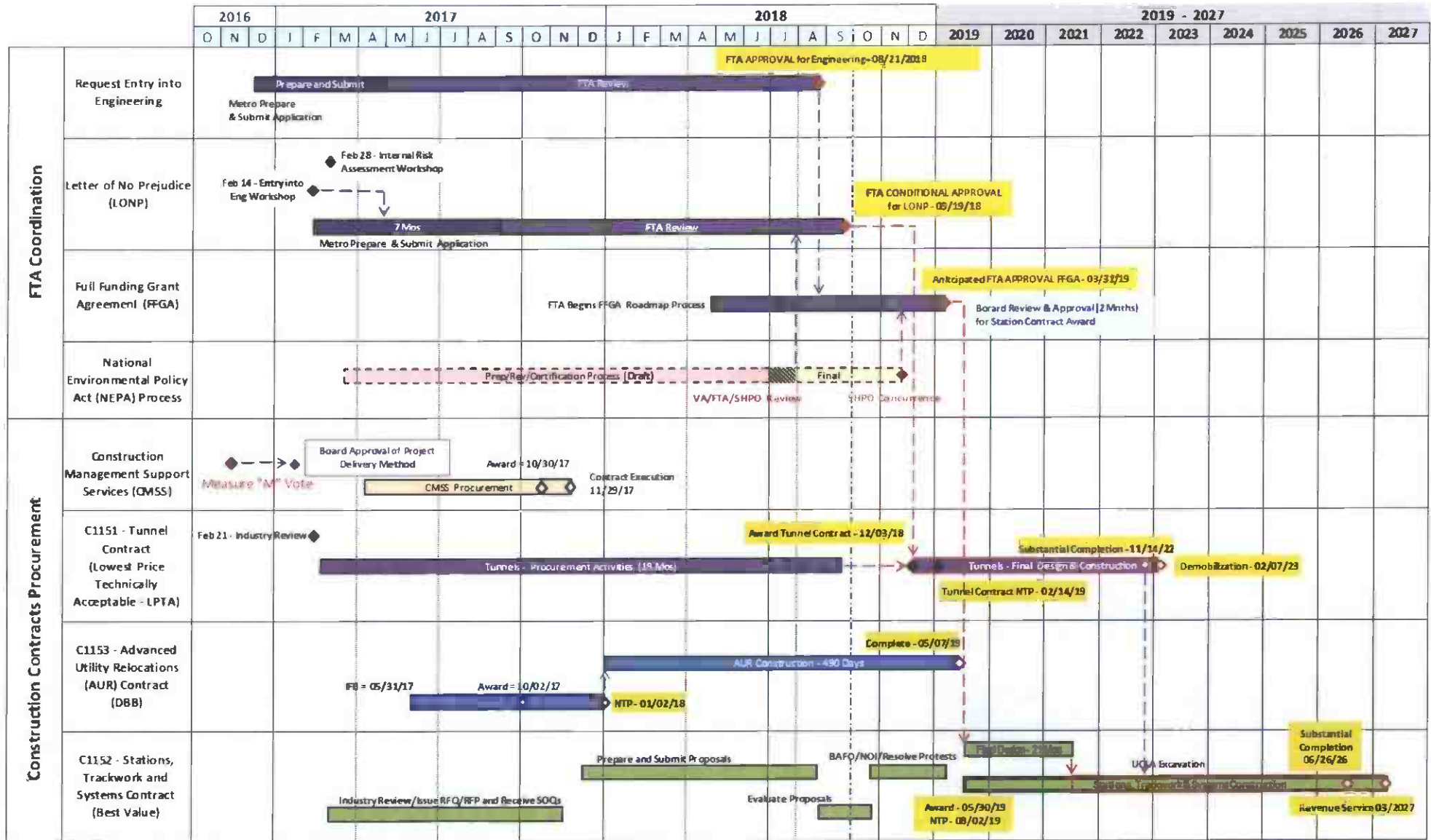
DOLLARS IN THOUSANDS

SCC CODE	DESCRIPTION	CURRENT ESTIMATE	LIFE OF PROJECT BUDGET *	PROPOSED BUDGET	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	CURRENT COST ESTIMATE / CURRENT FORECAST VARIANCE
10	GUIDEWAY & TRACK ELEMENTS	490,712	362,560	490,712	-	-	490,712	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	624,995	6,428	624,995	-	-	624,995	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	-	-	-	-	-	-	-
40	SITWORK & SPECIAL CONDITIONS	500,093	193,286	500,093	17,539	4,122	500,093	-
50	SYSTEMS	130,778	-	130,778	-	-	130,778	-
CONSTRUCTION SUBTOTAL (10-50)		1,746,579	562,274	1,746,578	17,539	4,122	1,746,578	-
60	ROW, LAND, EXISTING IMPROVEMENTS	466,874	466,874	466,874	120,876	40	466,874	-
70	VEHICLES	38,092	-	38,092	-	-	38,092	-
80	PROFESSIONAL SERVICES	498,493	215,924	498,493	86,106	51,882	498,493	-
SUBTOTAL (10-80)		2,750,038	1,245,073	2,750,038	224,521	56,044	2,750,038	-
90	UNALLOCATED CONTINGENCY	461,854	128,623	461,855	-	-	461,855	-
100	FINANCE CHARGES	451,100	-	451,100	-	-	451,100	-
TOTAL PROJECT ACTIVITIES (10-100)		3,662,992	1,373,696	3,662,992	224,521	56,044	3,662,992	-

NOTE: TOTAL INCURRED COST TO DATE IS \$57,811,091

* EXCLUDES ENVIRONMENTAL PLANNING PHASE

Westside Purple Line Extension Section 3 Project Preliminary Summary Schedule



Westside Purple Line Extension Section 3 Project Top Risks & Mitigations

Risk ID	Risk Description	Risk Score	Action Items
901	Tariffs potentially impact HRV and D/B contracts.	10.5	1. Monitor the market trend and assess the potential impact.
287.3	Delays due to obtaining lane closures and peak hour exemptions.	9.0	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.
653.3	Delay of contract turnover from tunnels to stations.	8.0	1. Review scope, ROW, procurement methodology, NEPA action, LONP to identify schedule risks.
119.3	Construction market risk - heated market conditions for rail transit, inc. significant tunnel projects in many other US regions and international.	8.0	
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	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)

Patsaouras Plaza Busway Station

FTA Quarterly Review – December 13, 2018



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	25,435,000	23,710,000	15,701,000	25,958,000	523,000
S	SPECIAL CONDITIONS	750,000	2,517,000	1,773,000	1,058,000	1,323,000	(1,194,000)
R	RIGHT-OF-WAY	-	-	-	-	-	-
P	PROFESSIONAL SERVICES	7,425,000	9,024,000	11,994,000	11,376,000	12,980,000	3,956,000
PC	PROJECT CONTINGENCY	2,817,000	2,817,000	-	-	-	(2,817,000)
TOTAL PROJECT		30,984,000	39,793,000	37,477,000	28,135,000	39,793,000	-



Expenditures through September 30, 2018



Patsaouras Plaza Busway Station

Issues With Potential to go Above \$100,000



- Construction work stoppage due to discovery of archaeological features and Native American remains
- Identification, evaluation, and treatment of the archaeological resources and Native American remains
- CN34 – Obstructions at Bent 6 & Bent 7
- Forecast for professional services



Patsaouras Plaza Busway Station

Design/Build Contract C0970 - Current Quarter Update



- Construction suspension continues with resumption tentatively scheduled for February 2019 (10 months impact)
- Work continues since June 2018 with the FTA and consulting parties for approval of the following in order to resume construction: Programmatic Agreement; Revised Cultural Resources Mitigation and Discovery Plan; and, Archaeological Identification, Evaluation and Treatment Plan
- Minor construction activities continued related to four canopy foundations and the elevator structure and platform foundation



Patsaouras Plaza Busway Station

Design/Build Contract C0970 – Top Risks and Mitigations

Risk	Impact	Mitigation
Schedule delays related to construction suspension	Budget/ Schedule	Work proactively with FTA and consulting parties to gain Programmatic Agreement approval, including engaging FTA Washington DC cultural resources staff
Contingency budget depletion due to construction suspension	Budget	Metro/Contractor Executive Management in construction resumption settlement negotiations
Cultural resources investigation, evaluation and determination extend construction suspension	Budget/ Schedule	Meet with FTA and cultural resources consultants on a weekly basis for updates. Initiate expedited review of documents and cultural resources.

Patsaouras Plaza Busway Station

Activities for Next Quarter



- Work with consulting parties to gain approval on *Cultural Resources Monitoring and Discovery Plan* revision, *Archeological Identification, Evaluation and Treatment Plan* and the *Programmatic Agreement*
- Form and pour the elevator structure
- Form and pour the emergency stairway
- Form and pour the Plaza level lift
- Start pouring Plaza level walls



Patsaouras Plaza Busway Station

Construction Photos



Pouring the foundation for the CMU building



Poured column footing at emergency stairway exit



Pouring Bent 6C for the emergency stairway exit



Cured Bents 6C-9C for the emergency stairway exit



Metro



Willowbrook/Rosa Parks Station

FTA Quarterly Review Meeting

December 13, 2018



Willowbrook/Rosa Parks Station

Major Activities During Reporting Period



- Early Start Package:
 - Removed existing asbestos cement pipe
 - Installed new Golden State Water line at Willowbrook Ave west
 - Backfilled and paved remaining trenches
- Package A:
 - Over-excavated and graded for building pads and footings
 - Laid out pad foundations
 - Trenched and installed electrical & plumbing lines



Metro

Willowbrook/Rosa Parks Station

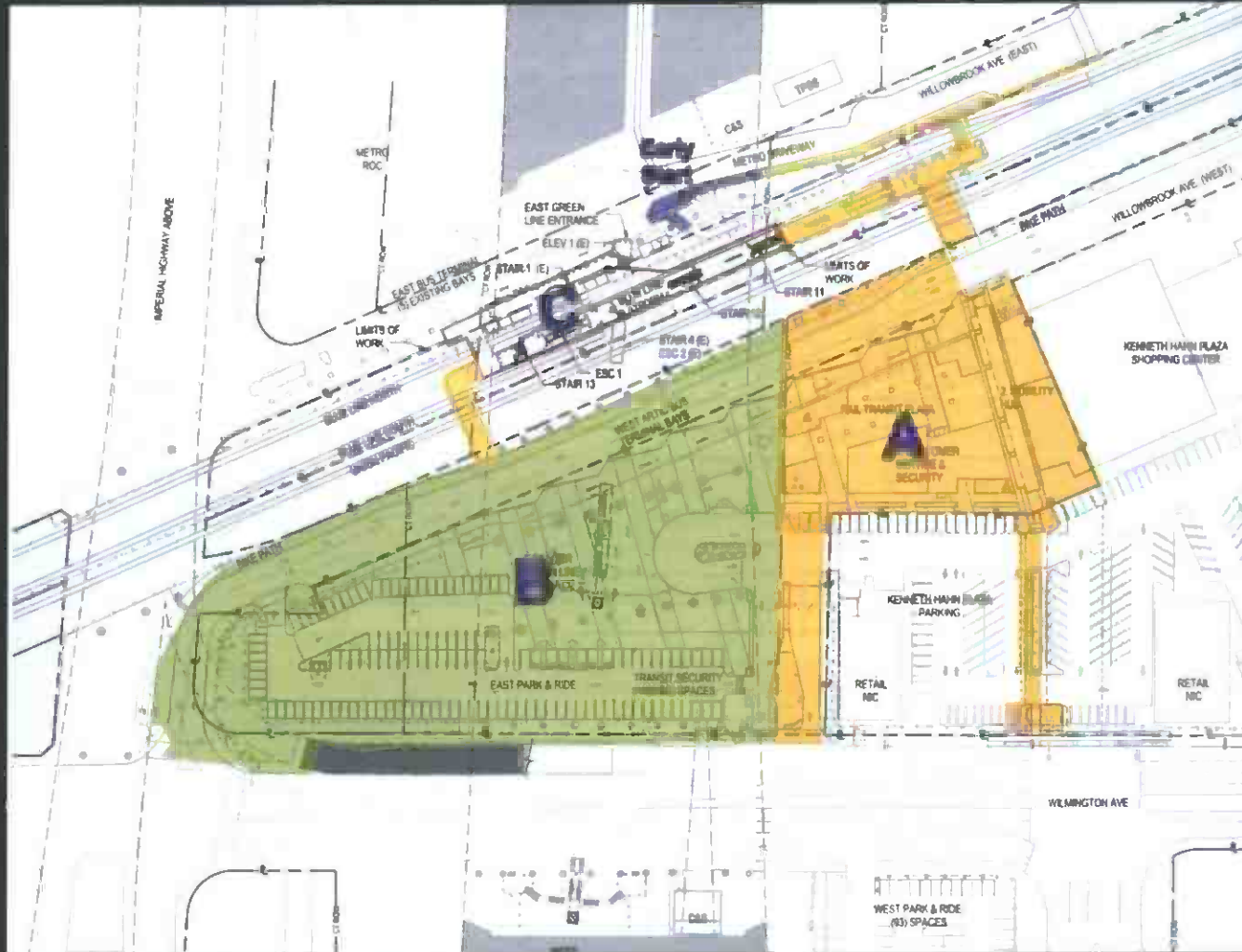
Project Schedule

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



Willowbrook/Rosa Parks Station

Project Phasing



Metro

Willowbrook/Rosa Parks Station

Project Cost Update

Activity	ORIGINAL GRANT BUDGET	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	ORIGINAL GRANT BUDGET / CURRENT FORECAST VARIANCE
Blue Line Improvements (<i>Items 1-5</i> : Platform Extensions, Canopies, Grade Crossing Improvements, new South Entrance, ROW Fencing)	\$4,747,240	\$4,747,240	\$36,532	\$ 5,331,807	(\$584,567)
Green Line Improvements (<i>Items 6-9</i> : Vertical Circulation, Lighting & Acoustical Enhancements)	\$14,417,979	\$14,417,979	\$0	\$ 3,715,104	\$10,702,875
New Construction (<i>Items 10-13</i> : Civic Plaza, Metro Customer Service Center, Sheriff's Facility, Mobility Hub)	\$16,642,913	\$16,642,913	\$0	\$ 17,603,511	(\$960,598)
Bus and Shelter Improvements (<i>Items 14-16</i> : Improvements to West and East Bus Depots)	\$3,462,904	\$3,462,904	\$0	\$ 1,345,715	\$2,117,189
Parking Improvements (<i>Items 17-19</i> : Safety enhancement and reconfiguration for both East and West Park & Ride Lots)	\$3,555,068	\$3,555,068	\$0	\$ 7,000,000	(\$3,444,932)
Circulation Improvements (<i>Items 20-23</i> : Signage, Transit Hall, Pedestrian Promenade, Kiss & Ride Lot)	\$4,844,679	\$4,844,679	\$7,785	\$ 3,121,139	\$1,723,540
Site-Wide Improvements (<i>Items 24-26</i> : General Site Work, Landscaping, Artwork)	\$3,236,024	\$3,236,024	\$1,490,928	\$ 3,906,178	(\$670,154)
Preliminary Engineering and Final Design	\$4,281,888	\$4,281,888	\$5,827,176	\$ 5,889,710	(\$1,607,822)
Construction - Agency Labor			\$488,573		
Construction - Third Party			\$393,339		
Contingency (10%)	\$5,518,878	\$5,518,878	\$0	\$ 5,518,878	\$0
Land Transaction	\$4,650,000	\$4,650,000	\$5,553,317	\$ 4,650,000	\$0
Tenant Relocation	\$1,300,000	\$1,300,000	\$162,637	\$ 1,300,000	\$0
Total Project Cost	\$66,657,573	\$66,657,573	\$13,960,288	\$ 59,382,041	\$7,275,532

1. Expenditures cumulative through 9/27/2018; TIGER expenditures YTD: \$365,330.67
2. Total Construction Progress percentage: 3.6%
3. The mezzanine is approximately 29% of the total project costs, PE Commitments and Expenditures were adjusted accordingly.



Metro

Willowbrook/Rosa Parks Station

Top Risks and Mitigations

Risk ID	Risk Description	Type RDMC	Risk Rating	Mitigation Strategies
16b	3rd party coordination: - UPRR - CPUC	M	16	Engage CPUC changes with FRA
19	Complete construction during scheduled Blue Line Closure (8 months)	C	10.5	1. Complete construction and testing for Station re-opening and public access in September 2019
21	Coordination with Operations and other concurrent Blue Line Projects ongoing.	C	10.5	1. Continue ongoing coordination with Operations during phasing plan development and construction.
11	Buy America Requirements	DM	9	1. Stantec to make sure "Buy America" requirements are in the contract documents - Complete 2. Make sure that Items specified meet Buy America requirements - Ongoing
16a	3rd party coordination: - Caltrans - County	M	7.5	1. Separate the Project into five (5) separate design packages (Design & Construction) - Complete 2. Coordinate the review of Package B - Ongoing



Metro

Willowbrook/Rosa Parks Station

Anticipated Activities for Next Reporting Period

- Early Start Package:
 - Install bollards around the SCE structures
 - Place curb on east side of Willowbrook Ave west
 - Complete Construction (Substantial Completion)
- Package A:
 - Install reinforcing steel for building foundations
 - Install storm drain, sewer, and water lines
 - Pour matt foundations for buildings
- Package B: Begin procurement preparation process



Eastside Access Improvements 1st and Central Station FTA Quarterly Meeting – December 13, 2018



Eastside Access Improvements Project Segments

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

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

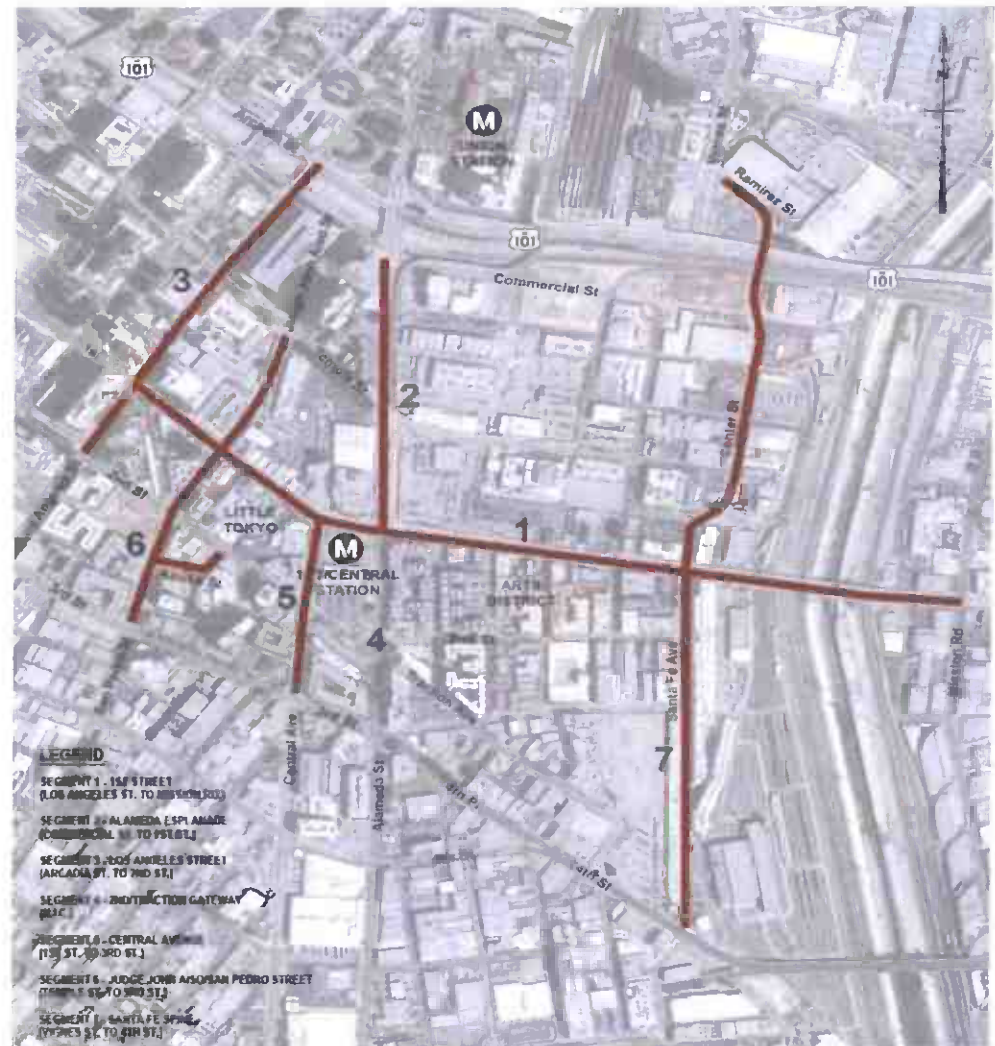
Segment 3 – Los Angeles Street
(Arcadia St. to 2nd St.)

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 preparation for submittal to COLA on Nov.12
Currently 80% complete

- Construction Status: Scheduled to start in early 2020
Currently 0% complete

Eastside Access Improvements

Preliminary Funding Plan



TIGER VI Discretionary Funds	\$11,800,000
Local (TIGER Match)	\$5,000,000
TOTAL	\$16,800,000

Eastside Access Improvements Project Schedule

MILESTONE	BASLINE DATE	CURRENT DATE	NOTES
Grant Award	21-Sep-15	21-Sep-15	
Design (100% Plan Approval)			
Start Date:	30-Sep-15	8-Mar-16	
End Date:	30-Sep-16	30-Apr-19	
Procurement:			
IFB Issue:		6-Aug-19	
Bid Opening:		3-Oct-19	
NTP:		12-Mar-20	
Owner Developed Construction Schedule		START	END
Submittals		13-Mar-20	13-Apr-20
Segment 1		14-Apr-20	2-Jun-20
Segment 2 (Note 1)		6-Jul-21	10-Jan-22
Segment 3		12-May-20	16-Oct-20
Segment 4		3-Jun-20	3-Aug-20
Segment 5		4-Aug-20	7-Dec-20
Segment 6		28-Apr-20	17-Sep-20
Segment 7		27-May-20	27-Apr-21
Punch List for Segment 2 (Note 2)		11-Jan-22	8-Feb-22
Schedule Contingency		9-Feb-22	9-May-22
Project Close-Out:		10-Feb-22	22-Dec-22

NOTES:

(1) Start of construction for Segment 2 is projected based on completion of Regional Connector construction in June 2021

(2) It is anticipated that Punch list for individual segments will be completed immediately after construction completion of each segment

Eastside Access Improvements

Design-Construction Budget

COST FORECAST

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 + Azusa + Little Tokyo	\$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		\$1,860,511
	Third Party	N/A	\$900,000		\$264,170
	Metro Project Labor and Construction Management (*)	N/A	\$3,000,000		\$0
	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	\$2,124,681

10/31/2018

Notes:

Expenditures cumulative through October 31, 2018

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 Risk Register



State	Low (L)	Med (M)	High (H)	Very High (V)	Significant (S)	Risk Score P/C/T/F
Probability (P)	< 10%	10-50%	50-70%	75-90%	> 90%	1-18
Cost Impact (C)	< \$250K	\$250K - \$1M	\$1 - 3M	\$3 - 10M	> \$10M	1-18
Time Impact (T)	< 1 Mths	1 - 3 Mths	3 - 6 Mths	6 - 12 Mths	> 12 Mths	1-18

Risk Register by SCC
Eastside Access Improvement Project
Risk Register Version: Sep 2018

Identification				Assessment					Management					Most Recent Comments	
Risk ID	Risk Description	Risk Type	FTA Milestone	Date Assessed	Cost	Time	Prob	Risk Score	Risk Owner	Mitg Strategy	Action Items	Action By	Due Date	Action Status	Latest Review Comments
SCC 10 GUIDEWAY & TRACK ELEMENTS															
A Total of 1 Risks															
ESIP-0	Segment 2 Construction delays could extend project beyond TIGER deadline	C			1	3	5	18		Mitigate	1. Explore possibility of using Metro funds for Segment 2 construction 2. PM to coordinate with RC on Project process	1. Metro 2. Metro	1. 03/01/2019 2. 04/30/2019	1. In Progress 2. In Progress	
SCC 40 SITEWORK & SPECIAL CONDITIONS															
A Total of 1 Risks															
ESIP-0	Unanticipated utility work could delay project and increase cost	C			3	1	1	3		Accept	1. Design phase investigations completed 2. Revisit design during construction	1. Metro 2. Metro	1. 04/30/2019 2. 04/30/2020	1. Complete 2. In Progress	07/02/2018 - PM has approached RC for related information
SCC 95 UNALLOCATED CONTINGENCY															
A Total of 4 Risks															
ESIP-0	Initial Grant Budget shortfall due to forecasted cost increase	R			4	5	5	25		Mitigate	1. Metro to identify additional funding sources for Board approval	1. Metro	1. 06/10/2019	1. In Progress	11/5/2018 - Upon bid opening LOP budget will be established for approval at December 2019 Board Meeting
ESIP-0	RCC Change Order could exceed allotted budget	R			2	2	4	8		Mitigate	1. EAIP to coordinate with RC prior to confirming the Mod	1. Metro	1. 05/01/2019	1. In Progress	11/5/2018 - Sole source justification to be prepared and coordinate with RC team on change order for RCC
ESIP-0	Metro procurement process for construction could delay contract award	R			2	2	2	4		Mitigate	1. Metro project team to complete as much documentation as possible	1. Metro	1. 03/01/2019	1. In Progress	11/5/2018 - Project team has started on Div.1 Documentation
ESIP-0	Delay in 100% Plan approval will impact IFB release date	D			1	2	2	4		Mitigate	1. Closer City coordination, Diligent QC of submittals by TTTA & its Subs	1. Metro	1. 04/30/2019	1. In Progress	

Total Number of Active Risks: 6

Eastside Access Improvements

Current Quarter Update

Major Activities During Last Quarter (July '18 – September'18)

Design Development

- Preparing 100% design plans
 - Started advancement of BOE design plans from 65% to 100%
 - Started advancement of BSS design plans from 65% to 100%
 - Submitted BSL 65% design plans on October 5
 - Started advancement of BSL design plans from 65% to 100%
 - Modified Alameda Esplanade plans to incorporate “Right Turn Pocket” at Alameda and Temple as required by DOT
 - Started advancement of DOT design plans from 65% to 100%

Cost and Schedule Containment Plan (CSCP)

- Submitted updated CSCP on October 23 to FTA for review

Eastside Access Improvements

Activities for Next Quarter

Major Activities Planned During October '18 to December '18

Design Development

- Perform Metro Quality Review on 100% Design Plans by November 2
- Submit 100% plans and Specifications to COLA Bureaus (except BSL) by November 12
- Over-The-Shoulder Meeting with BSS
- Comments Resolution Meeting with BSL
 - Advance BSL design plans to 100%
- Initiate design Approved for Construction (AFC) Design

Cost and Schedule Containment Plan (CSCP):

Update and finalize CSCP

P3010 Light Rail Vehicle Acquisition

FTA Quarterly Review – December 13, 2018



Reporting Month: July 2018-September 2018

Presentation Date: December 2018

Key Project Issues

“The intermittent unreliability of the vehicle on-board communication systems has not yet been resolved. The forecast date for development of a solution is March 2019. Once viable solution is determined, formal design review, qualification testing, and FAI will follow. Metro and KI are treating this a complete re-design of the Communication System. As a result, no vehicles have been awarded Final Acceptance status.

Service Bulletins have been issued to further improve the communication system’s reliability. In parallel with this effort, KI has engaged another communication system vendor to achieve 100% reliability. The Project Team will continue to follow up with KI and TOA accordingly.

Project Updates

- The delivery of Option 4 Cars is underway.
- 16 Cars shipped; 157 Cars shipped total.
- 12 Cars Conditionally Accepted; 141 Cars Conditionally Accepted total.
- 22 Cars in Revenue Service at the Foothill Extension Line; 119 Cars in Expo, Blue, Green Lines.
- Car 1184 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	\$268,427,613.00	\$268,427,613.00	\$268,427,613.00	\$244,278,592.00	\$24,149,021.00	\$0.00
SPARE PARTS	\$20,069,679.00	\$20,069,679.00	\$20,069,679.00	\$12,583,698.00	\$7,485,980.90	\$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	\$304,435,745.00	\$304,435,745.00	\$304,435,745.00	\$267,302,032.00	\$37,133,713.00	\$0.00
CONTINGENCY SUB-TOTAL	\$10,704,091.00	\$10,704,091.00	\$7,017,614.00	\$7,010,096.00	\$3,693,995.00	\$0.00
VEHICLE TOTAL	\$315,139,836.00	\$315,139,836.00	\$311,453,359.00	\$274,312,128.00	\$40,827,708.00	\$0.00
PROFESSIONAL SERVICES (ELEMENT A)	\$21,208,749.00	\$21,208,749.00	\$21,208,749.00	\$17,674,507.00	\$3,534,242.00	\$0.00
PROFESSIONAL SERVICES (ELEMENT B)	\$8,378,885.00	\$8,378,885.00	\$8,378,885.00	\$3,546,420.00	\$4,832,465.00	\$0.00
PROFESSIONAL SERVICES SUB-TOTAL	\$29,587,634.00	\$29,587,634.00	\$29,587,634.00	\$21,220,927.00	\$8,366,707.00	\$0.00

Reporting Month: July 2018 - September 2018

Presentation Date: December 2018

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	\$244,825,129.00	\$78,973,762.00	\$0.00
SPARE PARTS	\$27,332,000.00	\$27,332,000.00	\$27,332,000.00	\$0.00	\$27,332,000.00	\$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	\$256,991,912.00	\$109,329,732.00	\$0.00
CONTINGENCY SUB-TOTAL	\$18,604,375.00	\$18,604,375.00	\$13,744,658.00	\$13,701,353.00	\$4,903,022.00	\$0.00
VEHICLE TOTAL	\$384,926,019.00	\$384,926,019.00	\$380,066,302.00	\$270,693,265.00	\$114,232,754.00	\$0.00

Note: P3010 Life Of Project (LOP) TOTAL (Base Buy, Options #1 & #4 and Options #2 & #3) is \$972 Million

Reporting Month: July 2018 - September 2018

Presentation Date: December 2018

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	\$214,370,373.96	\$211,235,977.03	\$211,235,977.03	\$24,080,898.87	\$187,155,078.16	\$0.00
SPARE PARTS	\$15,821,024.40	\$15,589,698.73	\$15,589,698.73	\$0.00	\$15,589,698.73	\$0.00
SPECIAL TOOLS	\$389,434.57	\$383,740.49	\$383,740.49	\$0.00	\$383,740.49	\$0.00
DIAGNOSTIC TEST EQUIPMENT	\$1,416,049.63	\$1,395,344.99	\$1,395,344.99	\$0.00	\$1,395,344.99	\$0.00
TRAINING	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MANUALS	\$0.00	\$0.00	\$0.00	\$0.000	\$0.00	\$0.00
PERFORMANCE BOND	\$7,921,238.44	\$7,805,418.77	\$7,805,418.77	\$0.00	\$7,805,418.77	\$0.00
ON-SITE ENGINEER	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
VEHICLE SUB-TOTAL	\$239,918,121.00	\$236,410,180.00	\$236,410,180.00	\$24,080,898.87	\$212,329,281.13	\$0.00
CONTINGENCY SUB-TOTAL	\$15,869,912.00	\$15,869,912.00	\$4,461,625.00	\$4,435,577.00	\$11,434,335.00	\$0.00
VEHICLE TOTAL	\$255,788,033.00	\$252,280,092.00	\$240,871,805.00	\$28,516,475.87	\$223,763,616.13	\$0.00

Note: P3010 Life Of Project (LOP) TOTAL (Base Buy, Options #1 & #4 and Options #2 & #3) is \$972 Million

Reporting Month: July 2018 - September 2018

Presentation Date: December 2018

Budget Contingency Drawdown

PROJECT COST CONTINGENCY (through September 2018)					
UNITS IN DOLLARS					
Orders	Original Contingency (Budget)	Previous Period	Current Period	Allocated To-Date (Forecast)	Remaining Contingency (Forecast)
Base Order	\$10,704,091	\$0	\$-7,518	\$7,010,096	\$3,693,995
Options 1 and 4	\$18,604,375	\$0	\$-43,305	\$13,701,353	\$4,903,022
Options 2 and 3	\$15,869,912	\$0	\$-26,048	\$4,435,577	\$11,434,335
Total Contingency	\$45,178,378	\$0	\$-76,871	\$25,147,026	\$20,031,352

Reporting Month: July 2018 - September 2018

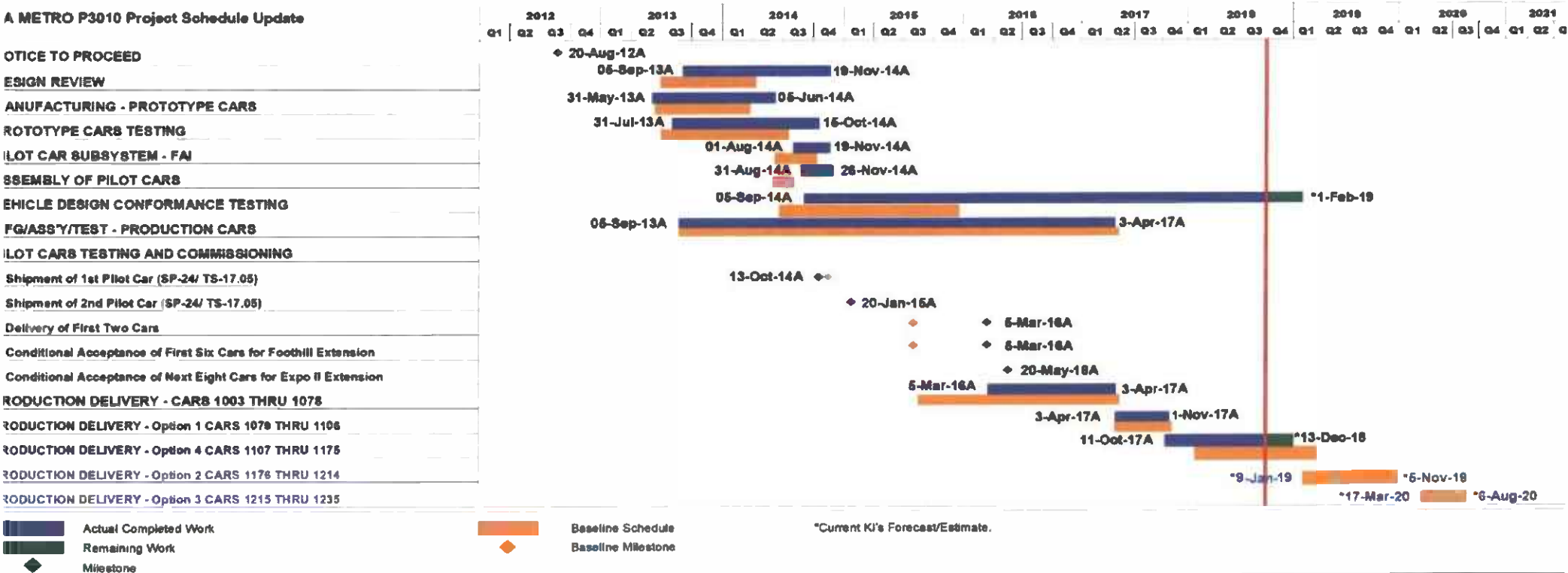
Presentation Date: December 2018

Summary Schedule

P3010 Light Rail Vehicle Acquisition Program
Monthly Project Status Report

September 2018

A METRO P3010 Project Schedule Update



Reporting Month: July 2018 - September 2018

Presentation Date: December 2018

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.	12	Metro to closely monitor KI's approach and implementation of the systems integration including the communication systems.
02	Design Conformance Testing (DCT) - DCT is performed on Metro's property prior to vehicle acceptance and could take longer than expected due to mainline test track availability.	9	<ol style="list-style-type: none"> 1. Perform early coordination with Operations and Planning on the test logistics and yard/track/Operator needs. 2. Develop contingency plans to continue performing mainline test at alternative yards. 3. Monitor and anticipate mainline test track availability.
01	Final Assembly Site – Potential workforce challenges including not being able to obtain/maintain qualified personnel to perform quality work within aggressive FA schedule.	9	<ol style="list-style-type: none"> 1. Perform early training on acquired staffs, clearly define working expectations, and allocate time for corrective actions. 2. Identify potential open items, establish/maintain quality verification process and standards, allocate staffs to mitigate potential schedule slippage due to re-works and re-tests. 3. KI to provide plans to grow and retain current staffs as well as incentives for attracting new qualifying staffs.
04	Contract Modification Process – Changes initiated by either party during design review, assembly, commissioning and warranty could potentially cause delay or claims.	8	<ol style="list-style-type: none"> 1. Anticipate, identify and define potentially essential “Needs” and “Wants” in the early stages of the project phase. 2. Engage customers and stakeholders for early discussions. 3. Obtain swift concurrence on the “Needs” based on safety, maintainability, and reliability requirements.

Questions

Heavy Rail Vehicle Acquisition Program



FTA Quarterly Meeting Review
December 13, 2018

New Heavy Rail Vehicle Program

- **PROJECT STATUS (ACTIVITIES FOR REPORTING PERIOD)**
 - Pre-Production Configuration Review (PPCR)
 - Metro will be exercising the Fire Mist Suppression System (FMSS) Alternative Technology.
 - This Design Review phase is on-going and anticipated to be completed in January 2019 based upon FMSS implementation.
 - Metro Technical Support
 - Metro and its Consultants have been providing technical support to the Contractor and its suppliers through working sessions.
 - Metro has Resident Engineers stationed in Changchun, China and Quincy, MA in order to provide the Contractor and its suppliers with direct technical support and clarification to inquiries.
 - Metro have been providing the Contractor and its suppliers with direct contact to our Consultant Subject Matter Experts (SMEs) for technical support and clarification inquiries.



New Heavy Rail Vehicle Program

- PROJECT BUDGET

DESCRIPTION	ORIGINAL PROJECT BUDGET	CURRENT PROJECT BUDGET	EXPENDITURES (ITD)	CURRENT PROJECT FORECAST (CONTRACT MODIFICATIONS)	PROJECT FORECAST
BASE ORDER 64 VEHICLES	\$178,395,869	\$178,395,869	\$26,557,951	\$0	\$178,395,869
PROFESSIONAL SERVICES	\$20,938,375	\$20,938,375	\$6,165,793	\$0	\$20,938,375
MTA ADMINISTRATION	\$11,960,055	\$11,960,055	\$2,314,674	\$0	\$11,960,055
VEHICLE SUBTOTAL	\$211,294,299	\$211,294,299	\$35,038,418	\$0	\$211,294,299
CONTINGENCY	\$21,926,767	\$21,926,767	\$0	\$7,403	\$21,919,364
TOTAL PROJECT	\$233,221,066	\$233,221,066	\$35,038,418	\$7,403	\$233,221,066

New Heavy Rail Vehicle Program

- CHANGE ORDER IN-PROCESS

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
Total		\$449,694.83
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
Total		\$442,291.84
	Variance	\$7,402.99



Metro

New Heavy Rail Vehicle Program

- **PROJECT SCOPE**

- **Base Order of 64 new HRVs:**

- 34 HRVs to support the Purple Line Extension (PLE), Section 1
 - 30 HRVs for A650 Base Buy fleet replacement.
 - The Total Project Budget is \$233 million, excluding five Options.

- **Options:**

- Option 1 (24 HRVs) and Option 2 (84 HRVs) to support fleet and service expansion
 - Option 3 (20 HRVs) to support the Purple Line Extension (PLE), Section 2
 - Option 4 (16 HRVs) to support the Purple Line Extension (PLE), Section 3
 - Option 5 (74 HRVs) for the A650 Option Buy fleet replacement

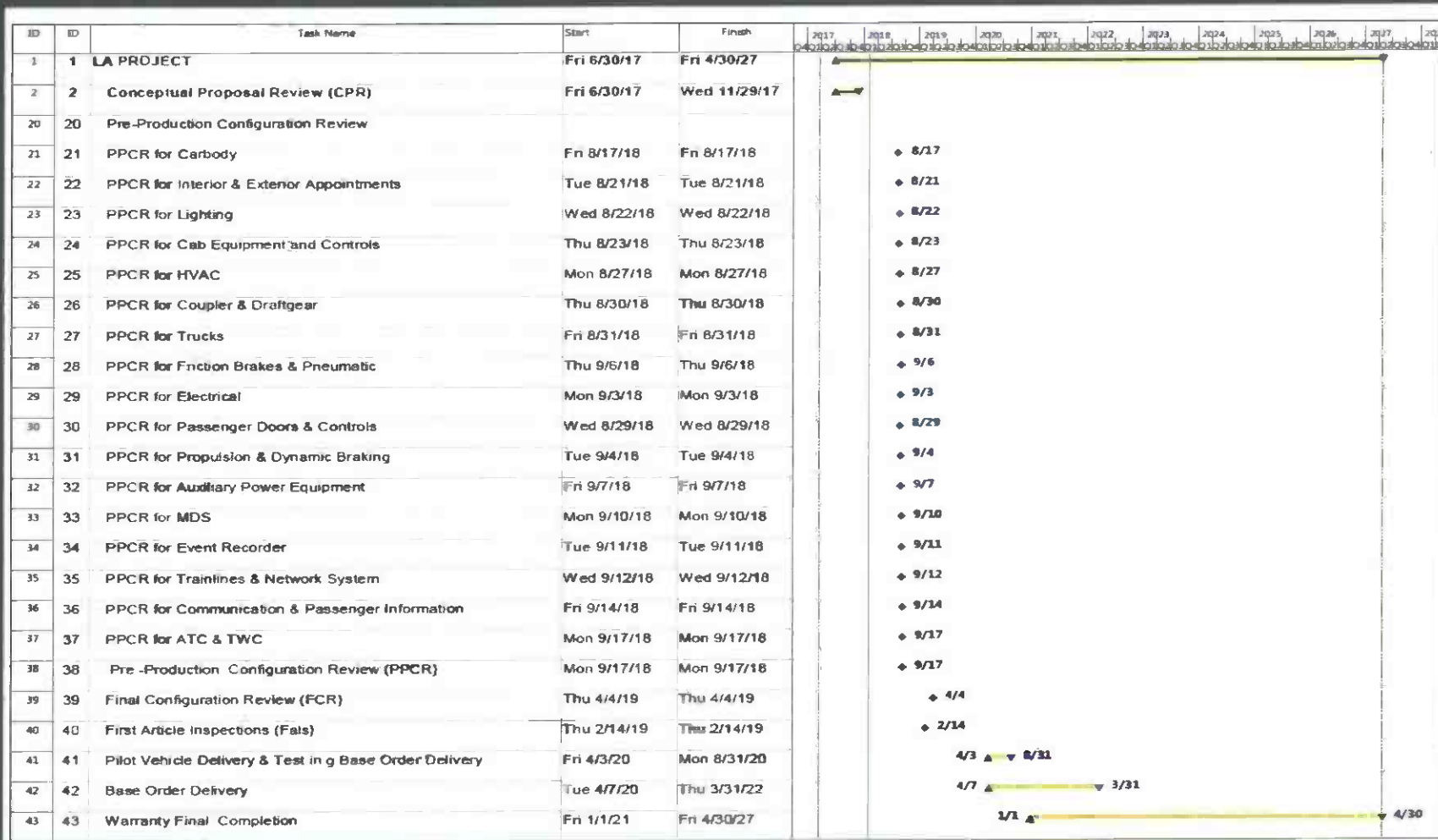
- **Metro does not intend to exercise any Options until we are confident in the Contractor being able to deliver a safe, reliable and performing vehicle.**



Metro

New Heavy Rail Vehicle Program

- MASTER PROJECT SCHEDULE (MPS) – BASE ORDER



*Note: Contractor has not submitted new schedule until FMSS Contract Modification is executed.

Metro

New Heavy Rail Vehicle Program

RISK MANAGEMENT

Risk ID	Risk Type	Risk Description	Date	Updated	Cost	Time	Prob	Risk Score	Risk Owner	Mitigation Strategy	Risk Score = $\frac{(\text{Cost} + \text{Time})}{2} \times \text{Probability}$	Cost	Time	Prob	Risk Score After Mitigation
1	Engineering	Contractor may not be able to provide necessary U.S. based resources, which may delay design, performance and car delivery.	15-Nov-16	29-Jan-18	5	3	4	15	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	3	3	10.5
2	External	U.S. Government tariffs on steel, aluminum and other products could result in a cost change order	06-Apr-18	31-Aug-18	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	1	5	15
3	Operations	Resources and track availability may be a constraint for LACMTA and delay the Contractor in commissioning Vehicles	25-Jan-16	31-Aug-18	3	4	4	12	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.	3	3	3	9
4	Production	CRRC MA Procurement may not have adequate supplies of parts and material for production of cars at Springfield.	11-May-18	31-Aug-18	2	4	4	12	Contractor	Mitigate	1. LACMTA will monitor the similar issue for the MBTA Project and apply Lessons Learned with CRRC MA. 2. LACMTA will conduct site visits to monitor progress. 3. Closely monitor Factory readiness for teh MBTA Project - weekly meetings	2	2	2	2
5	Production	Times Electric, Kingair and HZY have a very aggressive schedule for leasing, designing and permitting their new manufacturing facility in the LA Area. The facility may not be ready in time for vehicle production.	10-May-17	31-Aug-18	3	4	3	10.5	Contractor	Mitigate	1. LACMTA to assign resources to closely work with and monitor the Supplier's Local Employment Plan. 2. Should it be necessary, design verification could be first held at their Chinese facility and then official FAIs performed in LA. 3. LACMTA to audit suppliers for compliance to LEP commitment 4. Require CRRC to identify a dedicated person responsible for shepherding this process who will regularly meet with LACMTA staff and discuss progress. 5. Perform site visits and review Industrial plans NOTE: FMSS has pushed the schedule out 3 months.	2	3	2	5

New Heavy Rail Vehicle Program

- **ANTICIPATED ACTIVITIES FOR NEXT REPORTING PERIOD**
 - Continue with Pre-Production Configuration Review (PPCR)
 - Follow up on Quality Assurance audit of the Contractor and its Suppliers and close out Open Action Items
 - Conduct Working Sessions and Design Review meetings with the Contractor and its Supplier.
 - Contractor has obtained permits and construction has started for the Localization facility in the City of Industry (installing equipment, interior office spaces, and etc.).
 - Physical Foam Mock-Up has arrived in Los Angeles in October 2018 and will be readying for Metro's review by end of November 2018.

FTA Quarterly Review Action Item Report – August 29, 2018

Item No.	Status	Description	Responsible Agency	Responsible Staff	Due Date
1-2/28	Closed	Metro to provide the FTA/PMOC a revised Project Cost and Schedule Containment Plan for the Patsaouras Plaza Busway Station.	LACMTA	Timothy Lindholm/ Manuel Gurrola	4/30/18