

Los Angeles County
Metropolitan Transportation Authority

FTA Quarterly Review

Briefing Book

MAY 30, 2018



Metro

FTA QUARTERLY REVIEW MEETING AGENDA

Los Angeles County Metropolitan Transportation Authority

Wednesday, May 30, 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. Innovative Project Delivery P3 Process

PRESENTER

Edward Carranza
Phillip Washington
Drew Phillips
Charles Safer
Greg Kildare
Colin Peppard /
Yousef Salama

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. Westside Purple Line Extension Section 1 Project
- D. Westside Purple Line Extension Section 2 Project
- E. Westside Purple Line Extension Section 3 Project
- F. Regional Connector Transit Project

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

IV. FTA ACTION ITEMS

FTA / PMOC

PROPOSED SCHEDULE AND LOCATION OF NEXT MEETING

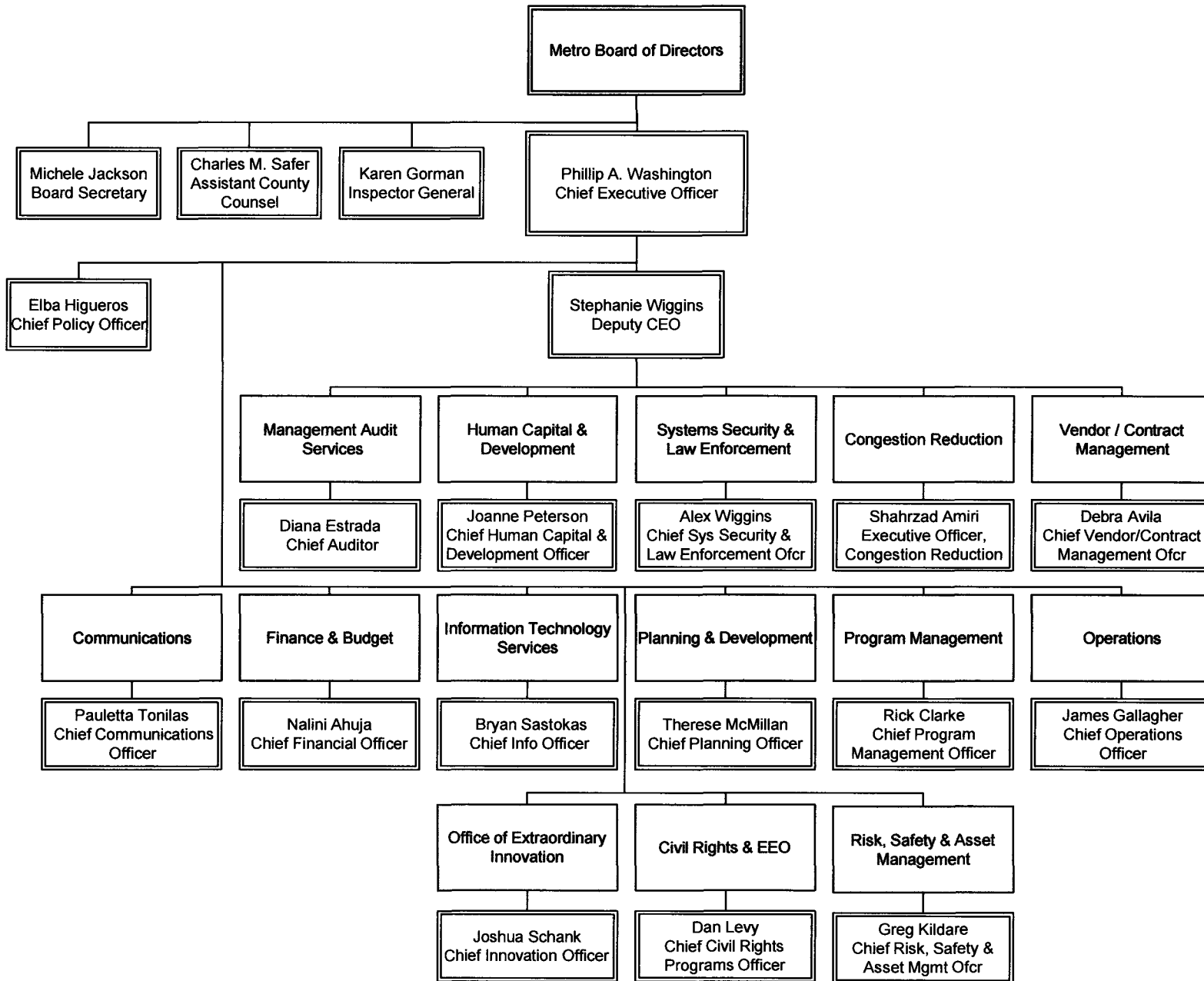
Los Angeles County Metropolitan Transportation Authority

Wednesday, August 29, 2018

William Mulholland Conference Room - 15th Floor

**METRO
ORGANIZATION CHART**

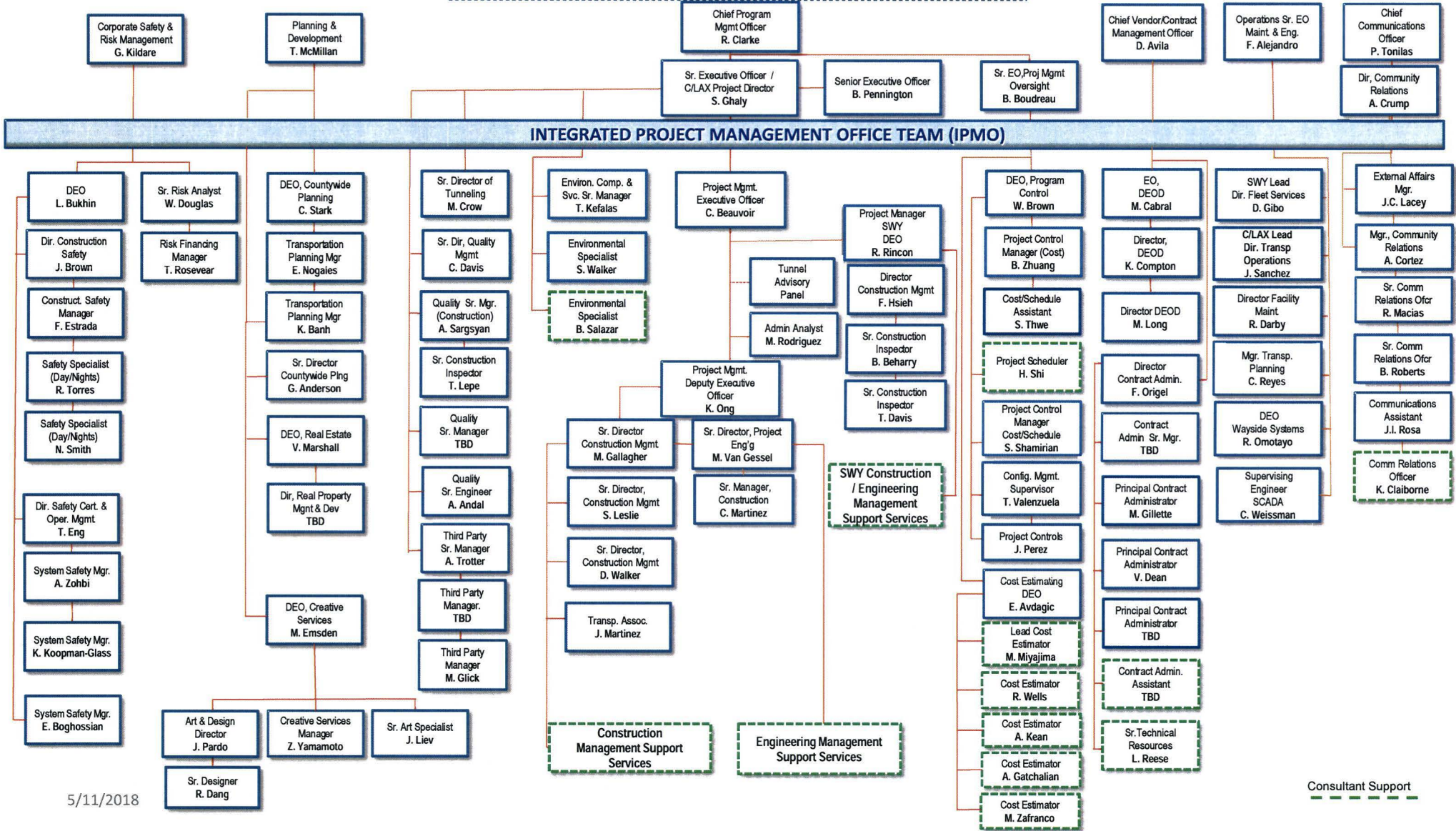
Metro Organization Chart



**TRANSIT PROJECT
ORGANIZATION CHARTS**

CRENSHAW/LAX TRANSIT PROJECT MATRIX ORGANIZATION

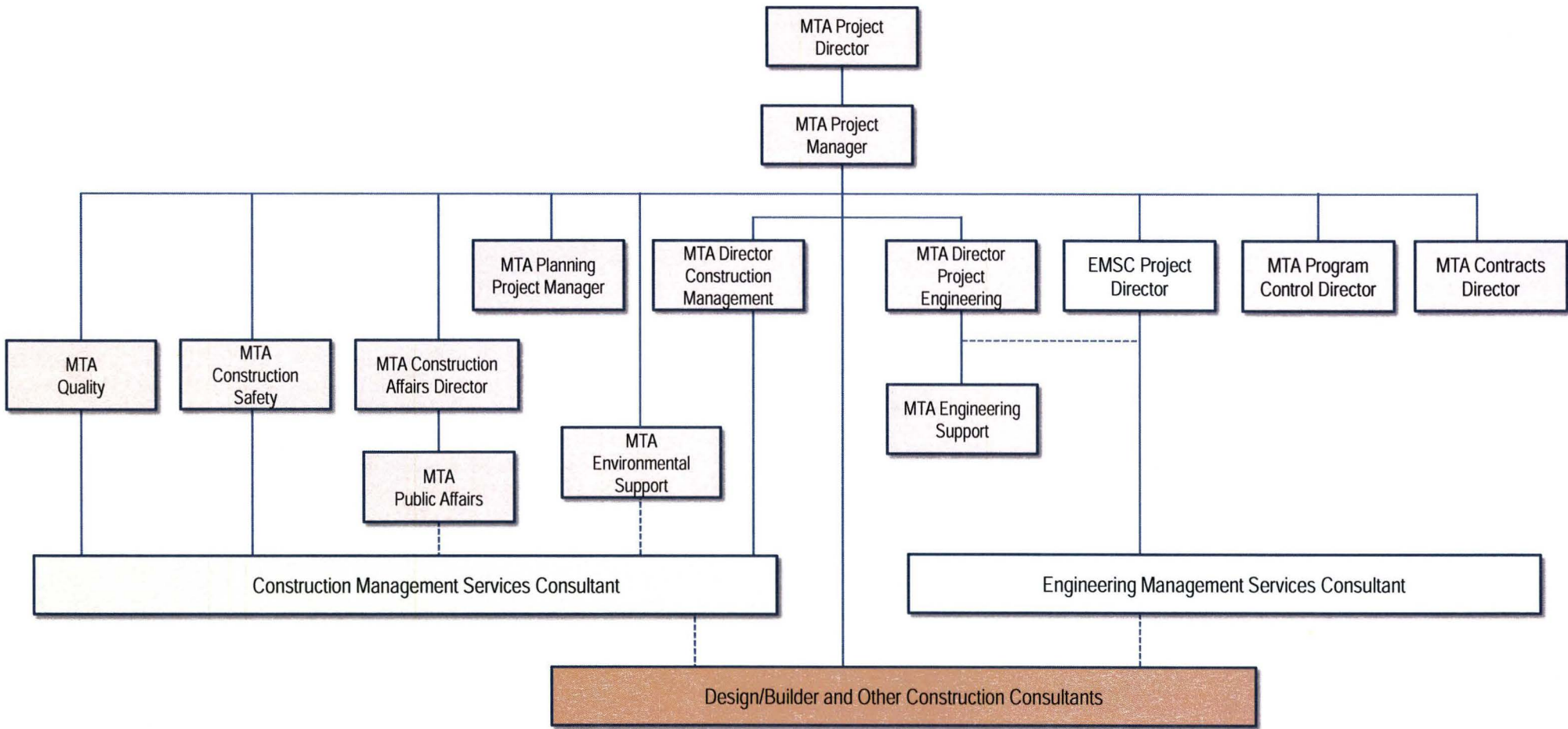
Metro Executive Management Organization and Staff



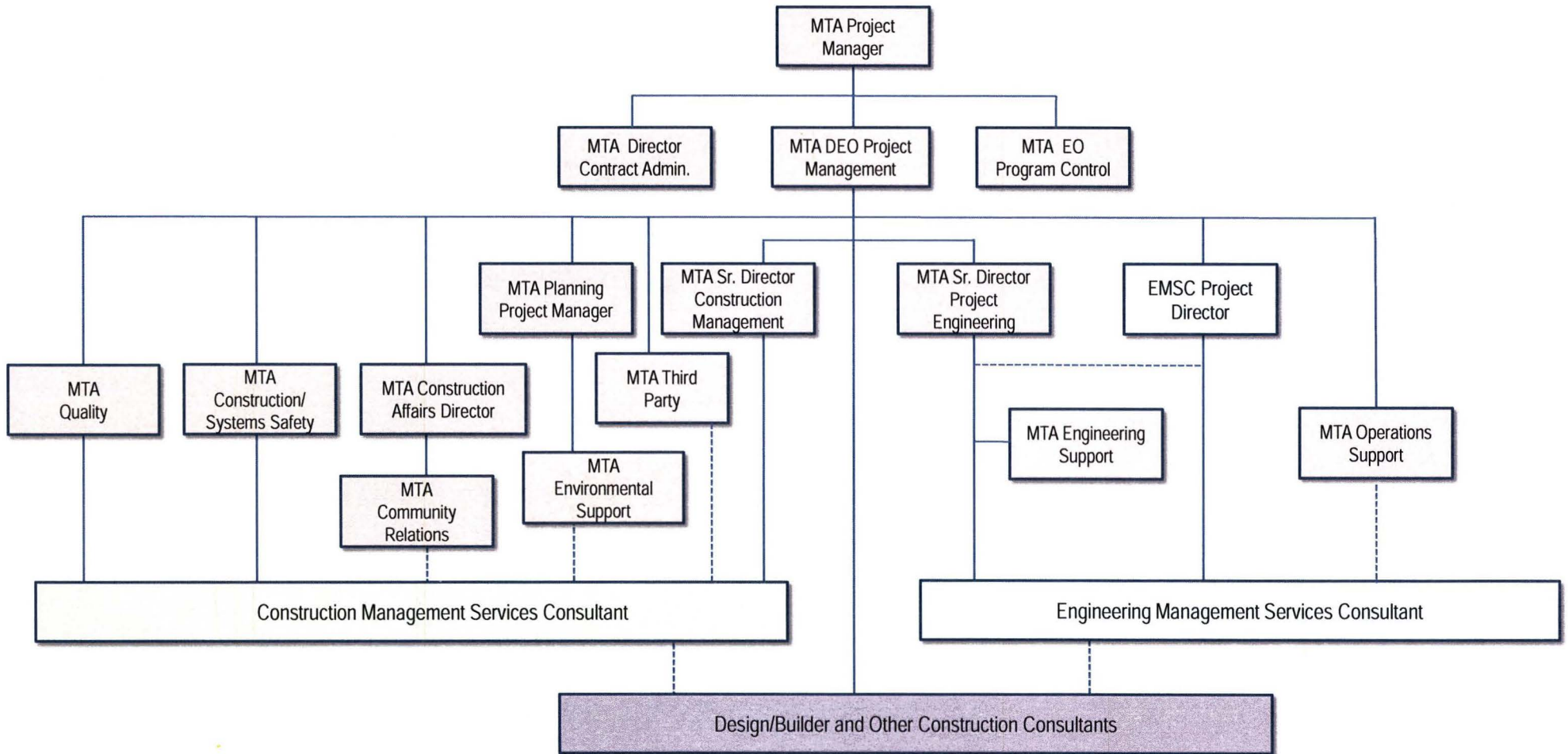
5/11/2018

Consultant Support

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

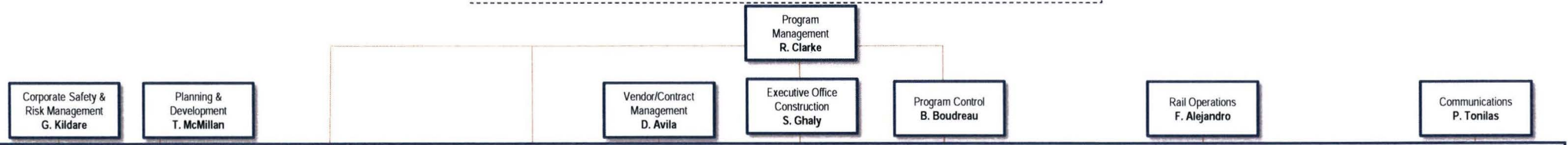


Westside Purple Line Extension Section 1 Responsibility and Reporting Matrix

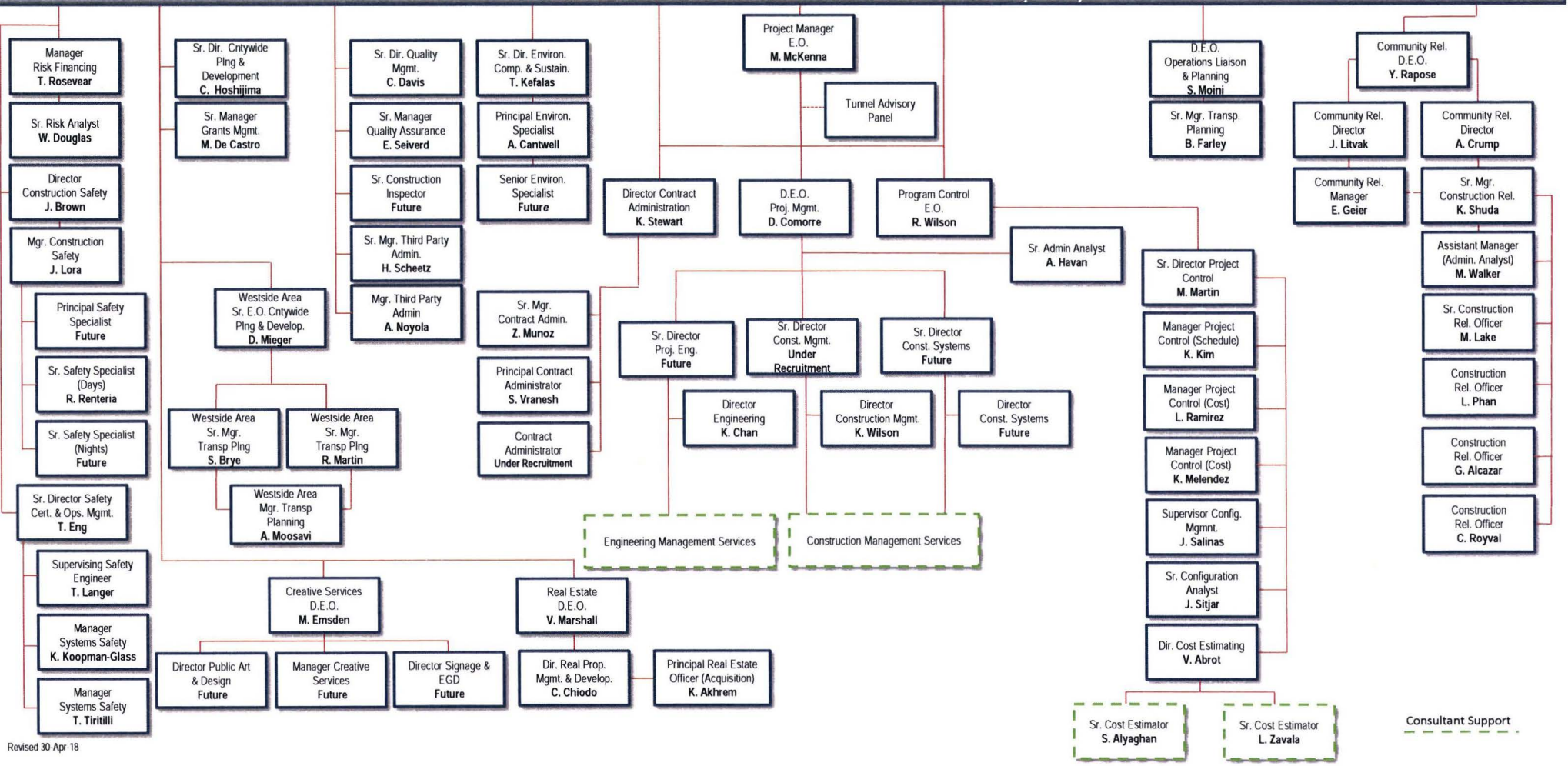


WESTSIDE PURPLE LINE EXTENSION SECTION 2 Matrix Organization

Metro Executive Management Organization and Staff

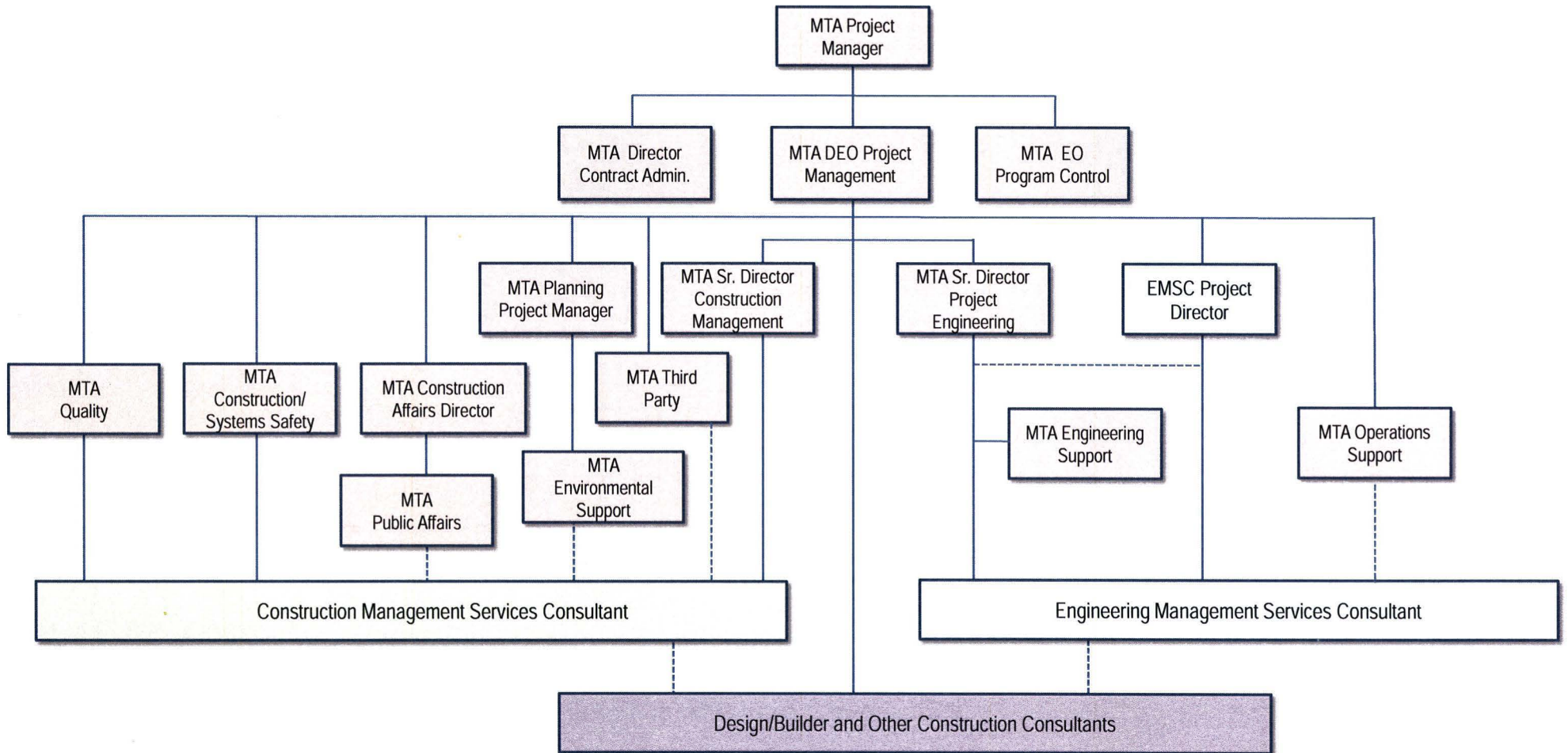


INTEGRATED PROJECT MANAGEMENT OFFICE TEAM (IPMO)



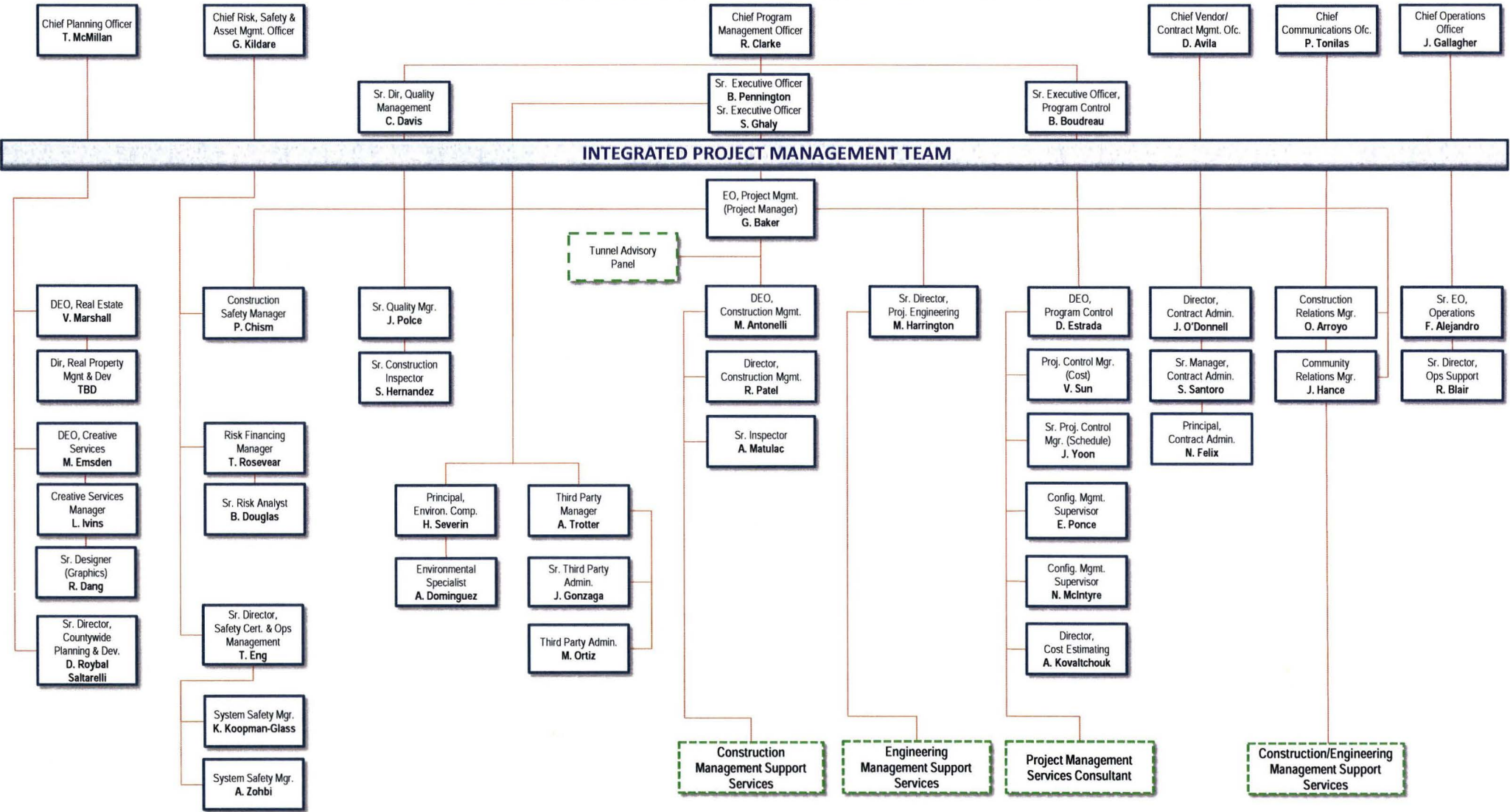
Consultant Support

Westside Purple Line Extension Section 3 Responsibility and Reporting Matrix

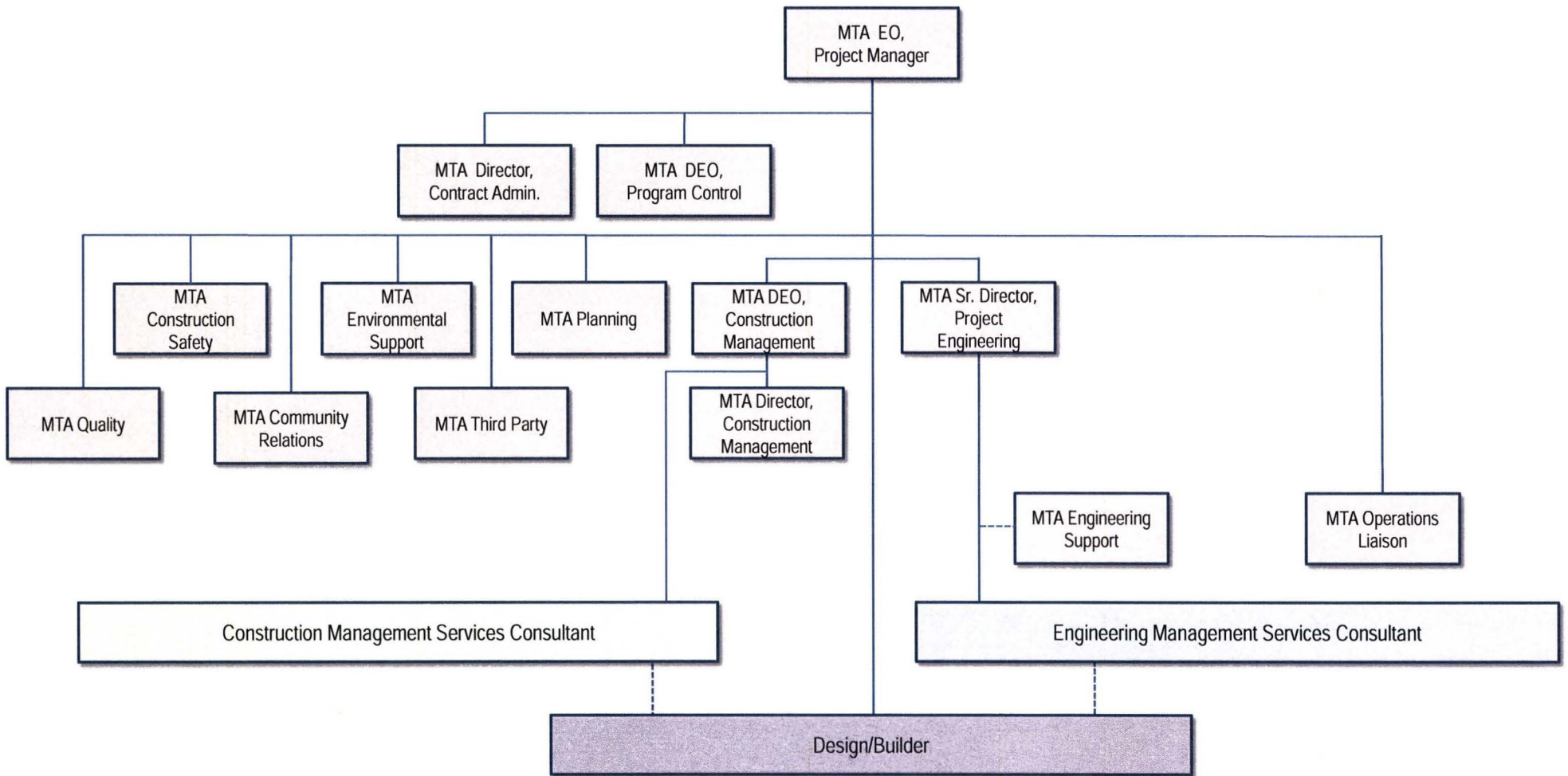


REGIONAL CONNECTOR TRANSIT PROJECT MATRIX ORGANIZATION

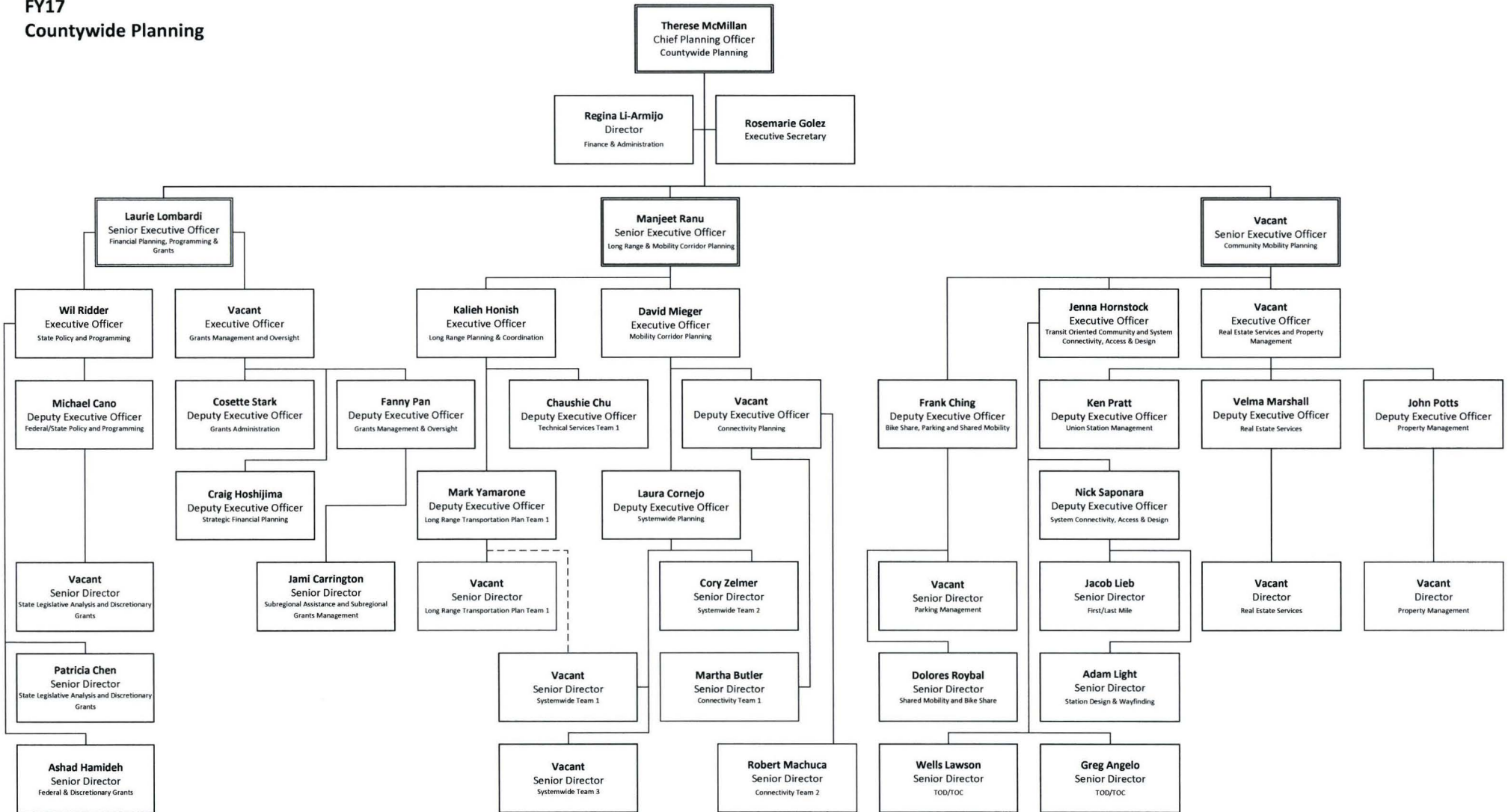
Metro Executive Management Organization and Staff



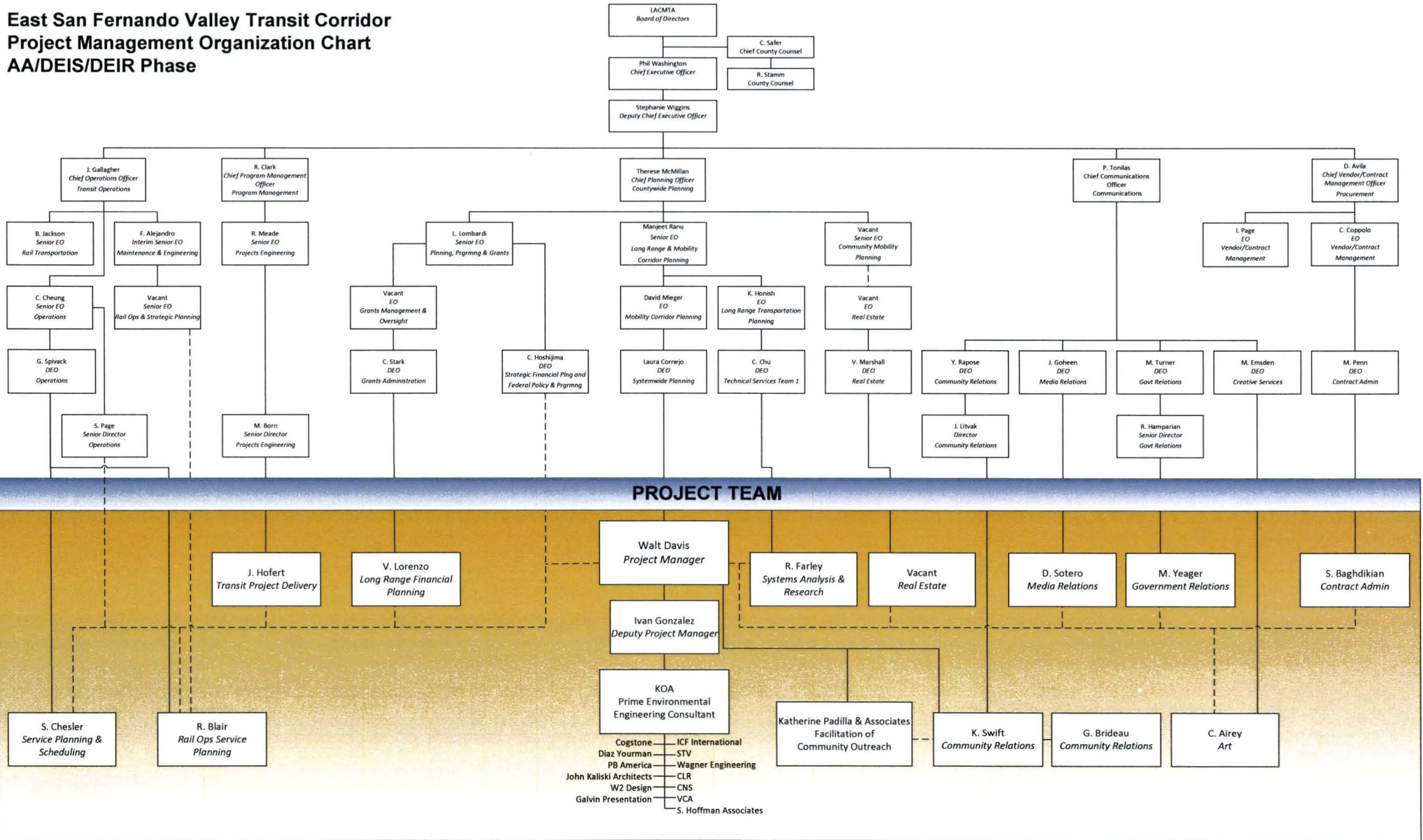
Regional Connector Transit Project Responsibility and Reporting Matrix



**FY17
Countywide Planning**



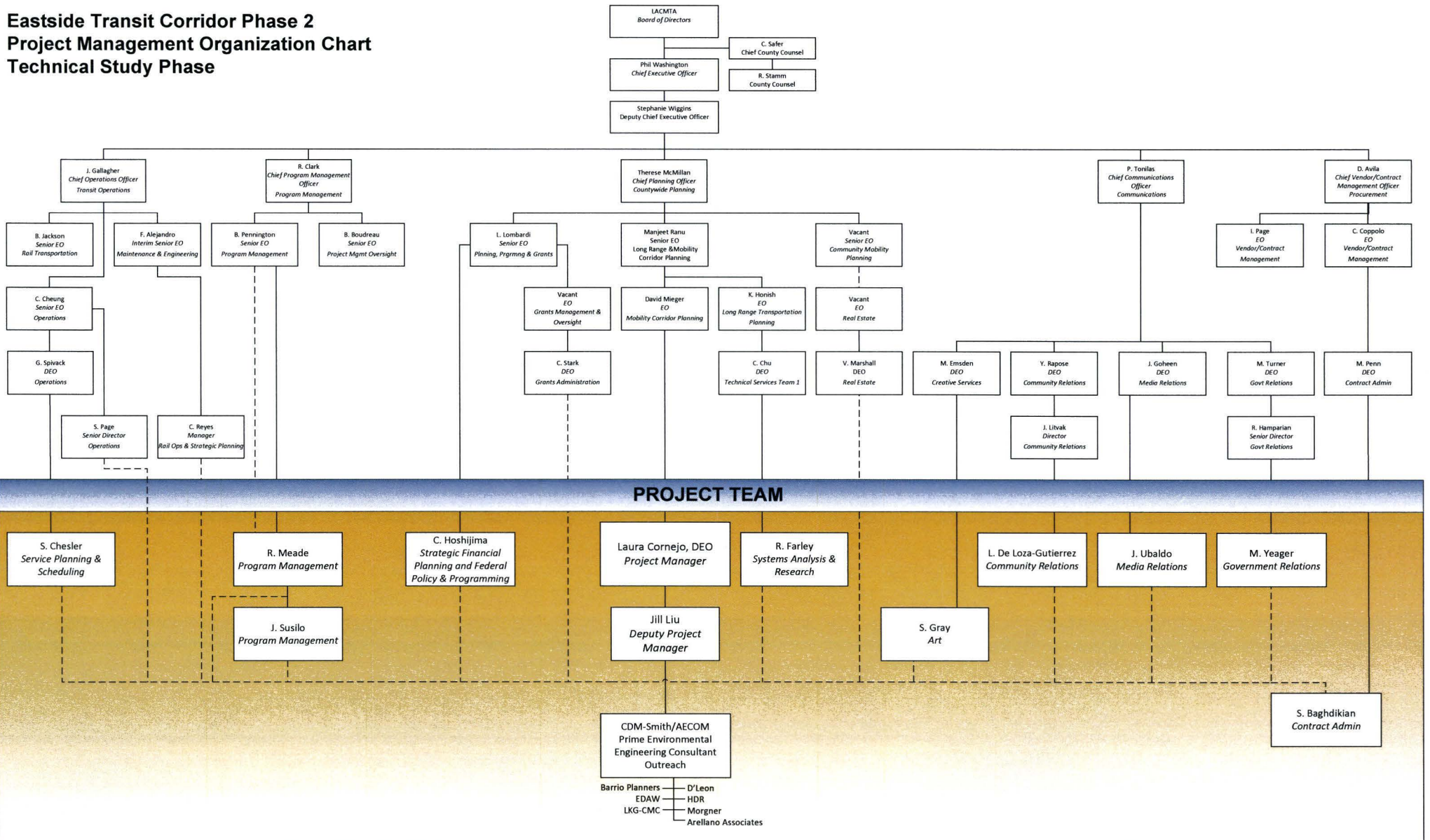
East San Fernando Valley Transit Corridor Project Management Organization Chart AA/DEIS/DEIR Phase



April 26, 2018

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

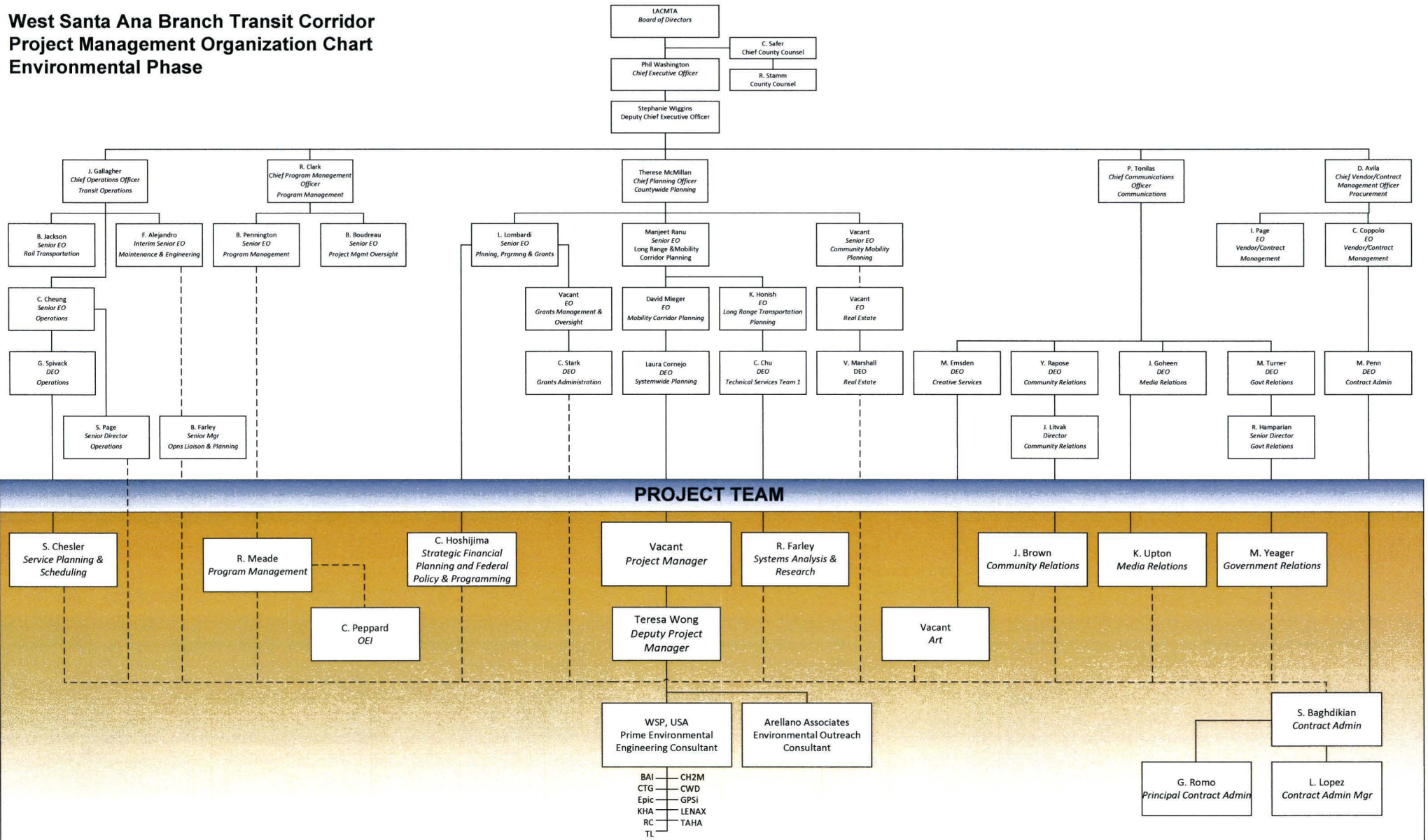
Eastside Transit Corridor Phase 2 Project Management Organization Chart Technical Study Phase



April 26, 2018

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

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



April 26, 2018

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

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

STATE LEGISLATION

Bill ID/Topic	Location	Summary	Position
<p>AB 1921 Rodriguez D Public employees' retirement: joint powers agreements: liability.</p>	<p>From committee: Do pass and re-refer to Com. on APPR. (Ayes 7. Noes 2.) (April 24). Re-referred to Com. on APPR.</p>	<p>(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.</p> <p>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 the 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. Existing law also permits otherwise and except as otherwise provided with respect to certain community choice aggregator joint powers agencies. The act also authorizes a party to an a joint powers agreement to separately contract for, or assume responsibilities for, specific debts, liabilities, or obligations of the agency. Existing law, with respect to electrical loads, permits entities authorized to be community choice aggregators to participate as a group through a joint powers agency and to also specify in their joint powers agreement that the debts, liabilities, and obligations of the agency shall not be those of the members of the agency.</p> <p>This bill would eliminate the above provisions within the Joint Exercise of Powers Act and those related provisions for community choice aggregators that permit an agreement between one or more parties to specify otherwise as to their debts, liabilities, and obligations and that permit a party to separately contract for those debts, liabilities, or obligations.</p> <p>The This bill would additionally eliminate that authorization, would specify that if an agency to a joint powers agreement participates in a public retirement system, all parties, both current and former to the agreement, would be jointly and severally liable for all obligations to the retirement system. system, and would eliminate the authority of those parties to agree otherwise with respect to the retirement liabilities of the agency. 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 retroactively to all parties, both current and former, to the joint powers agreement.</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. Under PERL, the board may refuse to contract with, or to agree to an amendment proposed by, any public agency for any benefit provisions that are not specifically authorized by that law and that the board determines would adversely affect the administration of the retirement system.</p> <p>This bill would prohibit the board from contracting with any public agency formed under the Joint Exercise of Powers Act unless all the parties to that agreement are jointly and severally liable for all of the public agency's obligation to the system. The bill would specify that those provisions apply retroactively to all parties, both current and former, to the agreement. The bill would also require any current agreement that does not meet these requirements to be reopened to include a provision holding all member agencies party to the agreement jointly and severally liable for all of the public agency's obligations to the system.</p>	<p>Oppose</p>

**Los Angeles County Metropolitan Transportation Authority (Metro)
State and Federal Legislative Matrix – Board Approved Positions
MAY 2018
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Bill ID/Topic	Location	Summary	Position
		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. Last Amended April 19, 2018	
AB 1721 Committee on Revenue and Taxation Los Angeles County Metropolitan Transportation Authority: transactions and use tax.	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.)	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.	Support
AB 2417 Rodriguez D Metro Gold Line Foothill Extension Construction Authority.	04/12/18 From committee: Do pass and re-refer to Com. on APPR. (Ayes 7. Noes 0.) (April 11). Re-referred to Com. on APPR.	(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. 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. (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. 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.	Oppose

Deferred=bill will be brought up at another time; Chaptered=bill has become law; LA=Last Amended; Enrolled=bill sent to Governor for approval or veto

Note: "Location" will provide most recent action on the legislation and current position in the legislative process. 5/1/2018

Bills highlighted in PURPLE have been submitted in the current month for Board consideration.

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

Bill ID/Topic	Location	Summary	Position
<p><u>AB 3124</u> <u>Bloom D</u></p> <p>Vehicles: length limitations: buses: bicycle transportation devices.</p>	<p>SENATE T. & H. 4/25/2018 - Referred to Com. on T. & H.</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><u>AB 3201</u> <u>Daly D</u></p> <p>California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program.</p>	<p>ASSEMBLY APPR. 4/23/2018 - Action From NAT. RES.: Do pass as amended. To APPR..</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 4/5/2018</p>	<p>Support</p>

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<p>SB 1434 <u>Leyva D</u></p> <p>Transportation electrification: electricity rate design.</p>	<p>SENATE APPR. 4/25/2018 - VOTE: Do pass as amended, but first amend, and re-refer to the Committee on [Appropriations]</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 3/22/2018</p>	<p>Support</p>

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**Los Angeles County Metropolitan Transportation Authority (Metro)
State and Federal Legislative Matrix – Board Approved Positions
MAY 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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<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 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>
<p>Continuing Resolution for FY 2018</p>	<p>The Continuing Resolution bill was an agreement to set funding levels for Fiscal Year 2018 and Fiscal Year 2019 - which will allow Appropriations Committee staff to complete their budget process by applying the new spending figures. The deal resulted in a large increase to non-defense spending over the next two federal fiscal years. The increase for Fiscal Year 2018 is \$63 billion and for Fiscal Year 2019 is \$68 billion. This provides roughly 10% more funding for federal transportation funding. Also included in the package is a "tax-extendors" deal that includes a retroactive alternative fuel tax benefit for properties and vehicles for 2017. The alternative fuels tax benefit expired in 2016 - which is why Congress had to retroactively approve it for last year. This item (worth approximately \$18 million to our agency) is a Board-approved federal priority and will remain a priority as Congress will again need to approve the tax benefit for the current year. Metro will continue working with the Los Angeles County Congressional delegation to strongly support funding for our agency's Board-approved federal priorities.</p>	<p>2/9/18 House and Senate approves Continuing Resolution to fund the Federal Government at Fiscal Year 2017 levels through March 23, 2018. The President then signed the bill shortly after Congress held the vote.</p>

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COUNTY OF LOS ANGELES
OFFICE OF THE COUNTY COUNSEL
TRANSPORTATION DIVISION
ONE GATEWAY PLAZA
LOS ANGELES, CALIFORNIA 90012-2952

MARY C. WICKHAM
County Counsel

April 19, 2018

TELEPHONE
(213) 922-2503
FACSIMILE
(213) 922-2530
TDD
(213) 633-0901

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 March 31, 2018, on the Status of MTA Litigation Related to Federally Funded MTA Projects.

Please call if you have any questions (213) 922-2511.

Very truly yours,

MARY C. WICKHAM
Interim County Counsel

By


CHARLES M. SAFER
Assistant County Counsel
Transportation Division

CMS:kh

Attachments

c: Charles M. Safer
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
 Date as of March 31, 2018

CASE NAME	CASE NUMBER	GRANT NUMBER	NARRATIVE	CASE STATUS
<p>Gerlinger (MTA) v. Parsons Dillingham</p> <p>consolidated with</p> <p>MTA v. Parson Dillingham</p>	<p>BC150298, etc.</p> <p>BC179027</p>	<p>MOS-1 and CA-03-0341, CA-90-X642</p> <p>MOS-1 and CA-03-0341, CA-90-X642</p>	<p>Originated as Qui Tam action. Concerns allegations of overbilling by MTA's construction Manager, Parsons-Dillingham ("PD").</p> <p>MTA filed suit against Parsons Dillingham for fraud and breach of contract in the performance of construction management services.</p>	<p>Trial court granted summary judgment in favor of defendants. Court of Appeal upheld trial court judgment.</p> <p>Trial court granted breach of contract judgment in favor of MTA. Court of Appeal reversed trial court judgment.</p> <p>MTA's Petition for Review before the California Supreme Court filed April 9, 2018.</p>
<p>Crenshaw Subway Coalition v. MTA, et al.</p>	<p>CV11-9603</p>	<p>TIFIA3 Loan</p>	<p>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.</p>	<p>Judgments for MTA and FTA on CEQA and NEPA claims. Government Code Claim for disparate impact remanded to State court.</p>
<p>Today's IV. Inc. v. MTA</p>	<p>BS160846</p>		<p>Petitioner alleges that Metro is not maintaining access to the hotel and complying with applicable noise standards in violation of the MMRP.</p>	<p>Petitioner's applications for various TROs were denied; discovery is ongoing. Trial will be reset for no later than early 2019.</p>
<p>City of Beverly Hills v. MTA</p>	<p>BS144164</p>		<p>Petitioner alleges that Metro accelerated funding for the subway without CEQA clearance.</p>	<p>Case is currently on hold.</p>
<p>City of Rosemead</p>	<p>BS169937</p>		<p>Petitioner claims that Metro violated CEQA by adopting a motion supporting one alternative as the locally preferred alternative prior to completion of CEQA review.</p>	<p>Judgment granted for MTA.</p>

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 January 26, 2018. MTA will file a responsive pleading by April 30, 2018.
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 November 17, 2017, the Patent Trial and Appeal Board ("PTAB") issued a decision in favor of MTA finding that the claims plaintiff has sued MTA on are unpatentable. On January 17, 2018 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 and the transponder devices associated with the ExpressLanes.

Wheelchair-Disability Discrimination Cases

CASE NAME	CASE NUMBER	GRANT NUMBER	NARRATIVE	CASE STATUS
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

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

March 31, 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**”) and Greenland USA to pursue joint development of the site. Since then, Greenland USA determined that it was no longer able to participate in the project and assigned its rights (as is provided for in the ENA) to 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. Further community outreach will take place in fall 2018 and environmental clearance and entitlement work is expected to start at the beginning of 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 Phase B expired. At the time, MBS had indicated to Metro that the cost of accommodating and working around existing Metro subway infrastructure on the site was too costly to proceed with the project as planned. MBS provided Metro with an alternate design for the project, which was significantly and materially different from the originally proposed design. After reviewing the alternate design, Metro elected to (a) not move forward with it, and (b) not pursue an extension of the Joint Development Agreement, letting it expire.

In December, Metro received an unsolicited proposal for development of the Phase B site. In accordance with Metro’s Unsolicited Proposal Policy and Process, a proposal

evaluation team was established and reviewed the initial proposal. Following this initial evaluation and pursuant to Metro's Unsolicited Proposals policy, the evaluation team has requested the proposer to submit a Phase 2 Detailed Proposal. Submittal and review of the Phase 2 Detailed Proposal will be completed in the third quarter of 2018.

Southwest corner of 1st/Boyle (Parcels ED-121 through ED-125, ED-191, ED-193 and ED-194)

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)

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)

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) – NO CHANGE

These parcels encompass the Metro Gold Line's 1.09-acre Soto station site and a 0.29-acre, Metro-owned parcel located across Soto Street from the station.

In June 2016, Metro and Bridge Housing Corporation/East LA Community Corporation (“**Bridge/ELACC**”) entered into an Exclusive Negotiation Agreement and Planning Document (“**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, the parties extended the term of the ENA through December 22, 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, and an application to the City of Los Angeles’ Housing and Community Investment Department for inclusion in their funding pipeline.

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)

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)

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 authorized the execution of a Joint Development Agreement and Ground Lease with Abode Communities (“**Abode**”), and approved the CEQA clearance for the project. Included in the Joint Development Agreement is a term sheet that sets forth the key terms and conditions of a Ground Lease that will provide for the construction and operation of the project.

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. The parties anticipate execution of the Ground Lease and commencement of construction in the 1st quarter of 2019.

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

This 1.56-acre site sits across Matthews Street from the Cesar E. Chavez/Soto site and was also acquired by Metro for an extension of the Metro Red Line into Boyle Heights.

In March 2017 Metro released 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.

**OPERATIONS RAIL
PERFORMANCE REPORT**

Los Angeles County
Metropolitan Transportation Authority
California

OPERATIONS MONTHLY RAIL PERFORMANCE REPORT

MARCH 2018



METRO RAIL PERFORMANCE – MARCH 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 2015	FY 2016	FY 2017	FY 2018 Target	FY 2018 YTD	FYTD Status	Jan Month	Feb Month	Mar Month
Systemwide									
On-Time Pullouts	99.67%	99.63%	99.61%	99.50%	99.63%	●	99.55%	99.79%	99.78%
Mean Miles Between Chargeable Mechanical Failures ³	34,524	30,482	29,711	32,550	29,688	●	31,385	39,413	46,881
In-Service On-time Performance	98.39%	98.10%	98.24%	98.99%	98.44%	●	98.52%	98.53%	98.91%
Service Delivery Ratio	99.35%	99.22%	99.23%	99.00%	99.16%	●	99.18%	99.23%	99.50%
Traffic Accidents Per 100,000 Train Miles	1.18	1.17	1.01	1.01	0.98	●	0.26	1.06	1.36
CPUC Reportable Accidents per 100,000 Train Miles	0.43	0.60	0.36	0.37	0.51	●	0.00	0.30	0.14
Passenger Accidents per 100,000 Boardings	0.013	0.016	0.023	0.010	0.018	●	0.011	0.000	0.011
Complaints per 100,000 Boardings	0.78	1.43	1.98	1.10	1.79	●	1.93	1.84	1.77
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours ^{1,2}	11.11	10.97	12.27	10.42	10.18	●	6.56	10.32	3.56
Lost Work Days per 200,000 Exposure Hours ^{1,2}	880	482	733	450.00	886	●	898	739	-
OSHA Injuries per 200,000 Exposure Hours ^{1,2}	6.68	6.32	8.53	6.00	6.46	●	2.81	5.16	-
Wayside									
Overdue Work Orders (Non-PMP) - Aging of Outstanding Work Orders	78	321	650	N/A	2,105	N/A	296	393	654
Past-Due Preventive Maintenance - Aging of Outstanding Work Orders	1	2	22	N/A	225	N/A	36	39	79
% of Completed Inspections	99.51%	99.57%	99.72%	N/A	99.64%	N/A	99.15%	100.00%	98.98%
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	9.07	4.77	5.35	4.53	4.88	●	11.32	8.14	0.00
Lost Work Days per 200,000 Exposure Hours ¹	309	148	194	138	328	●	313	289	-
OSHA Injuries per 200,000 Exposure Hours ¹	8.28	4.40	4.01	4.18	4.05	●	3.77	8.14	-
Blue Line									
On-Time Pullouts	99.41%	99.59%	99.60%	99.50%	99.24%	●	99.20%	99.86%	100.00%
Mean Miles Between Chargeable Mechanical Failures ³	23,716	19,240	15,405	22,825	13,482	●	15,581	20,912	17,027
In-Service On-time Performance	97.28%	96.10%	96.44%	98.80%	96.74%	●	97.95%	98.04%	97.56%
Service Delivery Ratio	98.88%	98.41%	98.54%	99.00%	98.19%	●	99.05%	98.68%	98.79%
Traffic Accidents Per 100,000 Train Miles	2.48	2.38	2.18	2.18	1.74	●	0.63	2.14	1.25
CPUC Reportable Accidents per 100,000 Train Miles	0.89	1.39	0.71	0.40	1.02	●	0.00	0.71	0.00
Passenger Accidents per 100,000 Boardings	0.034	0.016	0.046	0.010	0.030	●	0.000	0.000	0.000
Complaints per 100,000 Boardings	0.90	1.33	1.67	1.07	2.29	●	2.38	2.74	1.94
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	15.10	15.08	16.74	10.42	12.95	●	5.36	5.89	0.00
Lost Work Days per 200,000 Exposure Hours ¹	1,622	797	836	450	1,117	●	1,162	1,019	-
OSHA Injuries per 200,000 Exposure Hours ¹	10.64	6.79	10.40	6.00	6.64	●	5.36	0.00	-

¹ There is a One Month lag in reporting this data

² Includes Operations, RFS and Wayside

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

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

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

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

N/A = Not Available

Measurement	FY 2015	FY 2016	FY 2017	FY 2018 Target	FY 2018 YTD	FYTD Status	Jan Month	Feb Month	Mar Month
Red Line									
On-Time Pullouts	99.91%	99.79%	99.95%	99.50%	99.89%	●	99.41%	100.00%	100.00%
Mean Miles Between Chargeable Mechanical Failures ³	85,090	94,312	104,637	131,376	68,621	●	44,038	65,895	197,004
In-Service On-time Performance	99.13%	99.45%	99.39%	99.50%	99.30%	●	99.41%	99.17%	99.63%
Service Delivery Ratio	99.60%	99.71%	99.72%	100.00%	99.64%	●	99.65%	99.53%	99.78%
Traffic Accidents Per 100,000 Train Miles	0.47	0.75	0.57	0.57	0.48	●	0.00	0.94	0.84
CPUC Reportable Accidents per 100,000 Train Miles	0.07	0.07	0.14	0.21	0.10	●	0.00	0.00	0.00
Passenger Accidents per 100,000 Boardings	0.002	0.002	0.004	0.000	0.000	●	0.000	0.000	0.000
Complaints per 100,000 Boardings	0.54	0.57	1.19	0.55	1.18	●	1.32	1.33	1.47
New Workers' Compensation Indemnity Claims per	6.20	16.43	12.68	10.42	11.59	●	5.21	23.58	0.00
*Lost Work Days per 200,000 Exposure Hours	649	526	992	450	918	●	514	424	-
*OSHA Injuries per 200,000 Exposure Hours	3.54	7.99	7.52	6.00	4.19	●	0.00	5.89	-

Green Line									
On-Time Pullouts	99.32%	99.49%	99.69%	99.50%	99.52%	●	100.00%	0.00%	0.00%
Mean Miles Between Chargeable Mechanical Failures ³	21,054	19,238	16,375	23,220	19,490	●	18,605	23,262	22,924
In-Service On-time Performance	97.39%	98.52%	98.69%	98.80%	98.61%	●	98.47%	99.04%	99.17%
Service Delivery Ratio	99.50%	99.59%	99.61%	99.00%	99.29%	●	99.27%	99.49%	99.52%
Traffic Accidents Per 100,000 Train Miles	0.21	0.42	0.48	0.48	0.38	●	0.00	0.00	0.97
CPUC Reportable Accidents per 100,000 Train Miles	0.07	0.07	0.07	0.40	0.00	●	0.00	0.00	0.00
Passenger Accidents per 100,000 Boardings	0.024	0.034	0.048	0.010	0.014	●	0.116	0.000	0.000
Complaints per 100,000 Boardings	0.89	1.54	2.08	1.27	1.69	●	2.67	1.22	1.31
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	7.32	7.18	9.14	10.42	11.06	●	8.53	17.80	0.00
*Lost Work Days per 200,000 Exposure Hours	479	228	712	450	1,000	●	884	860	-
*OSHA Injuries per 200,000 Exposure Hours	4.07	3.19	6.65	6.00	9.30	●	8.53	0.00	-

Gold Line									
On-Time Pullouts	99.98%	99.68%	99.82%	99.50%	99.82%	●	99.40%	99.60%	100.00%
Mean Miles Between Chargeable Mechanical Failures ³	44,171	40,426	38,427	60,252	41,256	●	67,080	53,340	66,222
In-Service On-time Performance	98.56%	97.60%	97.61%	98.80%	98.67%	●	97.80%	98.09%	99.15%
Service Delivery Ratio	99.34%	99.11%	98.88%	99.00%	99.11%	●	98.64%	99.12%	99.52%
Traffic Accidents Per 100,000 Train Miles	1.14	0.99	0.61	0.61	0.48	●	0.00	0.94	0.87
CPUC Reportable Accidents per 100,000 Train Miles	0.30	0.60	0.25	0.40	0.19	●	0.00	0.00	0.00
Passenger Accidents per 100,000 Boardings	0.007	0.039	0.030	0.010	0.065	●	0.000	0.000	0.075
Complaints per 100,000 Boardings	1.01	2.73	2.78	2.22	2.34	●	2.13	2.23	2.70
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	15.96	11.87	14.31	10.42	10.04	●	5.55	6.25	5.36
*Lost Work Days per 200,000 Exposure Hours	1,068	766	1,055	450	1,070	●	1,031	930	-
*OSHA Injuries per 200,000 Exposure Hours	3.83	9.29	9.69	6.00	7.82	●	0.00	6.25	-

Expo Line									
On-Time Pullouts	-	99.53%	98.76%	99.50%	99.69%	●	100.00%	99.81%	99.00%
Mean Miles Between Chargeable Mechanical Failures ³	-	18,114	33,402	22,825	48,933	●	52,233	64,416	356,863
In-Service On-time Performance	99.14%	98.61%	98.48%	98.80%	98.55%	●	98.59%	98.14%	98.81%
Service Delivery Ratio	99.64%	99.56%	99.46%	99.00%	99.49%	●	99.25%	99.41%	99.78%
Traffic Accidents Per 100,000 Train Miles	1.02	0.74	1.26	1.26	2.00	●	0.80	0.91	3.29
CPUC Reportable Accidents per 100,000 Train Miles	1.02	0.50	0.63	0.40	1.36	●	0.00	0.91	0.82
Passenger Accidents per 100,000 Boardings	0.000	0.019	0.018	0.010	0.007	●	0.000	0.000	0.000
Complaints per 100,000 Boardings	1.12	3.38	3.68	1.83	2.24	●	2.28	2.01	1.71
New Workers' Compensation Indemnity Claims per	24.97	8.44	19.26	10.42	13.88	●	0.00	0.00	23.25
*Lost Work Days per 200,000 Exposure Hours	937	73	887	450	1,229	●	2,139	1,392	-
*OSHA Injuries per 200,000 Exposure Hours	-	5.63	16.60	6.00	9.77	●	-	8.98	-

* There is One Month lag in reporting this data

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

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

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

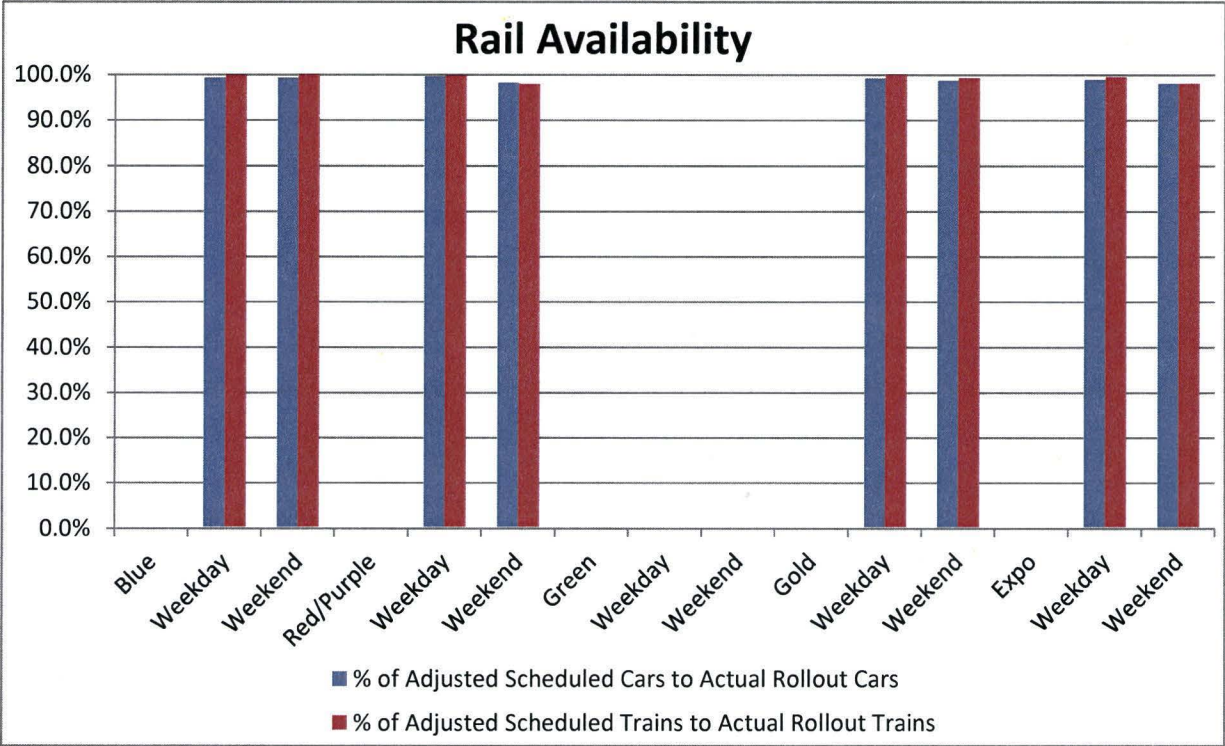
● Red - High probability that the target will not be achieved -- significant problems and/or delays. Falls below Target >70%.

N/A = Not Available

Vehicle Availability

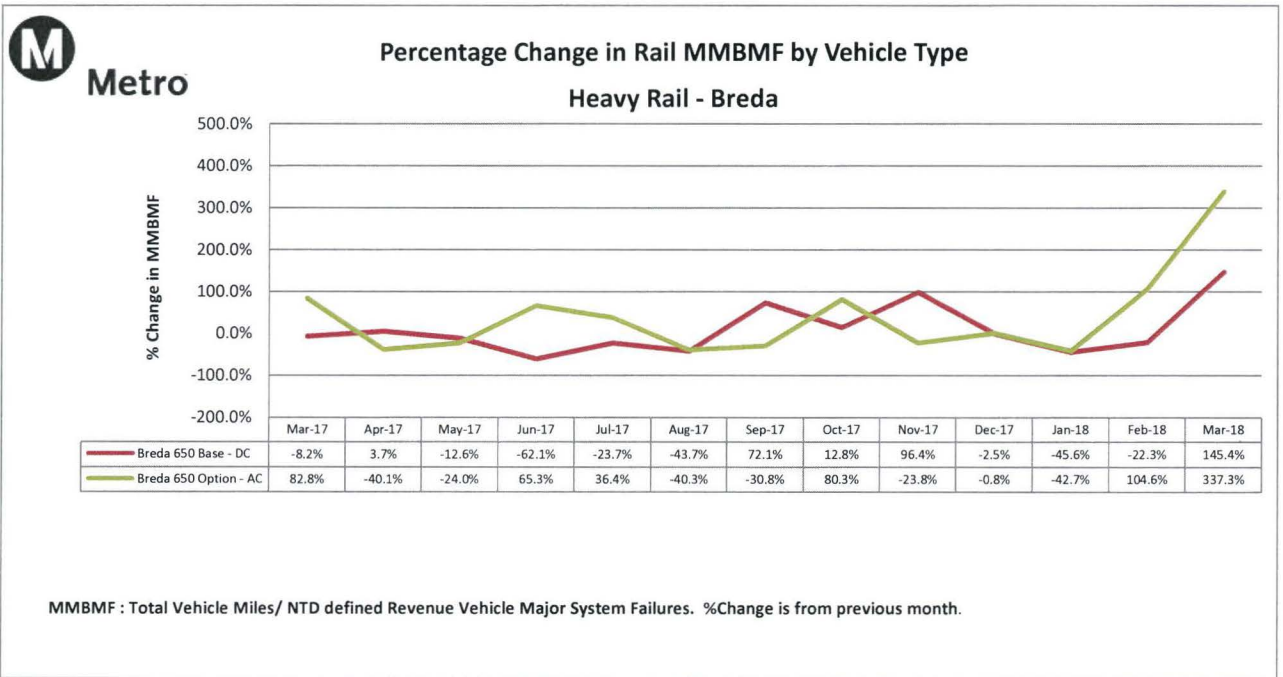
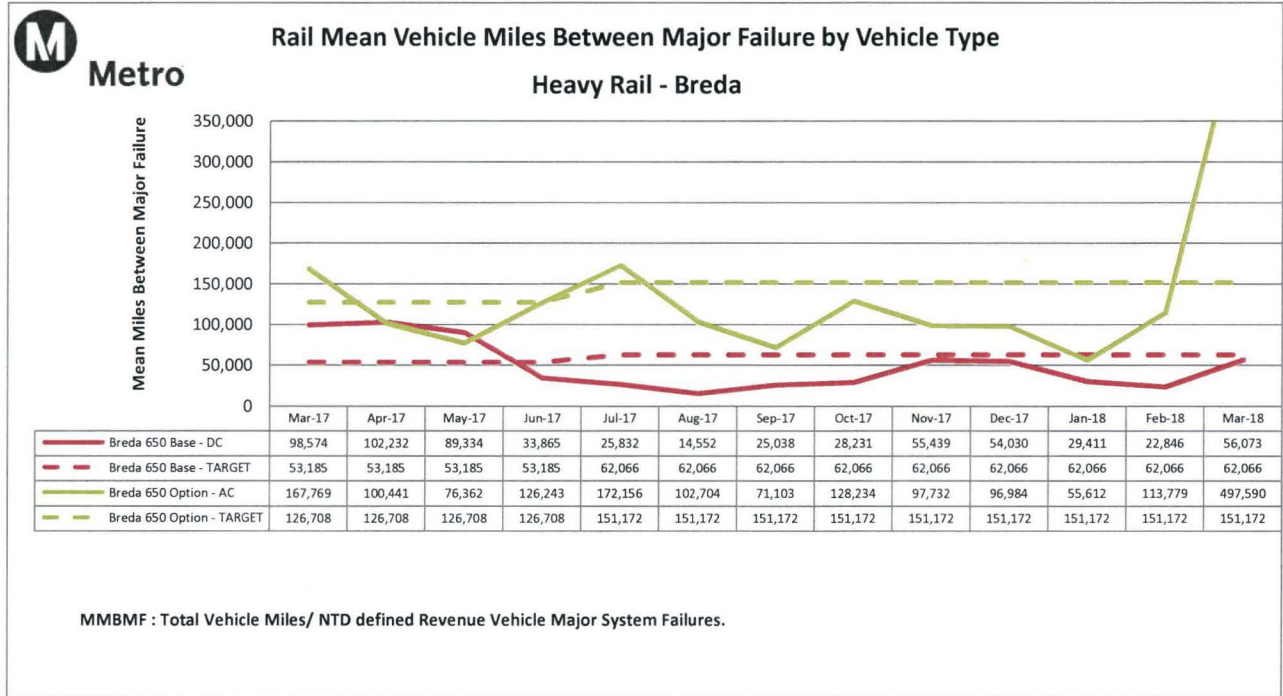
Mar 2018

Day Type	% of Adjusted Scheduled Cars to Actual Rollout Cars	% of Adjusted Scheduled Trains to Actual Rollout Trains
Blue		
Weekday	99.17%	99.84%
Weekend	99.22%	100.00%
Red/Purple		
Weekday	99.49%	99.76%
Weekend	98.18%	97.78%
Green		
Weekday	0.00%	0.00%
Weekend	0.00%	0.00%
Gold		
Weekday	99.14%	100.00%
Weekend	98.67%	99.17%
Expo		
Weekday	98.88%	99.41%
Weekend	97.92%	97.92%



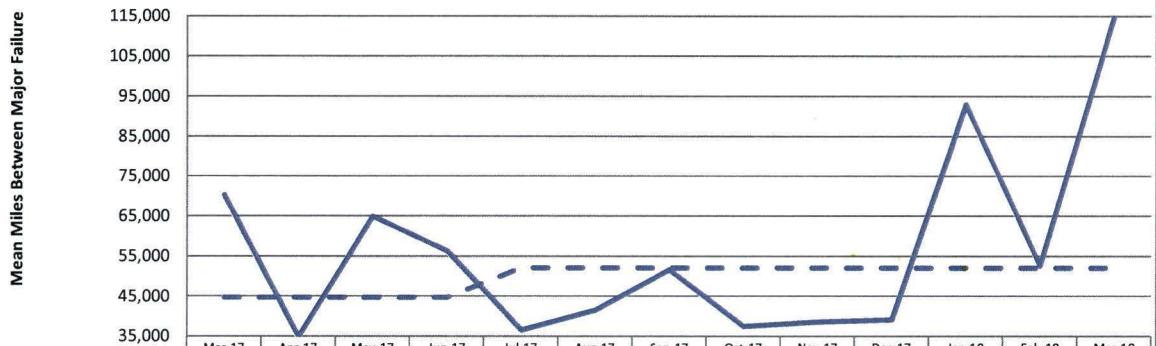
METRO RAIL PERFORMANCE – MARCH 2018

Rail Performance by Vehicle Type





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

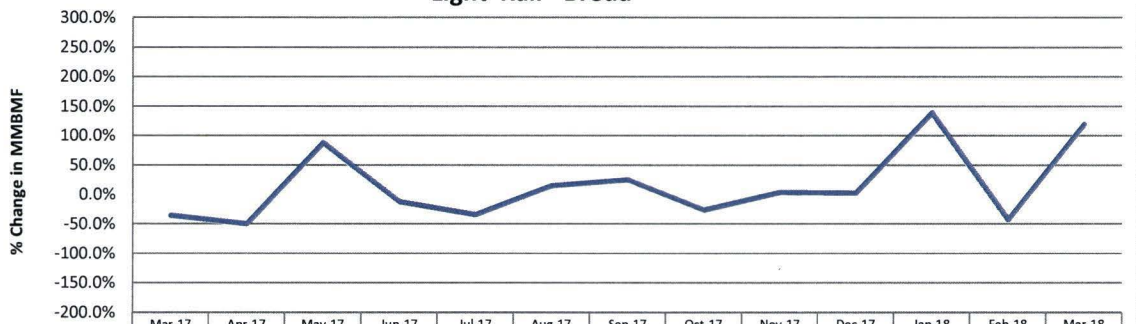


	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18
— AnsaldoBreda 2550 Base - AC	70,117	34,678	64,769	56,193	36,347	41,380	51,475	37,331	38,376	38,933	92,854	52,534	114,997
— AnsaldoBreda 2550 Base - TARGET	44,517	44,517	44,517	44,517	51,977	51,977	51,977	51,977	51,977	51,977	51,977	51,977	51,977

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



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



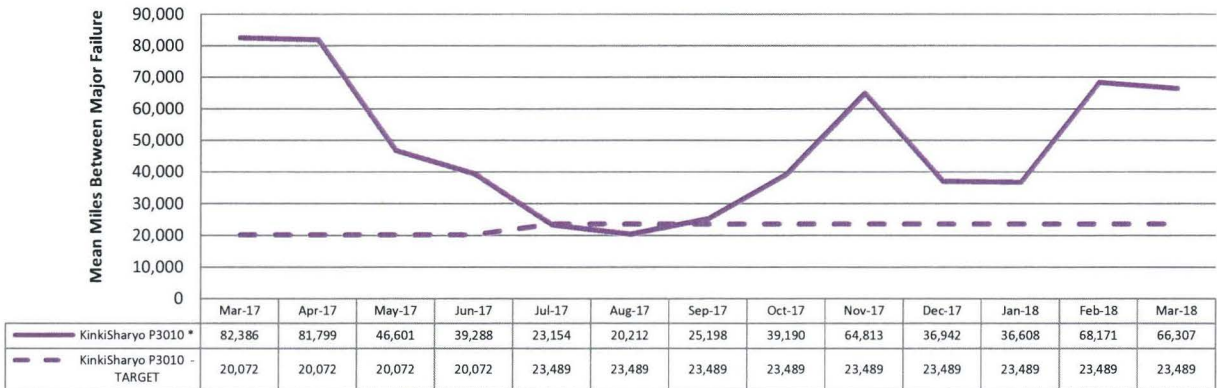
	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18
— AnsaldoBreda 2550 Base - AC	-36.4%	-50.5%	86.8%	-13.2%	-35.3%	13.8%	24.4%	-27.5%	2.8%	1.5%	138.5%	-43.4%	118.9%

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

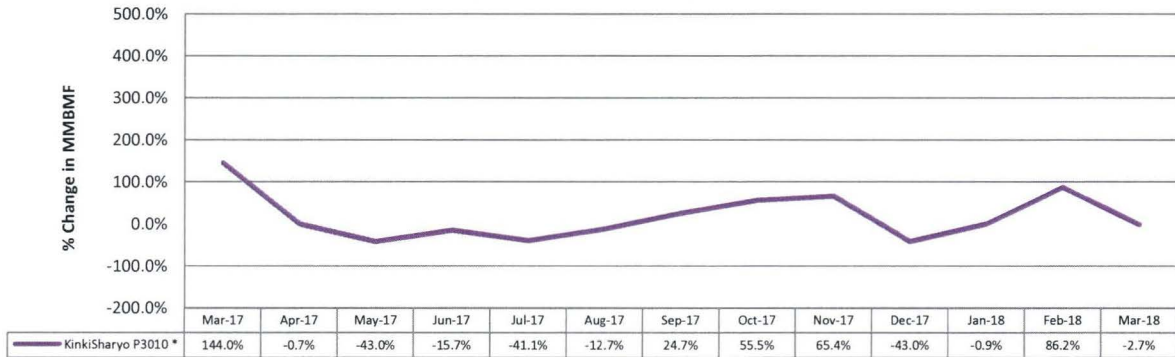


MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.



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.

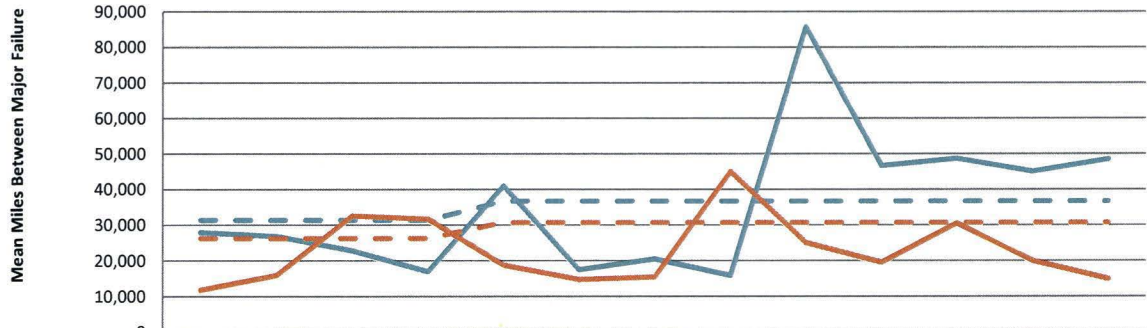
* KinkiSharyo rolling stock began service March 2016



Metro

Rail Mean Vehicle Miles Between Major Failure by Vehicle Type

Light Rail - NipponSharyo



	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18
Nippon Sharyo 2020 - DC	27,775	26,695	22,633	16,760	40,831	17,363	20,372	15,702	85,687	46,539	48,643	44,981	48,401
Nippon Sharyo 2020 - TARGET	31,214	31,214	31,214	31,214	36,599	36,599	36,599	36,599	36,599	36,599	36,599	36,599	36,599
Nippon Sharyo 865 - DC	11,659	15,680	32,397	31,499	18,599	14,523	15,304	44,844	24,932	19,346	30,327	19,862	14,775
Nippon Sharyo 865 - TARGET	26,062	26,062	26,062	26,062	30,478	30,478	30,478	30,478	30,478	30,478	30,478	30,478	30,478

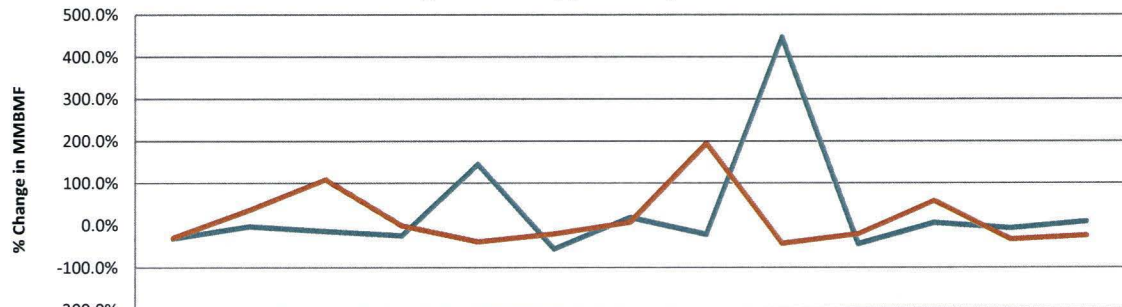
MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.



Metro

Percentage Change in Rail MMBMF by Vehicle Type

Light Rail - NipponSharyo



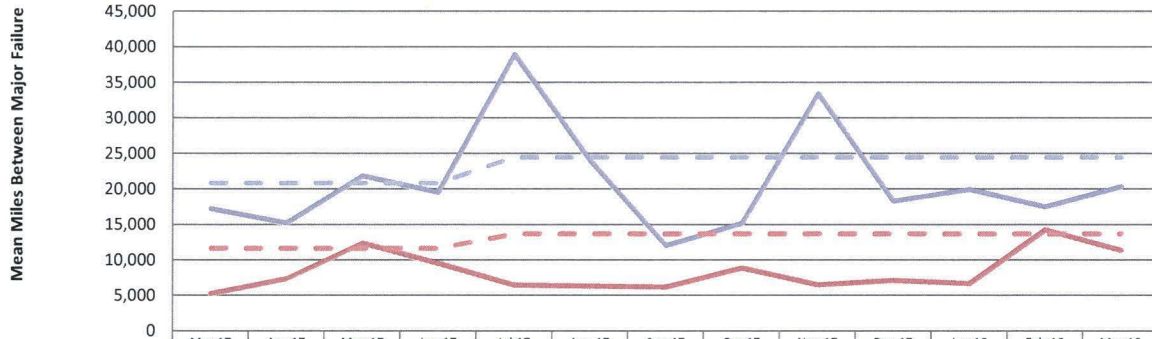
	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18
Nippon Sharyo 2020 - DC	-33.0%	-3.9%	-15.2%	-25.9%	143.6%	-57.5%	17.3%	-22.9%	445.7%	-45.7%	4.5%	-7.5%	7.6%
Nippon Sharyo 865 - DC	-32.2%	34.5%	106.6%	-2.8%	-41.0%	-21.9%	5.4%	193.0%	-44.4%	-22.4%	56.8%	-34.5%	-25.6%

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 - Siemens



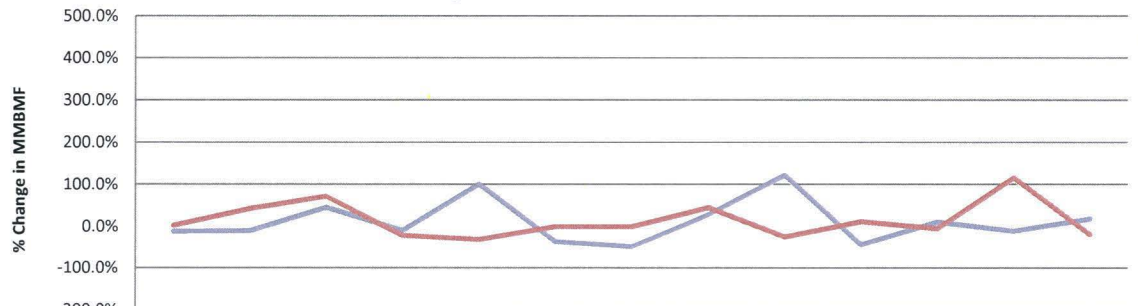
	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18
Siemens 2000 Base - AC	17,159	15,154	21,822	19,462	38,847	23,981	11,972	15,109	33,352	18,247	19,891	17,415	20,271
Siemens 2000 Base - TARGET	20,778	20,778	20,778	20,778	24,373	24,373	24,373	24,373	24,373	24,373	24,373	24,373	24,373
Siemens 2000 GE/ATP - AC	5,161	7,257	12,322	9,443	6,369	6,238	6,121	8,769	6,445	7,074	6,617	14,195	11,299
Siemens 2000 GE/ATP - TARGET	11,559	11,559	11,559	11,559	13,620	13,620	13,620	13,620	13,620	13,620	13,620	13,620	13,620

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



Metro

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



	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18
Siemens 2000 Base - AC	-13.6%	-11.7%	44.0%	-10.8%	99.6%	-38.3%	-50.1%	26.2%	120.7%	-45.3%	9.0%	-12.5%	16.4%
Siemens 2000 GE/ATP - AC	0.7%	40.6%	69.8%	-23.4%	-32.5%	-2.1%	-1.9%	43.3%	-26.5%	9.8%	-6.5%	114.5%	-20.4%

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

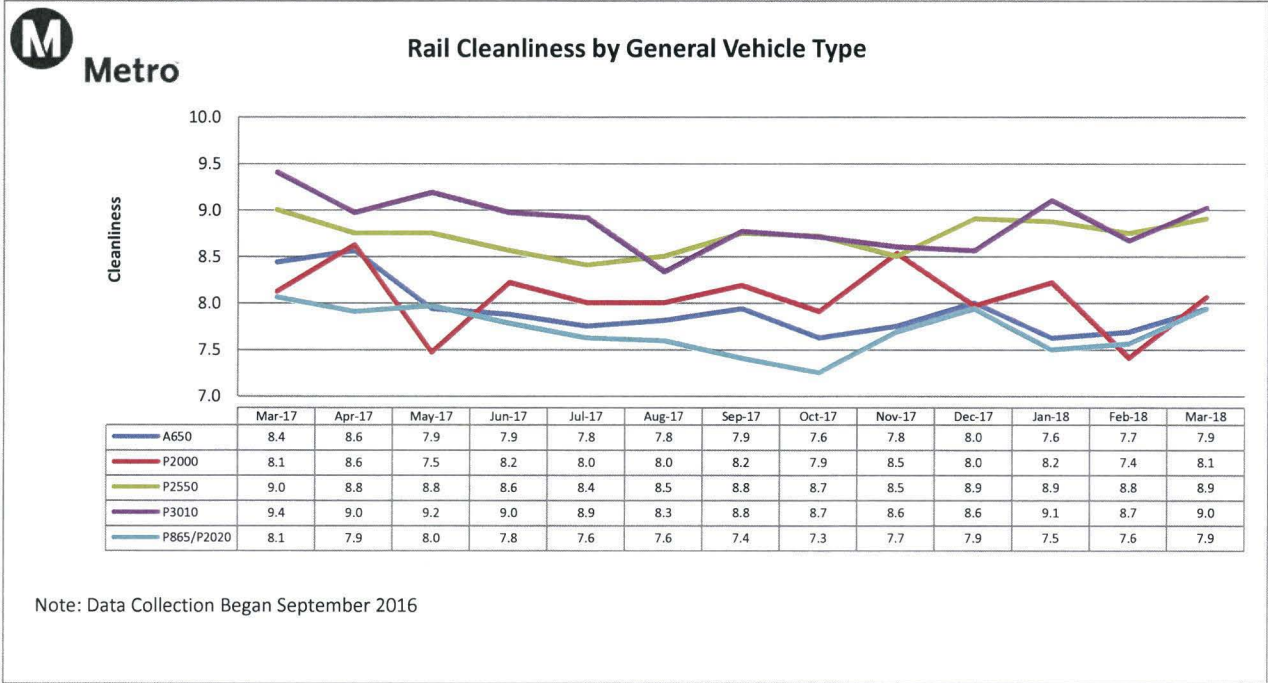
Mean Miles Between Major Failures

	FY 2017	FY 2018 Goal	FY 2018 YTD
AnsaldoBreda2550Base - AC	51,977	51,977	44,404
Breda 650 Base - DC	68,962	62,066	27,364
Breda 650 Option - AC	123,655	151,172	94,520
Kinkisharyo P3010	35,818	23,489	34,459
Nippon Sharyo 2020 - DC	19,963	36,599	29,591
Nippon Sharyo 865 - DC	20,076	30,478	21,920
Siemens 2000 Base - AC	16,738	24,373	19,690
Siemens 2000 GE/ATP - AC	7,988	13,620	7,177

Rail Fleet Distribution – MARCH 2018

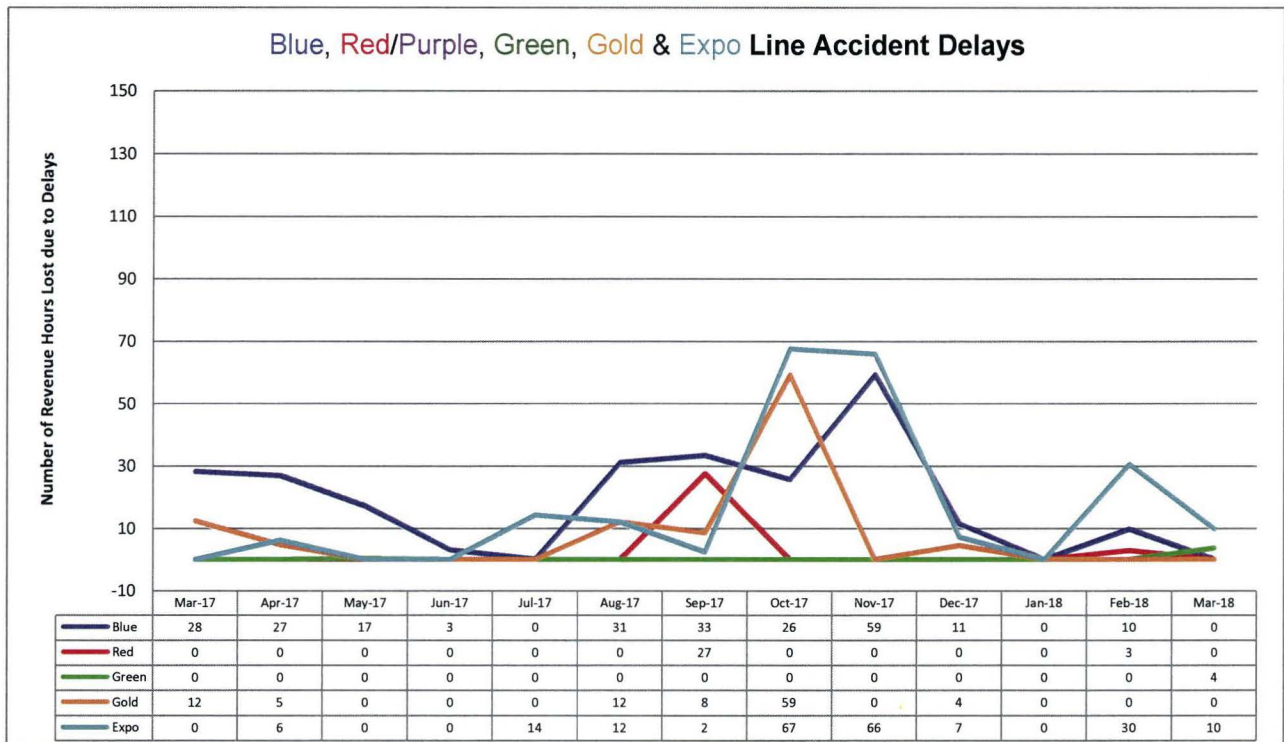
Number of Rail Vehicle Type by Division	Blue	Red / Purple	Green	Gold	Expo
AnsaldoBreda 2550 Base - AC				50	
Breda 650 Base - DC		30			
Breda 650 Option - AC		68			
KinkiSharyo P3010	32		9	21	55
Nippon Sharyo 2020 - DC	15				
Nippon Sharyo 865 - DC	22				
Siemens 2000 Base - AC	22				
Siemens 2000 GE/ATP - AC			26		
TOTALS	91	98	35	71	55

Cleanliness by Vehicle Type

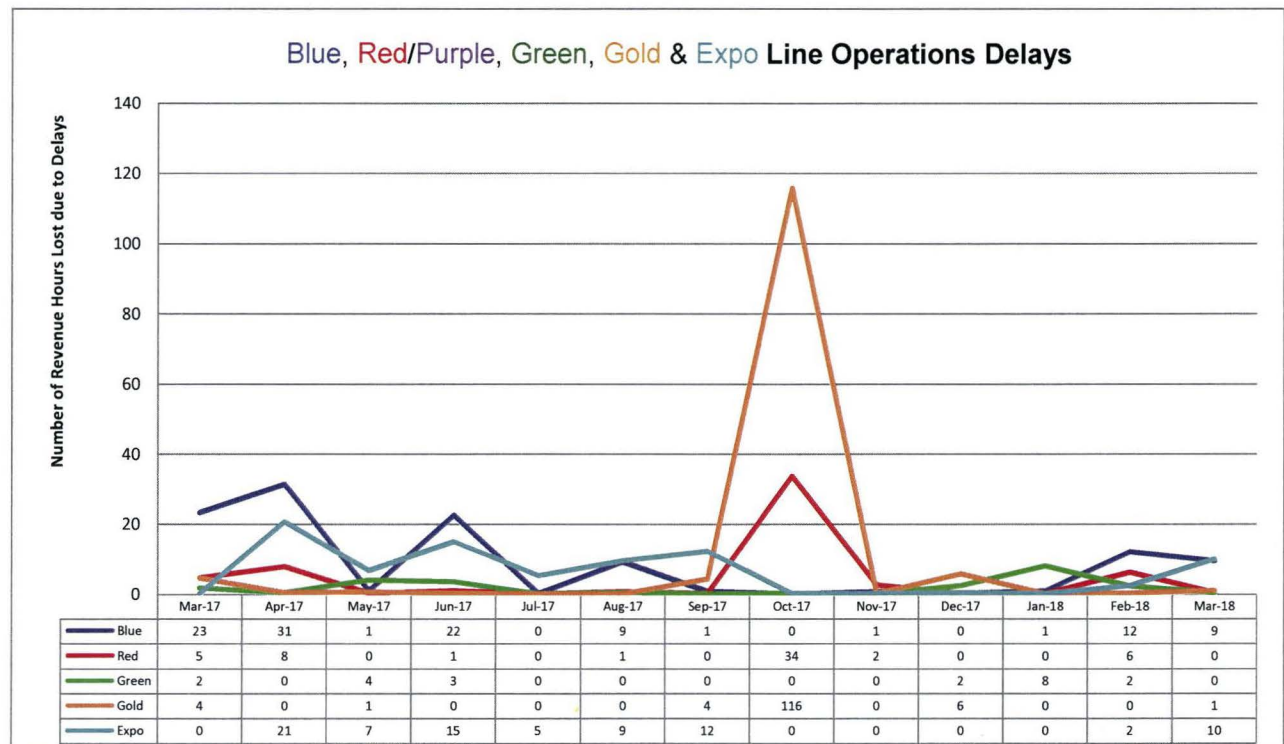


RAIL DELAYS BY CATEGORY - SYSTEMWIDE

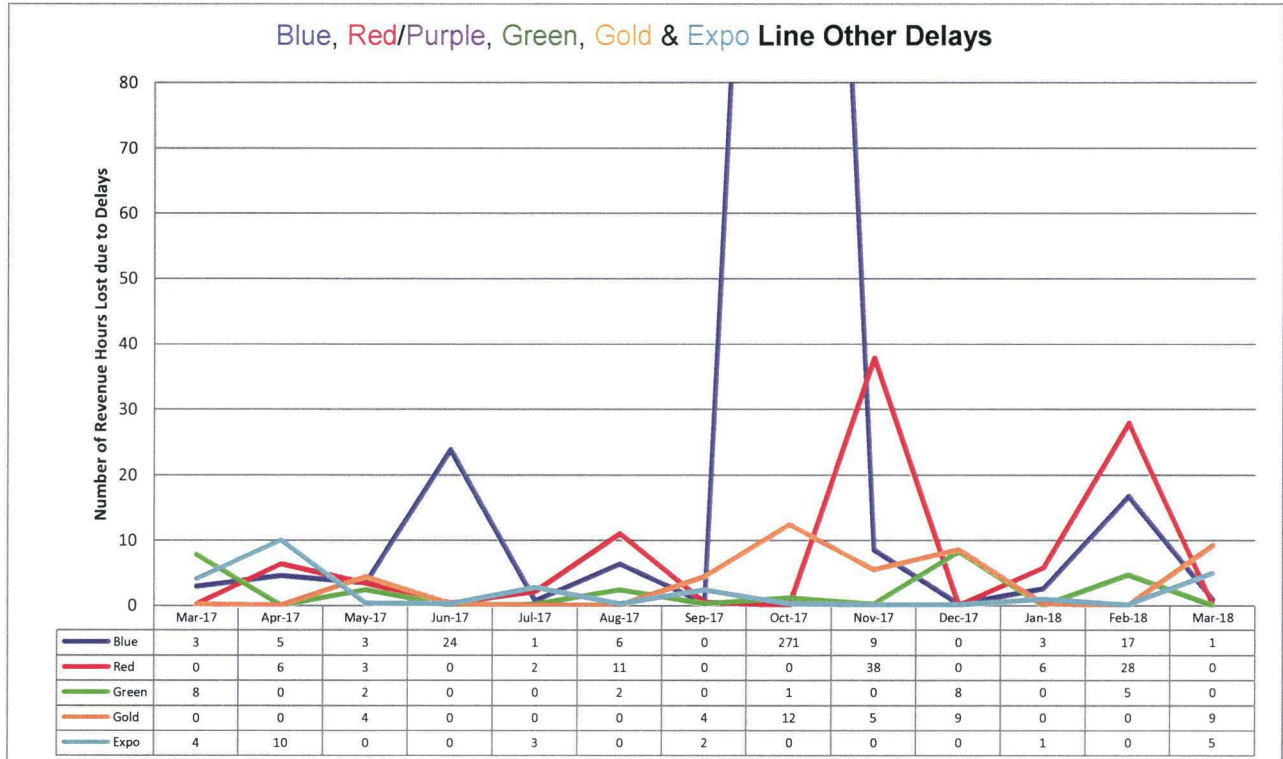
Revenue Hours Lost Related to - ACCIDENTS



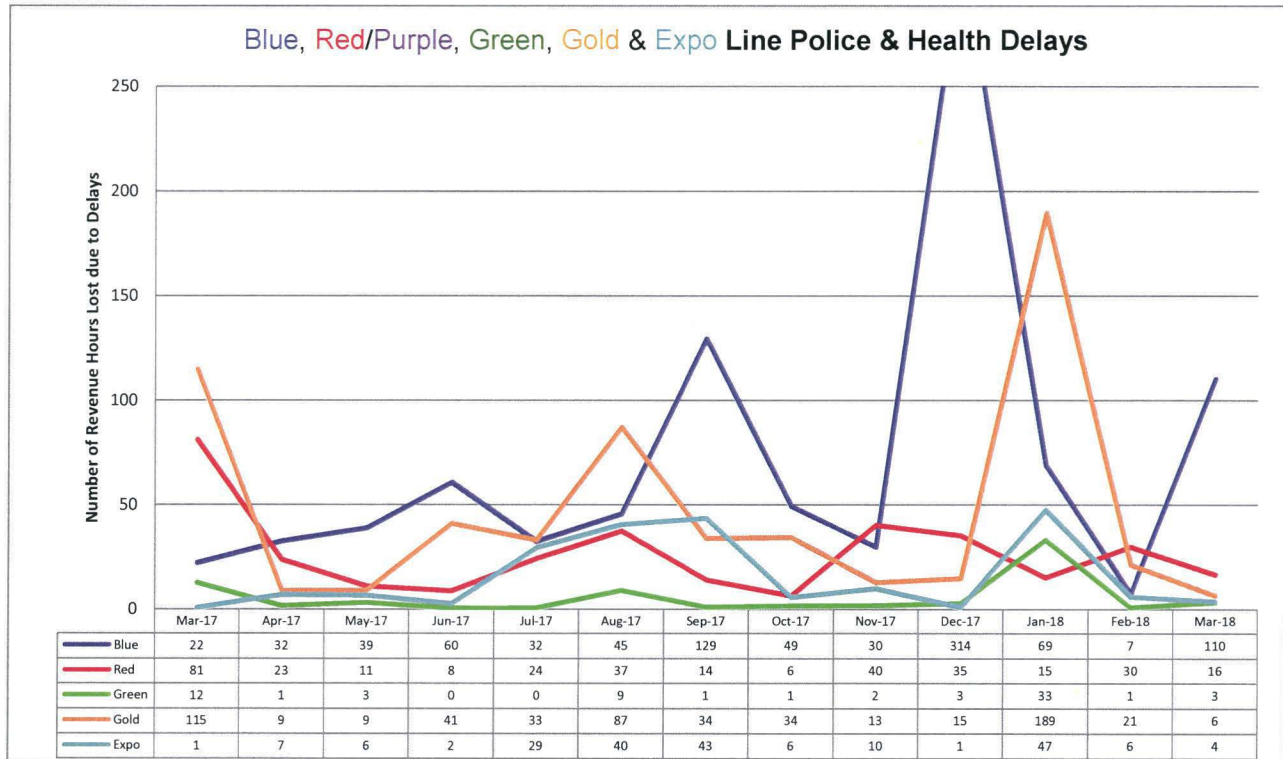
Revenue Hours Lost Related to - OPERATIONS



Revenue Hours Lost Related to - OTHER

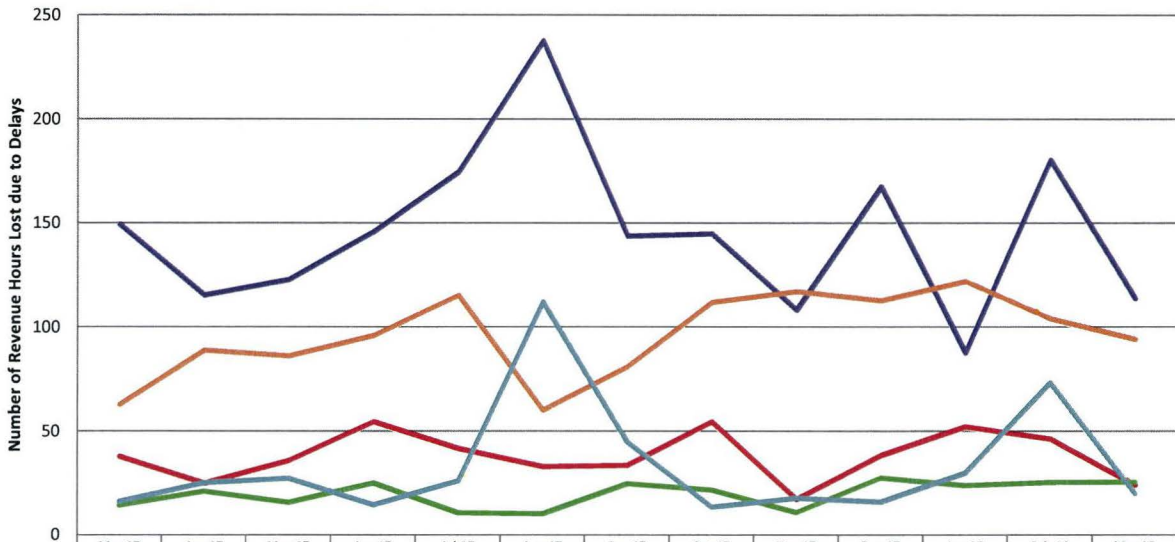


Revenue Hours Lost Related to - POLICE & HEALTH



Revenue Hours Lost Related to - Vehicle Delays

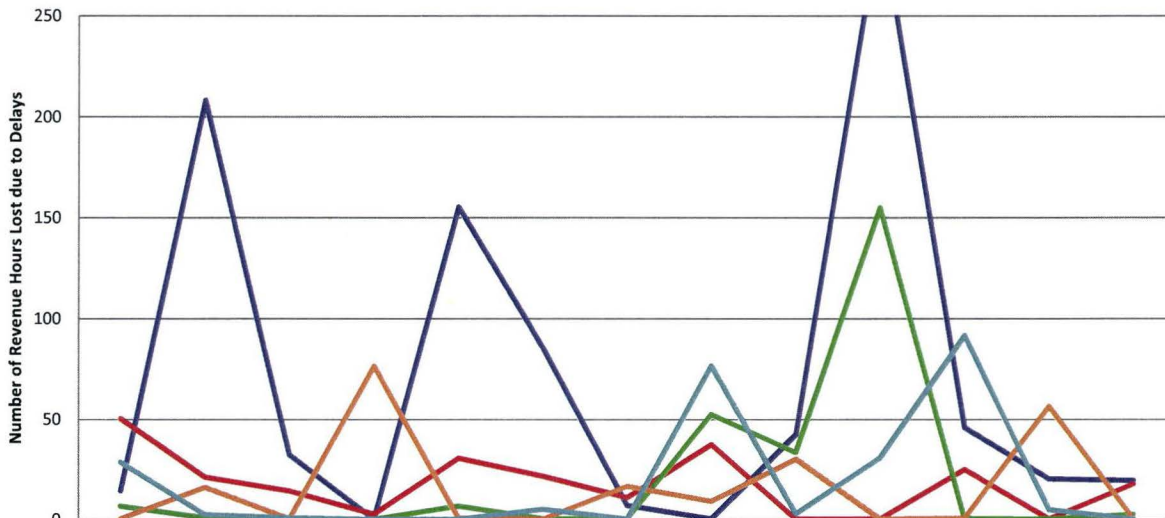
Blue, Red/Purple, Green, Gold & Expo Line Vehicle Delays



	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18
Blue	149	115	122	145	174	237	143	145	108	167	87	180	113
Red	38	25	36	54	41	33	33	54	17	38	52	46	24
Green	14	21	15	25	10	10	24	21	11	27	24	25	25
Gold	63	89	86	96	115	60	81	111	117	112	121	104	94
Expo	16	25	27	14	26	112	44	13	17	16	30	73	20

Revenue Hours Lost Related to - WAYSIDE

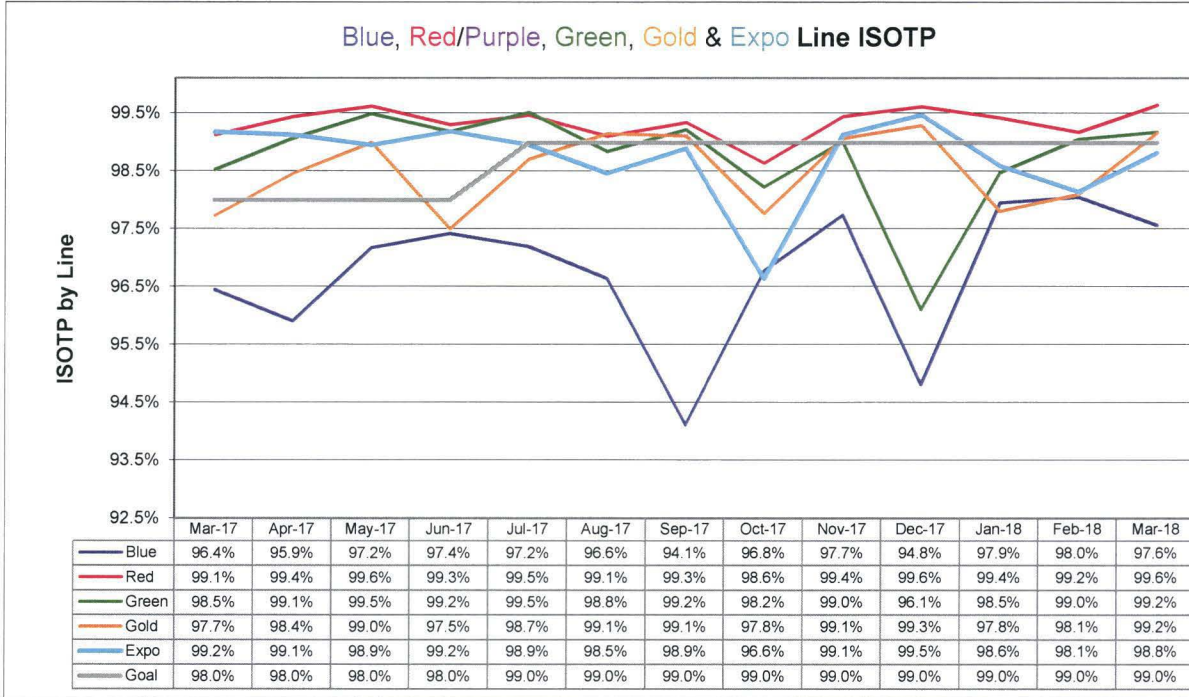
Blue, Red/Purple, Green, Gold & Expo Line Wayside Delays



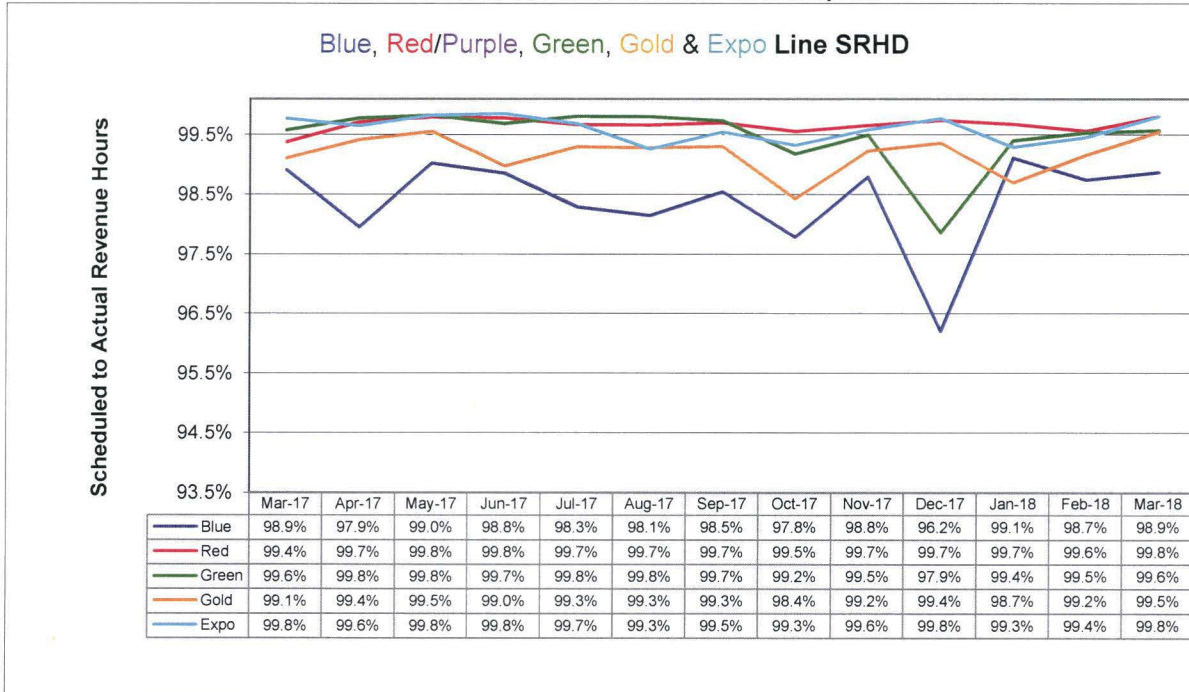
	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18
Blue	14	208	32	0	155	85	7	0	42	299	46	20	19
Red	50	21	14	3	30	21	11	37	0	0	25	0	18
Green	7	1	0	0	7	0	0	52	33	155	0	0	2
Gold	0	16	0	76	1	0	17	9	30	0	0	56	0
Expo	28	2	1	0	0	5	0	76	3	31	91	5	0

Rail Service Performance

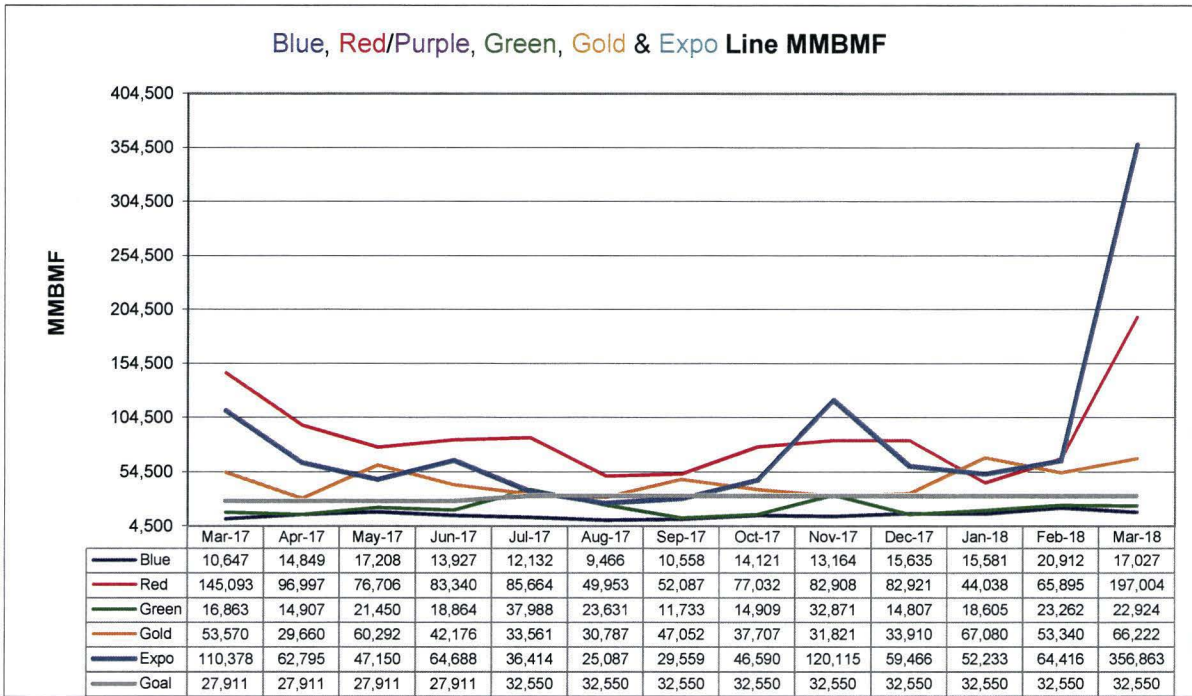
In Service On Time Performance by Line



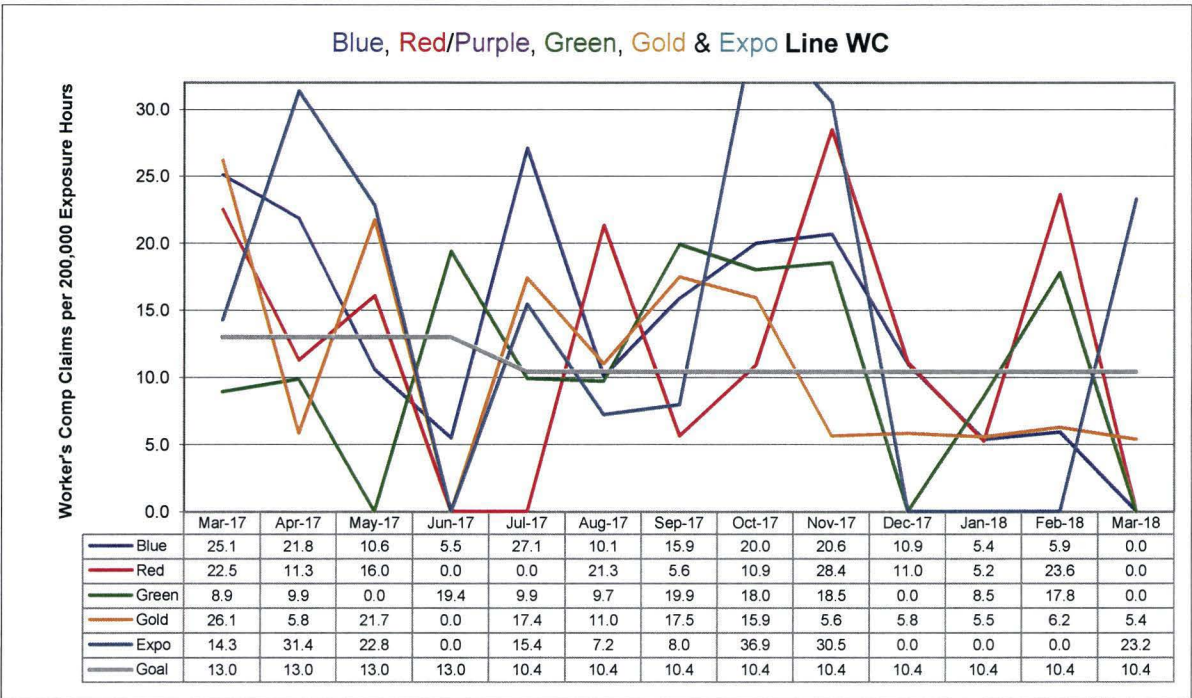
Ratio of Scheduled to Revenue Hours Delivered by Line



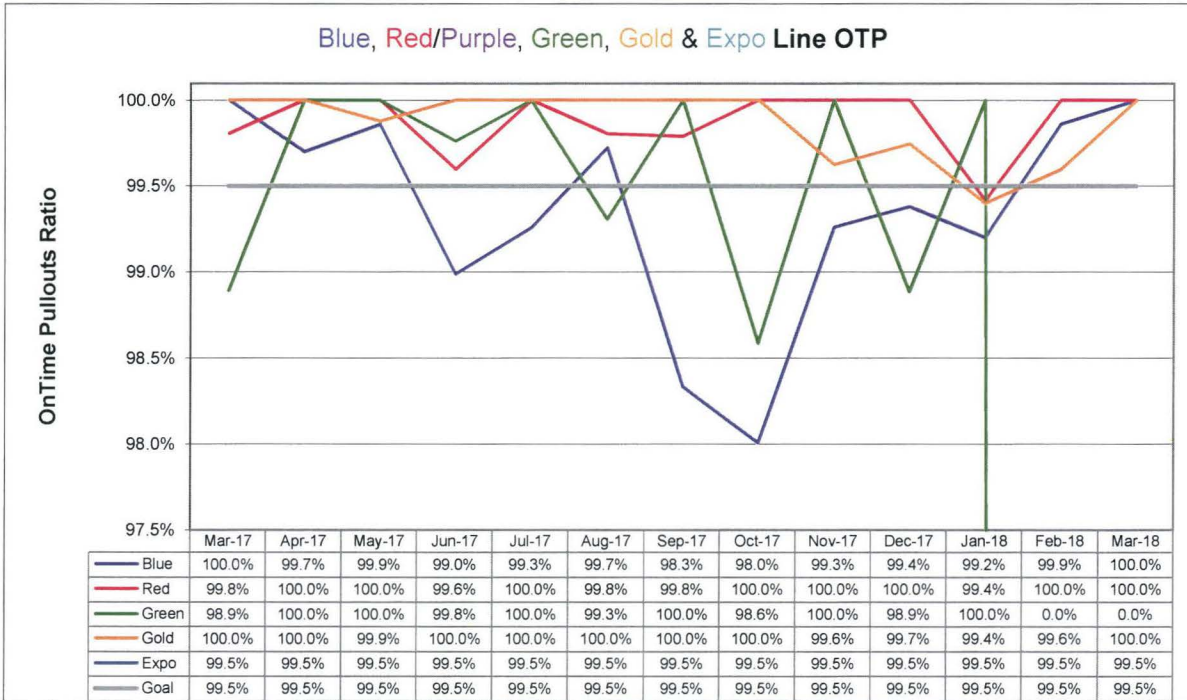
Mean Miles Between Mechanical Failures by Line



Workers Comp Claims by Line

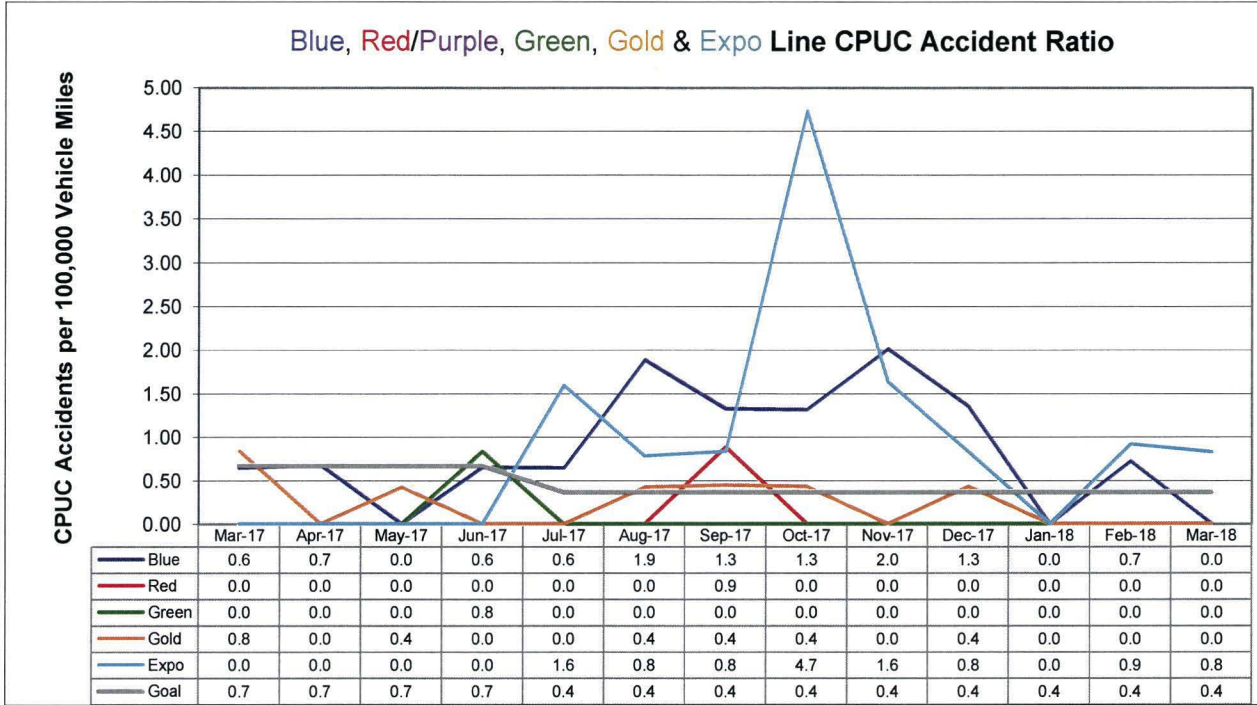


On-Time Pullouts Ratio by Line

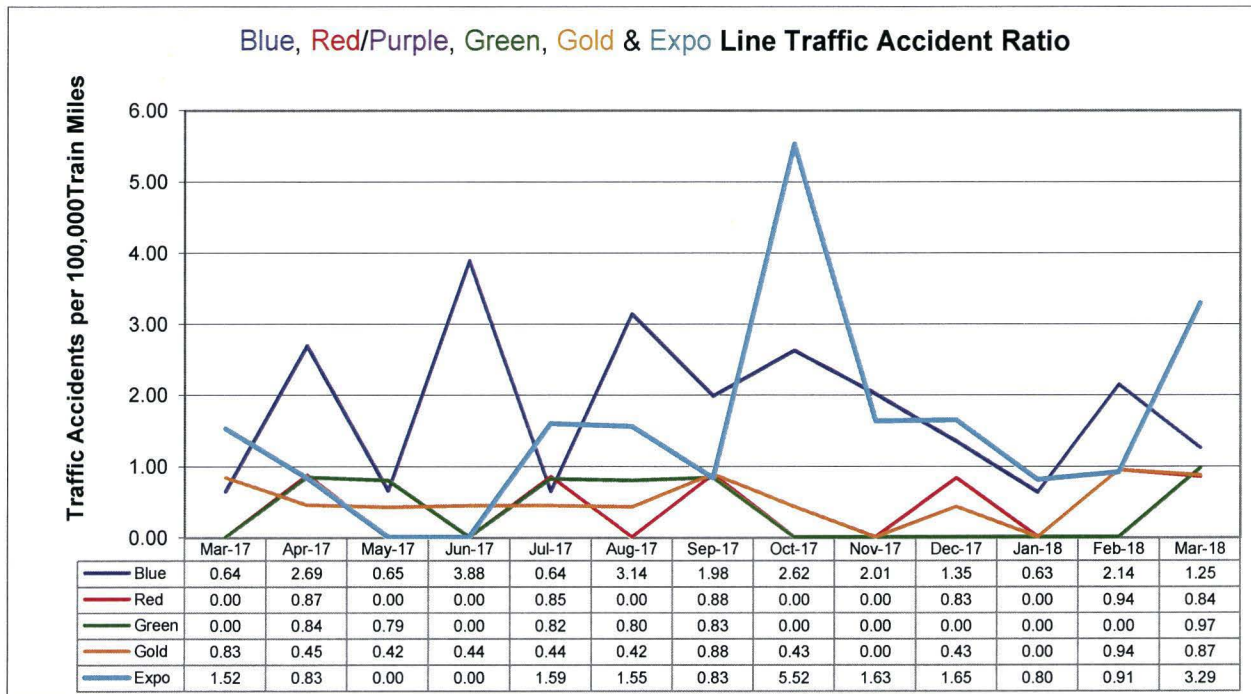


Rail Safety Performance

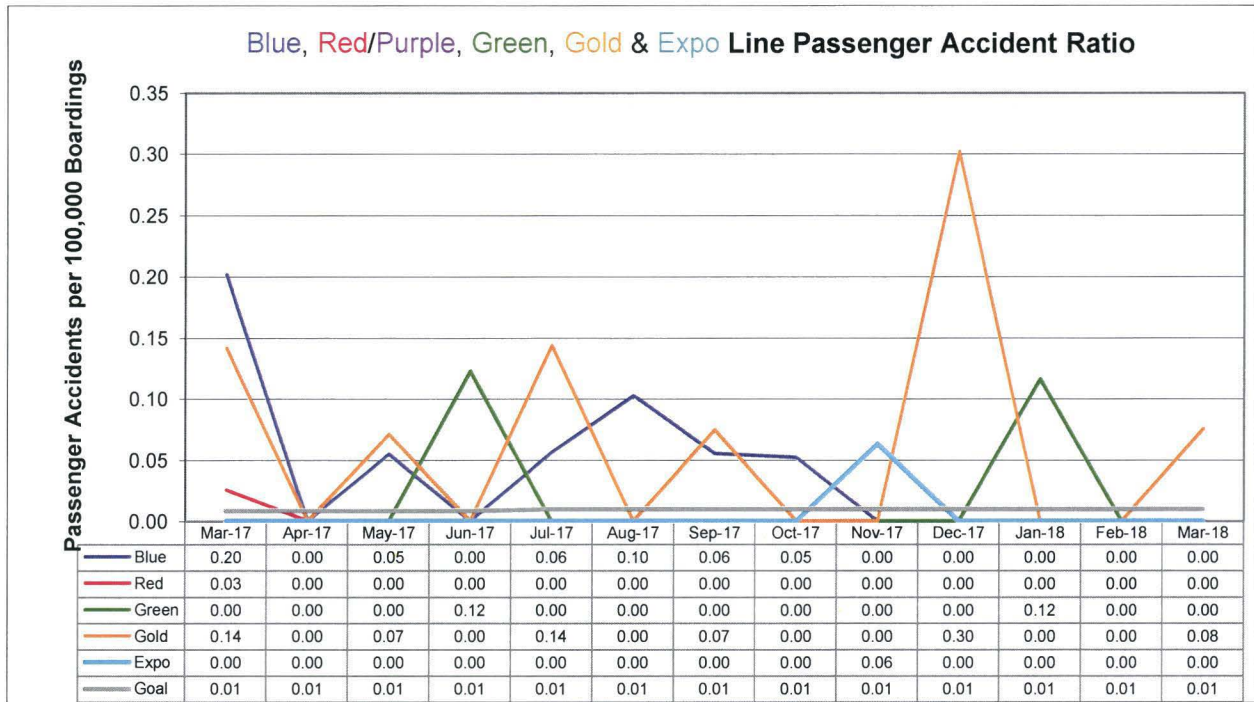
CPUC REPORTABLE ACCIDENTS PER 100,000 TRAIN MILES



TRAFFIC ACCIDENTS PER 100,000 TRAIN MILES

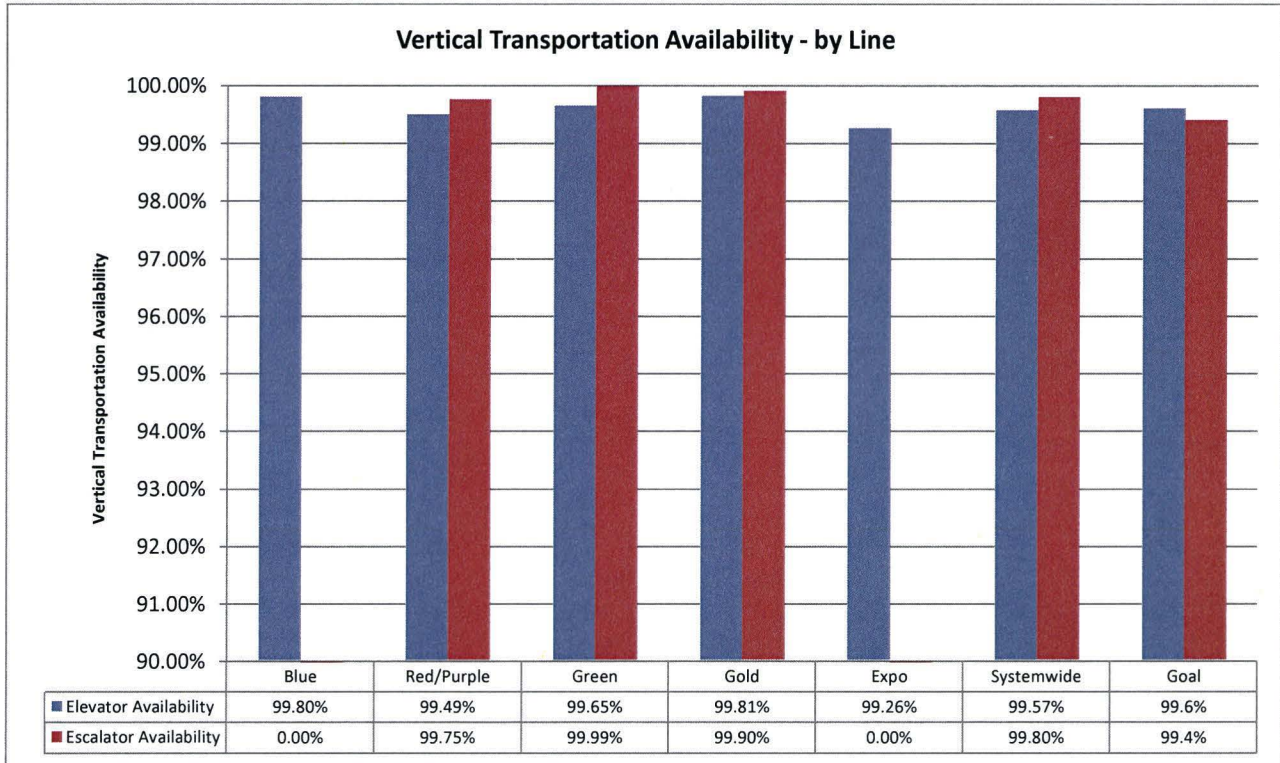


PASSENGER ACCIDENTS PER 100,000 BOARDINGS

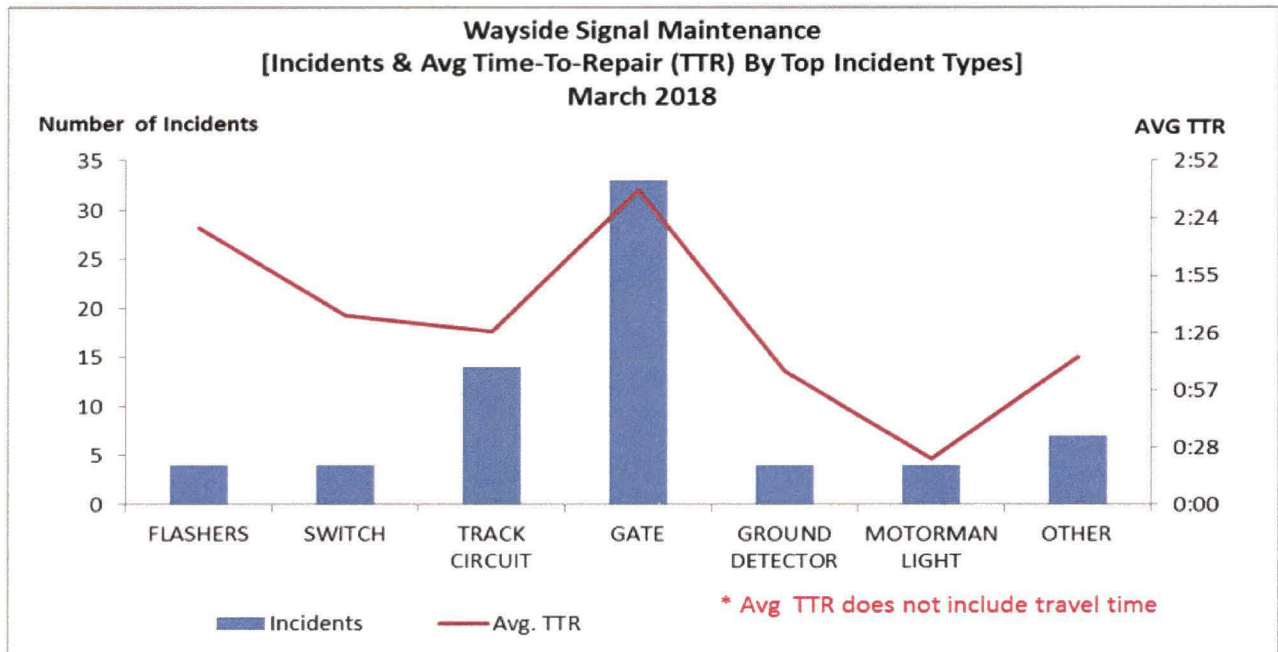
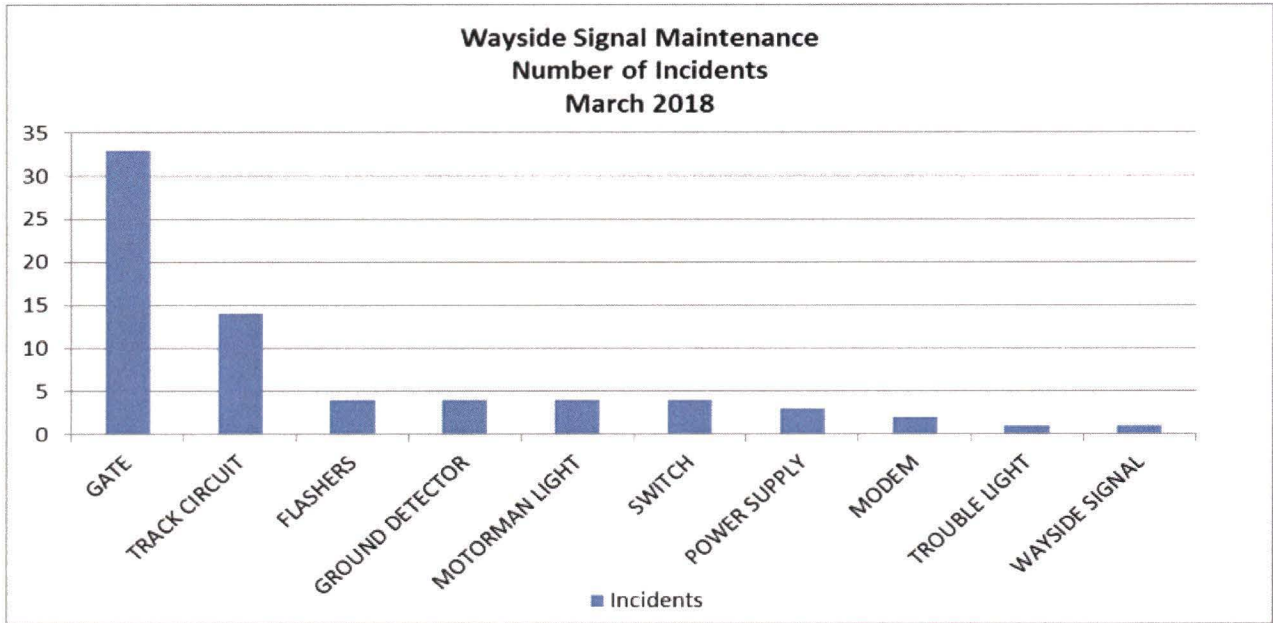


Systemwide Vertical Transportation Availability by Line

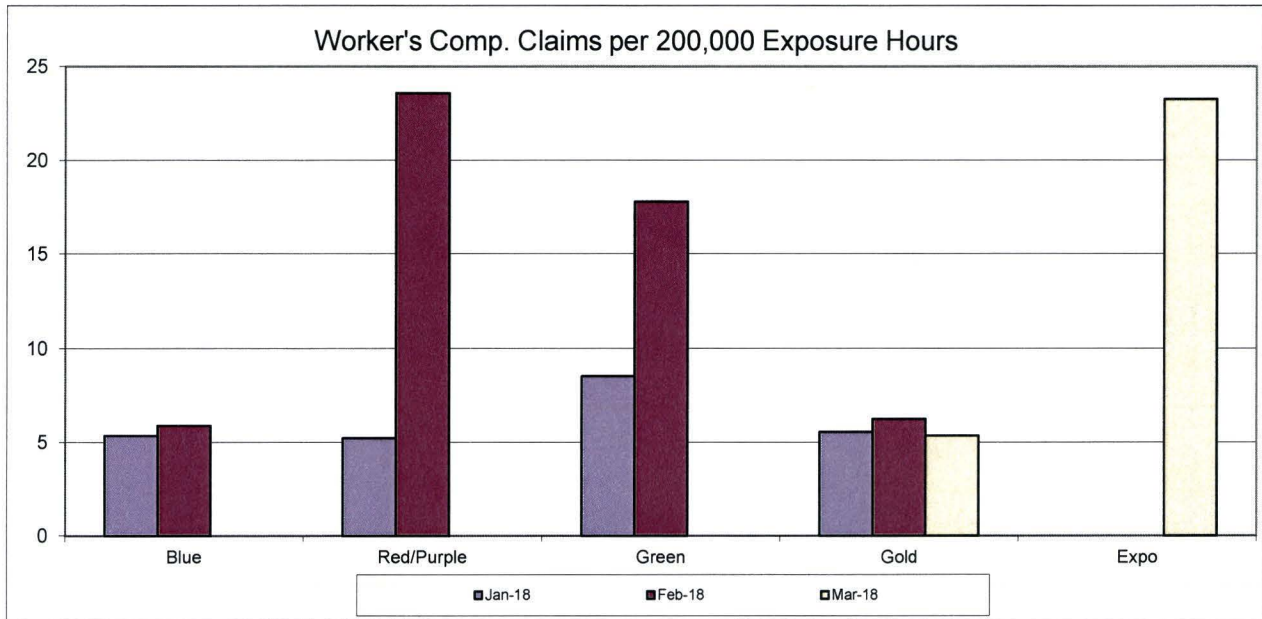
Mar 2018



Note: No Escalators at Blue and Expo Lines



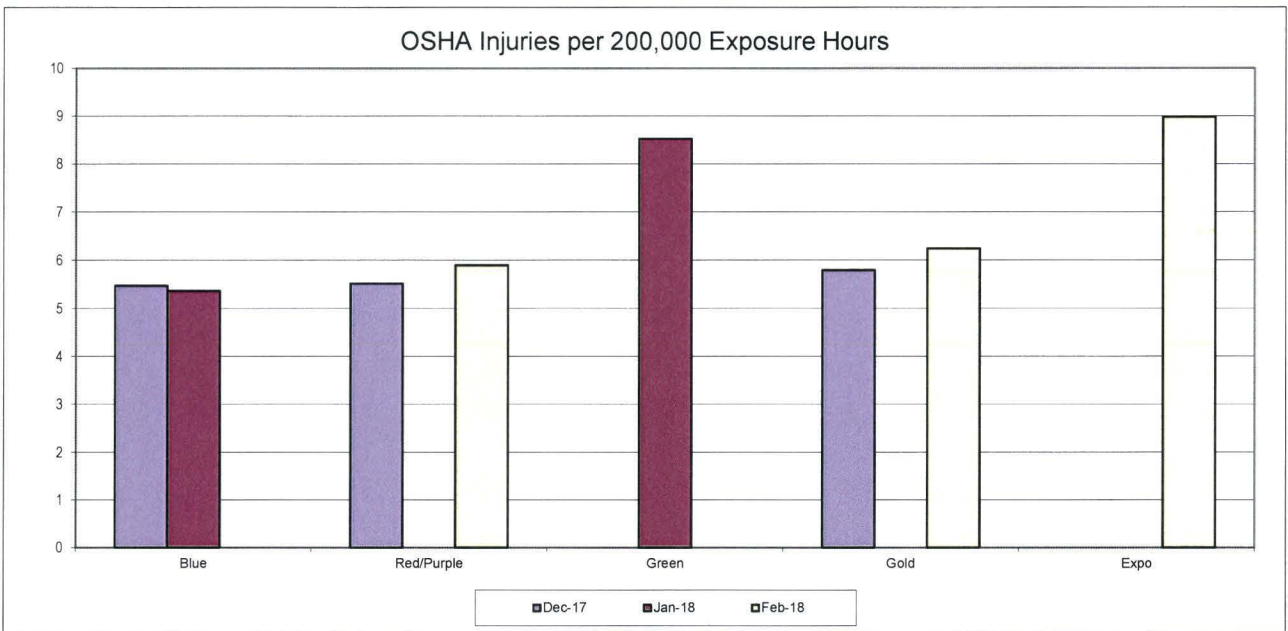
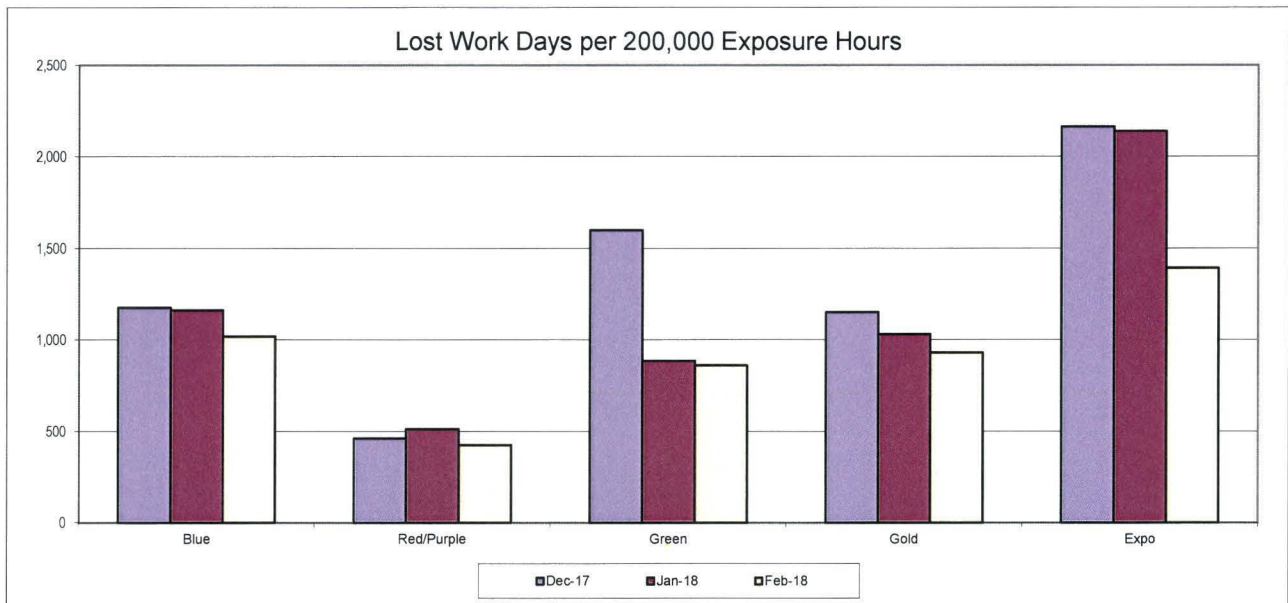
Worker's Comp. Claims
Jan 2018 - Mar 2018
3 Month Comparison



Lost Work Days and OSHA Injuries

Dec 2017 - Feb 2018

3 Month Comparison



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

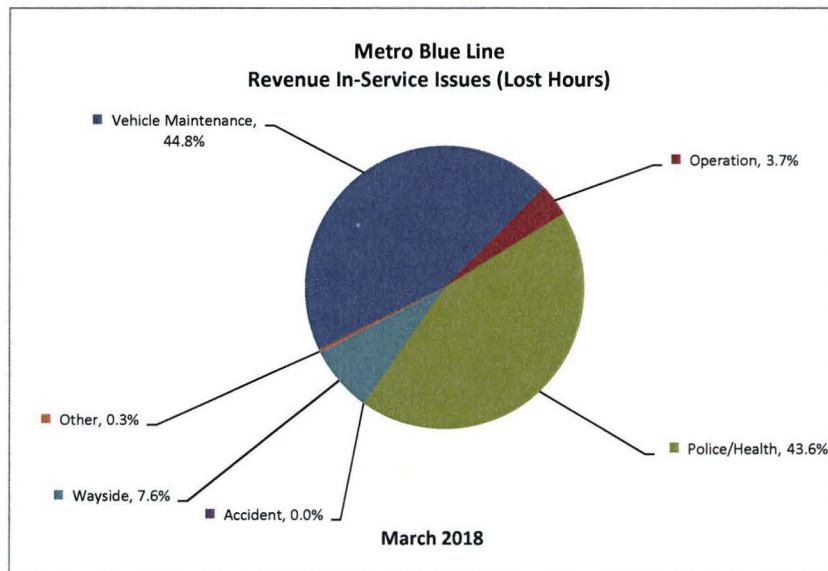
BLUE LINE

Out of a total of 20,894 hours operated, there were approximately 253 total hours of service delays.

March 2018 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	20,641	98.8%
Cancelled + Delayed Hours	253	1.2%
Total Revenue Hours	20,894	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	6	9.4	3.7%
Accidents	0	0.0	0.0%
Vehicle Maintenance	41	113.2	44.8%
Wayside	2	19.3	7.6%
Police & Health	19	110.2	43.6%
Other	5	0.8	0.3%
Total	73	252.9	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



March 2018 Blue Line incidents causing delay were as follows:

Operations Incidents:

3/2/2018 3:06:00 PM - Incident# 2976188 (0 lost trips, 10 lost minutes)

T-231 requests to enter the main line with transfer cars 217,205 to Green Line.

3/2/2018 8:50:00 PM - Incident# 2976294 (0 lost trips, 10 lost minutes)

Transfer train from Green to Blue Line preventing routing for northbound train at 1N. Therefore, transfer train routed in to the Willowbrook pocket first.

3/5/2018 1:33:00 PM - Incident# 2977172 (0 lost trips, 15 lost minutes)

Train Delay (Relay Train)

3/13/2018 4:40:00 PM - Incident# 2980638 (2 lost trips, 346 lost minutes)

Rule Violation (2012: Indifference to duty)

Train 102

T-201

(244A)-302-241

Northbound, Track 1 103Rd street station.

3/20/2018 3:22:00 PM - Incident# 2983496 (0 lost trips, 6 lost minutes)

Rule Violation

Train 119

T-005

(245A)-241-235

Southbound, Track 2 Washington station.

3/24/2018 11:01:00 AM - Incident# 2985128 (1 lost trip, 174 lost minutes)

Train Operator T-415 requested to be relieved at Transit Mall station due to her son being in ICU.

Train 106

T-415

1108-1106-1107

Northbound, Track 1 Transit Mall station.

Vehicle Maintenance Incidents:

3/1/2018 7:14:00 AM - Incident# 2975437 (0 lost trips, 9 lost minutes)

Train 118 reports door problems at 7th and Metro. car 239 5/6 and 1/2

3/1/2018 2:00:00 PM - Incident# 2975645 (2 lost trips, 349 lost minutes)

Train would not engage street run.

Train 105

T-322

(1092) 1102 1103

Track 2 Southbound Willow station

3/2/2018 5:18:00 AM - Incident# 2975911 (0 lost trips, 20 lost minutes)

Imperial signal 4N, Train-602 T-528 cars 302233//247 with spin slide activation-no movement.

3/2/2018 11:59:00 PM - Incident# 2975790 (1 lost trip, 177 lost minutes)

Propulsion / Dynamic Brakes

Train 104

T-307

(240)-245-242

Southbound, Track 2 at 2S Junction.

3/3/2018 7:20:00 PM - Incident# 2976571 (0 lost trips, 8 lost minutes)

Train 103 (249,236,229) T-324, Wardlow Station, track 2 reports friction brake fault, no movement.

3/4/2018 12:07:00 AM - Incident# 2976596 (1 lost trip, 174 lost minutes)

Operator reports of no horn on car #249 A.

T-521

Train #109

Cars (249 A)-236-229

Washington St.

Southbound TRk#2

3/5/2018 5:00:00 AM - Incident# 2976860 (0 lost trips, 20 lost minutes)

Propulsion / Dynamic Brakes (No transition from cab to street run)

(1096B)-1095-1074

Train 102

T-300

Metro. Southbound, Track 2

3/5/2018 6:39:00 AM - Incident# 2976920 (0 lost trips, 6 lost minutes)

Out Late due to no movement in the yard.

1089-1078-1098

Train 110

T-54

Blue line yard, southbound

3/5/2018 2:13:00 PM - Incident# 2977194 (0 lost trips, 4 lost minutes)

Door remains open

T-330

Train101

1103-(1105)-1107

Transit Mall Track 1 N/B

3/5/2018 11:38:00 PM - Incident# 2977359 (1 lost trip, 167 lost minutes)

Train 112 is reporting Propulsion faults with a 35MPH speed restriction LRV 302B..

Train 112

T-415

LRV'S 302 240-(238B)

Florence Station, track 2, southbound.

3/20/2018 5:07:00 PM - Incident# 2983538 (1 lost trip, 167 lost minutes)

Train 601 reports flats on 1112B

T-287, Train 601

Track 4, West, 23rd

(1112B)-1116-1078

3/20/2018 9:56:00 PM - Incident# 2983584 (1 lost trip, 167 lost minutes)

101A lost cab signal SB at Florence station.

3/21/2018 8:19:00 AM - Incident# 2983778 (1 lost trip, 167 lost minutes)

Reports of ATP failure

Train # 113

T-352

(101B)-157-127

Grand Station, Track #2, SB

3/21/2018 11:54:00 AM - Incident# 2983885 (0 lost trips, 15 lost minutes)

Reports of no movement

Train #104

T-291

(246)-240-302

Between Main yard interlocking and Wardlow Station

Track #2, SB

3/21/2018 1:06:00 PM - Incident# 2983926 (5 lost trips, 854 lost minutes)

Reports of no movement

Train # 108

T-26

230-301-239

2s Willow Interlocking

Track #2, SB

3/21/2018 6:11:00 PM - Incident# 2984055 (5 lost trips, 866 lost minutes)

Emergency Brake self applied.

T-59

Train 121

164-154-(112)

Florence IL. Track 2 S/B

3/22/2018 10:49:00 AM - Incident# 2985156 (1 lost trip, 167 lost minutes)

Car Body (Interior/Exterior) (Broken Wiper Blades)
(1090)-1121-1108
Train 109
T-549
Transist Mall, Northbound, Track 2

3/22/2018 4:38:00 PM - Incident# 2984483 (1 lost trip, 167 lost minutes)

ATP/Computer problems
Train 124
T-194
(101) 154
Track 2, 7th/MC

3/22/2018 7:30:00 PM - Incident# 2984533 (0 lost trips, 7 lost minutes)

Auto Train Protection (Speed Limit)
Train 105
T-321
(K1092A), 1113, 1074
Washington Station, Track 2, Southbound

3/23/2018 7:00:00 AM - Incident# 2984694 (0 lost trips, 6 lost minutes)

Overspeed Indication won't allow movement without ATP Bypass
Train 111
T-352
(101B)142-167
Willow Pocket, Track 1, Northbound

3/26/2018 8:28:00 AM - Incident# 2985622 (1 lost trip, 192 lost minutes)

Friction Brakes
(144)-103-160
Train 107
T-400
Slauson, Southbound, Track 2

3/27/2018 6:00:00 AM - Incident# 2986069 (2 lost trips, 334 lost minutes)

Train 116 reporting a air leak on LRV 249
T-201
LRV'S 231 (249)301
Willow Station, track 2, northbound.

3/27/2018 8:20:00 AM - Incident# 2986113 (0 lost trips, 6 lost minutes)

Train 116 reporting propulsion faults with a 35mph speed restriction.
Train 116
T-201
LRV'S 236-239-242
Florence Station, track 1, northbound.

3/27/2018 8:27:00 AM - Incident# 2986171 (2 lost trips, 334 lost minutes)

Train reports propulsion faults unable to cleared.

Train 111

T-262

LRV'S 112-151-(164A)

Firstone Station, track 2, southbound.

3/27/2018 5:54:00 PM - Incident# 2986373 (0 lost trips, 6 lost minutes)

ATP failure re-occurring.

Train 110

T-005

(101A), 154, 159

Venice Interlocking, Track 2, Southbound

3/28/2018 5:17:00 PM - Incident# 2986795 (1 lost trip, 167 lost minutes)

Train 104 (1108,1075,1102) T-363, Grand Statio, track 2 reports reoccurring doors not opening entire consist except for the trailing car.

3/30/2018 9:15:00 AM - Incident# 2987602 (1 lost trip, 180 lost minutes)

Train 116 reporting no movement at San Pedro Station.

T-201

LRV'S 1109-1113-117

San Pedro Station, track 2,southbound.

3/30/2018 2:31:00 PM - Incident# 2987727 (1 lost trip, 165 lost minutes)

Train 107 (241,242,248) T-264, Mainyard Interlocking, track 1, northbound reports 5 MPH speed code with no train in the circuit ahead.

Wayside Incidents:

3/1/2018 12:14:00 PM - Incident# 2975551 (0 lost trips, 4 lost minutes)

Signal: Signal Power Failure

SCADA

Florence, Nadeu and 92nd Street crossings.

3/23/2018 12:09:00 PM - Incident# 2984843 (7 lost trips, 1,152 lost minutes)

A loss of traction power from Wardlow Station to Transit Mall,tracks 1&2.

Police & Health Incidents:

3/2/2018 4:42:00 AM - Incident# 2975837 (0 lost trips, 20 lost minutes)

108th St grade crossing, LAFD advises fire hoses across tracks to support structure fire incident.

3/3/2018 2:42:00 PM - Incident# 2976494 (0 lost trips, 6 lost minutes)

Dixon with LASD reports to hold train 110 at Willowbrook Station due to a complaint received on board car 236.

3/3/2018 6:00:00 PM - Incident# 2976539 (6 lost trips, 1,044 lost minutes)

Train 107 (149,154,159) reports emergency responders close to track 1 at 18th & Flower.

3/3/2018 8:27:00 PM - Incident# 2976566 (0 lost trips, 8 lost minutes)

Train 102 (241,230,237) T-289 requests authorization to exit the train and investigate report of an individual falling in between train cars.

3/4/2018 8:50:00 PM - Incident# 2976789 (0 lost trips, 10 lost minutes)

LASD instructed control to hold all trains outside of Artesia Station. due to a report of a juvenile may be being held without her will.

3/5/2018 4:36:00 PM - Incident# 2977261 (0 lost trips, 6 lost minutes)

Man with a shopping cart fighting with LAPD.

3/5/2018 9:39:00 PM - Incident# 2977326 (0 lost trips, 9 lost minutes)

Trespasser at Nadeau Crossing.

3/7/2018 3:28:00 PM - Incident# 2978135 (6 lost trips, 1,001 lost minutes)

LASD instructs train 106 to hold at Washington Station due to a report received regarding a male hispanic wearing green clothes, white shoes.

3/7/2018 4:00:00 PM - Incident# 2978149 (1 lost trip, 167 lost minutes)

Train 121 (103,141,163) reports an individual was holding the doors of the train and another individual brandishing a knife on the platform.

3/8/2018 12:52:00 PM - Incident# 2978546 (0 lost trips, 12 lost minutes)

Vehicle Vs Bicycle (Non MTA)

3/12/2018 2:37:00 PM - Incident# 2980071 (7 lost trips, 1,168 lost minutes)

Track 2 blocked at 21st and Long Beach (between Willow and PCH stations). Traffic accident MTA not involved.

3/18/2018 12:57:00 AM - Incident# 2982360 (0 lost trips, 10 lost minutes)

Emergency: Patron Sick

Train # 108

T-149

(104B)-164

SB, Anaheim Station, Track #2

3/19/2018 12:12:00 AM - Incident# 2982578 (0 lost trips, lost minutes)

LBPD Zeidan called regarding the arrest of a suspect that had bomb equipment and wanted all trains to by-pass Pacific Coast Hwy. Station. No service made for 5 Northbound and 3 southbound Trains.

3/22/2018 7:49:00 AM - Incident# 2984239 (0 lost trips, 6 lost minutes)

Sick Individual (Missing Person located on board train)

3/22/2018 9:52:00 AM - Incident# 2984372 (0 lost trips, 12 lost minutes)

Trespasser-Elderly gentleman on ROW at 16th and Long Beach attempting to cross the street.

3/25/2018 1:20:00 PM - Incident# 2985375 (22 lost trips, 2,760 lost minutes)

Car went through the fence blocking tracks 1 and 2 at 52nd street and Long beach Avenue.

3/27/2018 6:06:00 AM - Incident# 2986056 (0 lost trips, 12 lost minutes)

Train 102/T-300 reporting a patron on board having a seizure at Transit Mall Station.

3/27/2018 6:12:00 AM - Incident# 2986083 (0 lost trips, 10 lost minutes)

Train 103/T-400 reporting that a young later is being harass by a male passenger on board his train.

3/28/2018 6:56:00 PM - Incident# 2986822 (0 lost trips, 7 lost minutes)

Train 110 (155,154,107) T-034, Transit Mall reports train is unable to depart due to an individual on a wheelchair blocking the path of the train.

3/29/2018 10:14:00 PM - Incident# 2987343 (2 lost trips, 344 lost minutes)

Train 671 (1054,1045,1042) T-519, Washington & Flower junction reports vehicle on track 1.

Other Incidents:

3/1/2018 6:21:00 AM - Incident# 2975424 (0 lost trips, 5 lost minutes)

5 minute delay due to dirty train at 7th and Metro. Train 108 T-211 reports feces on car 302

3/4/2018 5:55:00 PM - Incident# 2976766 (0 lost trips, 7 lost minutes)

Train 104 (1106,1090,1108) T-549, 103rd St. Station reports fire by the signals case at 103rd St. Station.

3/16/2018 4:44:00 PM - Incident# 2982034 (0 lost trips, 6 lost minutes)

Fight on board consist

Train 102

T-201

(155A)-163-135

Northbound, Track 1 Compton station.

3/22/2018 9:10:00 AM - Incident# 2985147 (0 lost trips, 12 lost minutes)

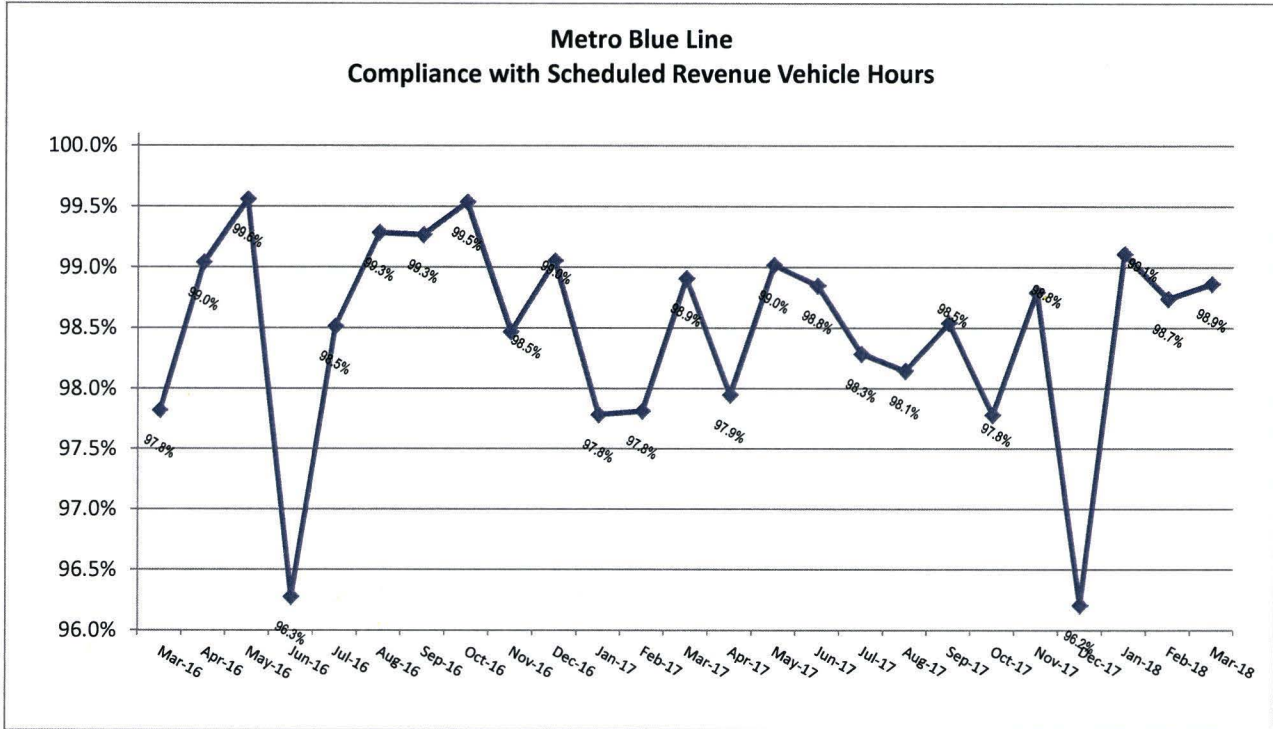
Pulling Emergency Door Release or T

3/24/2018 2:27:00 AM - Incident# 2985044 (0 lost trips, 20 lost minutes)

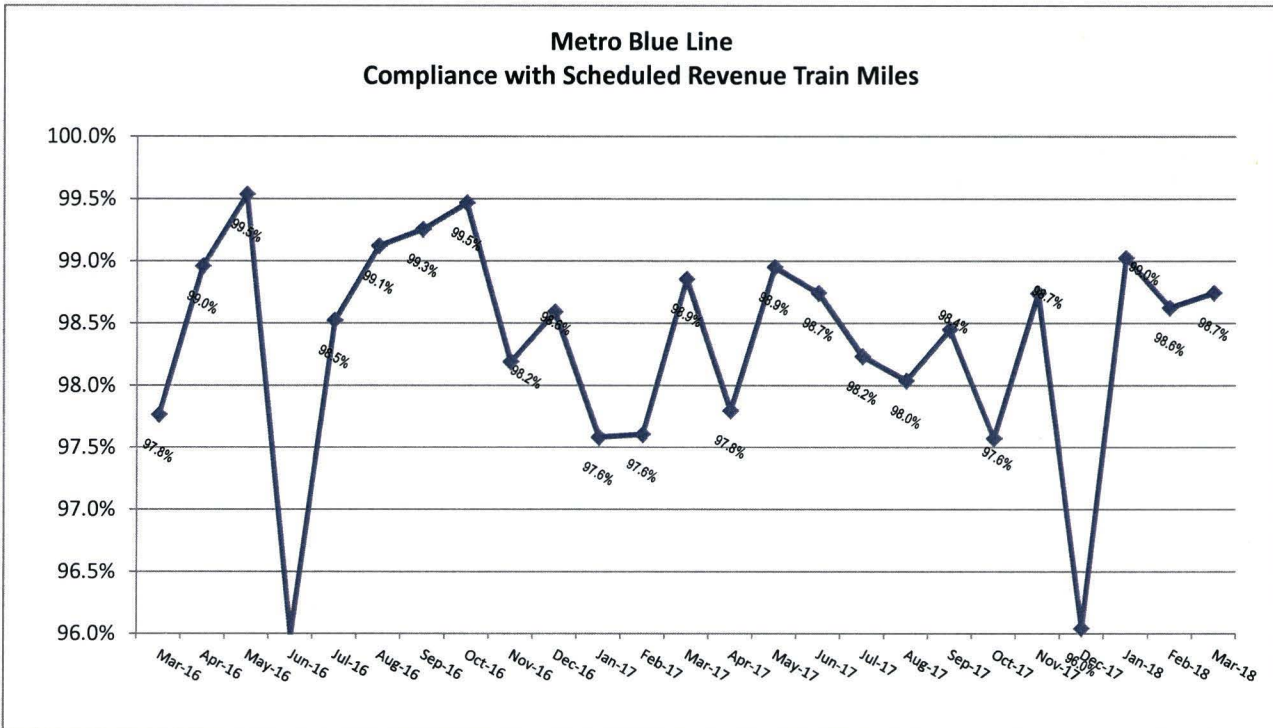
Leaning Fence into Track 1 side causing an obstruction track one side.

MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

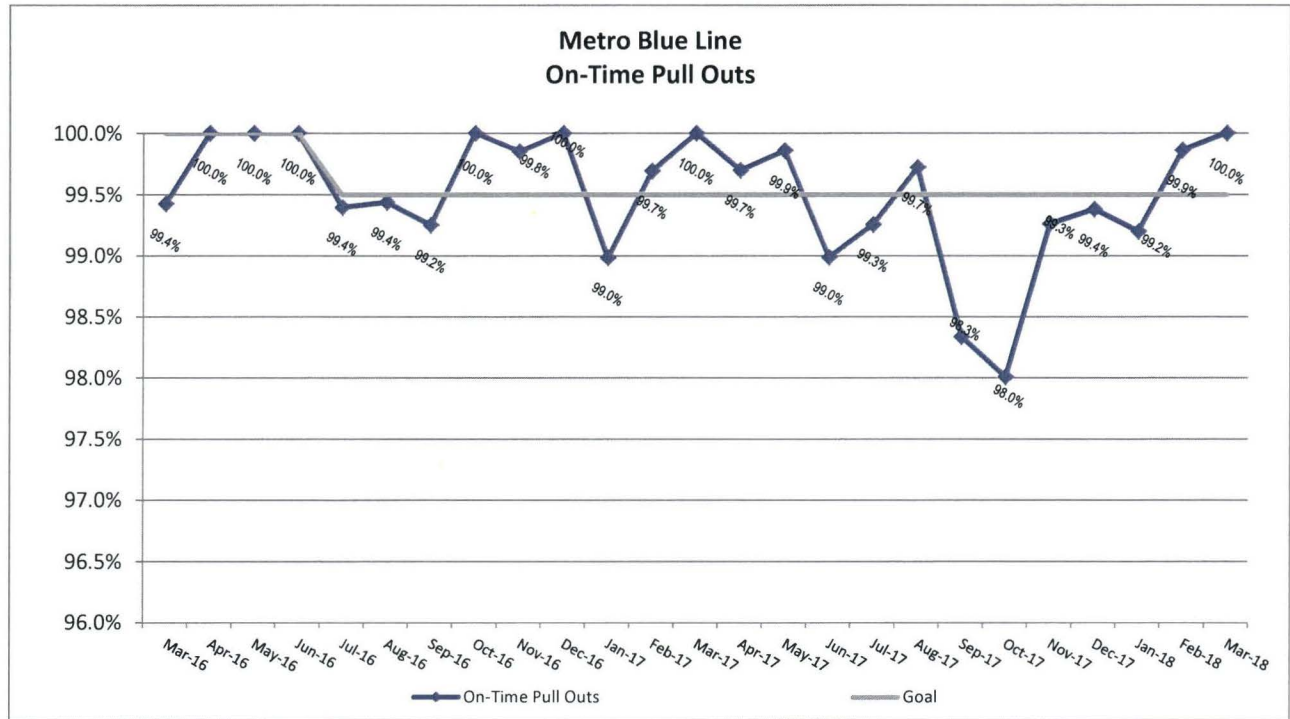
COMPLIANCE WITH SCHEDULED VEHICLE HOURS



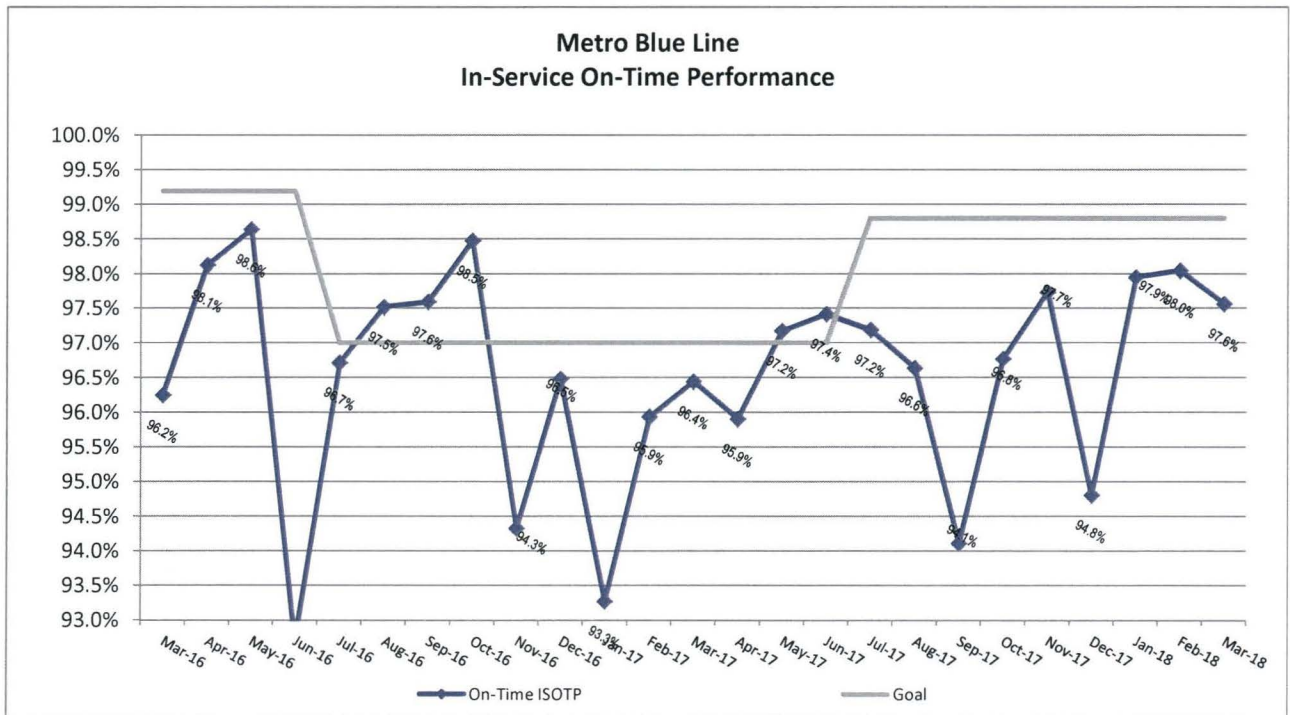
COMPLIANCE WITH SCHEDULED TRAIN MILES



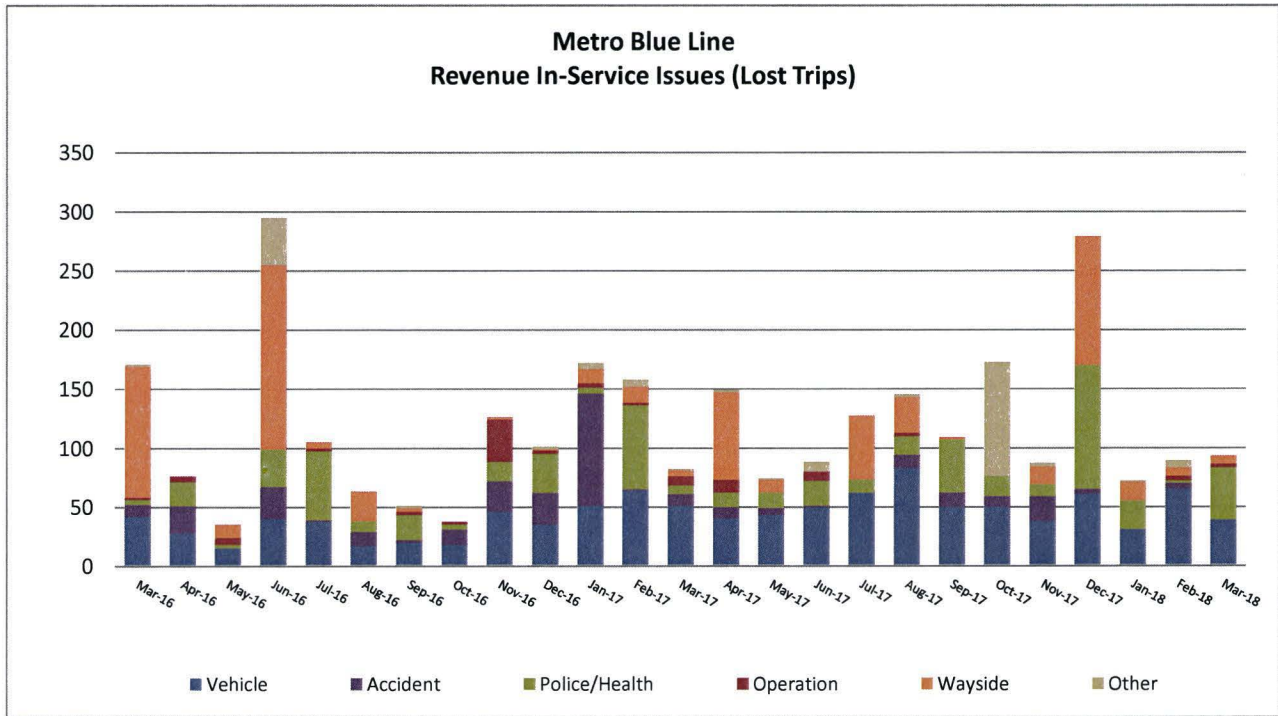
ON-TIME PULL OUTS



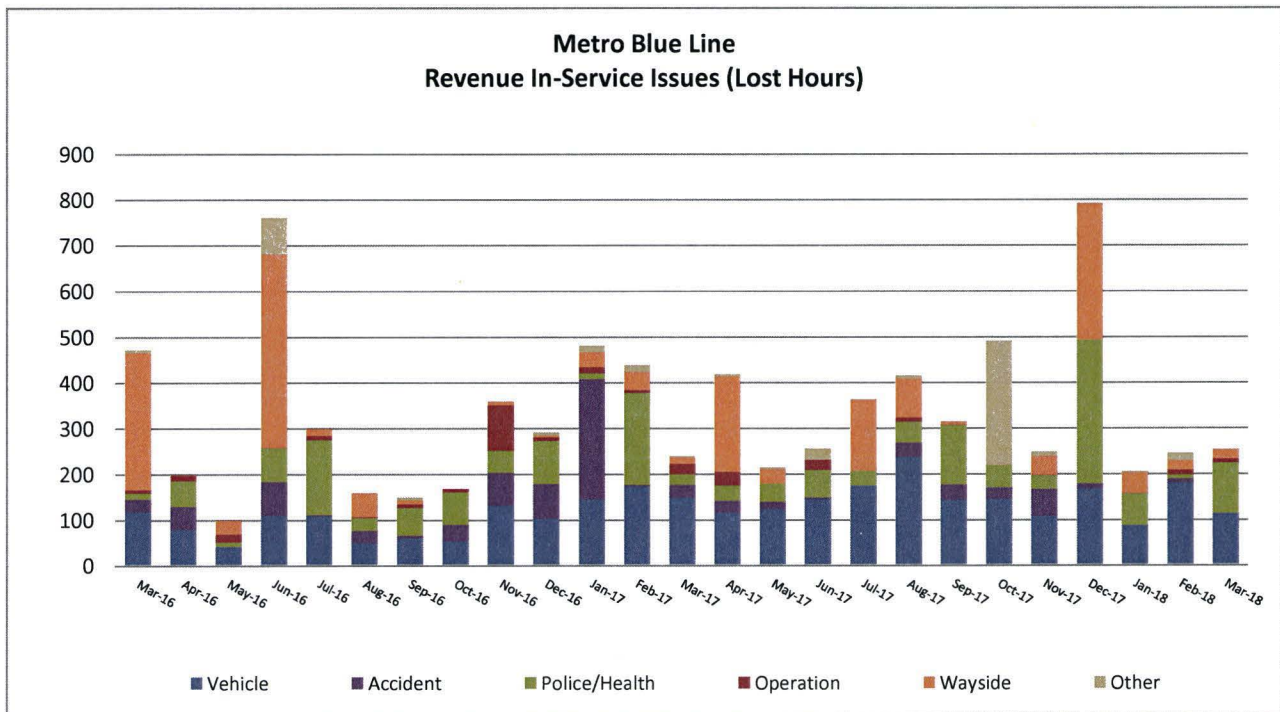
IN-SERVICE ON-TIME PERFORMANCE CHART



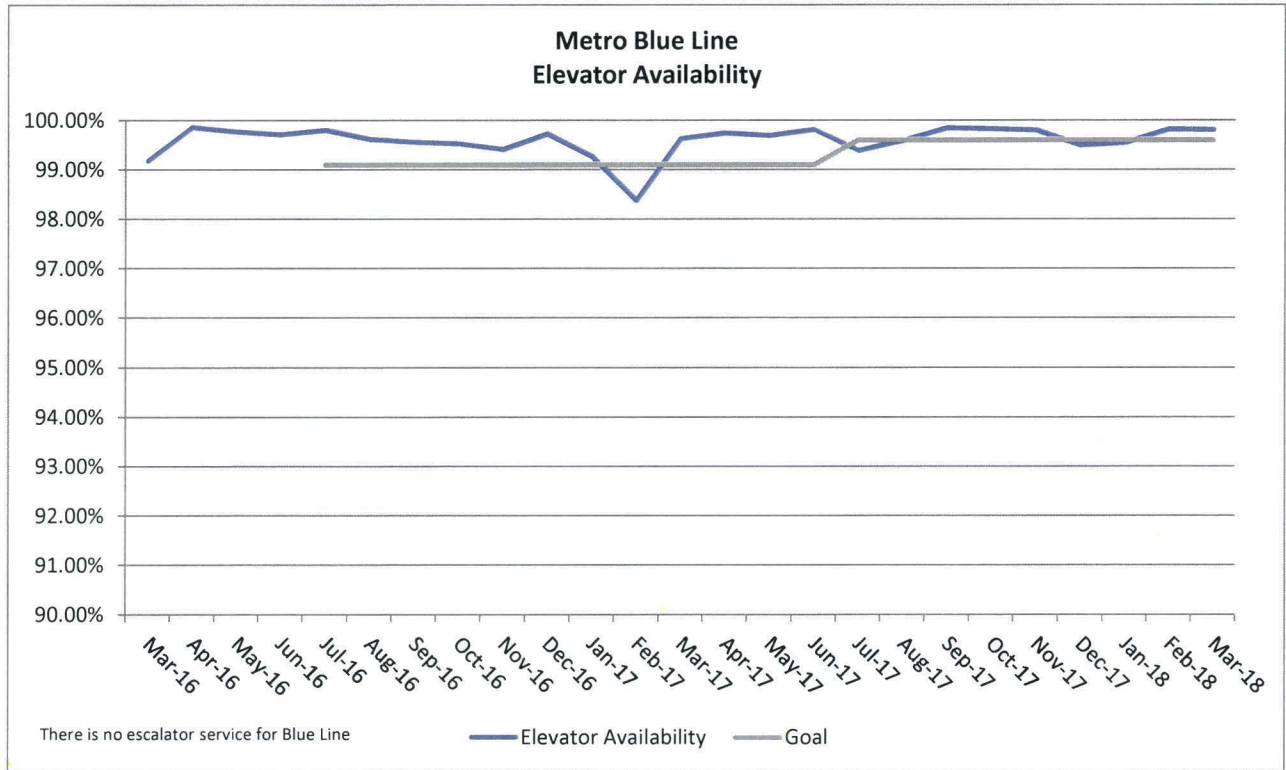
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



RED LINE

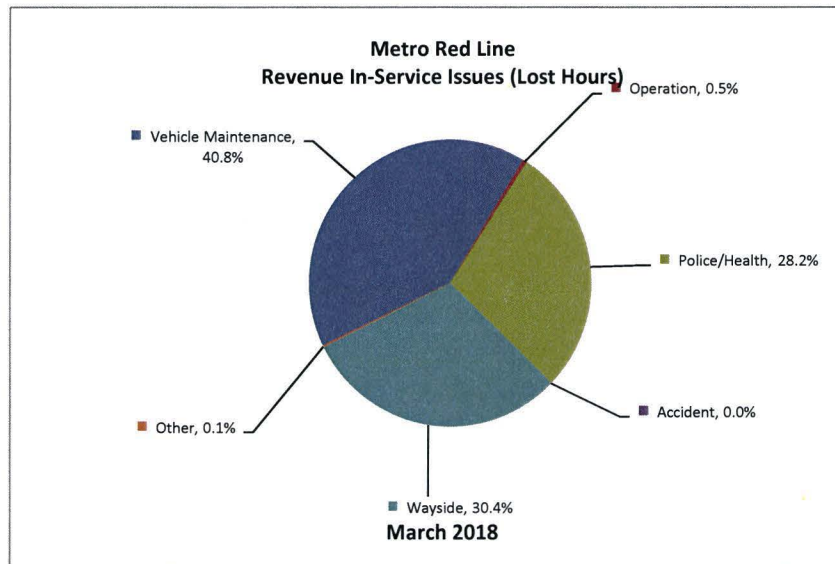
Out of a total of 26,845 hours operated, there were approximately 58 total hours of service delays.

March 2018 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	26,787	99.8%
Cancelled + Delayed Hours	58	0.2%
Total Revenue Hours	26,845	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	2	0.3	0.5%
Accidents	0	0.0	0.0%
Vehicle Maintenance	10	23.6	40.8%
Wayside	1	17.6	30.4%
Police & Health	14	16.3	28.2%
Other	1	0.1	0.1%
Total	28	57.9	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



March 2018 Red Line incidents causing delay were as follows:

Operations Incidents:

3/8/2018 5:40:00 AM - Incident# 2978350 (0 lost trips, 12 lost minutes)

Operator reports no movement due to loss of power on train# 205 at North Hollywood interlocking AR west.

Train 205

T-435

Cars (551), 552, 589, 590, 577, 578.

3/24/2018 12:13:00 PM - Incident# 2985139 (0 lost trips, 5 lost minutes)

TRACS indicates signal over run at N/H signal 8.

Train 209 T-378 (Alpha S) car 540.

Cars 601,602,533,534,539,(540)

Vehicle Maintenance Incidents:

3/5/2018 5:34:00 PM - Incident# 2977273 (0 lost trips, lost minutes)

M-839 reports a spill in car 564 and car needed to be cut out.

T_31

Train 213

Car 601,602,569, 570, 563, (564)

Union AR

3/6/2018 6:36:00 AM - Incident# 2977444 (1 lost trip, 155 lost minutes)

T-169 reports Emergency Brake Application going through Union Station East Interlocking. Train 209, cars (569), 570, 563, 564, 573, 574, YL/AL, Westbound.

3/8/2018 6:17:00 AM - Incident# 2978378 (2 lost trips, 311 lost minutes)

Operator reports heavy smoke coming from the dashboard.

Train 206

T-101

Cars (599) 600 579 580.

Civic Center AR westbound.

3/9/2018 3:38:00 PM - Incident# 2979089 (1 lost trip, 151 lost minutes)

Yard Control report Train 219 had ATP emergency brake application, will not be able to be dispatch per schedule.

3/12/2018 3:17:00 PM - Incident# 2980080 (1 lost trip, 161 lost minutes)

Friction Brake/No movement.

T-22

Train 206

(529)-520-527-522

Civic Center AR W/B

3/16/2018 5:13:00 AM - Incident# 2981717 (2 lost trips, 302 lost minutes)

CB-1 trip
525 (524) 521 530
T-80
Train 203
Civic AL East

3/19/2018 4:48:00 PM - Incident# 2983038 (0 lost trips, 8 lost minutes)

Miss aligned cab door lock.
T-138
Train 216
579-580-537-538-571-(572)
Hollywood/Western AL East

3/22/2018 5:34:00 PM - Incident# 2984513 (0 lost trips, 5 lost minutes)

Report of bouncy ride.
T-74
Train 203
Cars 599-600-565-(566)
7th Metro AL eastbound.

3/23/2018 4:04:00 PM - Incident# 2984932 (1 lost trip, 156 lost minutes)

Doors 1/3 off track in car 600.
Train 213
T-41
Cars 573,574,599,(600),593,594
Vermont/Santa Monica AL EB.

3/23/2018 8:32:00 PM - Incident# 2984993 (1 lost trip, 161 lost minutes)

Operator reports train not releasing friction brakes, all doors are closed.
Cars: 511 512 (513) 514 525 524.
Westlake MacArthur Station, AL track E/bound.
Train 216.
T-276.

3/25/2018 11:14:00 PM - Incident# 2985466 (0 lost trips, 10 lost minutes)

Car 582 doors 10 and 11 cut out
Train 206 T-166
North Hollywood AR East
Car # 535-536-581-(582)

Wayside Incidents:

3/2/2018 11:27:00 PM - Incident# 2976333 (7 lost trips, 1,055 lost minutes)

Power outage from 7th & Metro to Union. Power restored to all stations except for Union. Union had no power on the platform. RTU offline at Union

Police & Health Incidents:

3/3/2018 8:37:00 PM - Incident# 2976569 (0 lost trips, 10 lost minutes)

Altercations aboard trains
Train 206 T-367
Car 566
WB, Vermont Sunset, AL

3/6/2018 4:07:00 PM - Incident# 2977748 (1 lost trip, 149 lost minutes)

T-169 reports HVAC failure and a male patron smoking marijuana in car 568 at Hollywood/Vine AL.

3/7/2018 6:07:00 AM - Incident# 2977919 (0 lost trips, 7 lost minutes)

Union Station, Train-201 T-175 cars 533/534/595/596/541/542 with unresponsive remale on-baord car 596.
LAPD already onOscene and requested LAFD.

3/9/2018 10:44:00 AM - Incident# 2978935 (1 lost trip, 151 lost minutes)

Non responsive patron on Train 202 @ WW
T-179, Train 202
BR, East, WW
(517)-522-523-528

3/9/2018 11:39:00 AM - Incident# 2978957 (0 lost trips, 4 lost minutes)

Metro Security reports a unattended grey backpack
Train 207
T-271
Cars 585-(586)-587-588
7th/Metro AR West

3/13/2018 7:24:00 AM - Incident# 2980342 (0 lost trips, 6 lost minutes)

Male patron on board the train 211 requesting medical attention.

3/15/2018 3:42:00 PM - Incident# 2981559 (0 lost trips, lost minutes)

Report a male Hispanic having a seizure in car 537.

3/15/2018 4:14:00 PM - Incident# 2981585 (0 lost trips, 15 lost minutes)

Train # 203 Operator T-378, e/bound departing Wilshire Normandie B/L, reports a trespasser on the emergency walk.

3/16/2018 4:06:00 PM - Incident# 2982012 (1 lost trip, 151 lost minutes)

Report of unattended back pack on car 549.

3/18/2018 6:32:00 AM - Incident# 2982389 (0 lost trips, 5 lost minutes)

IDS alarm activated at HV AR East

3/18/2018 10:26:00 AM - Incident# 2982423 (0 lost trips, 5 lost minutes)

Male patron bleeding inside rail cars 501/518
T-179, Train 205
AR, NH, East
519-526-517-(518,501)-502

3/19/2018 10:30:00 PM - Incident# 2983099 (0 lost trips, 11 lost minutes)

CCTV reports unknown male when beyond the intrusion gate from 7th Metro AR walking westbound.

3/21/2018 3:22:00 PM - Incident# 2983993 (0 lost trips, 10 lost minutes)

T-23 reports trespassers walking on the ROW 300 ft. west of 7th/Metro AL.

3/22/2018 2:03:00 PM - Incident# 2984429 (0 lost trips, 5 lost minutes)

Train 206 reports person jumping into AL WV

T-15, Train 206

WV, East, AL Track

Lead 542, 541-538-537

3/28/2018 7:57:00 PM - Incident# 2986829 (3 lost trips, 451 lost minutes)

Train 202 received a report via Emergency Intercomm of an individual threatening passengers with a knife.

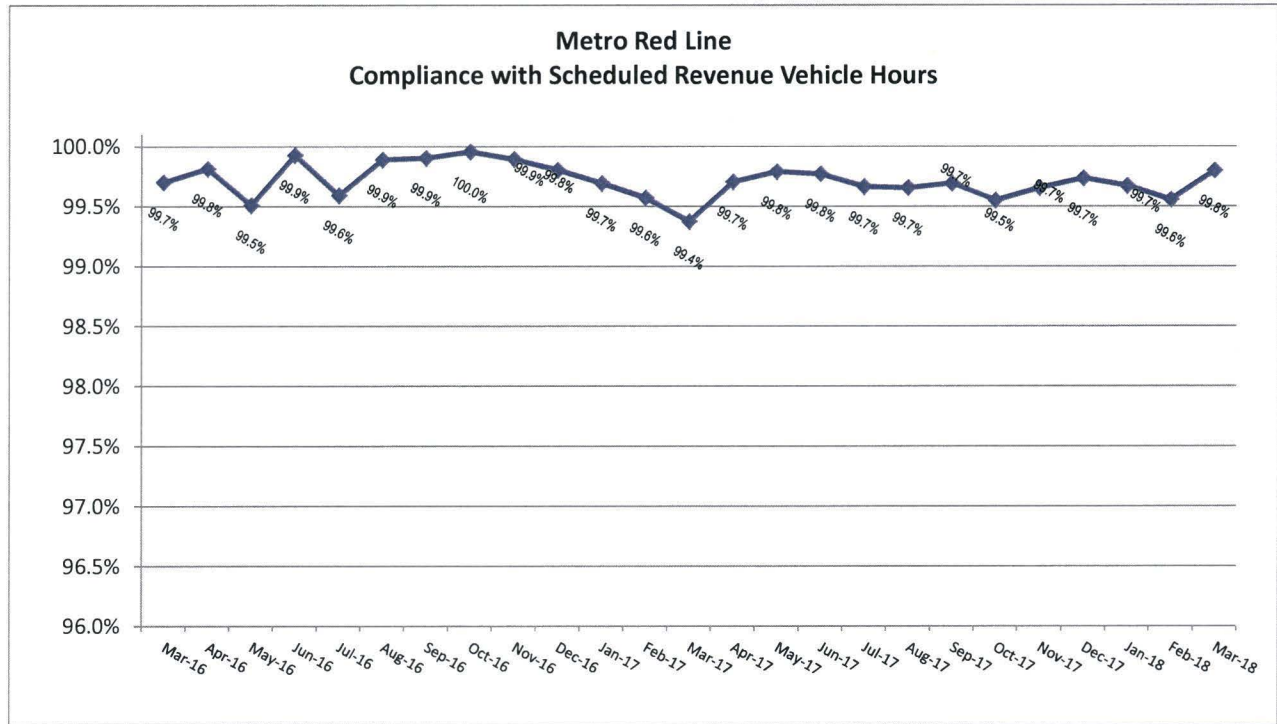
Other Incidents:

3/14/2018 3:22:00 AM - Incident# 2980742 (0 lost trips, 5 lost minutes)

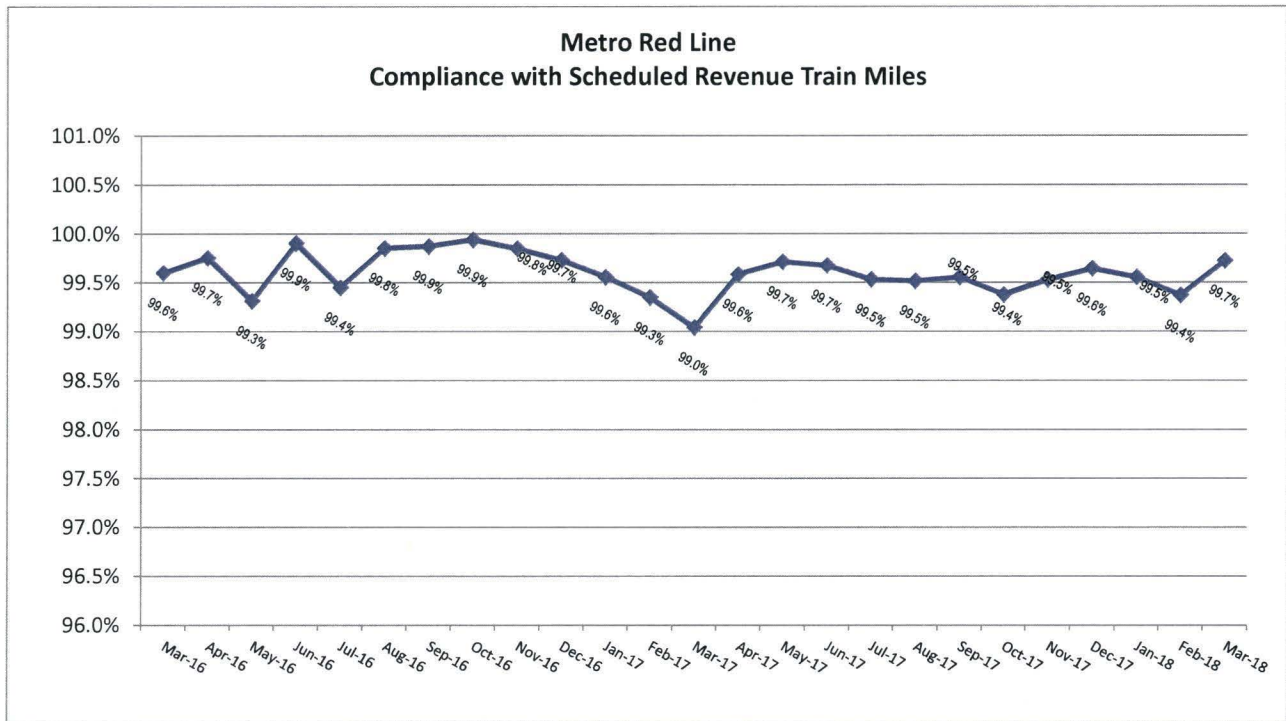
Yard Control reports no operator for Train 202.

MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

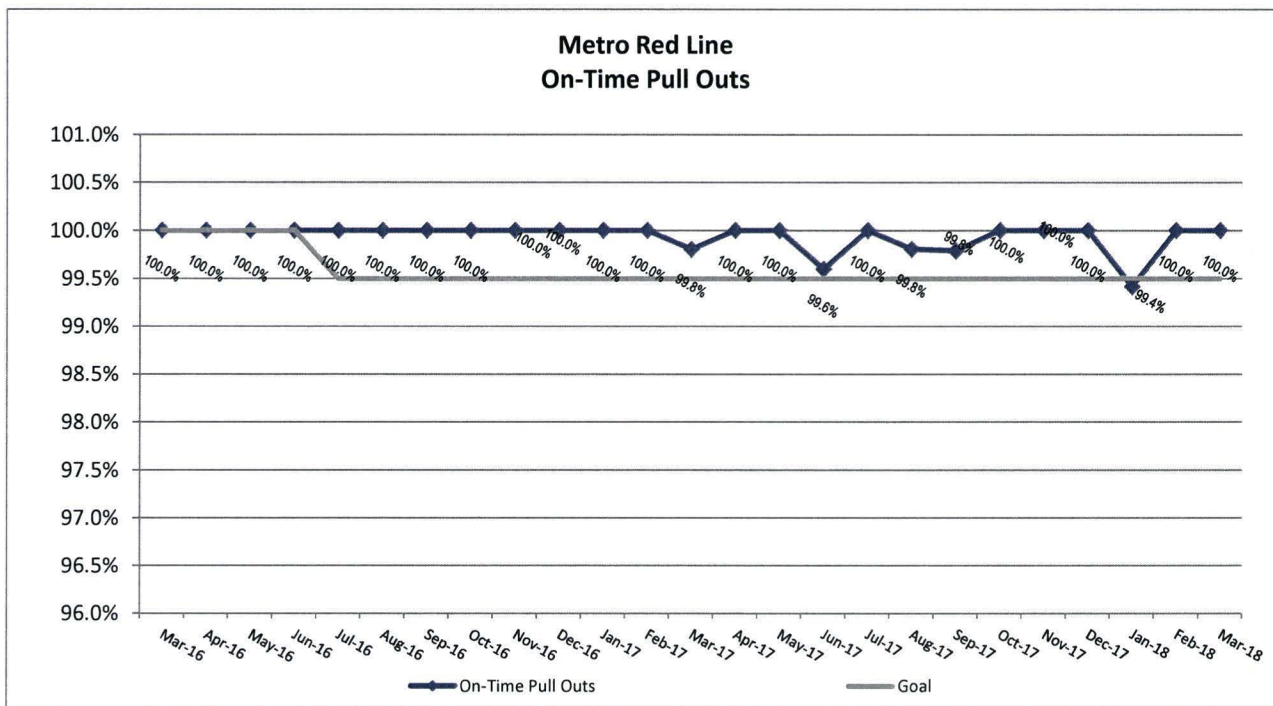
COMPLIANCE WITH SCHEDULED VEHICLE HOURS



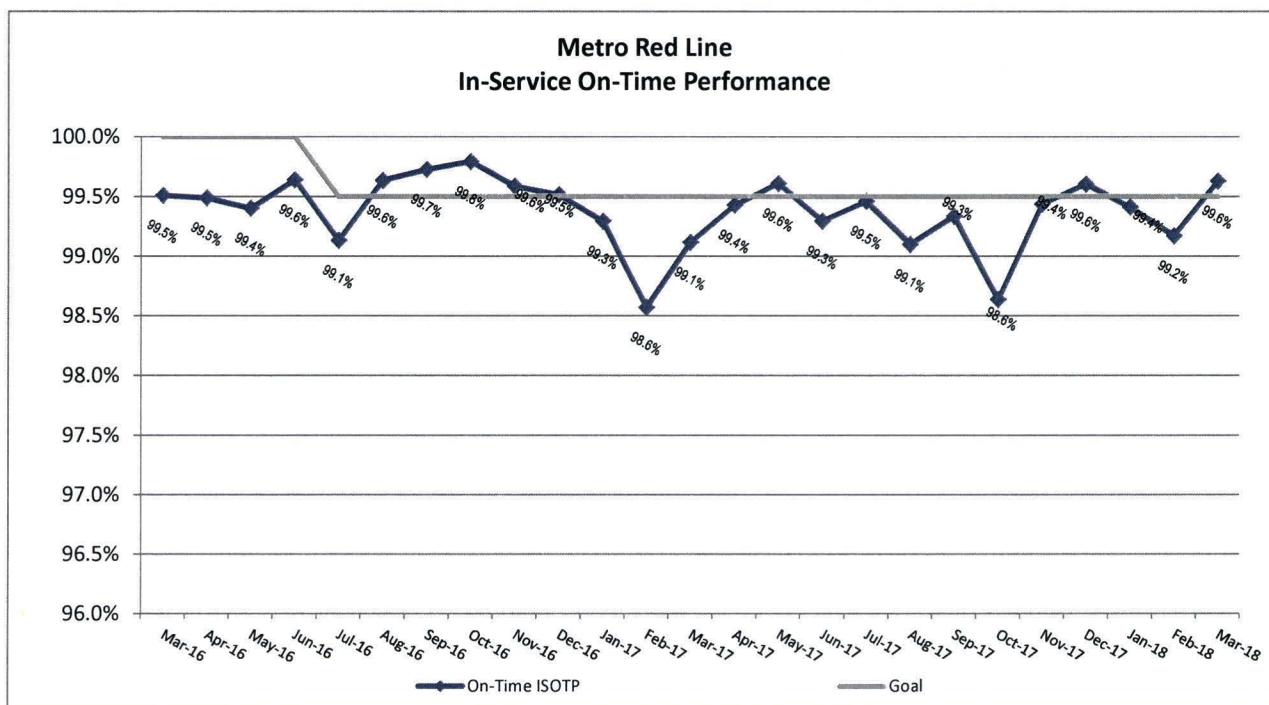
COMPLIANCE WITH SCHEDULED TRAIN MILES



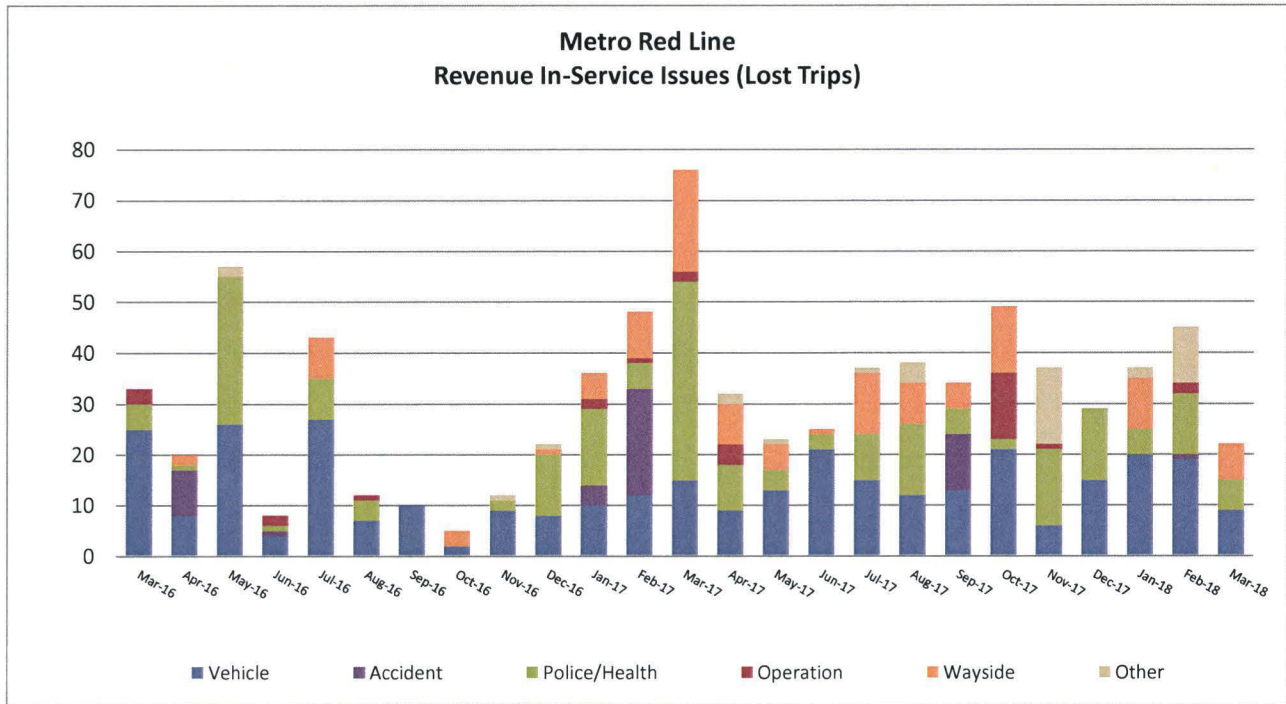
ON-TIME PULL OUTS



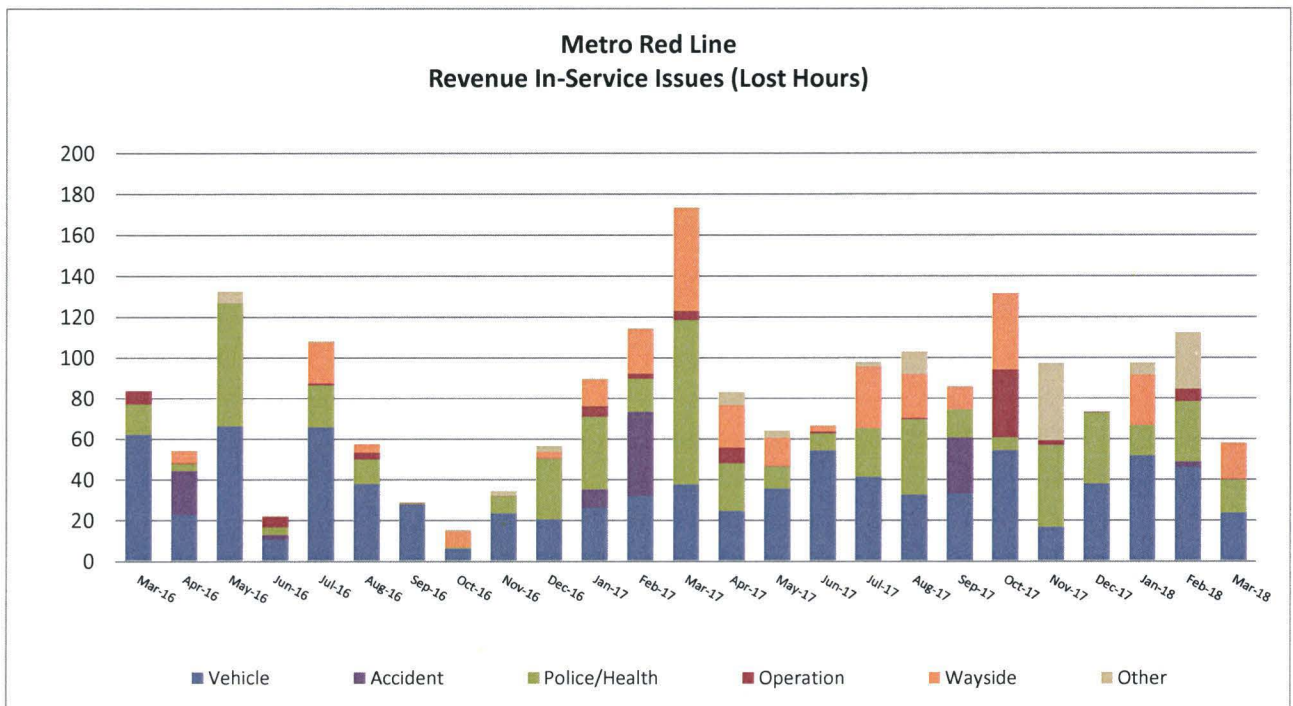
IN-SERVICE ON-TIME PERFORMANCE



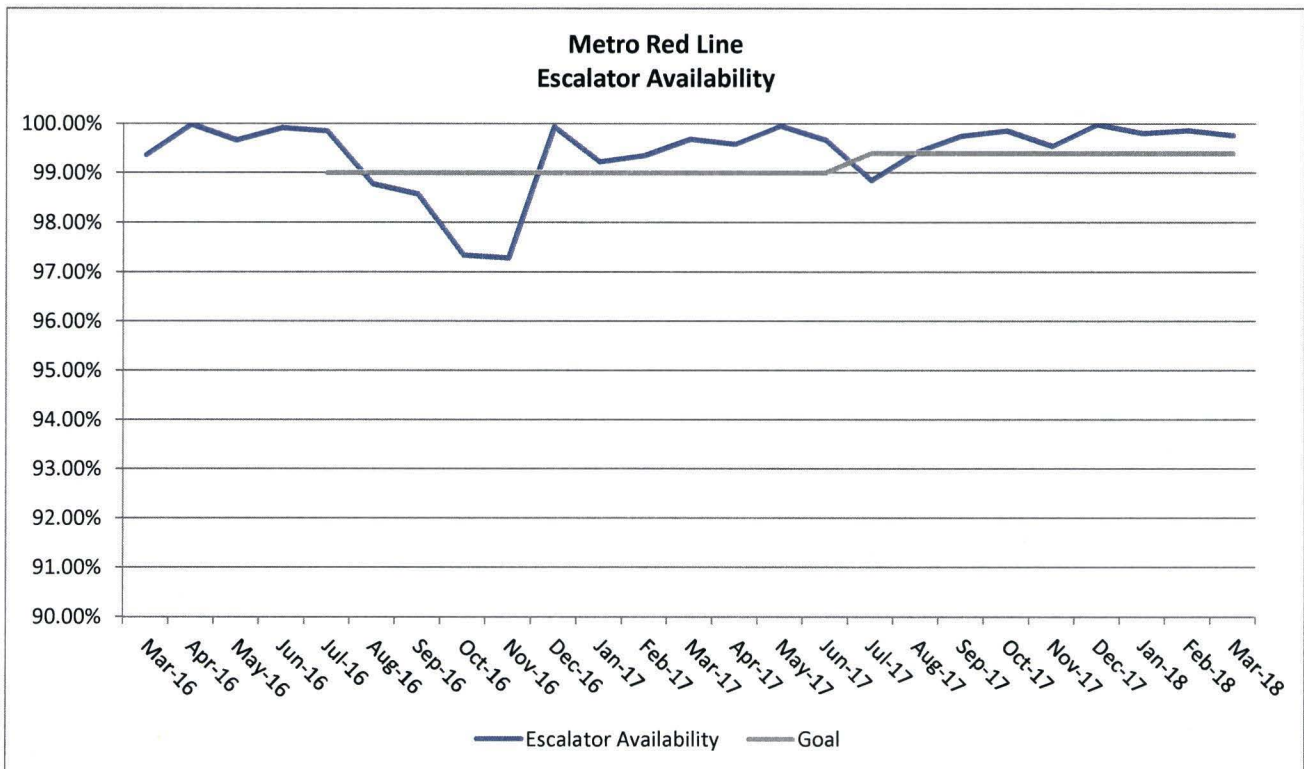
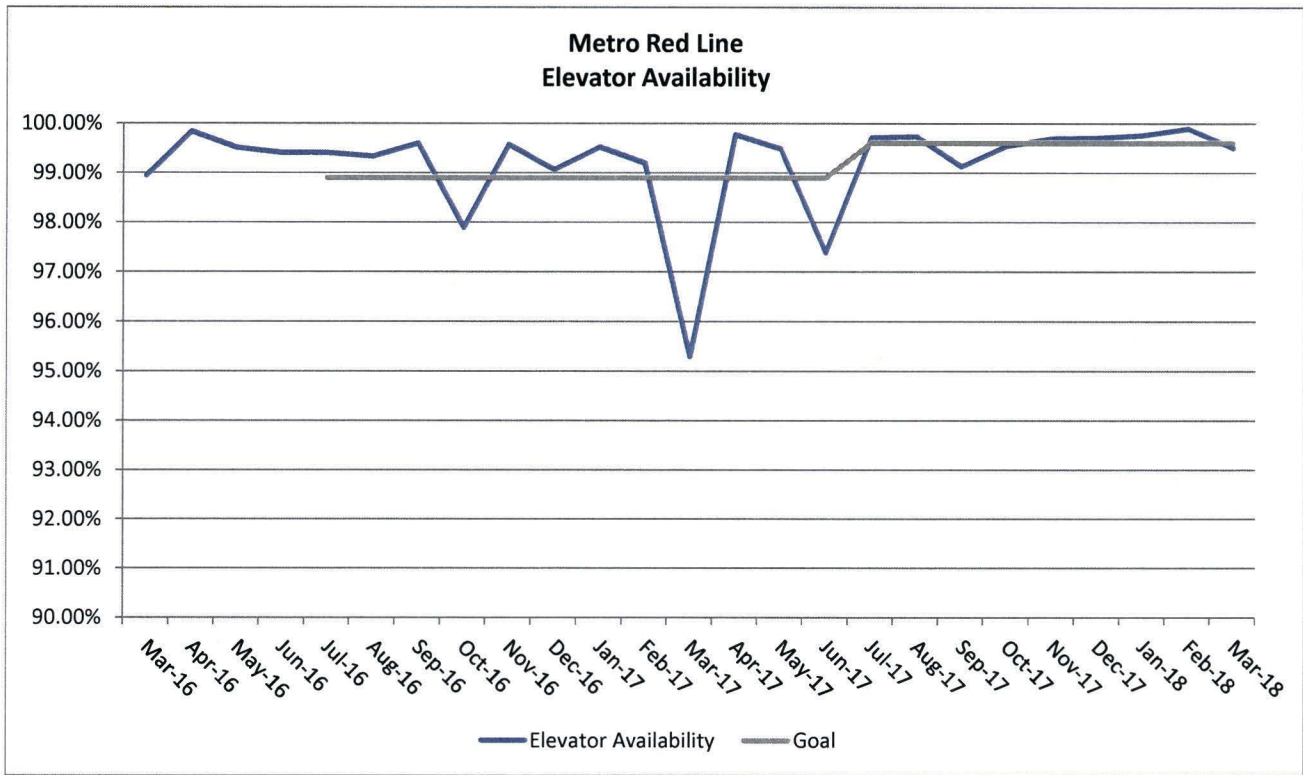
LOST TRIPS



LOST TRIPS



VERTICAL TRANSPORTATION AVAILABILITY



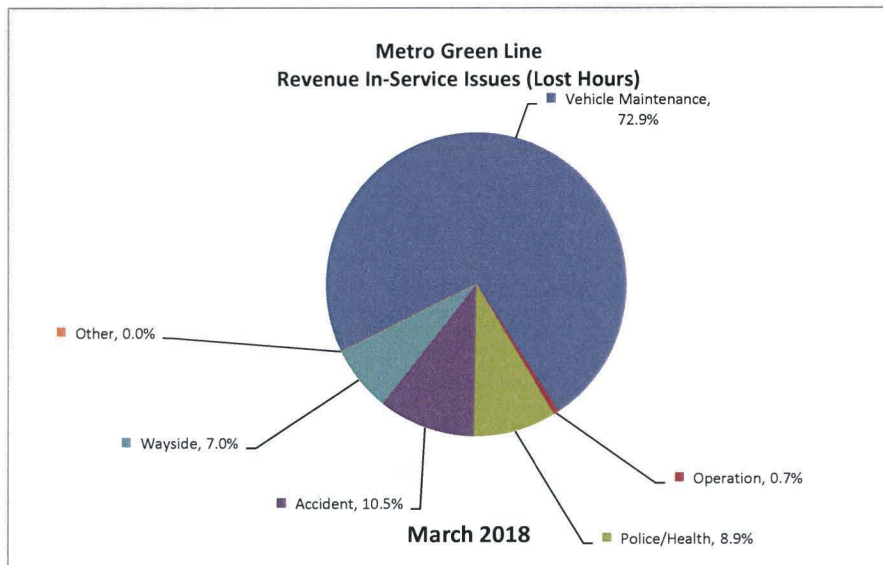
GREEN LINE

Out of a total of 7,264 hours operated, there were approximately 35 total hours of service delays.

March 2018 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	7,229	99.5%
Cancelled + Delayed Hours	35	0.5%
Total Revenue Hours	7,264	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	2	0.2	0.7%
Accidents	1	3.6	10.5%
Vehicle Maintenance	16	25.2	72.9%
Wayside	1	2.4	7.0%
Police & Health	6	3.1	8.9%
Other	0	0.0	0.0%
Total	26	34.6	100.0%

* Data from M3 used to report Service Delays is under review for accuracy
 The number of incidents on the following page may differ from the summary count due to some incidents not properly designated as cancelled or delayed



March 2018 Green Line incidents causing delay were as follows:

Operations Incidents:

3/17/2018 2:49:00 PM - Incident# 2982265 (0 lost trips, 9 lost minutes)

9 minute late departure from Norwalk.

Train 331

T-294

215B-221

Track 1

Westbound

3/17/2018 3:04:00 PM - Incident# 2982270 (0 lost trips, 5 lost minutes)

Late departure due to 10-100.

Norwalk station

Train 333

T-024

Track 1

Westbound

Accidents:

3/13/2018 2:45:00 PM - Incident# 2980563 (3 lost trips, 217 lost minutes)

Tire came on to the ROW and made contact with train

T-85, Train 332

Track 2, East, VMT 10

(225A)-222

Vehicle Maintenance Incidents:

3/2/2018 12:30:00 PM - Incident# 2976077 (1 lost trip, 68 lost minutes)

Train 331 Car 224-A developed a propulsion and speed restriction fault.

3/3/2018 7:12:00 PM - Incident# 2976549 (1 lost trip, 68 lost minutes)

Door Problem

Train #334, T-20

1080-1087

EB, Crenshaw Station, Track #2

3/5/2018 6:11:00 AM - Incident# 2976910 (0 lost trips, 6 lost minutes)

Operator T-140 reports no movement, due to a door problem.

Train 340

T-140

Cars 1081-1088

Westbound, Norwalk Station, Track 2

3/5/2018 12:00:00 PM - Incident# 2977098 (0 lost trips, 5 lost minutes)

Operator reports of a recurring propulsion fault

Train 333

T-068

(217B)205

Long Beach Station, Trk. 1, westbound

3/9/2018 8:27:00 AM - Incident# 2978927 (8 lost trips, 551 lost minutes)

T-409 Train 336 reports excessive arching Car 217.

3/9/2018 5:52:00 PM - Incident# 2979130 (1 lost trip, 68 lost minutes)

Propulsion Faults on Train 351

(224)-227

T-183

Hawthorne Station Track #2

3/11/2018 7:02:00 PM - Incident# 2979640 (1 lost trip, 92 lost minutes)

Door problem at Hawthorne Station.

Train 332, LRVS's (1087) and 1080.

Also (204A) and 208.

Hawthorne station eastbound both platforms.

3/13/2018 6:35:00 PM - Incident# 2980683 (1 lost trip, 74 lost minutes)

Prop fault

Train 334

T-322

(215B) 221

Track 2 Eastbound Harbor station

3/14/2018 5:42:00 AM - Incident# 2980784 (1 lost trip, 68 lost minutes)

Car 1083 and 1088 door problems

Train 336 T-40

Avalon Station Track 2 Eastbound

Car # (1088)-(1083)

3/15/2018 9:41:00 AM - Incident# 2982231 (0 lost trips, 10 lost minutes)

Car 226 no lighting, no power indication

Train 334

T-44

NorwalkStaion track 1

Consist 226-214

3/17/2018 7:17:00 AM - Incident# 2982159 (1 lost trip, 83 lost minutes)

Operator reports of a propulsion fault with a speed restriction
Train 334
T-458
(217)201
Norwalk Station, Trk. 1, westbound

3/18/2018 8:32:00 AM - Incident# 2982410 (0 lost trips, 9 lost minutes)
CBU Lock Up.
Train #332.
T-458.
LRV-215B, (221).
Norwalk Station, Track #1, Westbound.

3/21/2018 8:33:00 AM - Incident# 2983762 (1 lost trip, 68 lost minutes)
Doors will not open
Train 333
T-148 EB
Track 2
(204A)-219

3/22/2018 5:40:00 AM - Incident# 2984178 (3 lost trips, 204 lost minutes)
T-148 reports of no movement due to friction brake fault.
(207B)-243)

3/28/2018 12:05:00 PM - Incident# 2986645 (1 lost trip, 71 lost minutes)
Friction Brakes, cars, Cars #(205)-208
Train #332
T-348
Lakewood Station, Track #002, Eastbound.

3/29/2018 12:10:00 AM - Incident# 2986879 (1 lost trip, 68 lost minutes)
Car 218 low voltage fault not resetting
Train 352 T-13
Norwalk Platform 1 Westbound
Car # (218)-224

Wayside Incidents:

3/1/2018 3:16:00 PM - Incident# 2975664 (2 lost trips, 146 lost minutes)
False occupancy at Circuits 260 and 266 Hawthorne Station.

Police & Health Incidents:

3/3/2018 7:46:00 PM - Incident# 2976552 (0 lost trips, 15 lost minutes)
Assault/ @ females fighting
Train # 333, T-497
Car# 1082-1083
EB, Crenshaw Station, Track # 2

3/7/2018 12:05:00 PM - Incident# 2978075 (0 lost trips, 10 lost minutes)

Unruly passenger

Train 332

T-297 WB

Track1

Norwalk

(222)-208

3/8/2018 2:20:00 PM - Incident# 2978597 (0 lost trips, 10 lost minutes)

Trespasser on ROW

3/15/2018 7:10:00 AM - Incident# 2981330 (0 lost trips, 6 lost minutes)

Unresponsive patron on board car # 215

Train 334 T-68

Crenshaw Platform 2 Eastbound

3/16/2018 3:08:00 PM - Incident# 2981980 (2 lost trips, 139 lost minutes)

Near Miss, cars #(1081B)-1080

Train #333

T-020

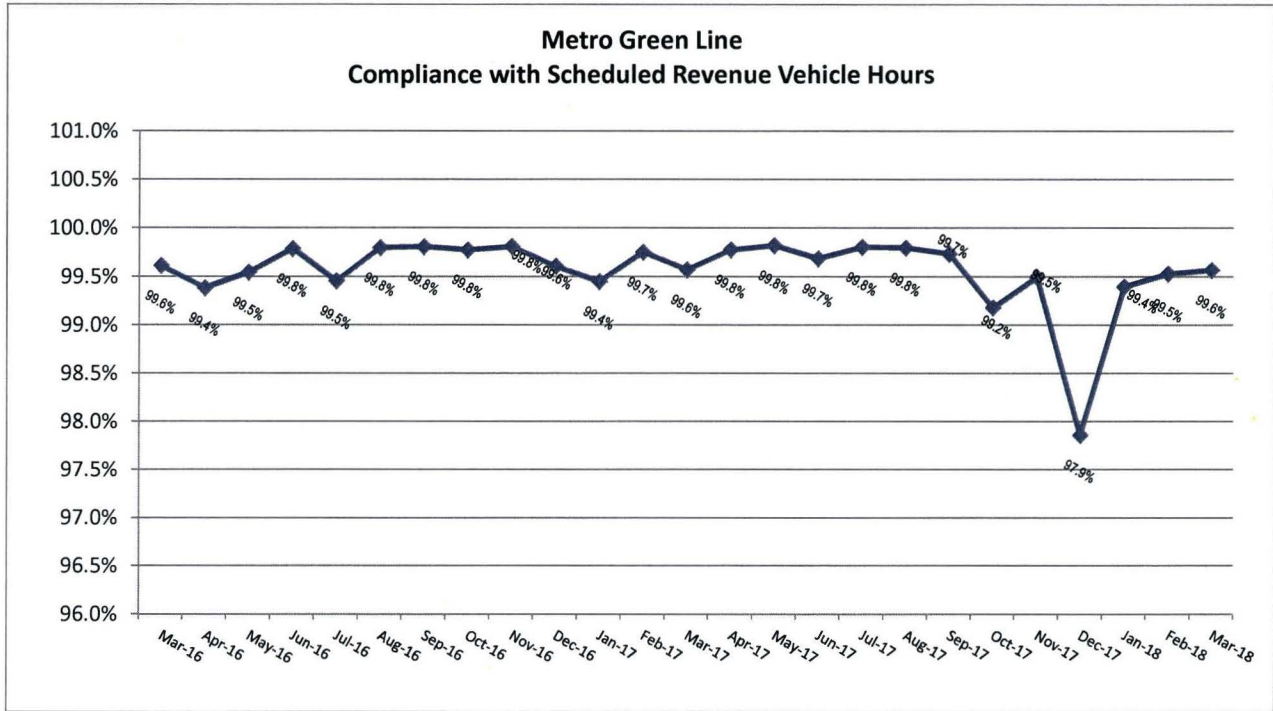
Lakewood Station, Track #002, Eastbound.

3/20/2018 4:17:00 PM - Incident# 2983507 (0 lost trips, 4 lost minutes)

Trespasser Track 2 Willowbrook

MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

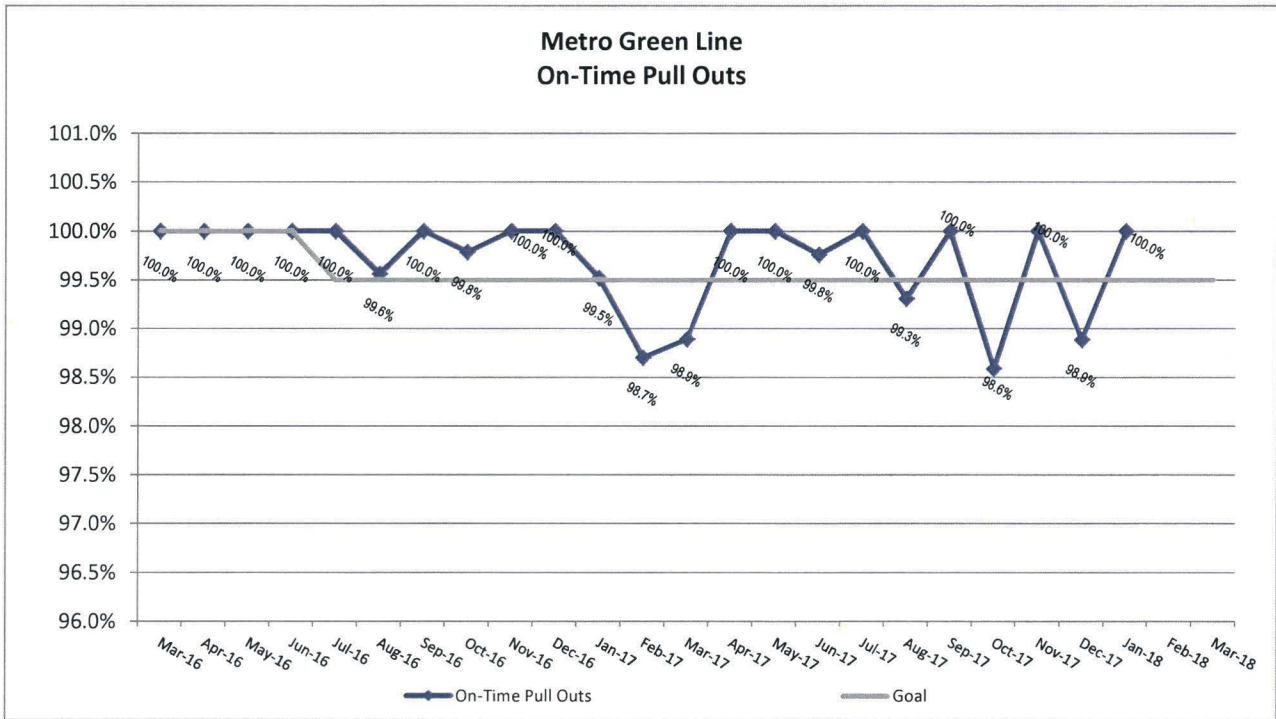
COMPLIANCE WITH SCHEDULED VEHICLE HOURS



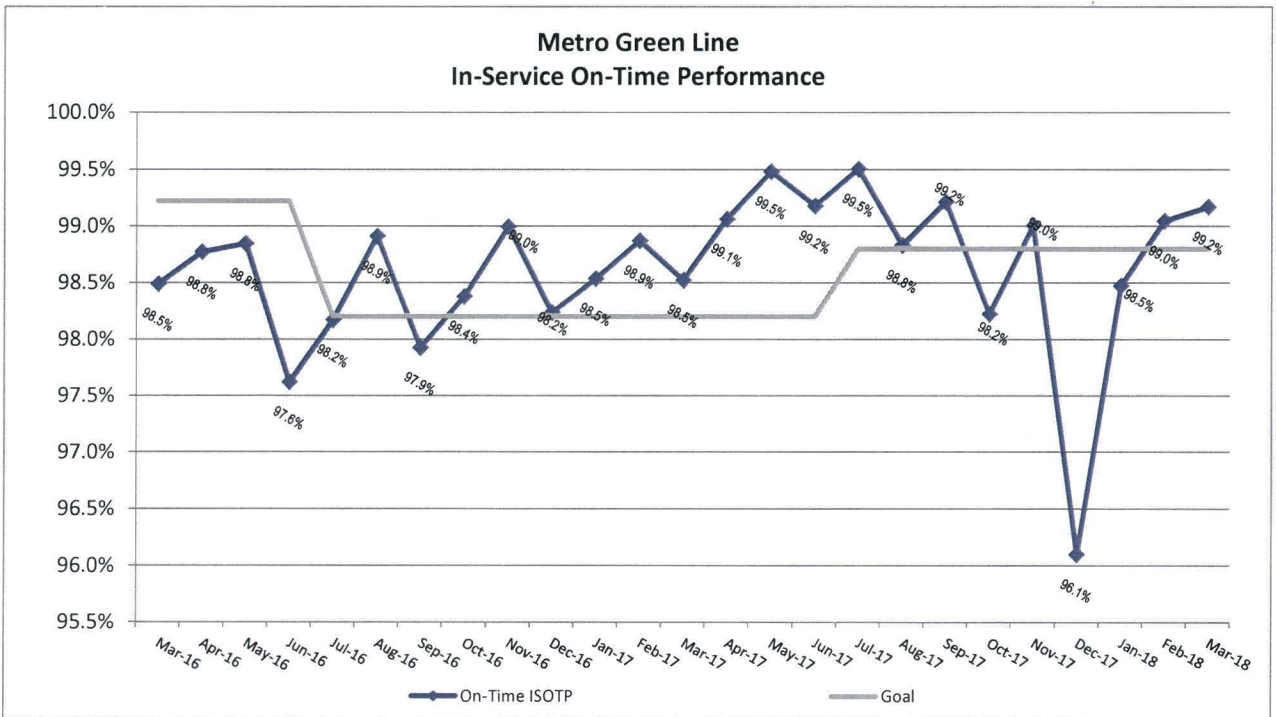
COMPLIANCE WITH SCHEDULED TRAIN MILES



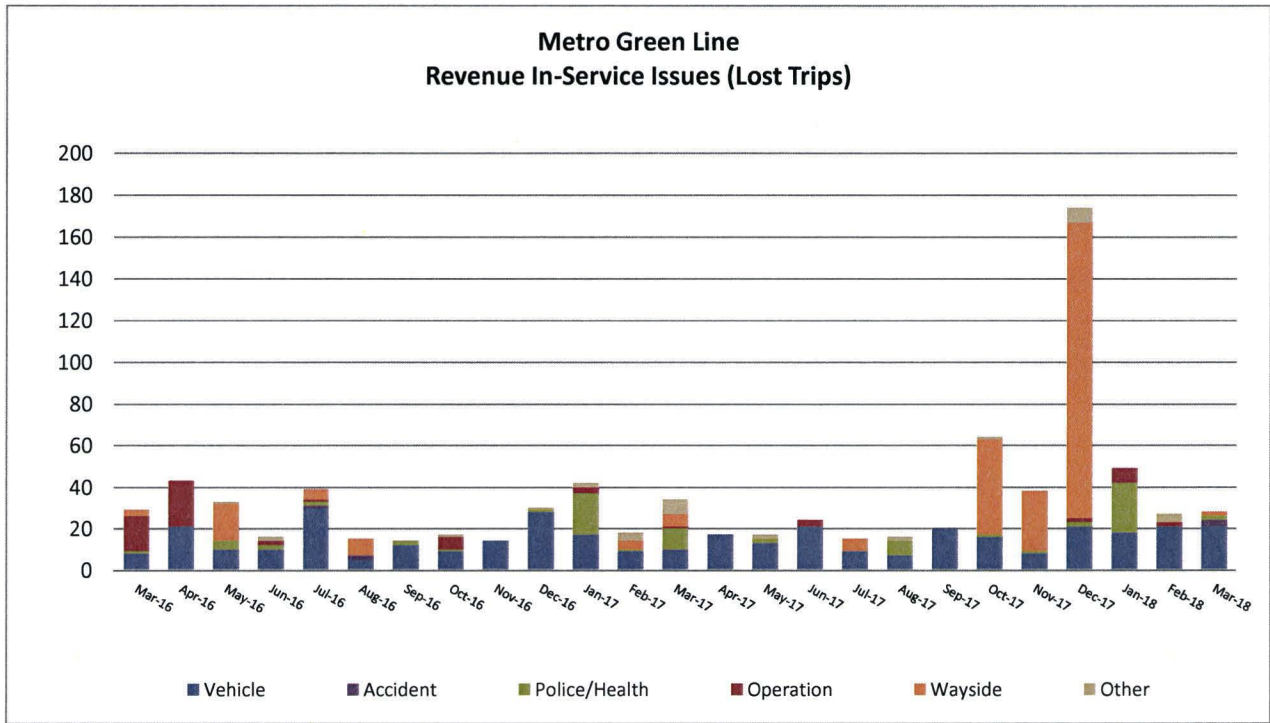
ON-TIME PULL OUTS



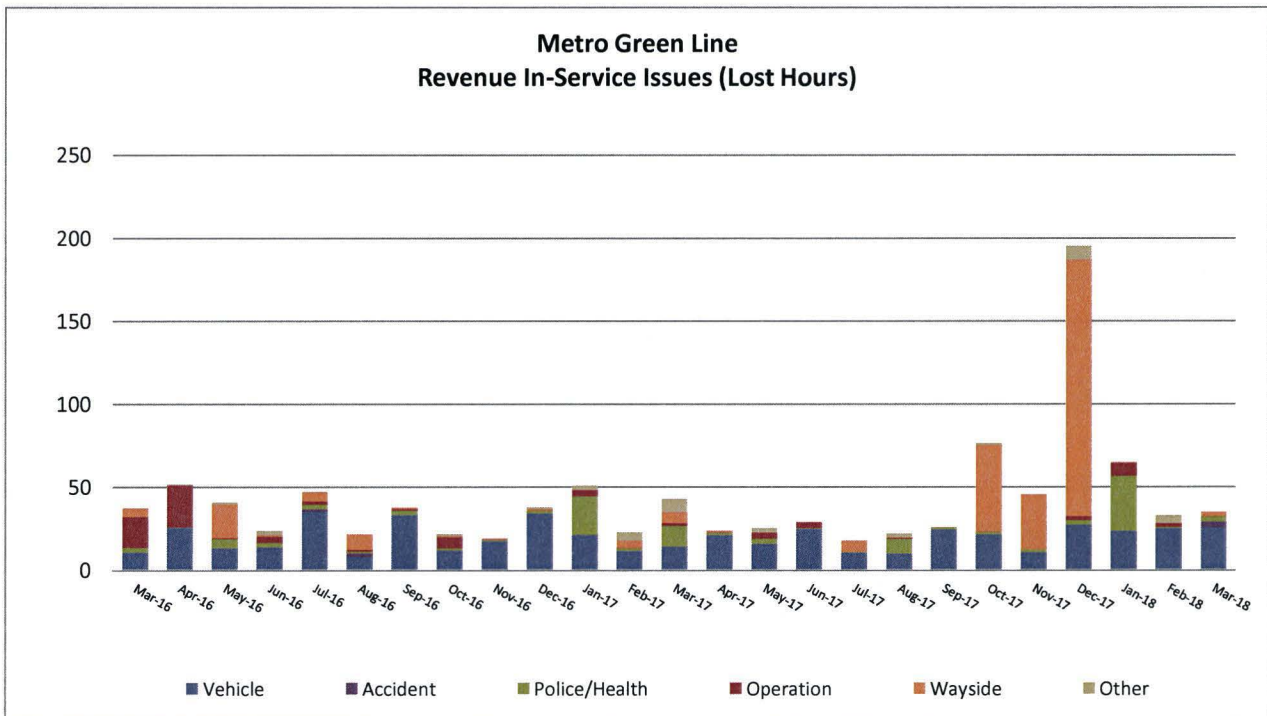
IN-SERVICE ON-TIME PERFORMANCE



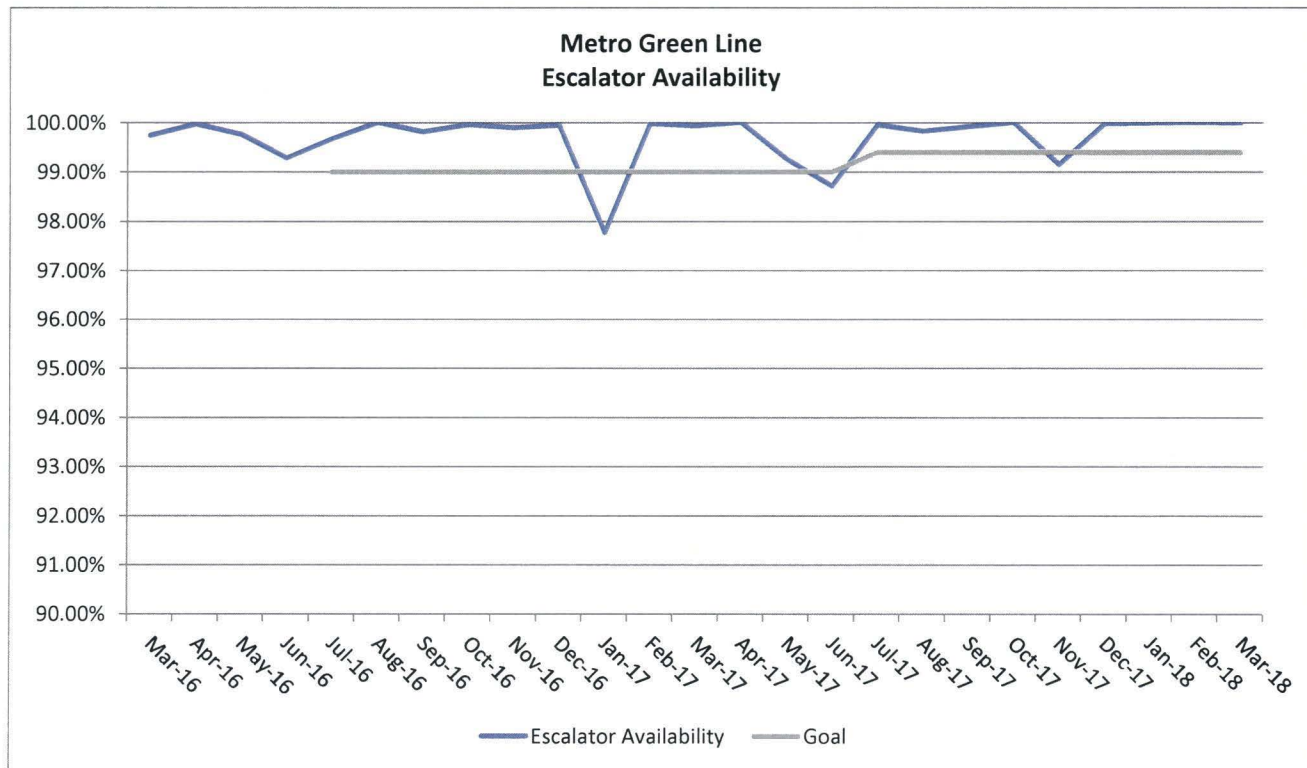
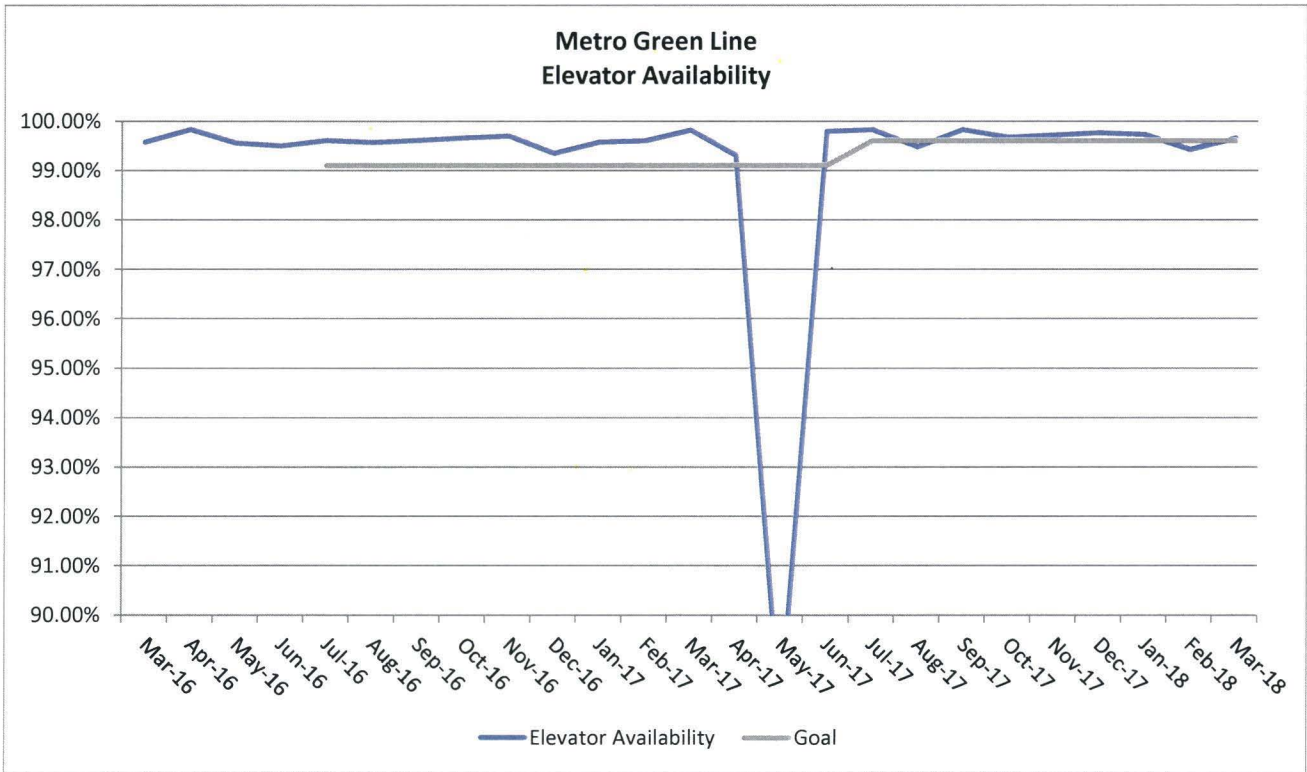
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



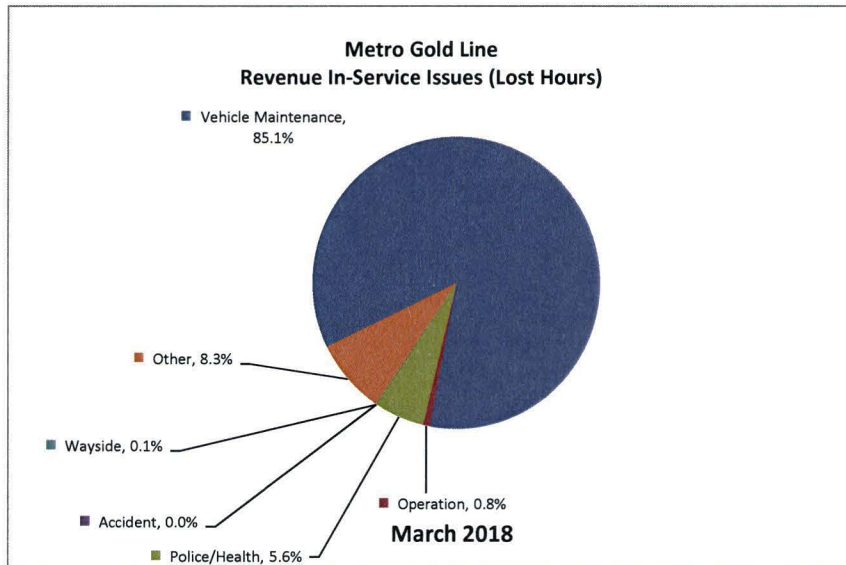
GOLD LINE

Out of a total of 22,830 hours operated, there were approximately 110 total hours of service delays.

March 2018 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	22,720	99.5%
Cancelled + Delayed Hours	110	0.5%
Total Revenue Hours	22,830	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	5	0.9	0.8%
Accidents	0	0.0	0.0%
Vehicle Maintenance	23	93.8	85.1%
Wayside	1	0.1	0.1%
Police & Health	6	6.2	5.6%
Other	2	9.2	8.3%
Total	37	110.1	100.0%

* Data from M3 used to report Service Delays is under review for accuracy
 The number of incidents on the following page may differ from the summary count due to some incidents not properly designated as cancelled or delayed



March 2018 Gold Line incidents causing delay were as follows:

Operations Incidents:

3/3/2018 2:32:00 AM - Incident# 2976342 (0 lost trips, 9 lost minutes)

Track Allocation (Pink Letter M-202) Dynaelectric

Power Down Personnel: TP-196

Pico Aliso2N to Ditman2S

3/5/2018 10:28:00 AM - Incident# 2977094 (0 lost trips, 7 lost minutes)

Operator departed 7 minutes late from APU/Citrus

T-036

Consist(1059B)1007/1010

Track #2

Train-405

APU/Citrus, Track #2, Southbound

3/10/2018 4:20:00 AM - Incident# 2979219 (0 lost trips, 20 lost minutes)

Track Allocation (Pink Letter M-217) Dynaelectric

Power Down Personnel: TP-196

Pico Aliso2N to Ditman2S

3/13/2018 8:51:00 AM - Incident# 2980387 (0 lost trips, 7 lost minutes)

Train Operator T-036 failed to depart on time from Atlantic Station.

3/27/2018 7:50:00 PM - Incident# 2986384 (0 lost trips, 10 lost minutes)

T-340 mis-read Schedule M-251 and departed Citrus riding the cushion toward Division 24 instead of operating Train 434 to relief point.

Vehicle Maintenance Incidents:

3/2/2018 10:25:00 AM - Incident# 2976052 (0 lost trips, 7 lost minutes)

Propulsion / Dynamic Brakes

Train 406

T-36

LRV (1015),1055

APU Citrus Station, Track 2

Southbound

3/4/2018 12:18:00 PM - Incident# 2976687 (1 lost trip, 336 lost minutes)

Propulsion fault

Train 403

T-304

Track 2 south Sierra Madre

731 (701A) 704

3/5/2018 6:51:00 AM - Incident# 2976929 (1 lost trip, 267 lost minutes)

Out Late-Trip Cancelled due to mechanical issues in the yard

3/6/2018 2:52:00 PM - Incident# 2977716 (2 lost trips, 541 lost minutes)

APS fault, A and B propulsion faults (1058B)1012.

South Pasadena Station

Train #433, T-63, track #2, southbound.

3/8/2018 6:32:00 PM - Incident# 2978678 (2 lost trips, 533 lost minutes)

Propulsion fault (704)731.

Duarte Station

Train #407, T-340, track #2, southbound

3/10/2018 9:20:00 PM - Incident# 2979431 (0 lost trips, 10 lost minutes)

Windshield wipers are not working. Stuck below windshield.

Train 410

T-316

Track 2

Filmore Station

(1055A)-1015

3/11/2018 11:58:00 AM - Incident# 2979541 (1 lost trip, 242 lost minutes)

No Fault - No Movement, Cars# 1010-1011

Train #408

T-429

Pico/Aliso, Track #002, Southbound.

3/13/2018 5:20:00 AM - Incident# 2980279 (1 lost trip, 267 lost minutes)

T-39 reports no movement on train 403. No faults displayed.

Cars (1011-1007)

3/13/2018 6:25:00 AM - Incident# 2980284 (3 lost trips, 800 lost minutes)

T-103 reports of smoke coming from car 743 on train 454.

3/13/2018 5:26:00 PM - Incident# 2980652 (0 lost trips, 6 lost minutes)

Pro trans is not working (1104B)1057.

Fremont Grevelia

Train #402, T-486, track #2, southbound.

3/14/2018 7:12:00 AM - Incident# 2980827 (0 lost trips, 5 lost minutes)

Multiple faults with no movement.

Train 451

T-429

Citrus Station

Track 1, S/B

(710A)-741

3/17/2018 1:41:00 PM - Incident# 2982237 (0 lost trips, 9 lost minutes)

T-11 reports no movement on LRV 701

T-11

Train 403

LRV (701) 738

Atlantic Station, Track 1, northbound.

3/20/2018 2:05:00 PM - Incident# 2983468 (3 lost trips, 813 lost minutes)

Doors 3/4 opened between stations 716(738)717.

Between Maravilla Station and Civic Center Station

Train #431, T-340, track #1, northbound.

3/20/2018 7:39:00 PM - Incident# 2983557 (0 lost trips, 10 lost minutes)

No fault, no movement (1006A)1011.

Monrovia Station

Train #453, T-52, track #2, southbound.

3/21/2018 4:11:00 PM - Incident# 2984021 (1 lost trip, 270 lost minutes)

Train 438 SL Fault no movement

3/21/2018 8:04:00 PM - Incident# 2984071 (1 lost trip, 270 lost minutes)

Major prop fault in car 749

3/22/2018 6:06:00 PM - Incident# 2984517 (0 lost trips, lost minutes)

Train delay due to door problem at Southwest Museum Station southbound.

Train 438

T-316

Car 733

3/23/2018 7:07:00 AM - Incident# 2984685 (0 lost trips, 7 lost minutes)

Lost cab signal. No movement and unable to go into stop/ proceed mode.

Train 419

T-159

Track 2

Mariachi Station

(720A)-733

3/23/2018 6:19:00 PM - Incident# 2984970 (1 lost trip, 270 lost minutes)

No Fault - No Movement

Train 408

T-524

Cars (1124),1007,1059

NB, Track 1, SMV

3/24/2018 2:15:00 PM - Incident# 2985175 (1 lost trip, 335 lost minutes)

(705)-717-738
Reported burning Brake Smell and Smoke
Train 403
NB Duarte
R-460 (CCTV took call from customer on board)

3/24/2018 9:13:00 PM - Incident# 2985246 (1 lost trip, 335 lost minutes)
(733B)-737
ATP Failure
NB Filmore Station
Train 410
T-470

3/28/2018 6:29:00 AM - Incident# 2986485 (1 lost trip, 273 lost minutes)
Operator reports of a high speed circuit breaker with a speed restriction
Train 411
T-338
(740)711
Downtown Azusa, Trk. 2, southbound

3/29/2018 9:45:00 PM - Incident# 2987342 (0 lost trips, 10 lost minutes)
Propulsion Faults on car 1109 at Duarte Station Northbound Track #1.
Train 431
(1109)-1007
T-251
Duarte Station Track #1 Northbound.

3/31/2018 2:01:00 PM - Incident# 2988056 (0 lost trips, lost minutes)
(738-722)
Door Faults - Had to be cut out
NB Maravilla - NB Chinatown
T-470
Train 406

3/31/2018 3:47:00 PM - Incident# 2988026 (0 lost trips, 7 lost minutes)
(1011-1110)
Door Fault - No Movement
NB DT Azusa
Train 407
T-347

Wayside Incidents:

3/24/2018 7:09:00 AM - Incident# 2985088 (0 lost trips, 5 lost minutes)
Interlocking: Switch Out Of Correspondence
SCADA
Atlantic interlocking.

Police & Health Incidents:

3/2/2018 10:51:00 AM - Incident# 2976047 (0 lost trips, 11 lost minutes)

Sick Individual

3/5/2018 5:35:00 AM - Incident# 2976862 (0 lost trips, 5 lost minutes)

Reports of sick individual

Train#411

T-18

(716)-717

Lincoln/Cypress Station, Track #1, NB

3/6/2018 4:54:00 PM - Incident# 2977773 (0 lost trips, 12 lost minutes)

Patron making terrorist threats on board train.

Approaching Duarte Station

Train #433, T-77, track #1, northbound.

Consist 710-725.

3/15/2018 6:46:00 PM - Incident# 2981628 (0 lost trips, 7 lost minutes)

Train Operator reported that a Passenger pulled the T and jumped onto the Right of Way at Baker Interlocking.

Train 454

(739A)-711

T-341

Baker Interlocking Track #1 Northbound

3/19/2018 8:34:00 PM - Incident# 2983076 (0 lost trips, 10 lost minutes)

Patron needs medical assistance, patron experiencing a possible seizure.

South Pasadena Station

Train #401, T-524, track #1, northbound.

Consist 745-714.

3/25/2018 6:50:00 PM - Incident# 2985429 (1 lost trip, 328 lost minutes)

Passenger aboard unknown car of Train 408 made a threat to kill everyone aboard if they don't put away their cellphones.

Other Incidents:

3/9/2018 4:19:00 PM - Incident# 2979133 (2 lost trips, 531 lost minutes)

T-189 Failed to Follow Summary M-217 Resulting in Loss of Revenue Service

3/31/2018 10:55:00 PM - Incident# 2988088 (0 lost trips, 20 lost minutes)

Female patron holding the doors.

T-429

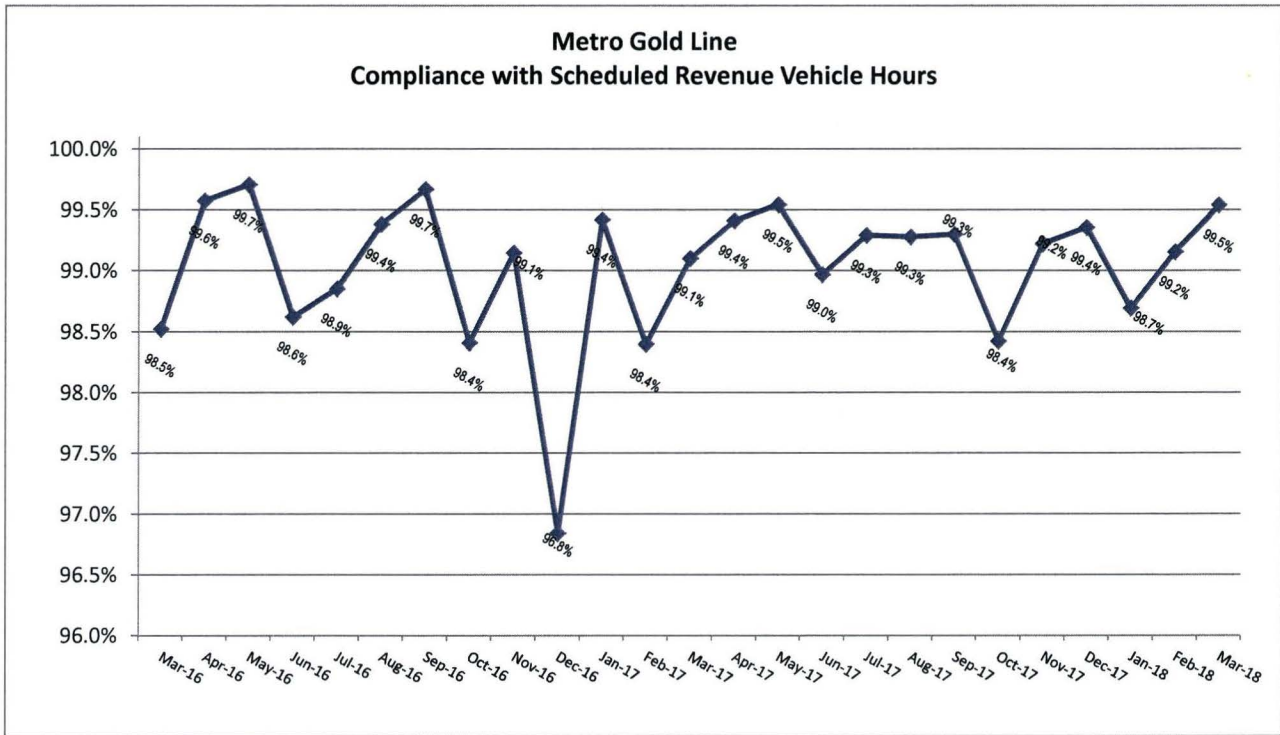
Train-402

Consist(720)717

Chinatown, Southbound,Track #2

MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

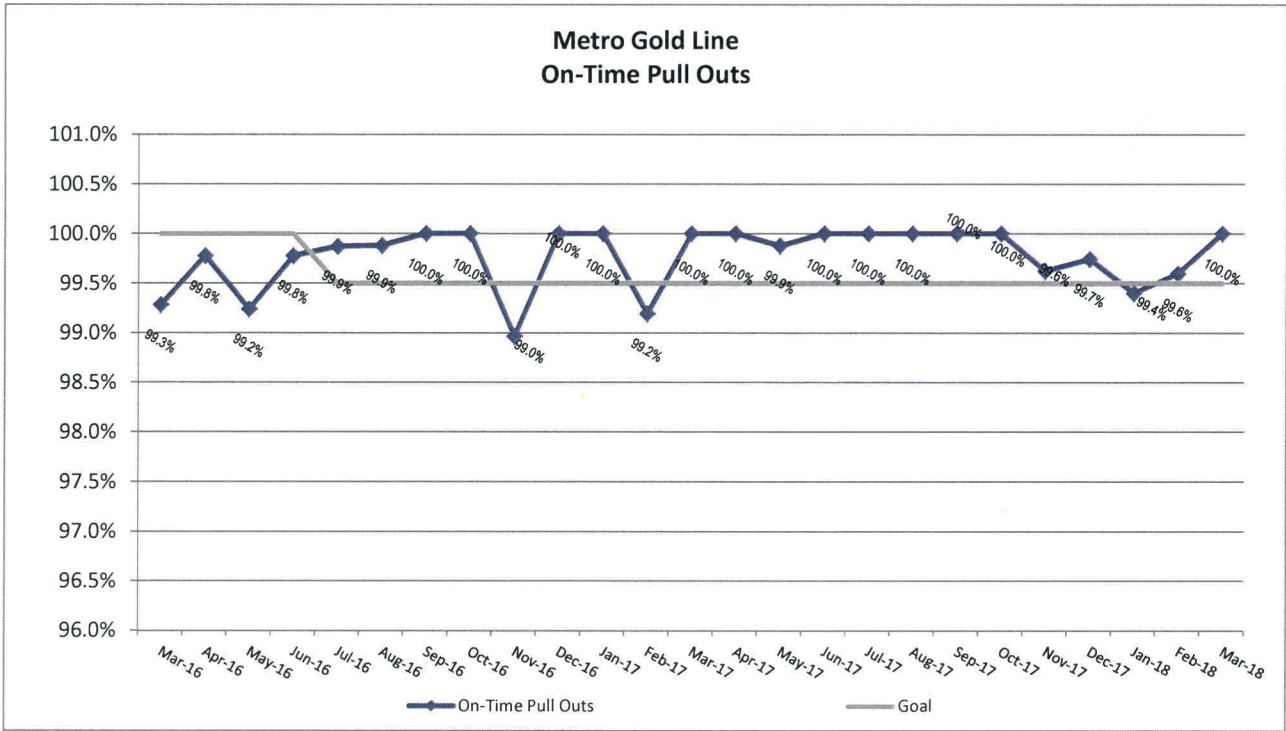
COMPLIANCE WITH SCHEDULED VEHICLE HOURS



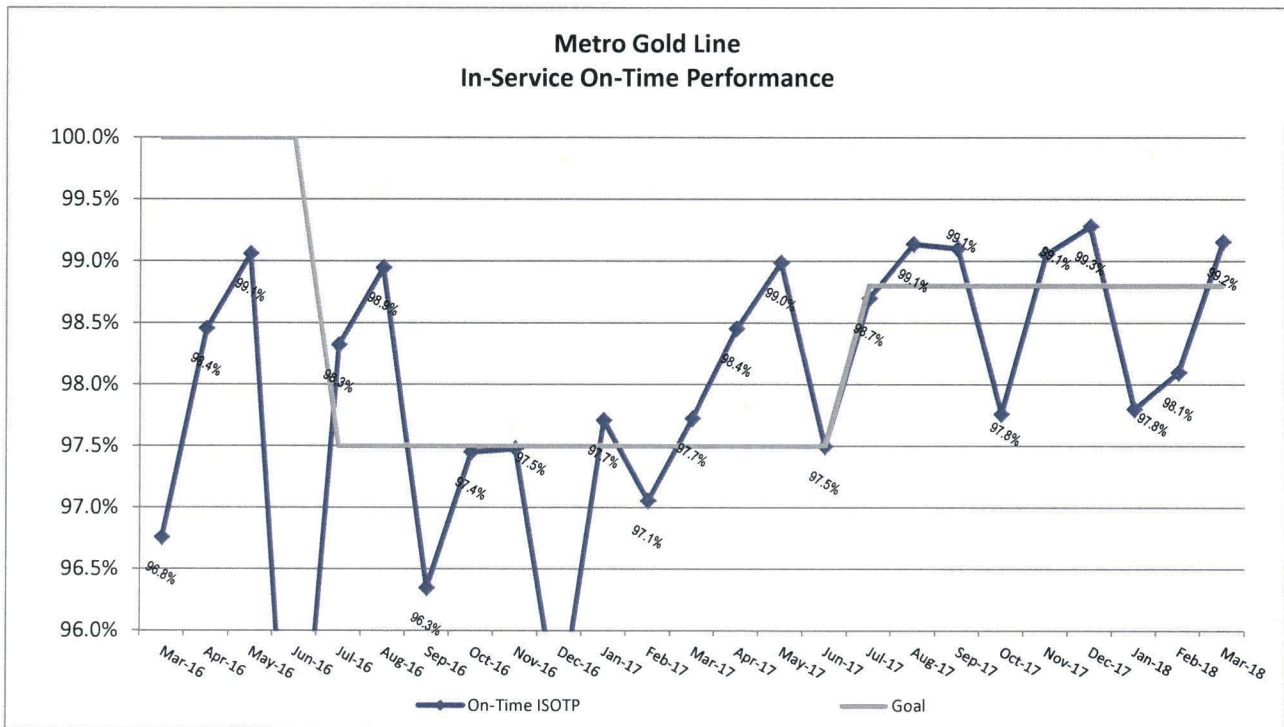
COMPLIANCE WITH SCHEDULED TRAIN MILES



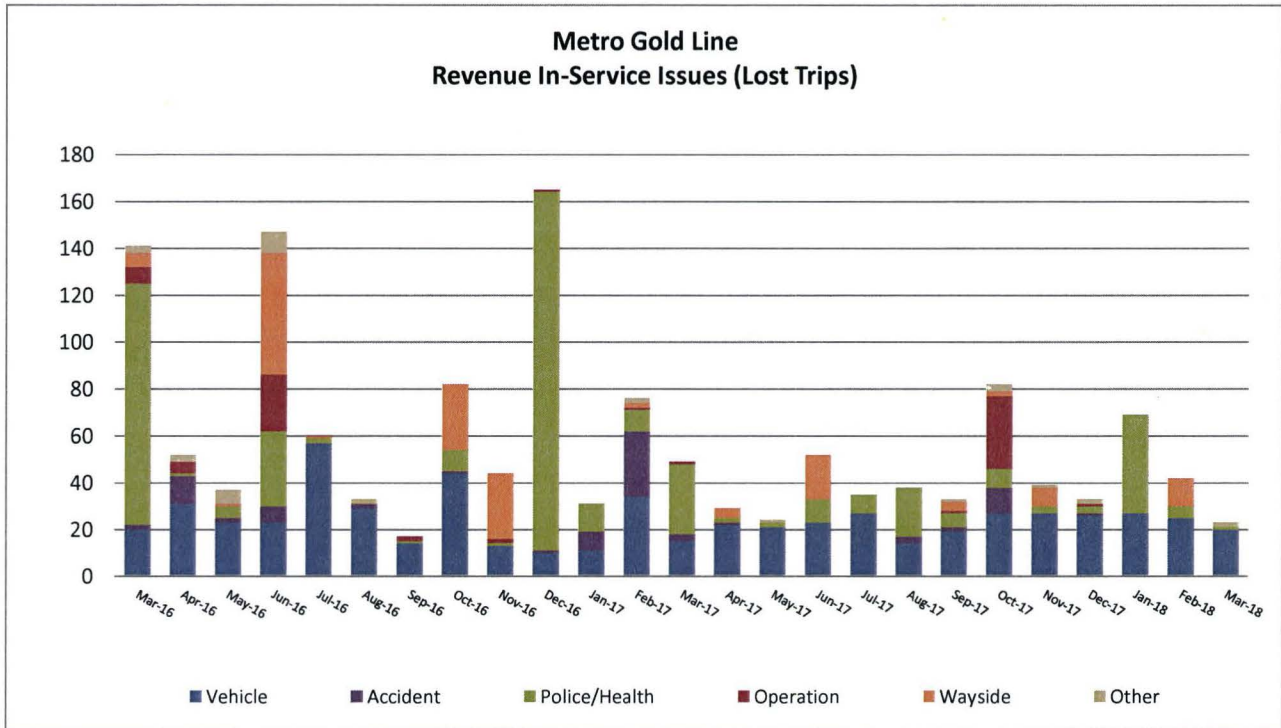
ON-TIME PULL OUTS



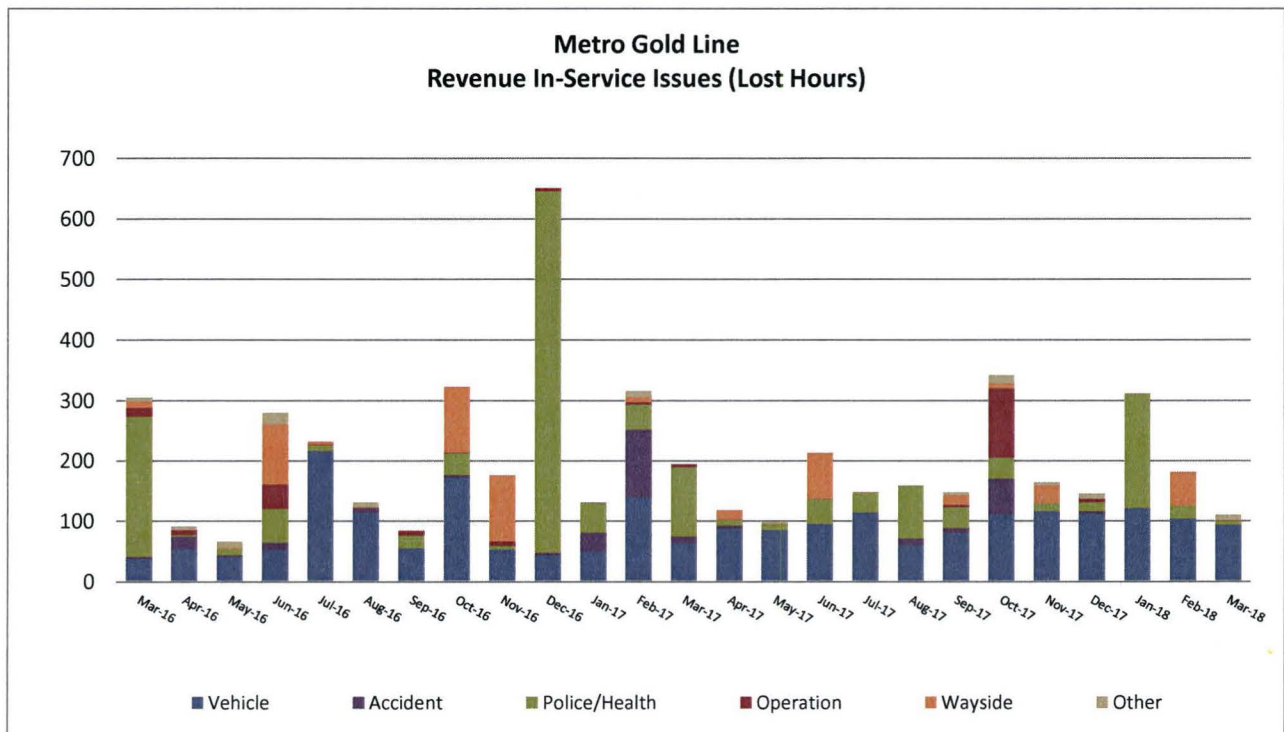
IN-SERVICE ON-TIME PERFORMANCE



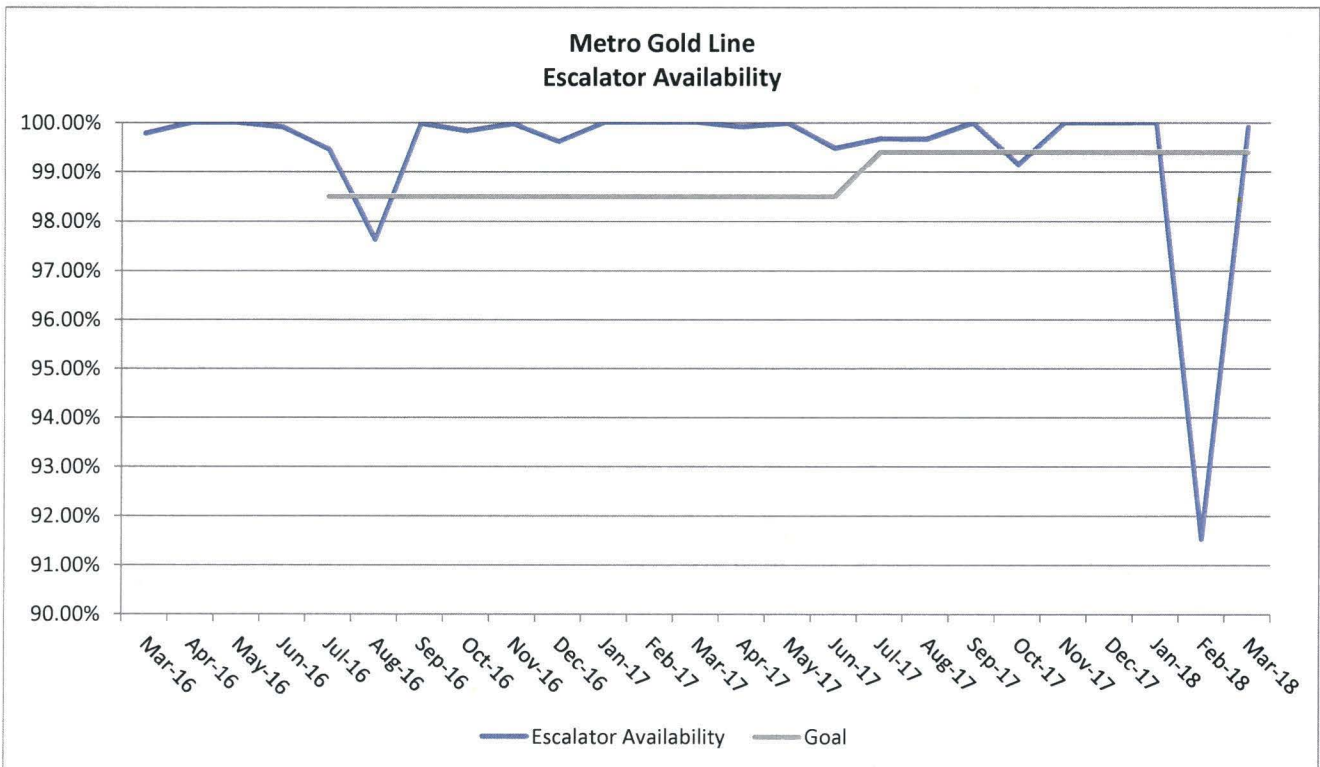
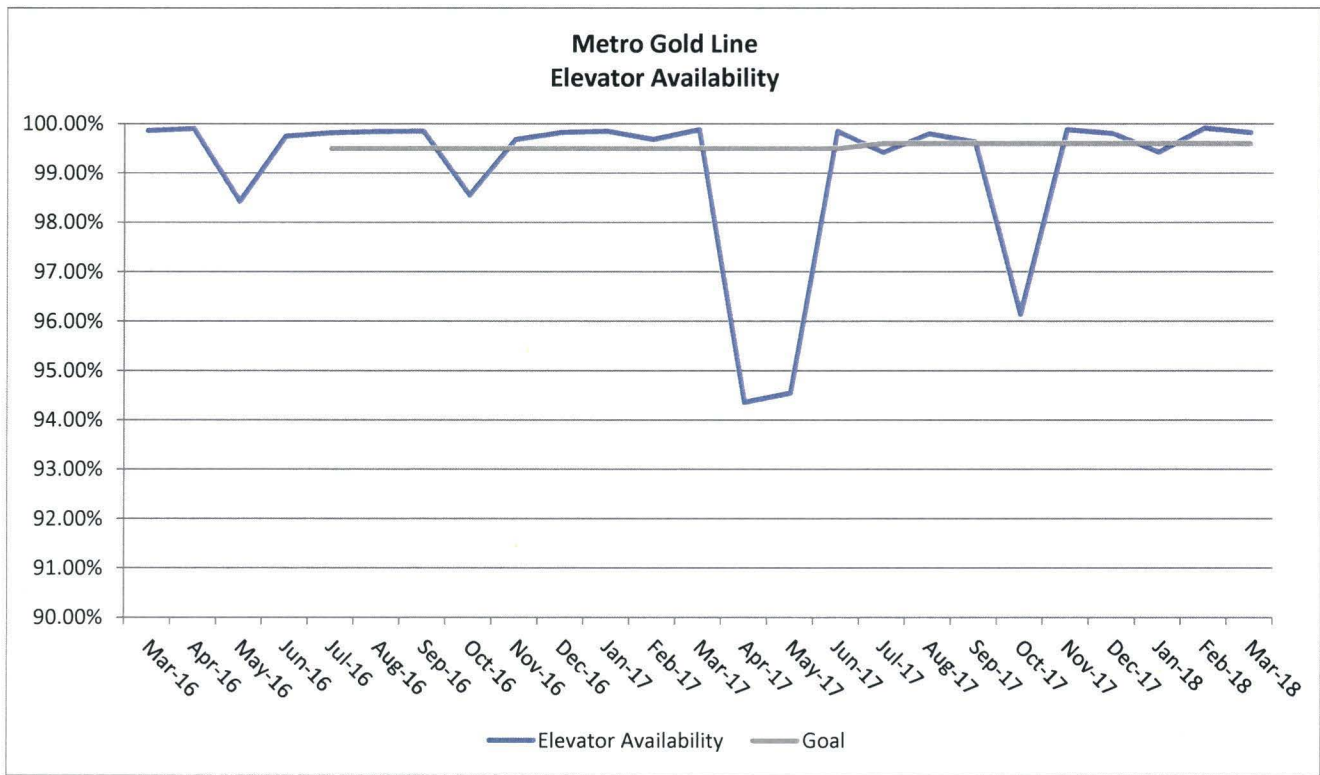
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



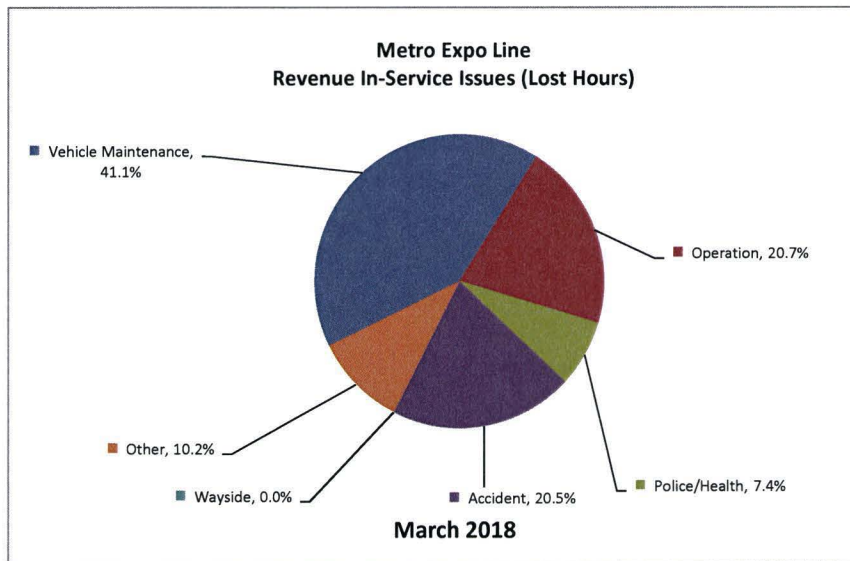
EXPO LINE

Out of a total of 21,977 hours operated, there were approximately 48 total hours of service delays.

March 2018 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	21,929	99.8%
Cancelled + Delayed Hours	48	0.2%
Total Revenue Hours	21,977	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	3	9.9	20.7%
Accidents	2	9.8	20.5%
Vehicle Maintenance	8	19.7	41.1%
Wayside	0	0.0	0.0%
Police & Health	8	3.5	7.4%
Other	2	4.9	10.2%
Total	23	47.8	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



March 2018 Expo Line incidents causing delay were as follows:

Operations Incidents:

3/1/2018 2:38:00 PM - Incident# 2975702 (0 lost trips, 25 lost minutes)

Train delay due to extended single tracking.

3/26/2018 1:06:00 PM - Incident# 2985780 (0 lost trips, 5 lost minutes)

Operator states that she is stress and is going sick one day at Santa Monica Station.

T-114

Train 604

Consist-242-230-236

Santa Monica Station, Track #4, N/B

3/28/2018 2:05:00 PM - Incident# 2986713 (4 lost trips, 564 lost minutes)

Yard Control notified control due to no manpower assignment 806-082 can not be filled. (Summary M-254)

Accidents:

3/2/2018 3:25:00 PM - Incident# 2976214 (3 lost trips, 438 lost minutes)

Train 601 reports a 10-73 at Denker Grade Crossing track 4, southbound. Car made a left turn in front of train.

3/5/2018 11:50:00 AM - Incident# 2977092 (1 lost trip, 151 lost minutes)

Trespasser vs. Train, cars #(1043A)-1016-1033

Train #652

T-349

7th Avenue and Exposition, Track #003, Northbound.

Vehicle Maintenance Incidents:

3/2/2018 1:55:00 AM - Incident# 2975809 (0 lost trips, 12 lost minutes)

Train Delay

Blue line train B.O. at the Flower Junction

3/5/2018 5:07:00 PM - Incident# 2977270 (0 lost trips, 6 lost minutes)

LVPS fault (Battery Charger), cars #(1046)-1072-1027

Train #656

T-252

La Brea Station, Track #004, Northbound.

3/6/2018 5:40:00 AM - Incident# 2977422 (0 lost trips, lost minutes)

Yard control notified control train 652 will be pulling out not due to friction brake faults in the yard.

Cars#1020-1049-1025

3/7/2018 2:38:00 PM - Incident# 2978122 (1 lost trip, 147 lost minutes)

Doors would not open on car 239.
Train 602
T-519
236 (239) 247
Track 3 Northbound 26th st station

3/13/2018 10:13:00 AM - Incident# 2980477 (4 lost trips, 574 lost minutes)

Reports of no movement
Train # 603
T-517
(248A)-239-234
Degnan Interlocking, Track #4, SB

3/15/2018 12:53:00 PM - Incident# 2981489 (1 lost trip, 141 lost minutes)

Friction brakes fault Motor alternator fault.
Train #602 T-133 car#140-164-102
northbound at Bundy

3/17/2018 11:44:00 AM - Incident# 2982198 (1 lost trip, 141 lost minutes)

No Fault - No Movement
Train 659
T-204
(1019B)-1052-1042
Southbound, Track 1 7th and Metro Center.

3/18/2018 8:00:00 AM - Incident# 2982403 (0 lost trips, 18 lost minutes)

Train 651 reports propulsion Faults with no movement.
Train 651
T-489
LRV'S 1028-1064-1050
22nd Street, track 3, northbound.

3/27/2018 9:45:00 AM - Incident# 2986192 (1 lost trip, 141 lost minutes)

Propulsion fault unable to clear
Train # 602 T-110 car#245-250-245
southbound at Vermont station.

Wayside Incidents:

3/6/2018 4:30:00 AM - Incident# 2977381 (0 lost trips, lost minutes)

Train 660 out late minutes due to routing issues within division 14

Police & Health Incidents:

3/1/2018 5:10:00 PM - Incident# 2975723 (0 lost trips, 15 lost minutes)

Train 602 reported a sick individual on board.

3/11/2018 4:17:00 AM - Incident# 2979464 (0 lost trips, 10 lost minutes)

LAPD reports a traffic accident at Exposition and Western Avenue. Car blocking track 4 at Western Avenue.

3/14/2018 8:12:00 PM - Incident# 2981181 (0 lost trips, 4 lost minutes)

LASD requested Train 674 to hold at 26th Street Station. The Train had departed 26th Street Station. Train 674 was held at 17th Street Station for a possible Assault Suspect.

Train 674

(1045)-1046-1044

T-94

17th Station Station Track #4

3/17/2018 8:49:00 PM - Incident# 2982322 (0 lost trips, 14 lost minutes)

Patron fell on board

Train # 654

T-473

(1073A_-1032-1043

NB, Pico Station, Track #1

3/18/2018 12:03:00 AM - Incident# 2982350 (1 lost trip, 141 lost minutes)

Emergency: Patron Sick

Seizure/ Stroke

T-511, Train# 656

1044-(1047B)-1018

Culver City Station, SB,Track # 4

3/28/2018 3:15:00 PM - Incident# 2986749 (0 lost trips, 6 lost minutes)

Reports of yellow van on the ROW

Train # 601

T-362

(247)-242-248

23rd Street Station, Track #4, SB

3/30/2018 7:01:00 PM - Incident# 2987794 (0 lost trips, 12 lost minutes)

10-390 near track zone.

Train 670

T-123

K1042, 1054, 1016

Santa Monica Station, Track 4, Southbound

3/31/2018 12:30:00 AM - Incident# 2987844 (0 lost trips, 9 lost minutes)

Altercation on board the train

Train #669, T-362

(1014 B)-1063-1051

Downtown Santa Monica Station

Other Incidents:

3/5/2018 5:08:00 AM - Incident# 2976852 (0 lost trips, 6 lost minutes)

Train operator reports a passenger doing a lewd act on the train.

3/8/2018 6:50:00 AM - Incident# 2978379 (2 lost trips, 288 lost minutes)

Sick Patron

Train 651

T-226

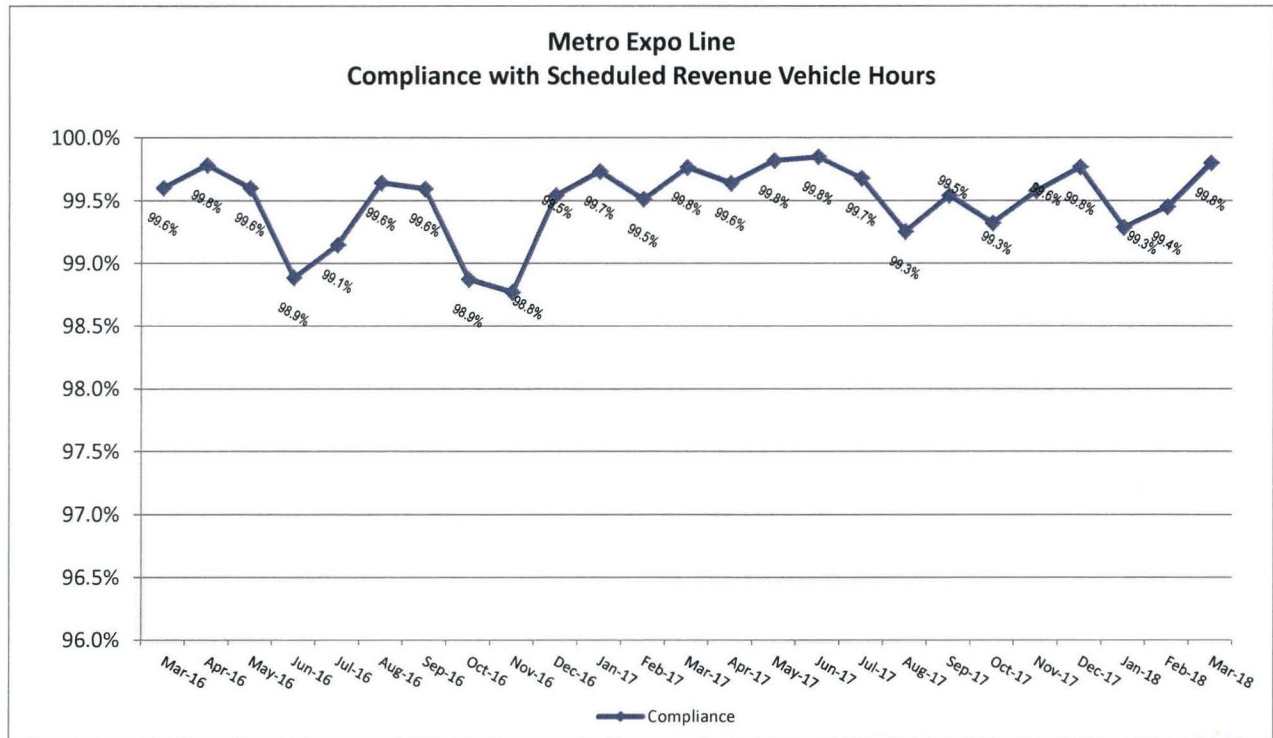
(1041)-1049-1065

LA Cienega Trk3 N/B

+ 6 minute delay.

MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

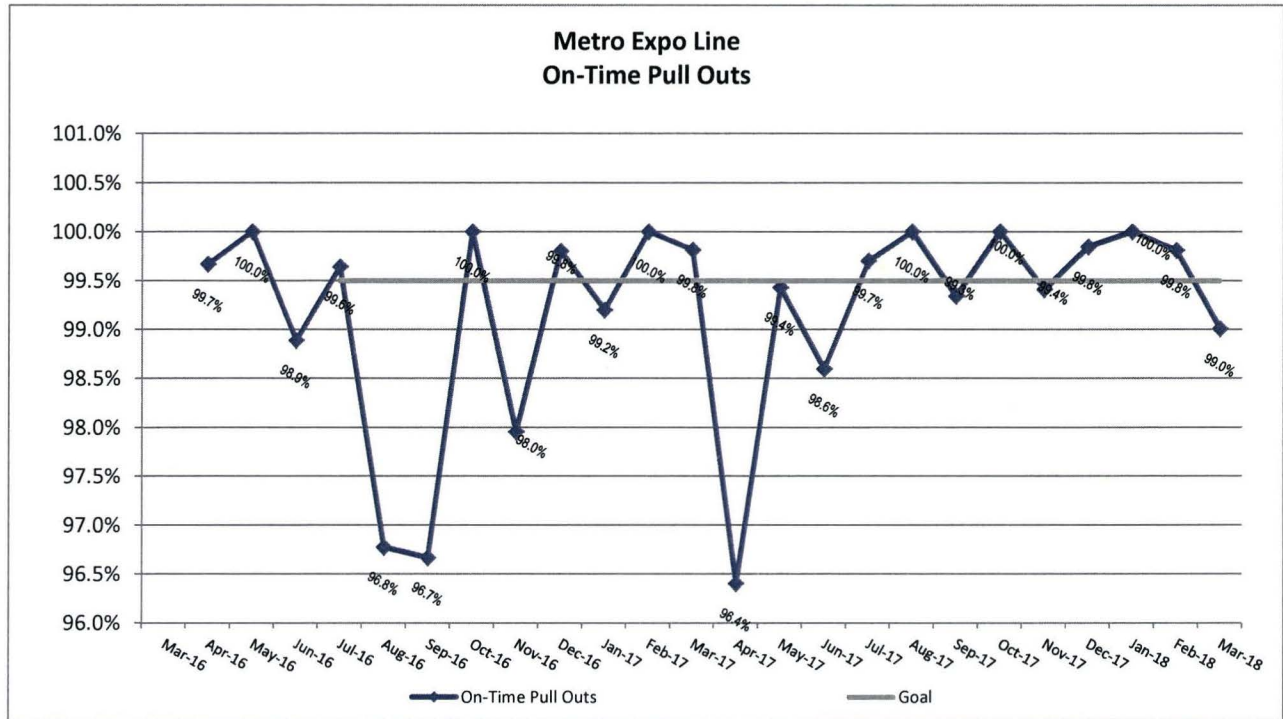
COMPLIANCE WITH SCHEDULED VEHICLE HOURS



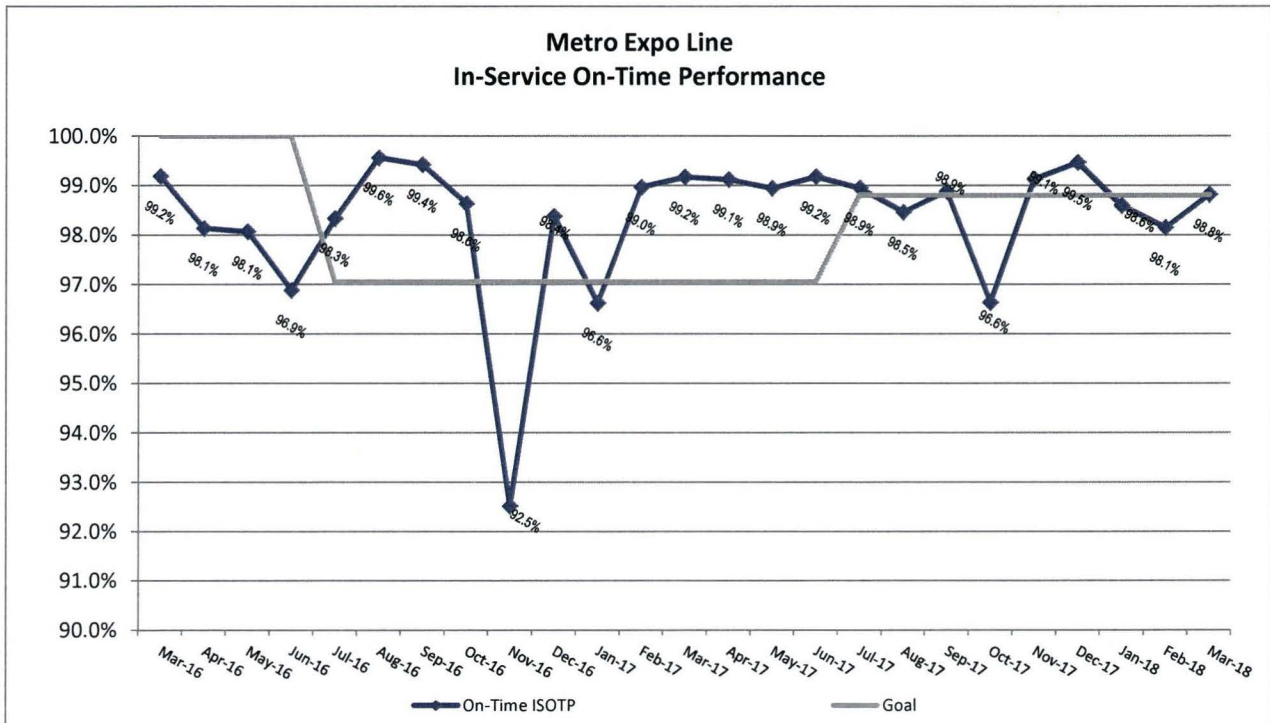
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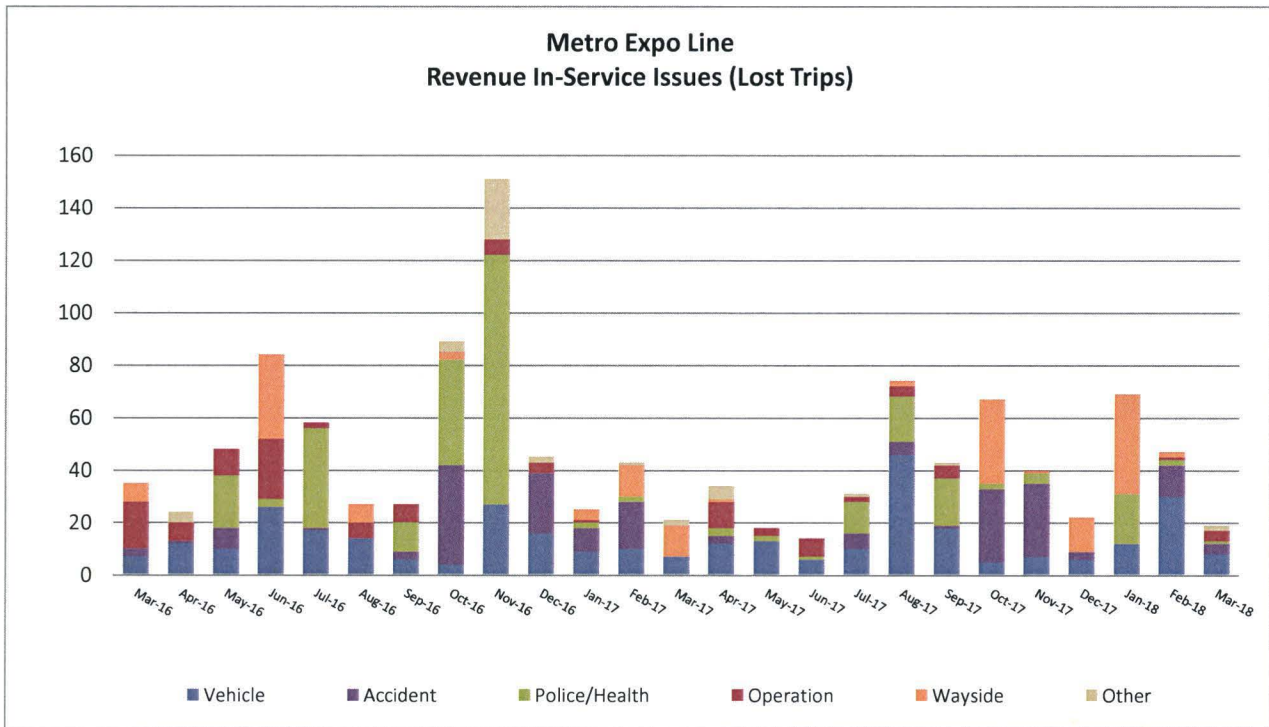
ON-TIME PULL OUTS



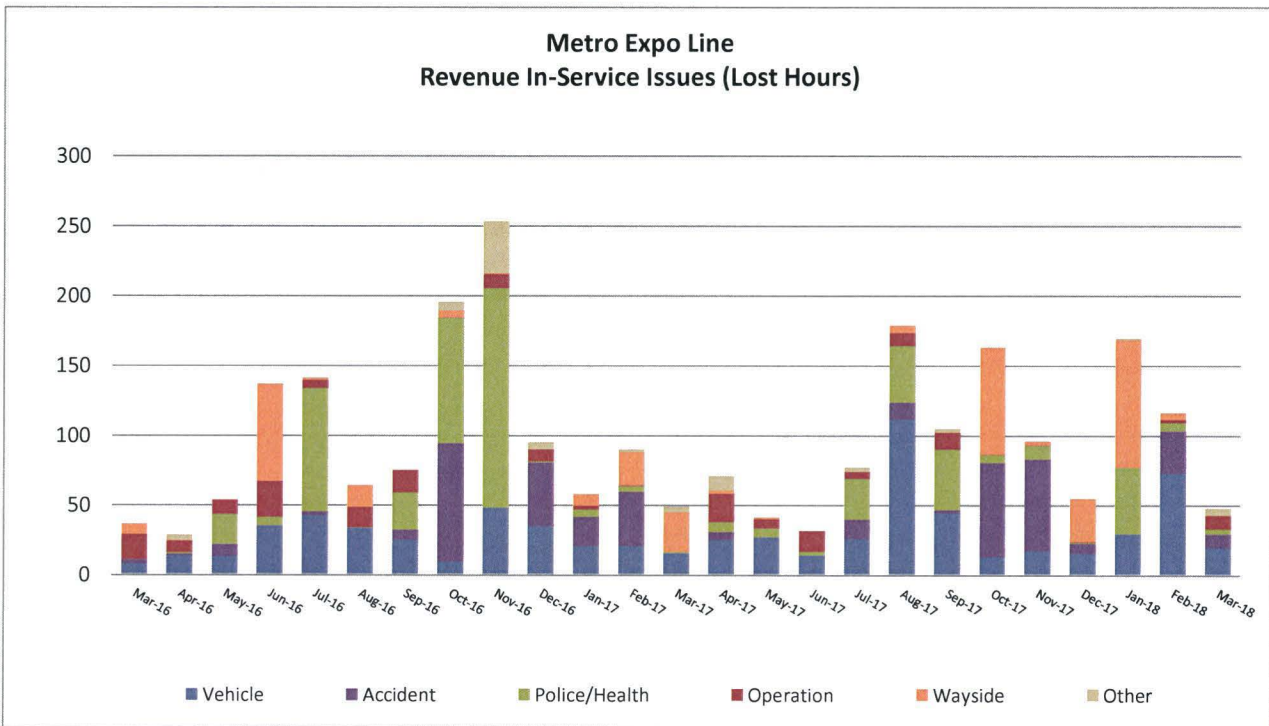
IN-SERVICE ON-TIME PERFORMANCE



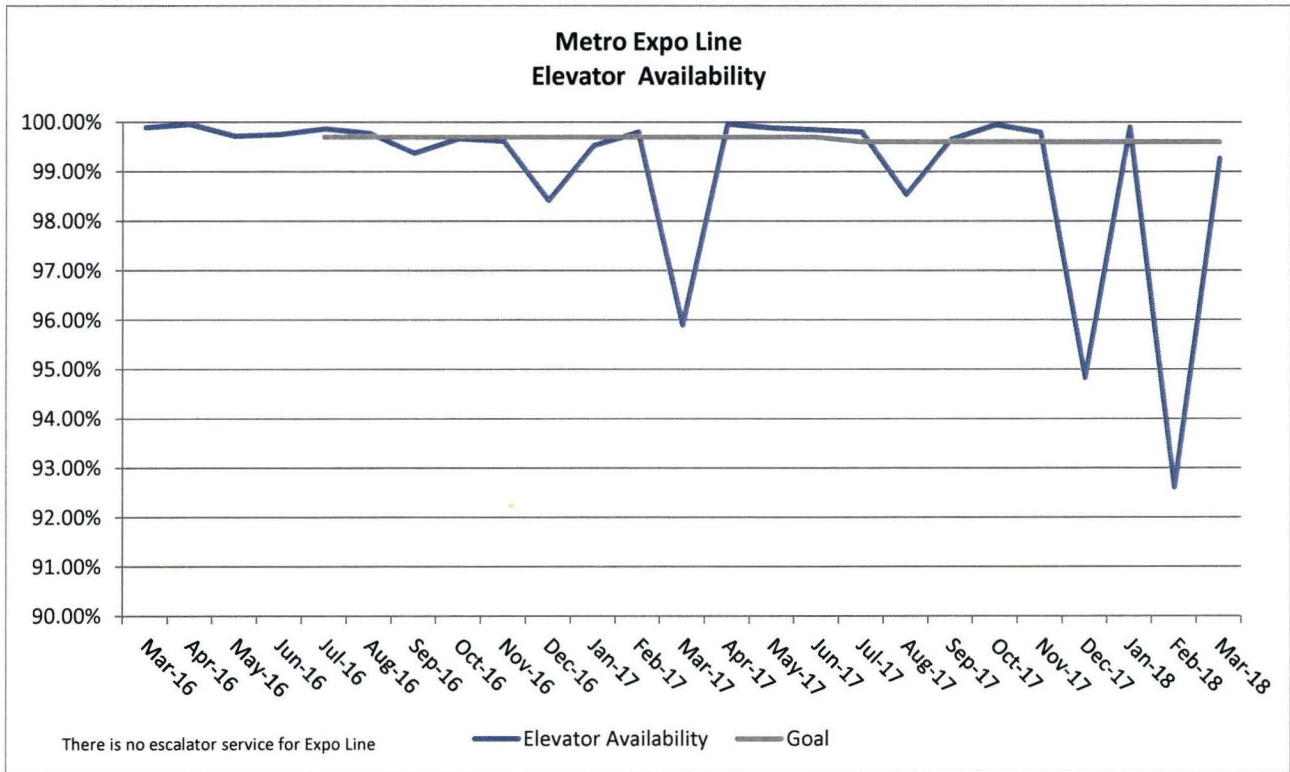
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



Financial Status

March 2018

FTA Quarterly Review

May 30, 2018



Metro

Excellence in Service and Support

FY18 – Indicators

- FY18 actual cash receipts from locally imposed sales tax revenues (PA, PC, MR, MM) totaled \$826.3M during Q3, an increase of 37% over FY17 Q3. Excluding M, sales tax receipts increased 2.5%
- The Mar 2018 Los Angeles County unemployment increased 0.1% from Dec while State and National levels remain unchanged.
LA 4.5%, CA 4.3% and US 4.1%
- Inflation in the Los Angeles Metropolitan Area continues to inch upward and was 3.76% for the period Mar '18 over Mar '17
 - Excluding Food and Energy, core inflation equaled 3.70%
- Transit indicators – FY 18 Q3
 - Ridership versus prior year
 - Bus: -2.5%
 - Rail: -4.4%
 - Total: -3.0%
 - Fare revenues – FY18 Q2 -3.7% vs FY 17 Q2



FY18 Q3 – Highlights

- After review of the pilot program, the Metro Board approved the expanded delegated authority of the CEO to negotiate and execute project related agreements within the authorized Life-of-Project Budget on all transit and regional rail capital projects program-wide.
- Approved the award of ten-year, bus and rail system advertising contracts expected to generate a minimum of \$305 million
- Approved Local Return Borrowing Guidelines and procedures for Props A&C and Measures R&M to formalize how local jurisdictions can finance their participation in projects.



FY18 Q4– Look Ahead

- Proposed Adoption of the FY 2018-19 Budget estimated at \$6.6 billion, a 4.5% increase over FY18 including:

Expenditures by Program Type (\$ in Millions)	FY18	FY19	FY18 - FY19 \$ Change	FY18 - FY19 % Change
	Budget	Prelim Budget		
1 Transportation Infrastructure Development	\$ 1,987.2	\$ 1,987.7	\$ 0.5	0.0%
2 Metro Transit – Operations, Maintenance, & Regional Operating Services	1,755.4	1,795.5	40.1	2.3%
3 Metro Transit - SGR & Other Asset Improvements	431.9	493.0	61.1	14.1%
4 Subsidy Funding Programs	1,243.3	1,333.0	89.7	7.2%
5 Regional Rail	178.4	179.0	0.6	0.3%
6 Congestion Management	113.0	127.3	14.3	12.6%
7 General Planning & Programs	133.5	167.4	33.9	25.4%
8 Debt Service	383.9	416.6	32.7	8.5%
9 Oversight & Admin	55.2	63.3	8.2	14.8%
Total Budget	\$ 6,281.7	\$ 6,562.6	\$ 280.9	4.5%

- The FY19 budget reflects significant increases in State of Good Repair including the “New Blue” initiative, planning for adopted Measure M projects, increased subsidies to local jurisdictions and our ongoing Transit Infrastructure Development program.



METRO CONSTRUCTION SAFETY

FTA Quarterly Review Meeting

May 30, 2018



CONSTRUCTION SAFETY QUARTERLY REPORT



Crenshaw/LAX Transit Project

CRENSHAW/LAX TRANSIT PROJECT

- ❑ Metro participated in WSCC Tool-Box Safety Huddle Meetings in January, February and March 2018.
- ❑ WSCC participated in Metro's All Hands Safety and Security Meetings in January, February and March 2018.
- ❑ WSCC participated in Metro's Executive Safety Walks and Safety Briefings in January, February and March 2018.
- ❑ Project-to-Date Total Work Hours: 6,175,093
- ❑ Recordable Injuries as of March 2018: 82
- ❑ Project Rate per 200,000 Labor Hours: 2.6
- ❑ BLS National Heavy Construction Incident Rate: 2.8
- ❑ Total Days Away Cases: 3
- ❑ Total Restrictive Duty Cases: 11

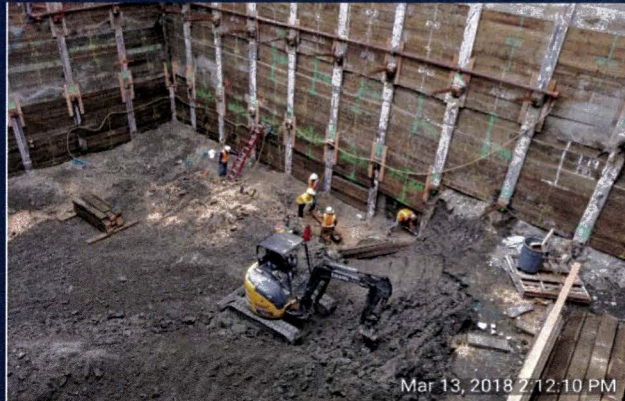
CONSTRUCTION SAFETY QUARTERLY REPORT



Westside Purple Line Extension
Section 1 Project

WESTSIDE PURPLE LINE EXTENSION SECTION 1 PROJECT

<input type="checkbox"/> Project to Date Total Work Hours:	2,574,200
<input type="checkbox"/> Recordable Injuries as of February 2018:	12
<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:	3



Regional Connector Transit Project

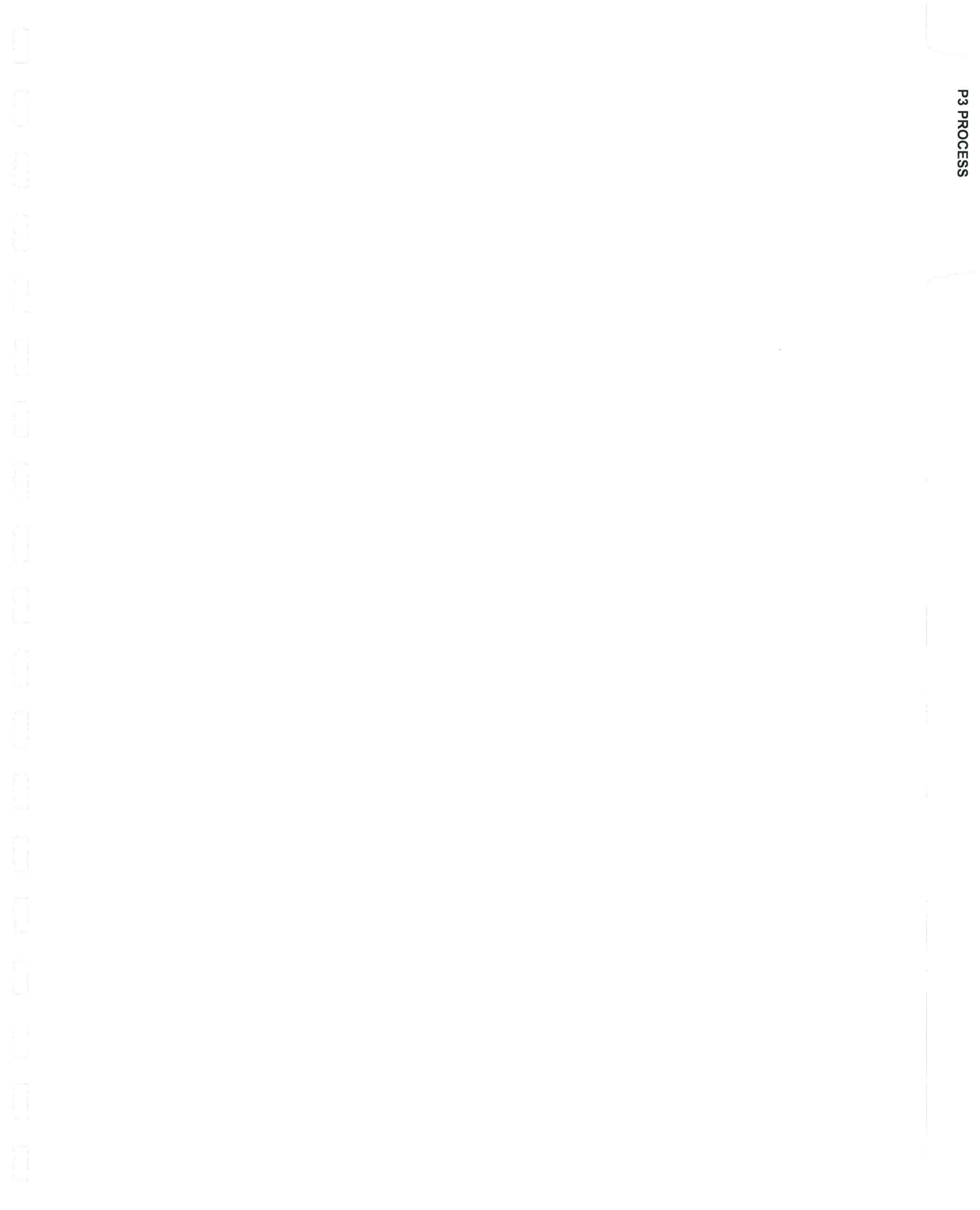
REGIONAL CONNECTOR TRANSIT PROJECT

<input type="checkbox"/> Project to Date Total Work Hours:	2,775,436
<input type="checkbox"/> Recordable Injuries as of February 2018:	13
<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

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.





Innovative Project Delivery

A Programmatic Approach to Developing &
Delivering Transit P3s



Metro

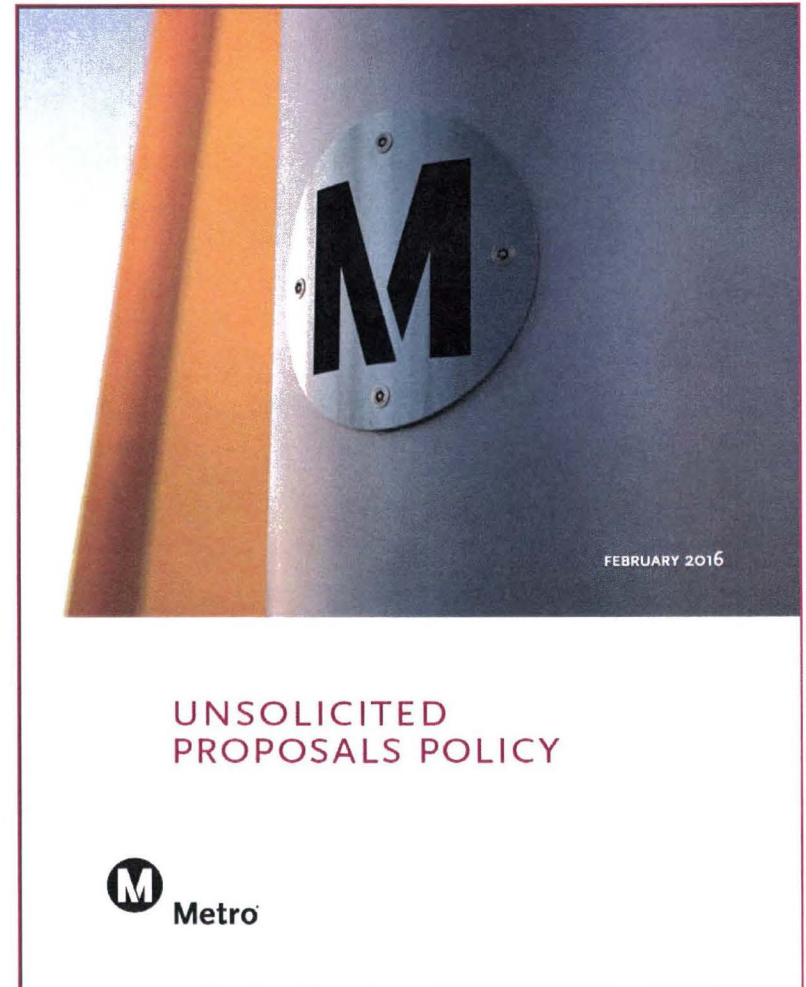
Colin F. Peppard

Office of Extraordinary Innovation

May 30th, 2018

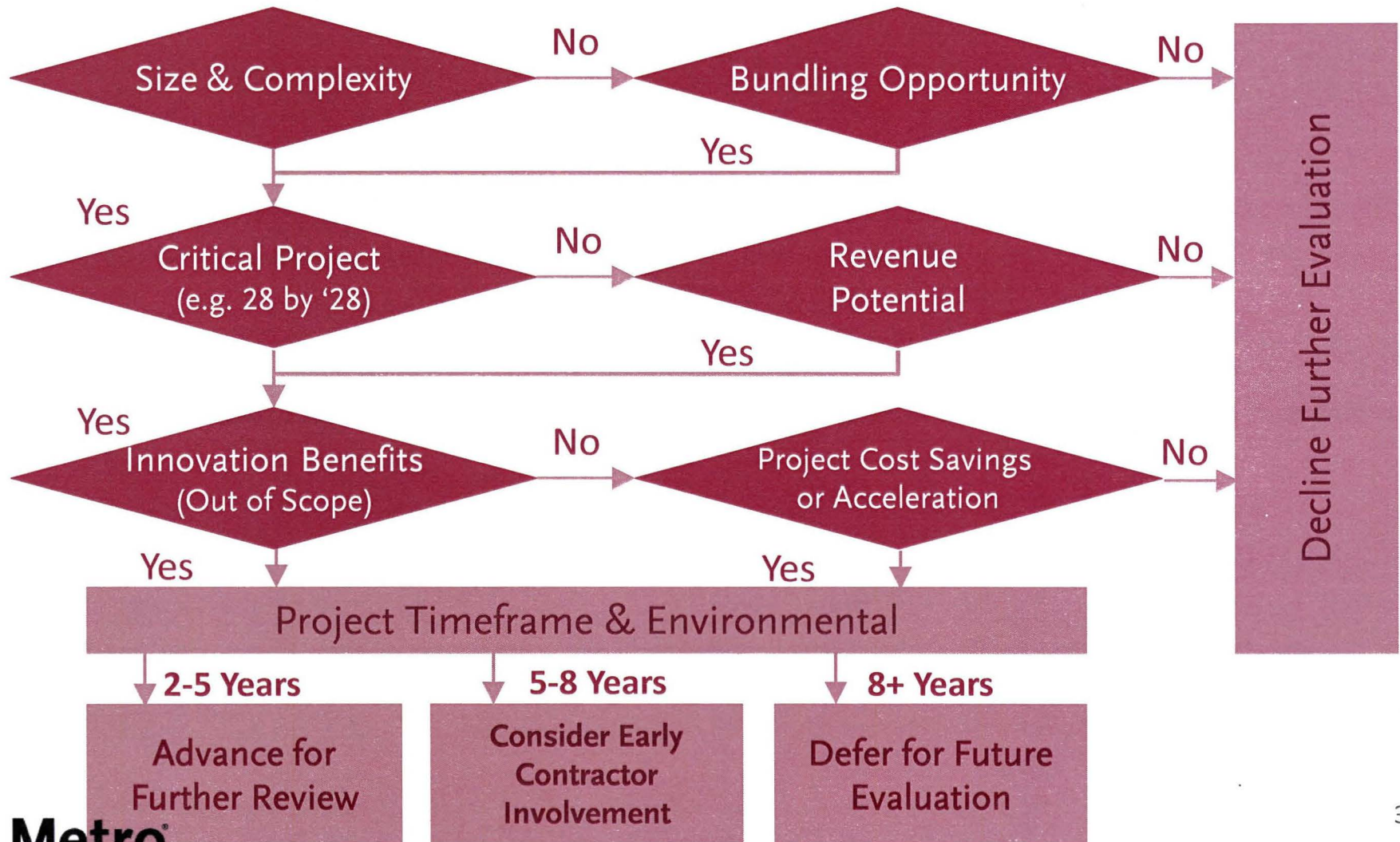
Unsolicited Proposals Drive P3 Screening

- > Open door for ideas, innovation, and experimentation
- > Private sector identification of value opportunities
- > Allows the market to work for Metro
- > Expands capacity to identify and evaluate P3 opportunities
- > Change management tool



P3 Screening Approach

Capital Project Concept Screening Process



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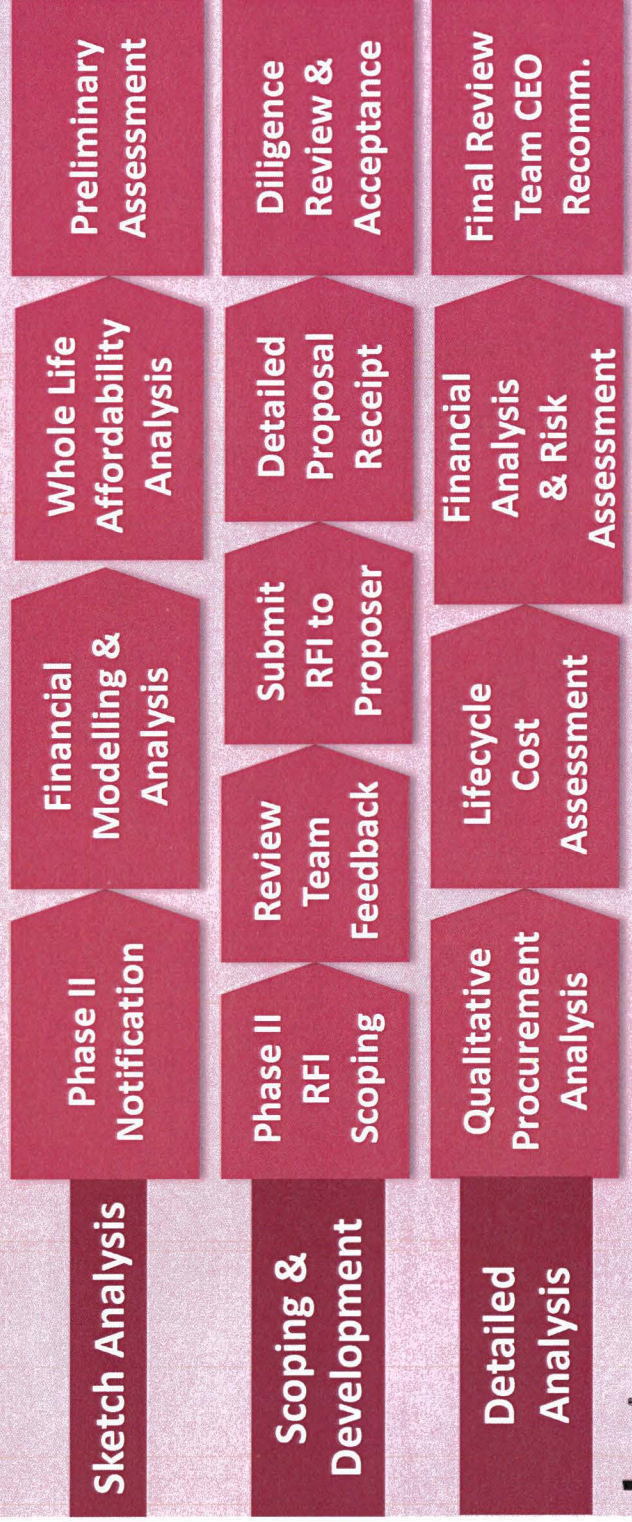
P3 Unsolicited Proposal Review

Capital Project Screening & Evaluation Process

Phase I Proposal



Phase II Proposal



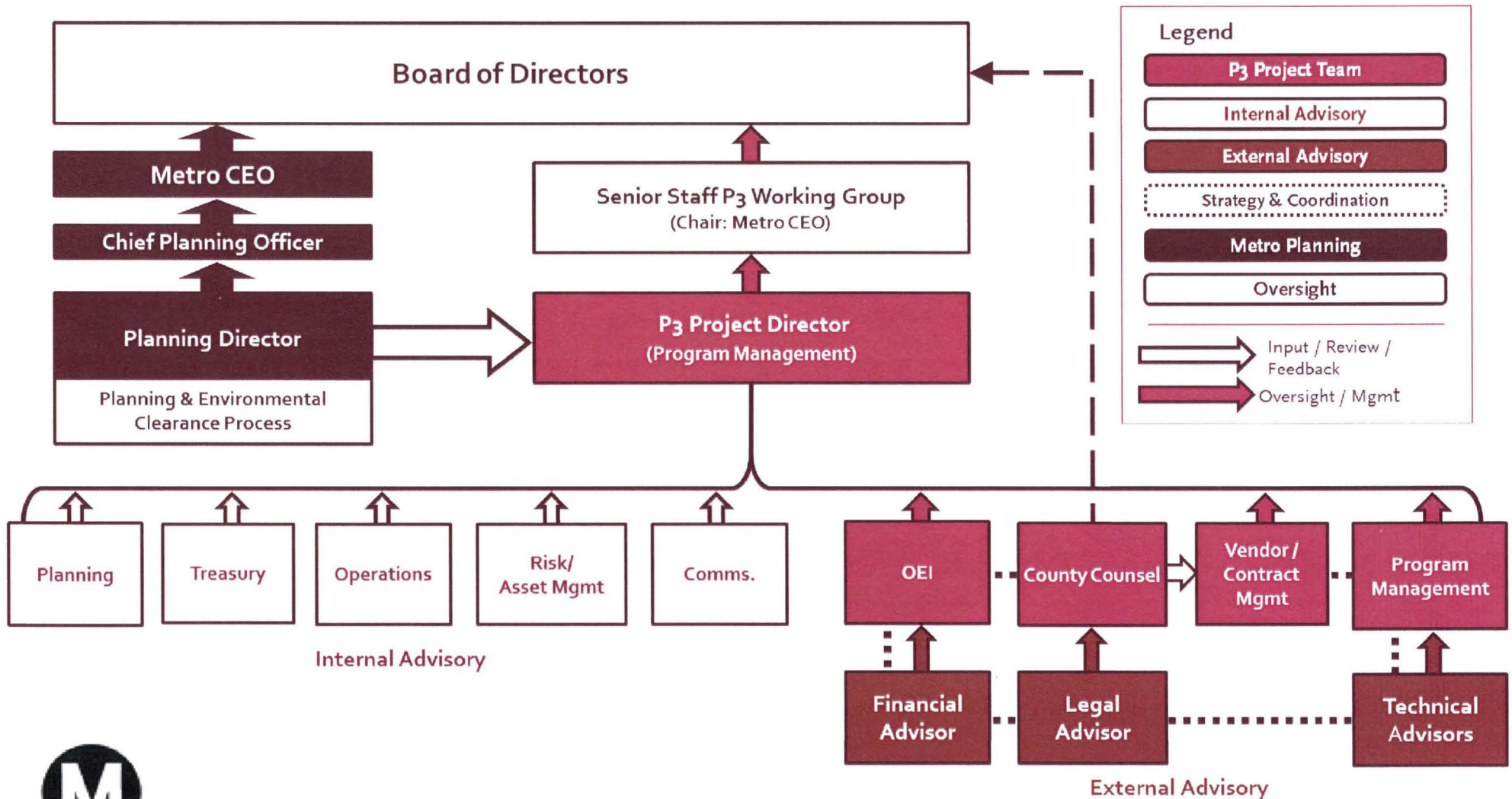
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Key P3 Team Roles & Responsibilities

Integrated team approach to developing and delivering P3 projects

- > **Program Management:** Overall management of P3 development, integrated with Planning-led EIR process
- > **Office of Extraordinary Innovation:** Pre-procurement, Financial Analysis and Business Case
- > **Vendor/Contract Management:** Procurement documents, industry engagement, and procurement process (RFQ/RFP)
- > **Coordination/Metro Departments:** Operations, Risk Management, OMB, Communications

P3 Project Governance Structure



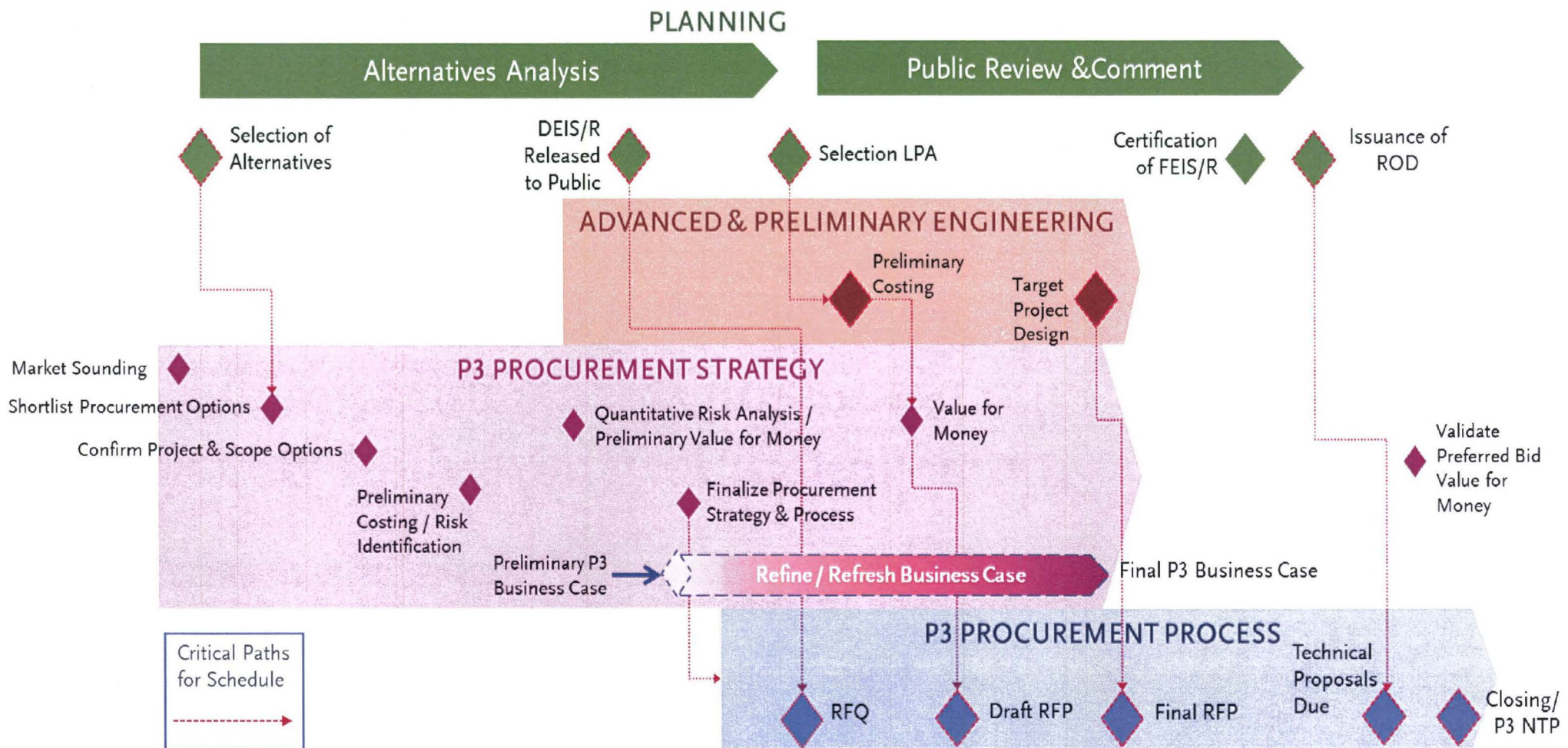
Project Planning & Environmental Review

Project planning/environmental and P3 development are separate but closely integrated efforts

- > Planning and environmental must remain agnostic of delivery model (DBB, DB, P3, etc.)
- > P3 development activities cannot move ahead of the planning and environmental processes
- > Outputs from project planning efforts are critical inputs into P3 analysis for procurement decision-making and structuring
- > Iterative engineering and risk analysis occur earlier than usual to produce project data required for timely project delivery

Planning and P3 Procurement Integration

Planning, design, and environmental review process must integrate with and feed data into P3 procurement process while remaining independent.



P3 Project Implementation

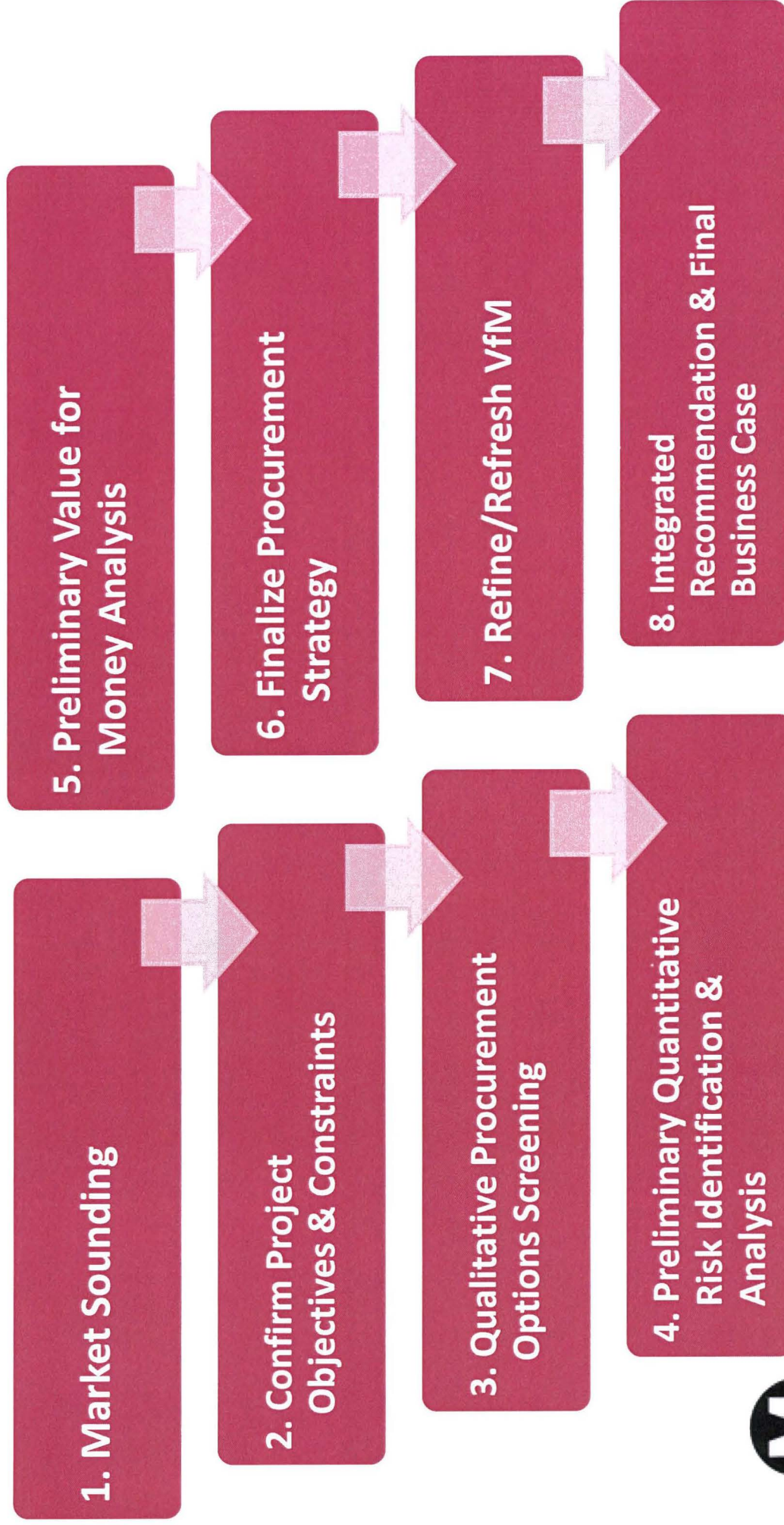
P3 project development differs significantly from Design-Build delivery practice:

- > Significantly more due diligence on full set of project costs and risks (inc. O&M, lifecycle) than D/B procurement
- > Clear project definition (scope, financial, policy, etc.) required to make decision regarding P3 commercial model
- > Less advanced engineering for P3 procurement than may be needed to meet some federal requirements
- > Procurement activities timed just behind environmental and engineering will produce the most efficient project schedule, but is a coordination and data challenge



Metro

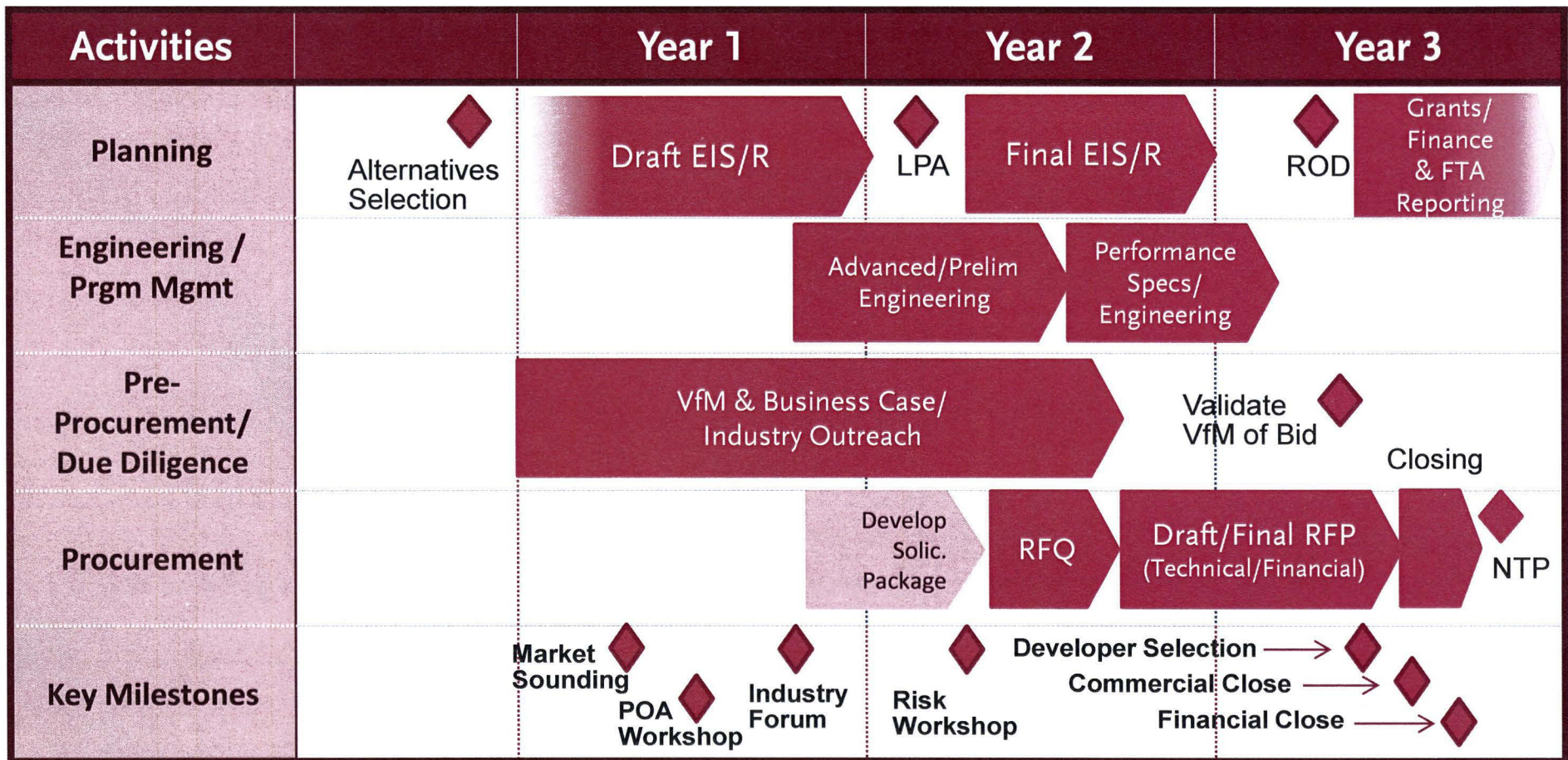
P3 Pre-Procurement Activities



Metro

Sample P3 Project Schedule

Overlap planning, engineering, and procurement tasks for schedule efficiency



Post-ROD Role of Planning

Metro Planning to lead key project roles after issuance of Record of Decision

- > Ensure consistency of procurement/delivery with planning and environmental documents, Metro/state/federal policy, and Measure M/LRTP requirements
- > Review financial proposals and any security documents
- > Internal financial assessment and planning, including funding, bond sizing and structuring, budgetary needs, etc.
- > Federal (CIG, etc) and State grants and funding opportunities
- > Communication and coordination with FTA regarding project progress



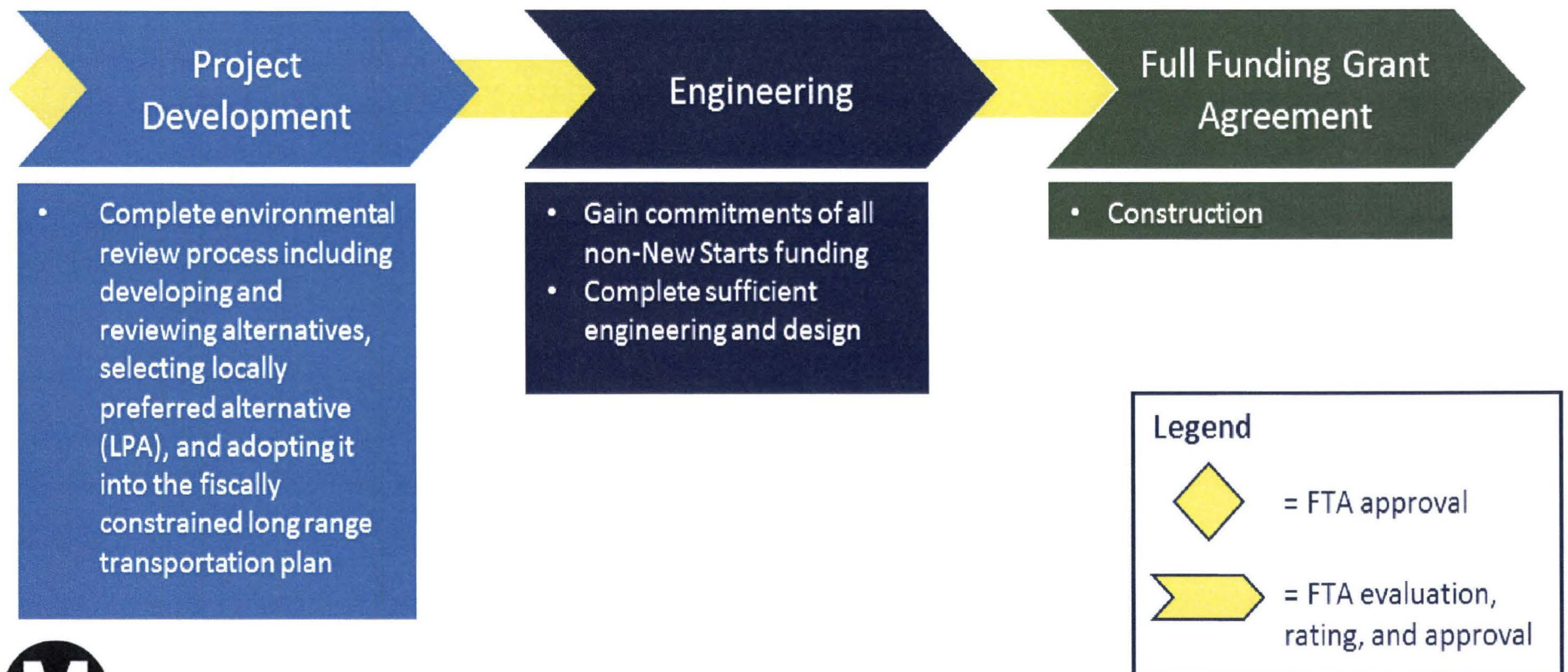
Metro

Key FTA Integration Points

- > Authorization to enter Project Development
- > Issuance of ROD
- > Checklist Final Design
- > Early Systems Work Agreement Application
- > Final Design Approval
- > Award of Early Systems Work Agreement
- > FFGA Submittal to FTA
- > FFGA Recommendation to Congress
- > Congressional Approval

Integration with CIG Review Process

New Starts FFGA requirements coincide with DBB/DB development process, and timing of P3 procurement activities may present challenges.



Key Considerations for Metro

Multiple Alignments

- Multiple alignments are areas of risk to schedule and cost
- Need to have alignment finalized prior to Entry into Engineering

Phasing

- Depends upon agreement on alignment
- Dependent upon availability of Local funds (non-CIG funds)

Local Financial Commitment

- 30 percent of non-CIG funds in hand prior to Entry into Engineering
- Secure balance of local funds including contingency during Engineering phase

P3 Procurement Schedule

- Success relies on interplay between FTA and P3 processes
- Requires significant coordination between FTA Regional (and HQ) and Metro

Capacity Investment Grant Program FFGA

- Contingent upon FTA's view that their risk has been minimized vs transferred
- If P3 costs come in higher than anticipated, FTA share does not increase
- Drawdown schedule does not match AP payments
- Confirmation of costs prior to submittal of FFGA Formal Application
- FFGA is required before award to P3 vendor/Financial Close

Potential FTA Opportunities

> Private Investment Project Procedures

- **Opportunity:** Alignment of FTA milestones and requirements with P3 timeframes and products
- **Challenges:** Discretionary waivers; No statutory requirements

> Expedited Delivery for CIG Pilot Program

- **Opportunity:** Faster CIG evaluation processing
- **Challenges:** Cost share and O&M Requirement

> Planning & Environmental Linkages

- **Opportunity:** Integration of P3 development products into CEQA/NEPA process to minimize duplication of effort
- **Challenge:** Project vs. procurement goals; NEPA process independence

FTA Quarterly Planning Update

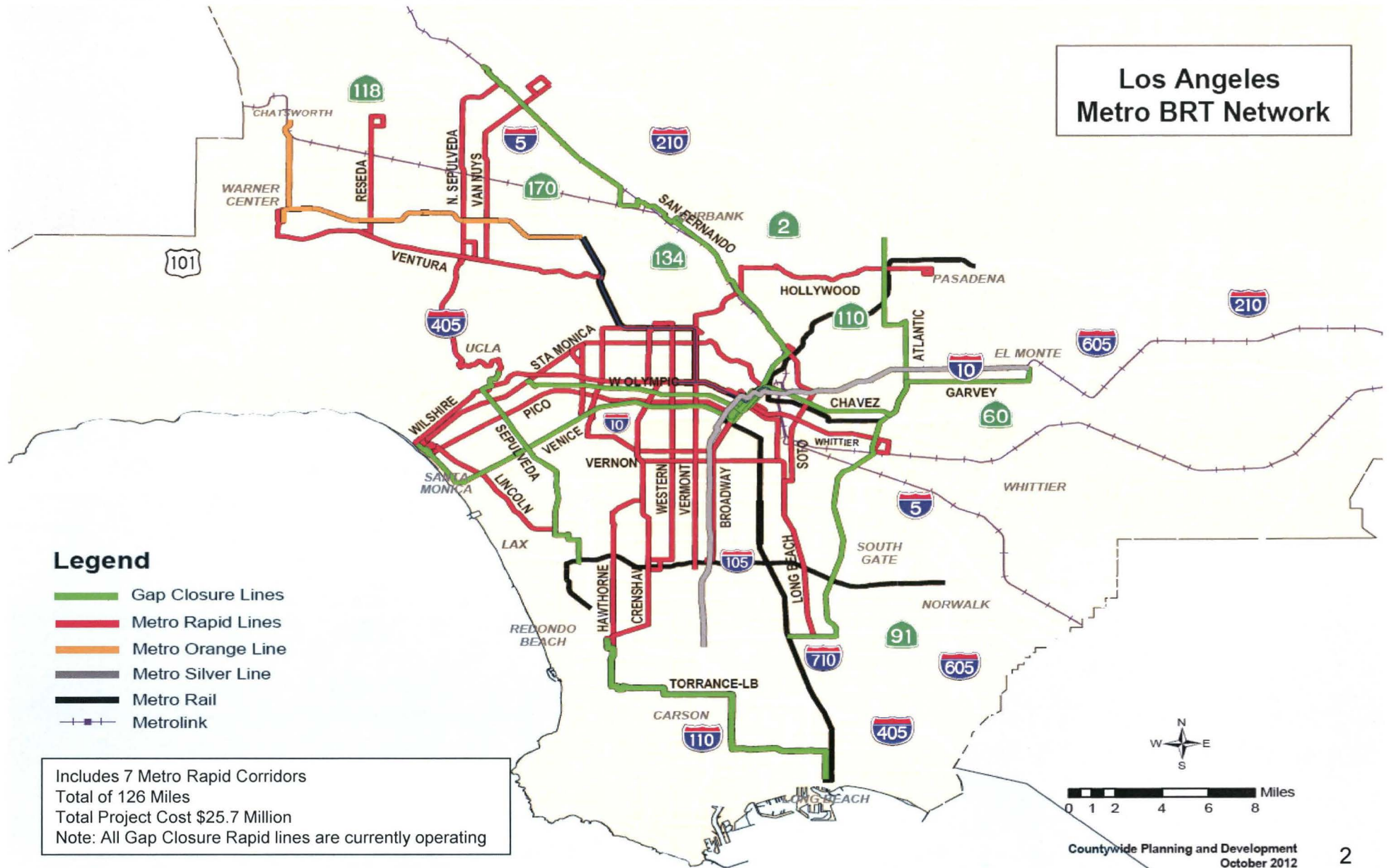
May 30, 2018

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
- TIGER VII Grant Project
 - Rail to Rail Active Transportation Corridor Connector Project
- Ladders of Opportunity Grant Project
 - Cesar Chavez Bus Stop Improvements Project



Metro Rapid System Gap Closure Lines



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*
 - January 2018 – City re-released RFP
 - 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	Contract awarded
29	City of Torrance	December 2018	Revised shelter design
8	Culver City	Late Summer 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	\$19,093,403	\$23,121,925
Shelters	\$ 5,160,000	\$ 5,160,000	\$ 4,112,676	\$5,140,000
TOTAL	\$29,204,301	\$28,281,925	\$23,206,079	\$28,261,925

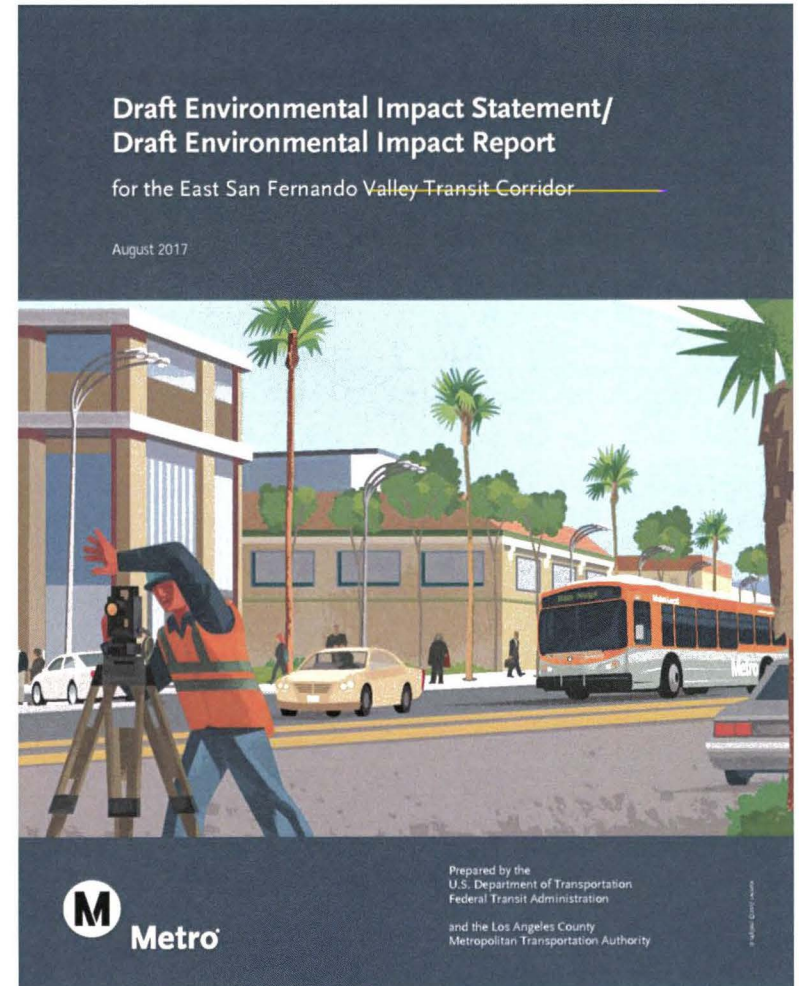
East San Fernando Valley Transit Corridor

Draft EIS/EIR Status:

- Drafting June Board Report and developing staff's LPA recommendations to respond to public comments:
 - Support for an at-grade rail alternative
 - Selection of a preferred Maintenance and Storage Facility site
 - Design changes to reduce right-of-way impacts near Metrolink tracks

Coordinating Activities with:

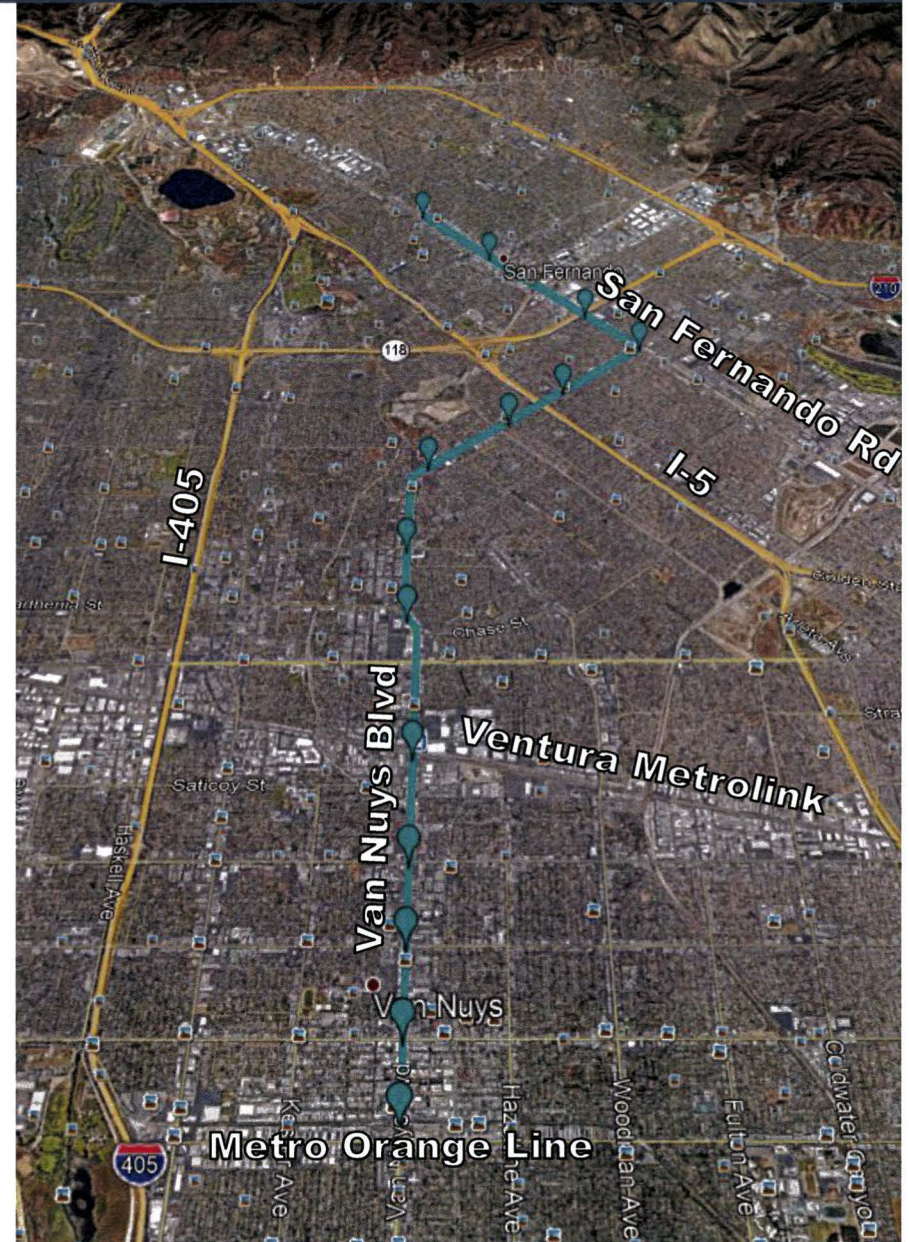
- Regional Rail/SCRRA on the Brighton to Roxford double track project
- Metro Orange Line on proposed BRT grade separation at Van Nuys Blvd.
- City of San Fernando to reduce property acquisitions



East San Fernando Valley Transit Corridor

June 2018 Board Action:

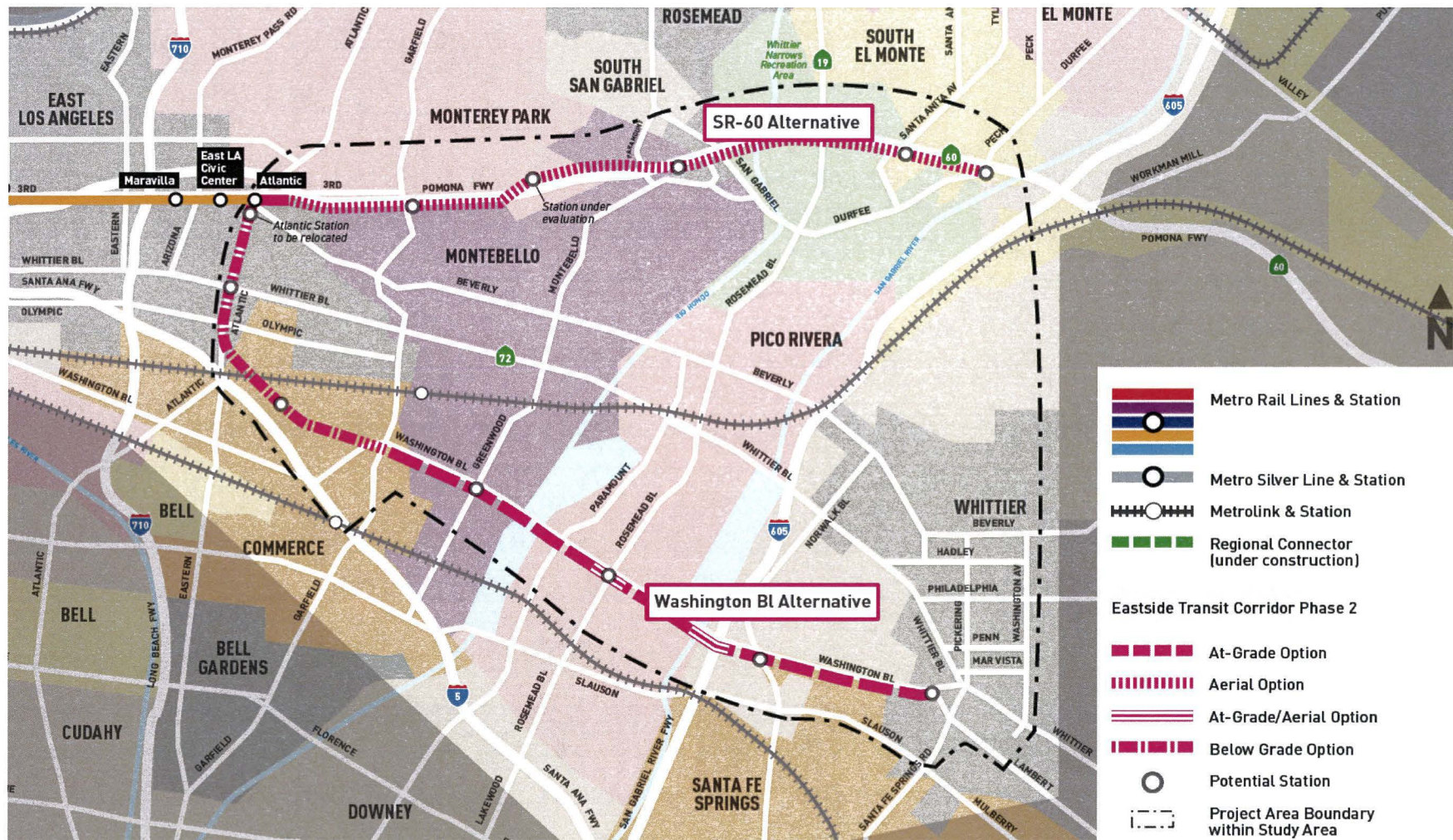
- Select a Locally Preferred Alternative:
 - LRT or BRT
 - Maintenance and Storage Facility location
- Consider award of Supplemental Studies:
 - LRT Grade Crossing and Safety Analysis
 - Metro Orange Line Connections Study
 - First/Last Mile Study of 14 planned stations



Eastside Transit Corridor Phase 2

Three (3) Build Alternatives:

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



Eastside Transit Corridor Phase 2

Status

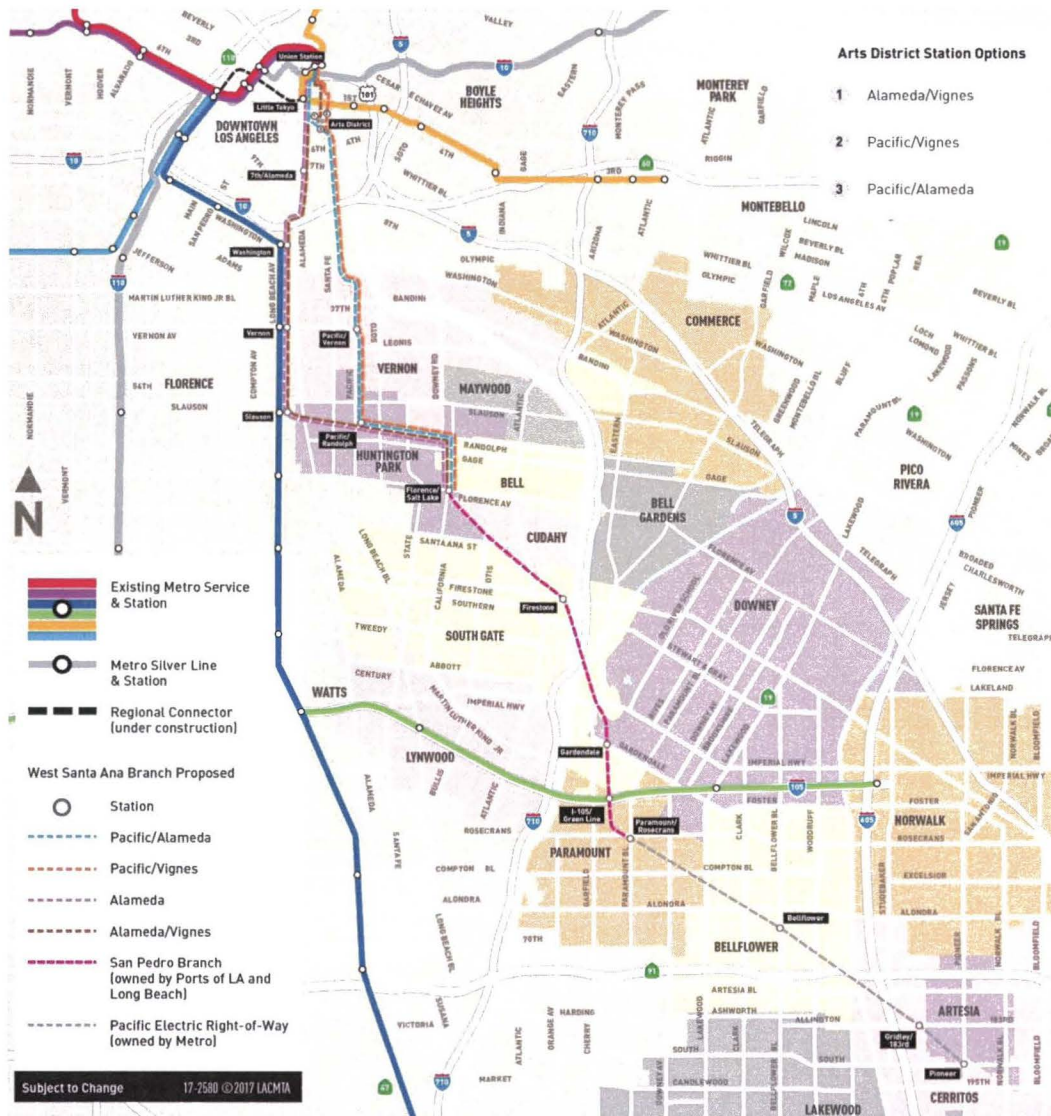
- May 2017 – Board Approval of Technical Study recommendations and updated Project Definition:
 - SR-60 North Side Design Variation LRT Alternative
 - Washington Boulevard Alternative with Atlantic Below Grade
 - Combined Alternative with both SR-60 and Washington Boulevard
- May 2018 – Continued procurement process for professional services:
 - Environmental studies (a contract modification with existing consultant)
 - Advanced Conceptual Engineering (ACE) design services RFP
 - Outreach support services RFP
- Continued Stakeholder Outreach

Next Steps

- Summer 2018 – Board award of contracts



West Santa Ana Branch Transit Corridor



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

Draft EIS/EIR will evaluate:

- Northern Alignment Options
- One Southern Alignment
- Stations
- Grade Crossings
- Maintenance Yard Options
- Site Specific Design Options

West Santa Ana Branch Northern Alignment Options



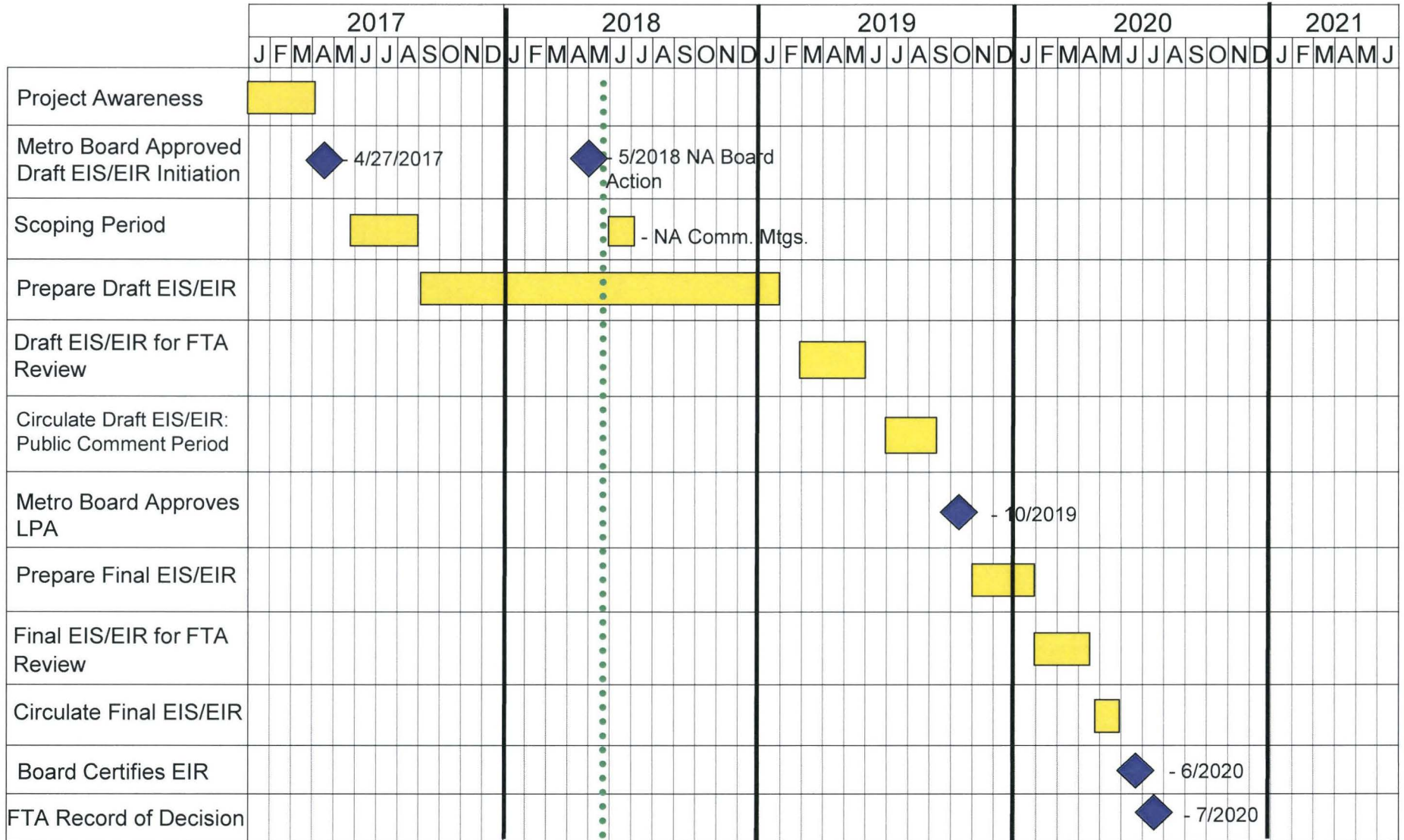
Status

- March 2018 – Board authorized study of additional Northern Alignment Options
 - Five community meetings held
- April/May 2018 - Conducted additional technical analysis on Northern Alignment Options
 - Four community meetings held
 - Ongoing stakeholder briefings

Next Steps

- May 2018 – Board action on northern alignment options to carry forward into the Draft EIS/EIR
- Summer – Updated scoping meetings

West Santa Ana Branch Transit Corridor Schedule



◆ = Milestone Date

Last Revised: 5/2018

Rail to Rail Active Transportation Corridor (ATC) Connector Project

Status

- February 16, 2018 – Invitation for Bid solicitation package released
- May 1, 2018 – Bids received

Next Steps

- July 2018 – Award construction contract
- Continued coordination with:
 - City of Los Angeles (Bureaus and Departments)
 - Crenshaw/LAX Project Team

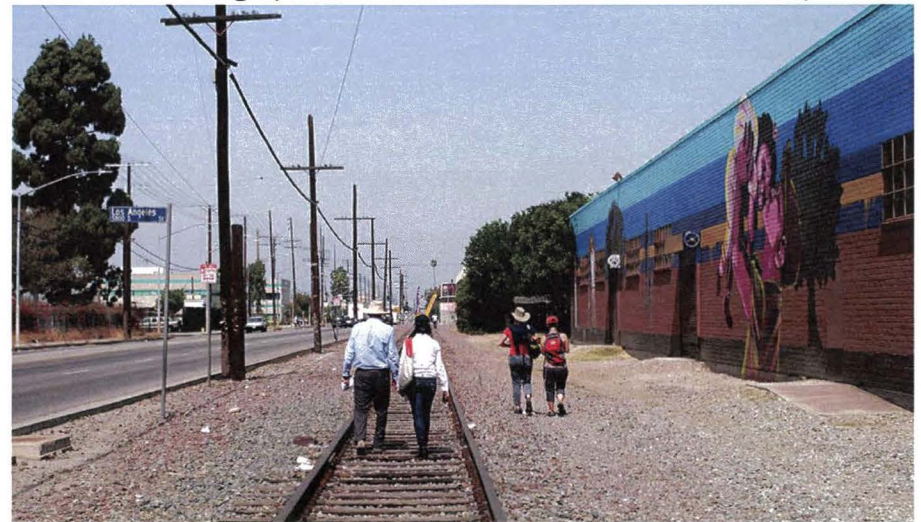


Rail to Rail Active Transportation Corridor (ATC) Connector Project

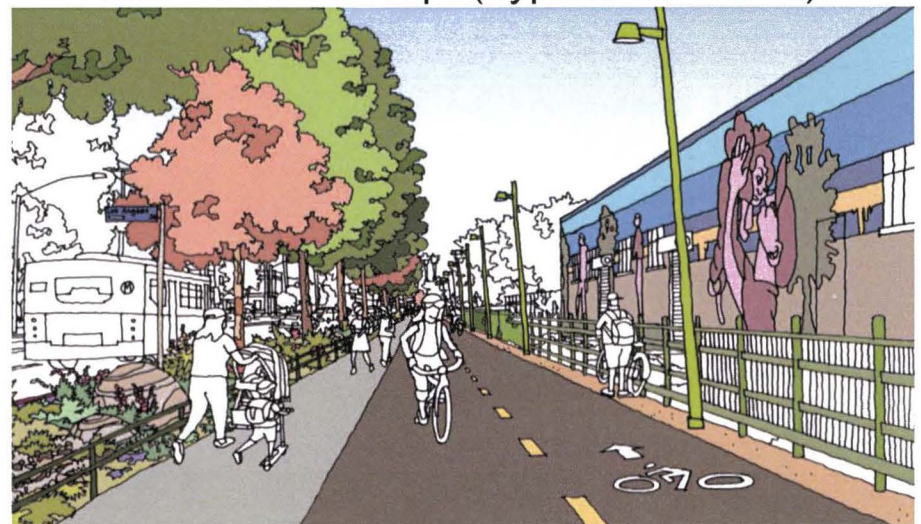
Slauson Corridor Design Concept

- Remove existing railroad track along the existing Metro owned ROW
- Pave and stripe path for Class I and strip only for Class II/III Bike Facilities
- Install safety features
- Construct new crosswalks at select locations
- Install lighting under highway on Slauson Ave
- Install landscape features such as trees, shrubs and benches

Existing (Slauson west of San Pedro)

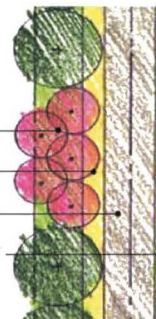


Mid-block Concept (Typical 30' ROW)

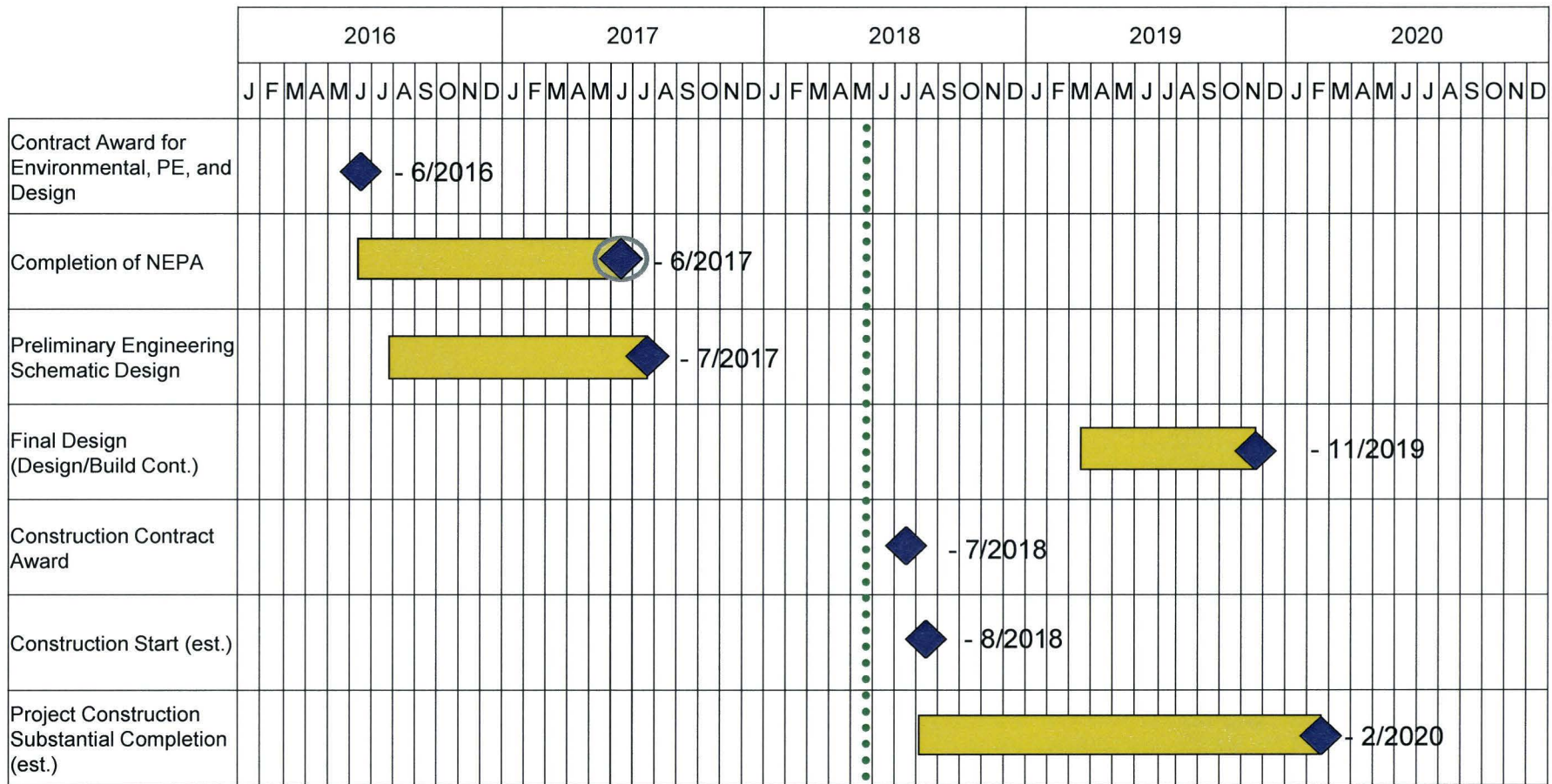


COMPOSITION
30' typical ROW

- 7'
- 11' street buffer
- 5' walking path
- 12' bike path
- 2' property line buffer



Rail to Rail ATC Connector Project Schedule (est.)



Last Revised: 5/2018

◆ = Milestone Date

○ = FTA Action

Milestones

PROJECT		NOI/NOP	Admin Draft to FTA	NOA	LPA
CEQA/ NEPA	East San Fernando Valley Transit Corridor	Mar-13	Jul-16	Aug-17	Jun-18
	Eastside Transit Corridor Phase 2 ¹	Jan-10	Dec-13	Aug-14	May-21
	West Santa Ana Branch Transit Corridor	Jun-17	Mar-19	Jun-19	Oct-19

¹ November 2014 Board approved completion of further technical studies

TIGER PROJECTS (CEQA/NEPA)		Environmental Completion	Project Completion
VII	Rail to Rail Active Transportation Corridor Connector Project	Jun-17	Feb-20

Cesar Chavez Bus Stop Improvements Project

Status

- Scheduled completion of project has been delayed from March 2019 to February 2020
- Design is 100% complete
- Materials procurement in process to be released Summer 2018
- Construction procurement in process to be released Summer 2018

Schedule delay due to:

- Property acquisition required condemnation; another path was selected
- Macy Street Tunnel required cultural assessment
- Design Contract delayed due to lengthy negotiations of price and design
- City coordination and approvals required for City ROW

Next Steps / Revised Schedule:

- Complete procurements by January 2019
- Begin construction February 2019
- Complete construction by February 2020



Cesar Chavez Bus Stop Improvements Project



FOR REFERENCE ONLY

NO.	DATE	BY	APP.	DESCRIPTION
1	JULY 11, 2017	CLP		25% DESIGN - FINAL

Gensler
 500 South Figueroa
 Los Angeles CA 90071
 Telephone 213 327-9600

DATE: 7/11/17
 DRAWN BY: CLP
 CHECKED BY: [blank]
 SCALE: 1/8"=1'-0"



LOS ANGELES COUNTY
 METROPOLITAN TRANSPORTATION AUTHORITY
 ONE GATEWAY PLAZA
 LOS ANGELES CA, 90012

Cesar Chavez Transit Pavilion
 837 Lyon Street, Los Angeles, CA 90012

SITE RENDERINGS

PROJECT NO.	48822702
DATE	06/27/17
SCALE	1/8"=1'-0"
DATE	7/11/17
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DATE	7/11/17
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A-12

12 OF 15

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	\$234,273	\$108,576
Construction	\$1,742,848	\$1,742,848	\$0	\$1,742,848
TOTAL	\$2,085,697	\$2,085,697	\$234,273	\$1,851,424



Crenshaw/LAX Transit Project

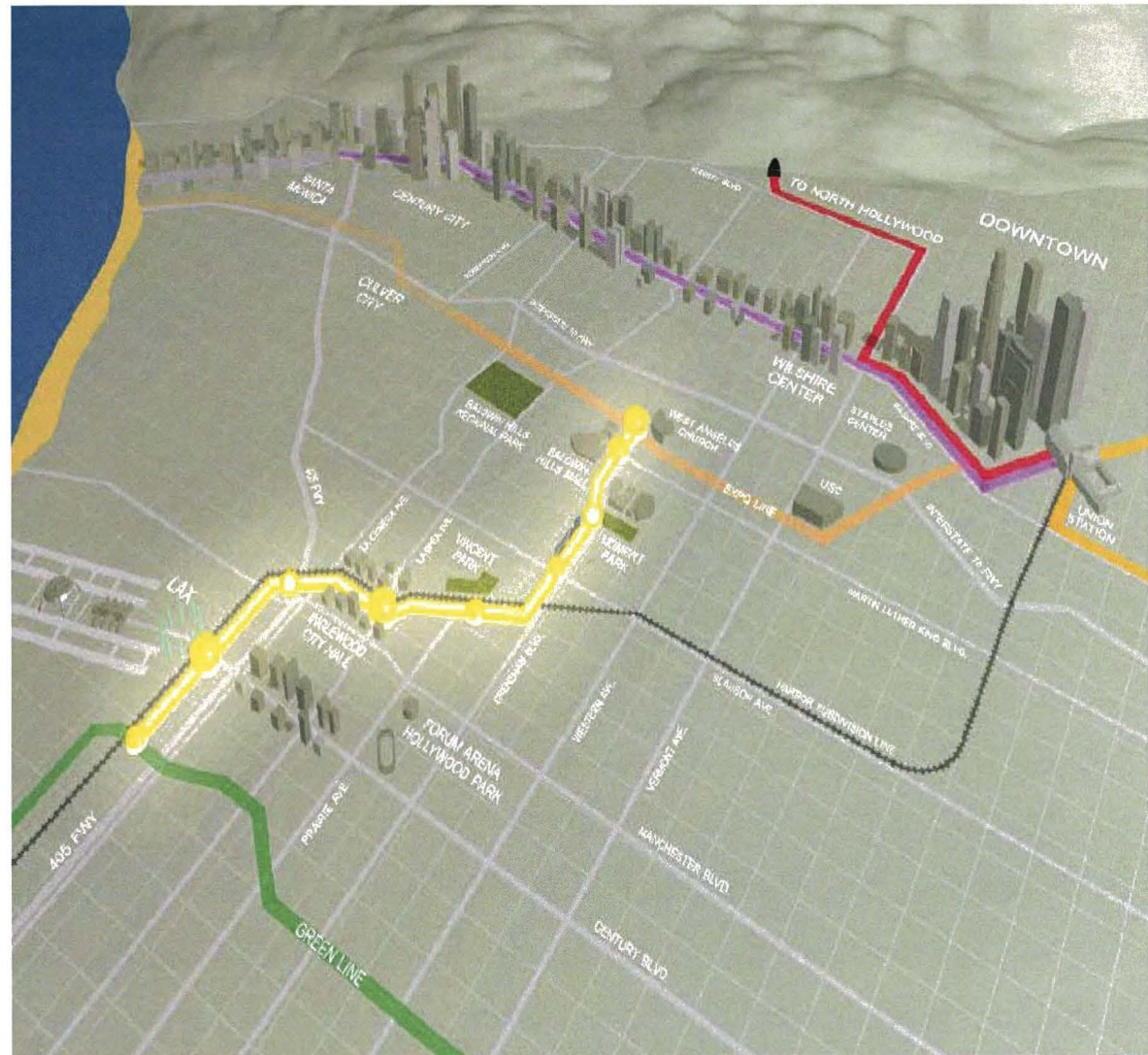
FTA Quarterly Review – May 30, 2018



Metro

Project Description

- 8.5 miles, 8 stations, 22 LRT vehicles
- Current Budget = \$2,058 million
- Current Forecast = \$2,058 million
- Contractor Award Date = August 01, 2013
- Current Revenue Service = October 30, 2019
- Forecast Revenue Service = October 30, 2019
- Design progress = 99%
- Construction progress = 79%
- Forecast Remaining Contingency = 1.1% of total Budget
- Federal Funds = \$651.8 million
- Local Funds = \$1,117.3 million
- State Funds = \$288.9 million



Project Update

- The main line contractor Walsh Shea Corridor Constructors (WSCC) is behind schedule.
- WSCC has been requested by Metro to accelerate to recover delay and has submitted a preliminary mitigation plan which is under review by Metro.
- Green Line tie-in construction activities completed and the Line re-opened on April 1, 2018 – one week ahead of schedule.
- The March 2018 safety recordable rate is at 2.6 which is below the national average of 2.8 (based on 200,000 work hours).
- The estimated jobs created to-date is 16,012 with 517 estimated jobs created last quarter.*
- The Southwestern Yard contractor Hensel Phelps Herzog (HPH) is on schedule toward a planned completion in January 2019.
- Cost contingency is less than 1.1% of total budget.

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

Construction Update

Segment A



AVIATION/CENTURY STATION – Station platform overhang
formwork installation at the service building exit corridor staircase.



AVIATION/CENTURY BRIDGE – Panels, PPA, PPC, LCPA and LPA
installed in the service building electrical room.

Construction Update

Segment B



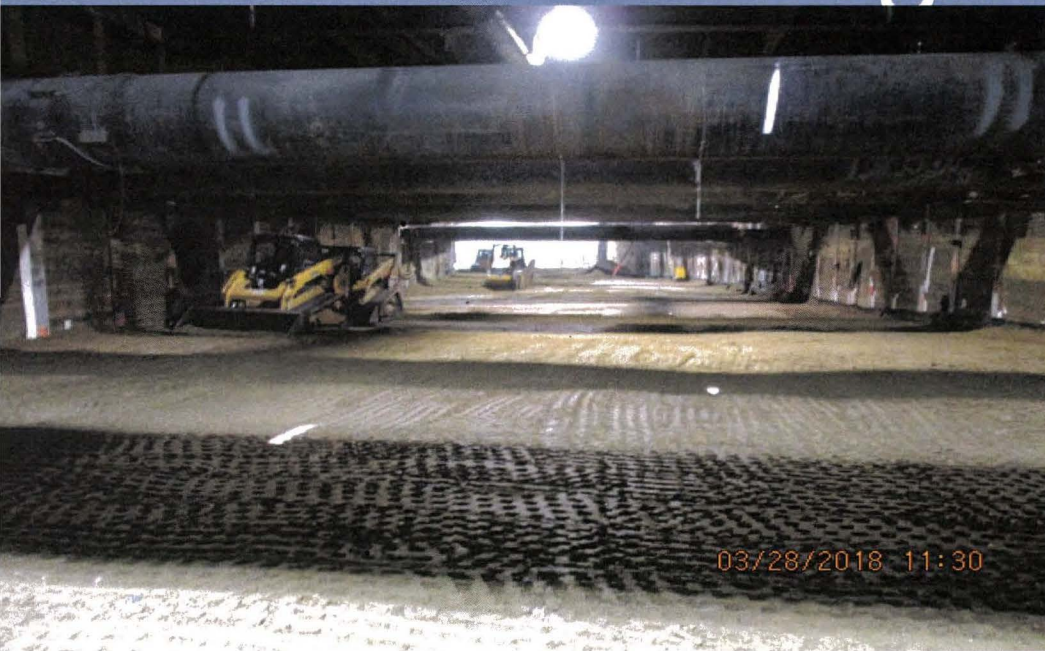
UG#3 – Ironhorse direct fixation plinth construction alongside walkway reinforcement



Hyde Park Station – Trenching for systems duct bank

Construction Update

Segment C



JG4 – Grading and compaction of backfill at roof level



Leimert Park Station – Installation of formwork for roof plenum walls.

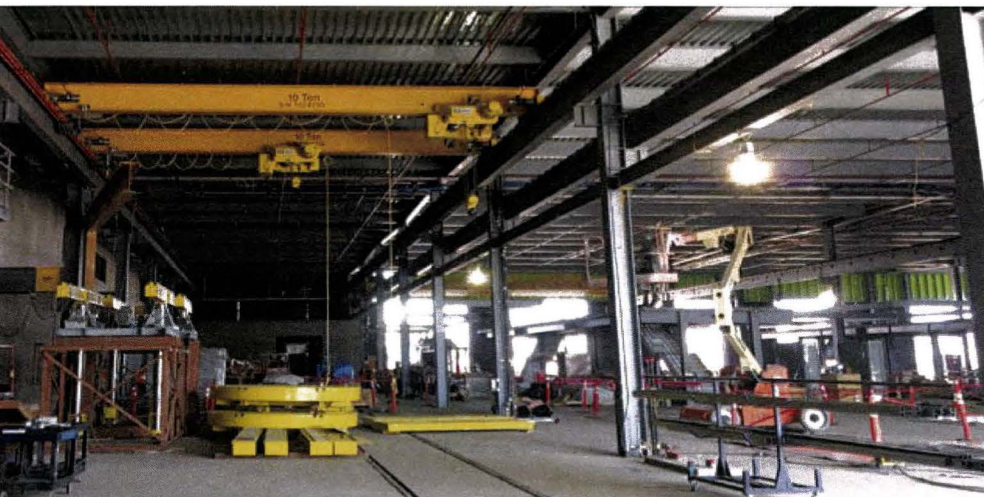
Construction Update Southwestern Yard



Southwestern Yard – Looking south showing yard and automated people mover columns



Southwestern Yard – Aerial view as of 04/2018



Southwestern Yard – Main shop equipment turn tables, truck lift, 10 ton cranes



Southwestern Yard – Main Shop

Project Cost Status

UNITS IN DOLLARS

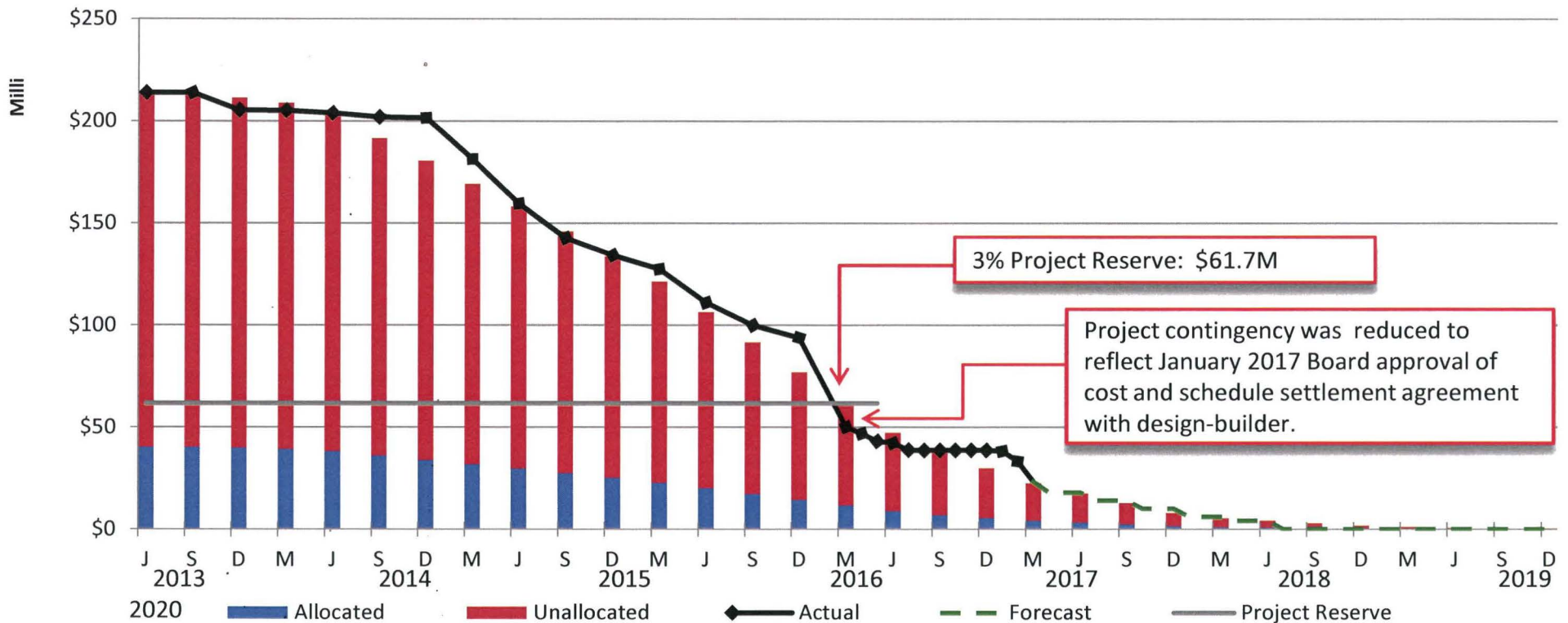
SCC CODE	DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		CURRENT BUDGET/ FORECAST VARIANCE
			PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
10	GUIDEWAYS	471,335,000	-	450,354,375	-	450,882,396	-	397,094,355	-	450,885,416	531,042
20	STATIONS	153,906,000	-	315,050,000	1,178,496	316,840,737	-	188,650,089	1,178,495	316,840,737	1,790,737
30	SOUTHWESTERN YARD	66,673,000	-	71,164,000	-	71,053,330	1,959,534	46,640,830	-	71,164,000	-
40	SITWORK/SPECIAL CONDITIONS	235,576,000	-	395,798,361	7,941,775	407,471,186	91,367	329,882,854	8,038,162	415,145,000	19,346,638
50	SYSTEMS	125,132,000	-	169,436,000	41,477	160,782,768	-	66,138,227	41,477	170,549,284	1,113,284
CONSTRUCTION SUBTOTAL (10-50)		1,052,622,000	-	1,401,802,736	9,161,747	1,407,030,417	2,050,901	1,028,406,355	9,258,133	1,424,584,438	22,781,702
60	RIGHT-OF-WAY	132,294,000	-	127,490,000	-	124,739,698	(22,700)	124,558,461	-	124,739,810	(2,750,190)
70	LRT VEHICLES	87,780,000	-	83,571,544	-	82,050,901	-	70,247,539	-	83,571,544	-
80	PROFESSIONAL SERVICES	273,147,000	-	368,734,466	(395,323)	360,169,842	3,500,453	311,487,732	691,972	375,810,042	7,075,576
SUBTOTAL (10-80)		1,545,843,000	-	1,981,598,746	8,766,424	1,973,990,859	5,528,654	1,534,700,086	9,950,106	2,008,705,833	27,107,087
90	UNALLOCATED CONTINGENCY	177,157,000	-	50,401,254	-	-	-	-	(9,950,106)	23,294,167	(27,107,087)
TOTAL PROJECT 865512 with SWY 49% (10-100)		1,723,000,000	-	2,032,000,000	8,766,424	1,973,990,859	5,528,654	1,534,700,086	-	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	8,766,424	1,999,539,890	5,528,654	1,560,249,117	-	2,058,000,000	-

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)

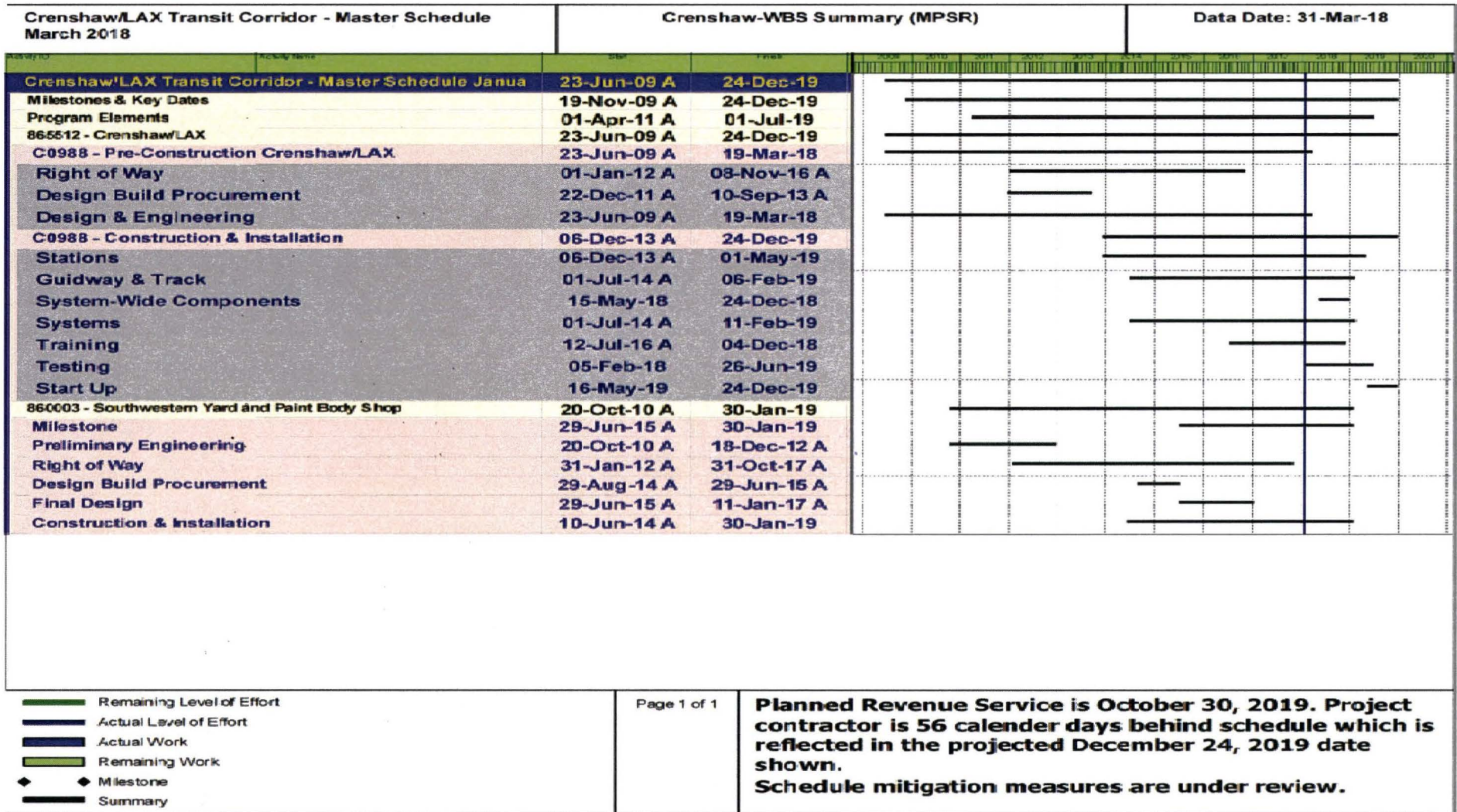
C0988 NON-CRENSHAW/LAX TRANSIT PROJECT FUNDED SCOPE OF WORK									
DESCRIPTION	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		FORECAST VARIANCE
	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
405556 SYSTEMWIDE TRANSIT PLANNING	-	175,495	-	320,035	-	230,035	-	175,495	-
210090/93 FARE GATE PROJECT	-	2,566,226	-	2,566,226	-	252,726	-	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	-	35,794,171	383,071	35,316,555	-	37,914,465	-
500013 C/LAX LAWA SCOPE OF WORK	-	1,575,362	-	914,613	-	741,407	-	1,575,362	-
TOTAL	-	44,431,548	-	41,795,045	383,071	36,944,058	-	44,431,548	-

Budget Contingency Drawdown

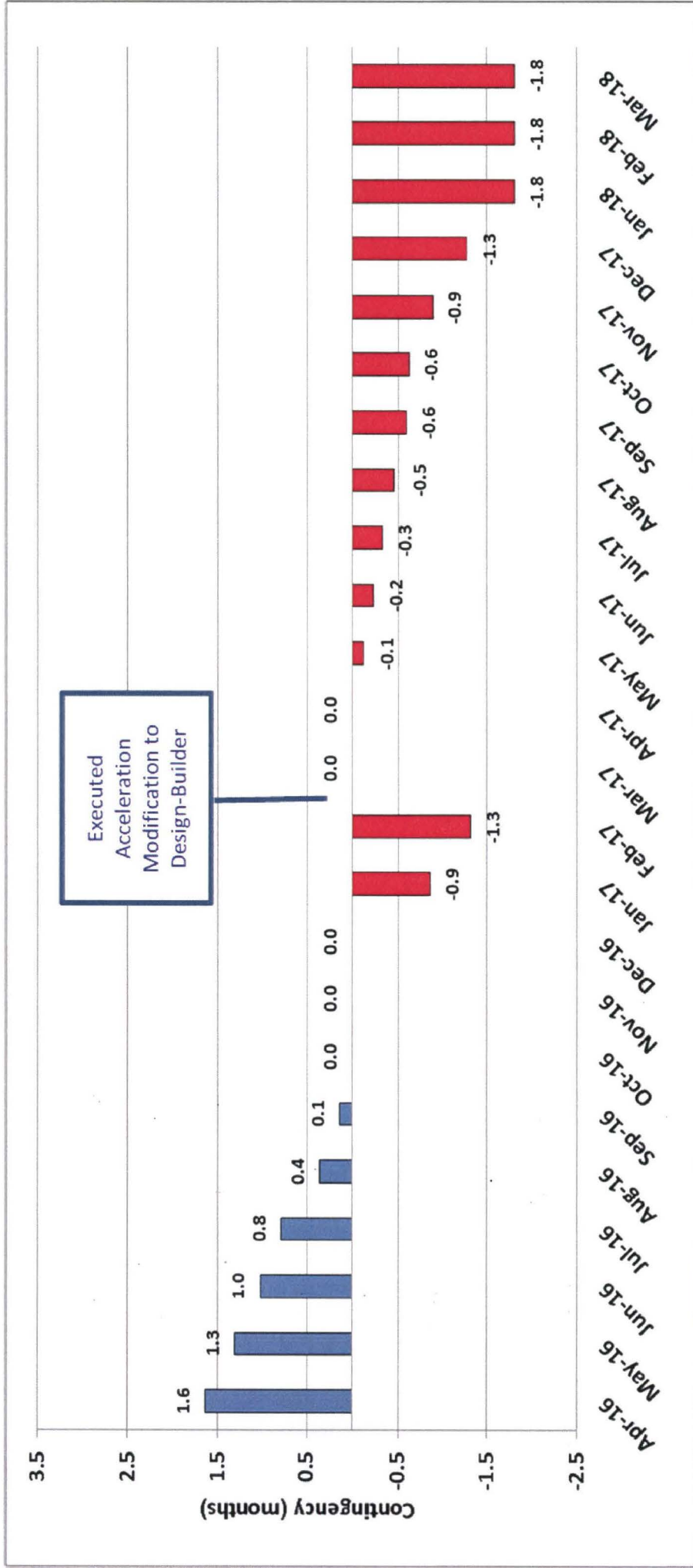


PROJECT COST CONTINGENCY (through 30-Mar-2018)						
UNITS IN DOLLARS						
	Original Contingency (Budget)	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)	Remaining Percent% from LOP of \$2,058mil
Unallocated Contingency	173,500,000	(140,255,728)	(9,950,106)	(150,205,834)	23,294,166	1.13%
Allocated Contingency	40,366,792	(40,366,792)	-	(40,366,792)	-	0.00%
Total Contingency	213,866,792	(180,622,520)	(9,950,106)	(190,572,625)	23,294,166	1.13%

Summary Schedule

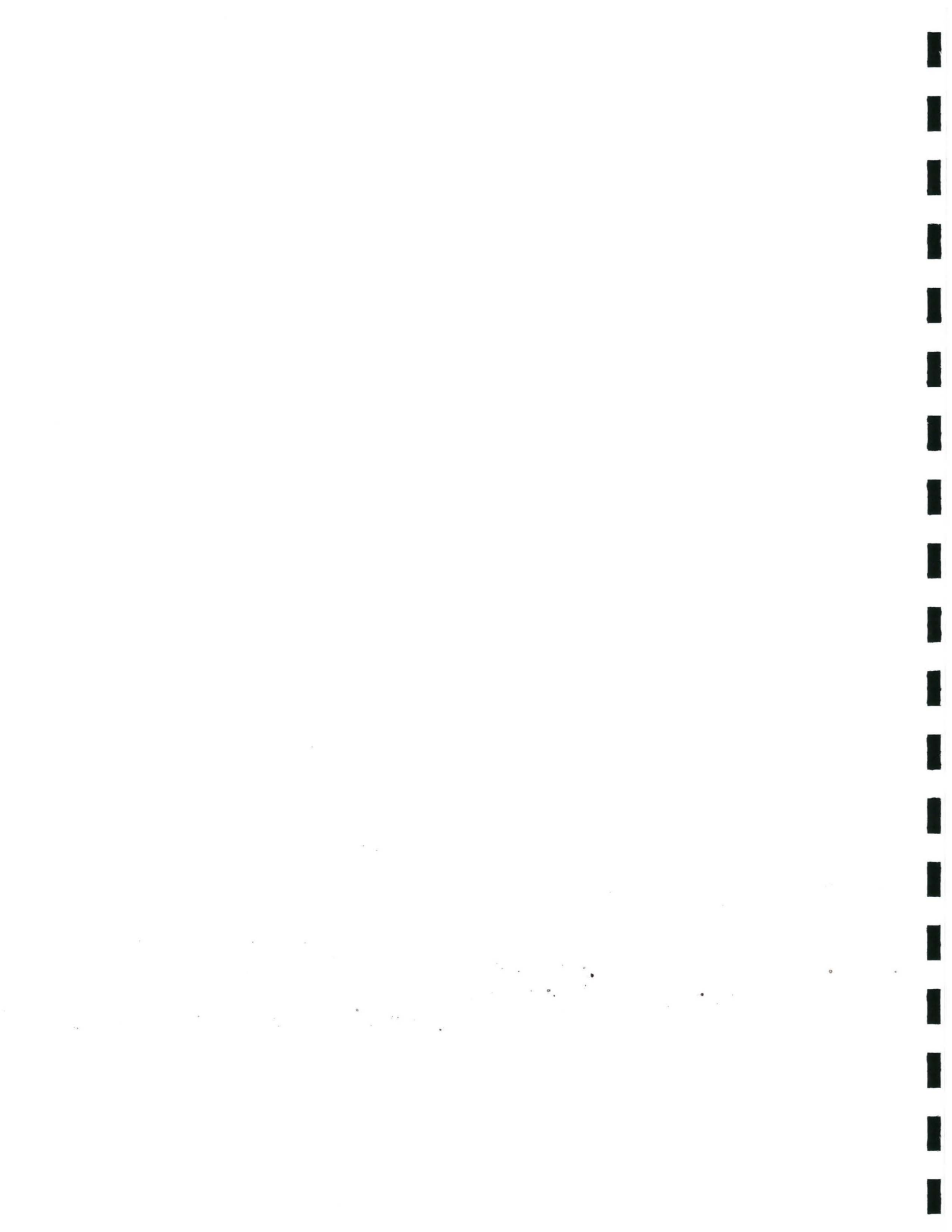


Schedule Contingency Drawdown



Top Risks & Mitigations

RISK ID	RISK DESCRIPTION	RISK SCORE	MITIGATION STRATEGIES
124	Main Line testing prior to pre-revenue operations may take longer than expected, resulting in increased Main Line Metro and Consultant costs and potential delay to 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. Push to gain schedule float (Contingency). 7. Expedite contractor/vendor turnaround of test results. 8. Keep test firms informed of critical schedule needs.
362	Schedule activities that are critical to completion	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
355	Issues with long lead delivery or improper planning for integration, testing and startup of Communication systems	12	<ol style="list-style-type: none"> 1. Verify contractor has qualified installers and inspectors. 2. Verify system vendor are kept informed of schedule. 3. Verify that all required interfaces with other systems has been addressed in the testing and startup procedures.
354	Issues with energization of Traction Power. DWP and Edison Issues	11	<ol style="list-style-type: none"> 1. Coordinate with utilities way in advance – get their review of design and submittals. 2. Do Supplier Quality Surveillance of substation fabrication. 3. Keep utilities informed of current schedule.
201	DB unable to obtain critical skilled specialty workers needed for complex systems, elevator testing, etc.	9	<ol style="list-style-type: none"> 1. Suggest the following to DB: <ul style="list-style-type: none"> - Direct job seekers to apprentice programs - Communicate with union apprenticeship coordinators - Develop labor targets and maintain those levels through project 2. Monitor PLA target goals. 3. Potential consultant in traffic control
356	Issues with long lead delivery or improper planning for testing and startup of TPSS, TP Emergency shutdown, Emergency phones in tunnels, SCADA, etc.	9	<ol style="list-style-type: none"> 1. Verify contractor has qualified installers and inspectors. 2. Verify system vendors are kept informed of schedule. 3. Verify that all required interfaces with other systems has been addressed in the testing and startup procedures.

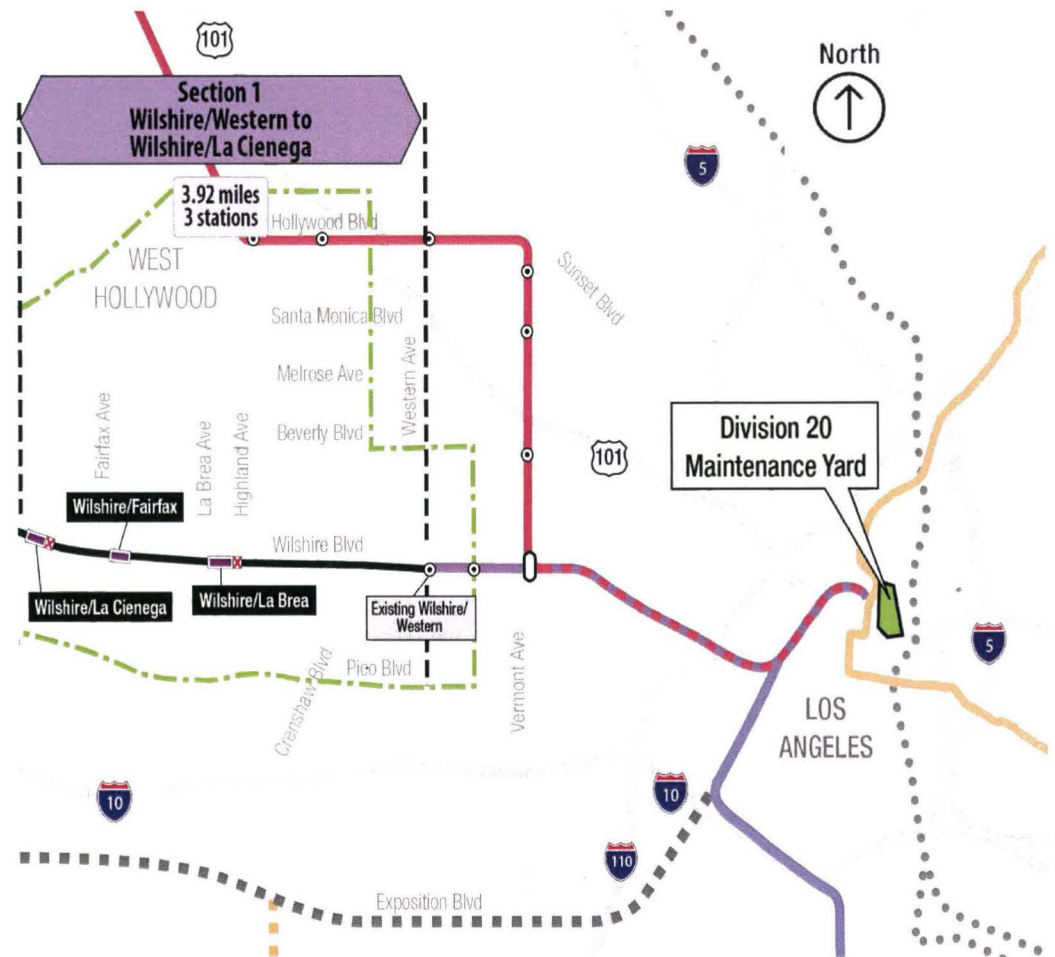


**Westside Purple Line Extension Section 1 Project
FTA Quarterly Review
May 30, 2018**



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: 34%
- Daily Project Transit Trips: 33,694
- Daily New Transit Trips: 9,841
- Forecast Contingency: 8%
- Federal Funds: \$1.26 Billion
- Local Funds: \$1.56 Billion
- Status: All three (3) stations and W/W TBM Shaft under construction



Westside Purple Line Extension Section 1 Project

Key Project Updates

- Work at the Wilshire/La Cienega Station location is currently being performed under the terms of the Memorandum of Understanding (MOA) with the City of Beverly Hills. A change notice has been issued to STS for the changed scope of work per the MOA. Awaiting Cost and Schedule Proposal (CSP) from STS.
- The current job creation for March 2018 is 870, for the third quarter of FY 2018 is 1,228, and to date is 12,352 estimated jobs, as extrapolated from the Los Angeles Economic Development Corporation (LAEDC) analysis of job impacts.

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

Current Activities:

- Utility relocation, dewatering activities, temporary ventilation / instrumentation installation.

Overview:

- Construction activities in preparation for retrieval shaft excavation and bracing.

Status:

- Utility relocation, installation of the water treatment system and dewatering wells, instrumentation installation and the temporary ventilation system is on-going.
- Retrieval shaft excavation below the deck and bracing are scheduled to commence in May 2018.



Wilshire/Western Site Ventilation System



Wilshire/Western Site Crane Mobilized

Westside Purple Line Extension Section 1 Project

Project Update

Wilshire/La Brea Station

Current Activities:

- Dewatering, HDPE Installation
- Concrete placement at invert slab
- Preparation for concrete wall placement

Overview:

- Work primarily occurs underground beneath concrete decking.
- Material delivery and hauling occurs day/night.

Status:

- Concrete placement at the Wilshire/La Brea Station invert slab continues.
- Vertical conveyor construction at the south shaft site is on-going, as well as continued installation of rebar, embeds, plumbing/drains and electrical conduits.
- Concrete wall pours are scheduled to start in April 2018.
- TBM assembly at Wilshire/La Brea Station is scheduled to commence in July 2018.

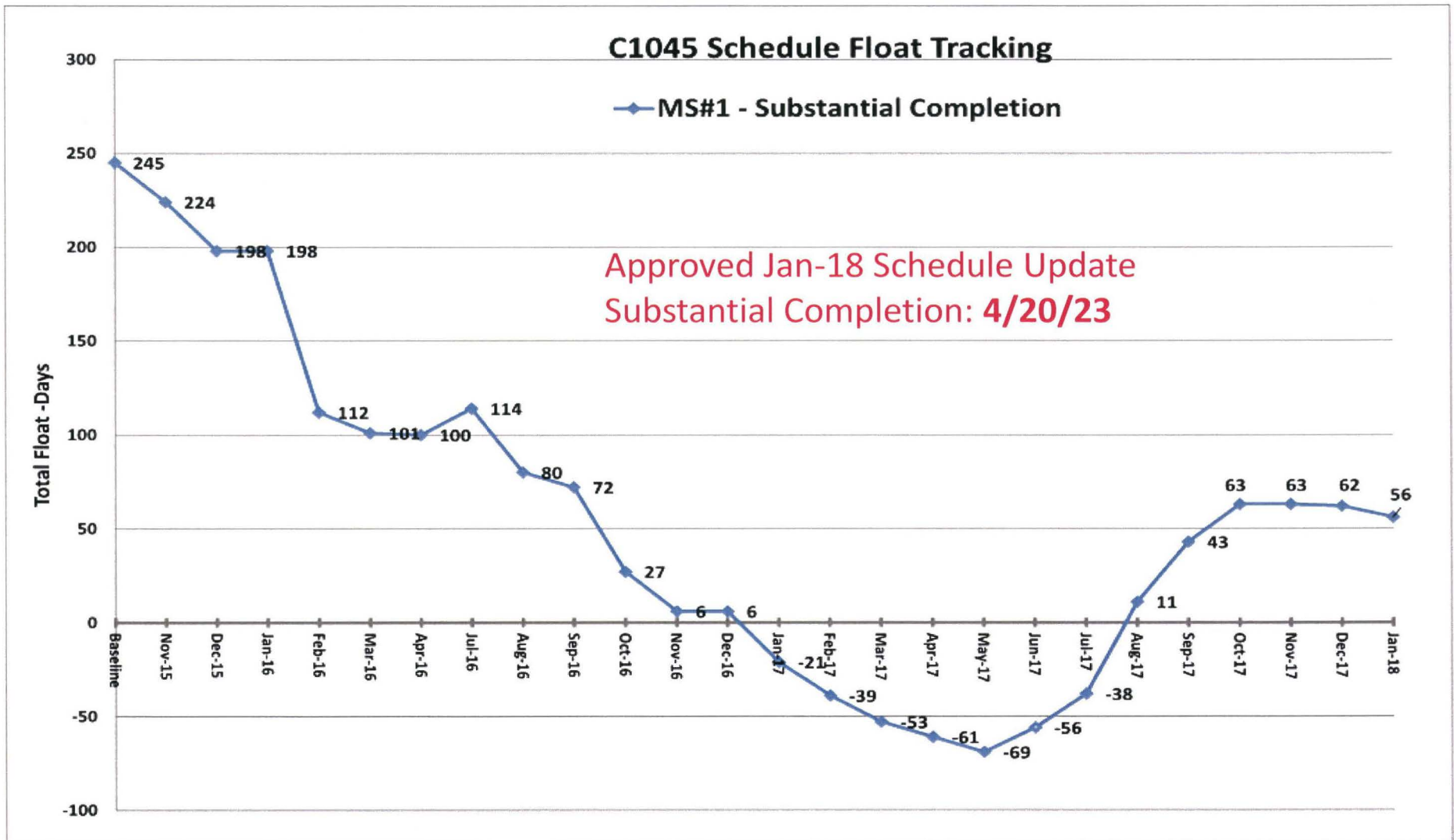


Drain installation at Wilshire/La Brea Station



Wall Rebar Installation at Wilshire/La Brea Station 5

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



Westside Purple Line Extension Section 1 Project

Project Update

Wilshire/Fairfax Station

Current Activities:

- Excavation
- Waler/Strut Installation

Overview:

- Work primarily occurs underground beneath concrete decking.
- Material delivery and hauling occurs day/night.
- Excavation in Paleo zone limited to 6" lifts.

Status:

- Excavation and the installation of walers continues. Placement of Level C struts started in March 2018, along with Level D Gut Trench excavation.
- Excavation east of Gridline 11 (west side of the muck shaft) is now clear of the Paleo zone. There will be no more 6" lifts required in that area.
- Pipe canopy tunnel eye at the west end of the station has started.



Shotcrete Placement at Wilshire/Fairfax Station



Excavation at West End of Wilshire/Fairfax Station

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

Current Activities:

- Hanging Utilities
- Station Excavation

Overview:

- Work primarily occurs underground beneath concrete decking.
- Material delivery and hauling occurs day/night.

Status:

- Under deck excavation at Wilshire/La Cienega station continues with Level A struts scheduled to be installed in April 2018.
- Work on the ventilation system and underground station access inside the La Cienega Station Yard, the water treatment plant and access shaft in the Gale Yard, the hanging of utilities, and installation of the temporary ventilation system under the deck continues.



Wilshire/La Cienega Station Temp Ventilation System



Wilshire/La Cienega Station Level A Excavation

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

Current Activities:

- Concrete placements in preparation for TBM Assembly
- Installation of TBM support equipment “grout silos/muck conveyors/muck bin”

Overview:

- TBM assembly to occur at Wilshire/La Brea Station site.

Status:

- Tunnel Boring Machines (TBMs) were delivered to Los Angeles in December 2017. All of the TBM components are at the contractor’s Riverside staging area.
- TBM unveiling scheduled for April 25, 2018.
- Tunneling is planned to start in August 2018.
- Tunnel instrumentation installation along Reach 1 continues.



Muck Bin Pile Installation at Wilshire/La Brea Station



Conveyor Tower Belt Assembly at Wilshire/La Brea Station 9

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	380,970	116,199	387,938	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	570,051	489,322	447,611	109,736	489,322	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	39,086	38,092	36,483	9,887	38,092	-
40	SITWORK & SPECIAL CONDITIONS	139,820	812,415	779,315	499,323	812,415	-
50	SYSTEMS	123,579	115,199	99,544	18,387	115,199	-
CONSTRUCTION SUBTOTAL (10-50)		1,437,616	1,842,966	1,743,922	753,532	1,842,966	-
60	ROW, LAND, EXISTING IMPROVEMENTS	212,475	190,036	190,036	166,008	190,036	-
70	VEHICLES	160,196	108,302	98,118	14,192	108,302	-
80	PROFESSIONAL SERVICES	410,342	506,876	341,670	280,145	506,876	-
SUBTOTAL (10-80)		2,220,629	2,648,180	2,373,746	1,213,877	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	2,373,746	1,213,877	3,090,101	-

NOTE: TOTAL INCURRED COST TO DATE \$1,234,359

* 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	380,970	116,199	387,938	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	570,051	489,322	447,611	109,736	489,322	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	39,086	38,092	36,483	9,887	38,092	-
40	SITWORK & SPECIAL CONDITIONS	139,820	812,415	779,315	499,323	812,415	-
50	SYSTEMS	123,579	115,199	99,544	18,387	115,199	-
	CONSTRUCTION SUBTOTAL (10-50)	1,437,616	1,842,966	1,743,922	753,532	1,842,966	-
60	ROW, LAND, EXISTING IMPROVEMENTS	212,475	190,036	190,036	166,008	190,036	-
70	VEHICLES	160,196	108,302	98,118	14,192	108,302	-
80	PROFESSIONAL SERVICES	410,342	506,876	341,670	280,145	506,876	-
	SUBTOTAL (10-80)	2,220,629	2,648,180	2,373,746	1,213,877	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	2,373,746	1,213,877	3,090,101	-

NOTE: TOTAL INCURRED COST TO DATE \$1,234,359

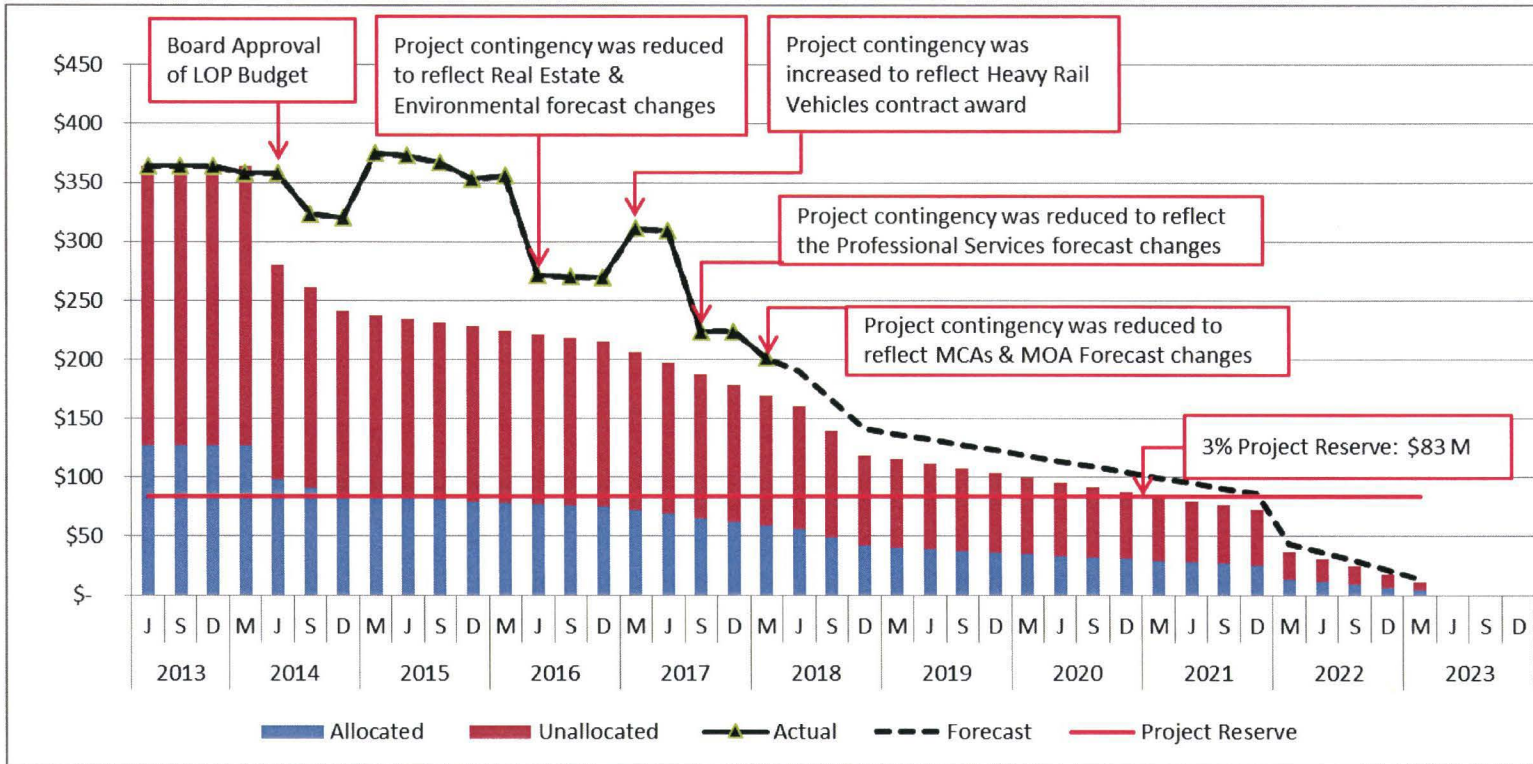
SCC CODE	DESCRIPTION	ORIGINAL NON FFGA BUDGET	CURRENT NON FFGA BUDGET	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	CURRENT NON FFGA BUDGET/ FORECAST VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	-	-	-	-	-	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	-	-	-	-	-	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	2,925	5,073	896	5,260	2,335
40	SITWORK & SPECIAL CONDITIONS	-	-	484	484	2,031	2,031
50	SYSTEMS	-	-	-	-	-	-
	CONSTRUCTION SUBTOTAL (10-50)	-	2,925	5,557	1,380	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	2,867	3,047	3,628	53
	SUBTOTAL (10-80)	14,305	19,305	21,369	12,877	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	21,369	12,877	24,879	-
	ENVIRONMENTAL/PLANNING	39,370	39,370	39,370	39,357	39,370	-
	TOTAL NON-FFGA (INCL. ENV./PLANNING)	55,674	64,248	60,738	52,234	64,248	-

NOTE: TOTAL INCURRED COST TO DATE \$52,524

TOTAL PROJECT	2,838,262	3,154,350	2,434,484	1,266,111	3,154,350	-
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NOTE: TOTAL INCURRED COST TO DATE \$1,286,884

Westside Purple Line Extension Section 1 Project Project Cost Contingency Drawdown



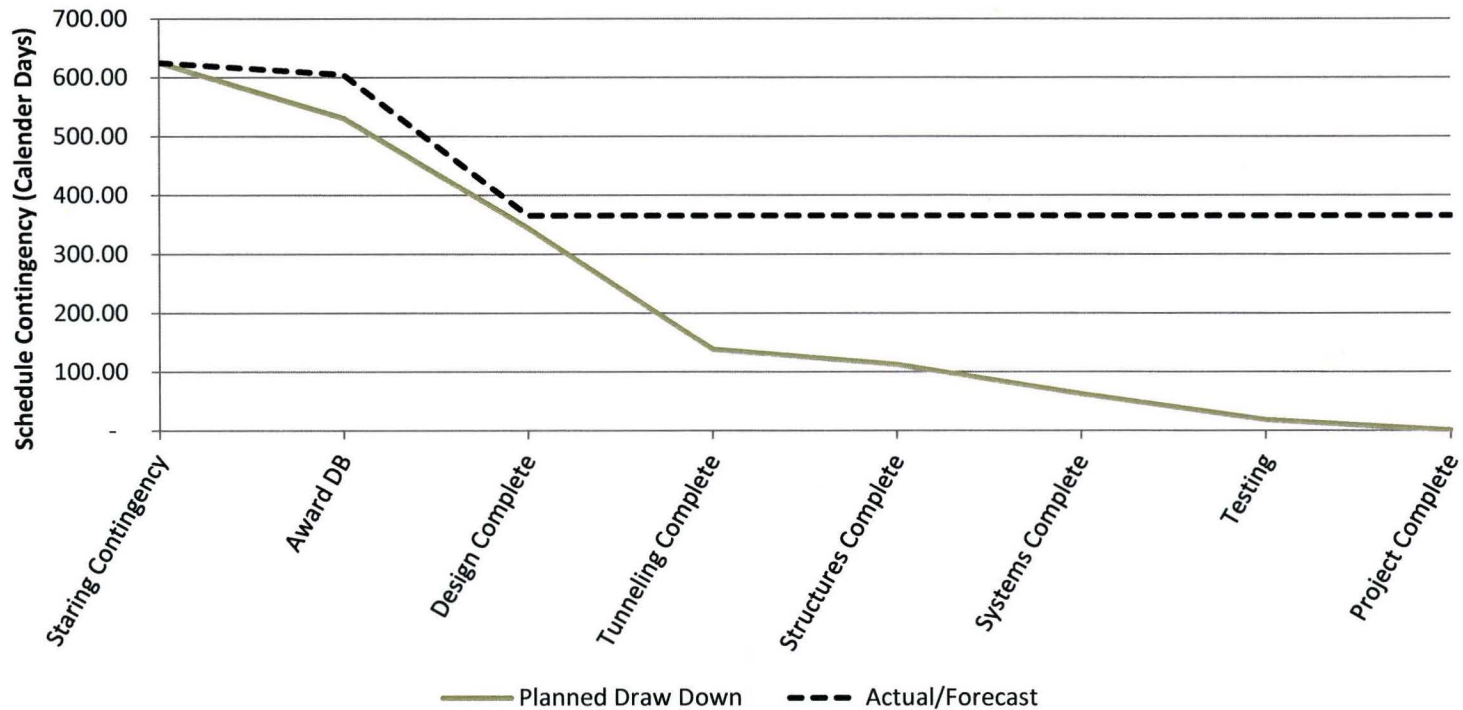
PROJECT COST CONTINGENCY						
DOLLARS IN THOUSANDS						
	Original Contingency (Budget)	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)	Percentage (%)
Unallocated Contingency	248,592	(80,517)	(56,204)	(136,721)	111,871	45%
Allocated Contingency	71,963	(18,936)	36,066	17,130	89,093	124%
Total Contingency	320,555	(99,453)	(20,137)	(119,591)	200,964	63%

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

DISADVANTAGED BUSINESS ENTERPRISE (DBE)

DISADVANTAGED BUSINESS ENTERPRISE (DBE) STATUS	
Contract C1045 Westside Purple Line Extension - Section 1 (Reported Data as of March 2018)	
<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. 	20.00%
<ul style="list-style-type: none"> Current DBE Commitment – Design Total DBE Committed Dollars divided by Total Contract Value for Design or Construction. 	\$13,086,625 (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. 	\$12,323,919 (19.12%)
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. 	\$261,838,935 (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. 	\$82,723,275 (15.03%)
One hundred-four (104) Construction DBE subcontractors have been identified to-date.	

Westside Purple Line Extension Section 1 Project Project Schedule Contingency Drawdown



PROJECT SCHEDULE CONTINGENCY DRAWDOWN ANALYSIS

The project schedule contingency drawdown curve is based on a November 8, 2023 Revenue Service Date (RSD).

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. 3. Project will reconcile with cost from Real Estate within 2nd quarter 2018.
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.
288.1	Construction impacts including air quality, noise, and vibration have the potential for impacts on neighboring communities which may require mitigation efforts. Section 1 construction will take place in Wilshire Blvd. which is mixed residential and commercial.	9	<ol style="list-style-type: none"> 1. DB contractor to comply with all requirements in the FEIS regarding air quality, noise and vibration issues and any other local ordinances requirements. 2. DB Contractor has mitigation measures in place.
256.0	Potential cost and schedule impact for building settlement and damage from underground construction and potential dewatering difficulties.	7.5	<ol style="list-style-type: none"> 1. Modified contingency plan as needed. 2. Wilshire/La Brea Station has been excavated and dewatered. Settlement less than expected.
202.0	Areas with concentrated methane and H2S presence will complicate construction progress and safety, increase price and may cause delays.	7.5	<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. Additional geotechnical investigations are being performed by the DB contractor (Goulder & Associates) in this area. 3. Re-assemble taskforce. The taskforce is currently meeting on a periodic basis.

Westside Purple Line Extension Section 1 Project Questions



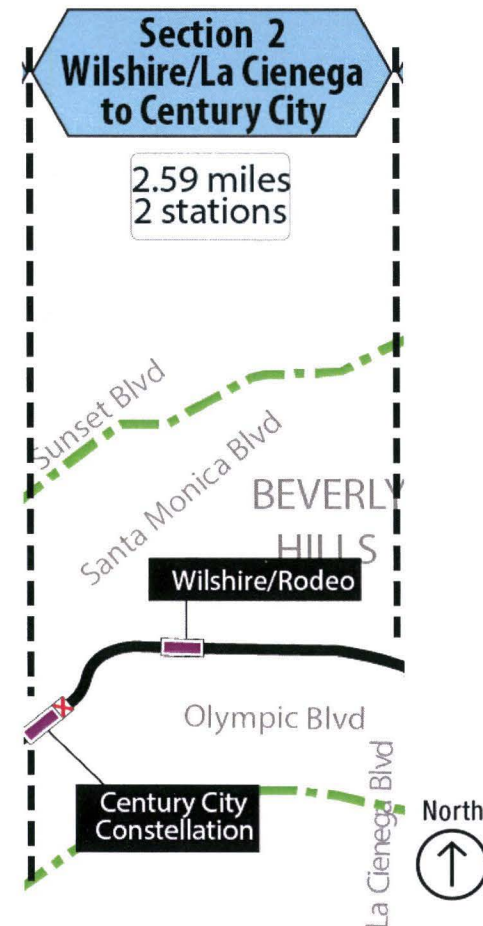
C1045 Design/Build Contract Computer-Generated Rendering of Wilshire/La Cienega Station 17

**Westside Purple Line Extension Section 2 Project
FTA Quarterly Review
May 30, 2018**



Westside Purple Line Extension Section 2 Project Description

- The WPLE Section 2 Project is a 2.59 mile alignment from the future Wilshire/La Cienega Station to the future Century City Constellation Station. The Project includes 20 heavy rail vehicles, twin-bored tunnels and two (2) new subway stations:
 - Wilshire/Rodeo
 - Century City Constellation
- FFGA Budget: \$2.50 Billion
- FFGA Forecast: \$2.50 Billion
- FFGA RSD: December 31, 2026
- Forecast RSD: August 29, 2025
- Design/Builder: Tutor Perini/O&G, a Joint Venture (TPOG)
- Design Progress: 57%
- Construction Progress: 0%
- Daily Project Transit Trips: 36,121
- Daily New Transit Trips: 5,350
- Forecast Contingency: 17%
- Federal Funds: \$1.36 Billion
- Local Funds: \$1.14 Billion



Westside Purple Line Extension Section 2 Project Key Project Updates

- The current job creation for March 2018 is 211, for the third quarter of FY 2018 is 576 and to date is 4,076 estimated jobs, as extrapolated from the Los Angeles Economic Development Corporation (LAEDC) analysis of job impacts.
- Memorandum of Agreement (MOA) negotiations with the City of Beverly Hills are ongoing for the C1120 Contract and anticipated to complete in the second quarter of 2018.

Westside Purple Line Extension Section 2 Project Contract C1120 Update

- TPOG is continuing with the required contractual submittals and has submitted the following:
 - Worksite traffic control plans (WTCP's) for Launch Box full closure
 - Design Package 3 (Volume 2) – Stations for Wilshire Rodeo Station (station design) 60% design
 - SOE 100% design for Launch Box
 - Santa Monica Bus layover IFC design
 - Geotechnical Fault Investigation Work Plan
 - TBM factory acceptance tests
- Geotechnical investigations started in late 2017. Seventeen borings have been completed. Additional borings are proposed to commence in April/May 2018.
- Pre-construction surveys are ongoing.

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

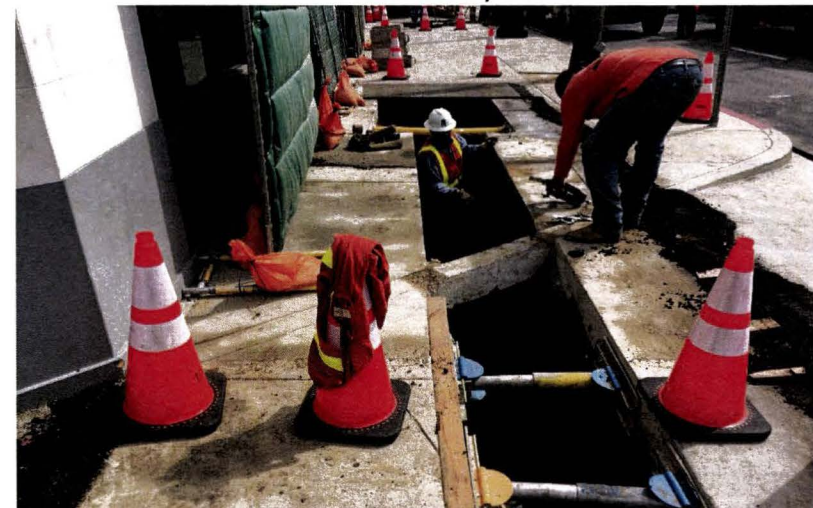
- SCG/AT&T (combined) – Utility relocations began on February 12, 2018. Completion for both utilities is anticipated in Summer 2018.
- Negotiations with the City of Beverly Hills for an MOA for the C1120 Contract began in August 2017 and are anticipated to complete in the second quarter of 2018.



SCG utility work

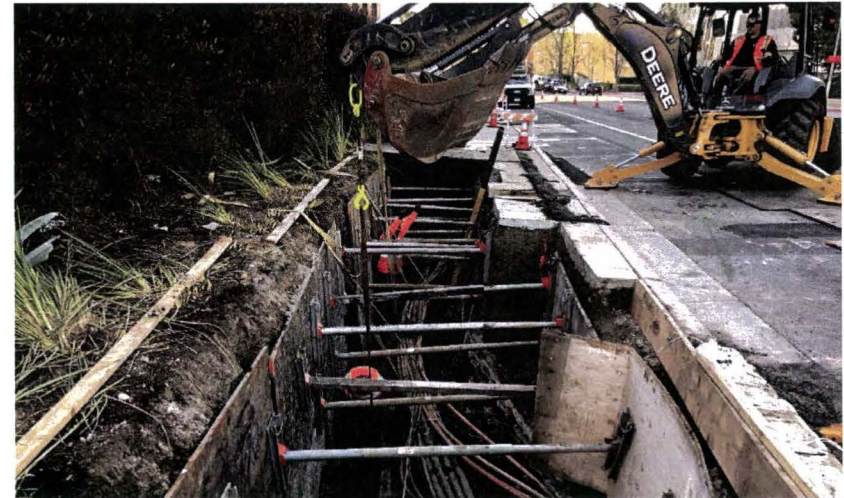


SCG utility work



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

- All utility relocation work within the tunnel boring machine “Launch Box” has been completed.
- AT&T – Duct Bank and vault construction began in November 2017 at the station box and anticipated to complete in June 2018.
- LADWP Power – Construction began in May 2017 and anticipated to complete in June 2018.
- Cable pulling and splicing for both AT&T and LADWP Power will start after completion of civil work and continue into 2019.



AT&T utility work



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	346,440	306,924	23,000	328,836	(17,605)
20	STATIONS, STOPS, TERMINALS, INTERMODAL	517,378	434,990	410,368	41	443,071	8,081
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	-	-	-	-	-	-
40	SITWORK & SPECIAL CONDITIONS	406,955	537,107	526,020	203,577	560,625	23,518
50	SYSTEMS	96,734	81,457	68,537	1,576	81,907	450
	CONSTRUCTION SUBTOTAL (10-50)	1,406,389	1,399,994	1,311,849	228,195	1,414,439	14,445
60	ROW, LAND, EXISTING IMPROVEMENTS	312,422	419,396	223,081	137,629	419,396	-
70	VEHICLES	85,351	42,000	-	-	42,000	-
80	PROFESSIONAL SERVICES	383,941	373,478	175,105	112,892	374,574	1,096
	SUBTOTAL (10-80)	2,188,104	2,234,869	1,710,035	478,716	2,250,409	15,540
90	UNALLOCATED CONTINGENCY	222,441	175,676	-	-	160,136	(15,540)
100	FINANCE CHARGES	88,695	88,695	-	-	88,695	-
	TOTAL (10-100)	2,499,240	2,499,240	1,710,035	478,716	2,499,240	-

NOTE: TOTAL FFGA INCURRED COST TO DATE\$492,565

EXCLUDES CONCURRENT NON-FFGA PROJECT ACTIVITIES

¹ APPROVED LIFE OF PROJECT (LOP) 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	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	PROPOSED FFGA BUDGET/ FORECAST VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	385,323	346,440	306,924	23,000	328,836	(17,605)
20	STATIONS, STOPS, TERMINALS, INTERMODAL	517,378	434,990	410,368	41	443,071	8,081
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-	-
40	SITWORK & SPECIAL CONDITIONS	406,955	537,107	526,020	203,577	560,625	23,518
50	SYSTEMS	96,734	81,457	68,537	1,576	81,907	450
	CONSTRUCTION SUBTOTAL (10-50)	1,406,389	1,399,994	1,311,849	228,195	1,414,439	14,445
60	ROW, LAND, EXISTING IMPROVEMENTS	312,422	419,396	223,081	137,629	419,396	-
70	VEHICLES	85,351	42,000	-	-	42,000	-
80	PROFESSIONAL SERVICES	383,941	373,478	175,105	112,892	374,574	1,096
	SUBTOTAL (10-80)	2,188,104	2,234,869	1,710,035	478,716	2,250,409	15,540
90	UNALLOCATED CONTINGENCY	222,441	175,676	-	-	160,136	(15,540)
100	FINANCE CHARGES	88,695	88,695	-	-	88,695	-
	TOTAL PROJECT (10-100)	2,499,240	2,499,240	1,710,035	478,716	2,499,240	-

NOTE: TOTAL FFGA INCURRED COST TO DATE \$492,565

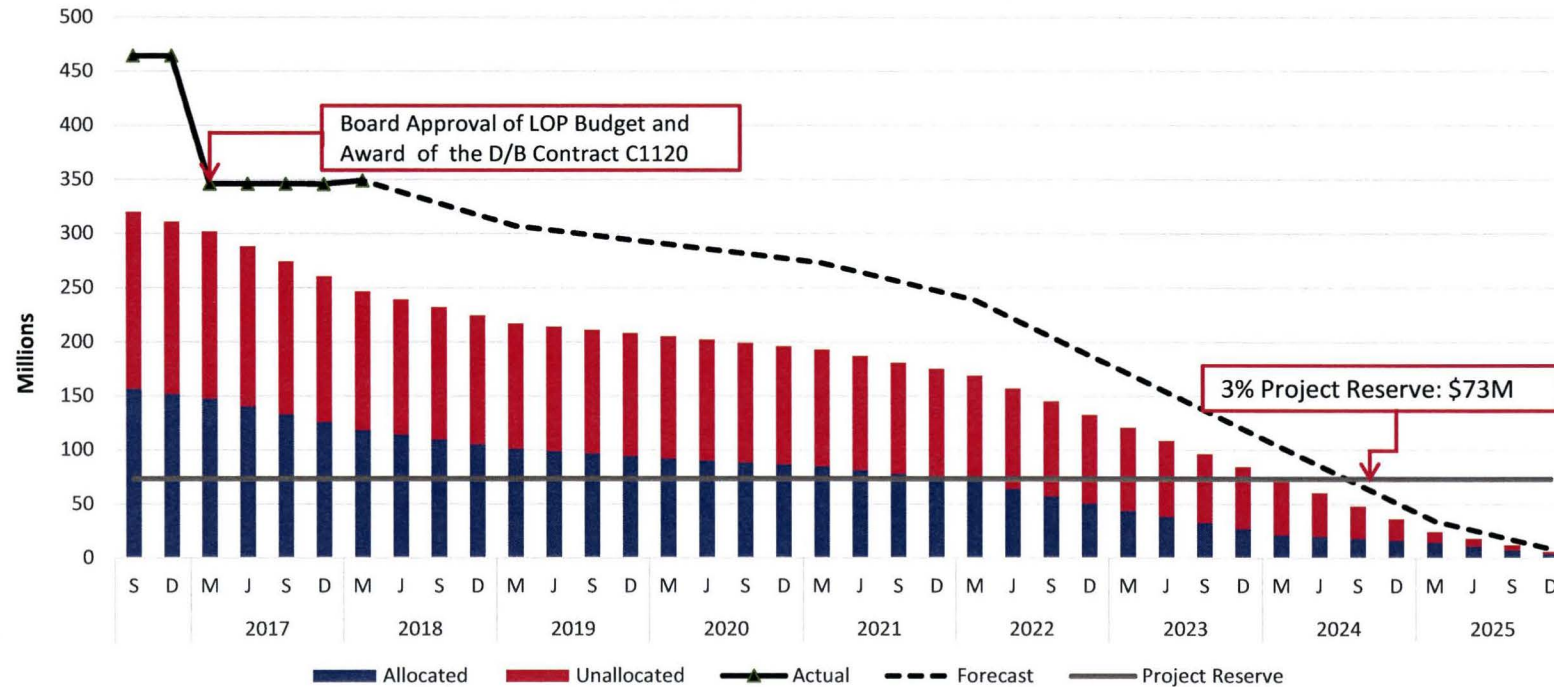
SCC CODE	DESCRIPTION	ORIGINAL NON FFGA BUDGET	CURRENT NON FFGA BUDGET	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	CURRENT NON FFGA BUDGET/ FORECAST VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	-	-	-	-	-	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	-	-	-	-	-	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-	-
40	SITWORK & SPECIAL CONDITIONS	16,175	16,175	3,350	-	16,175	-
50	SYSTEMS	-	-	-	-	-	-
	CONSTRUCTION SUBTOTAL (10-50)	16,175	16,175	3,350	-	16,175	-
60	ROW, LAND, EXISTING IMPROVEMENTS	7,000	7,000	7,000	6,578	7,000	-
70	VEHICLES	-	-	-	-	-	-
80	PROFESSIONAL SERVICES	1,400	1,400	602	72	1,400	-
	SUBTOTAL (10-80)	24,575	24,575	10,952	6,650	24,575	-
90	UNALLOCATED CONTINGENCY	1,500	1,500	-	-	1,500	-
100	FINANCE CHARGES	-	-	-	-	-	-
	TOTAL NON-FFGA (10-100)	26,075	26,075	10,952	6,650	26,075	-
	ENVIRONMENTAL/PLANNING	4,349	4,349	3,329	2,758	4,349	-
	TOTAL NON-FFGA (INCL. ENV./PLANNING)	30,424	30,424	14,282	9,408	30,424	-

NOTE: TOTAL NON-FFGA INCURRED COST TO DATE \$9,408

TOTAL PROJECT	2,529,664	2,529,664	1,724,316	488,124	2,529,664	-
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NOTE: TOTAL INCURRED COST TO DATE \$501,973

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)	Percentage (%)
Unallocated Contingency	177,176	(15,540)	-	(15,540)	161,636	91%
Allocated Contingency	168,534	18,701	(65)	18,636	187,170	111%
Total Contingency	345,710	3,161	(65)	3,096	348,806	101%

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

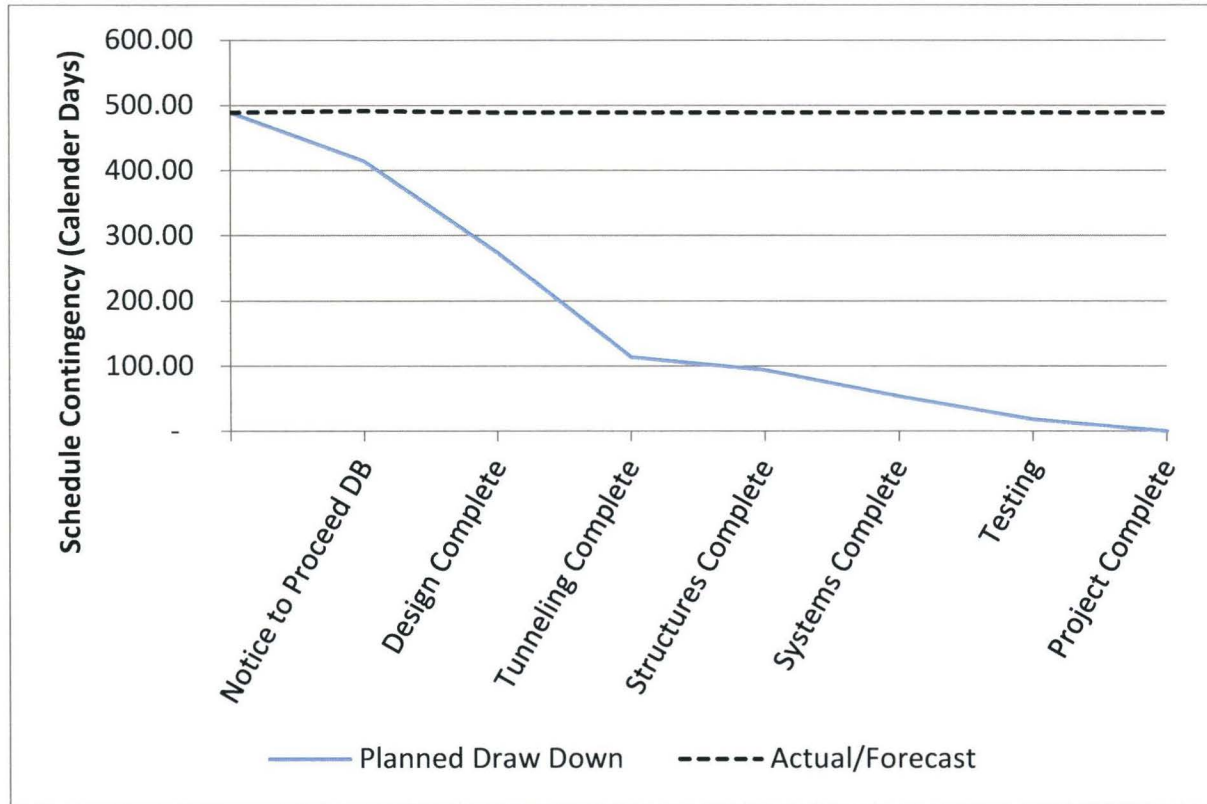
- RC-DBE Goal (Design) – A numerically expressed percentage of funds apportioned to Design Contracts and is calculated based upon the relative availability of DBE firms as compared to all firms in the relevant geographic market area. 25%
- Current RC-DBE Commitment – Total DBE Committed Dollars divided by Total Contract Value for Design or Construction. \$14,731,914
(25.31%)
- Current RC-DBE Participation– Total amount paid to date to DBEs divided by the amount paid to date to Prime. \$ 6,875,653
(17.06%)

Fifteen (15) Design DBE subcontractors have been identified for Design

- 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 geographic market area. 17%
- Current DBE Commitment - Actual commitments as Construction work is awarded. \$77,732,279
(5.99%)
- Current DBE Participation- Total amount paid to date to DBEs divided by the amount paid to date to Prime \$1,236,310
(0.60%)

Seven (7) Construction DBE subcontractors have been identified to-date

Westside Purple Line Extension Section 2 Project Project Schedule Contingency Drawdown

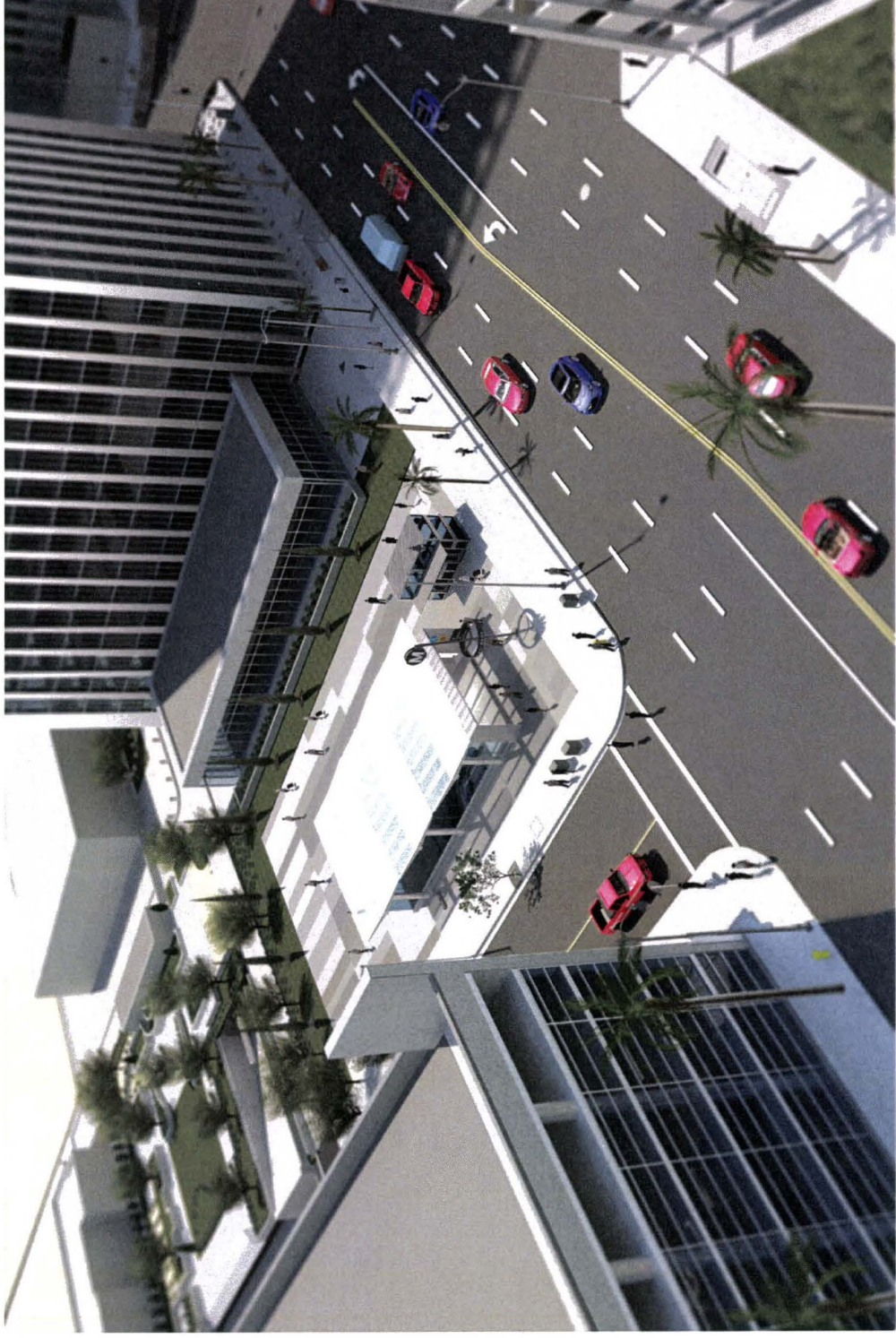


The project schedule contingency drawdown curve is based on an August 29, 2025 Forecast Revenue Service Date (RSD).

Westside Purple Line Extension Section 2 Project Top Risks & Mitigations

Risk ID	Risk Description	Risk Score	Action Items
396.0	Delayed negotiations on MOA with City of Beverly Hills (COBH) for utility work and DB contract could delay the Project and/or result in additional project costs.	18	<ol style="list-style-type: none"> 1. Metro will continue developing agreements based on current MOA. 2. MOA governing remaining utility work was approved by COBH on November 22, 2017. 3. Negotiations for Contract C1120 are underway with COBH.
125.2	Utility relocations could delay construction.	18	<ol style="list-style-type: none"> 1. Work with City and Utility Owners to expedite obtaining permits, and complete design and construction on schedule. 2. COBH MOA for AUR work was approved on November 22, 2017.
282.2	Turnover of property to DB contractor is delayed beyond the dates stipulated in the contract documents.	12	<ol style="list-style-type: none"> 1. Metro to complete property acquisition before the need date. 2. Building demolish to be part of DB contract. DB Contractor to start work as early as possible.
33.2	Acquisition of property is delayed due to condemnation and/or legal battle.	11	<ol style="list-style-type: none"> 1. Current project schedule accounts for additional time required for condemnation.
678.2	Resource availability for Real Estate and County Counsel	9	<ol style="list-style-type: none"> 1. Utilize outside resources for services rendered.

Westside Purple Line Extension Section 2 Project Questions

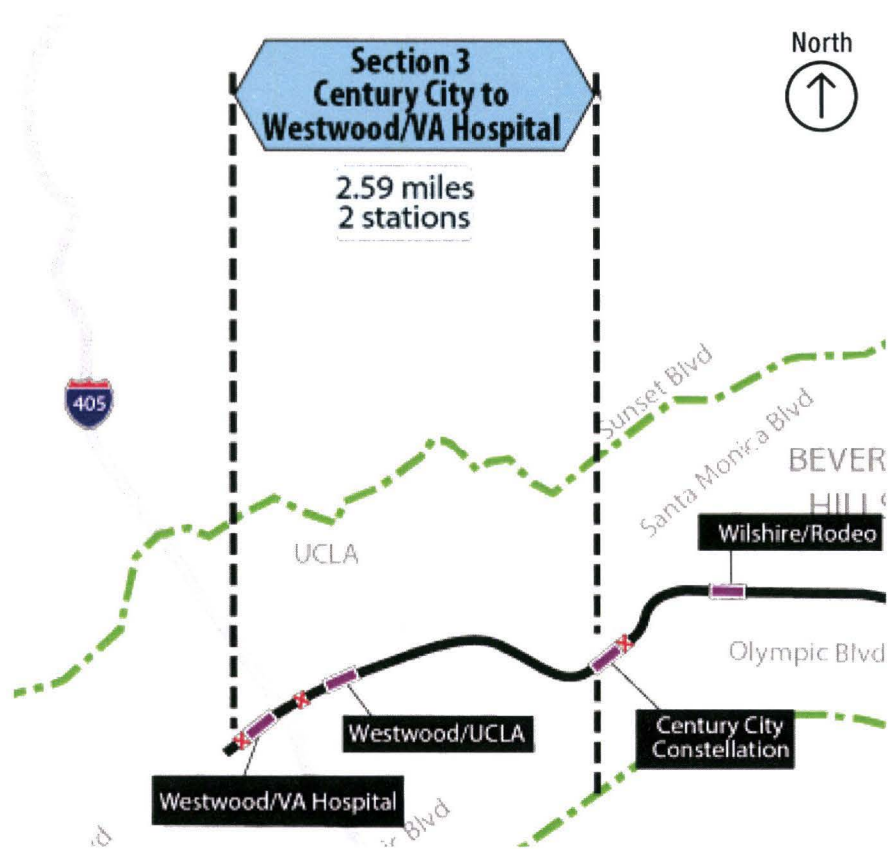


Wilshire/Rodeo Station

**Westside Purple Line Extension Section 3 Project
FTA Quarterly Review
May 30, 2018**



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



- The WPLE Section 3 Project is a 2.59 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 (YOE Dollars):
 - \$3.59 Billion
- Revenue Service Date:
 - Forecast – 2026
- Daily Project Transit Trips: 42,903
- Daily New Transit Trips: 9,386

Westside Purple Line Extension Section 3 Project Project Update

- Metro requested entry into the FTA New Starts Engineering Phase on April 28, 2017. PMOC conducted a FTA Pre-Engineering Risk Review on March 20, 2018. The outcome will facilitate PMOC's recommendation for FTA approval.
- Request for Letter of No Prejudice (LONP) was submitted on September 11, 2017 to FTA for approval. LONP Review Workshop action items have been addressed by Metro.
- Procurement
 - C1151 Tunnel Contract – Technical proposals were received on November 13, 2017, and price proposals were received on April 6, 2018. Contract award subject to approval of the LONP.
 - C1152 Stations, Trackwork and Systems Contract – Request for Qualifications (RFQ)/Request for Proposals (RFP) was issued on September 15, 2017. Qualifications from respondents were received on November 20, 2017. Proposals are due on June 22, 2018.
- Construction
 - C1153 Advanced Utility Relocation (AUR) Contract – Contractor setup laydown yard and site office trailer on April 13, 2018. Potholing and sawcutting activities started on April 30, 2018.
- The current job creation for March 2018 is 23, for the third quarter of Fiscal Year 2018 is 65 and to date is 542 estimated jobs, as extrapolated from the Los Angeles Economic Development Corporation (LAEDC) analysis of job impacts.

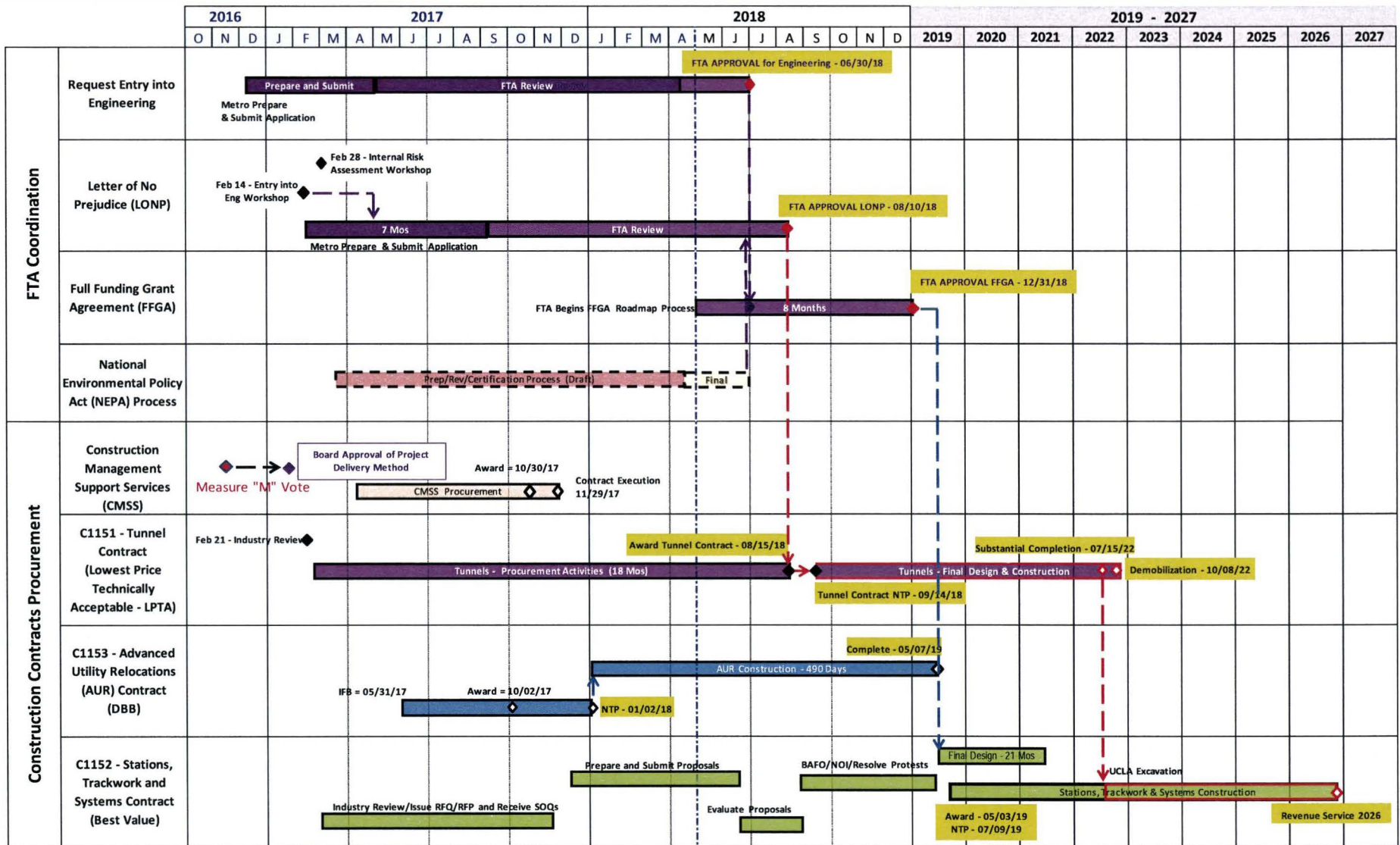
Westside Purple Line Extension Section 3 Project Project Cost Status

DOLLARS IN THOUSANDS

SCC CODE	DESCRIPTION	CURRENT COST ESTIMATE	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	CURRENT COST ESTIMATE / CURRENT FORECAST VARIANCE
10	GUIDEWAY & TRACK ELEMENTS	490,712	-	-	490,712	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	624,995	-	-	624,995	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	4,240	-	-	4,240	-
40	SITWORK & SPECIAL CONDITIONS	487,565	17,068	1,369	487,565	-
50	SYSTEMS	130,778	-	-	130,778	-
CONSTRUCTION SUBTOTAL (10-50)		1,738,291	17,068	1,369	1,738,291	-
60	ROW, LAND, EXISTING IMPROVEMENTS	466,874	101,437	40	466,874	-
70	VEHICLES	38,092	-	-	38,092	-
80	PROFESSIONAL SERVICES	494,893	75,316	43,951	494,893	-
SUBTOTAL (10-80)		2,738,150	193,820	45,359	2,738,150	-
90	UNALLOCATED CONTINGENCY	284,017	-	-	284,017	-
100	FINANCE CHARGES	564,746	-	-	564,746	-
TOTAL (10-100)		3,586,913	193,820	45,359	3,586,913	-

NOTE: TOTAL INCURRED COST TO DATE \$46,418,616

Westside Purple Line Extension Section 3 Project Preliminary Summary Schedule



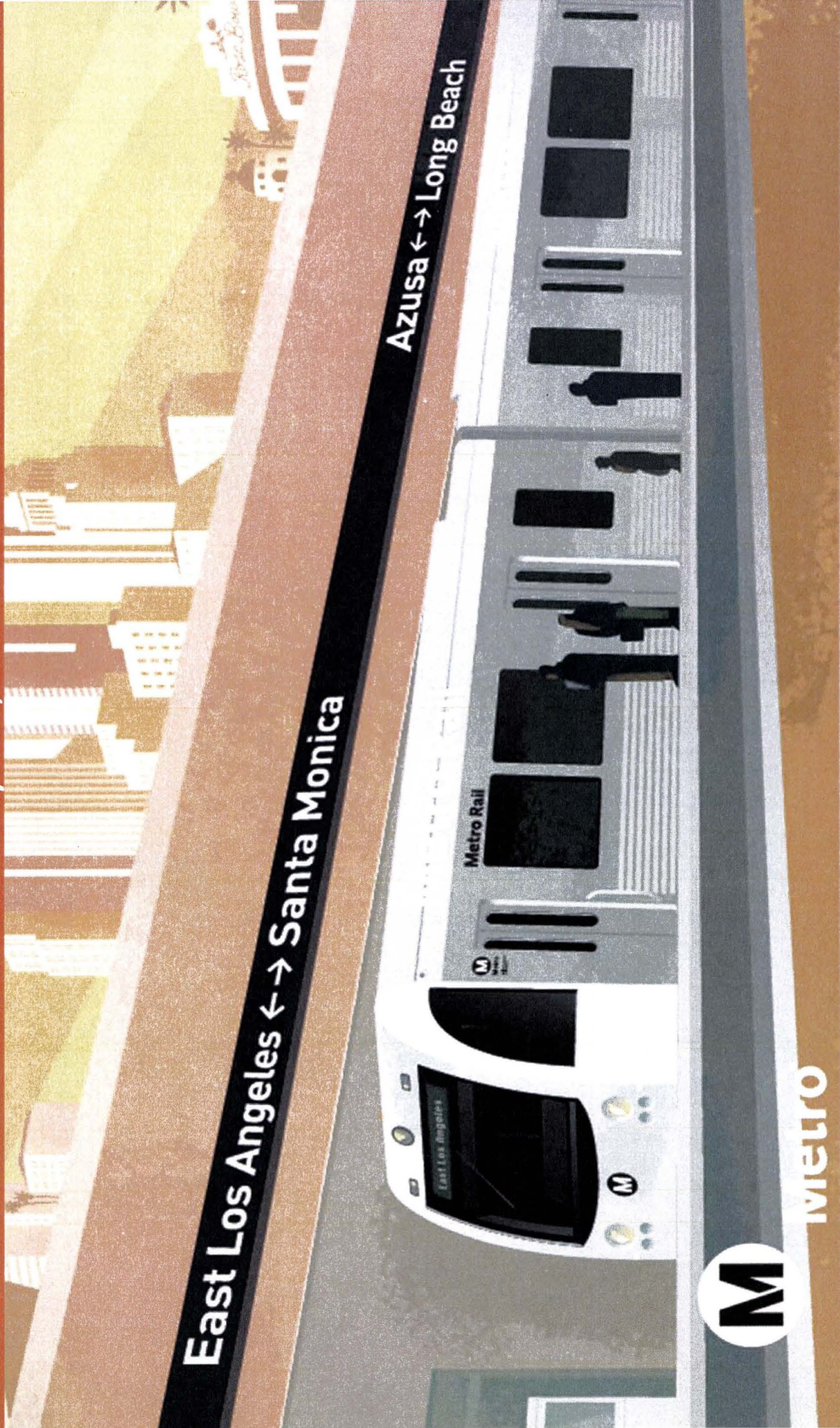
Westside Purple Line Extension Section 3 Project Top Risks & Mitigations

Risk ID	Risk Description	Risk Score	Review Comments
671.3	Properties required at Army Reserve may not be available. (SCC 60)	17.5	<p>10/30/2017 - New risk. Risk profile adjusted to reflect VA hospital only. In discussions with VE Real Estate.</p> <p>02/01/2018- Probability changed from 4-5.</p> <p>03/10/2018 - Metro sent letter to Army Reserve with revised request on 3/20/18; determination expected in April 2018. Keep the risk score till next month.</p>
567	Delay in the acquisition of easements on the VA Hospital Property (SCC 60)	12.0	<p>08/7/2012 - PMOC reduced the probability from 4 to 2.</p> <p>02/28/2017 - Cost increased 3-5; Probability decreased 5-4.</p> <p>10/30/2017 - New Risk to reflect Army Reserve only.</p> <p>02/01/2018 - Probability increase from 2 to 4.</p>
640	Other factors may delay the approval of the LNOP (SCC 90)	10.5	<p>11/29/2016 - New Risk.</p> <p>07/12/2017 - Probability increased 1-5; cost and schedule 4-5</p> <p>03/20/2018 - Received comments for the 130C. Reduce the risk score from 5,5,5 to 4,3,3.</p>
652.3	Additional environmental documentation process delays tunnel contract. (SCC 10)	10.5	<p>07/12/2017 - Had good meeting with SHPO on 7/11. Confirmed required documentation. Most likely not 130C and could be higher level (e.g. EA).</p> <p>10/30/2017 - It is anticipated environmental can be resolved with a 130C, however VA could request an EA. Letter expected from VA this week. 106 issues need to be resolved before issue to SHPO. 130C required for LONP.</p> <p>02/01/2018 - Draft 130C has been submitted to VA & Army Reserve on Jan 25, 2018.</p> <p>03/20/2018 - Scope refinement on Army Reserve. Risk score reduced from 5,5,5 to 4,3,3.</p>
40	ROW negotiations in the alignment between Constellation and UCLA may require longer negotiations and result in schedule delay and increased project cost. (SCC 60)	9.0	<p>11/29/2016 - Risk score increased.</p> <p>02/28/2017 - Cost increased from 2-4 due to significant legal fees. Time decreased from 5-3; probability increased 4-5.</p> <p>10/30/2017 - Risk profile adjusted. SSE requirements 2trs (not subject to 130C). Need EE approval to proceed.</p>
126.3	Private utility companies may have resource constraints for meeting our schedule. (SCC 40)	9.0	<p>02/28/2017 - Cost increased 2-3 & schedule 3-4. Probability reduced 5-4.</p> <p>07/12/2017 - Time and probability reduced 4-3.</p> <p>02/01/2018 - Scoring to be re-visited at next risk review meeting.</p>

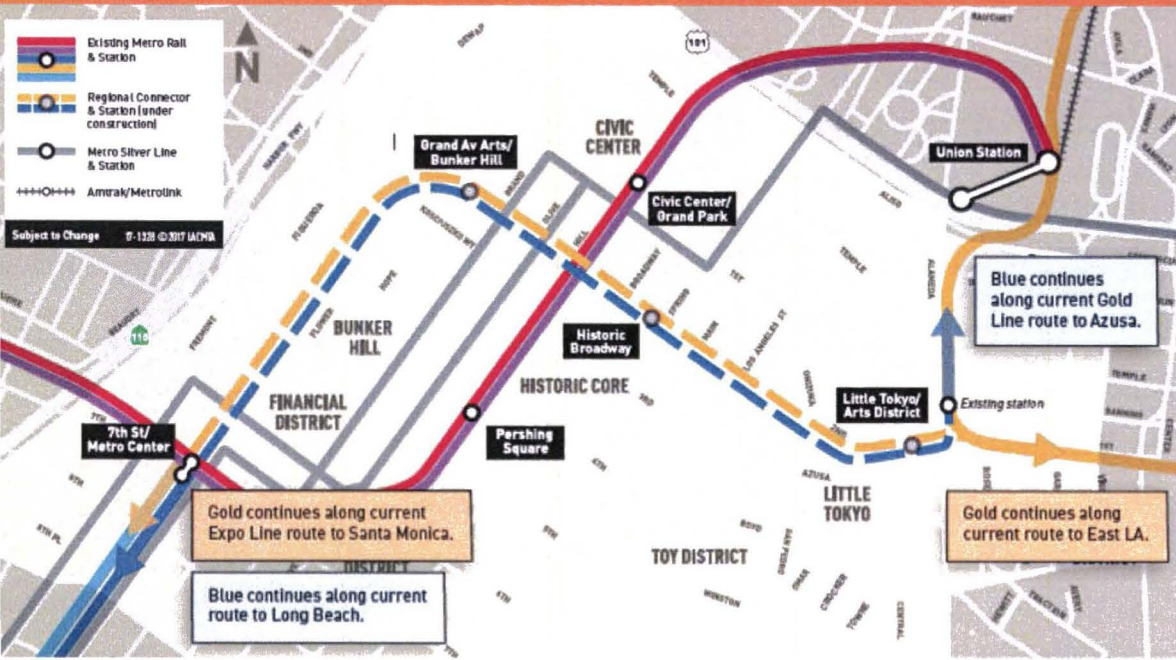
Regional Connector Transit Project

FTA Quarterly Review Meeting

May 30, 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
- 17,700 Daily New Transit Trips

- FFGA Budget – \$1,402.93M
- FFGA Forecast – \$1,670.83M
- FFGA RSD – 02/2023
- Forecast RSD – 12/2021
- FFGA Contingency (Proposed Budget) – 4.38%
- FFGA Contingency (To Go) – 9.56%
- Federal Funds – \$911.30M
- Local Funds – \$858.84M
- Design-Build Contractor: Regional Connector Constructors
- Award Amount: \$927.23M
- Status: In Construction
- Overall Project Progress – 47.9%
- Final Design Progress – 99.8%
- Construction Progress – 44.5%

Key Project Updates

- Focus remains on two schedule-critical areas of the Project:
 1. 6th/Flower Utilities
 2. 2nd/Broadway Station
- Project Recordable Injury Rate (Feb 2018) = 1.15
 - C0980 – 2,149,367 WH / 12 Recordable
 - C0981 – 111,060 WH / 1 Recordable
- Estimated Jobs Created to Date as of March 2018 is 10,706 with a Estimated Total Jobs of 20,000*.



Invert pour along tunnel guideway between Grand Av Arts/Bunker Hill Station and 4th/Flower

Construction Update Tunnel

- Cross passage construction continues
- Preparation for Sequential Excavation Method (SEM) Cavern excavation near complete



Excavation and breakout of tunnel segments in Spring Street hammerhead



Tunnel crews beginning pour for right tunnel, Hope to Flower

- Bored tunnel segment breakthrough underway at Historic Broadway Station

Construction Update

Little Tokyo/Art District Station

- Excavation has resumed at 1st/Central
- Decking and bracing has begun at the Wye Fan Plant



Excavation and lagging at Central SOE



Decking work near 1st/Alameda intersection

Construction Update Historic Broadway Station



Form underpinning columns at LA Times Building



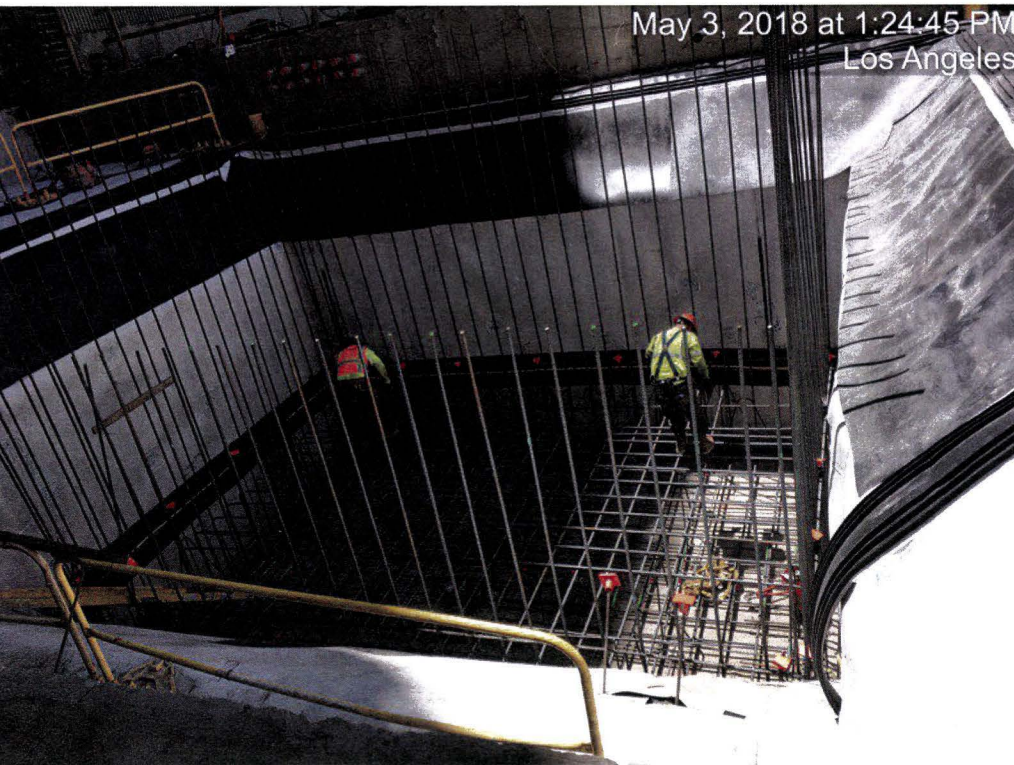
Fine grading ancillary station structure

- Underpinning of LA Times Building is in progress
- Adjacent station and ancillary area excavation continues at Historic Broadway Station

Construction Update

Grand Av Arts/Bunker Hill Station

- Permanent structural concrete construction continues at Grand Av Arts/Bunker Hill Station



Rebar installation at East Sump

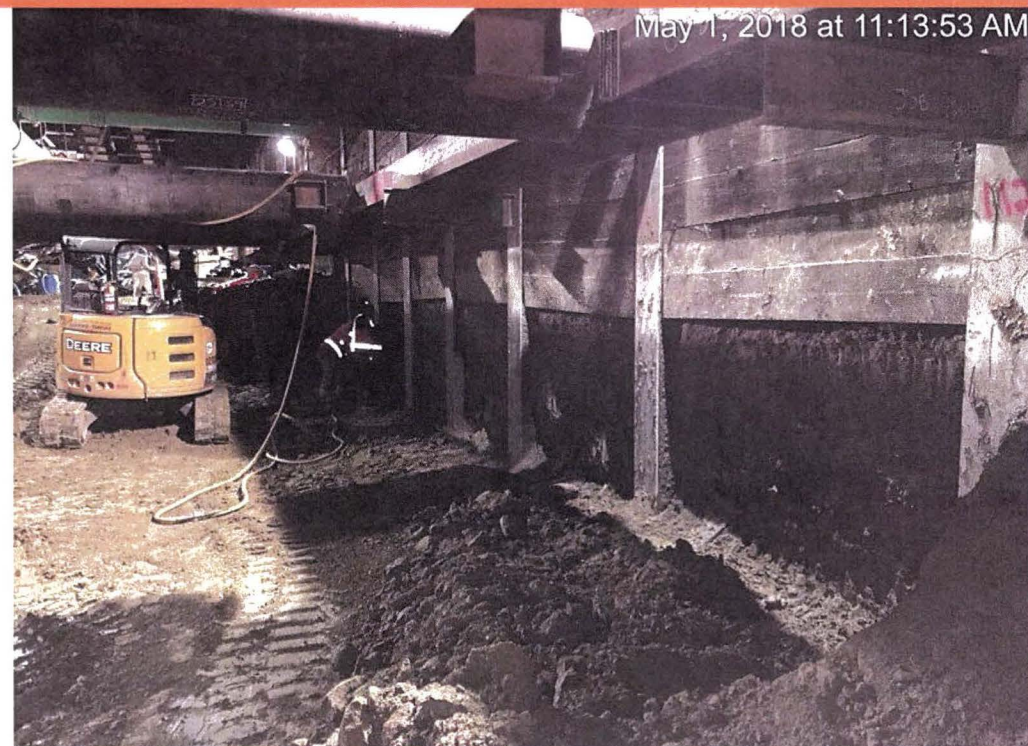


HDPE East Hammerhead

Construction Update Flower Street



Installing middle level strut



Excavation/lagging to bottom level at new release for excavation zone

- Utility protection/relocations, support of excavation and decking continues along Flower Street
- LADWP continues cable pulling and intercept work at night and on weekends

Disadvantaged Business Enterprises

Contract C0980 Regional Connector Transit Corridor Design-Build (Reporting Data as of March 2018)

Design

- DBE Goal 20%
- Current DBE Commitment \$13.8M (22.63%)
- Current DBE Participation 26.84%
- Twelve (12) Design DBE sub-consultants have been identified to date

Construction

- DBE Goal 18%
- Current DBE Commitment \$191.9M (18%)
- Current DBE Participation 12.71%
- *Seventy (70)* Construction DBE sub-consultants have been identified to date

Project Cost Status

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT (860228)
 PERIOD ENDING MAR 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	243,266	143,719	247,671	2,740
20	STATIONS, STOPS, TERMINALS, INTERMODAL	354,268	220,966	220,966	43,683	221,111	145
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	0	0	0	0	0	0
40	SITWORK & SPECIAL CONDITIONS	141,785	578,230	568,784	410,209	591,240	13,010
50	SYSTEMS	69,667	72,674	63,736	10,726	74,268	1,594
	CONSTRUCTION SUBTOTAL (10-50)	846,343	1,116,801	1,096,752	608,338	1,134,290	17,489
60	ROW, LAND, EXISTING IMPROVEMENTS	115,889	90,629	70,551	51,747	74,297	-16,331
70	VEHICLES	16,275	16,275	16,275	1,678	16,275	0
80	PROFESSIONAL SERVICES	261,455	350,222	278,189	243,395	358,498	8,275
	SUBTOTAL (10-80)	1,239,963	1,573,927	1,461,768	905,158	1,583,361	9,433
90	UNALLOCATED CONTINGENCY	135,399	82,600	0	0	73,167	-9,433
100	FINANCE CHARGES	27,571	14,301	0	0	14,301	0
	TOTAL PROJECT (10-100)	1,402,932	1,670,828	1,461,768	905,158	1,670,828	0

Note: Expenditures reflect FIS incurred cost through 03/31/2018 plus pending invoices from RCC, CPJV and Arcadis.

Project Cost Status

FFGA / Non-FFGA

DOLLARS IN THOUSANDS

PERIOD ENDING MAR 2018

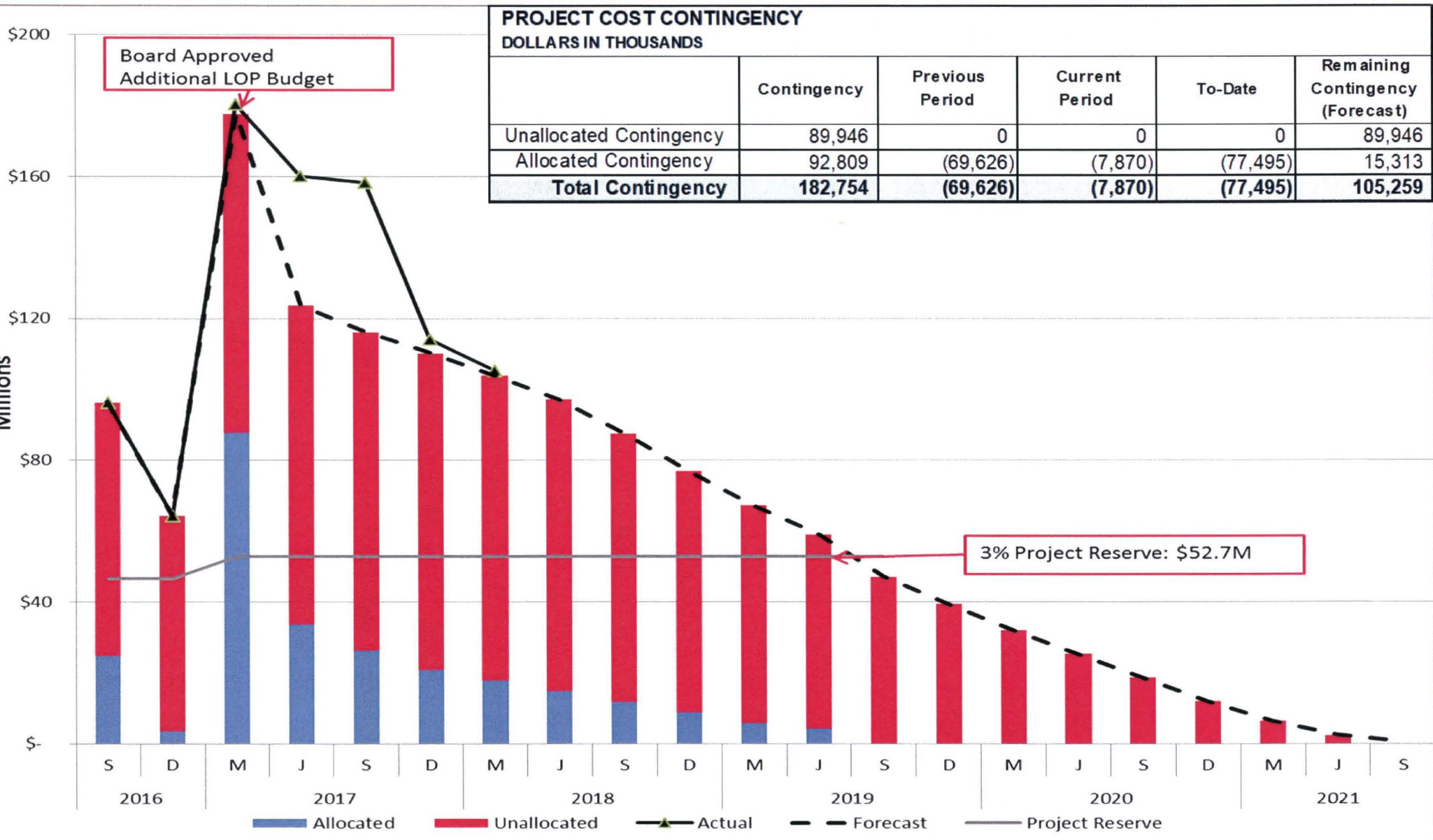
SCC CODE	DESCRIPTION	ORIGINAL FFGA BUDGET	PROPOSED FFGA BUDGET	COMMITMENTS	EXPENDITURES	PROPOSED FFGA FORECAST AT COMPLETION	VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	280,622	244,931	243,266	143,719	247,671	2,740
20	STATIONS, STOPS, TERMINALS, INTERMODAL	354,268	220,966	220,966	43,683	221,111	145
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	0	0	0	0	0	0
40	SITework & SPECIAL CONDITIONS	141,785	578,230	568,784	410,209	591,240	13,010
50	SYSTEMS	69,667	72,674	63,736	10,726	74,268	1,594
	CONSTRUCTION SUBTOTAL (10-50)	846,343	1,116,801	1,096,752	608,338	1,134,290	17,489
60	ROW, LAND, EXISTING IMPROVEMENTS	115,889	90,629	70,551	51,747	74,297	-16,331
70	VEHICLES	16,275	16,275	16,275	1,678	16,275	0
80	PROFESSIONAL SERVICES	261,455	350,222	278,189	243,395	358,498	8,275
	SUBTOTAL (10-80)	1,239,963	1,573,927	1,461,768	905,158	1,583,361	9,433
90	UNALLOCATED CONTINGENCY	135,399	82,600	0	0	73,167	-9,433
100	FINANCE CHARGES	27,571	14,301	0	0	14,301	0
	TOTAL PROJECT (10-100)	1,402,932	1,670,828	1,461,768	905,158	1,670,828	0

Note: Expenditures reflect FIS incurred cost through 03/31/2018 plus pending invoices from RCC, CPJV and Arcadis.

SCC CODE	DESCRIPTION	ORIGINAL NON FFGA BUDGET	PROPOSED NON FFGA BUDGET	COMMITMENTS	EXPENDITURES	PROPOSED NON FFGA FORECAST AT COMPLETION	VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS		4,100	4,100	239	4,100	0
20	STATIONS, STOPS, TERMINALS, INTERMODAL		8,953	8,953	8,050	8,980	28
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS		0	0	0	0	0
40	SITework & SPECIAL CONDITIONS		20,487	10,746	1,796	27,970	7,484
50	SYSTEMS		750	0	0	1,500	750
	CONSTRUCTION SUBTOTAL (10-50)		34,289	23,799	10,085	42,550	8,261
60	ROW, LAND, EXISTING IMPROVEMENTS		2,113	0	0	2,113	0
70	VEHICLES		0	0	0	0	0
80	PROFESSIONAL SERVICES		29,066	14,036	9,098	27,335	-1,731
	SUBTOTAL (10-80)		65,468	37,835	19,183	71,998	6,531
90	UNALLOCATED CONTINGENCY		7,346	0	0	815	-6,531
100	FINANCE CHARGES		0	0	0	0	0
	TOTAL NON-FFGA (10-100)		72,814	37,835	19,183	72,814	0
	ENVIRONMENTAL/PLANNING		26,500	26,500	24,949	26,500	0
	TOTAL NON-FFGA (INCL. ENV./PLANNING)		99,314	64,334	44,131	99,314	0
	TOTAL PROJECT	1,402,932	1,770,142	1,526,103	949,289	1,770,142	0


NOTE: EXPENDITURES ARE CUMULATIVE THROUGH 03/31/2018 METRO AND TRIBUNE AGREED ON REIMBURSEMENT OF ~\$1.6 MILLION RELATED TO 2ND/BROADWAY OVERBUILD.

Budget Contingency Drawdown



Summary Schedule

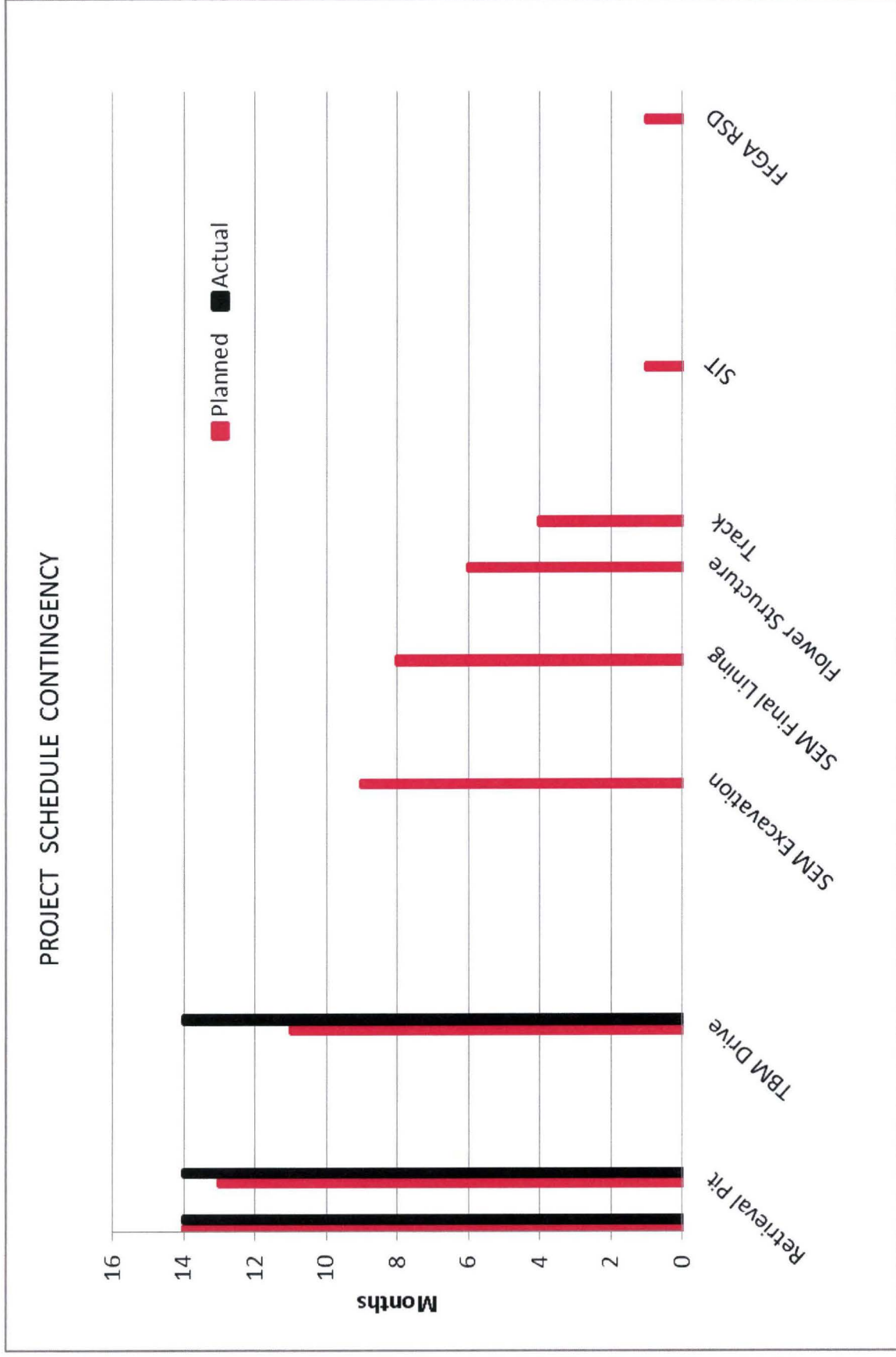
Regional Connector Master Schedule Current			Regional Connector Level 1 Schedule																MASTER SCHEDULE MARCH 2018																			
Activity ID	Activity Name	Finish	2014		2015				2016				2017				2018				2019				2020				2021				2022					
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Regional Connector Master Schedule Current (March 2018)	07-Dec-21																																				
	Project Planning & Development	29-Jun-12 A																																				
	FFGA / TIFIA Loan Approved	20-Feb-14 A	▼ 20-Feb-14A																																			
	Engineering	31-Aug-18	→ 31-Aug-18																																			
	Right of Way	31-Dec-16	→ 31-Dec-18																																			
	Metro Furnished Equipment	12-Feb-20	→ 12-Feb-20																																			
	Construction	05-Nov-21	→ 05-Nov-21																																			
	Utilities (Including 3rd Parties)	30-Sep-20	→ 30-Sep-20																																			
	Guideway & Track	13-May-21	→ 13-May-21																																			
	SEM	30-Jan-20	→ 30-Jan-20																																			
	Stations	19-Feb-21	→ 19-Feb-21																																			
	Systems	01-Sep-21	→ 01-Sep-21																																			
	Substantial Completion	09-Oct-21	▼ 09-Oct-21																																			
	Testing	05-Nov-21	→ 05-Nov-21																																			
	Pre-Revenue Operations	07-Dec-21	▼ 07-Dec-21																																			
	RSD	07-Dec-21	▼ 07-Dec-21																																			

 Remaining Work
 Milestone

1 of 1
 Regional Connector Level 1 Summary Schedule
 Los Angeles County Metropolitan Transportation Authority

Data Date : 31-Mar-18
 Current Date : 10-Apr-18

Schedule Contingency Drawdown



Top Risks & Mitigations

April 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. <i>Community Relations to provide information to determine schedule updates on Flower Street</i>
225	<i>Inadequate or incomplete system integration and testing efforts may precipitate delayed Revenue Service Date.</i>	7.5	<ol style="list-style-type: none"> 1. <i>Ongoing bi-weekly meetings</i> 2. <i>Factory Acceptance Testing (FAT) planning underway</i>
334	SEM cavern may encounter structural steel member during excavation, which may have schedule and cost implications.	7.5	<ol style="list-style-type: none"> 1. Plan for encounter based on TBM drives through the area 2. Consider T&M admin through impact areas
352	<i>DWP Power Cable Pulling at 6th/Flower may take longer than 2.5 months after RCC's work, which may have schedule and cost implications.</i>	7	<ol style="list-style-type: none"> 1. <i>Collaborative effort required for the early access to initiate cable pulling</i> 2. <i>Executive management involvement (Metro-DWP Executive Meeting)</i>



PATSAOURAS PLAZA
BUSWAY STATION

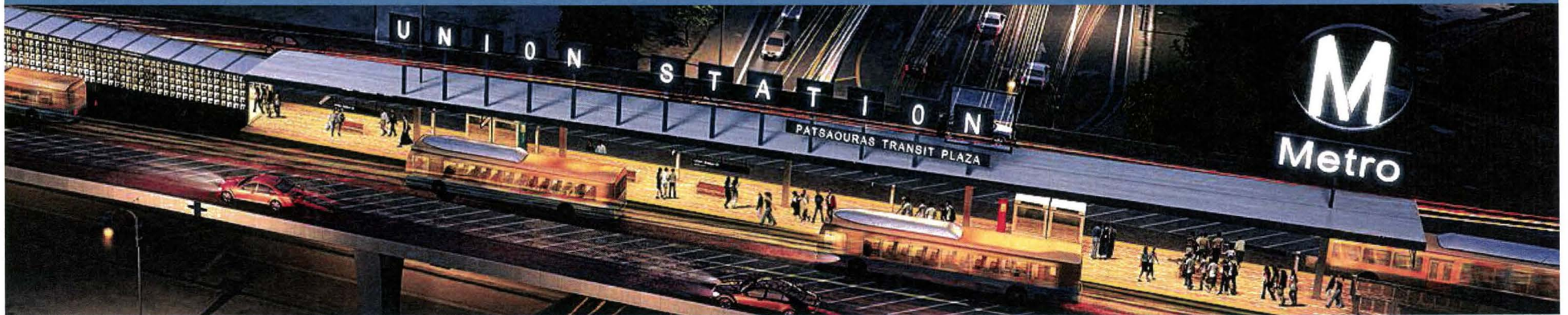
Patsaouras Plaza Busway Station

FTA Quarterly Review – May 30, 2018



Patsaouras Plaza Busway Station

Design/Build Contract C0970 - Current Quarter Update



Design Status

- Pedestrian Ramp/Bridge/Station: AFC design package awaiting Caltrans and Metro approval
- Roadway Plans: AFC design package awaiting Caltrans approval (with exception of utility plans)
- MEP: Contractor developing Interface Management Plan

Construction

- Completed deck pours on right side of freeway
- Began removing falsework on right side of freeway
- Initiated deck pours on left side of freeway
- Completed elevator foundation plies



Patsaouras Plaza Busway Station

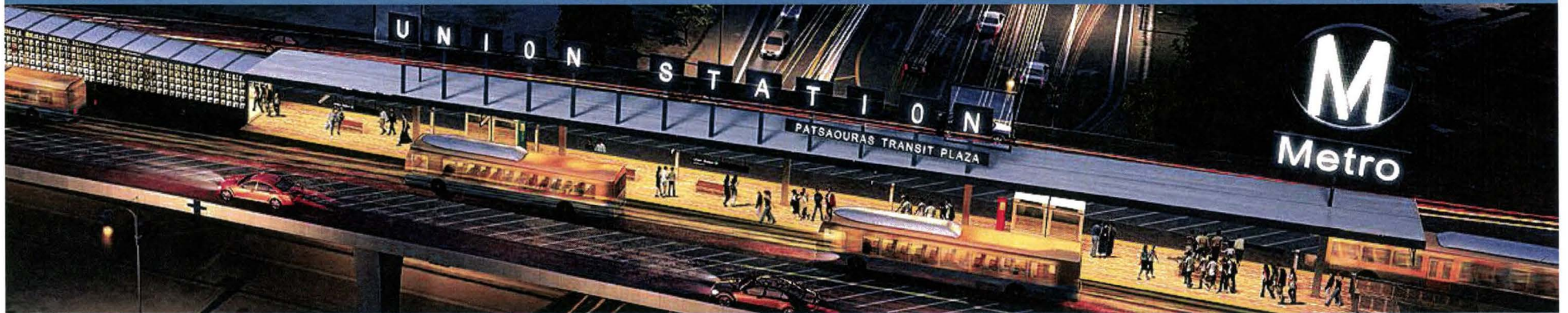
Design/Build Contract C0970 – Top Risks and Mitigations

Risk	Impact	Mitigation
Potential for differing site conditions at Pedestrian ramp micropiles and elevator foundations	Budget/ Schedule	Immediate direction to contractor to do changed work. Metro reallocating savings from Special Conditions to pay for work. 3 rd Party Agents on Project Team.
Schedule delays related to TIAs for design	Budget	Metro/Contractor Executive Management in settlement negotiations
Schedule delays related to TIAs for construction	Budget	Metro directed and contractor agreed to expedited monthly schedule update and TIA processing
Potential delays due to Cultural Resources at Pedestrian Ramp Micropiles and Austin Vault	Budget/ Schedule	Immediate direction to contractor to re-sequence the work. Metro developing a Testing and Evaluation Plan for CALTRANS, Native American tribes, and SHPO approval.



Patsaouras Plaza Busway Station

Activities for Next Quarter



- Continue micropiling the foundations for the pedestrian overcrossing
- Complete concrete pours on left side of freeway
- Begin removing falsework on left side of freeway
- Continue Mechanical/Electrical/Plumbing (MEP) work
- Complete pouring the elevator foundation caps
- Complete and file the Storm Drain exception with CALTRANS
- Finalize a Cost and Schedule Containment Plan



Patsaouras Plaza Busway Station

Construction Photos



Frame 3 Left Exterior Stems



Frame 4 Left Deck Pour



Drill for Micropile Test



Frame 4 Left Post Tensioning



Metro



Caltrans

Willowbrook/Rosa Parks Station

FTA Quarterly Review Meeting

May 30, 2018



Willowbrook/Rosa Parks Station

Major Activities During Reporting Period



- Early Start Package:
 - Implemented traffic control plan.
 - Completed sidewalk and curb demo at NRC tracks.
 - Construction @ 20% completion.
- Package A:
 - Construction Bid period closed on March 30th.
 - Submitted Construction Allocation request to CTC for May 17th Meeting.



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		12/29/2017 A
End of Construction		8/31/2018
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	5/14/2018
Construction		
Notice to Proceed	10/30/2016	6/4/2018
Begin Construction	5/30/2017	8/2/2018
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 Cost Update

Activity	ORIGINAL GRANT BUDGET	COMMITMENTS	EXPENDITURES	CURRENT FORECAST	ORIGINAL GRANT BUDGET / CURRENT FORECAST VARIANCE
Blue Line Improvements (<i>Items 1-5: Platform Extensions, Canopies, Grade Crossing Improvements, new South Entrance, ROW Fencing</i>)	\$4,747,240	\$4,747,240	\$2,925	\$ 8,012,339	(\$3,265,099)
Green Line Improvements (<i>Items 6-9: Vertical Circulation, Lighting & Acoustical Enhancements</i>)	\$14,417,979	\$14,417,979	\$0	\$ 5,936,478	\$8,481,501
New Construction (<i>Items 10-13: Civic Plaza, Metro Customer Service Center, Sheriff's Facility, Mobility Hub</i>)	\$16,642,913	\$16,642,913	\$0	\$ 12,409,835	\$4,233,078
Bus and Shelter Improvements (<i>Items 14-16: Improvements to West and East Bus Depots</i>)	\$3,462,904	\$3,462,904	\$0	\$ 567,798	\$2,895,106
Parking Improvements (<i>Items 17-19: Safety enhancement and reconfiguration for both East and West Park & Ride Lots</i>)	\$3,555,068	\$3,555,068	\$0	\$ 4,241,432	(\$686,364)
Circulation Improvements (<i>Items 20-23: Signage, Transit Hall, Pedestrian Promenade, Kiss & Ride Lot</i>)	\$4,844,679	\$4,844,679	\$1,845	\$ 1,115,317	\$3,729,362
Site-Wide Improvements (<i>Items 24-26: General Site Work, Landscaping, Artwork</i>)	\$3,236,024	\$3,236,024	\$21,450	\$ 9,060,970	(\$5,824,946)
Preliminary Engineering and Final Design	\$4,281,888	\$5,889,710	\$5,419,881	\$ 5,889,710	(\$1,607,822)
Construction - Agency Labor			\$21,910		
Construction - Third Party			\$119,875		
Contingency (10%)	\$5,518,878	\$5,518,878	\$0	\$ 4,134,417	\$1,384,461
Land Transaction	\$4,650,000	\$4,650,000	\$5,553,317	\$ 4,650,000	\$0
Tenant Relocation	\$1,300,000	\$1,300,000	\$57,637	\$ 1,300,000	\$0
Total Project Cost	\$66,657,573	\$68,265,395	\$11,198,840	\$ 57,318,296	\$9,339,277

1. Expenditures cumulative through 3/27/2018; TIGER expenditures YTD: \$26,071.26

2. 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

Top Risks and Mitigations

Risk ID	Risk Description	Type RDMC	Risk Rating	Mitigation Strategies
21	1. Coordination with Operations and other concurrent Blue Line Projects ongoing.	C	13.5	1. Continue ongoing coordination with Operations during phasing plan development and construction.
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
16b	3rd party coordination: - County - Union Pacific - CPUC	M	9	1. Continue coordination during County review of Packages A and C with LOA 2. Establish monthly coordination meetings/updates with UP
3	As-built drawings not available for underground, Potential Unknown Utilities	DM	7.5	1. Field investigation during design development - Done 2. Evaluating Sewer and Date lines based on the investigation - Potholing for Sewer connection will be const. contract. - Installing new Data line
11	Buy America Requirements	DM	4.5	1. RNL to make sure "Buy America" requirements are in the contract documents - Complete 2. Make sure that Items specified meet Buy America requirements - Ongoing



Metro

Willowbrook/Rosa Parks Station

Anticipated Activities for Next Reporting Period

- Early Start Package – Begin trench work along Wilmington Ave / Northern Driveway / Willowbrook Ave East.
- Package A:
 - Evaluate construction bids.
 - Award construction contract.
 - CTC approval of ATP and SB1 grant construction allocation request.
 - Board approval of Life of Project budget.
- Package B: Submit Encroachment Permit application to Caltrans.





Eastside Access Improvements_1st and Central Station FTA Quarterly Meeting – May 30, 2018



Metro

Eastside Access Improvements

Project Description

Project consists of 8 different segments within City of Los Angeles Right of Way and Include:

- Bike lanes, Cycle Track, and Walk-Bike Esplanade installation
- Sidewalk widening and repairs
- Crosswalk improvements
- Tree planting
- Replacement of street lights
- Wayfinding and signage
- Storm Water Management



Metro

Eastside Access Improvements

Preliminary Funding Plan



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



Metro

February 17, 2016 Planning and Programming Committee

February 25, 2016 Metro Board Meeting

Eastside Access Improvements

Design-Construction Budget

SEGMENT	ACTIVITY	ORIGINAL BUDGET	CURRENT BUDEGT	EXPENDITURES	CURRENT FORECAST	GRANT - FORECAST VARIANCE
1	1st Street: From Los Angeles Street to Mission Road	\$2,896,108	\$1,791,334	\$0	\$1,791,334	\$1,104,774
2	Alameda Esplanande	\$1,290,531	\$4,364,962	\$0	\$4,364,962	-\$3,074,431
3	Los Angeles Street Esplanade: From the Plaza to 2nd Street	\$3,698,730	\$684,920	\$0	\$684,920	\$3,013,810
4	2nd Traction Street	\$1,038,816	\$230,535	\$0	\$230,535	\$808,281
5	Central Avenue: From 1st Street to 3rd Street	\$310,438	\$315,017	\$0	\$315,017	-\$4,579
6	Judge John Aiso/San Pedro Street: From Temple to 3rd Street	\$691,711	\$350,559	\$0	\$350,559	\$341,152
7	Santa Fe Spine	\$1,163,645	\$2,763,476	\$0	\$2,763,476	-\$1,599,831
8	Funda.Ped. Improvements for the Project + Azusa + Little Tokyo	\$386,999	\$305,090	\$0	\$305,090	\$81,909
	General Sit Access and Staging	\$0	\$989,400	\$0	\$989,400	-\$989,400
	Subtotal:	\$11,476,978	\$11,795,291	\$0	\$11,795,291	-\$318,313
	Preliminary Engineering/Professional Services	N/A	\$2,548,451	\$1,475,762	\$2,660,492	
	Third Party	N/A	\$900,000	\$138,814	\$900,000	
	Metro Project Labor and Construction Management (*)	N/A	\$0	\$0	\$3,000,000	
	Escalation	\$1,423,022	Included above	\$0	\$0	
	Mobilization/Traffic Control	\$1,100,000	Included above	\$0	\$0	
	Construction Contingency (@20%)	\$2,800,000	\$2,359,058	\$0	\$2,359,058	
	Total Project Cost:	\$16,800,000	\$17,602,801	\$1,614,576	\$20,714,842	-\$3,914,842

4/26/2018

Notes:

Expenditures cumulative through April 26, 2018

Current Budget is based on 65% Cost estimate

Professional Services Cost under review - Estimated Increase of \$600,000

Includes estimated Metro (soft) cost during the construction phase of \$3,000,000

Construction Contingency of 20% included

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



Metro

Eastside Access Improvements Project Schedule

MILESTONE SCHEDULE

2-May-18

MILESTONE	BASELINE DATE	CURRENT DATE	NOTES
Grant Award	22-Sep-15	22-Sep-15	
Environmental Finding	22-Sep-15	22-Sep-15	
Design (30% - 100%)			
Start Date:	30-Sep-15	8-Mar-16	
End Date:	30-Sep-16	21-Jan-19	
Procurement:			
IFB Issue:		26-Apr-19	
Bid Opening:		15-Jul-19	
NTP:		22-Nov-19	
Construction:		START (*)	END (*)
Traffic Control Plans		25-Nov-19	21-Feb-20
Segment 1		1-May-21	30-Sep-21
Segment 2		1-Jun-21	31-Dec-21
Segment 3:		1-Mar-20	31-Jul-20
Segment 4:		1-Jul-20	31-Dec-20
Segment 5:		1-May-21	30-Sep-21
Segment 6:		1-Mar-20	31-Jul-20
Segment 7:		1-Aug-20	31-Jan-23
Segment 8:		1-Aug-20	28-Feb-21
Project Close-Out:		28-Jan-23	31-Dec-23

(*) Based on current and proposed construction schedule as discussed with Regional Connector, Div 20, and ESOC projects.

The construction dates for EAIP project have been provided only as placeholder.

Upon award of contract EAIP contractor will provide the baseline schedule which may reflect different sequence and the durations



Metro

Eastside Access Improvements

Risk Register

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

RISK DESCRIPTION	RISK				RMA TARGET DATE	RISK OWNER	RISK MANAGEMENT ACTION - RMA	ACTION STATUS
	PROB (P)	COST (C)	TIME (T)	RISK SCORE $P*(C+T)/2$				
Initial Grant Budget shortfall due to forecasted cost increase	5	4	5	22.5	Apr-19	Metro	Metro to identify additional funding sources for Board approval	PM working with Sr. Mgt.
RCC Change Order could exceed allotted budget. Also need FTA approval for issuing CO	5	2	2	10	Jul-18	Metro	Metro to seek formal FTA approval for sole sourcing RCC	PM coordinating with Regional Connector
Increase in TTTA Contract Fees	5	1	2	7.5	Apr-18	Metro	To present Contract Modification at April Board	Board has approved the Change Request
Delay in 100% Plan approval will impact IFB release date	4	2	4	12	Jan-19	Metro	Closer City coordination, Diligent QC of submittals by TTTA & its Subs	PM working with City, RC, and TTTA
LADOT requires street parking incorporated on Alameda Esplanade	3	2	2	6	Jun-18	Metro	Metro to coordinate with CD 14 and LADOT to address the request	Design will be modified pending LABOS approval
LABSS requiring Metro to maintain Bioswale on public ROW at Alameda Esplanade	5	3	3	15	Jul-18	Metro	Metro Senior Management to establish a new MCA applicable to all projects	Met with Sr. Leadership at COLA on April 9
Delay due to LADOT parking requirements for Sci Arc, Taxi Zone and at Alameda	2	3	4	7	Jun-18	Metro	TTTA has modified design as agreed with CD 14, DOT, BSS, BOS, BOE, BSL	Approaching final resolution
Design and Segment 2 Construction delays could extend project beyond TIGER deadline	5	1	5	15	Jul-18	Metro	PM to coordinate with concurrent Metro Projects RC, Div 20, and ESOC	Exploring options with other Metro projects and TTTA
Metro - COLA Procurement process for construction could delay contract award	4	2	3	10	Jun-19	Metro	Metro and TTTA exploring options to minimize the delay	PM coordinating with TTTA and COLA
Construction delay due to concurrent projects in the area could affect schedule/cost	5	2	5	17.5	Jun-19	Metro	PM reviewing options to reduce the delay with other PM	PM continue to discuss with PMs and COLA
Unanticipated utility work could delay project and increase cost	4	3	4	14	Oct-19	Metro	Metro to conduct Utility identification (e.g., potholing) during design phase	PM has initiated the idea with TTTA

Eastside Access Improvements

Current Quarter Update

MAJOR ACTIVITIES DURING REPORTING PERIOD

65% Plans Under Review by DOT, BOE, BSS, BSL

Coordination between other concurrent Metro projects Continued

Met with Little Tokyo Community Leaders to address concerns

Met with Arts District members to clarify project scope

Met with CD 14 and COLA on multiple occasions

Project schedule and cost projection updates continue



Metro

Eastside Access Improvements

Activities for Next Quarter

ANTICIPATED ACTIVITIES FOR NEXT REPORTING PERIOD

COLA: Complete 65% plans submittals and comments resolution

COLA: Proceed with 100% plans development

Coordination Meetings with RC, ESOC and Division 20

Follow up meeting with CD14 and LABSS to advance Maintenance MCA

Update the Cost and Schedule Containment Plan



Metro

P3010 Light Rail Vehicle Acquisition

FTA Quarterly Review Meeting – May 2018



Reporting Month: February 2018 - April 2018
Presentation Date: May 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 October, 2018. As a result, no vehicles have been awarded Final Acceptance status pending mitigation of the communications problem.”

(Comment is unchanged from the previous Quarterly Report dated 02/28/18)

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 updates and progress have been satisfactory and the Project Team will continue to follow up with KI accordingly.

Project Updates

- The delivery of Option 4 Cars is underway.
- 5 Cars shipped; 131 Cars shipped total.
- 2 Cars Conditionally Accepted; 119 Cars Conditionally Accepted total.
- 22 Cars in Revenue Service at the Foothill Extension Line; 97 Cars in Expo, Blue, Green Lines.
- Car 1158 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	\$242,903,996.00	\$25,523,617.00	\$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	\$0.000	\$675,512.00	\$0.00
PERFORMANCE BOND	\$8,714,500.00	\$8,714,500.00	\$8,714,500.00	\$8,714,500.00	\$0.00	\$0.00
ON-SITE ENGINEER	\$1,679,366.00	\$1,679,366.00	\$1,679,366.00	\$1,595,398.00	\$83,968.00	\$0.00
VEHICLE SUB-TOTAL	\$304,435,745.00	\$304,435,745.00	\$304,435,745.00	\$265,927,436.00	\$38,508,309.00	\$0.00
CONTINGENCY SUB-TOTAL	\$10,704,091.00	\$10,704,091.00	\$6,147,614.00	\$6,147,614.00	\$4,556,477.00	\$0.00
VEHICLE TOTAL	\$315,139,836.00	\$315,139,836.00	\$310,583,359.00	\$272,075,050.00	\$43,064,786.00	\$0.00
PROFESSIONAL SERVICES (ELEMENT A)	\$21,208,749.00	\$21,208,749.00	\$21,208,749.00	\$16,683,661.00	\$4,525,088.00	\$0.00
PROFESSIONAL SERVICES (ELEMENT B)	\$8,378,885.00	\$8,378,885.00	\$8,378,885.00	\$3,288,707.00	\$5,090,278.00	\$0.00
PROFESSIONAL SERVICES SUB-TOTAL	\$29,587,634.00	\$29,587,634.00	\$29,587,634.00	\$19,972,268.00	\$9,615,366.00	\$0.00

Reporting Month: February 2018-April 2018

Presentation Date: May 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	\$189,097,286.00	\$134,701,605.00	\$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	\$201,264,069.00	\$165,057,575.00	\$0.00
CONTINGENCY SUB-TOTAL	\$18,604,375.00	\$18,604,375.00	\$6,534,165.00	\$6,534,165.00	\$12,070,210.00	\$0.00
VEHICLE TOTAL	\$384,926,019.00	\$384,926,019.00	\$372,855,809.00	\$207,798,234.00	\$177,127,785.00	\$0.00

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

Reporting Month: February 2018-April 2018

Presentation Date: May 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	\$214,370,373.96	\$214,370,373.96	\$24,080,898.87	\$190,289,475.09	\$0.00
SPARE PARTS	\$15,821,024.40	\$15,821,024.40	\$15,821,024.40	\$0.00	\$15,821,024.40	\$0.00
SPECIAL TOOLS	\$389,434.57	\$389,434.57	\$389,434.57	\$0.00	\$389,434.57	\$0.00
DIAGNOSTIC TEST EQUIPMENT	\$1,416,049.63	\$1,416,049.63	\$1,416,049.63	\$0.00	\$1,416,049.63	\$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	\$7,921,238.44	\$7,921,238.44	\$0.00	\$7,921,238.44	\$0.00
ON-SITE ENGINEER	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
VEHICLE SUB-TOTAL	\$239,918,121.00	\$239,918,121.00	\$239,918,121.00	\$24,080,898.87	\$215,837,222.13	\$0.00
CONTINGENCY SUB-TOTAL	\$15,869,912.00	\$15,869,912.00	\$11,651,376.00	\$11,651,376.00	\$4,218,536.00	\$0.00
VEHICLE TOTAL	\$255,788,033.00	\$255,788,033.00	\$251,569,497.00	\$35,732,274.87	\$220,055,758.13	\$0.00

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

Reporting Month: February 2018-April 2018

Presentation Date: May 2018

Budget Contingency Drawdown

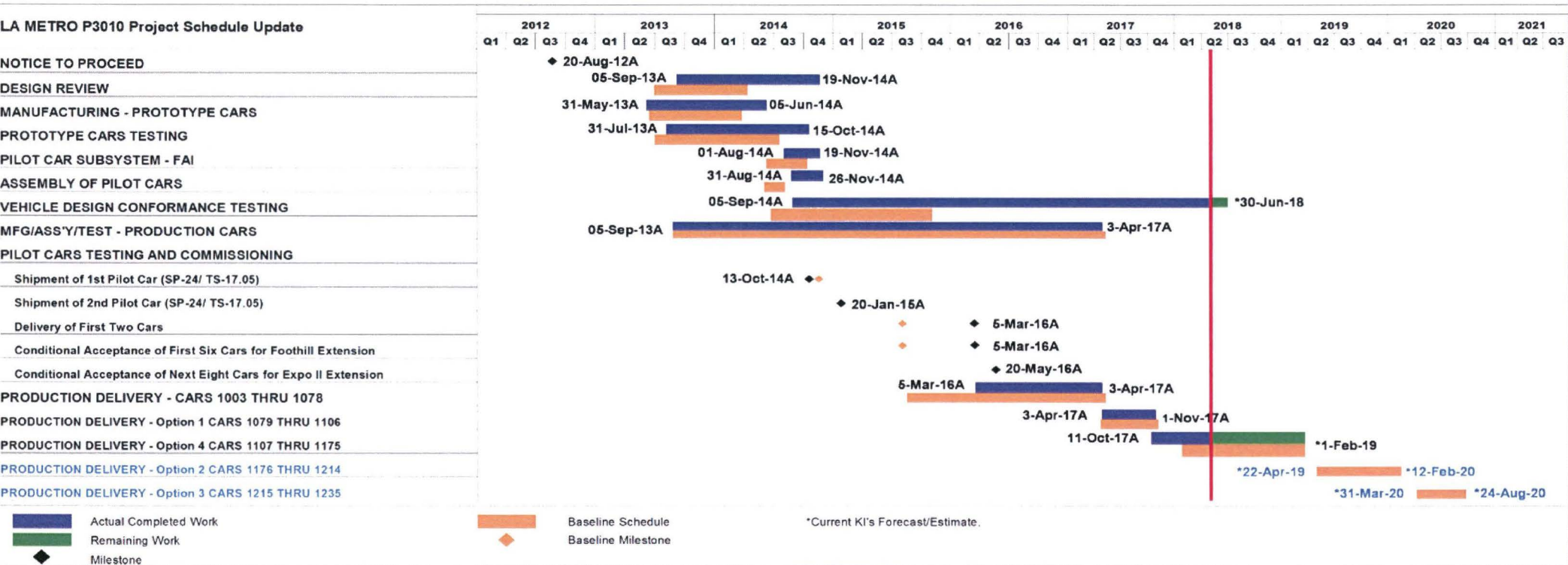
PROJECT COST CONTINGENCY (through April 2018)					
UNITS IN DOLLARS					
Orders	Original Contingency (Budget)	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Base Order	\$10,704,091	\$0	\$773,695	\$6,147,614	\$4,556,477
Options 1 and 4	\$18,604,375	\$0	\$5,669,567	\$6,534,165	\$12,070,210
Options 2 and 3	\$15,869,912	\$0	\$11,651,376	\$11,651,376	\$4,218,536
Total Contingency	\$45,178,378	\$0	\$18,094,638	\$24,333,155	\$20,845,223

Reporting Month: February 2018-April 2018
Presentation Date: May 2018

Summary Schedule

P3010 Light Rail Vehicle Acquisition Program
Monthly Project Status Report

April 2018



Reporting Month: February 2018-April 2018

Presentation Date: May 2018

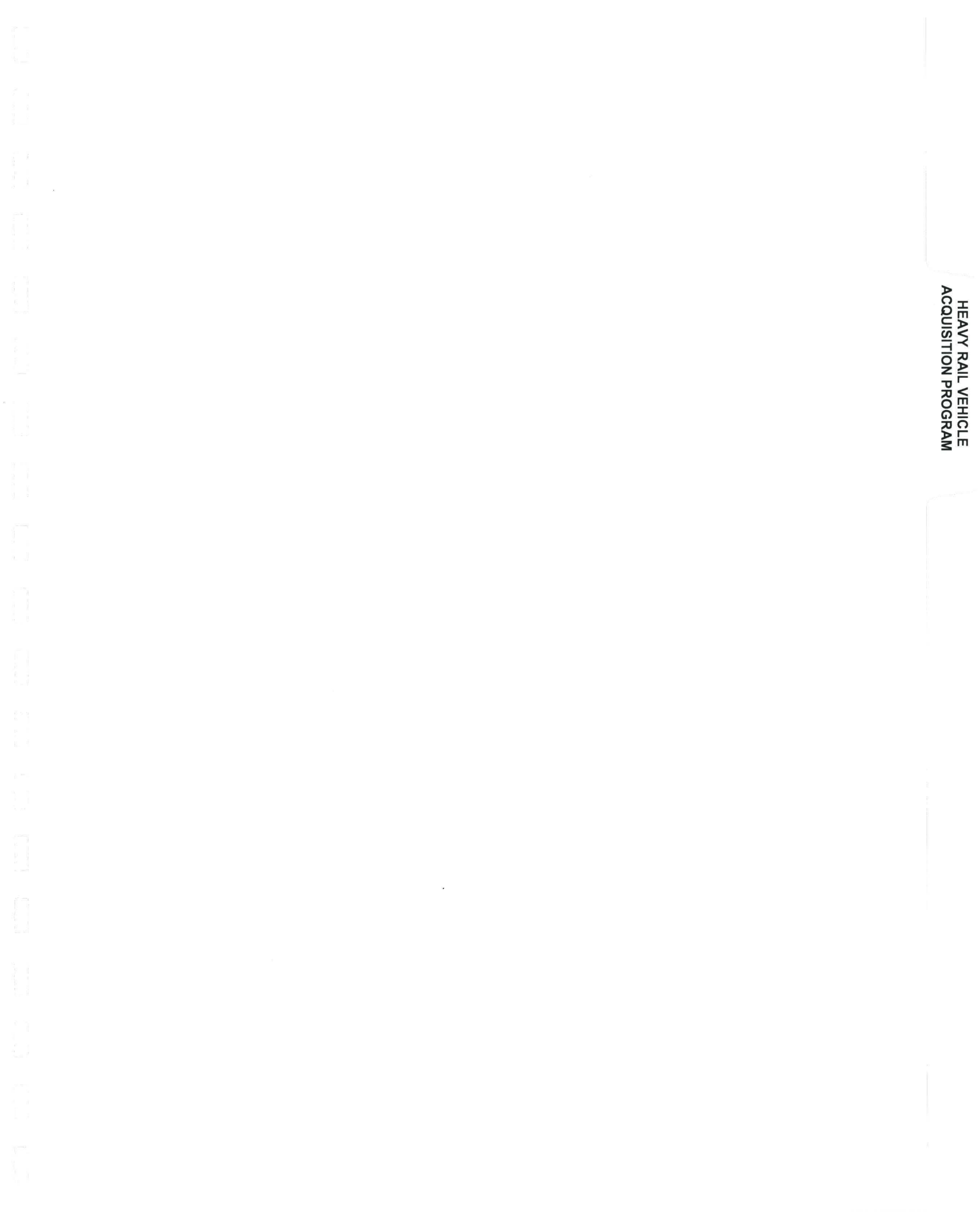
Top Risks & Mitigations

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

Reporting Month: February 2018-April 2018

Presentation Date: May 2018

Questions

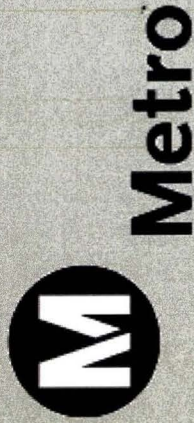


Los Angeles County
Metropolitan Transportation Authority

Heavy Rail Vehicle Acquisition Program



FTA Quarterly Meeting Review
May 30, 2018



New Heavy Rail Vehicle Program

- **PROJECT STATUS (ACTIVITIES FOR REPORTING PERIOD)**
 - Conceptual Proposal Review (CPR)
 - This Design Review phase is completed.
 - Pre-Production Configuration Review (PPCR)
 - This Design Review phase is now in progress and will be completed by September 2018.
 - Metro Technical Support
 - Metro and its Consultants have been providing technical support to the Contractor and its suppliers through working sessions.
 - Metro now 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.



Metro

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	\$25,804,223	\$0	\$178,395,869
PROFESSIONAL SERVICES	\$20,938,375	\$20,938,375	\$4,369,125	\$0	\$20,938,375
MTA ADMINISTRATION	\$11,960,055	\$11,960,055	\$2,011,592	\$0	\$11,960,055
VEHICLE SUBTOTAL	\$211,294,299	\$211,294,299	\$32,184,940	\$0	\$211,294,299
CONTINGENCY	\$21,926,767	\$21,926,767	\$0	\$0	\$21,926,767
CONTINGENCY SUBTOTAL	\$21,926,767	\$21,926,767	\$0	\$0	\$21,926,767
TOTAL PROJECT	\$233,221,066	\$233,221,066	\$32,184,940	\$0	\$233,221,066

New Heavy Rail Vehicle Program

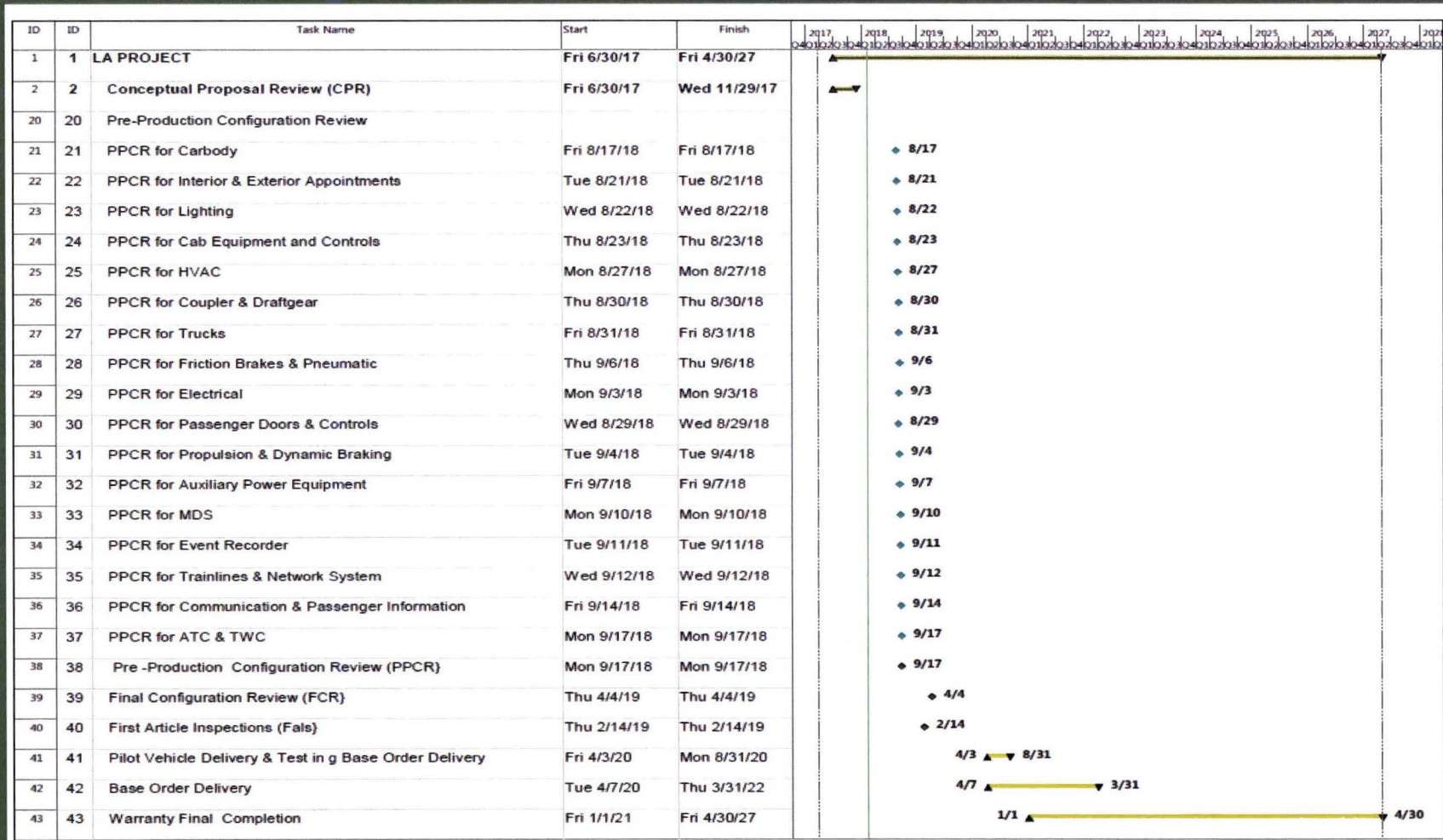
- **PROJECT SCOPE**
 - Base Order of 64 new HRVs:
 - 34 HRVs to support the Purple Line Extension (PLE), Section 1
 - 30 HRVs for A650 Base Buy fleet replacement.
 - The Total Project Budget is \$233 million, excluding five Options.
 - Options:
 - Option 1 (24 HRVs) and Option 2 (84 HRVs) to support 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



New Heavy Rail Vehicle Program

RISK MANAGEMENT

Risk Type	Risk Description	Date	Updated	Cost	Time	Prob	Risk Score	Risk Owner	Mitigation Strategy	Action Items	Cost	Time	Prob	Risk Score After Mitigation
External	U.S. Government tariffs on steel, aluminum and other products could result in a cost change order	06-Apr-18	18-May-18	5	1	5	15	Contractor	Accept	1. LACMTA is in discussions with other affected Agencies, MBTA, SEPTA & CTA. 2. CRRC MA is buying their steel from Japan and the US.	5	1	5	15
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	16	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 continue to meet with CRRC Senior Execs to push for necessary resources	4	3	3	10.5
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	30-Mar-18	3	4	5	17.5	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	2	3	4	10
Engineering/Production	The Contractor may not effectively manage their suppliers during design and production	15-Nov-16	29-Jan-18	4	3	4	14	LACMTA	Mitigate	1. Closely monitor the Contractor and their management of its suppliers. Arrange a bi-weekly meeting between LACMTA support staff and responsible CRRC staff to discuss progress. 2. Encourage intermediate "over-the-shoulder design reviews. 3. Hold periodic Supplier Forums, to communicate current issues and look ahead info. 4. Schedule design review workshops with CRRC and Suppliers	3	3	3	9
Operations	Resources and track availability may be a constraint for LACMTA and delay the Contractor in delivering Vehicles	25-Jan-16	29-Jan-18	3	4	4	14	LACMTA	Mitigate	1. LACMTA will coordinate closely with competing projects to avoid conflicts and resource availability. 2. LACMTA will consider some preliminary testing to be performed in the yard. 3. Contractor to perform static, functional and dynamic testing before delivering Vehicles to ensure that LACMTA yard is a Commissioning Site.	3	3	3	9

New Heavy Rail Vehicle Program

- **ANTICIPATED ACTIVITIES FOR NEXT REPORTING PERIOD**
 - Continue with Pre-Production Configuration Review (PPCR)
 - Perform Quality Assurance audit of the Contractor and its Suppliers
 - Conduct Working Sessions and Design Review meetings with the Contractor and its Supplier.
 - Contractor has signed the lease and eventual purchase agreement for the facility in the City of Industry, CA for the Localization program and is in the process of applying for permits to start construction (installing equipment, interior office spaces, and etc.).
 - Metro has exercised the Alternative Technology for the Fire Mist Suppression System (FMSS).



Metro

FTA Quarterly Review Action Item Report – February 28, 2018

Item No.	Status	Description	Responsible Agency	Responsible Staff	Due Date
1-2/28	Open	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

