

Metro

*Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
3rd Floor Board Room
Los Angeles, CA*



Agenda - Final

Thursday, April 12, 2018

9:00 AM

**One Gateway Plaza, Los Angeles, CA 90012,
3rd Floor, Metro Board Room**

System Safety, Security and Operations Committee

John Fasana, Chair

Robert Garcia, Vice Chair

Paul Krekorian

Mark Ridley-Thomas

Hilda Solis

Carrie Bowen, non-voting member

Phillip A. Washington, Chief Executive Officer

METROPOLITAN TRANSPORTATION AUTHORITY BOARD RULES
(ALSO APPLIES TO BOARD COMMITTEES)

PUBLIC INPUT

A member of the public may address the Board on agenda items, before or during the Board or Committee's consideration of the item for one (1) minute per item, or at the discretion of the Chair. A request to address the Board should be submitted in person at the meeting to the Board Secretary. Individuals requesting to speak on more than three (3) agenda items will be allowed to speak up to a maximum of three (3) minutes per meeting. For individuals requiring translation service, time allowed will be doubled.

Notwithstanding the foregoing, and in accordance with the Brown Act, this agenda does not provide an opportunity for members of the public to address the Board on any Consent Calendar agenda item that has already been considered by a Committee, composed exclusively of members of the Board, at a public meeting wherein all interested members of the public were afforded the opportunity to address the Committee on the item, before or during the Committee's consideration of the item, and which has not been substantially changed since the Committee heard the item.

The public may also address the Board on non-agenda items within the subject matter jurisdiction of the Board during the public comment period, which will be held at the beginning and/or end of each meeting. Each person will be allowed to speak for up to three (3) minutes per meeting and may speak no more than once during the Public Comment period. Speakers will be called according to the order in which the speaker request forms are received. Elected officials, not their staff or deputies, may be called out of order and prior to the Board's consideration of the relevant item.

In accordance with State Law (Brown Act), all matters to be acted on by the MTA Board must be posted at least 72 hours prior to the Board meeting. In case of emergency, or when a subject matter arises subsequent to the posting of the agenda, upon making certain findings, the Board may act on an item that is not on the posted agenda.

CONDUCT IN THE BOARD ROOM - The following rules pertain to conduct at Metropolitan Transportation Authority meetings:

REMOVAL FROM THE BOARD ROOM The Chair shall order removed from the Board Room any person who commits the following acts with respect to any meeting of the MTA Board:

- a. Disorderly behavior toward the Board or any member of the staff thereof, tending to interrupt the due and orderly course of said meeting.
- b. A breach of the peace, boisterous conduct or violent disturbance, tending to interrupt the due and orderly course of said meeting.
- c. Disobedience of any lawful order of the Chair, which shall include an order to be seated or to refrain from addressing the Board; and
- d. Any other unlawful interference with the due and orderly course of said meeting.

INFORMATION RELATING TO AGENDAS AND ACTIONS OF THE BOARD

Agendas for the Regular MTA Board meetings are prepared by the Board Secretary and are available prior to the meeting in the MTA Records Management Department and on the Internet. Every meeting of the MTA Board of Directors is recorded on CD's and as MP3's and can be made available for a nominal charge.

DISCLOSURE OF CONTRIBUTIONS

The State Political Reform Act (Government Code Section 84308) requires that a party to a proceeding before an agency involving a license, permit, or other entitlement for use, including all contracts (other than competitively bid, labor, or personal employment contracts), shall disclose on the record of the proceeding any contributions in an amount of more than \$250 made within the preceding 12 months by the party, or his or her agent, to any officer of the agency, additionally PUC Code Sec. 130051.20 requires that no member accept a contribution of over ten dollars (\$10) in value or amount from a construction company, engineering firm, consultant, legal firm, or any company, vendor, or business entity that has contracted with the authority in the preceding four years. Persons required to make this disclosure shall do so by filling out a "Disclosure of Contribution" form which is available at the LACMTA Board and Committee Meetings. Failure to comply with this requirement may result in the assessment of civil or criminal penalties.

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Español

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日本語

中文

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ภาษาไทย

Tiếng Việt

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General Information/Rules of the Board - (213) 922-4600

Internet Access to Agendas - www.metro.net

TDD line (800) 252-9040

NOTE: ACTION MAY BE TAKEN ON ANY ITEM IDENTIFIED ON THE AGENDA

CALL TO ORDER**ROLL CALL****APPROVE Consent Calendar Item(s): 22 and 23.**

Consent Calendar items are approved with one motion unless held by a Director for discussion and/or separate action.

CONSENT CALENDAR**22.**[2018-0074](#)

AUTHORIZE the Chief Executive Officer to award a two-year, firm fixed price Contract No. MA48271000 to Romaine Electric Corporation, the lowest responsive and responsible bidder for Spark Plugs (Denso). The Contract one-year base amount is \$701,158.68, inclusive of sales tax, and the one-year option amount is \$701,158.68, inclusive of sales tax, for a total contract amount of \$1,402,317.36, subject to resolution of protest(s), if any.

Attachments: [Attachment A - Procurement Summary](#)
[Attachment B - DEOD Summary](#)

23.[2017-0835](#)

AUTHORIZE the Chief Executive Officer to award a firm fixed unit rate Contract No. OP97901000-48045 for rigging services at the Metro Red Line and Purple Line stations to United Riggers & Erectors, Inc. for the five-year period covering May 1, 2018 through May 1, 2023, for an amount not-to-exceed \$2,893,200.

Attachments: [Attachment A - Procurement Summary](#)
[Attachment B - DEOD Summary](#)

NON-CONSENT**24.**[2017-0792](#)

Operations Employee of the Month

Attachments: [Presentation](#)

25. [2017-0793](#)

RECEIVE oral report on Green Line/Crenshaw LAX Tie-In Project completion.

Attachments: [Presentation](#)

26. [2018-0101](#)

RECEIVE AND FILE Monthly Update on Transit Policing Performance.

Attachments: [Attachment A- System-Wide Law Enforcement Overview February 2018](#)
[Attachment B - Supporting Crime Data February 2018](#)
[Attachment C- Key Performance Indicators February 2018](#)

27. [2018-0109](#)

RECEIVE AND FILE report on Metro Rail capacity in response to Board Motion 2017-0922.

Attachments: [Attachment A - Motion 2017-0922](#)
[REVISED Attachment B - Rail Ridership Data in Relation to Service Capacity V2](#)
[REVISED Attachment C - Train by Train Loading](#)
[Presentation](#)

28. [2017-0853](#)

RECEIVE AND FILE report on the proposed Warner Center Service Improvement Plan.

Attachments: [Attachment A - Warner Center Service Improvement Plan](#)

29. [2017-0905](#)

AUTHORIZE the Chief Executive Officer to award a three-year firm fixed unit rate Contract No. OP962800003367 to Nationwide Environmental Services Inc., to provide power sweeping services for Metro transit facilities for a not-to-exceed amount of \$5,314,860 effective June 1, 2018 through May 31, 2021.

Attachments: [Attachment A - Procurement Summary](#)
[Attachment B - DEOD Summary](#)

30.

[2018-0061](#)

AUTHORIZE the Chief Executive Officer to award Contract No. PS46172000 to Gannett Fleming Transit & Rail Systems for on-call engineering support services in support of Rail Maintenance and Engineering, for a total not-to exceed amount of \$31,000,000, inclusive of \$16,000,000 for the initial two-year base, and \$5,000,000 for each of the three, one-year options (effective May 2018 through April 2023); subject to resolution of protest(s), if any.

Attachments: [Attachment A - List of Proposed Project Uses](#)
[Attachment B - Procurement Summary](#)
[Attachment C - DEOD Summary](#)
[Attachment D - Estimated Engineering Support Services](#)

GENERAL PUBLIC COMMENT

Consideration of items not on the posted agenda, including: items to be presented and (if requested) referred to staff; items to be placed on the agenda for action at a future meeting of the Committee or Board; and/or items requiring immediate action because of an emergency situation or where the need to take immediate action came to the attention of the Committee subsequent to the posting of the agenda.

COMMENTS FROM THE PUBLIC ON ITEMS OF PUBLIC INTEREST WITHIN COMMITTEE'S SUBJECT MATTER JURISDICTION

Adjournment



Board Report

File #: 2018-0074, File Type: Contract

Agenda Number: 22.

SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTEE APRIL 12, 2018

SUBJECT: DENSO SPARK PLUGS SUPPLIER

ACTION: AWARD CONTRACT

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a two-year, firm fixed price Contract No. MA48271000 to Romaine Electric Corporation, the lowest responsive and responsible bidder for Spark Plugs (Denso). The Contract one-year base amount is \$701,158.68, inclusive of sales tax, and the one-year option amount is \$701,158.68, inclusive of sales tax, for a total contract amount of \$1,402,317.36, subject to resolution of protest(s), if any.

ISSUE

This procurement is for the acquisition of spark plugs which are required for maintaining the safe and reliable operation of the bus fleet. Award of contract will ensure that Bus Maintenance has adequate inventory to repair and maintain the buses according to Metro maintenance standards.

DISCUSSION

Spark plugs are an electrical ignition device that fits into the cylinder head of a CNG engine and ignites the air-fuel mixture needed for combustion to power the engine. In accordance with manufacturer's recommendations, spark plugs are required to be changed at pre-determined intervals based on mileage. Replacement of the spark plugs is essential for the proper maintenance of Metro's bus fleet and to ensure that buses run as efficiently as designed.

The Contract to be awarded is a "requirements type" agreement in which we commit to order only from the awardee, up to the specified quantity for a specific duration of time, but there is no obligation or commitment for us to order any or all of the spark plugs that may be anticipated. The bid quantities are estimates only, with deliveries to be ordered and released as required.

Spark Plugs will be purchased, maintained in inventory and managed by Material Management. As spark plugs are issued, the appropriate budget project numbers and accounts will be charged.

DETERMINATION OF SAFETY IMPACT

Award of contract will ensure that all operating divisions have adequate inventory to maintain the bus and rail fleets and equipment according to Metro Maintenance standards.

FINANCIAL IMPACT

The funding of \$116,859 for these products is included in the FY18 budget under multiple bus operating cost centers in project 306002 Operations Maintenance under line 50441, Parts - Revenue Vehicle.

Since this is a multi-year contract, the cost center managers and Chief Operations Officer will be accountable for budgeting the cost in future fiscal years including any option exercised.

Impact to Budget

The funds for this action will come from various sources including Fares, Advertising, Operating eligible sales tax; such as PA, PC, MR/MM, TDA, and Federal. That are eligible for use on Bus Operating projects. Use of these funding sources will maximize allowable funding allocations give approved provisions.

ALTERNATIVES CONSIDERED

The alternative is to not award the Contract and procure spark plugs on the open market on an as-needed basis. This approach is not recommended since it does not provide a commitment from the supplier to ensure availability and price stability.

NEXT STEPS

Metro's requirements for spark plugs will be fulfilled under the provisions of the Contract.

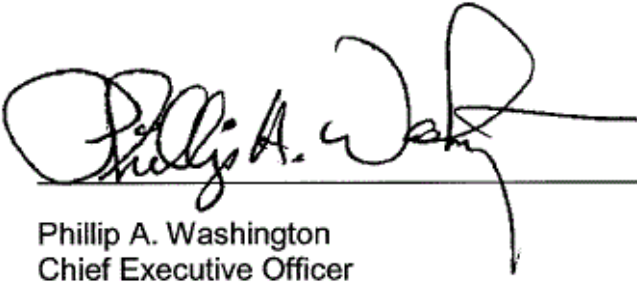
ATTACHMENTS

Attachment A - Procurement Summary

Attachment B - DEOD Summary

Prepared By: Nathan Jones, Director of Contract Administration (213) 922-6101
Amy Romero, Senior Director Central Maintenance (213)922-5709

Reviewed by: Debra Avila, Chief, Vendor/Contract Management (213) 922-6383
James T. Gallagher, Chief Operations Officer (213) 922-4424



Phillip A. Washington
Chief Executive Officer

PROCUREMENT SUMMARY

DENSO SPARK PLUGS SUPPLIER/MA48271000

1.	Contract Number: MA48271000	
2.	Recommended Vendor: Romaine Electric Corporation	
3.	Type of Procurement (check one): <input checked="" type="checkbox"/> IFB <input type="checkbox"/> RFP <input type="checkbox"/> RFP-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	Procurement Dates:	
	A. Issued: 1/12/18	
	B. Advertised/Publicized: 1/12/18	
	C. Pre-proposal/Pre-Bid Conference: N/A	
	D. Proposals/Bids Due: 2/15/18	
	E. Pre-Qualification Completed: 2/27/18	
	F. Conflict of Interest Form Submitted to Ethics: 2/27/18	
	G. Protest Period End Date: : 4/26/18	
5.	Solicitations Picked up/Downloaded: 16	Bids/Proposals Received: 3
6.	Contract Administrator: Tanya Allen	Telephone Number: 213/922-1018
7.	Project Manager: Alex DiNuzzo	Telephone Number: 213/922-5860

A. Procurement Background

This Board Action is to approve Contract No. MA48271000 for the acquisition of Spark Plugs (Denso). Denso is an aftermarket (non-OEM) spark plug. Board approval of contract awards are subject to resolution of any properly submitted protest.

IFB No. MA48271 was issued in accordance with Metro’s Acquisition Policy and the contract type is firm fixed price.

One amendment was issued during the solicitation phase of this IFB:

- Amendment No. 1, issued on January 15, 2018, clarified potential bidder’s questions.

A total of three bids were received on February 15, 2018.

B. Evaluation of Bids

This procurement was conducted in accordance, and complies with LACMTA’s Acquisition Policy for a competitive sealed bid. The three bids are listed below in alphabetical order:

1. B & C Truck Electric Service, Inc.
2. Gillig LLC
3. Romaine Electric Corporation

C. Price Analysis

The recommended bid price from Romaine Electric Corporation has been determined to be fair and reasonable based upon adequate price competition and selection of the lowest price responsive and responsible bidder.

Line Item No.	Low Bidder Name	Bid Amount	Metro ICE
1	Romaine Electric Corporation	\$1,402,317.36	\$1,230,389
2.	B&C Truck Electric Service Inc.	\$1,444,269.96	
3.	Gillig LLC	\$1,547,432.10	

D. Background on Recommended Contractor

The recommended firm, Romaine Electric Corporation, has been in business for 97 years, and is a leader in Electrical and manufacturer parts, components, alternators, starters, regulators, spark plugs and other related parts. Romaine Electric Corporation has provided spark plugs for the Defense Logistics Agency, Sun Tran, Omni Transportation Authority, King County WA, Tri-Met, Community Transit, and Pierce Transit. In the past, Romaine Electric Corporation has provided satisfactory products and services to Metro.

DEOD SUMMARY

DENSO SPARK PLUG SUPPLIER/MA48271000

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) did not establish a Disadvantaged Business Enterprise (DBE) goal for this procurement. DEOD determined that there was a lack of availability of DBE certified firms to supply the required aftermarket spark plugs, which are shipped directly to Metro.

B. Living/Prevailing Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention Policy (LW/SCWRP) is not applicable to this Contract.

C. Prevailing Wage Applicability

Prevailing wages are not applicable to this Contract.

D. Project Labor Agreement/Construction Careers Policy

Project Labor Agreement/Construction Careers Policy is not applicable to this Contract.

**Board Report**

File #: 2017-0835, **File Type:** Contract**Agenda Number:** 23.

**SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTEE
APRIL 12, 2018****SUBJECT: RIGGING SERVICES FOR METRO RED LINE AND
PURPLE LINE STATIONS****ACTION: AWARD CONTRACT****RECOMMENDATION**

AUTHORIZE the Chief Executive Officer to award a firm fixed unit rate Contract No. OP97901000-48045 for rigging services at the Metro Red Line and Purple Line stations to United Riggers & Erectors, Inc. for the five-year period covering May 1, 2018 through May 1, 2023, for an amount not-to-exceed \$2,893,200.

ISSUE

Large power transformers, emergency ventilation fan motors, uninterruptible power supply (UPS) and battery banks eventually fail due to aging and fatigue caused by mechanical and electrical stresses. These equipment/components must be replaced if a failure occurs or if preventive maintenance determines that they will fail. The physical attributes, including weight and size, of this equipment and the design of the station/location where they are installed or utilized requires the use of professional rigging services so they can be replaced in the event of equipment failure.

DISCUSSION

The current contract for rigging services for Metro's Red and Purple Line stations is set to expire in April 2018. The Metro Red and Purple heavy rail lines serve a total of 16 passenger stations and two underground power facilities. These Metro facilities are powered by large power transformers weighing up to 44,000 pounds each. Ventilation for the tunnels connecting passenger stations is provided by large emergency ventilation fans weighing up to 2,000 pounds. Each passenger station also requires ventilation and this is accomplished by utilizing large air handling units.

Emergency backup power for passenger stations is provided by large industrial UPS in accordance with Metro's Fire and Life Safety Program and Supervisory Control and Data Acquisition (SCADA) system. These UPS utilizes large banks of industrial type batteries that weigh up to 40,000 pounds.

Power transformers, large motor fans, and battery banks eventually fail due to age and fatigue caused by mechanical and electrical stresses. Therefore, equipment must be replaced as soon as

failures occur in order to maintain a safe and reliable rail passenger service. Replacement of this heavy equipment requires the use of a professional rigging contractor to safely remove defective equipment, install new equipment and undertake small engineering tasks to address installation issues that may be encountered at each work site.

Rigging is complex and can involve engineering, a crane, rigging and traffic control. Rigging will include a technical analysis of the scope of work for each task at each site. From the technical analysis, a safe method or work plan is developed to move, lift and hoist the equipment. Each work site requires a unique work plan and method. The work plan and method of execution determines the resources required, such as size of crane, a list of tools to be used, and the labor skills and crafts required. Often times, engineering modifications are required to adjust equipment to fit in the designed configuration.

DETERMINATION OF SAFETY IMPACT

Approval of the recommendation will have a positive impact on safety. As power transformers, large motor fans and battery banks approach failure due to aging and fatigue, this equipment shall be replaced to provide reliable and uninterrupted rail service to patrons, employees and the public. This Contract will ensure compliance with Rail System Fire and Life Safety guidelines of Metro and the California Public Utilities Commission (CPUC).

FINANCIAL IMPACT

The total five year contract amount is \$2,893,200. Funding of \$100,000 for the current fiscal year is included in the FY18 budget in cost center 3960, Traction Power under project 205106, MRL UPS/Battery Replacement. Since this is a multi-year contract, Senior Executive Officer, Rail Maintenance and Engineering and cost center manager will be budgeting the cost in future years.

Impact to Budget

The source of funds for this action will come from Proposition C40 and other funding sources that are eligible for Rail Capital Projects. Use of these funding sources will maximize allowable funding allocations given approved funding provisions.

ALTERNATIVES CONSIDERED

The Board may decline to approve the contract award. This alternative is not recommended because Metro does not have internal staff resources to provide rigging services. Furthermore, since these equipment support critical passenger station functions, their dysfunctions may limit Metro's ability to execute emergency procedures should an incident occurs. The failure of the equipment can impact the quality of rail service and expose Metro, its patrons, employees and the public to a greater safety risk.

NEXT STEPS

Upon Board approval, staff will execute Contract No. OP97901000-48045, with United Riggers & Erectors, Inc., to provide rigging services.

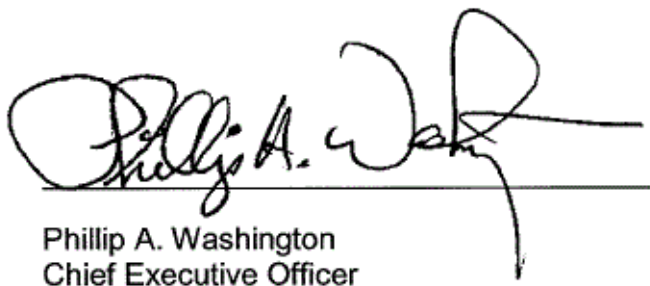
ATTACHMENTS

Attachment A - Procurement Summary

Attachment B - DEOD Summary

Prepared by: Winston Dixon, Manager, Wayside Systems (213) 922-3323
Remi Omotayo, DEO, Wayside Systems Engineering & Maintenance (213) 922-3243
Errol Taylor, Sr. EO, Rail Maintenance & Engineering (213) 922-3227

Reviewed by: Debra Avila, Chief Vendor/Contract Management Officer (213) 418-3051
James T. Gallagher, Chief Operations Officer (213) 418-3108



Phillip A. Washington
Chief Executive Officer

PROCUREMENT SUMMARY

RIGGING SERVICES FOR METRO RED LINE AND PURPLE LINE STATIONS/
OP97901000-48045

1.	Contract Number: OP97901000-48045	
2.	Recommended Vendor: United Riggers & Erectors, Inc.	
3.	Type of Procurement (check one): <input type="checkbox"/> IFB <input checked="" type="checkbox"/> RFP <input type="checkbox"/> RFP-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	Procurement Dates:	
	A. Issued: November 21, 2017	
	B. Advertised/Publicized: November 21, 2017	
	C. Pre-Proposal Conference: November 30, 2017	
	D. Proposals Due: January 8, 2018	
	E. Pre-Qualification Completed: January 23, 2018	
	F. Conflict of Interest Form Submitted to Ethics: January 18, 2018	
	G. Protest Period End Date: April 16, 2018	
5.	Solicitations Picked up/Downloaded: 7	Bids/Proposals Received: 1
6.	Contract Administrator: Aielyn Dumaua	Telephone Number: (213) 922-7320
7.	Project Manager: Winston Dixon	Telephone Number: (213) 922-3323

A. Procurement Background

This Board Action is to approve the award of Contract No. OP97901000-48045 to United Riggers & Erectors, Inc. to provide rigging services for Metro Red Line and Purple Line Stations.

Request for Proposal (RFP) No. OP48045 was issued as a competitive negotiated procurement in accordance with Metro's Acquisition Policy and the contract type is a firm fixed unit rate. The RFP was open only to Metro Certified Small Business firms.

One amendment was issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on December 14, 2017, extended the proposal due date and revised the Statement of Work to include small engineering services, such as design and install permanent lifting I-Beams.

RFP No. OP48045 was released on November 21, 2017, as a competitive procurement open only to Metro certified small businesses. The solicitation was available for download from Metro's website. Advertisements were placed in four leading publications within Los Angeles County (Los Angeles Daily News, Watts Times, La Opinion and The Korean Times) to notify potential proposers of this solicitation. Metro notified potential proposers from Metro's vendor database based on applicable North American Industry Classification System (NAICS) codes. Furthermore, two weeks prior to the RFP issue date, Metro reached out and

encouraged other potential prime contractors to apply for Metro SBE certification and participate in this solicitation.

A pre-proposal conference and site visit were held on November 30, 2017 and was attended by one participant.

Seven firms downloaded the RFP and were included on Metro's planholders' list. No questions were received regarding the solicitation. One proposal was received on January 8, 2018.

Since only one proposal was received, Metro staff canvassed 18 potential proposers, including Metro certified SBE firms, other rigging firms, and firms on the planholders list who did not propose, to determine why no other proposals were received. The following is a summary of the market survey:

1. Potential proposer is a Metro certified SBE firm but does not have the technical capabilities to pursue this project as a prime contractor.
2. Potential proposer is a Metro certified SBE firm but was not interested in submitting a proposal because they currently have a lot of work.
3. Potential proposer is a Metro certified SBE but does not provide rigging services.
4. Potential proposer is a Metro certified SBE firm engaged in the sale, rental and/or repair of construction/heavy equipment only.
5. Potential proposer is not a Metro certified SBE firm and does not have the technical capabilities to pursue this project as a prime contractor.
6. Potential proposer can be certified by Metro as an SBE firm but chose to focus on other opportunities outside of Metro.

B. Evaluation of Proposals

A Proposal Evaluation Team (PET) consisting of staff from Rail Maintenance-of-Way (MOW), Traction Power Systems, Rail MOW Engineering, and Logistics was convened and conducted a comprehensive technical evaluation of the proposal received.

The proposal was evaluated based on the following evaluation criteria and weights:

- | | |
|---|------------|
| • Qualification and Experience of the Prime Contractor/Team | 30 percent |
| • Qualifications and Experience of Key Personnel | 20 percent |
| • Management Plan/Approach | 30 percent |
| • Price Proposal | 20 percent |

The evaluation criteria are appropriate and consistent with criteria developed for similar rigging services. Several factors were considered when developing these weights, giving the greatest importance to the qualifications and experience of the prime contractor/team and management plan/approach.

United Riggers & Erectors, Inc. (URE), the incumbent, was the only proposer that responded to this solicitation. The PET determined that the technical proposal received from URE addressed the RFP requirements and that its personnel are qualified and experienced with all aspects of the required tasks. Based on a thorough evaluation of the proposal, the PET determined URE to be technically qualified to perform the work.

The following is a summary of the PET scores:

1	Firm	Average Score	Factor Weight	Weighted Average Score	Rank
2	United Riggers & Erectors, Inc.				
3	Qualification and Experience of the Prime Contractor/Team	87.53	30.00%	26.26	
4	Qualifications and Experience of Key Personnel	85.00	20.00%	17.00	
5	Management Plan/Approach	91.11	30.00%	27.33	
6	Price Proposal	100.00	20.00%	20.00	
7	Total		100.00%	90.59	1

C. Cost/Price Analysis

The recommended fully burdened rates for the labor classifications and equipment required have been determined to be fair and reasonable based on price analysis, cost analysis, technical evaluation, fact-finding and negotiations.

Work for this Contract will be authorized through the issuance of separate task orders. Each future task order will contain a specific Statement of Work, which the Contractor will provide a cost proposal according to the requirements. A cost/price analysis will be performed, as appropriate, on task orders issued.

D. Background on Recommended Contractor

The recommended firm, United Riggers & Erectors, Inc. (URE), located in Walnut, CA, has been in business for 52 years. It initially focused on rigging and transport of heavy machinery. Soon after, URE expanded into general construction services which included structural concrete, structural steel erection, piping and machinery maintenance. The proposed project manager has over 40 years of experience in the construction industry and had been an active member of the Ironworkers Local #433, Los Angeles, for 29 years. He is the project manager of the current contract. URE has been providing rigging services to Metro for over 10 years and performance has been satisfactory. URE is a Metro certified small business firm.

DEOD SUMMARY

**RIGGING SERVICES FOR METRO RED LINE AND PURPLE LINE STATIONS/
OP97901000-48045**

A. Small Business Participation

Pursuant to Metro's Board-approved policy, competitive acquisitions with three or more Small Business Enterprise (SBE) certified firms within the specified North American Industry Classification System (NAICS) as identified for the project scope shall constitute a Small Business Set-Aside procurement. Accordingly, the Contract Administrator advanced the solicitation, including posting the solicitation on Metro's website, advertising, and notifying certified small businesses as identified by NAICS code(s) that this solicitation was open to **SBE Certified Small Businesses Only**.

United Riggers & Erectors, Inc. is an SBE Prime that is performing 100% of the work with its own workforce.

SMALL BUSINESS SET-ASIDE

SBE Prime Contractor	SBE % Committed
United Riggers & Erectors, Inc (Prime)	100%
Total	100%

B. Living Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention Policy (LW/SCWRP) is not applicable to this Contract.

C. Prevailing Wage Applicability

Prevailing Wage requirements are applicable to this project. DEOD will monitor contractors' compliance with the State of California Department of Industrial Relations (DIR), California Labor Code, and, if federally funded, the U S Department of Labor (DOL) Davis Bacon and Related Acts (DBRA).

D. Project Labor Agreement/Construction Careers Policy

Project Labor Agreement/Construction Careers Policy is not applicable to this Contract.



Metro

Los Angeles County
Metropolitan Transportation
Authority
One Gateway Plaza
3rd Floor Board Room
Los Angeles, CA

Board Report

File #: 2017-0792, **File Type:** Oral Report / Presentation

Agenda Number:

**SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTEE
APRIL 12, 2018**

SUBJECT: OPERATIONS EMPLOYEE OF THE MONTH

RECOMMENDATION

Operations Employee of the Month

DISCUSSION

Operations Employee of the Month recognizes Transportation and Maintenance frontline employees for their outstanding leadership contributions to the Operations Department.

April Employees of the Month



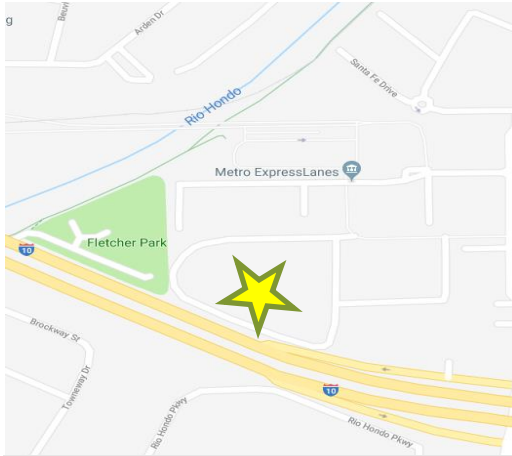
Employees of the Month



Transportation

Bus Operator

Drew L. Fowlkes



Division 9 – El Monte

Maintenance

Mechanic A Leader

Eskender Abraham

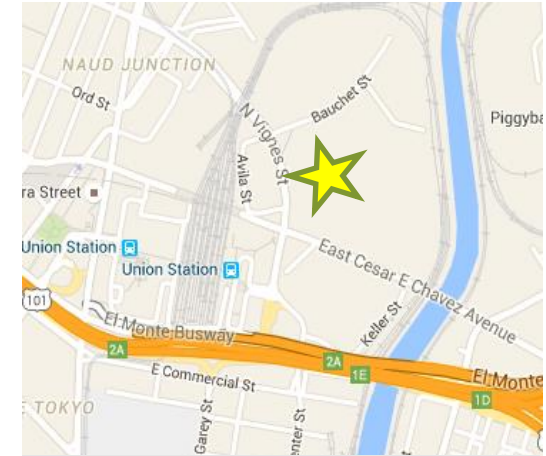


Division 4 – Downey

Logistics

Storekeeper

Branden Atkins



Central Maintenance
Facility – LA



Board Report

File #: 2017-0793, **File Type:** Oral Report / Presentation

Agenda Number: 25.

**SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTEE
APRIL 12, 2018**

**SUBJECT: ORAL REPORT ON SYSTEM SAFETY, SECURITY
AND OPERATIONS**

ACTION: RECEIVE ORAL REPORT

RECOMMENDATION

RECEIVE oral report on Green Line/Crenshaw LAX Tie-In Project completion.

DISCUSSION

Background

The closure took place during Friday, January 26, 2018 through Saturday, April 7, 2018. Operations will discuss service plan lessons learned, customer feedback, and plans to resume normal operations.

Metro Green Line & Crenshaw/LAX Line Tie-In Project Completion Update

Project Update

Overview

- **Construction work to connect and integrate the Green Line and the Crenshaw/LAX Line was completed nearly one week ahead of schedule.**
- **As a result, the five Green Line stations listed that were closed since January 26, 2018 reopened on Sunday, April 1, 2018:**
 - **Aviation/LAX**
 - **Mariposa**
 - **El Segundo**
 - **Douglas**
 - **Redondo Beach**



Service

- During the 65-day closure, trains between Norwalk and Hawthorne/Lennox ran regular service
- Free bus shuttle service replaced rail service affected five (5) stations
 - Bus shuttle headsign and bus stop information was clear, visible & augmented by announcements
 - Staff was onsite to support customers
- LAX G-Shuttle, Santa Monica BBB Route 3/R3, and Metro Line 625 were temporarily relocated from Aviation/LAX Station to Hawthorne/Lennox Station
- Metro Contracted Bus Services extended Line 625 on Imperial Hwy to meet Green Line trains at Hawthorne/Lennox Station
- Metro's Parking Management Program for the Green Line Stations (Norwalk, Lakewood, Aviation and Crenshaw) was put on hold until June 2018



Green Line Shuttles carried approximately 85% of normal ridership at the 5 closed stations.

Work Accomplished - Construction

- **New Crenshaw/LAX infrastructure was successfully installed by contractor Walsh-Shea Corridor Constructors to connect and integrate with the Green Line west of Aviation Station**
- **Tie-in activities included:**
 - **Civil – Demolition and reconstruction of the track plinths to accommodate track configuration**
 - **Overhead Catenary System – Poles and wires for power**
 - **Signal – Modifications to the Green Line track circuits**



Work Accomplished - Metro

Maintenance of Way

- Replaced OCS at multiple locations
- Replaced Cameras and GTELS from Redondo Beach to Aviation Station
- Completed Rail Grinding
- Transposed Rail and replaced Ties
- Replaced switch machines at Redondo Beach and the Yard Entrance



Facilities Maintenance

- Improved corroded ROW Infrastructure from Redondo Beach to Aviation Station
- Replaced Station and ROW Signage
- Replaced Platform Gap Fillers
- Improved Norwalk Tail Track to Allow Maintenance of Rail Vehicles at this Location



Vehicles

- Software Compatibility and Testing of Two Car Types
- Train Control Software Modifications Allowing Trains to Run on the Tie-In Segment

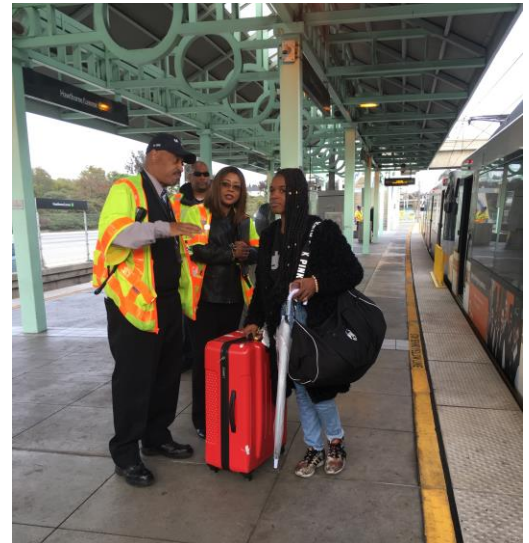
Rail Fleet Service

- Regular servicing, maintenance, and overnight storage of Green Line cars were temporarily located at Norwalk Station

Operations used the Green Line closure by completing track, signal and other maintenance work along the closed right-of-way and stations to avoid further disruptions and ensure a more reliable commute.

Project Highlights

- ✓ **Implementation of a comprehensive public outreach and communications plan to ensure customers were informed during all project stages**
- ✓ **Ridership was maintained throughout the 5 closed Green Line stations due to internal and external planning and partnership efforts**
- ✓ **Completion of Operations related activities**
- ✓ **Completion of Crenshaw/LAX Project construction ahead of schedule**
- ✓ **Preparation for final cut-over targeted for Fall 2018**





Board Report

File #: 2018-0101, **File Type:** Informational Report

Agenda Number: 26.

SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTEE APRIL 12, 2018

**SUBJECT: MONTHLY UPDATE ON TRANSIT POLICING
PERFORMANCE**

ACTION: RECEIVE AND FILE

RECOMMENDATION

RECEIVE AND FILE Monthly Update on Transit Policing Performance.

ISSUE

This report reflects February 2018 performance data as reported under the transit policing deployment strategy which is a combination of in-house fare compliance officers, private security for fixed assets and a multi-agency law enforcement deployment strategy by the Los Angeles Police Department (LAPD), Los Angeles County Sheriff's Department (LASD), and Long Beach Police Department (LBPD). The information in this report summarizes system-wide Part 1 and Part 2 crime data, average emergency response times, assaults on bus operators, and Metro's fare compliance and homeless outreach efforts. The Six Key Performance Indicators (KPI) are System Wide Part 1 and Part 2 Crimes, Average Emergency Response Times, Percentage of Time Spent on the System, Ratio of Staffing Levels vs Vacant Assignments, Ratio of Proactive vs Dispatched Activity, and Number of Grade Crossing Operations.

DISCUSSION

Crime stats are as follows:

February

Part 1 crime activity decreased by 24.3% system-wide compared to the same period last year. The total Part 1 crimes equated to 2.8 crimes per 1 million boardings.

Part 2 crime activity increased by 12.4% system-wide compared to the same period last year.

February Summary by Mode

Part 1 crime on the rail system increased by 9% compared to the same period last year. Part 1 crime

on the bus system decreased by 26% (there were 9 less crimes committed than the same period last year). The decrease in bus crime can be attributed to the proactive police work in reducing patron assaults.

Bus Operator Assaults:

There were four (4) bus operator assaults reported in February, resulting in 73.3% decrease from last year.

Average Emergency Response Times:

Emergency response times averaged 5.24 minutes for the month of February.

Annual On-Board Customer Satisfaction Survey

The agency strives to improve customer satisfaction; as a result an annual On-Board Customer Satisfaction Survey is conducted. The results of the 2017 survey revealed:

- 90% of passengers feel safe while riding the bus.
- 79% of passengers feel safe while riding the rail.

Physical Security Improvements:

The Systems Security and Law Enforcement Department continues to make the protection of our patrons and employees the number one priority. During the month of February, Metro facility physical security assessment team completed the evaluation of 18 divisions. The evaluation assessment was complemented by the interview of division leaders, key staff, and Metro executives, ranging from Information Technology to Rail Operations and Security. The goal of identifying lapses in physical security and develop the foundation to request funding to improve our security posture across the agency is well on its way. Necessary arrangements are also being explored for future physical security assessments of Union Station and all the parking lots that Metro acquired from Cal Trans.

All needed preparations with TSA have been completed in order to conduct a secondary test of the explosive detection device during the first week of March. Secondary screening will be provided by LAPD's K9 team in the event the device registers an anomaly.

The annual Systems Security Plan was submitted to the California Public Utilities Commission before the due date of February 15th and is still under review. Lastly, The Green Line Tie In project continued throughout the month of February and all available security was incorporated in the protection of pre-identified key sites.

Significant Activities:

Los Angeles Police Department

- **2/3/18-** Officers at Green Line Avalon Station were alerted of a robbery. Officers arrested one

of the four subjects.

- **2/18/18-** Law enforcement officers noticed subject walking towards Gold Line Indiana Station trying to conceal a weapon. Officers detained subject and discovered an unloaded rifle. Subject was arrested and booked.
- **2/27/18-** Subject sexually battered patron at Red Line 7th St/Metro Station. Subject was taken into custody without incident.

Los Angeles County Sheriff's Department

- **2/2/18-** Subject was arrested for attempted kidnapping at Artesia Blue Line Station.
- **2/18/18-** Law enforcement officers noticed subject walking towards Gold Line Indiana Station trying to conceal a weapon. Officers detained subject and discovered an unloaded rifle. Subject was arrested and booked.
- **2/25/18-** Law enforcement officers observed subject walk onto the Blue Line Willowbrook/Rosa Parks Station platform without using TAP card. Upon a search, a loaded gun was recovered. Subject was arrested without further incident.

Long Beach Police Department

- **2/12/18-** Subject assaulted transit security officer at Blue Line Wardlow Station. Subject was arrested without further incident.
- **2/20/18-** Subject battered transit security officer at Blue Line Downtown Long Beach Station. Law enforcement officers were able to apprehend subject.
- **2/27/18-** Officers responded to a domestic violence call at Blue Line Pacific Coast Highway Station. The subject fled prior to the officer's arrival. Officers contacted parole agent and jointly worked to take the subject into custody.

Community and Problem Oriented Policing Activities:

Transit Law Enforcement attended Metro's Meet & Greet at Gold Line Mariachi Plaza Station. There were representatives from all three law enforcement agencies and they were able to interact with community members and discuss public transportation safety tips.

Metro's Ongoing Homelessness Outreach Efforts:

In spring 2016, Metro created the Metro Homeless Task Force to address the displaced persons that have turned to Metro system and property for alternative shelter. Out of the Task Force, Metro created the Metro Transit Homeless Action Plan which was presented to the Metro Board of Directors in February 2017. The Action Plan's goals are to enhance the customer experience, maintain a safe and secure system, and provide coordinated outreach. Components of the plan include Metro's coordination with County and City Measure H and Measure HHH. The plan also called for the hiring

of two C3 teams (County, City, Community) through the County Department of Health Services as indicated by Metro’s Board of Directors. The C3 teams are to provide coordinated and responsive outreach to the homeless and to ultimately get them in housing resources. Metro intends on extending the contract for these C3 teams for an additional year.

Metro’s C3 Homeless Outreach Teams:

Metro’s C3 Homeless Outreach teams’ twelve-month pilot program began on May 22, 2017, with initial homeless outreach on the Red Line. Since the teams’ commencement they have provided the following: 2,284 total unduplicated contacts, 464 of whom have been placed into permanent housing solutions.

C3 Homeless Outreach February 5, 2018 through March 5, 2018:

Performance Measure	Monthly Number Served	Fiscal YTD Number Served
Unduplicated individuals initiated contact (pre-engagement phase)	136	2,420
Unduplicated individuals engaged (engagement phase)	55	1,594
Unduplicated individuals who are provided services or who successfully attained referrals	28	849
Unduplicated individuals engaged who successfully attained an interim housing resource (this includes crisis and/or bridge housing)	30	238
Unduplicated individuals engaged who are successfully linked to a permanent housing program	15	252
Unduplicated individuals engaged who are permanently housed	3	22

C3 Coordination with Law Enforcement

With Metro System Security and Law Enforcement personnel as the lead, Metro’s C3 teams coordinate with LAPD’s Homeless Outreach and Protective Engagement (HOPE) Teams, LASD’s Mental Evaluation Teams (MET), Long Beach PD, and Metro’s Transit Security Officers, in an effort to engage the homeless and provide placement into services. These law enforcement entities provide gap service to the Red Line when the C3 Teams are off duty and provide outreach support for the rest of the system that is not part of pilot program. Being that LAPD’s patrol includes the Red Line; connections are made between C3 teams and LAPD during the course of the C3 pilot program. Of those C3 contacts connected with interim housing during the month of January, one connection was due to the ongoing partnership between LAPD and C3 teams. LASD’s MET teams consist of Deputies paired with clinicians and the Department of Health, LAPD’s HOPE teams consist of Officers who partner with LAHSA, the LA City Attorney’s Office, and the LA City Department of Sanitation for homeless outreach response.

At the Board’s request, Metro has amended the police reporting structure as to allow for more comparable data.

Los Angeles Police Department HOPE Teams

LAPD Transit Bureau homeless outreach totals the HOPE team contacts plus the patrol / Transit Services Division (TSD). Therefore, LAPD's February 2018 homeless outreach is the following:

ACTION	HOPE	TSD	TOTAL
Contacts	129	92	221
Referrals	65	12	77
5150 Hold	2	8	10
Mental Illness	24	9	33
Substance Abuse	16	1	17
Veterans	6	0	6
Shelter	5	0	5
Motel With Housing Plan	0	0	0
VA Housing	1	0	1
Return To Family	0	0	0
Transitional Long-Term Housing	0	0	0
Detox	1	0	1
Rehab	0	0	0

Sheriff Mental Evaluation Team (MET) Contacts and Efforts

ACTION	TOTAL
Contacts	335
Referrals	51
5150 Hold	8
Mental Illness	112
Substance Abuse	104
Veterans	6
Shelter	23
Motel With Housing Plan	1
VA Housing	0
Return To Family	2
Transitional Long-Term Housing	1
Detox	0
Rehab	0

Long Beach Police Department

Additional officers were assigned on several occasions to deal with ridership complaints of homeless issues on the early morning and late night trains. Subjects were provided homeless resource forms and were offered Multi-Service Center services.

- Saturday, February 10: A transient subject was found sleeping in the Willow Street Station parking structure elevator. He was cited for 640(d)(1) PC - Blocking Free Movement and was provided a homeless resource form.
- Saturday, February 10: A transient subject was observed sleeping while camped out in the Willow Street Station parking structure. He was issued a citation for 369(i)PC - Trespass on Transit Property and was issued a homeless resource guide.
- Saturday, February 24: Metro Transportation Section officers conducted a homeless outreach effort at a homeless encampment west of the property of Division 11 Blue Line Maintenance Yard. All contacts were provided homeless resource forms.

Metro's Encampment Protocol:

LAPD's HOPE and Sheriff's MET teams continue to provide enforcement and outreach on City properties abutting Metro, while Metro in the process of creating their own encampment protocol to meet the continuing changing laws and policy. In the interim, information of encampment locations has been shared with LAHSA to engage in preliminary outreach.

Additional Resources and Partnership:

Metro's Transit Homeless Action Plan integrates itself into the work provided under Measures H and HHH. Parts of Measure H's E-6 strategies include 40 additional outreach workers to conduct outreach on Metro properties. These outreach workers will be shared with beaches, harbors, parks and libraries. It has been communicated by the County that the outreach workers will not go pass the stations' fare gates, however, they are willing to entertain a potential pilot program where at one station, one line, outreach workers can go pass the stations' fare gates. The pilot location has been established as 7th/ Metro station off the Blue, Expo, Red and Purple Lines with outreach that will start the week of March 26, 2018. Additional outreach locations will include the Gold Line, Purple Line, and additional transit terminus locations inclusive of bus to have the broadest homeless outreach.

The County continues to work on their full breath launch of the 2-1-1 hotline/web portal to provide homeless resources. For the winter months, Metro has provided all law enforcement and Metro staff a winter shelter resource list for 24/7 operations. Once this reporting tool is launched Metro will be able to provide real-time organized homeless reporting to the County.

Metro also continues to further integrate working with the faith based community and with the LA County Department of Mental Health to best serve the homeless community.

ATTACHMENTS

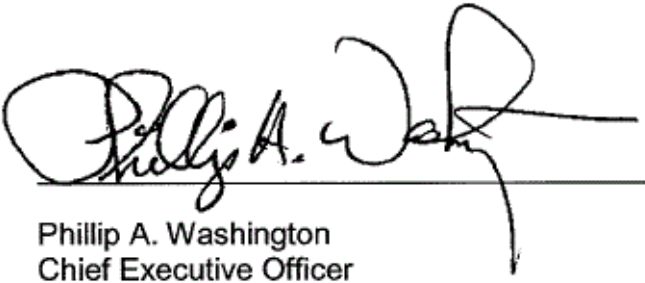
Attachment A - System-Wide Law Enforcement Overview February 2018

Attachment B - Supporting Crime Data February 2018

Attachment C - Key Performance Indicators February 2018

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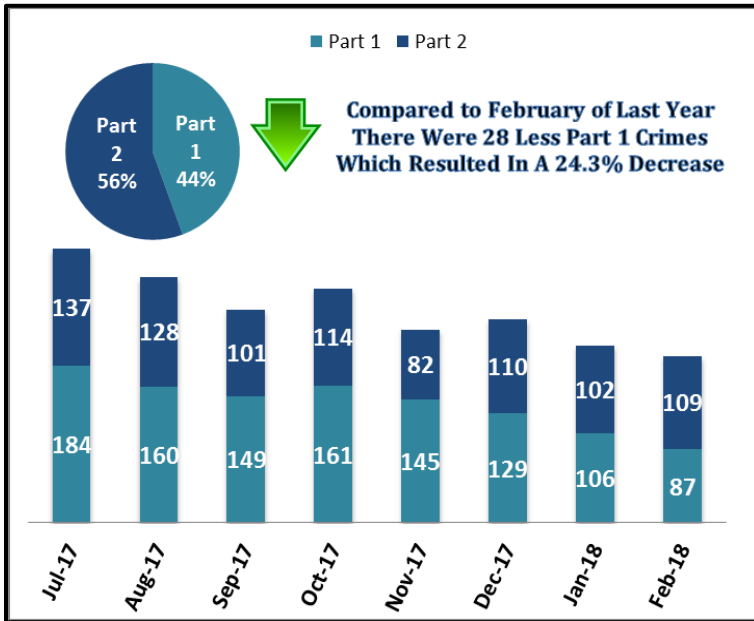
Phillip A. Washington
Chief Executive Officer

SYSTEM-WIDE LAW ENFORCEMENT OVERVIEW

FEBRUARY 2018

Attachment A

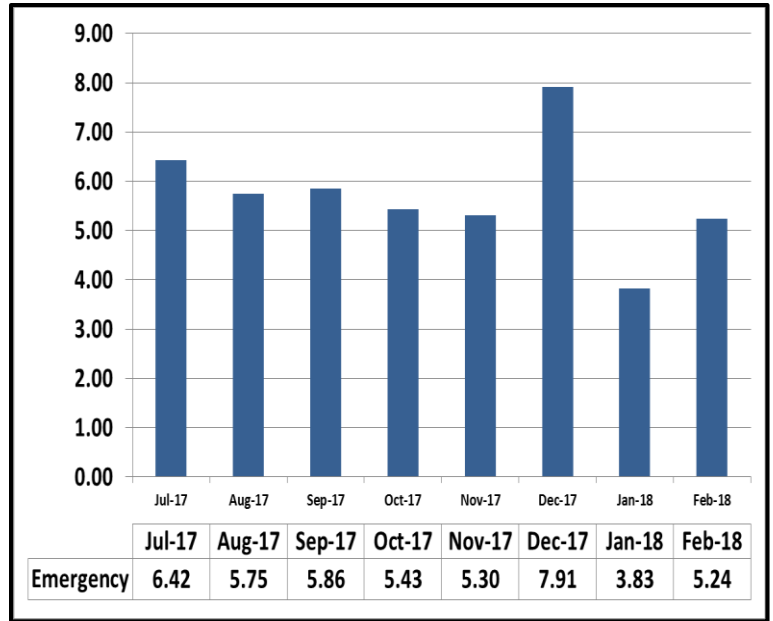
Part 1 & Part 2 Crimes



For the month of February 2018, Part 1 crime activity is down by 24.3% system-wide compared to the same period last year. In a monthly contrast, there were 19 less Part 1 crimes in February than in January, resulting in an 18% decrease.

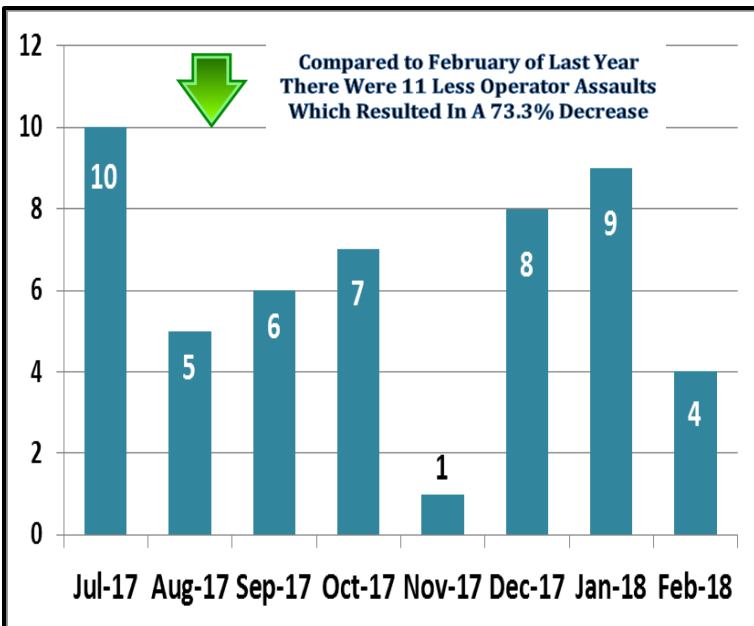
Part 2 crime activity is up 12.4% system-wide compared to the same period last year. In a monthly contrast, there were 6 more Part 2 crimes in February than in January, resulting in a 7% increase.

Average Emergency Response Times



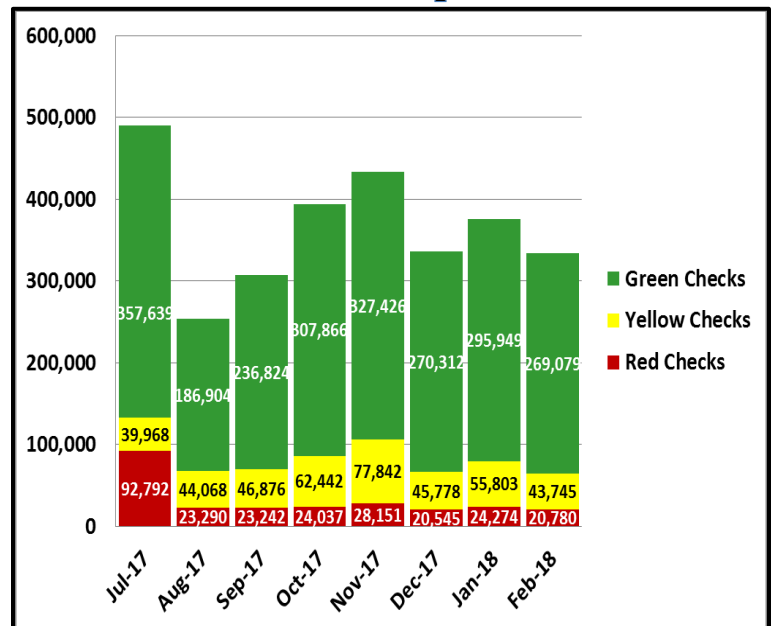
Average emergency response times were 5.24 mins.

Bus Operator Assaults



There were a total of 4 Bus Operator Assaults. Comparing the Bus Operator Assaults from the same period last year, there were 15 Operator Assaults last year resulting in a 73.3% decrease.

Fare Compliance



Green Checks- Occurs when a patron has valid fare

Yellow Checks- Occurs when a patron has valid fare, but did not tap at transfer station

Red Checks- Occurs when a patron has invalid fare

Blue Line - February 2018

ATTACHMENT B

REPORTED CRIME				
PART 1 CRIMES	LAPD	LASD	LBPD	FYTD
Homicide	0	0	0	1
Rape	1	0	0	3
Robbery	1	3	2	44
Agg Assault	1	0	1	32
Agg Assault on Op	0	0	0	0
Burglary	0	0	1	4
Larceny	2	4	0	75
Bike Theft	0	0	0	5
Motor Vehicle Theft	0	0	0	9
Arson	0	0	0	1
SUB-TOTAL	5	7	4	174
Selected Part 2 Crimes				
Battery	3	3	7	72
Battery Rail Operator	0	0	0	0
Sex Offenses	0	0	0	8
Weapons	0	1	3	14
Narcotics	0	4	1	28
Trespassing	0	0	0	6
Vandalism	1	1	1	10
SUB-TOTAL	4	9	12	138
TOTAL	9	16	16	312

PART 1 CRIMES PER STATION		
Station	FEBRUARY	FYTD
7th/Metro	2	9
Pico	1	4
Grand	0	0
San Pedro	0	2
Washington	1	6
Vernon	1	5
Slauson	0	12
Florence	0	12
Firestone	1	17
103rd St	0	3
Willowbrook	4	24
Compton	2	10
Artesia	0	14
Del Amo	0	10
Wardlow	0	7
Willow	3	17
PCH	0	5
Anaheim	0	6
5th St	1	5
1st St	0	0
Downtown Long Beach	0	9
Pacific	0	0
Rail Yard	0	0
Total	16	177

ARRESTS				
TYPE	LAPD	LASD	LBPD	FYTD
Felony	0	4	11	155
Misdemeanor	4	23	141	1,090
TOTAL	4	27	152	1,245

CITATIONS				
TYPE	LAPD	LASD	LBPD	FYTD
Other Citations	1	7	68	948
Vehicle Code Citations	0	42	113	957
TOTAL	1	49	181	1,905

CALLS FOR SERVICE				
TYPE	LAPD	LASD	LBPD	FYTD
Routine	N/A*	46	11	699
Priority	N/A*	65	70	1,361
Emergency	N/A*	9	64	559
TOTAL	0	120	145	2,619

*Currently unable to report stats by Rail Line

DISPATCHED VS. PROACTIVE			
TYPE	LAPD	LASD	LBPD
Dispatched	18%	3%	9%
Proactive	82%	97%	91%
TOTAL	100%	100%	100%

PERCENTAGE OF TIME ON THE RAIL SYSTEM	
LINE	FEBRUARY
Blue Line-LAPD	86%
Blue Line-LASD	87%
Blue Line-LBPD	70%

GRADE CROSSING OPERATIONS				
LOCATION	LAPD	LASD	LBPD	FYTD
Washington St	105			454
Flower St	25			174
103rd St	2			39
Wardlow Rd			2	11
Pacific Ave.				2
Willowbrook		25		27
Florence Station		13		24
Compton Station		7		14
Artesia Station		11		14
Long Beach Blvd			2	11
TOTAL	132	56	4	770

LEGEND
Los Angeles Police Department
Los Angeles County Sheriff's Department
Long Beach Police Department

Blue Line Highlights
 The Blue Line had 14 less Part 1 crimes than the same period last year (30), which is a 46.6% decrease

Green Line - February 2018

REPORTED CRIME			
PART 1 CRIMES	LAPD	LASD	FYTD
Homicide	0	0	0
Rape	0	1	1
Robbery	0	3	36
Agg Assault	0	0	10
Agg Assault on Op	0	0	0
Burglary	0	0	2
Larceny	0	5	29
Bike Theft	0	0	3
Motor Vehicle Theft	0	1	11
Arson	1	0	1
SUB-TOTAL	1	10	93
Selected Part 2 Crimes			
Battery	0	4	20
Battery Rail Operator	0	0	0
Sex Offenses	0	0	3
Weapons	0	0	5
Narcotics	0	0	10
Trespassing	0	1	1
Vandalism	0	1	11
SUB-TOTAL	0	6	50
TOTAL	1	16	143

PART 1 CRIMES PER STATION		
Station	FEBRUARY	FYTD
Redondo Beach	0	3
Douglas	0	2
El Segundo	0	2
Mariposa	0	0
Aviation	0	2
Hawthorne	3	7
Crenshaw	1	10
Vermont	0	6
Harbor	0	8
Avalon	1	9
Willowbrook	3	18
Long Beach	2	9
Lakewood	1	13
Norwalk	0	6
Total	11	95

ARRESTS			
TYPE	LAPD	LASD	FYTD
Felony	0	5	42
Misdemeanor	1	15	127
TOTAL	1	20	169

CITATIONS			
TYPE	LAPD	LASD	FYTD
Other Citations	0	7	79
Vehicle Code Citations	0	32	219
TOTAL	0	39	298

CALLS FOR SERVICE			
TYPE	LAPD	LASD	FYTD
Routine	N/A*	81	831
Priority	N/A*	54	468
Emergency	N/A*	5	85
TOTAL	0	140	1384

*Currently unable to report stats by Rail Line

DISPATCHED VS. PROACTIVE		
TYPE	LAPD	LASD
Dispatched	12%	5%
Proactive	88%	95%
TOTAL	100%	100%

PERCENTAGE OF TIME SPENT ON THE RAIL SYSTEM	
LINE	FEBRUARY
Green Line-LAPD	89%
Green Line-LASD	86%

LEGEND	
Los Angeles County Sheriff's Department	
Los Angeles County Sheriff's Department	

Green Line Highlights

The Green Line had 3 less Part 1 crimes than the same period last year (14), which is a 21.4% decrease

Expo Line - February 2018

REPORTED CRIME			
PART 1 CRIMES	LAPD	LASD	FYTD
Homicide	0	0	0
Rape	0	0	0
Robbery	4	0	35
Agg Assault	0	0	12
Agg Assault on Op	0	0	0
Burglary	0	0	0
Larceny	10	0	89
Bike Thefts	1	0	16
Motor Vehicle Theft	0	0	0
Arson	0	0	0
SUB-TOTAL	15	0	152
Selected Part 2 Crimes			
Battery	5	0	26
Battery Rail Operator	0	0	0
Sex Offenses	1	0	5
Weapons	0	0	0
Narcotics	0	0	0
Trespassing	0	0	0
Vandalism	1	0	2
SUB-TOTAL	7	0	33
TOTAL	22	0	185

PART 1 CRIMES PER STATION		
Station	FEBRUARY	FYTD
7th/Metro	1	9
Pico	0	6
23rd St	2	2
Jefferson/USC	0	3
Expo/USC	0	3
Expo/Vermont	0	13
Expo/Western	1	32
Expo/Crenshaw	2	8
Farmdale	2	14
La Brea	1	9
La Cienega	2	7
Culver City	0	14
Palms	1	3
Expo/Westwood	0	3
Expo/Sepulveda	0	2
Expo/Bundy	3	12
26th St /Bergamot	0	4
17th St/SMC	0	4
D/T Santa Monica	0	5
Expo Rail Yard	0	0
Total	15	153

ARRESTS			
TYPE	LAPD	LASD	FYTD
Felony	1	0	16
Misdemeanor	1	3	18
TOTAL	2	3	34

CITATIONS			
TYPE	LAPD	LASD	FYTD
Other Citations	0	0	141
Vehicle Code Citations	0	0	4
TOTAL	0	0	145

CALLS FOR SERVICE			
TYPE	LAPD	LASD	FYTD
Routine	N/A*	20	229
Priority	N/A*	23	210
Emergency	N/A*	4	21
TOTAL	0	47	460

*Currently unable to report stats by Rail Line

DISPATCHED VS. PROACTIVE		
TYPE	LAPD	LASD
Dispatched	18%	3%
Proactive	82%	97%
TOTAL	100%	100%

PERCENTAGE OF TIME SPENT ON THE RAIL SYSTEM	
LINE	FEBRUARY
Expo Line-LAPD	88%
Expo Line-LASD	85%

GRADE CROSSING OPERATIONS			
LOCATION	LAPD	LASD	FYTD
Exposition Blvd	55		159
Santa Monica		14	16
Culver City		1	2
TOTAL	55	15	177

LEGEND	
Los Angeles Police Department	
Los Angeles County Sheriff's Department	

Expo Line Highlights

The Expo Line had 3 more Part 1 crimes than the same period last year (12), which is a 25% increase

Red Line - February 2018

REPORTED CRIME		
PART 1 CRIMES	LAPD	FYTD
Homicide	0	0
Rape	0	2
Robbery	2	40
Agg Assault	3	19
Agg Assault on Op	0	0
Burglary	0	0
Larceny	12	83
Bike Theft	1	5
Motor Vehicle Theft	0	13
Arson	0	0
SUB-TOTAL	18	162
Selected Part 2 Crimes		
Battery	13	114
Battery Rail Operator	0	0
Sex Offenses	7	27
Weapons	0	0
Narcotics	0	0
Trespassing	0	3
Vandalism	4	14
SUB-TOTAL	24	158
TOTAL	42	320

PART 1 CRIMES PER STATION		
Station	FEBRUARY	FYTD
Union Station	5	15
Civic Center	1	7
Pershing Square	1	9
7th/Metro	0	5
Westlake	6	32
Wilshire/Vermont	0	9
Wilshire/Normandie	0	0
Vermont/Beverly	1	8
Wilshire/Western	0	0
Vermont/Santa Monica	0	6
Vermont/Sunset	0	7
Hollywood/Western	0	4
Hollywood/Vine	2	16
Hollywood/Highland	0	19
Universal	0	7
North Hollywood	2	18
Red Line Rail Yard	0	0
Total	18	162

ARRESTS		
TYPE	LAPD	FYTD
Felony	2	16
Misdemeanor	3	37
TOTAL	5	53

CITATIONS		
TYPE	LAPD	FYTD
Other Citations	23	181
Vehicle Code Citations	0	6
TOTAL	23	187

CALLS FOR SERVICE	
TYPE	LAPD
Routine	N/A*
Priority	N/A*
Emergency	N/A*
TOTAL	

*Currently unable to report stats by Rail Line

DISPATCHED VS. PROACTIVE	
TYPE	LAPD
Dispatched	19%
Proactive	81%
TOTAL	100%

PERCENTAGE OF TIME SPENT ON THE RAIL SYSTEM	
LINE	FEBRUARY
Red Line- LAPD	86%

LEGEND
Los Angeles Police Department

Red Line Highlights

The Red Line had 1 more Part 1 crimes than the same period last year (17), which is a 6% increase

Gold Line - February 2018

REPORTED CRIME			
PART 1 CRIMES	LAPD	LASD	FYTD
Homicide	0	0	0
Rape	0	0	0
Robbery	0	0	7
Agg Assault	0	0	7
Agg Assault on Op	0	0	0
Burglary	0	0	0
Larceny	0	1	30
Bike Theft	0	0	9
Motor Vehicle Theft	0	0	6
Arson	0	0	0
SUB-TOTAL	0	1	59
Selected Part 2 Crimes			
Battery	5	1	29
Battery Rail Operator	0	0	0
Sex Offenses	0	0	1
Weapons	0	0	1
Narcotics	0	0	3
Trespassing	0	0	2
Vandalism	0	0	16
SUB-TOTAL	5	1	52
TOTAL	5	2	111

PART 1 CRIMES PER STATION		
Station	FEBRUARY	FYTD
APU/Citrus College	0	6
Azusa Downtown	0	1
Irwindale	0	2
Duarte	0	1
Monrovia	0	6
Arcadia	0	1
Sierra Madre	0	1
Allen	0	0
Lake	0	1
Memorial Park	0	1
Del Mar	0	3
Fillmore	1	2
South Pasadena	0	2
Highland Park	0	1
SW Museum	0	1
Heritage Square	0	1
Lincoln Heights	0	0
Chinatown	0	2
Union Station	0	4
Little Tokyo	0	1
Pico/Aliso	0	2
Mariachi	0	3
Soto	0	1
Indiana (both LAPD & LASD)	0	8
Maravilla	0	1
East LA	0	0
Atlantic	0	7
Total	1	59

ARRESTS			
TYPE	LAPD	LASD	FYTD
Felony	0	0	13
Misdemeanor	1	2	67
TOTAL	1	2	80

CITATIONS			
TYPE	LAPD	LASD	FYTD
Other Citations	30	1	234
Vehicle Code Citations	49	10	251
TOTAL	79	11	485

CALLS FOR SERVICE			
TYPE	LAPD	LASD	FYTD
Routine	N/A*	56	681
Priority	N/A*	76	618
Emergency	N/A*	3	59
TOTAL	0	135	1,358

*Currently unable to report stats by Rail Line

DISPATCHED VS. PROACTIVE		
TYPE	LAPD	LASD
Dispatched	19%	4%
Proactive	81%	96%
TOTAL	100%	100%

PERCENTAGE OF TIME SPENT ON THE RAIL SYSTEM	
LINE	FEBRUARY
Gold Line-LAPD	86%
Gold Line-LASD	82%

GRADE CROSSING OPERATIONS			
LOCATION	LAPD	LASD	FYTD
Marmion Way	82		505
Arcadia Station		11	17
Sierra Madre		1	3
Irwindale			12
Filmore Station		37	88
Monrovia		18	35
Memorial		11	30
Magnolia Ave			1
Duarte Station		6	21
City Of Azusa		12	26
South Pasadena		23	40
Allen		3	4
City Of East LA		35	70
Figueroa St	65		194
TOTAL GOAL= 10	147	157	1,046

LEGEND
Los Angeles Police Department
Los Angeles County Sheriff's Department

Gold Line Highlights

The Gold Line had 6 less Part 1 crime than the same period last year (7), which is a 86% decrease

Orange Line - February 2018

REPORTED CRIME		
PART 1 CRIMES	LAPD	FYTD
Homicide	0	0
Rape	0	0
Robbery	1	8
Agg Assault	0	3
Agg Assault on Op	0	0
Burglary	0	0
Larceny	1	6
Bike Theft	0	0
Motor Vehicle Theft	0	1
Arson	0	0
SUB-TOTAL	2	18
Selected Part 2 Crimes		
Battery	1	10
Battery Bus Operator	0	0
Sex Offenses	1	3
Weapons	0	0
Narcotics	0	0
Trespassing	0	0
Vandalism	0	3
SUB-TOTAL	2	16
TOTAL	4	34

PART 1 CRIMES PER STATION		
Station	FEBRUARY	FYTD
North Hollywood	0	7
Laurel Canyon	0	0
Valley College	0	0
Woodman	0	0
Van Nuys	0	2
Sepulveda	0	1
Woodley	0	0
Balboa	0	2
Reseda	0	2
Tampa	1	1
Pierce College	0	0
De Soto	0	0
Canoga	1	2
Warner Center	0	1
Sherman Way	0	0
Roscoe	0	0
Nordhoff	0	0
Chatsworth	0	0
Total	2	18

ARRESTS		
TYPE	LAPD	FYTD
Felony	1	4
Misdemeanor	2	11
TOTAL	3	15

CITATIONS		
TYPE	LAPD	FYTD
Other Citations	339	2,349
Vehicle Code Citations	269	1,254
TOTAL	608	3,603

CALLS FOR SERVICE		
TYPE	LAPD	FYTD
Routine	N/A*	N/A*
Priority	N/A*	N/A*
Emergency	N/A*	N/A*
TOTAL	0	0

*Currently unable to report stats by Bus Rapid Transit Line

DISPATCHED VS. PROACTIVE	
TYPE	LAPD
Dispatched	13%
Proactive	87%
TOTAL	100%

PERCENTAGE OF TIME SPENT ON THE BUS SYSTEM	
LINE	FEBRUARY
Orange Line- LAPD	81%

LEGEND
Los Angeles Police Department

Orange Line Highlights

The Orange Line had 1 more Part 1 crimes than the same period last year (1), which is a 100% increase

Silver Line - February 2018

REPORTED CRIME			
PART 1 CRIMES	LAPD	LASD	FYTD
Homicide	0	0	0
Rape	0	0	0
Robbery	0	0	0
Agg Assault	1	0	2
Agg Assault on Op	0	0	0
Burglary	0	0	0
Larceny	0	0	2
Bike Theft	0	0	1
Motor Vehicle Theft	0	0	0
Arson	0	0	0
SUB-TOTAL	1	0	5
Selected Part 2 Crimes			
Battery	0	0	5
Battery Bus Operator	0	0	1
Sex Offenses	0	0	1
Weapons	0	0	0
Narcotics	0	0	0
Trespassing	0	0	0
Vandalism	0	0	0
SUB-TOTAL	0	0	7
TOTAL	1	0	12

PART 1 CRIMES PER STATION		
Station	FEBRUARY	FYTD
El Monte	0	0
Cal State LA	0	0
LAC/USC	0	0
Alameda	0	1
Downtown	0	2
37th St/USC	1	1
Slauson	0	0
Manchester	0	0
Harbor Fwy	0	1
Rosecrans	0	0
Harbor/Gateway	0	0
Carson	0	0
PCH	0	0
San Pedro	0	0
Total	1	5

ARRESTS			
TYPE	LAPD	LASD	FYTD
Felony	0	0	3
Misdemeanor	1	0	14
TOTAL	1	0	17

CITATIONS			
TYPE	LAPD	LASD	FYTD
Other Citations	187	0	2,170
Vehicle Code Citations	212	0	1,626
TOTAL	399	0	3,796

CALLS FOR SERVICE			
TYPE	LAPD	LASD	FYTD
Routine	N/A*	0	11
Priority	N/A*	1	7
Emergency	N/A*	0	2
TOTAL	0	1	20

*Currently unable to report stats by Bus Rapid Transit Line

DISPATCHED VS. PROACTIVE		
TYPE	LAPD	LASD
Dispatched	12%	0%
Proactive	88%	100%
TOTAL	100%	100%

PERCENTAGE OF TIME SPENT ON THE BUS SYSTEM	
LINE	FEBRUARY
Silver Line- LAPD	88%
Silver Line- LASD	65%

LEGEND	
Los Angeles Police Department	
Los Angeles County Sheriff's Department	

Silver Line Highlights

The Silver Line had 8 less Part 1 crime than the same period last year (9), which is a 89% decrease

Bus Patrol - February 2018

REPORTED CRIME			
PART 1 CRIMES	LASD	LAPD	FYTD
Homicide	0	0	0
Rape	0	0	3
Robbery	0	7	125
Agg Assault	0	1	69
Agg Assault on Op	0	0	3
Burglary	0	0	2
Larceny	2	13	220
Bike Theft	0	0	9
Motor Vehicle Theft	0	0	19
Arson	0	0	0
SUB-TOTAL	2	21	450
Selected Part 2 Crimes			
Battery	2	20	227
Battery Bus Operator	2	2	53
Sex Offenses	1	2	47
Weapons	0	0	3
Narcotics	6	0	10
Trespassing	0	0	4
Vandalism	2	2	47
SUB-TOTAL	13	26	391
TOTAL	15	47	841

LASD's Part 1 Crimes per Sector		
Sector	FEBRUARY	FYTD
Westside	0	8
San Fernando	0	2
San Gabriel Valley	1	15
Gateway Cities	1	6
South Bay	0	11
Total	2	42

LAPD's Part 1 Crimes per Sector		
Sector	FEBRUARY	FYTD
Valley Bureau		
Van Nuys	0	10
West Valley	1	9
North Hollywood	0	10
Foothill	0	4
Devonshire	1	4
Mission	0	7
Topanga	0	4
Central Bureau		
Central	2	37
Rampart	0	25
Hollenbeck	0	4
Northeast	0	2
Newton	2	41
West Bureau		
Hollywood	0	10
Wilshire	2	27
West LA	0	7
Pacific	0	9
Olympic	2	40
Southwest Bureau		
Southwest	4	83
Harbor	0	16
77th Street	6	89
Southeast	1	30
Total	21	468
Total Part 1 Crimes	23	510

ARRESTS			
TYPE	LASD	LAPD	FYTD
Felony	4	2	37
Misdemeanor	22	5	173
TOTAL	26	7	210

CITATIONS			
TYPE	LASD	LAPD	FYTD
Other Citations	0	7	163
Vehicle Code Citations	64	3	553
TOTAL	64	10	716

CALLS FOR SERVICE			
TYPE	LASD	LAPD	FYTD
Routine	61	208	2,189
Priority	93	266	2,785
Emergency	11	74	748
TOTAL	165	548	5,722

DISPATCHED VS. PROACTIVE		
TYPE	LASD	LAPD
Dispatched	1%	16%
Proactive	99%	84%
TOTAL	100%	100%

PERCENTAGE OF TIME SPENT ON THE BUS SYSTEM	
LINE	February
LASD BUS	82%
LAPD BUS	86%

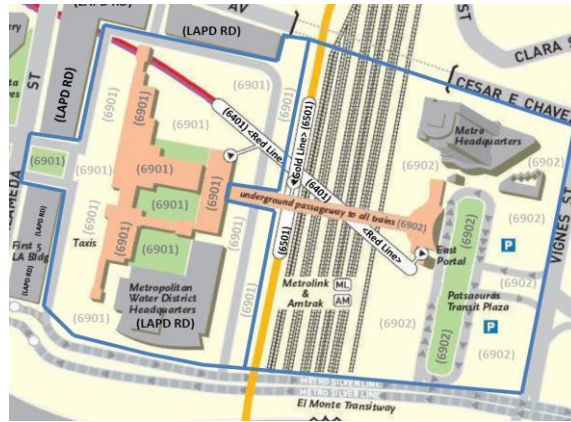
LEGEND	
Los Angeles Police Department	
Los Angeles County Sheriff's Department	

Bus Patrol

There were 2 less Part 1 crimes than the same period last year (25), which is a 8% decrease

Union Station - February 2018

REPORTED CRIME		
PART 1 CRIMES	LAPD	FYTD
Homicide	0	0
Rape	1	1
Robbery	0	0
Agg Assault	0	7
Agg Assault on Op	0	0
Burglary	0	0
Larceny	6	40
Bike Theft	0	0
Motor Vehicle Theft	0	4
Arson	0	0
SUB-TOTAL	7	52
Selected Part 2 Crimes		
Battery	1	20
Battery Rail Operator	0	0
Sex Offenses	1	2
Weapons	0	0
Narcotics	0	0
Trespassing	0	7
Vandalism	0	2
SUB-TOTAL	2	31
TOTAL	9	83



Westside

Eastside

ARRESTS		
TYPE	LAPD	FYTD
Felony	2	17
Misdemeanor	5	35
TOTAL	7	52

CITATIONS		
TYPE	LAPD	FYTD
Other Citations	8	87
Vehicle Code Citations	1	3
TOTAL	9	90

CALLS FOR SERVICE		
TYPE	LAPD	FYTD
Routine	N/A*	N/A*
Priority	N/A*	N/A*
Emergency	N/A*	N/A*
TOTAL	0	0

*Currently unable to report stats by Union Station

DISPATCHED VS. PROACTIVE	
TYPE	LAPD
Dispatched	23%
Proactive	77%
TOTAL	100%

PERCENTAGE OF TIME SPENT AT UNION STATION	
LOCATION	LAPD
Union Station	83%

LEGEND	
Los Angeles Police Department	

Union Station Highlights

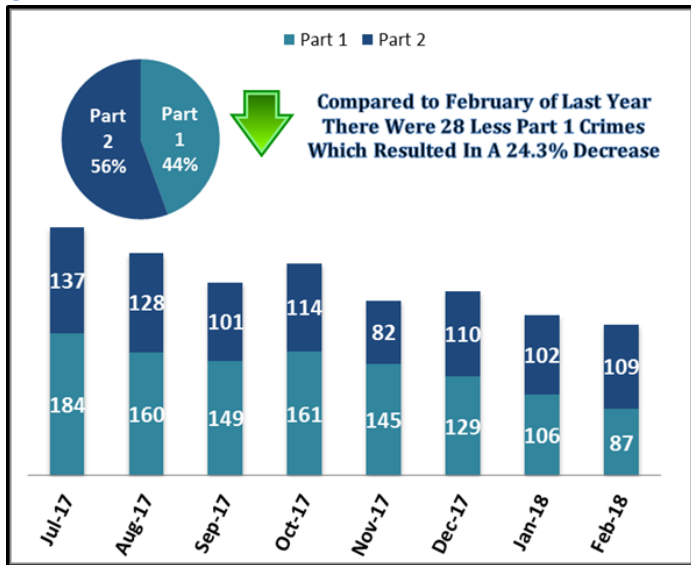
Union Station had 1 less Part 1 crime than the same period last year (8), which is a 12.5% decrease

Key Performance Indicators

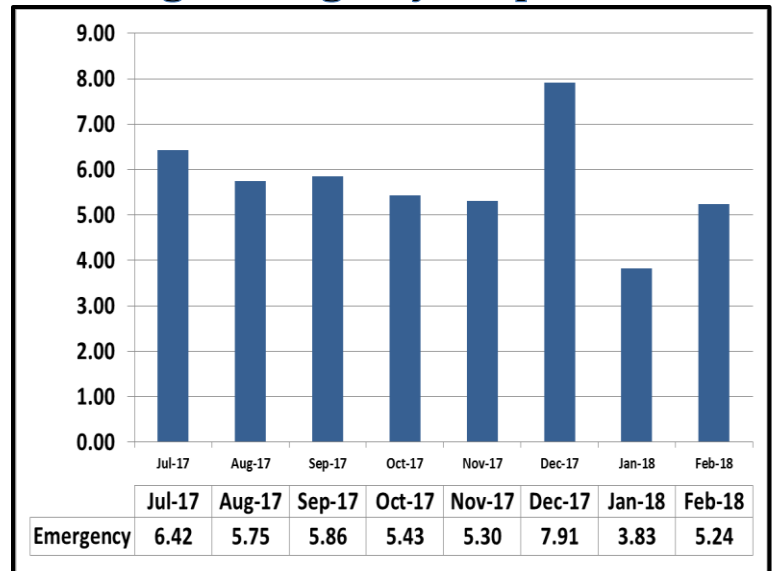
FEBRUARY 2018

Attachment C

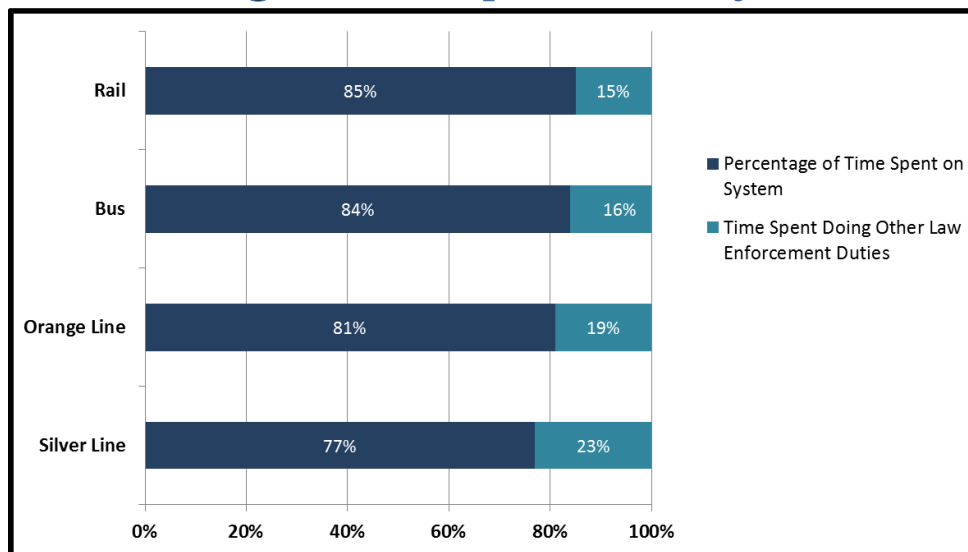
System Wide Part 1 & Part 2 Crimes



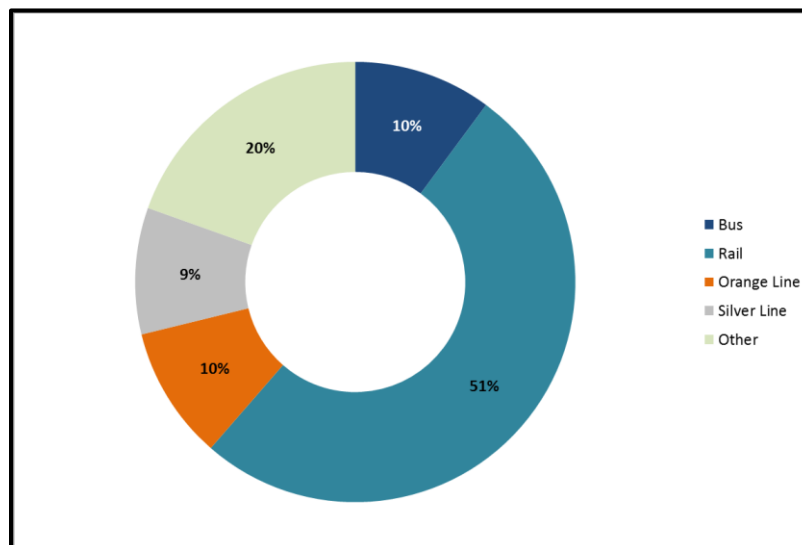
Average Emergency Response Times



Percentage of Time Spent on the System



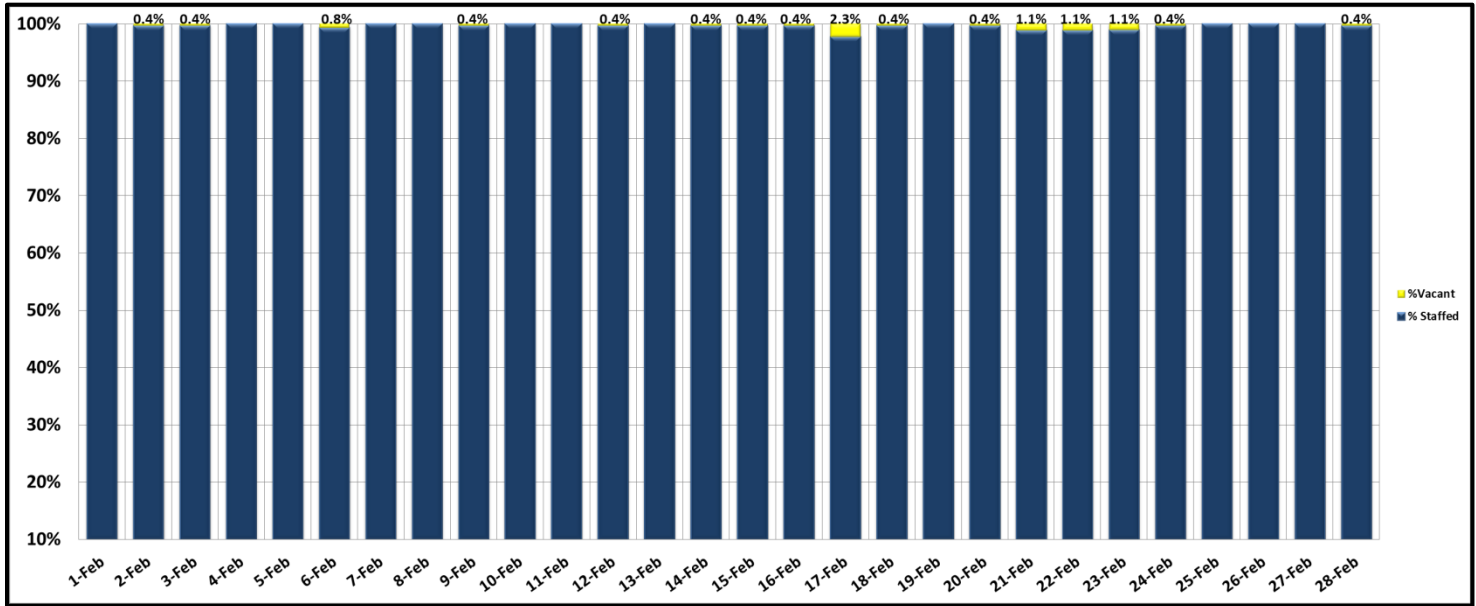
Percentage of Time Spent on the System as a Whole



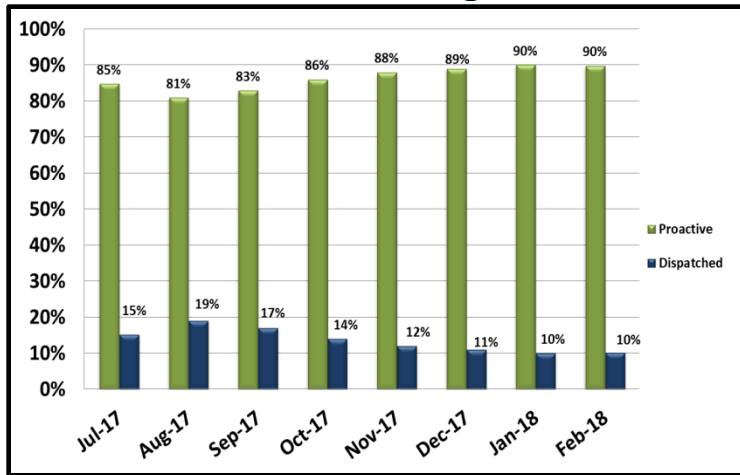
Key Performance Indicators

FEBRUARY 2018

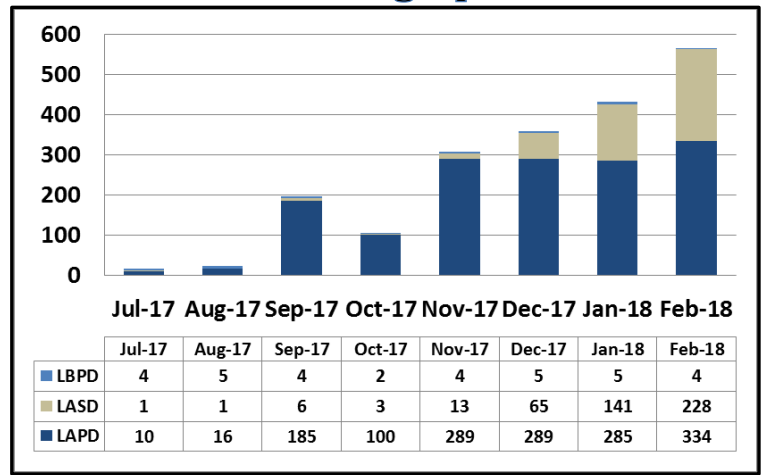
Ratio of Staffing Levels vs Vacant Assignments



Ratio of Proactive vs Dispatched Activity



Grade Crossing Operations



Grade Crossing Operation Locations February:

1. Blue Line Stations (192)
2. Expo Line Stations (70)
3. Gold Line Stations (304)



Board Report

File #: 2018-0109, **File Type:** Contract

Agenda Number: 27.

REVISED
SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTEE
APRIL 12, 2018

**SUBJECT: METRO RAIL CAPACITY STUDY
(MOTION 2017-0922 RESPONSE)**

ACTION: RECEIVE AND FILE

RECOMMENDATION

RECEIVE AND FILE report on Metro Rail capacity in response to Board Motion 2017-0922.

ISSUE

On January 25, 2018, the Board of Directors (Board) approved Motion #2017-0922 (Metro Rail Capacity Study) under Item 47, requesting staff to analyze current ridership as a percentage of maximum capacity for passengers at all existing rail stations during weekdays, weekends, peak, and off-peak hours. This report responds to the motion’s request.

While there is generally capacity on the rail network during the non-peak periods, during the peak hours, trains on all rail lines meet and exceed the maximum capacity on a trip by trip basis as ridership demand pulses to the line from connecting bus and rails service, work shift start and end times, school bell times, etc.

DISCUSSION

Detailed rail ridership is collected continuously through a series of riding checks. The number of checks performed on a monthly basis is only large enough to permit estimation of ridership by line and day type. On an annual basis these checks can be aggregated to provide a more complete picture of ridership by station, direction, and time of day. The most recent annual ride check compilation spans FY2017.

Unlike the Metro bus system, rail cars are not all presently equipped with Automated Passenger Counters (APC’s). APC’s are provided as part of the current P3010 light rail vehicle (LRT) car order, however, staff is working to finalize the process and methodology for data capture and validation, which will include a one year FTA testing and approval process. Similarly, a retrofit of the P2000 LRV will incorporate APC’s. However, delivery of the retrofitted P2000 LRVs will not begin until the start of 2020, with FTA testing and validation which requires an additional year. The planned procurement of

heavy rail vehicles (HRV) to replace the existing fleet and provide service for the extended Purple Line will provide APC's that are expected to be fully functional within five years from now.

As a result, the data used in this report was based on the full set of FY 2017 checks. Capacity is defined in the adopted Transit Service Policy, which states that maximum capacity (seated and standing) of a light rail line equals 175% of the seated capacity, or a load factor of 1.75. The maximum capacity of a heavy rail line equals 230% of the seated load, or 2.3 load factor. The load factor is higher for heavy rail as the seating configuration provides more space for standees. These capacity standards balance the goals of operating efficiency with customer comfort and the ability to periodically exceed the standard without passing up customers.

The analysis of ridership and capacity is presented in two attachments to this report. Attachment B shows ridership and capacity for each rail line and station, segmented by time period and day of week. The time periods shown are the highest passenger demand hours of each type of service (peak, off peak, Saturday and Sunday) for each direction of travel. Each chart shows the maximum capacity of all trains operated during that hour (solid line) and the number of total seats on those trains (dashed line). The hourly passenger load at each station is shown by a vertical bar with an extension of the bar showing higher loads experienced during the peak 20 minutes of demand.

Since Attachment B averages the passenger loads on board at each station during the time period, it masks the true variability in loads from trip to trip. For example, a train that carries 50% seated load may be followed by a train that carries 150% of seated load, which would result in an average of 100% seated load on each of the two trips. As a result, the variation in loads from train to train due to the pulsing of ridership arriving to each line based on connections from other bus and rail services, work and shift end times, school bell times, etc. are not represented. Therefore, Attachment C provides a detailed look at each trip's maximum ridership load factor (observed passengers per seats) for all weekday trips checked. A load factor of 1.00 represents the seated capacity of a train (shown with a dashed line), and a load factor of 1.75 (2.30 for the Red/Purple Line) represents the total maximum capacity of a train (shown with a solid line).

The charts indicate there is significant variation in demand from train to train within any specified hour due to the pulsing of ridership discussed above, with some observed trains exceeding the policy capacity. Table 1 summarizes the number of trips at each level of capacity from less than seated loads (load factor under 1.0) to over maximum capacity (load factor above 1.75 for LRT and 2.30 for HRT).

Table 1
Observed Number of Trips within Each Load Factor Range

	Peak	Direction	1.0 or Less	1.0 to 1.25	1.25 to 1.50	1.50 to 1.75	Over 1.75
Blue Line	AM	North	2	3	4	2	
	PM	South		4	2	2	2
Green Line	PM	East	3	4	5	4	
	AM	West	9	8			
Gold Line	PM	North				6	3
	AM	South		1	4	2	1
Expo Line	PM	East		1	3		7
	AM	West	2	3	2	2	1

	Peak	Direction	1.0 or Less	1.0 to 1.43	1.43 to 1.87	1.87 to 2.30	Over 2.30
Red/Purple Line	PM	East	1	1	7	2	1
	PM	West	1	4	1	6	

FINANCIAL IMPACT

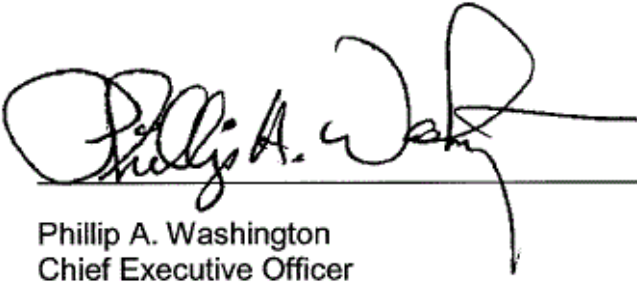
Receive and File of this report would have no financial impact to the agency.

ATTACHMENTS

- Attachment A - Motion 2017-0922 Metro Rail Capacity Study
- Attachment B - Rail Ridership Data in Relation to Service Capacity
- Attachment C - Train By Train Loading in Relation to Train Capacity

Prepared by: Jaclyn Luu, Senior Transportation Planner (213) 922-4562
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Reviewed by: James T. Gallagher, Chief Operations Officer, (213) 418-3108



Phillip A. Washington
Chief Executive Officer



Board Report

File #:2017-0922, **File Type:**Motion / Motion
Response

Agenda Number:47.

**REGULAR BOARD MEETING
JANUARY 25, 2018**

Motion by:

Fasana, Barger, Dupont-Walker, and Solis

Metro Rail Capacity Study

Ridership on Metro's lines continues to grow. Staff has continued to add capacity to Metro's lines by adding cars and increasing service frequency.

Passenger capacity varies considerably by line and by station. Metro needs to understand how much capacity is available on rail lines as development intensifies and demand for service increases.

**SUBJECT: MOTION BY FASANA, BARGER, DUPONT-WALKER
AND SOLIS**

Metro Rail Capacity Study

WE THEREFORE MOVE that Metro provide an analysis of current ridership as a percentage of maximum capacity for passengers at all existing rail stations during weekdays, weekends, on -peak, and off-peak hours and report the results to the Board at the April 2018 meetings.

Metro Rail Capacity Study

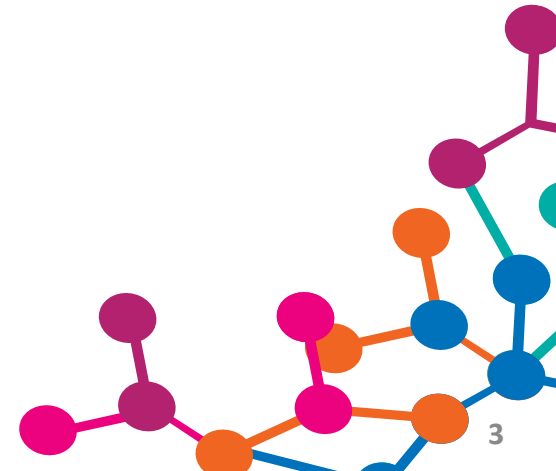
Overview

- Metro Rail Capacity Study Motion (January 2018)
- Analyze current ridership as a percentage of maximum capacity for passengers at all existing rail stations during:
 - Weekdays
 - Weekends
 - On-Peak Hours
 - Off-Peak Hours



Data Collection

- Rail ridership data collected through manual counts and reported on a monthly basis at a line and day type level.
- Sampling methodology requires one year to collect enough data to generate station and time period level ridership. (FY17 most current)

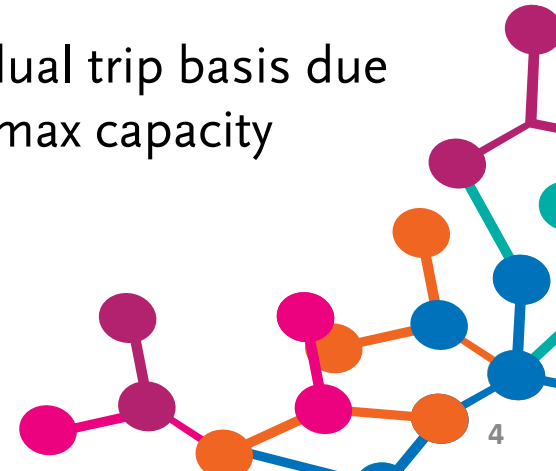


Data Analysis

- Capacity (seated and standing) of a light rail line equals 175% of the seated capacity, or a load factor of 1.75. The maximum capacity of a heavy rail line equals 230% of the seated load, or 2.3 load factor.
- Capacity generally exists on the rail network during midday and weekends, with the exception of the Expo and Gold Lines when averaging all trips within a one hour and a 20 minute time slice.
- Standing capacity generally exists on all rail lines during peak periods in the peak direction when averaging trips.
- However, significant ridership variation on an individual trip basis due to “pulsing” of ridership, with many trips exceeding max capacity during the peak period.



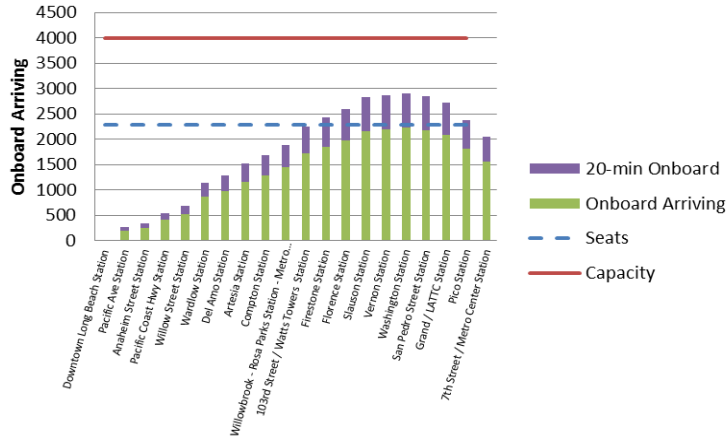
Metro



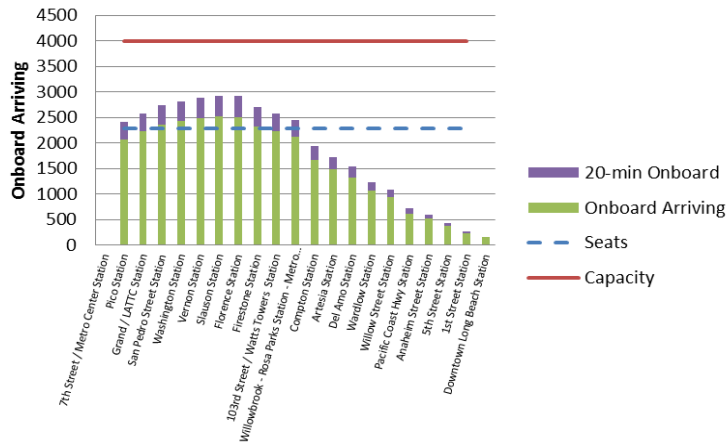
Findings – Weekday Peak Hours

Metro Blue Line

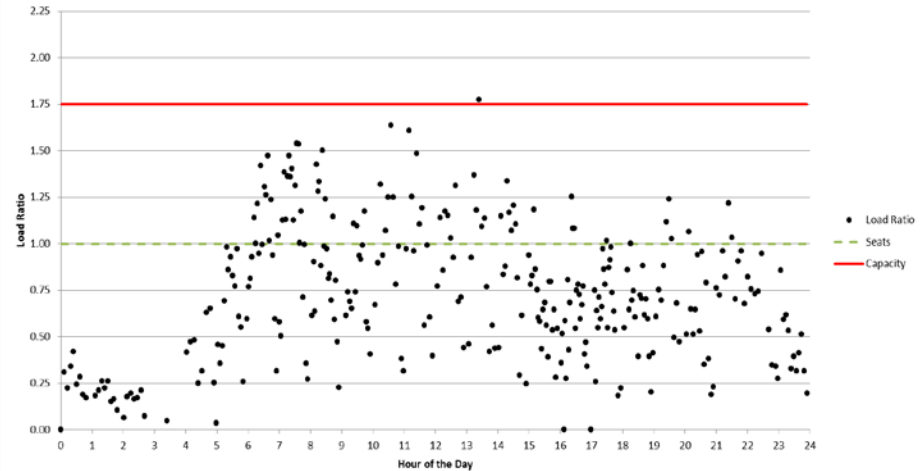
Metro Blue Line Weekday Northbound 7-8am



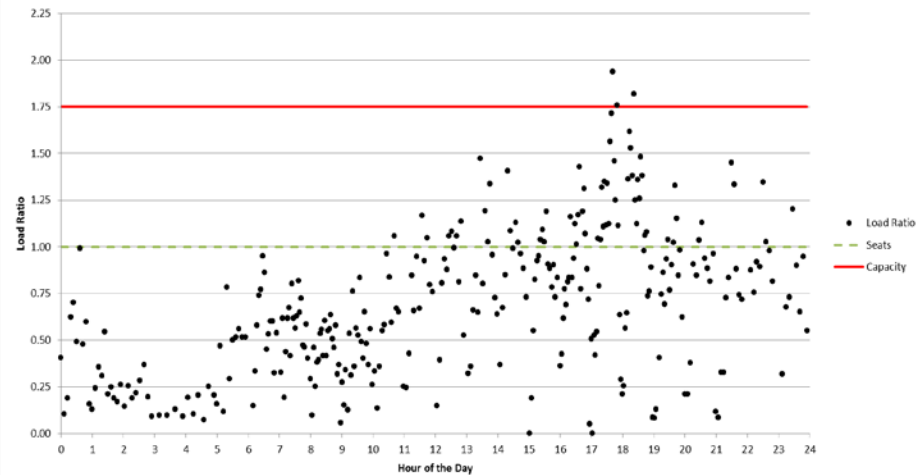
Metro Blue Line Weekday Southbound 5-6pm



Metro Blue Line Weekday Northbound Load Ratios



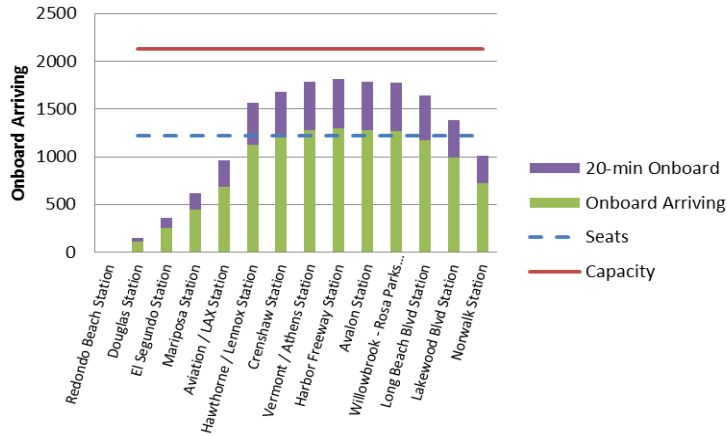
Metro Blue Line Weekday Southbound Load Ratios



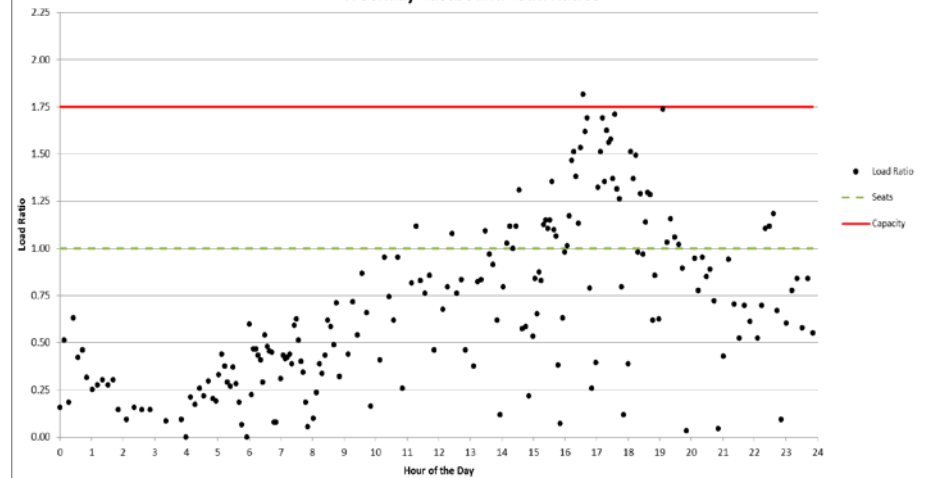
Findings – Weekday Peak Hours

Metro Green Line

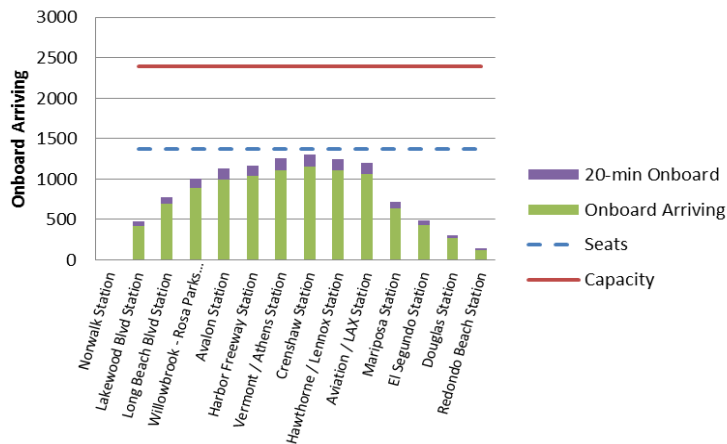
**Metro Green Line
Weekday Eastbound 5-6pm**



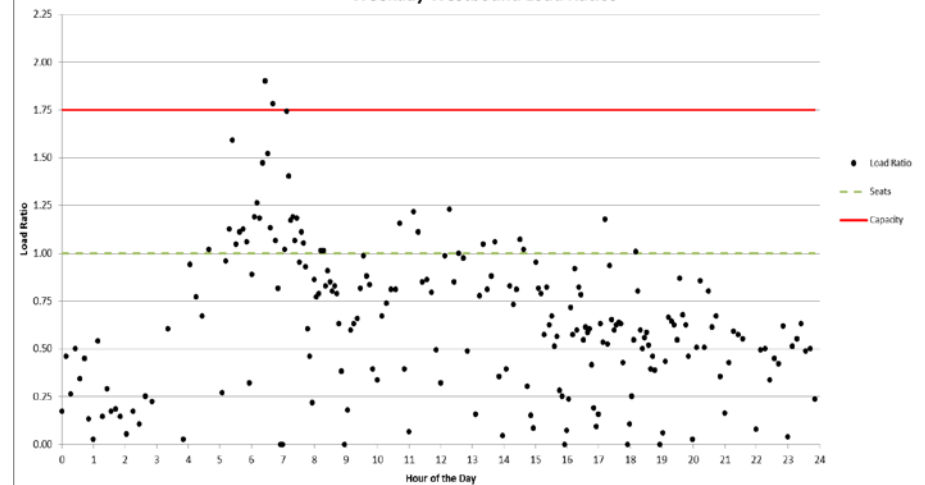
**Metro Green Line
Weekday Eastbound Load Ratios**



**Metro Green Line
Weekday Westbound 7-8am**

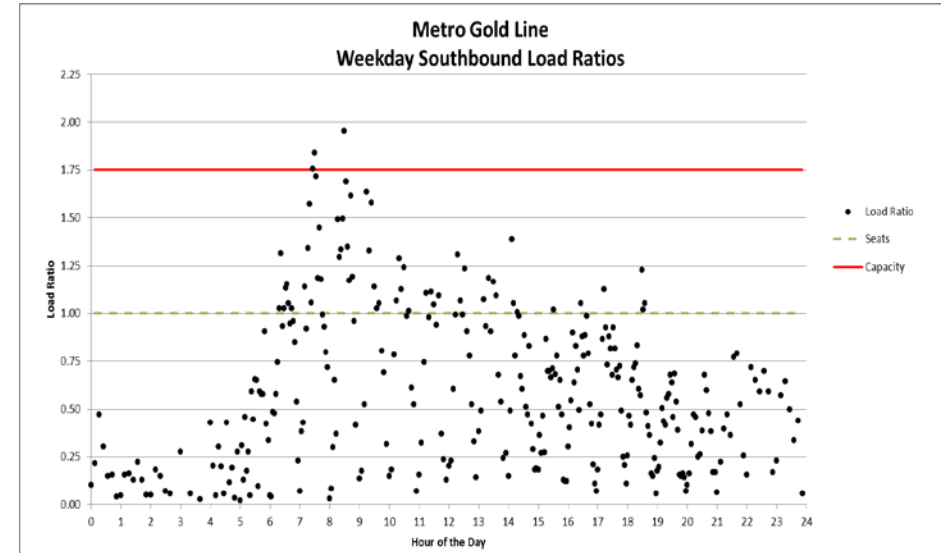
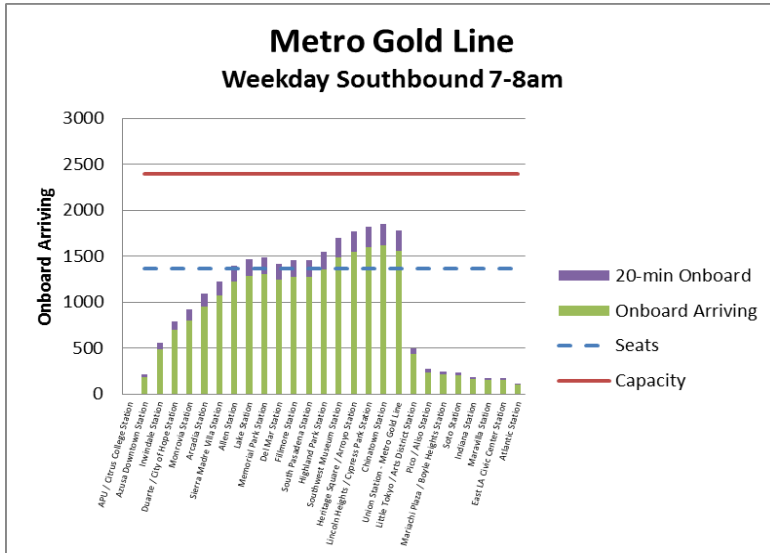
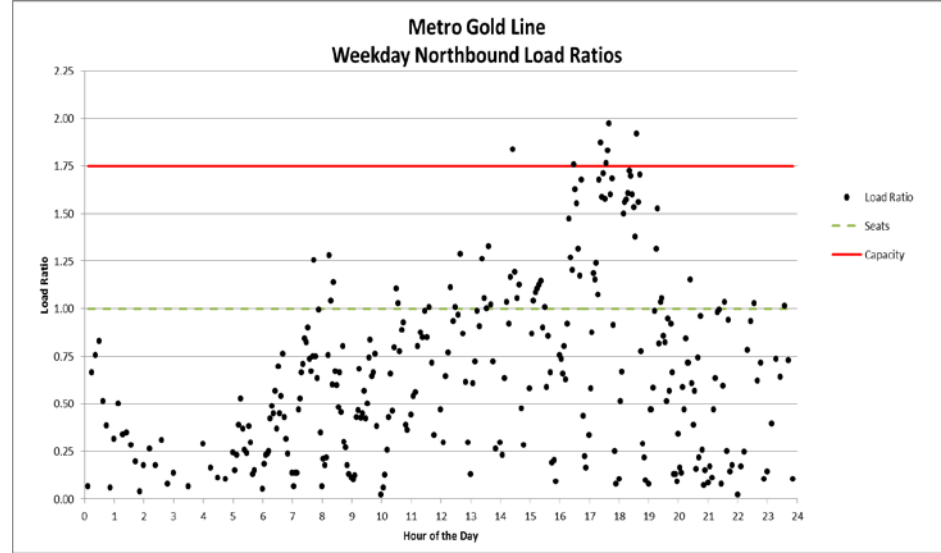
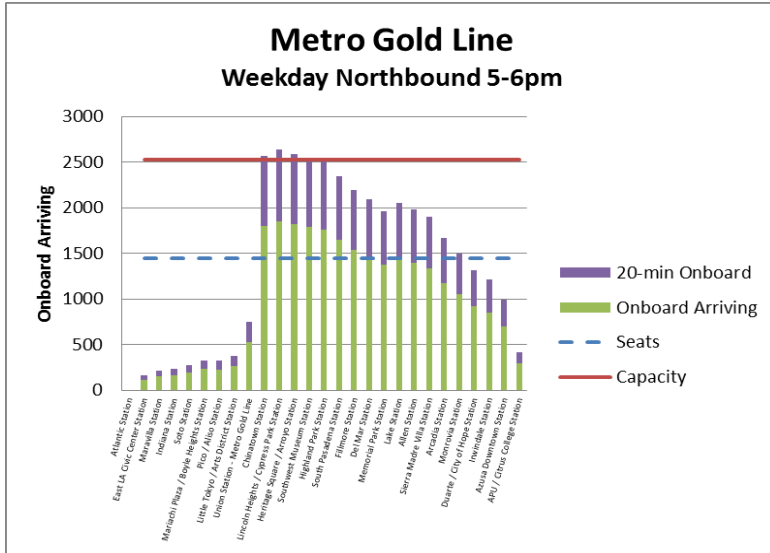


**Metro Green Line
Weekday Westbound Load Ratios**



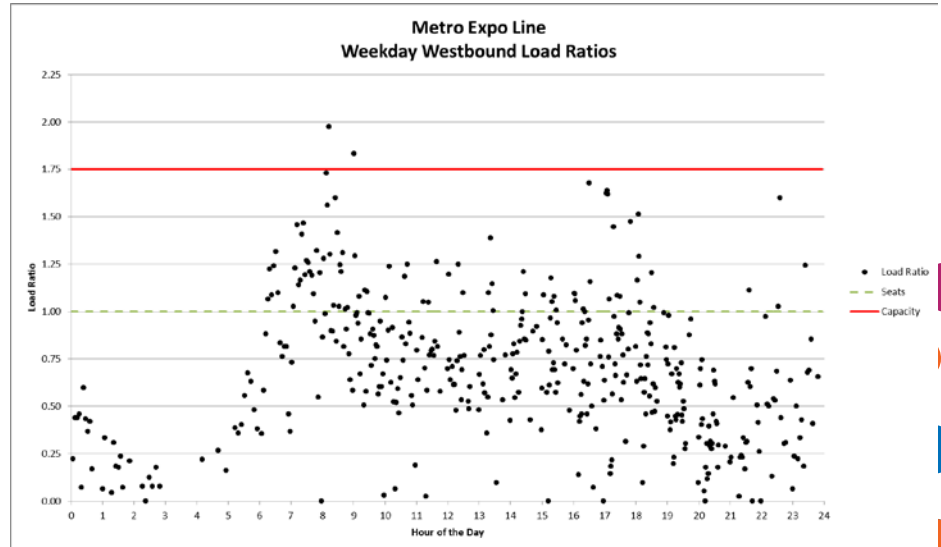
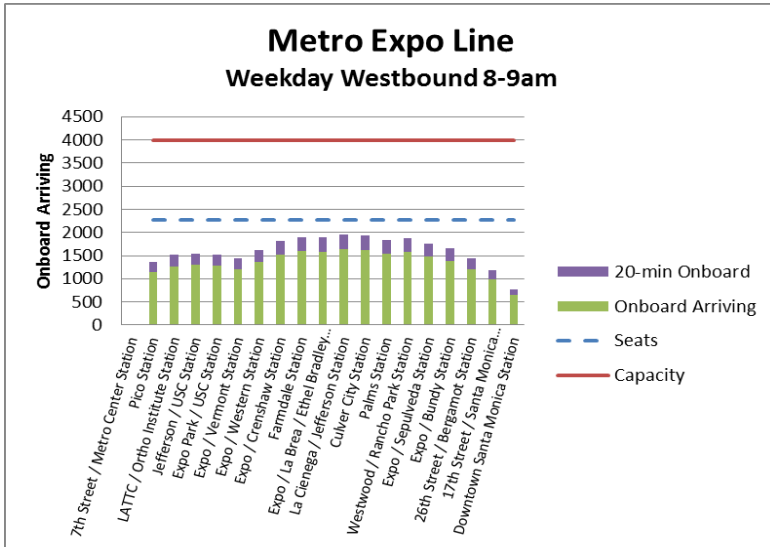
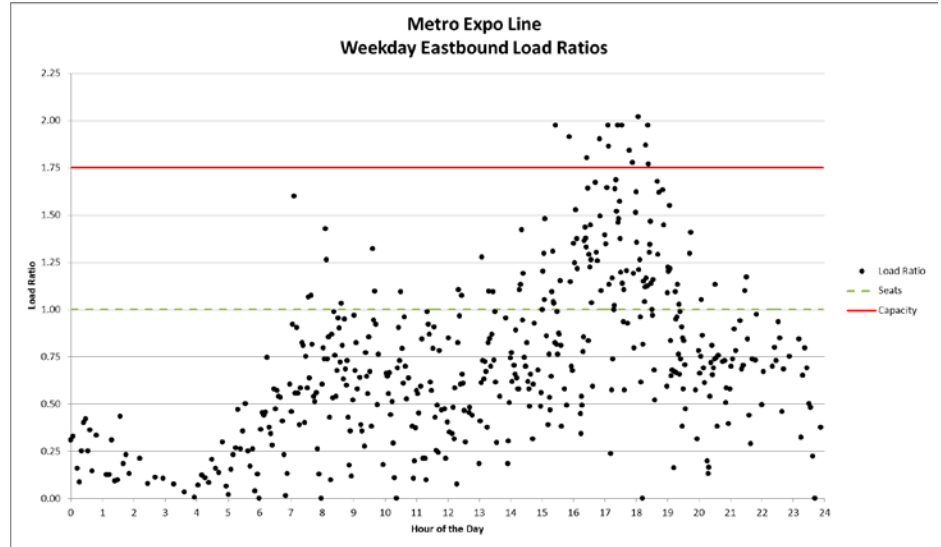
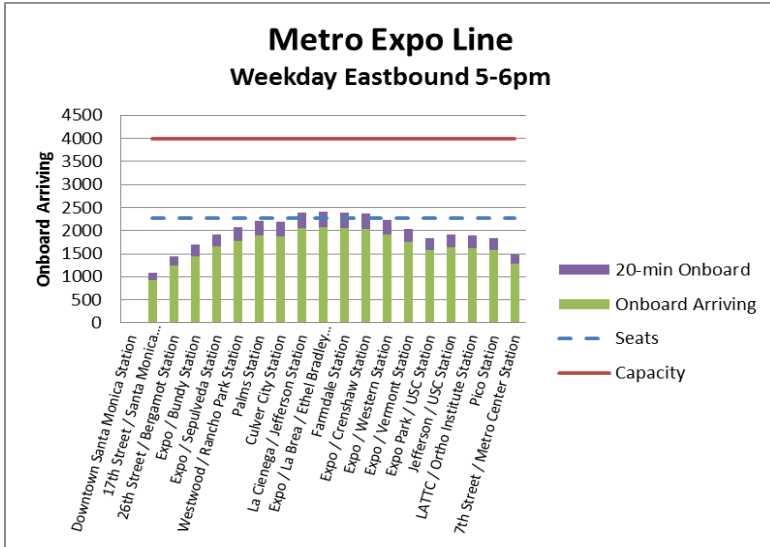
Findings – Weekday Peak Hours

Metro Gold Line



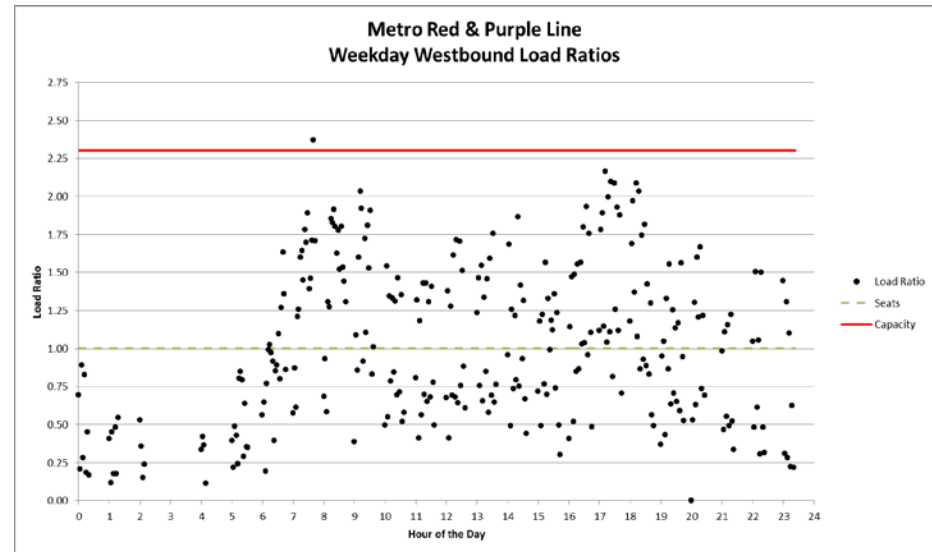
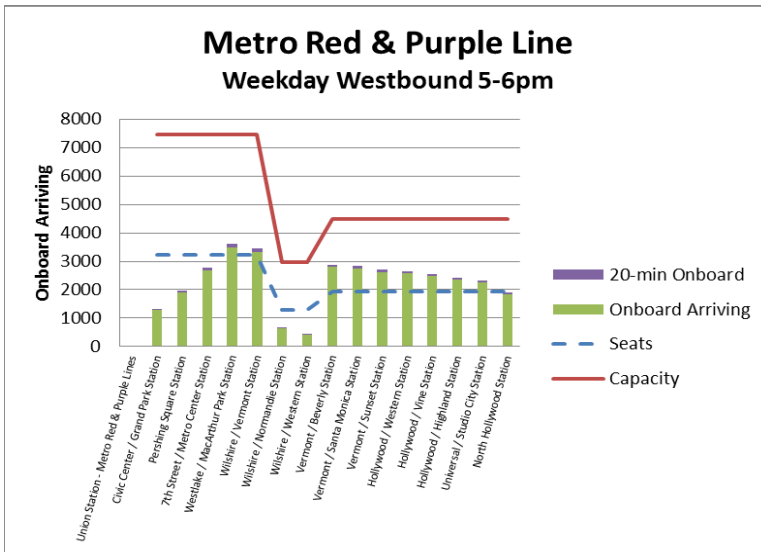
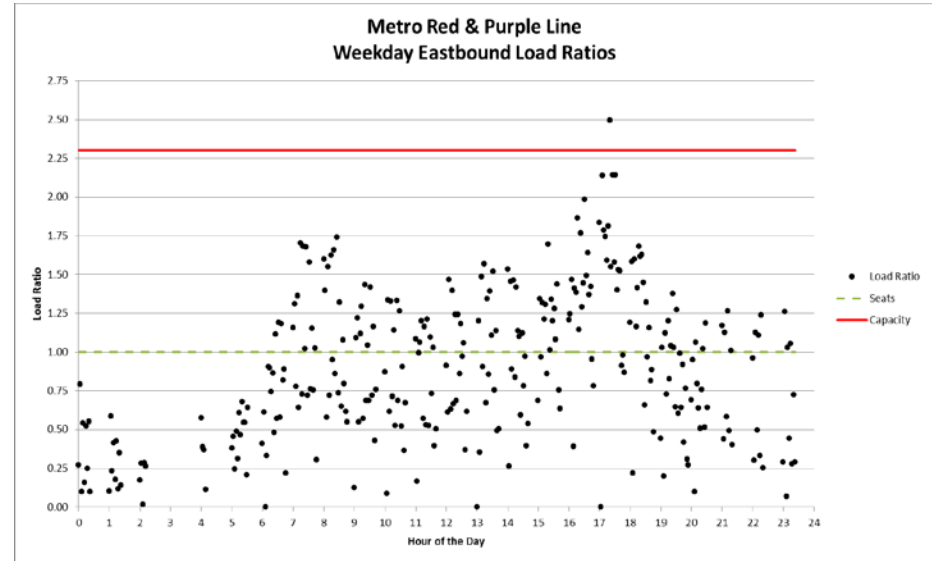
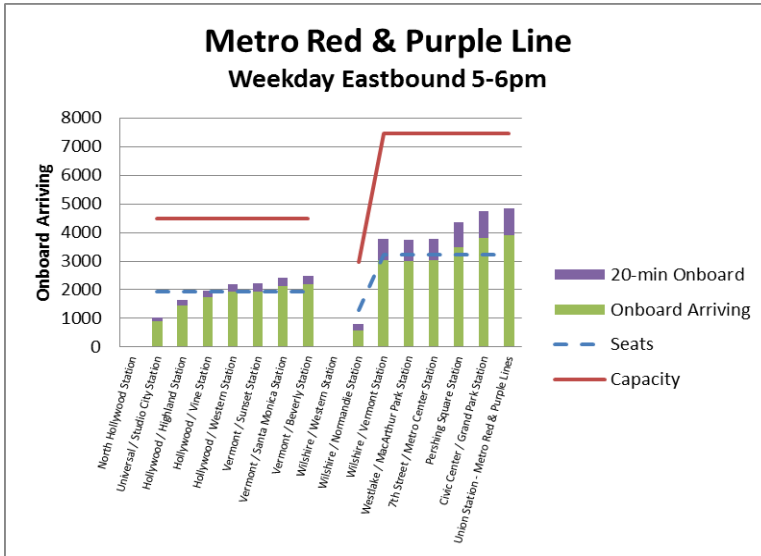
Findings – Weekday Peak Hours

Metro Expo Line



Findings – Weekday Peak Hours

Metro Red & Purple Line



Findings

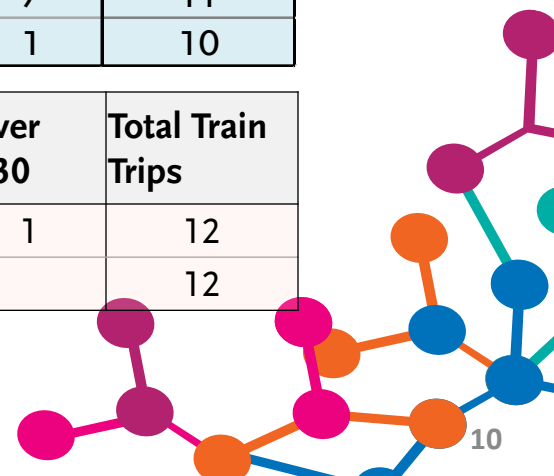
- The findings indicate there is significant variation in demand from train to train within any specified hour due to the pulsing of ridership, with some observed trains exceeding the policy capacity.
- The table summarizes the number of train trips observed at each level of capacity from less than seated loads (load factor under 1.0) to over maximum capacity (load factor above 1.75 for LRT and 2.30 for HRT).

Line	Direction	Peak Hour	1.0 or Less	1.0 to 1.25	1.25 to 1.50	1.50 to 1.75	Over 1.75	Total TrainTrips
Blue Line	North	AM	2	3	4	2		11
	South	PM		4	2	2	2	10
Green Line	East	PM	3	4	5	4		16
	West	AM	9	8				17
Gold Line	North	PM				6	3	9
	South	AM		1	4	2	1	8
Expo Line	East	PM		1	3		7	11
	West	AM	2	3	2	2	1	10

Line	Direction	Peak Hour	1.0 or Less	1.0 to 1.43	1.43 to 1.87	1.87 to 2.30	Over 2.30	Total Train Trips
Red/Purple Line	East	PM	1	1	7	2	1	12
	West	PM	1	4	1	6		12



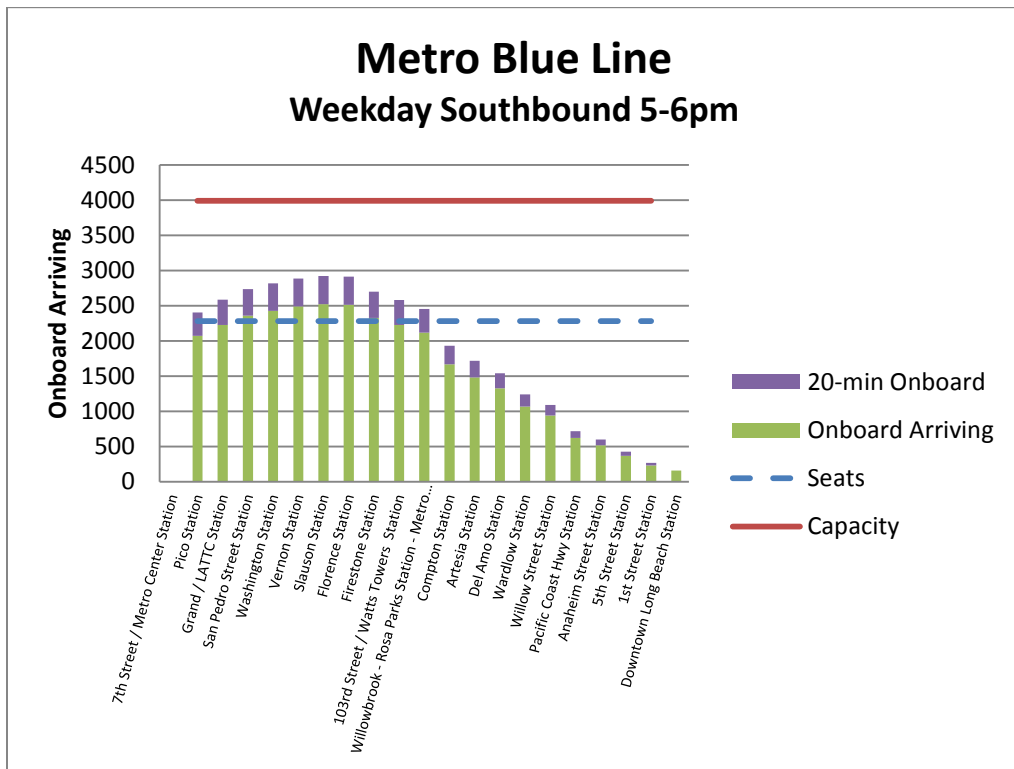
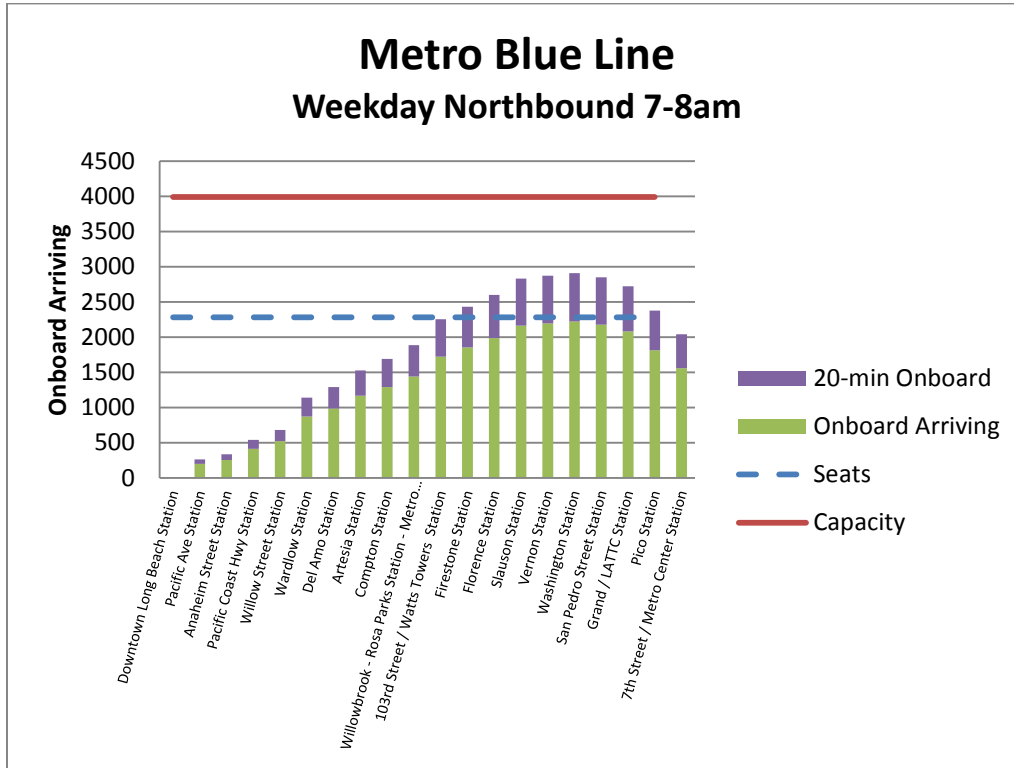
Metro



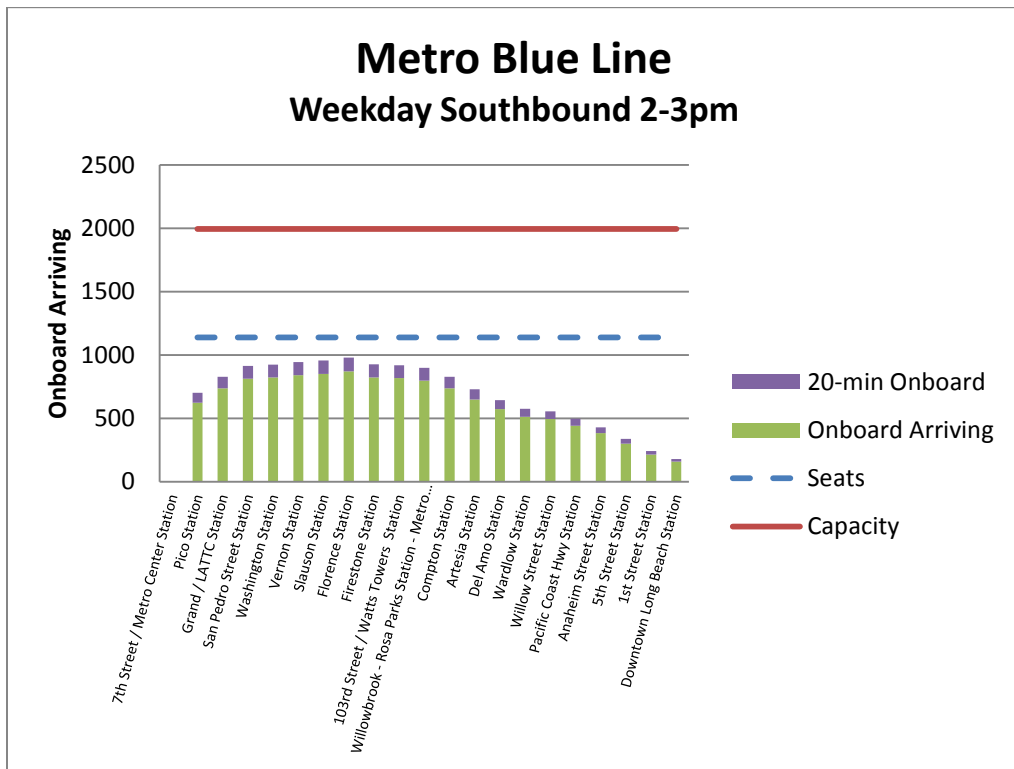
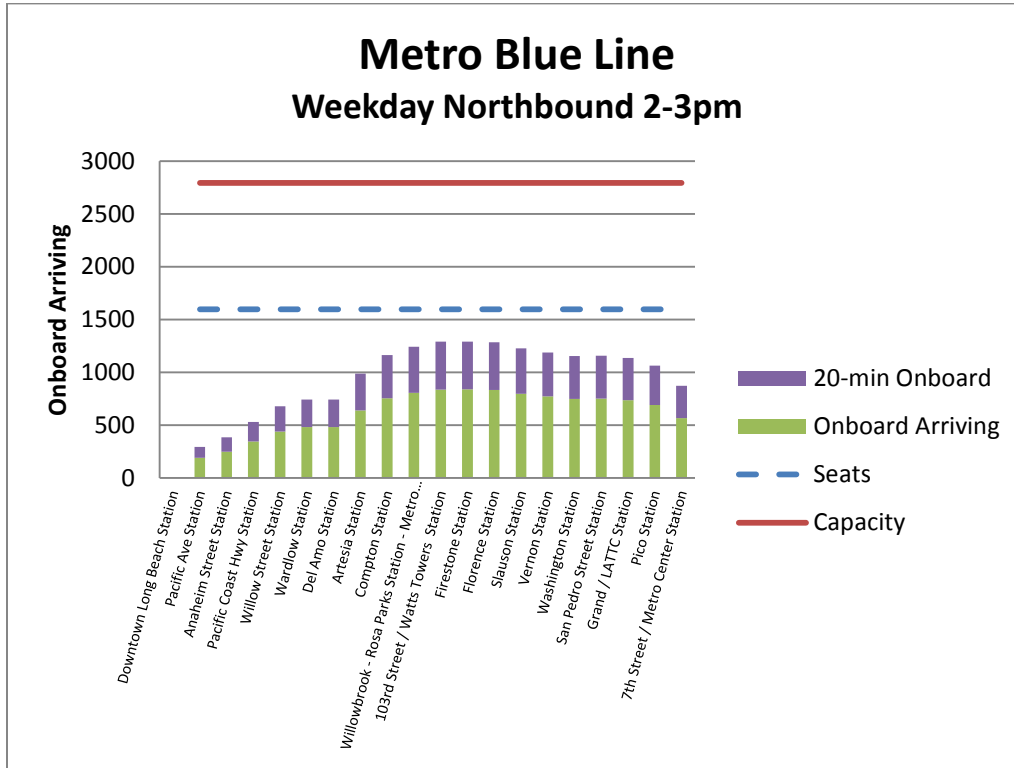
REVISED - ATTACHMENT B

Rail Ridership Data in Relation to Service Capacity

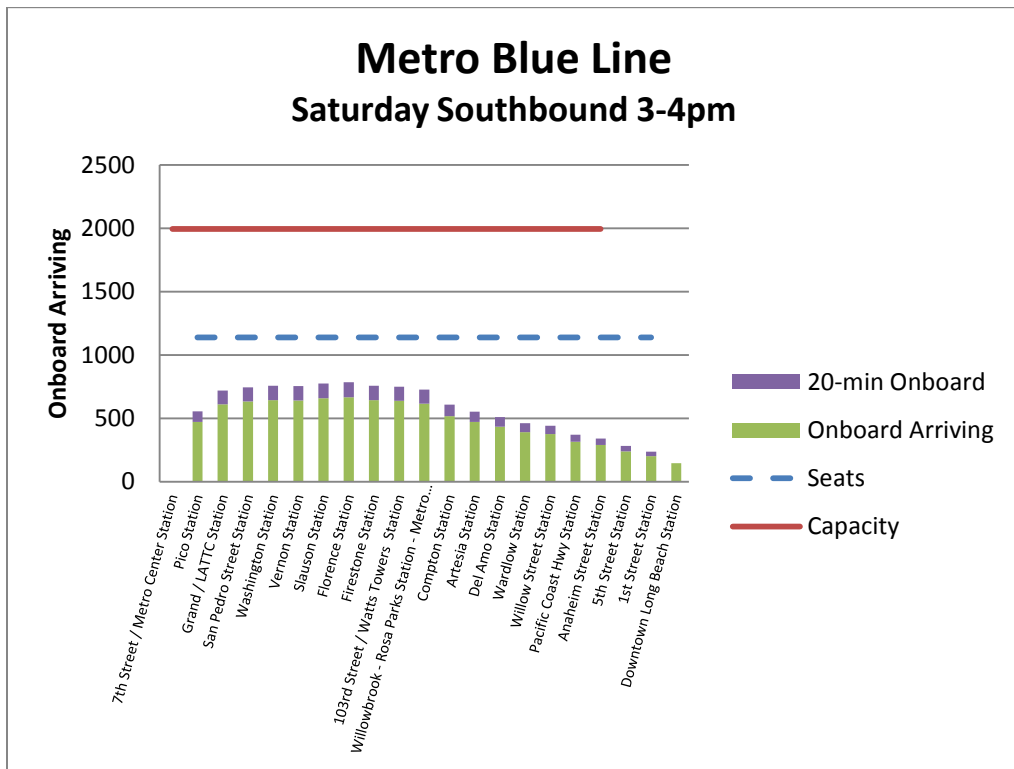
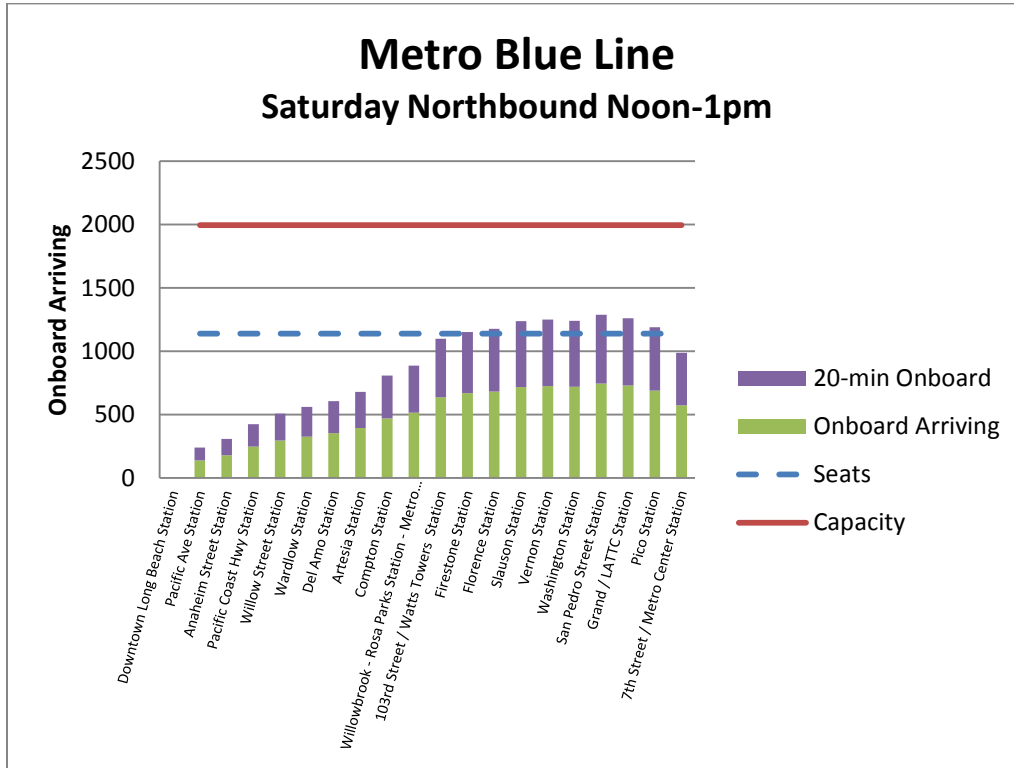
METRO BLUE LINE
Weekday Peak Hours



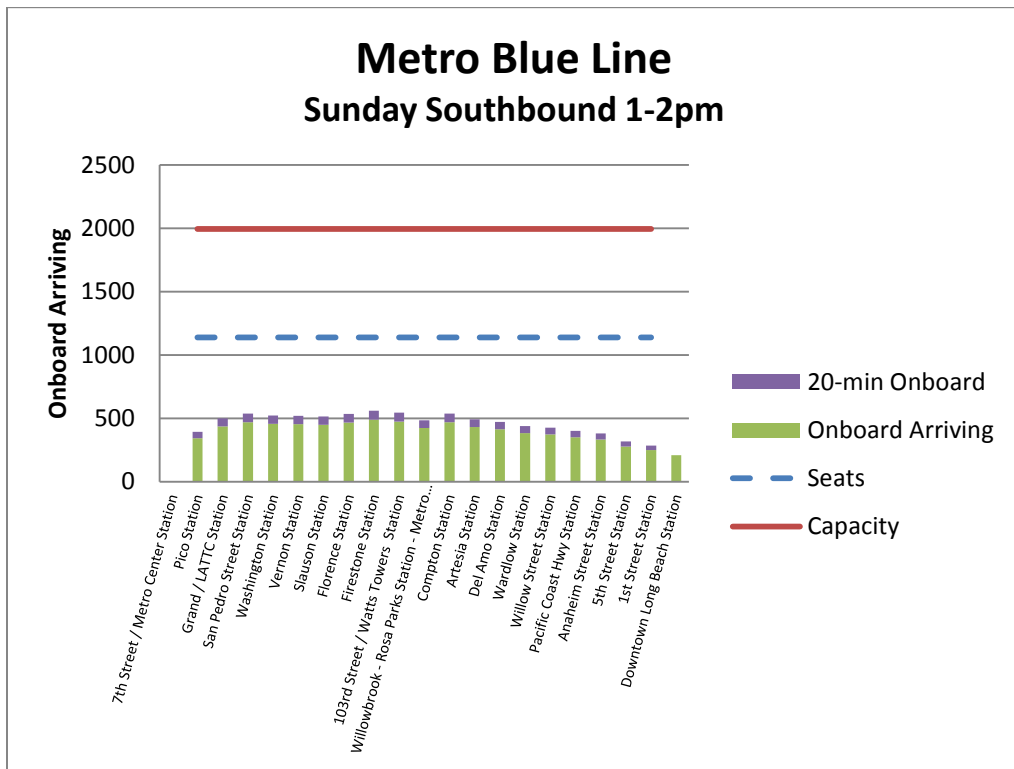
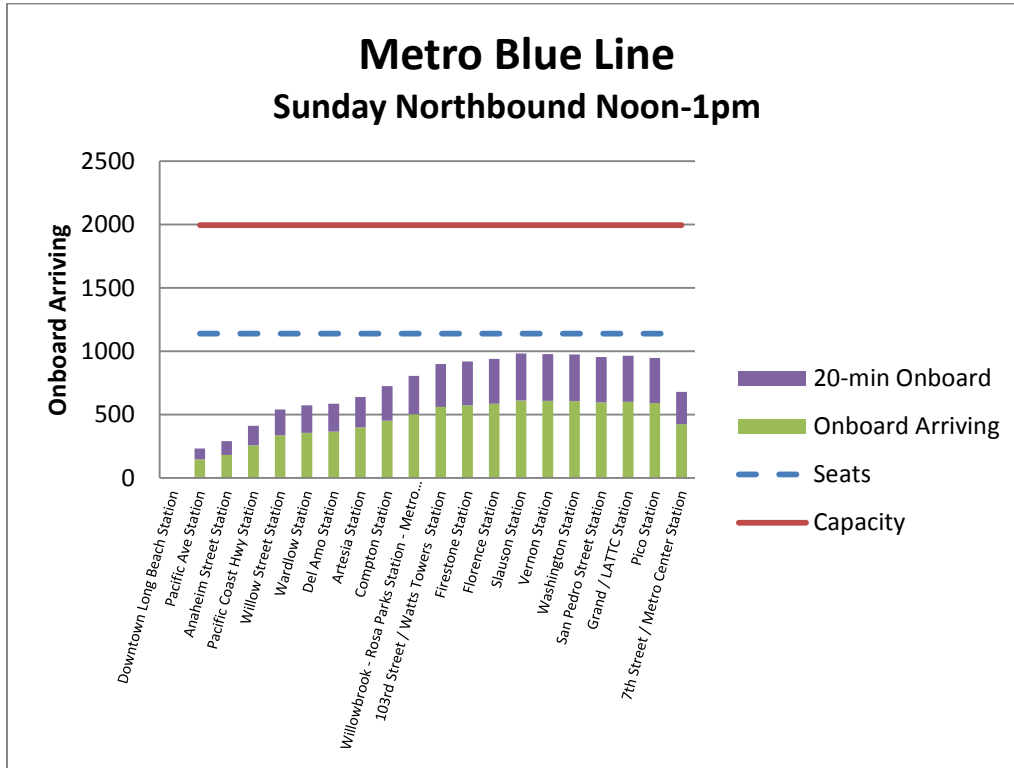
METRO BLUE LINE
Weekday Off Peak Hours



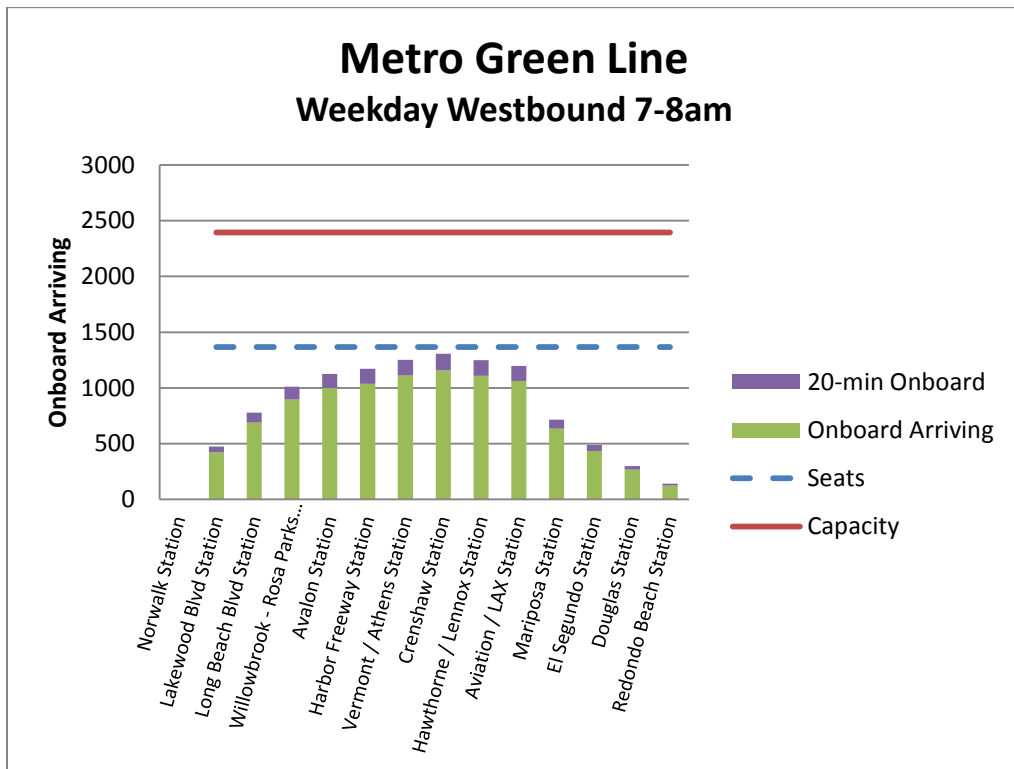
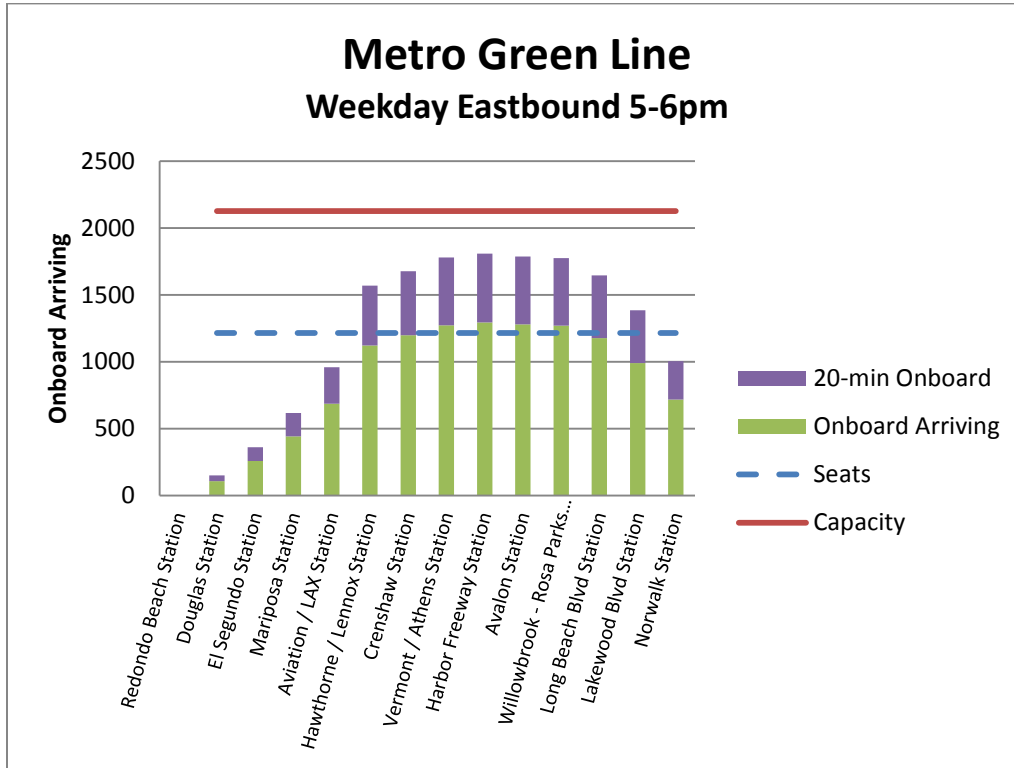
METRO BLUE LINE
Saturdays



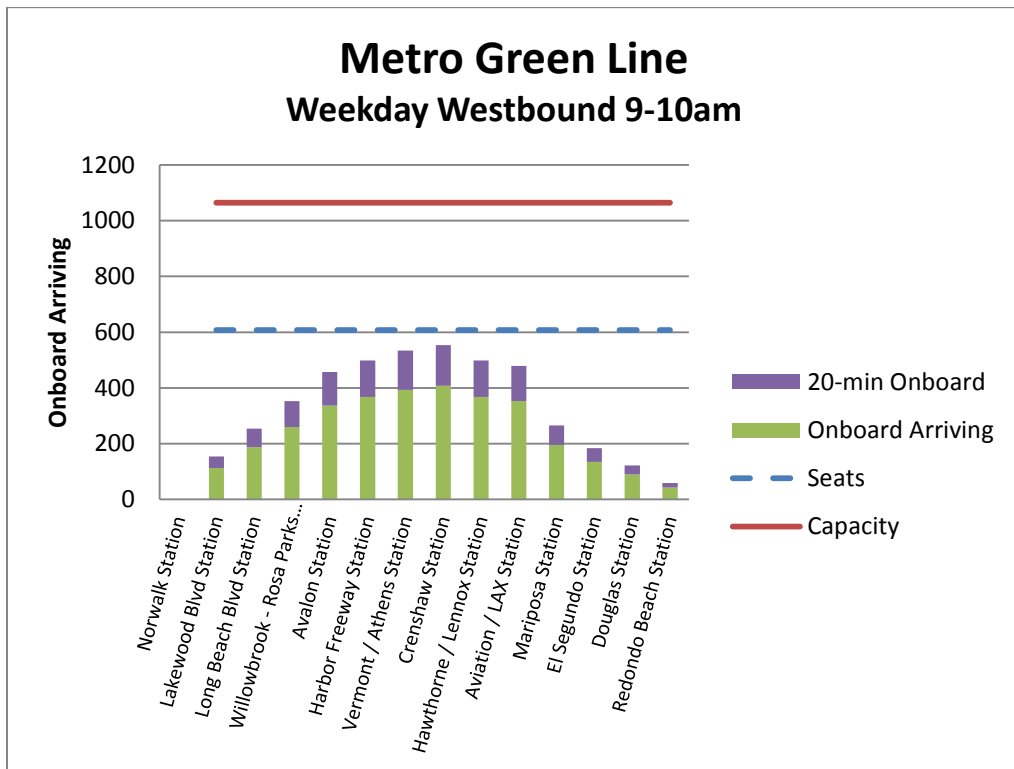
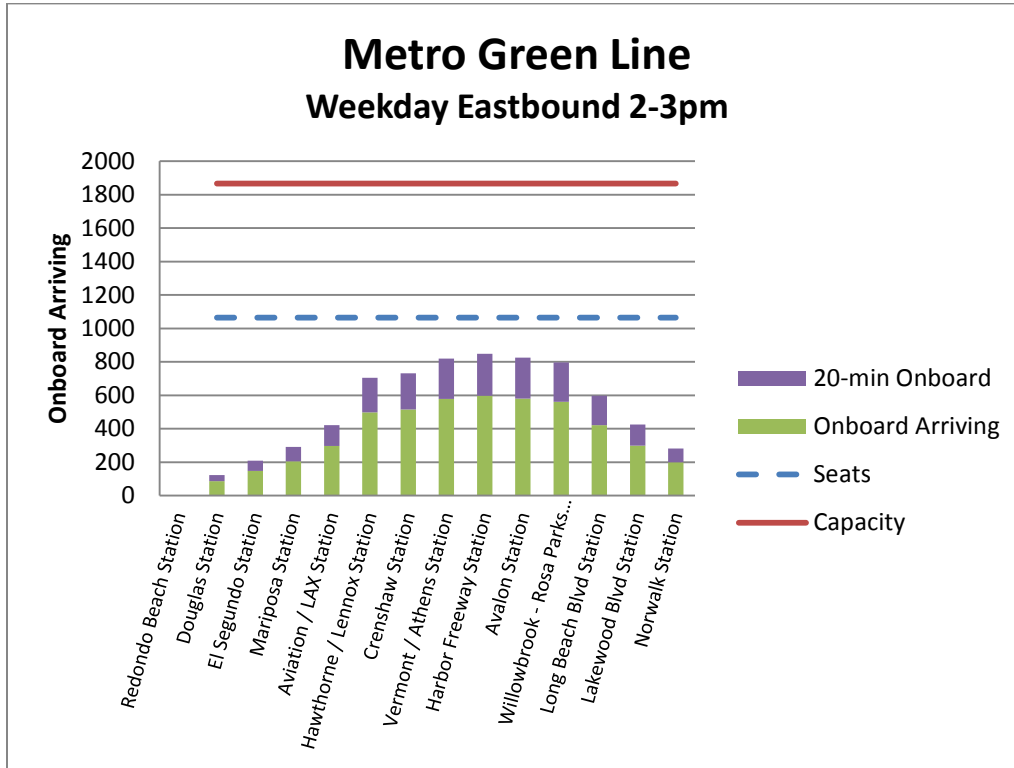
METRO BLUE LINE
Sundays



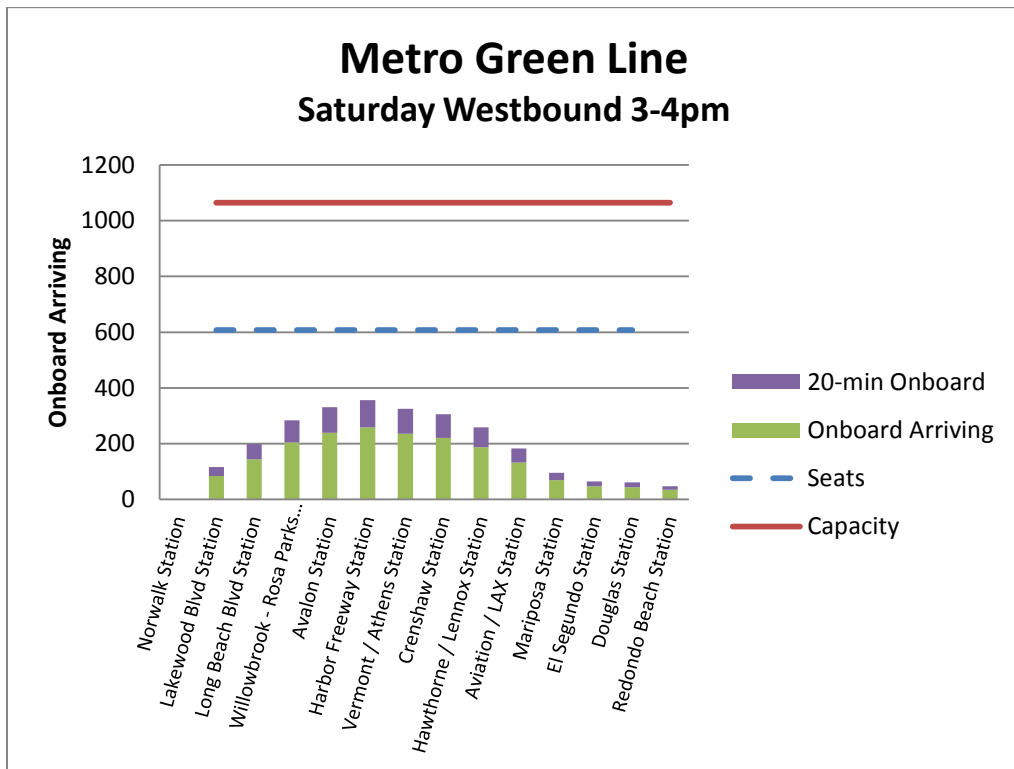
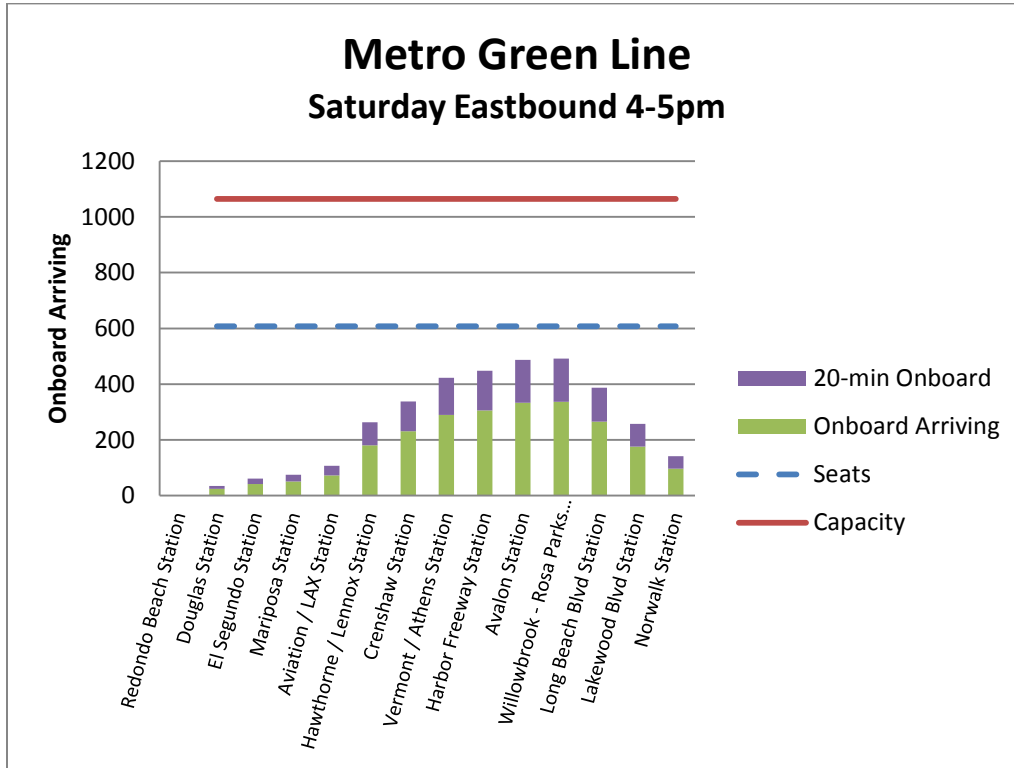
METRO GREEN LINE
Weekday Peak Hours



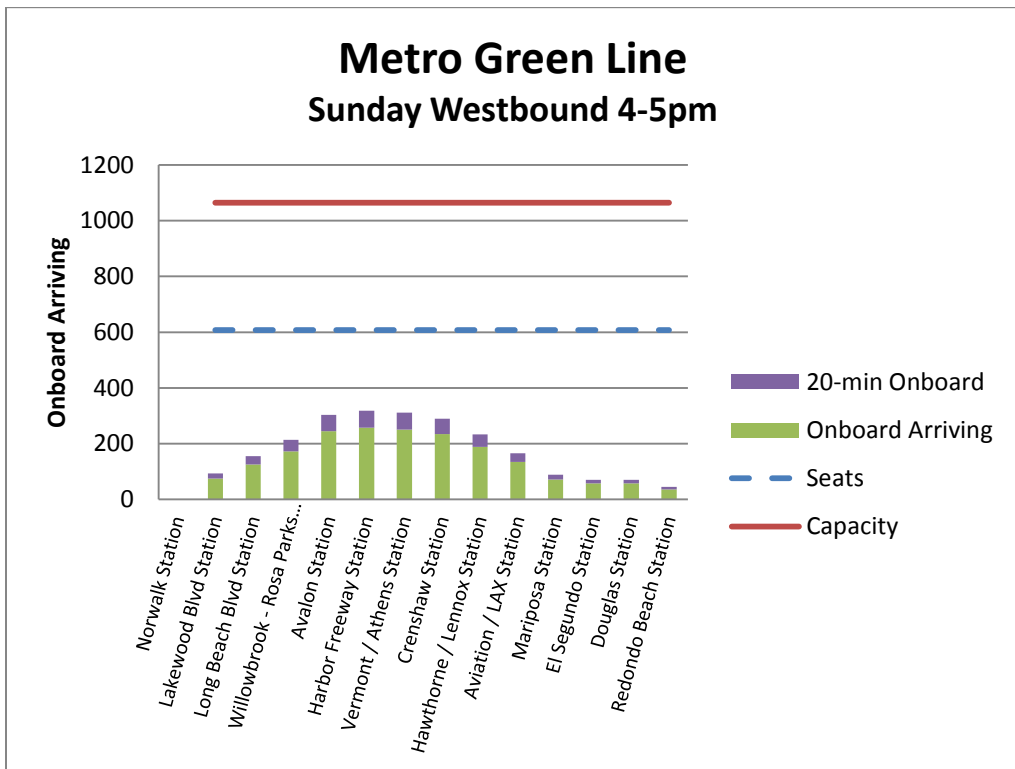
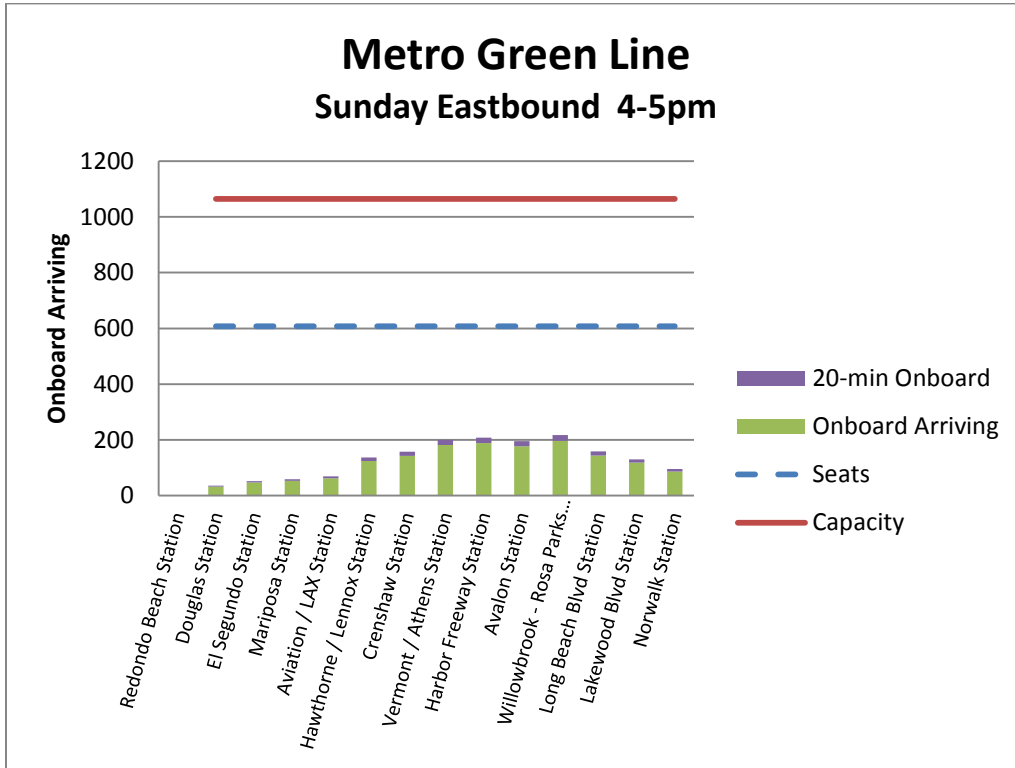
METRO GREEN LINE
Weekday Off Peak Hours



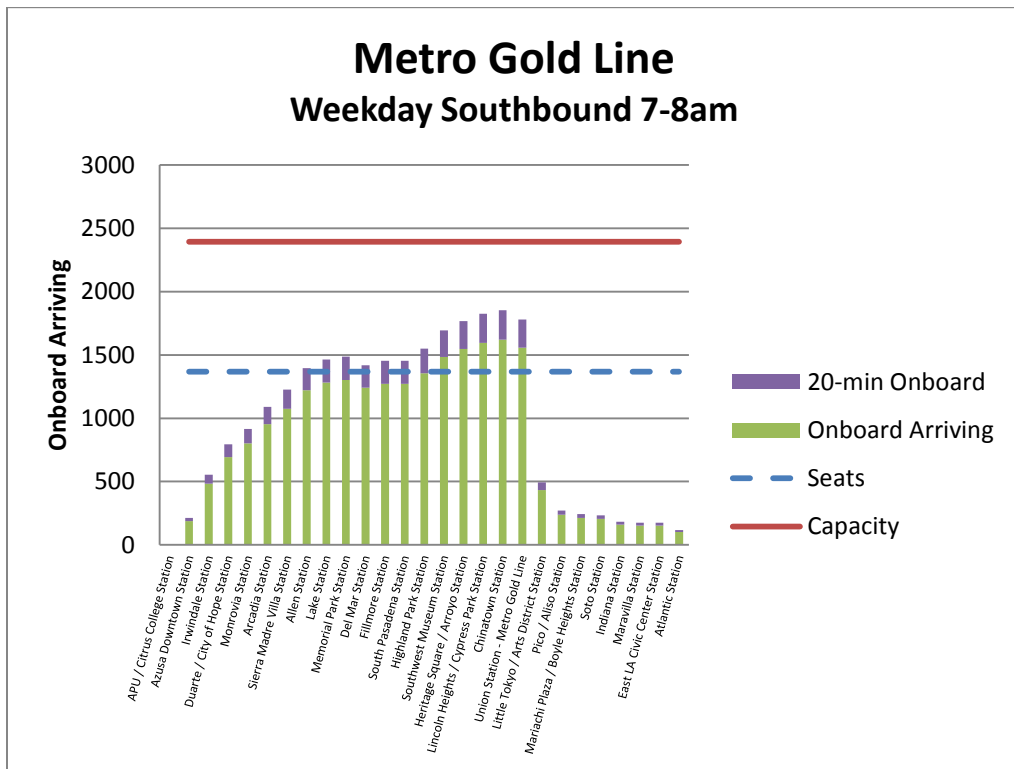
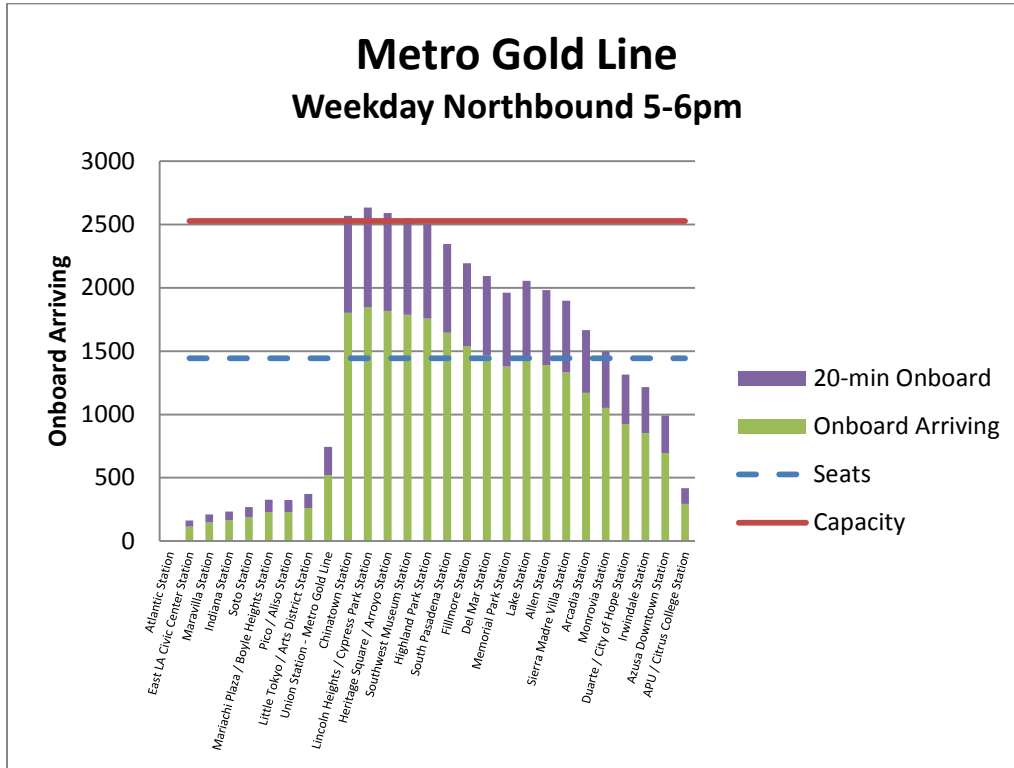
METRO GREEN LINE
Saturdays



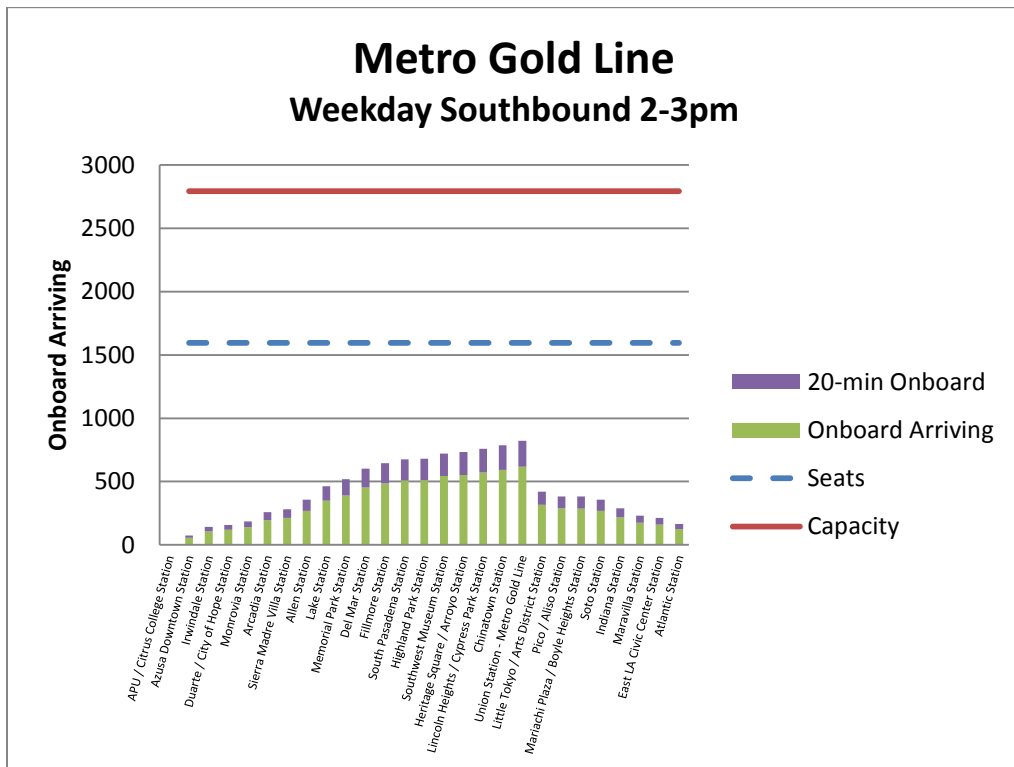
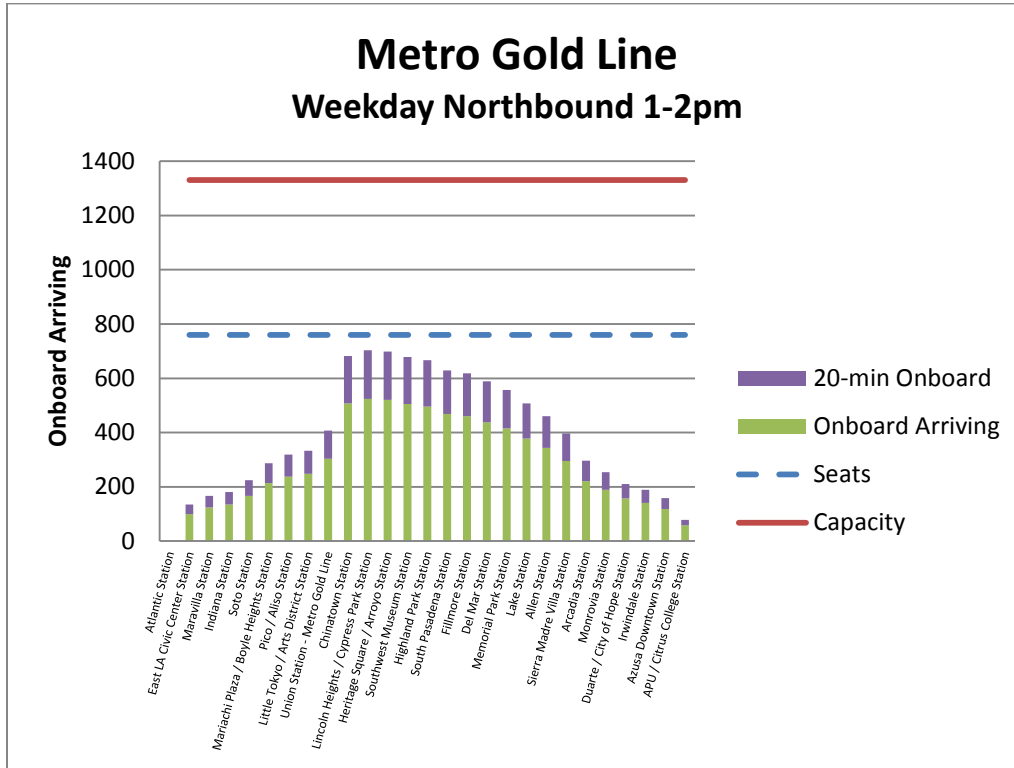
METRO GREEN LINE
Sundays



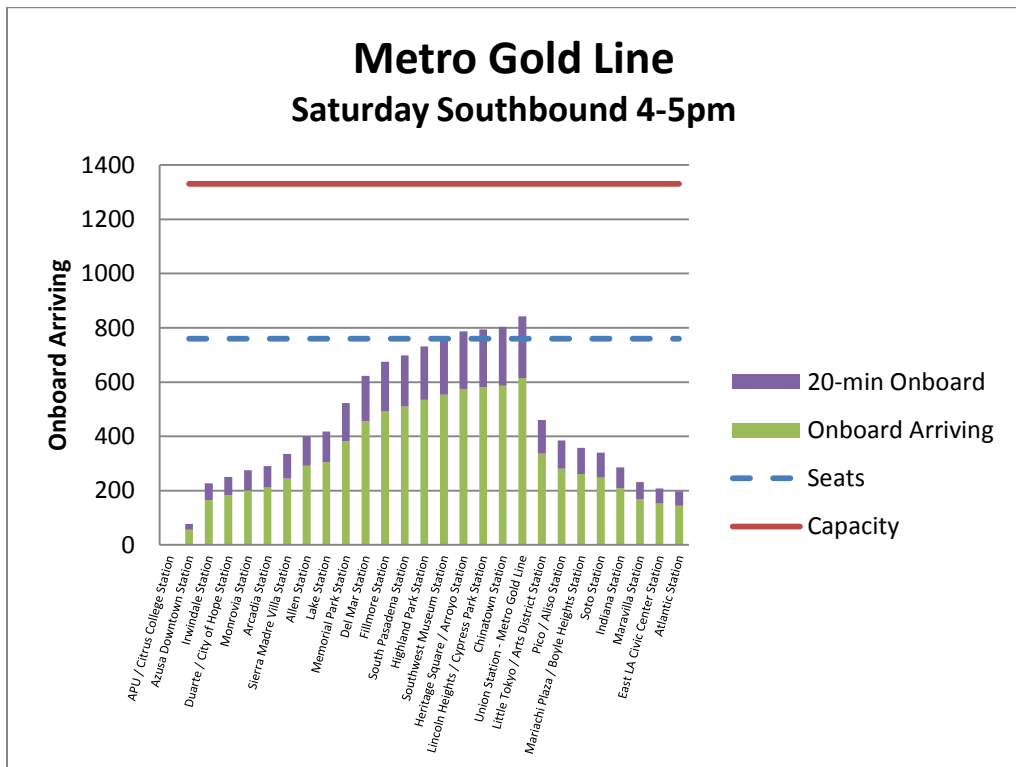
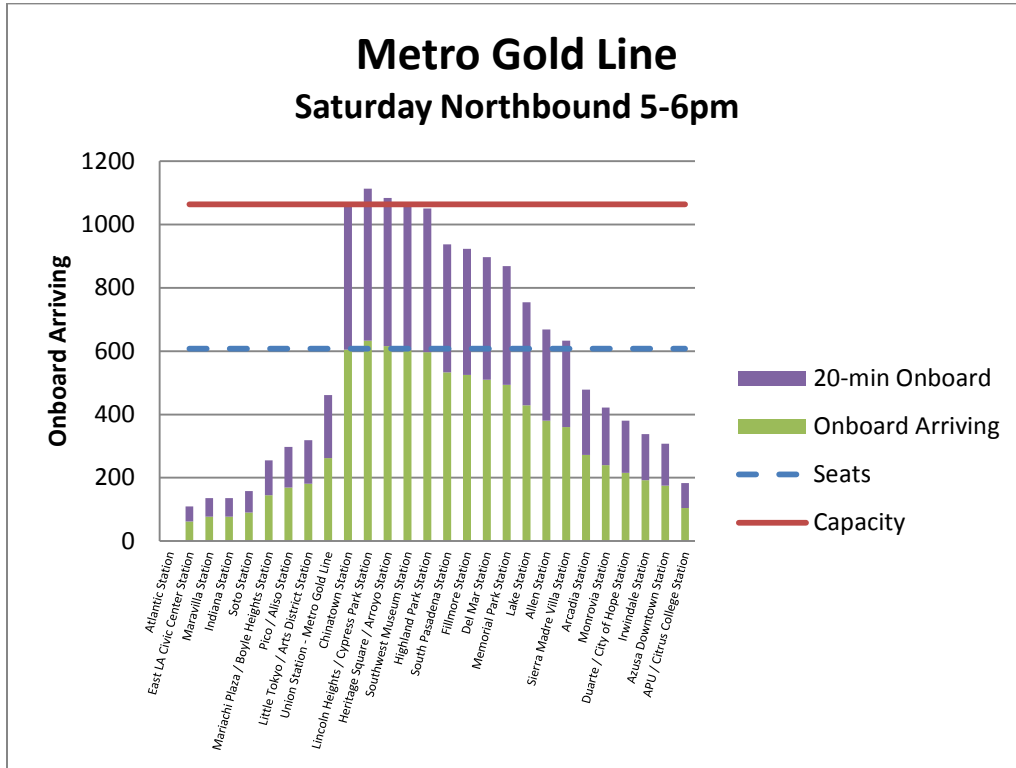
METRO GOLD LINE
Weekday Peak Hours



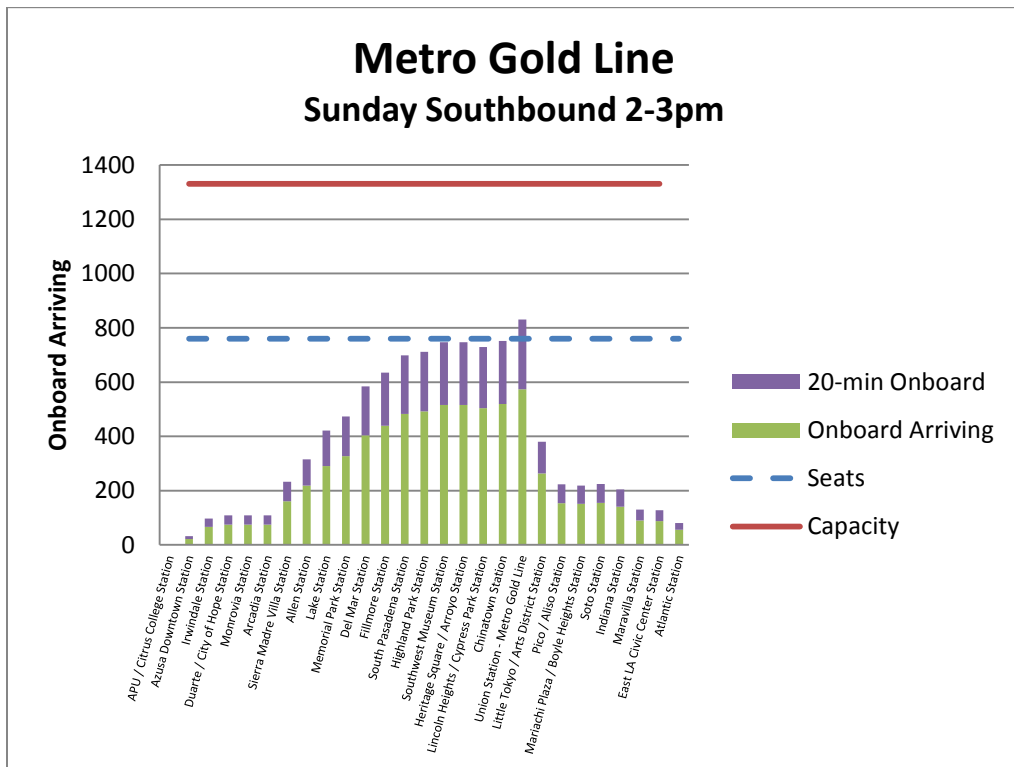
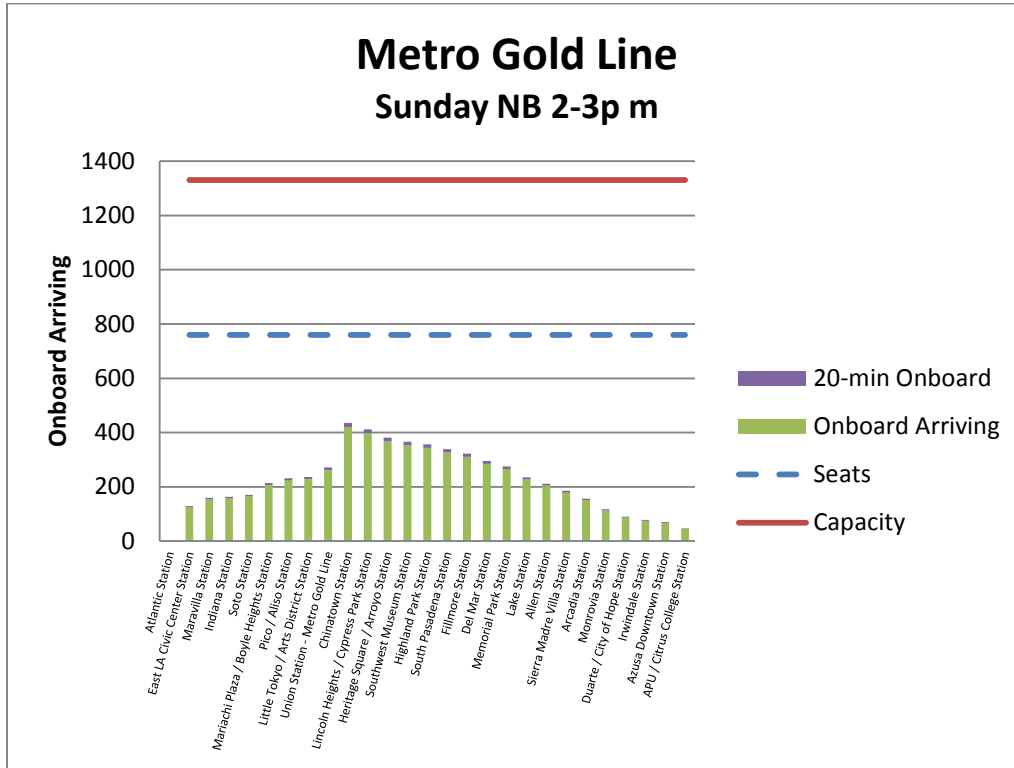
METRO GOLD LINE
Weekday Off Peak Hours



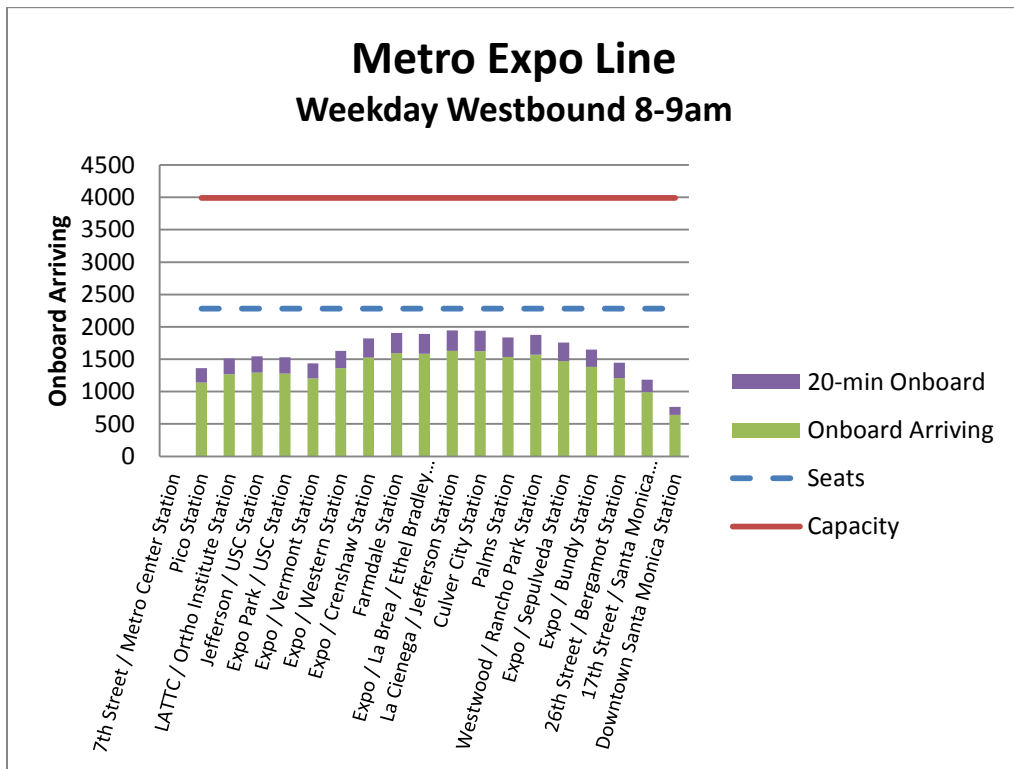
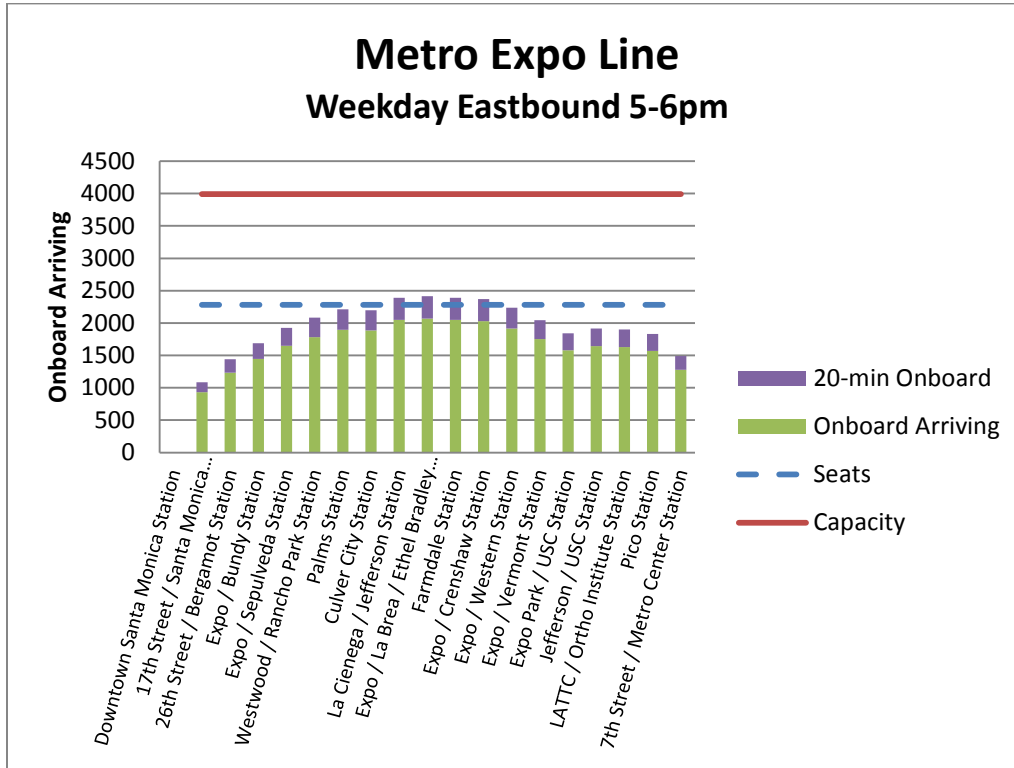
METRO GOLD LINE
Saturdays



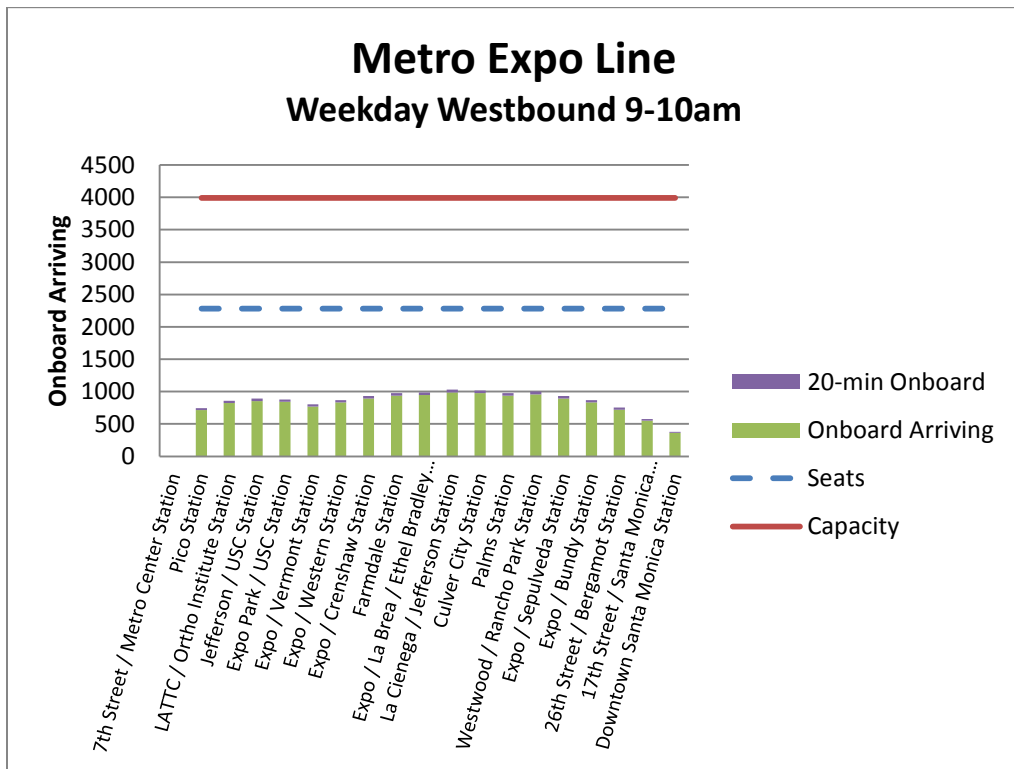
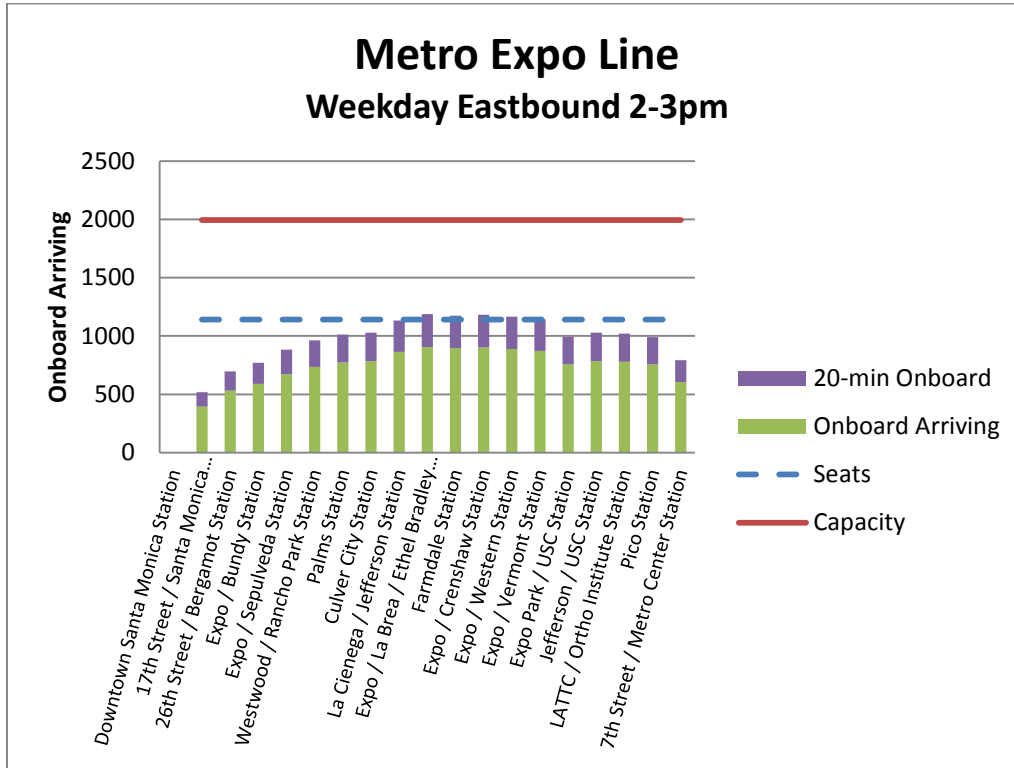
METRO GOLD LINE
Sundays



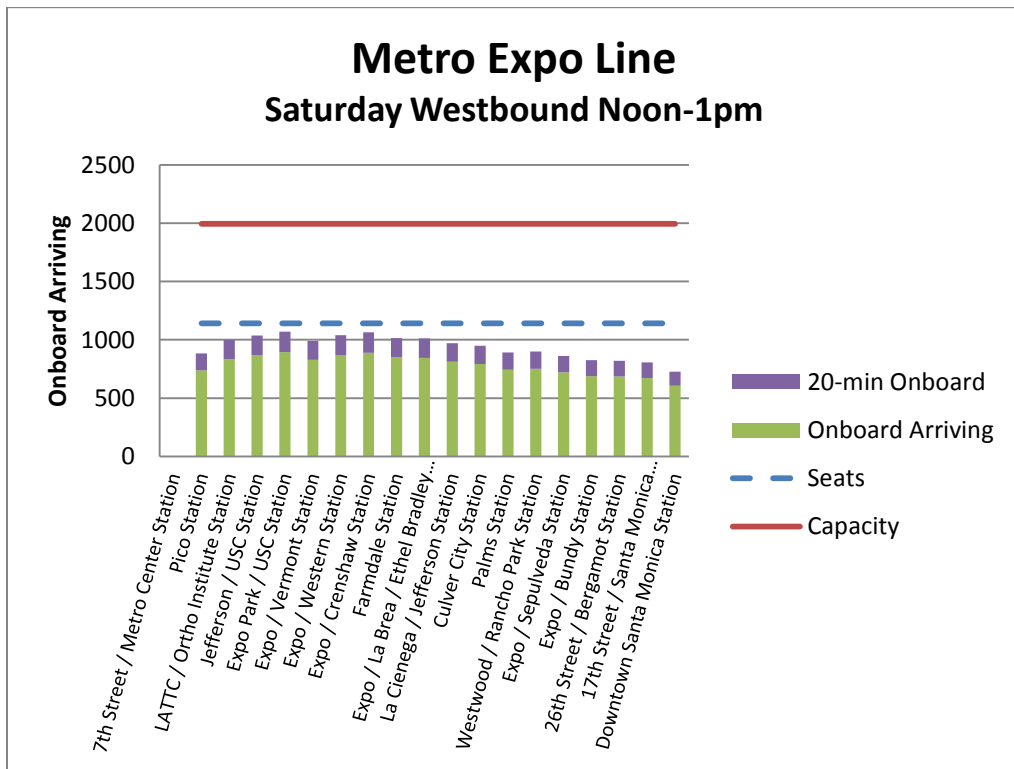
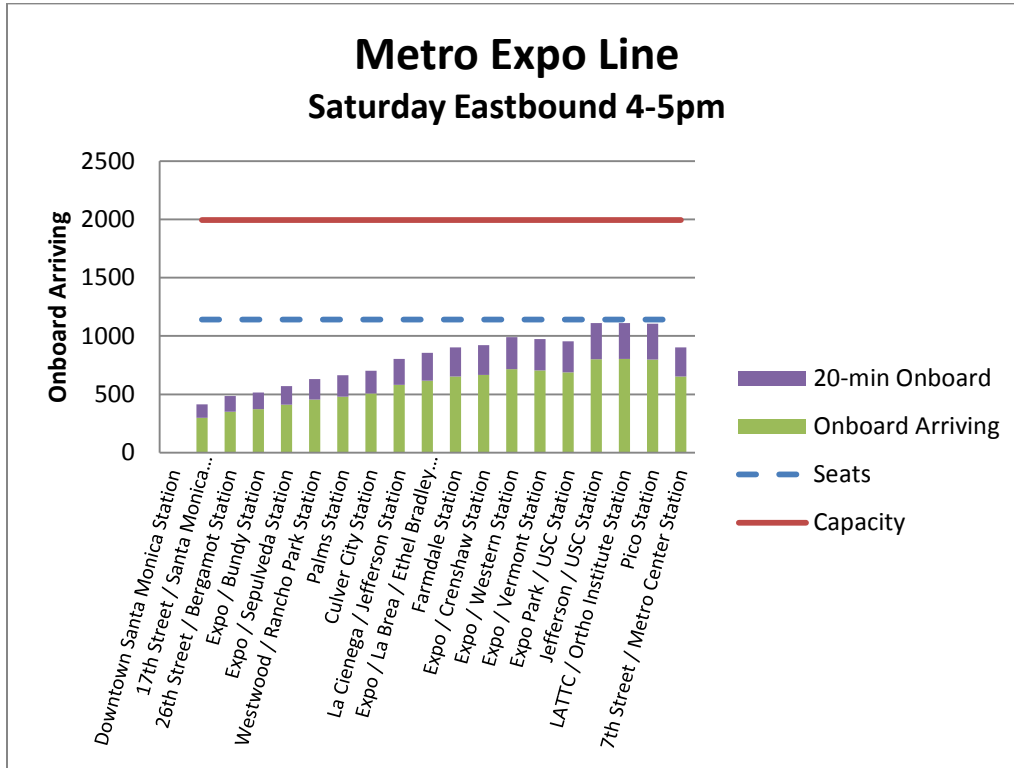
METRO EXPO LINE
Weekday Peak Hours



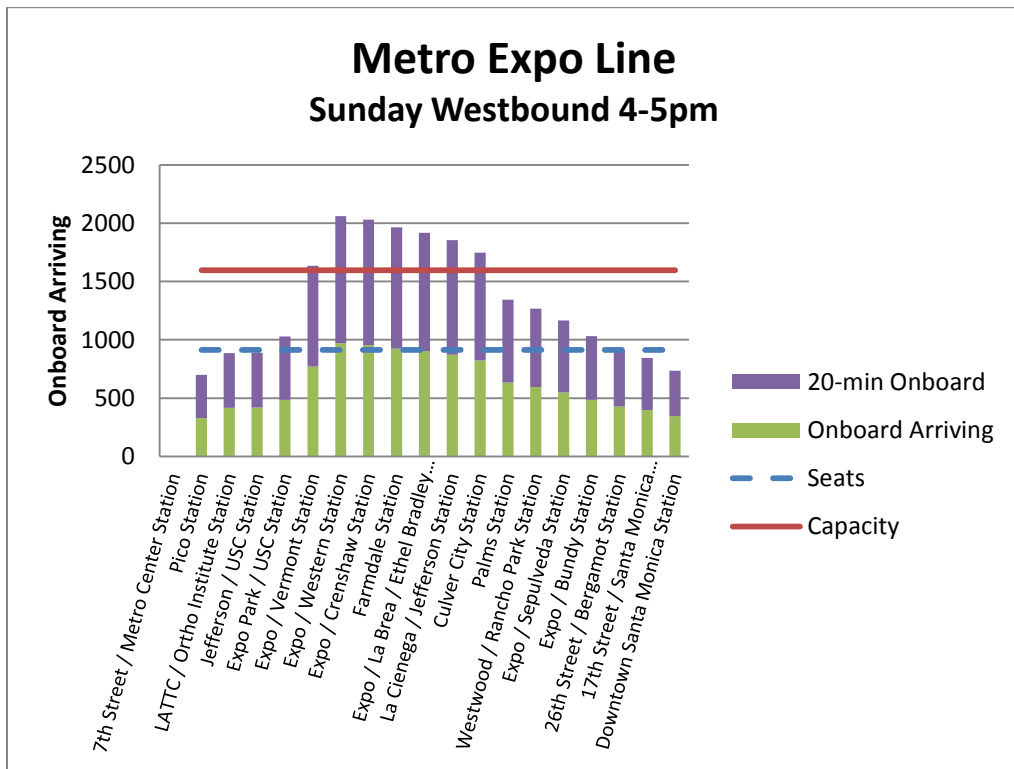
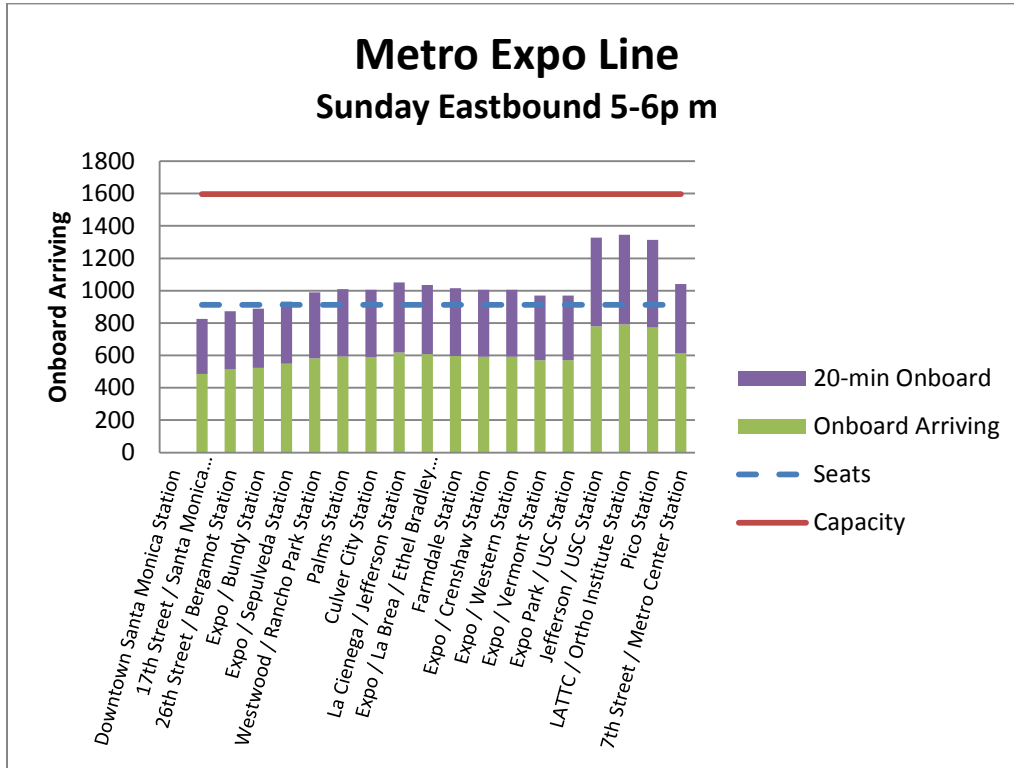
METRO EXPO LINE
Weekday Off Peak Hours



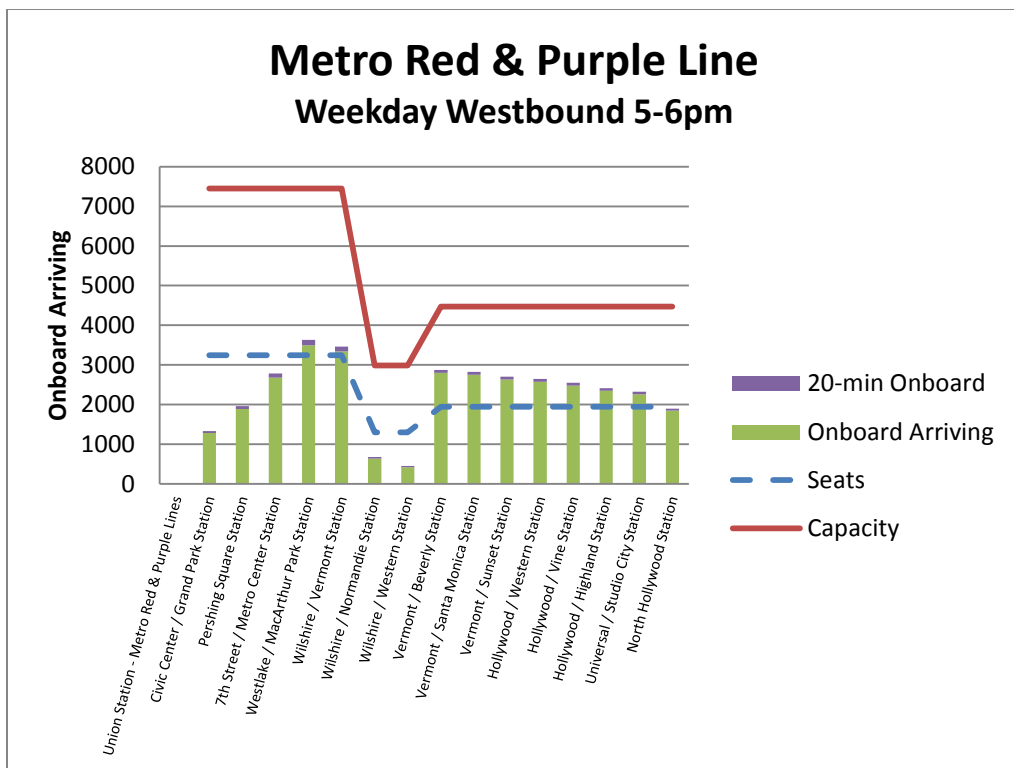
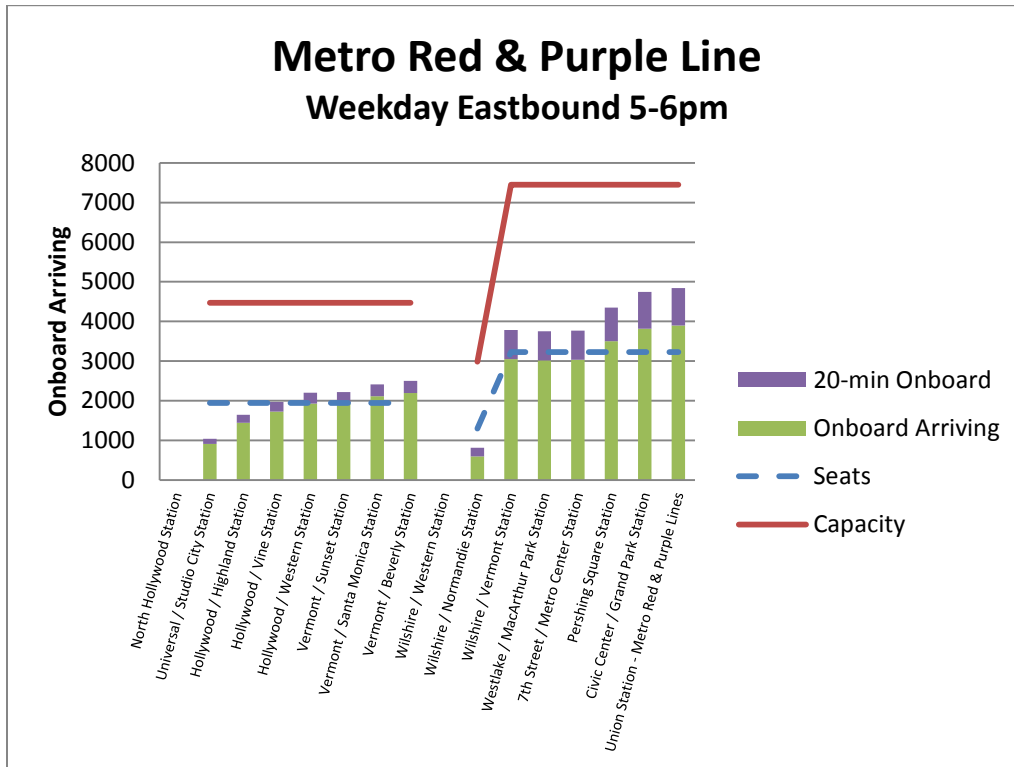
METRO EXPO LINE
Saturdays



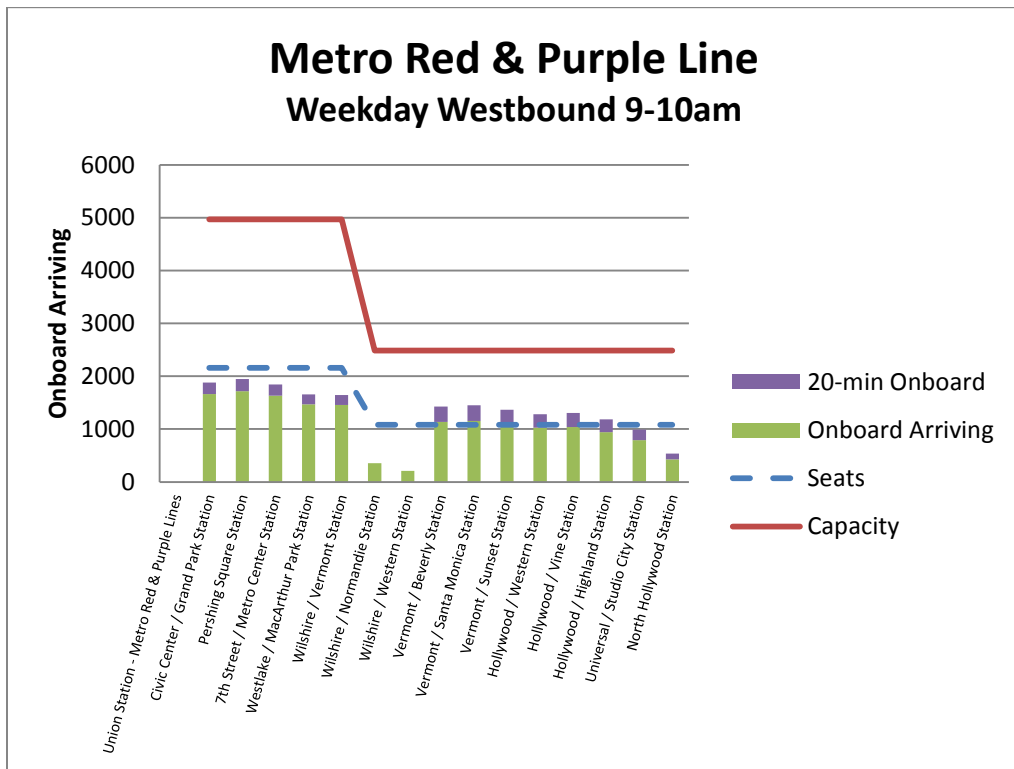
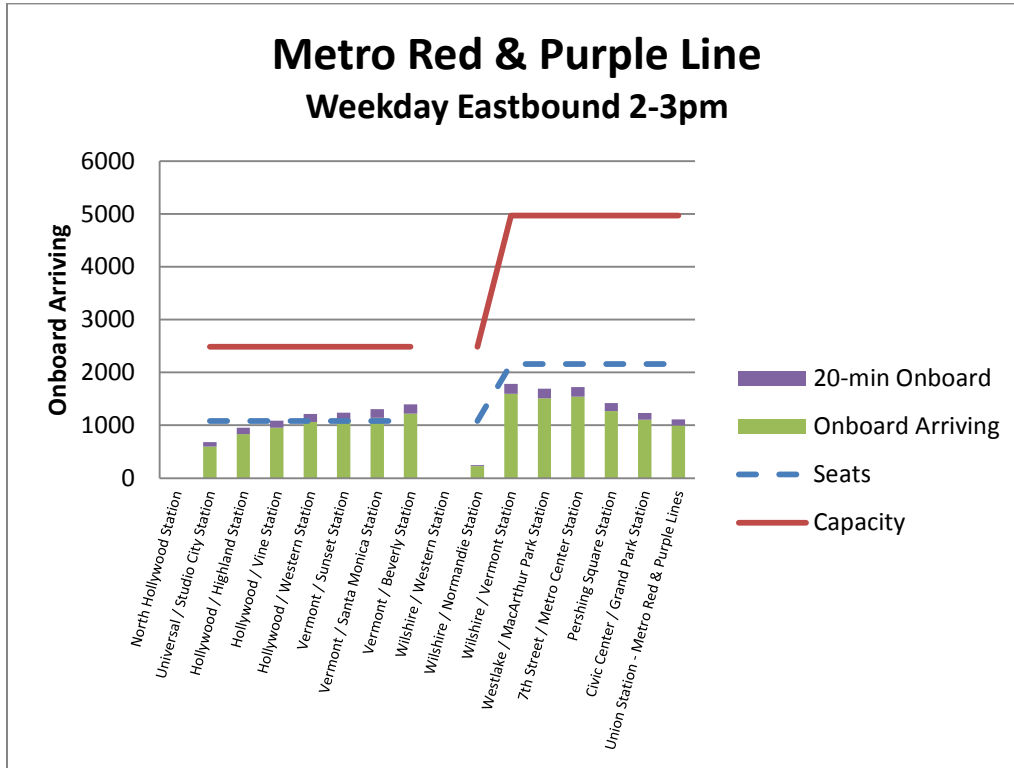
METRO EXPO LINE
Sundays



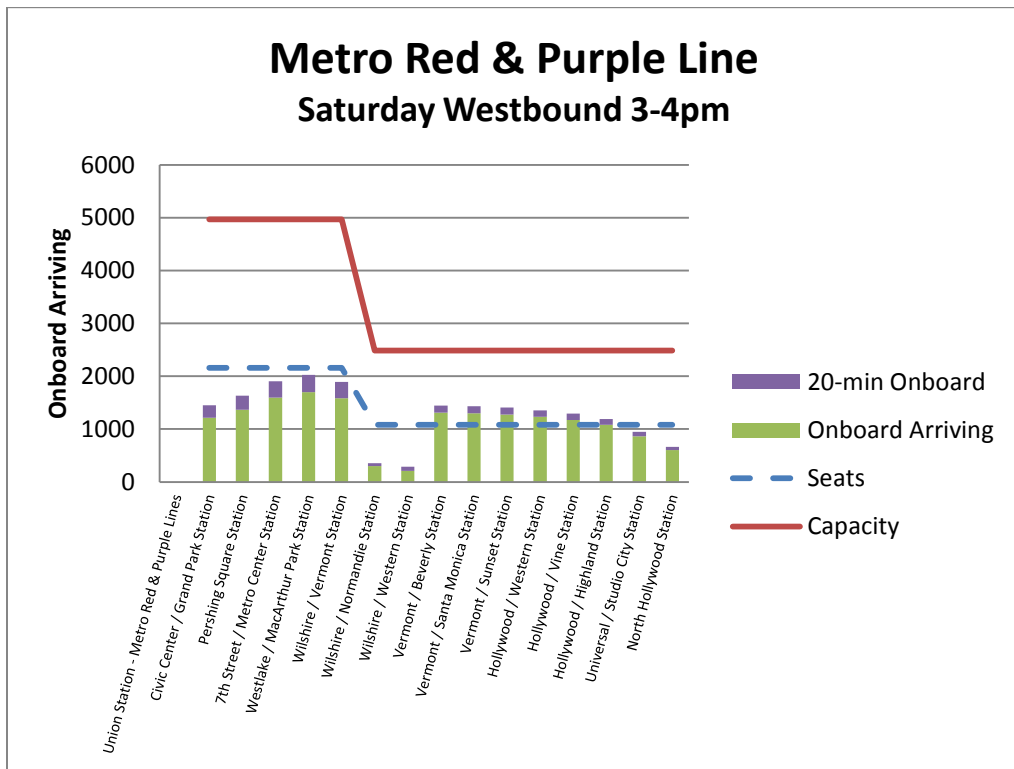
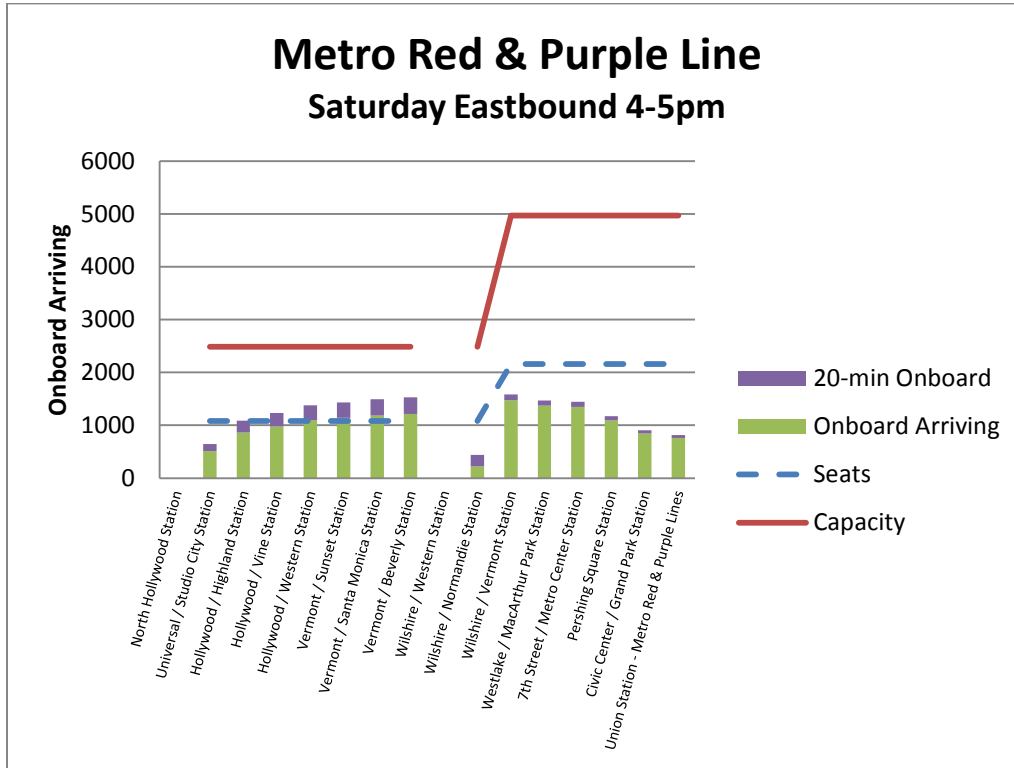
METRO RED/PURPLE LINES
Weekday Peak Hours



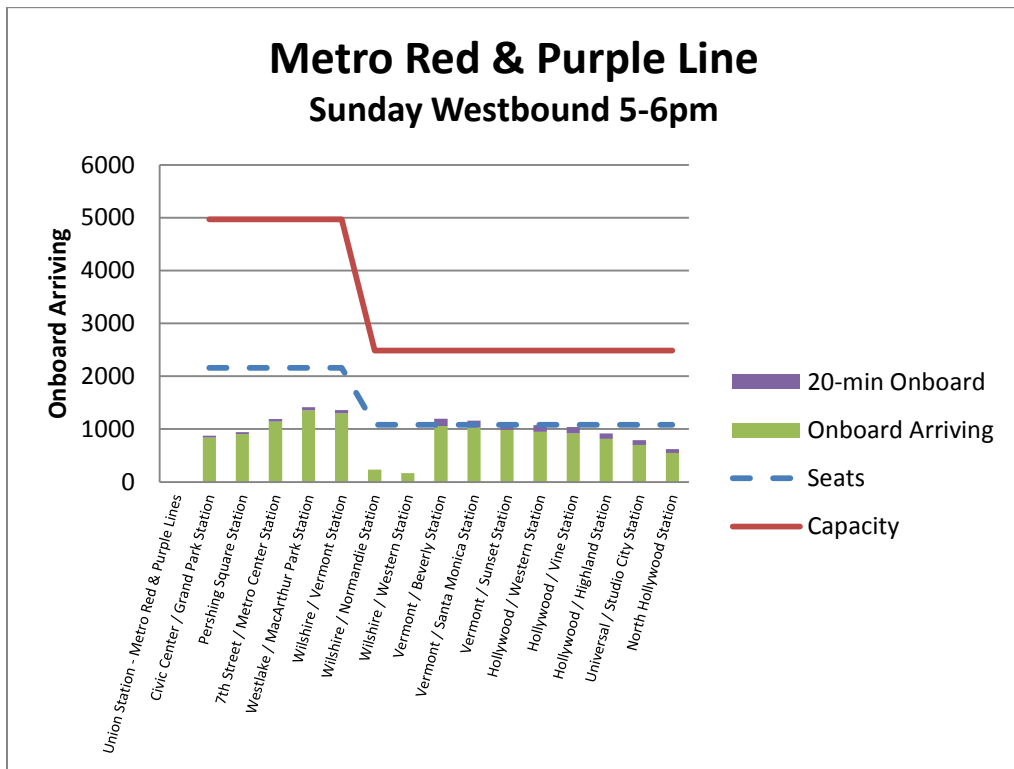
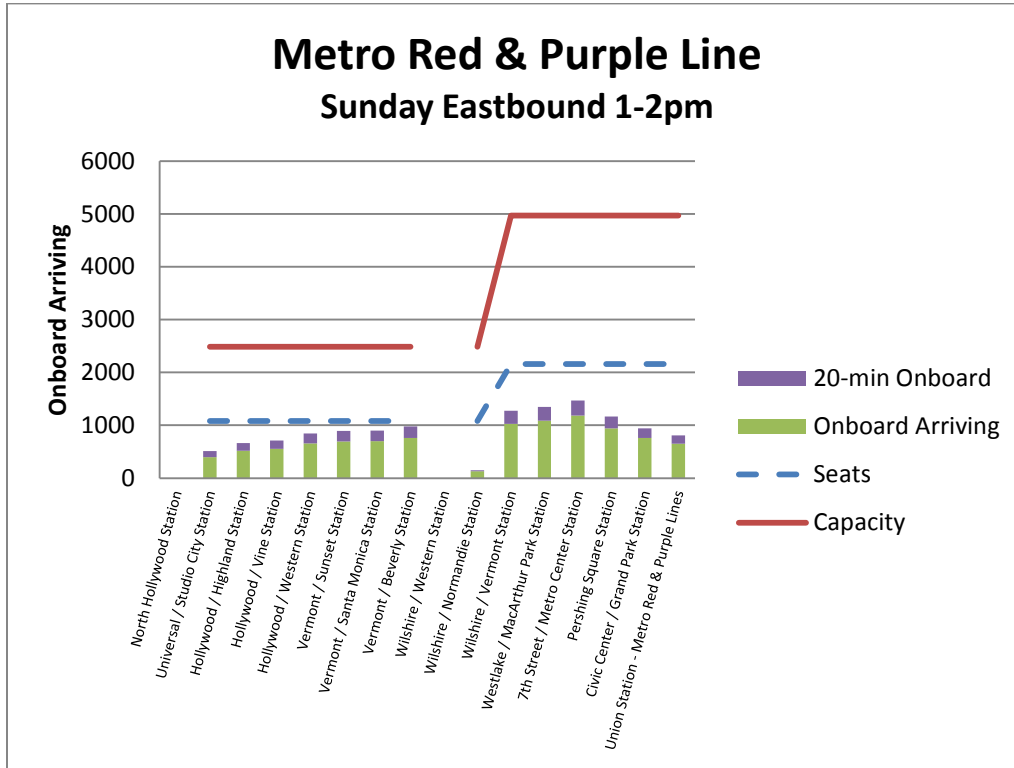
METRO RED/PURPLE LINES
Weekday Off Peak Hours



METRO RED/PURPLE LINES
Saturdays



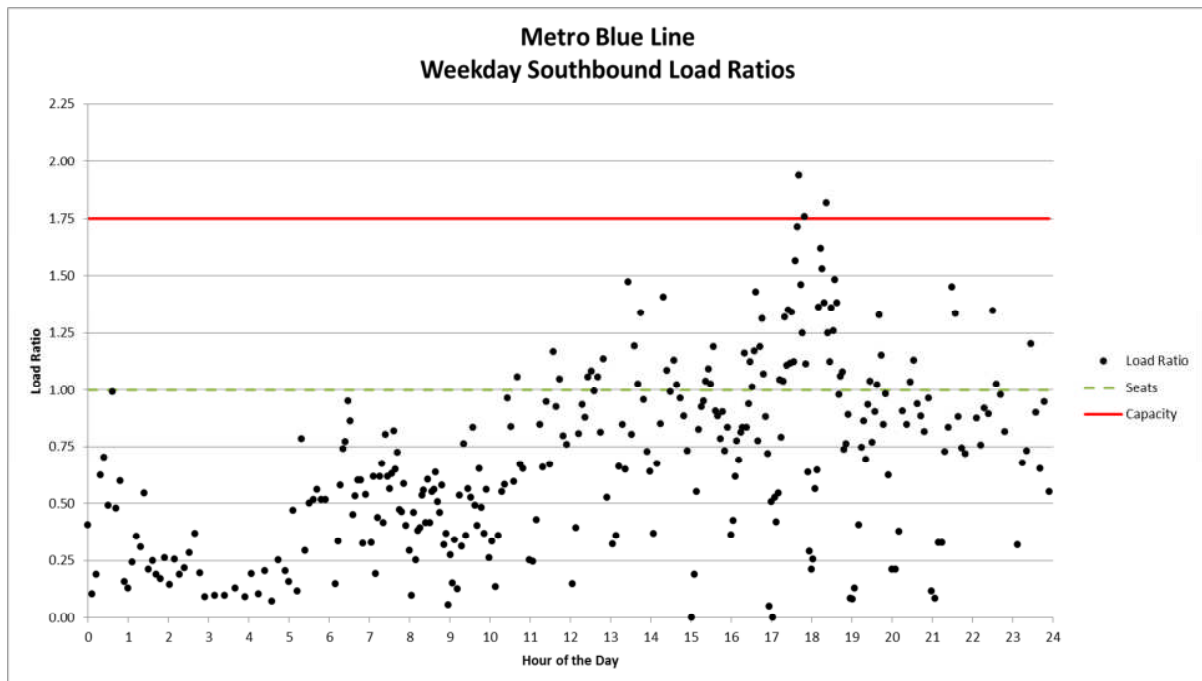
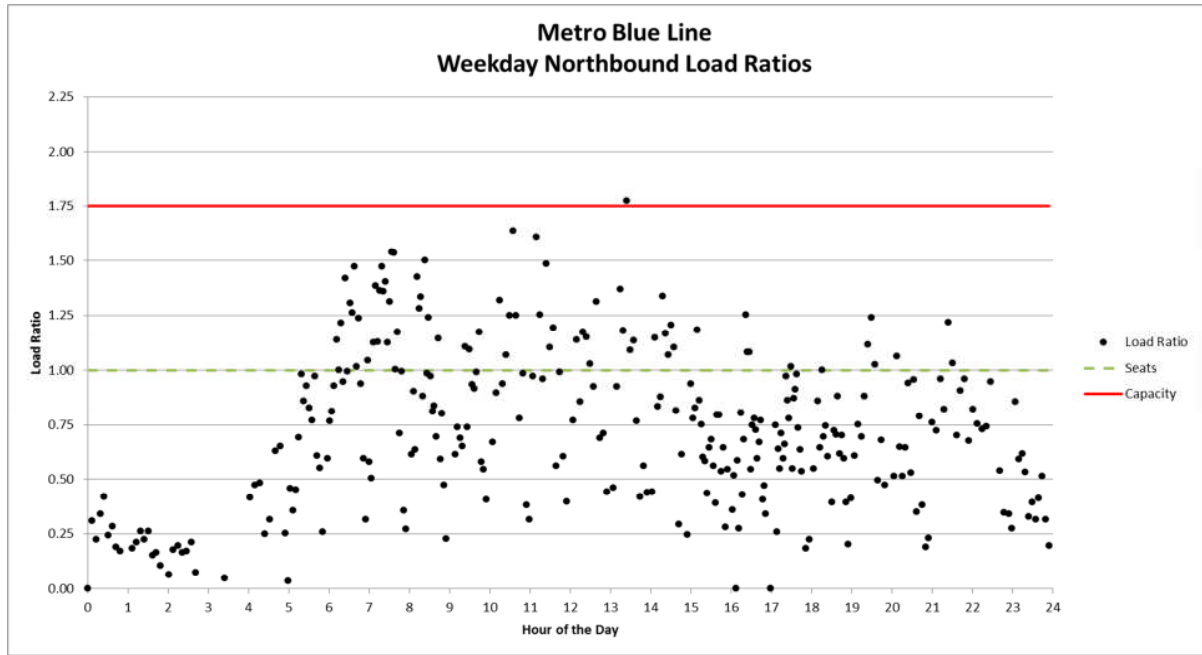
METRO RED/PURPLE LINES
Sundays



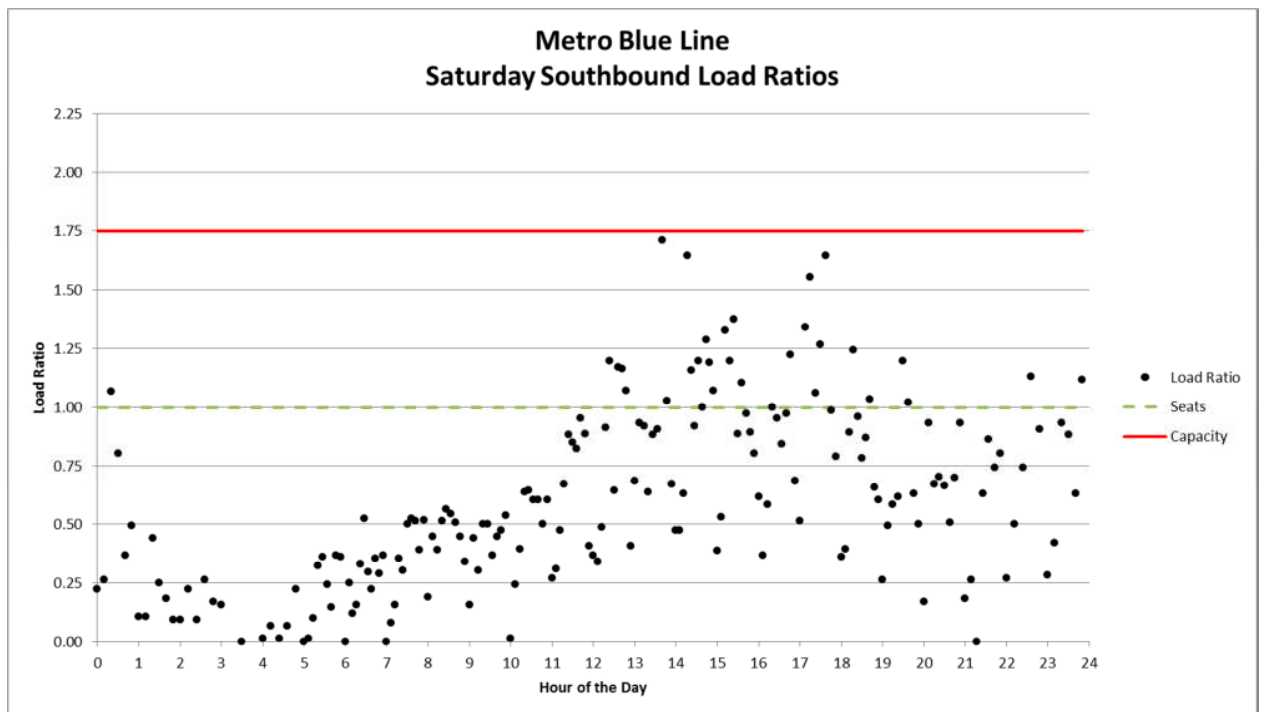
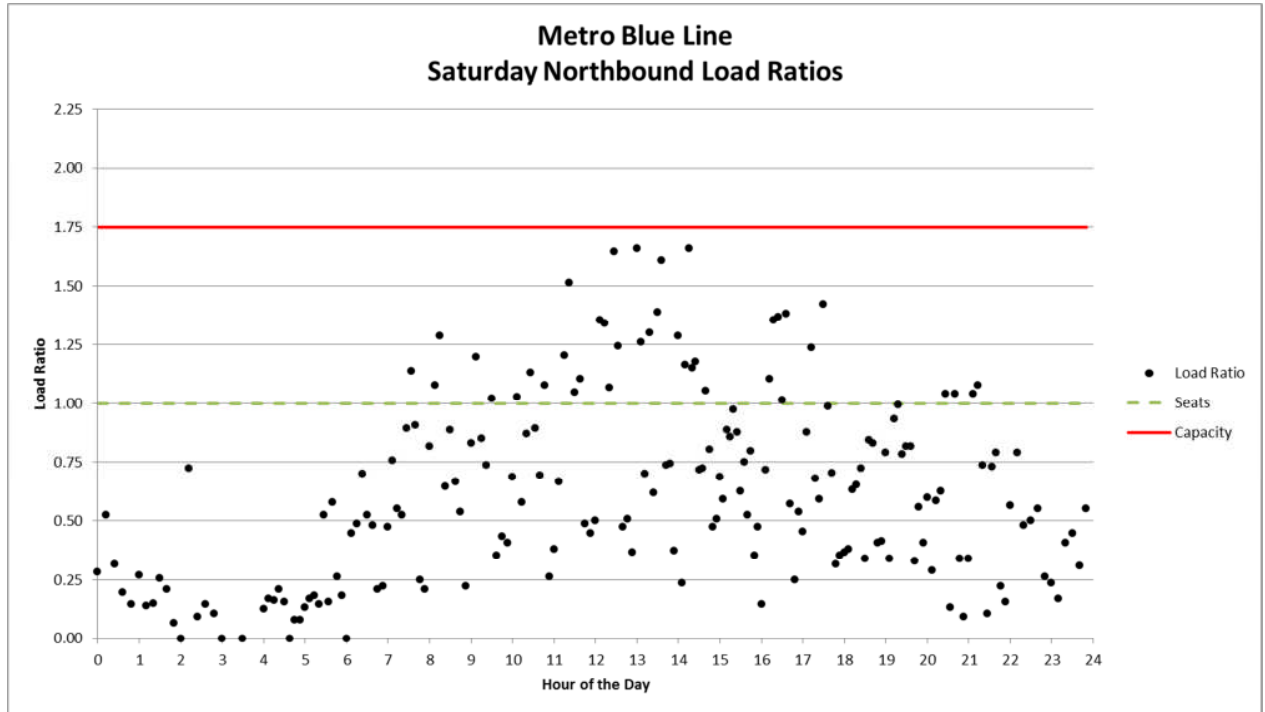
REVISED - ATTACHMENT C

Train By Train Loading in Relation to Train Capacity

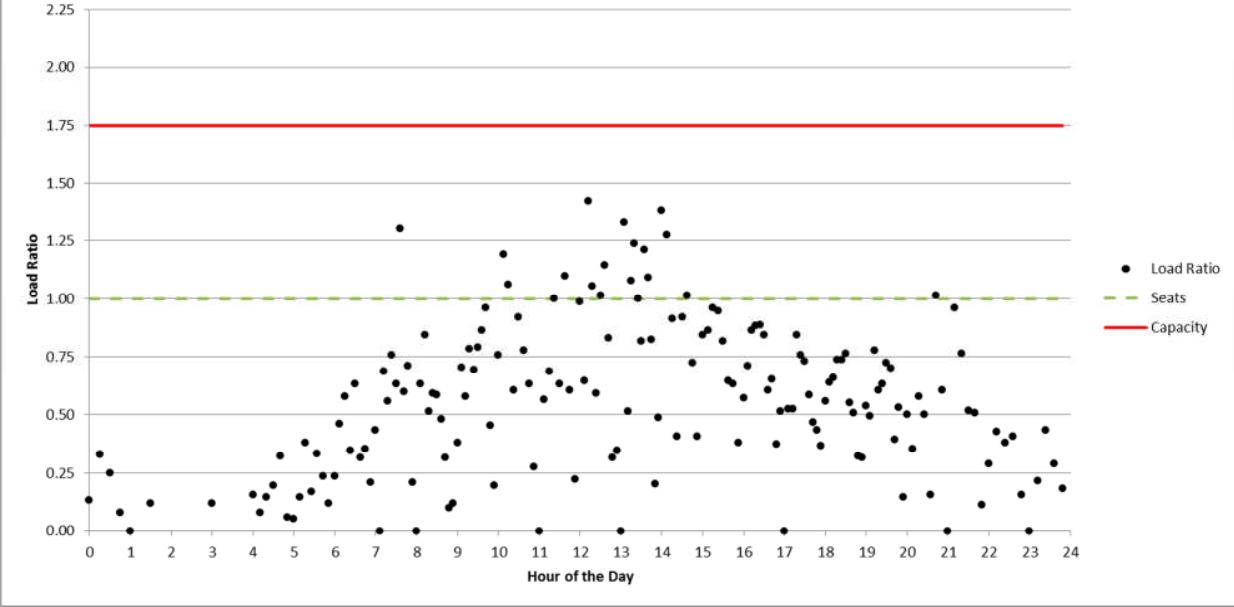
**METRO BLUE LINE
WEEKDAY LOAD RATIOS**



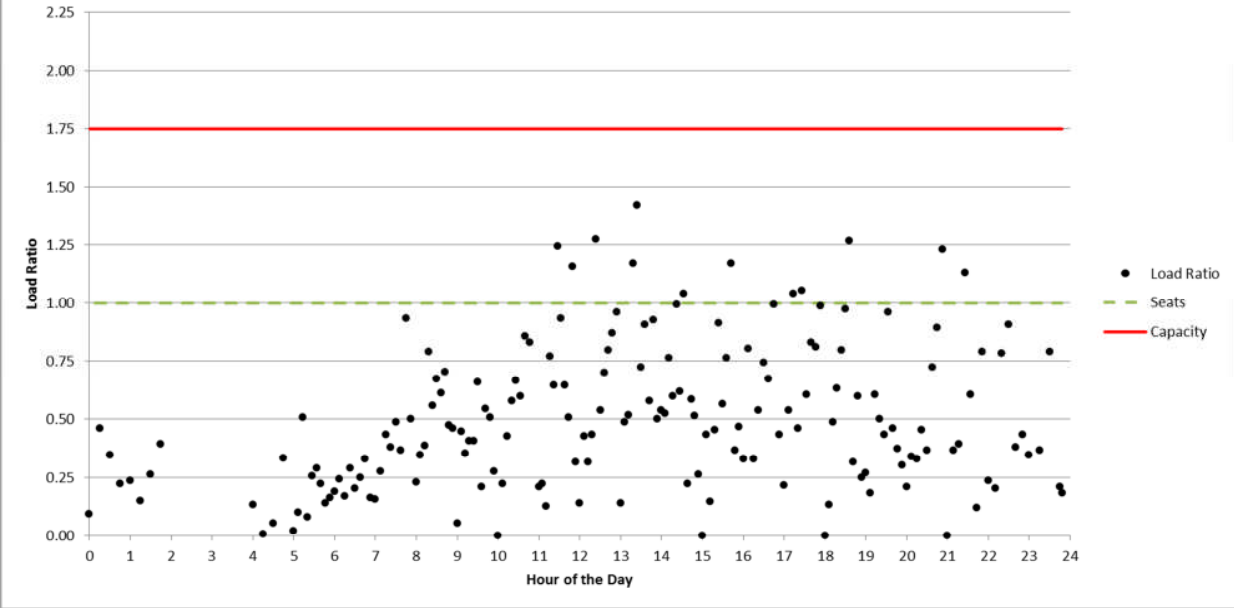
METRO BLUE LINE
WEEKEND LOAD RATIOS



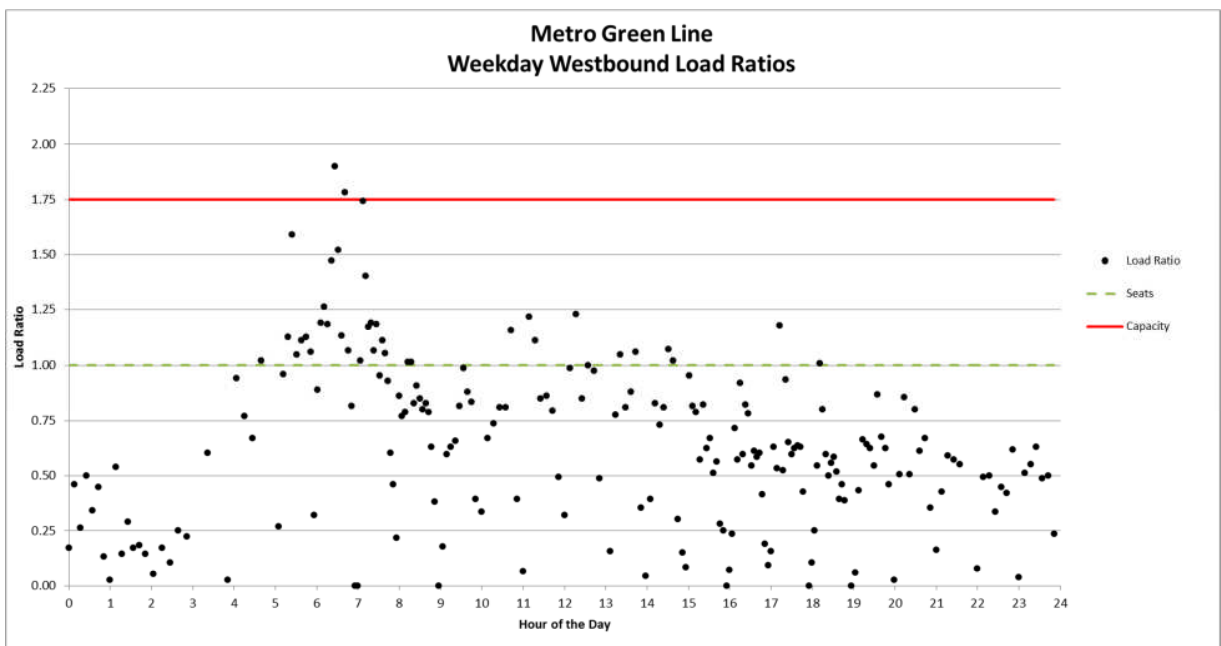
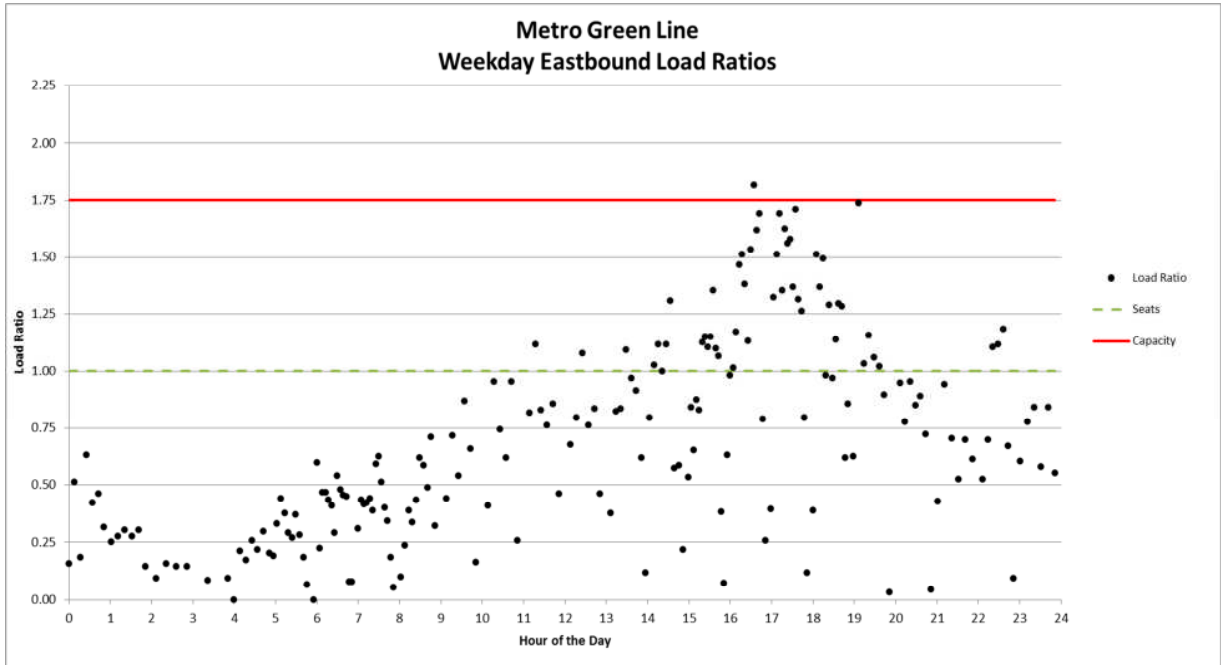
Metro Blue Line Sunday Northbound Load Ratios



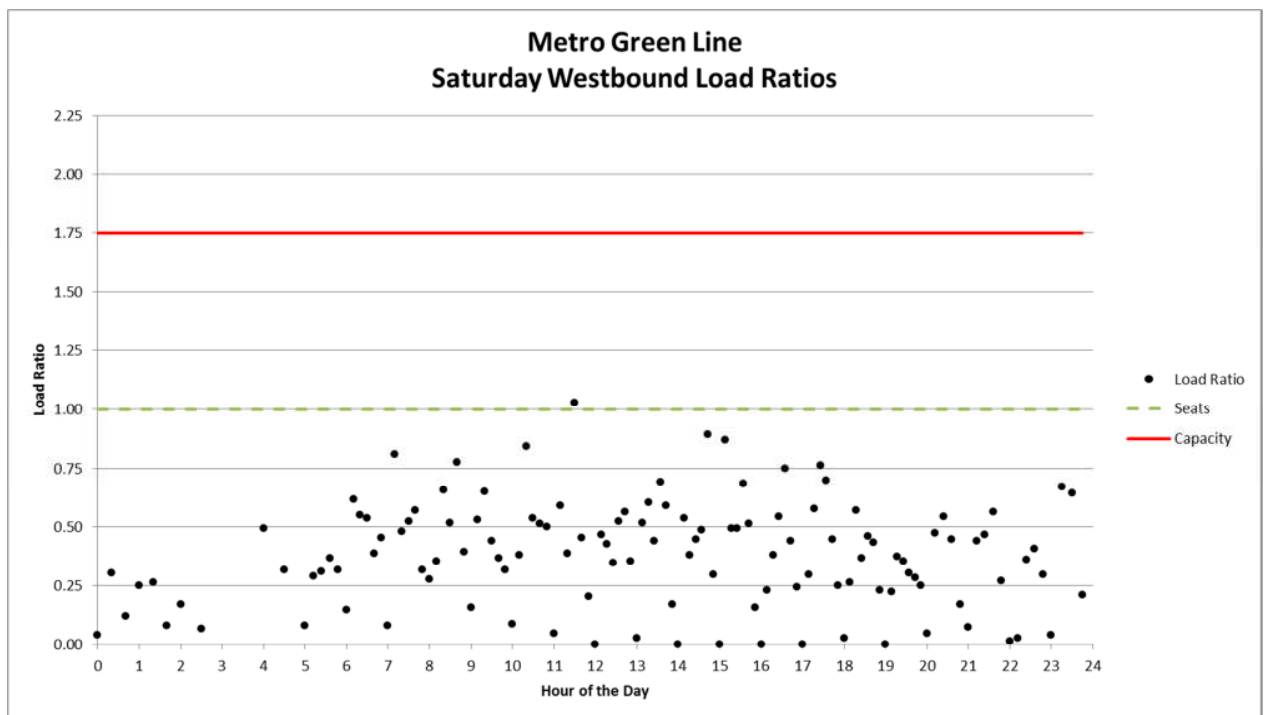
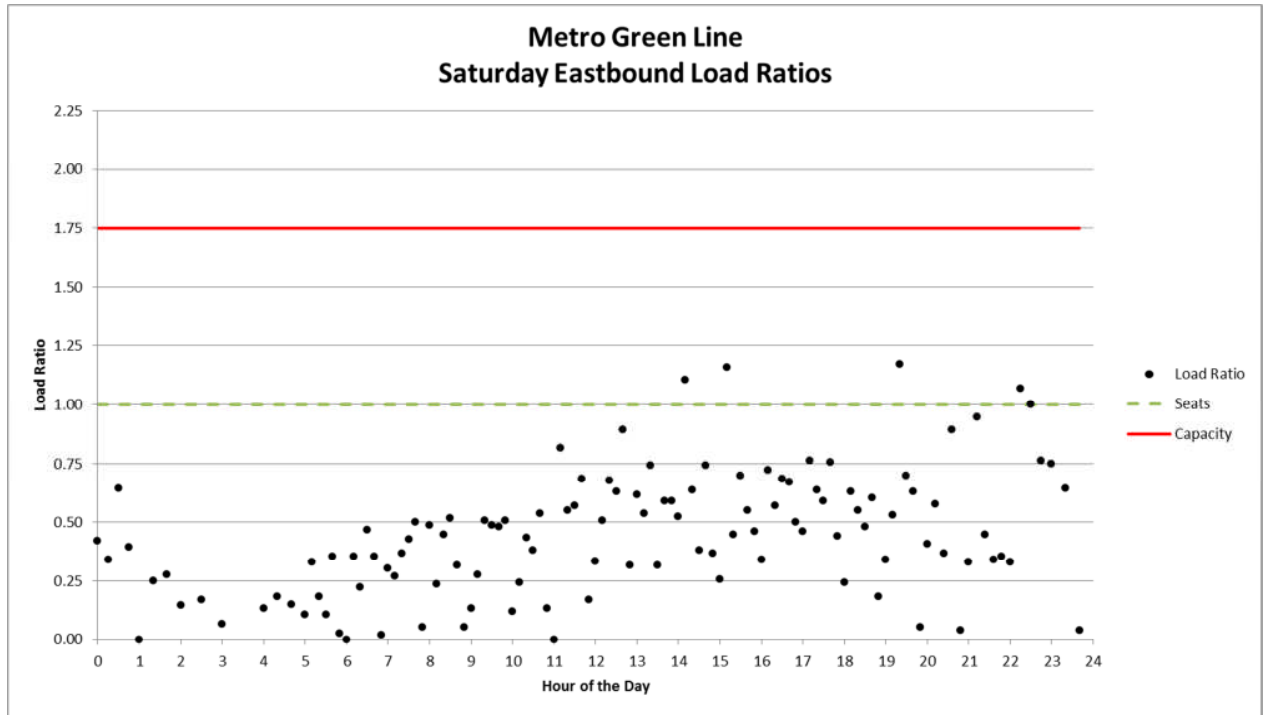
Metro Blue Line Sunday Southbound Load Ratios



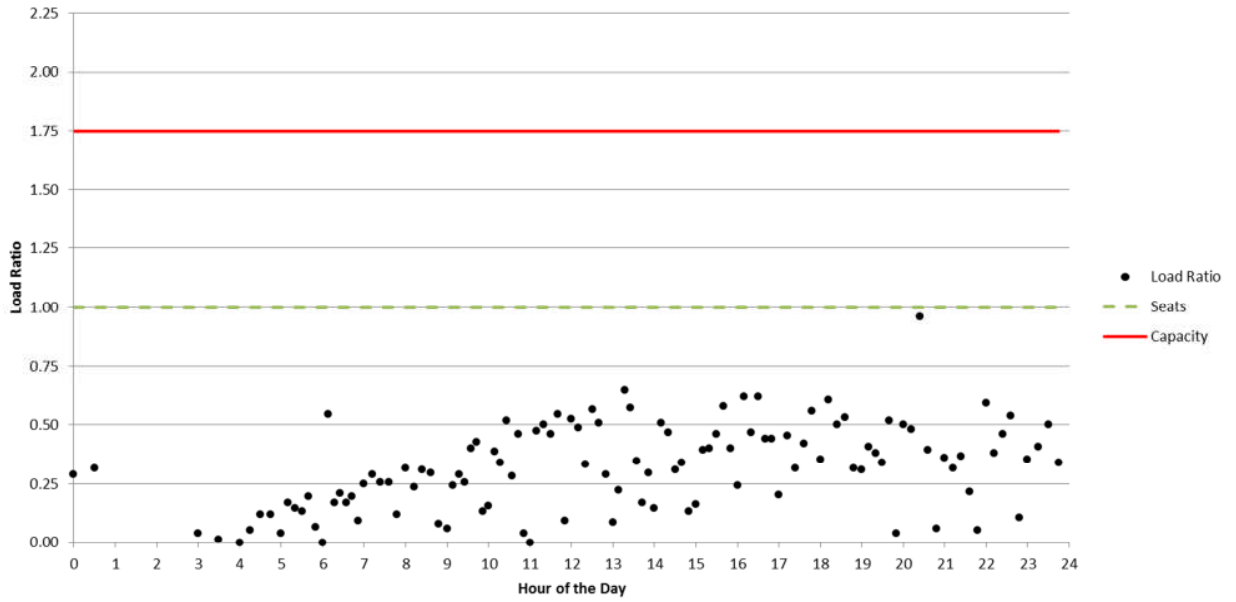
METRO GREEN LINE WEEKDAY LOAD RATIOS



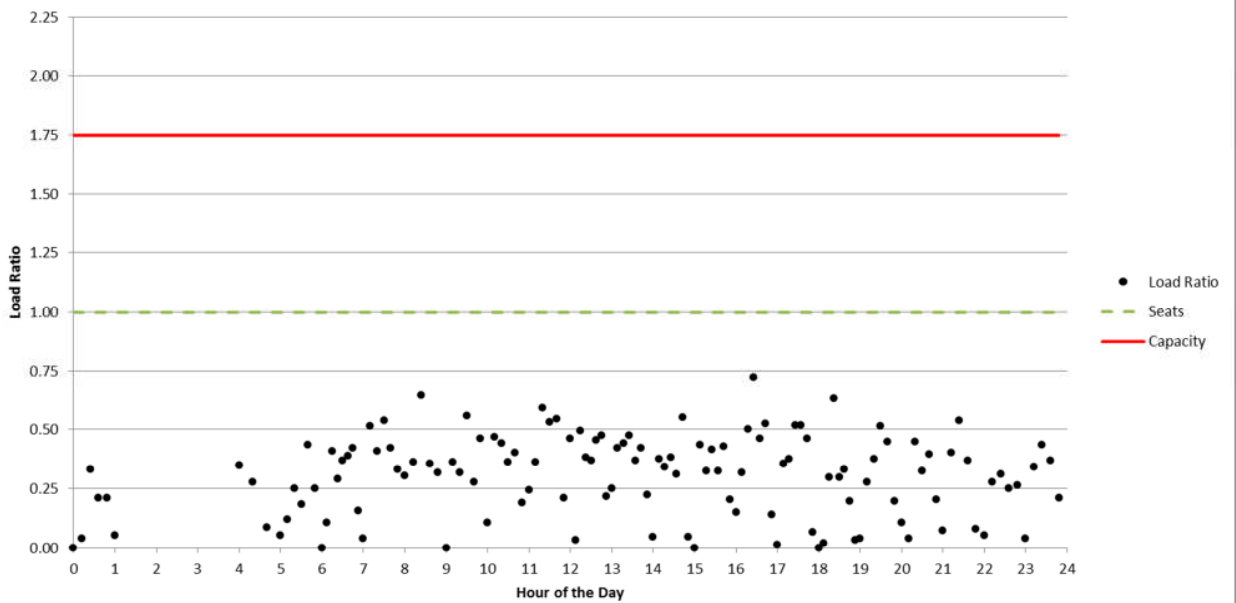
METRO GREEN LINE WEEKEND LOAD RATIOS



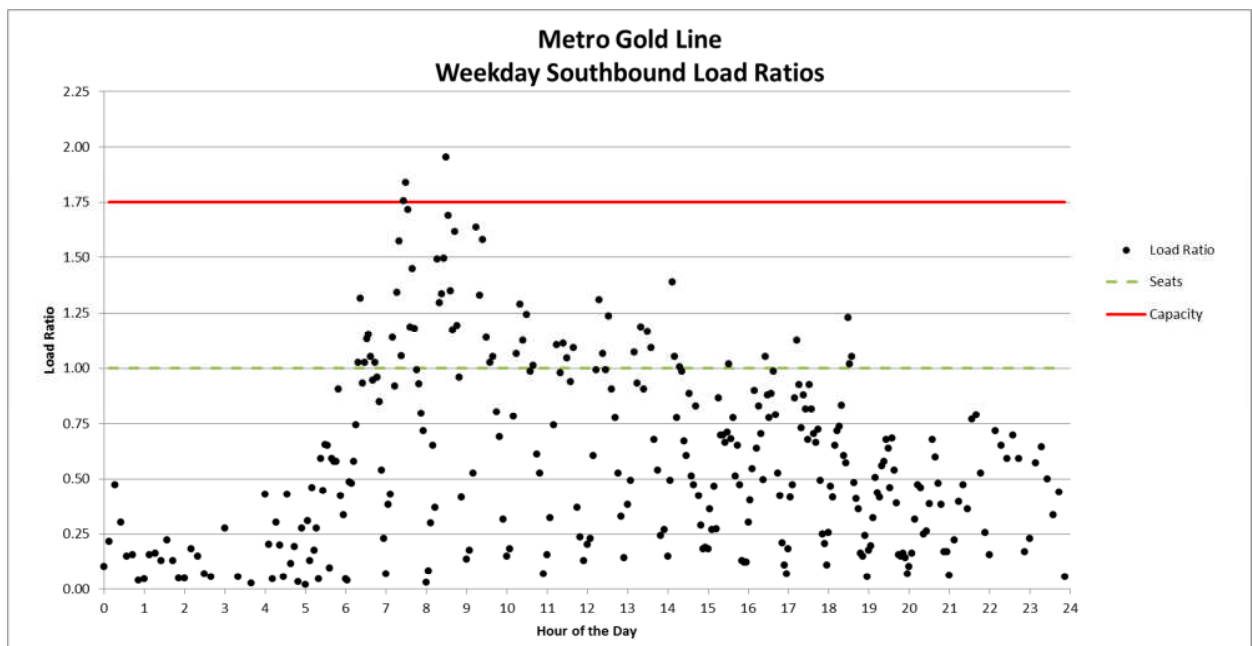
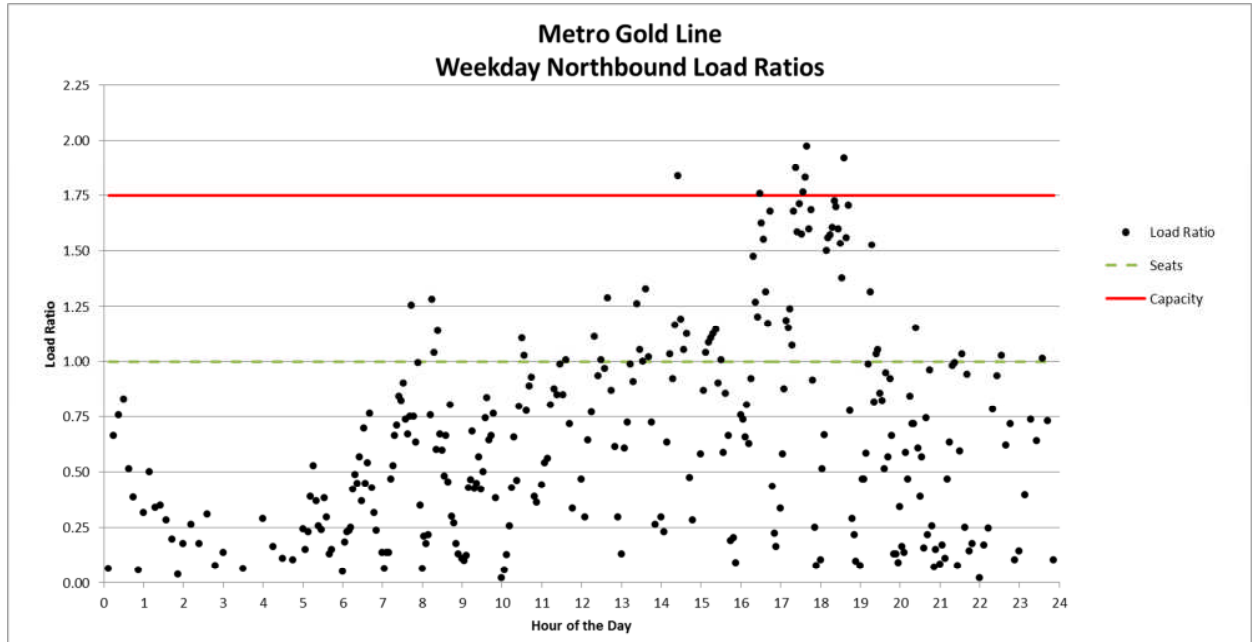
Metro Green Line Sunday Eastbound Load Ratios



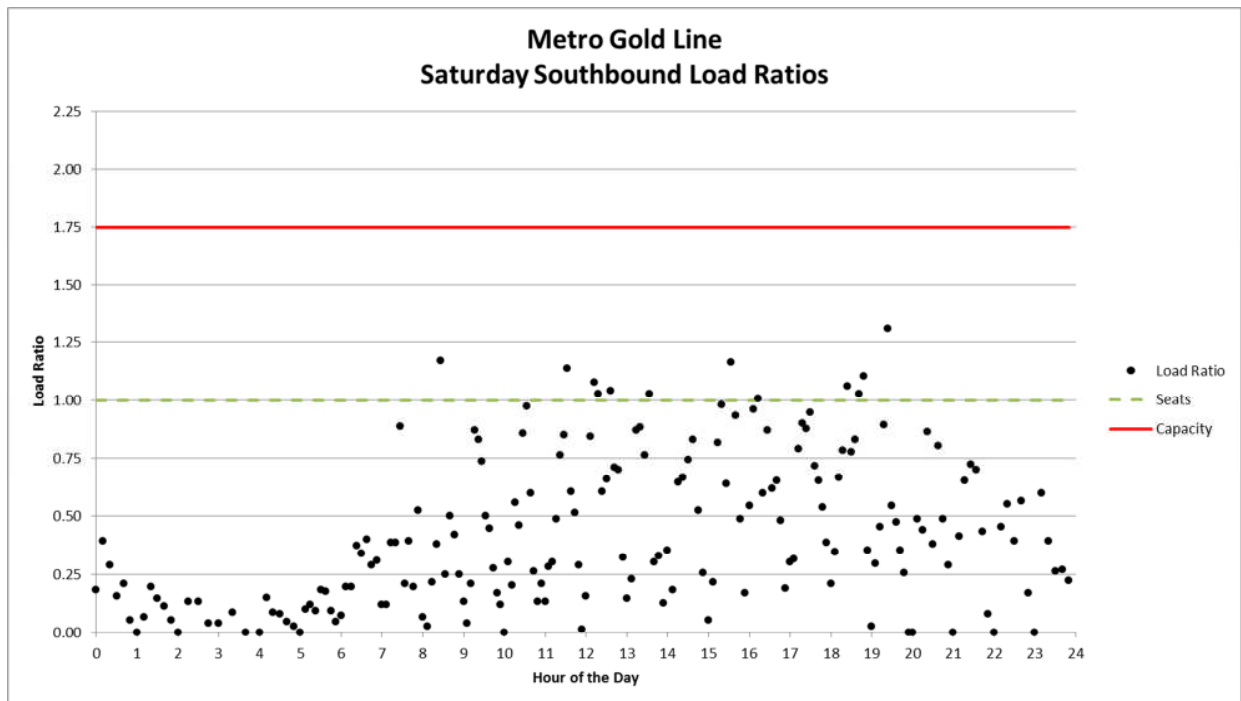
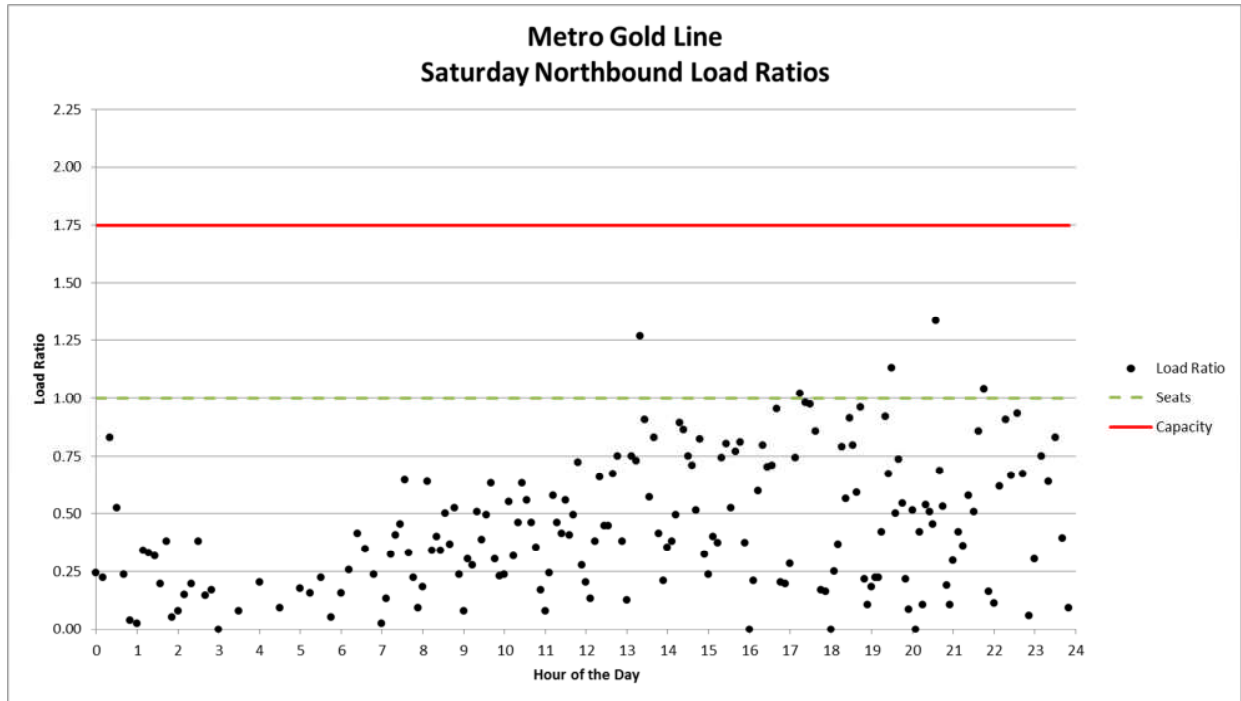
Metro Green Line Sunday Westbound Load Ratios



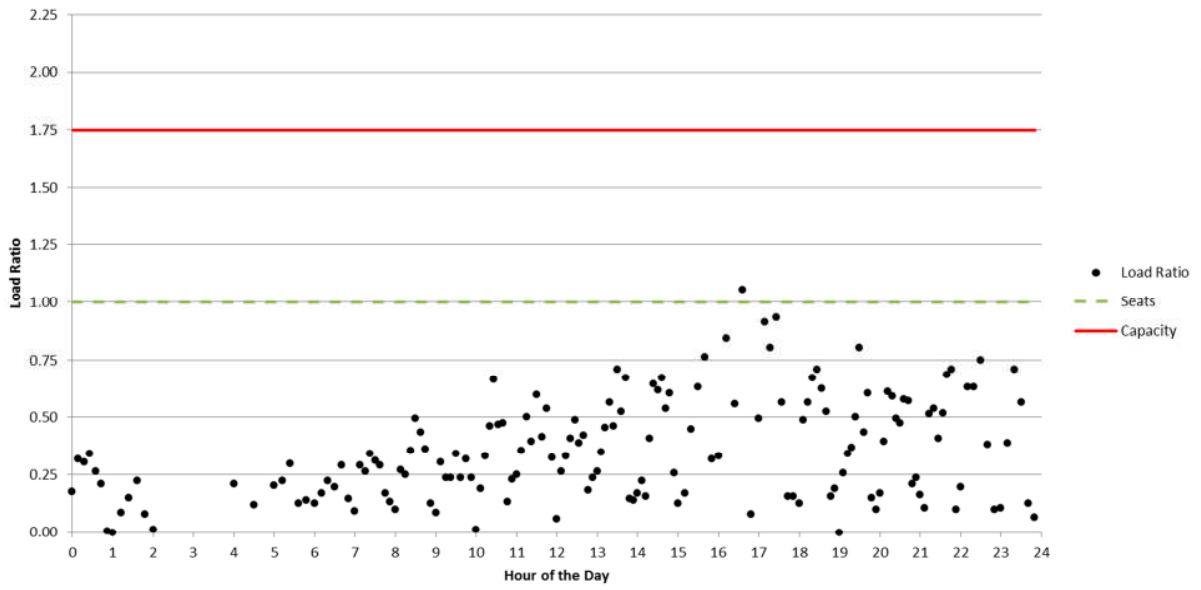
METRO GOLD LINE WEEKDAY LOAD RATIOS



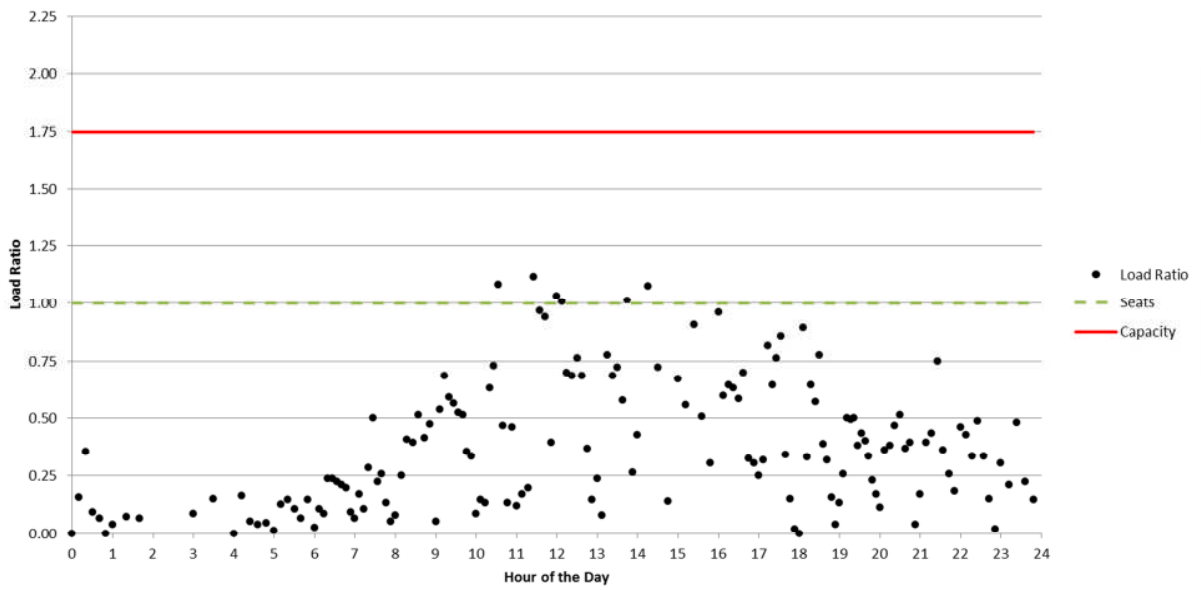
METRO GOLD LINE
WEEKEND LOAD RATIOS



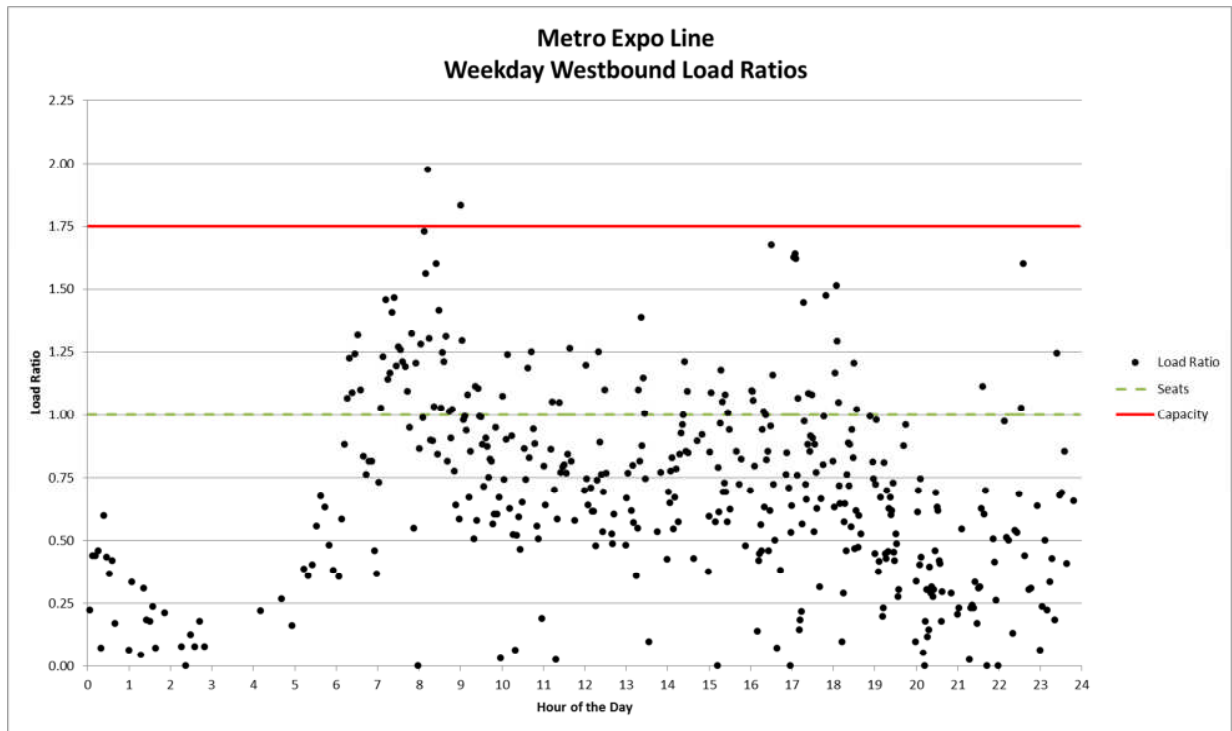
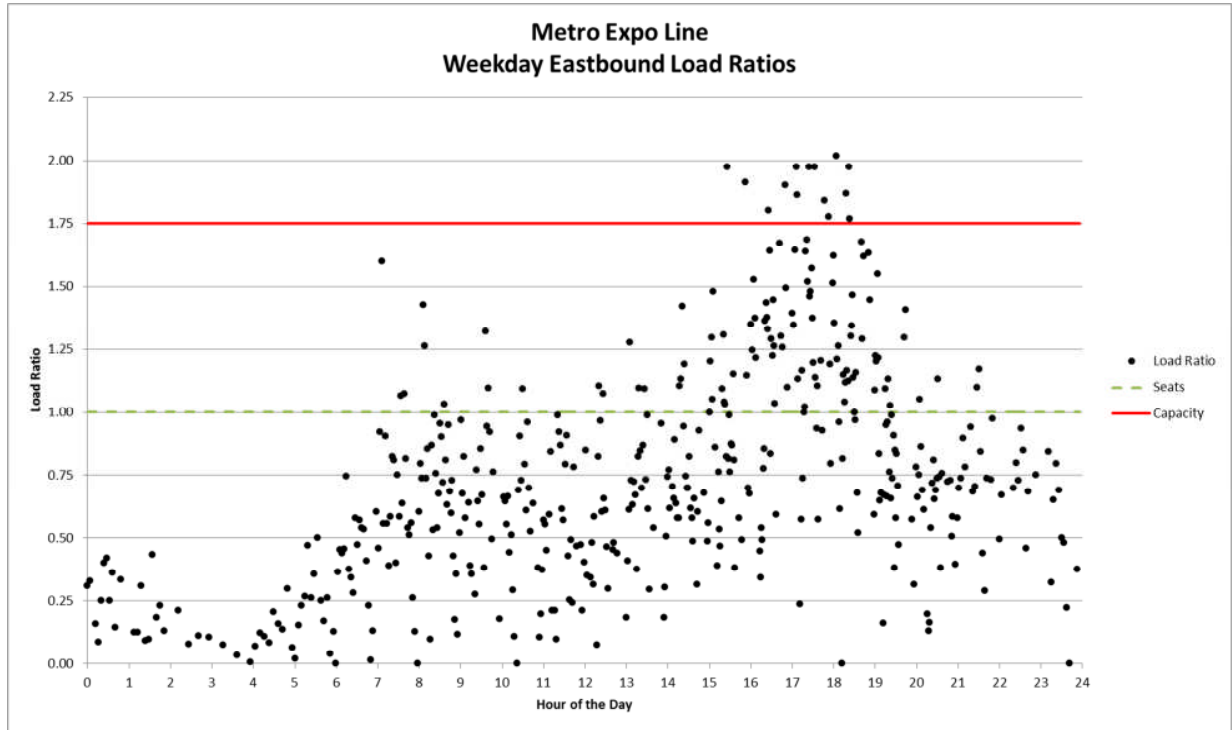
Metro Gold Line Sunday Northbound Load Ratios



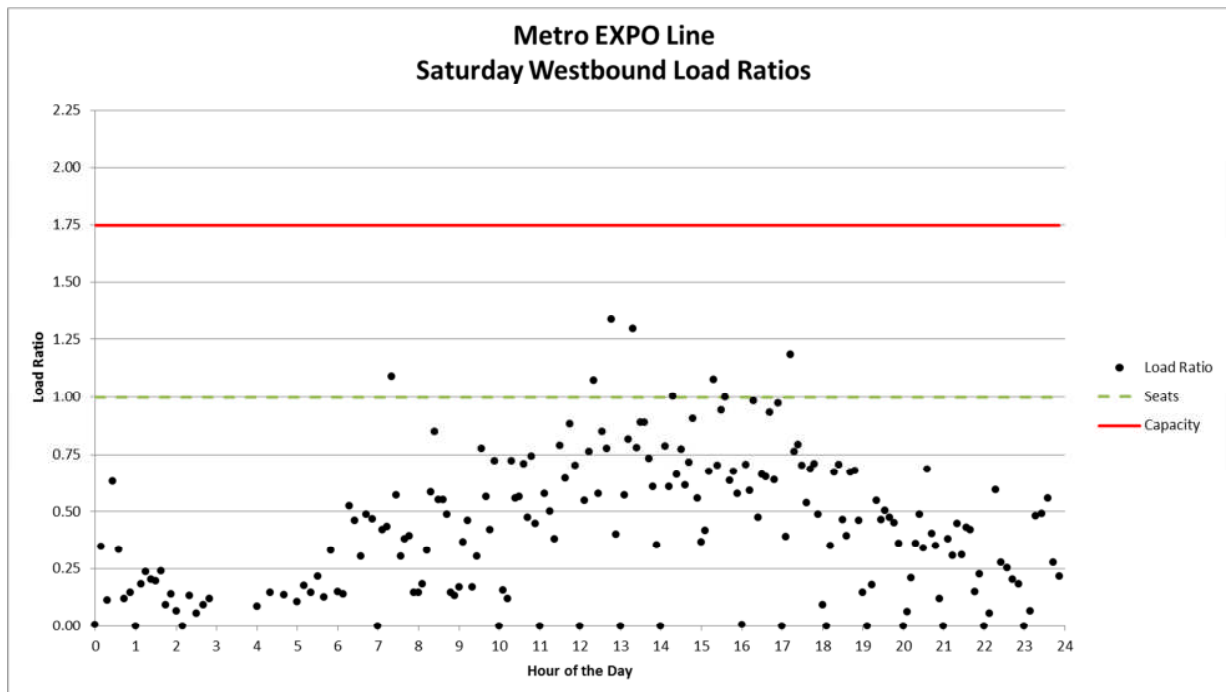
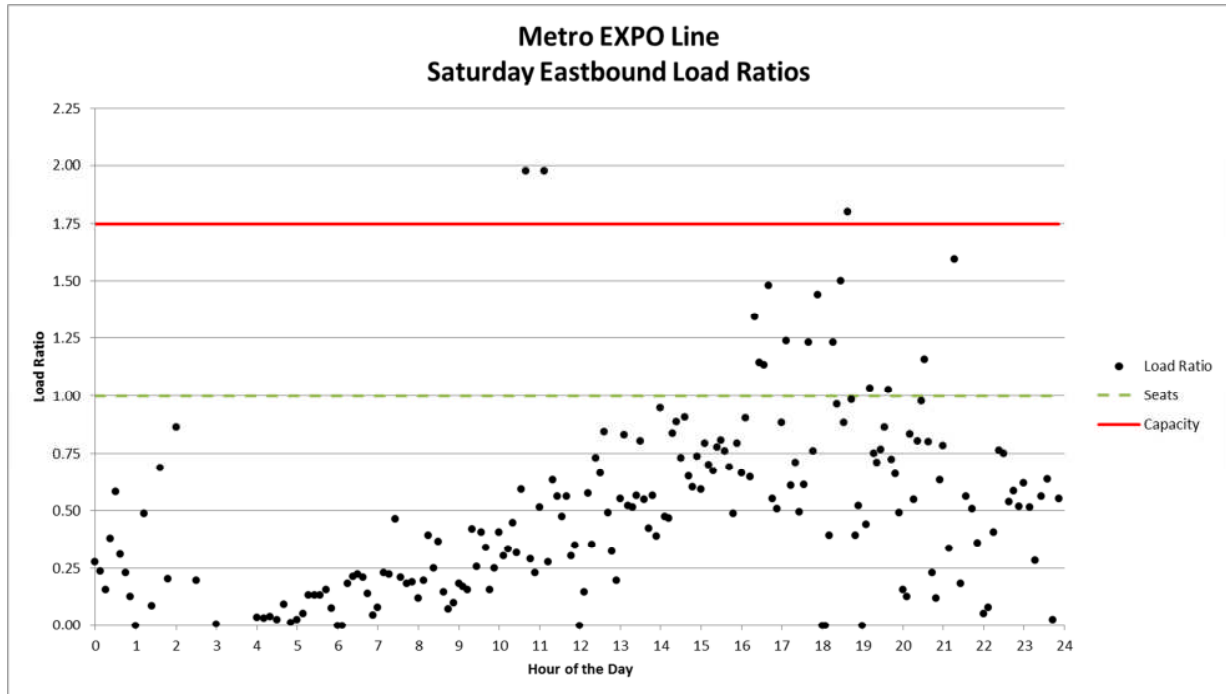
Metro Gold Line Sunday Southbound Load Ratios



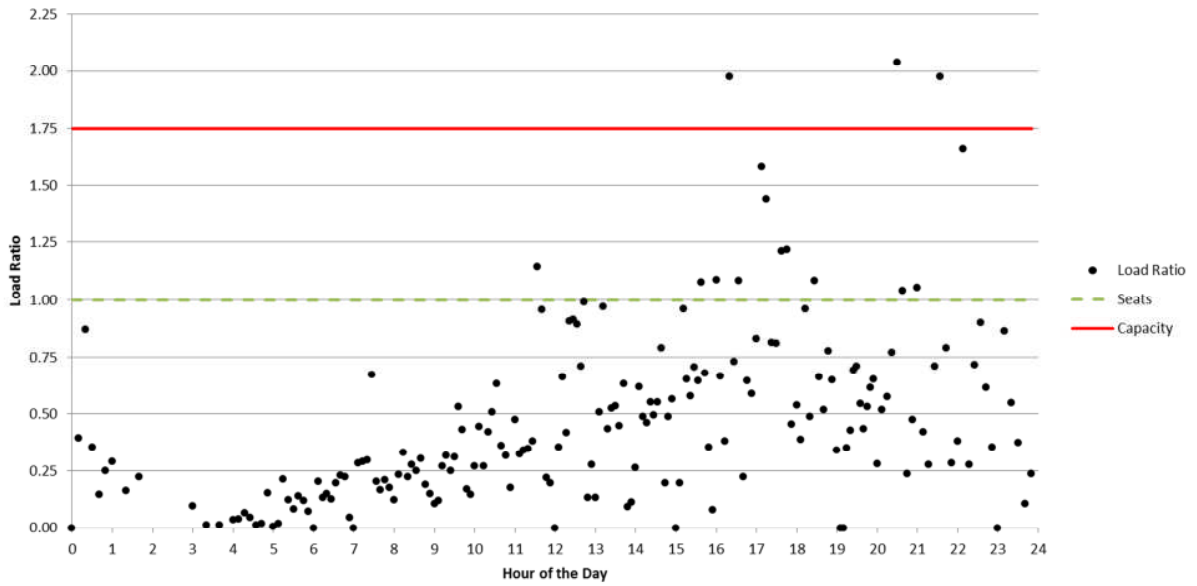
METRO EXPO LINE WEEKDAY LOAD RATIOS



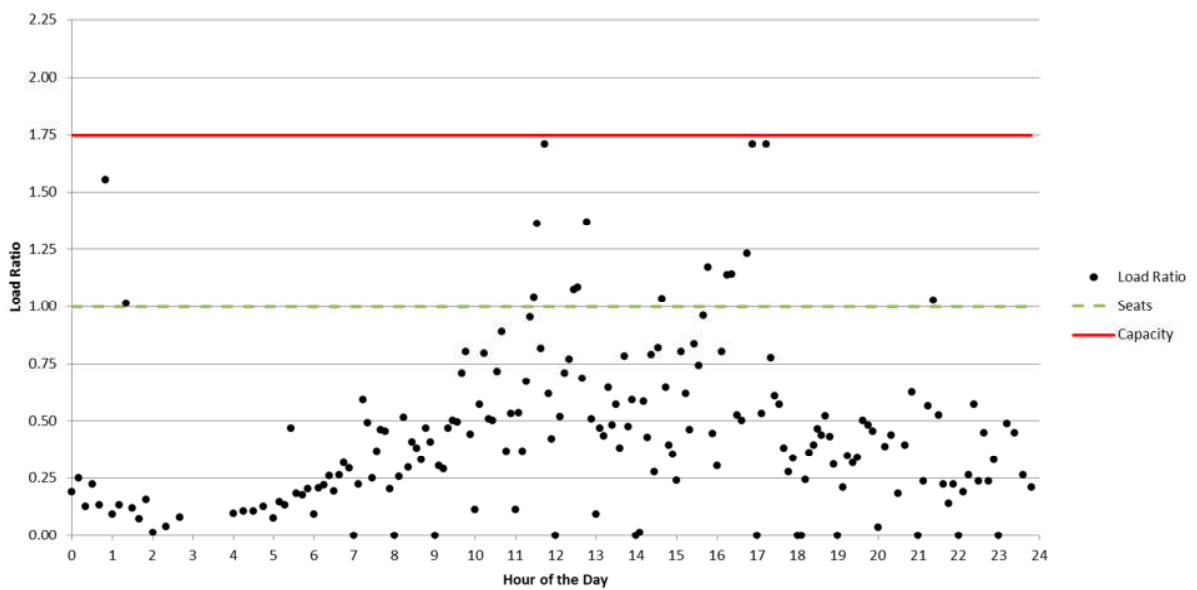
METRO EXPO LINE WEEKEND LOAD RATIOS



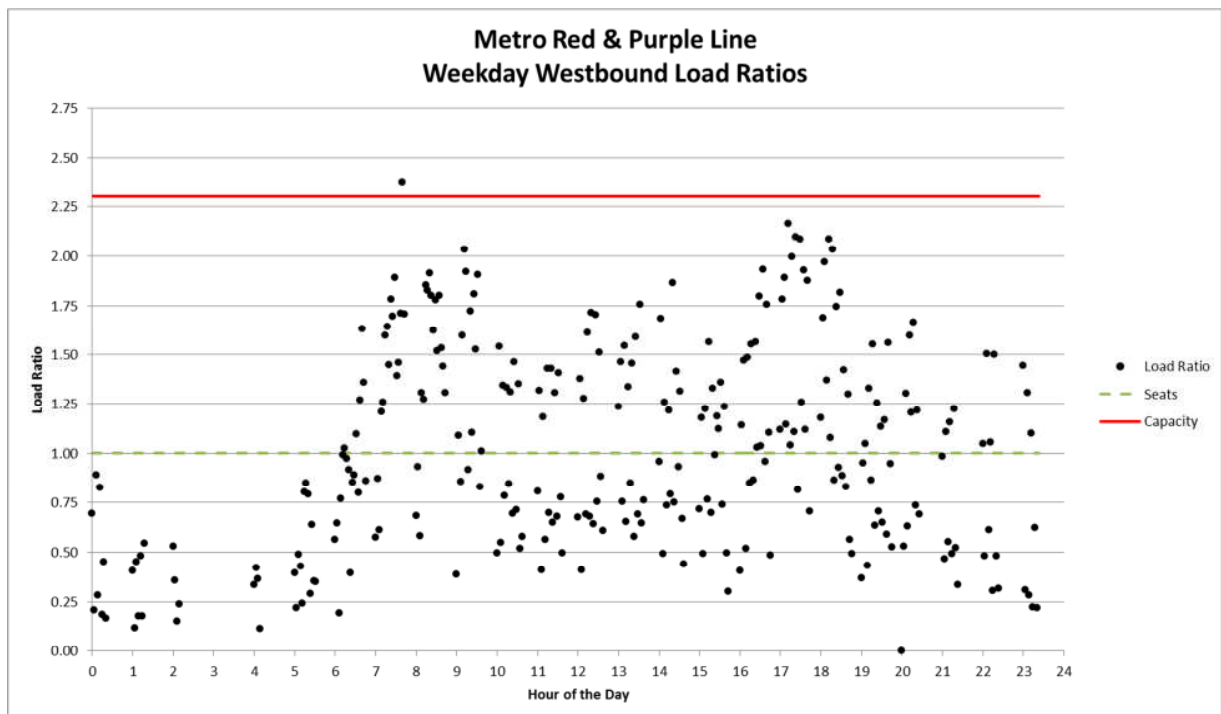
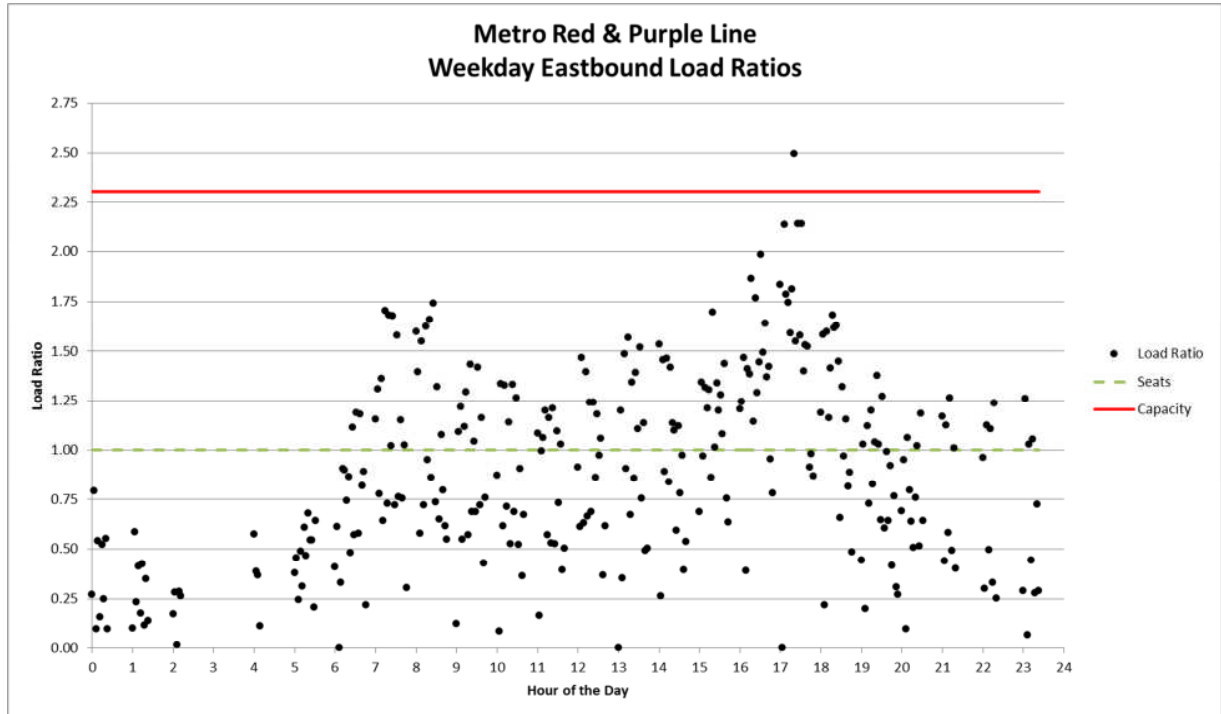
Metro EXPO Line Sunday Eastbound Load Ratios



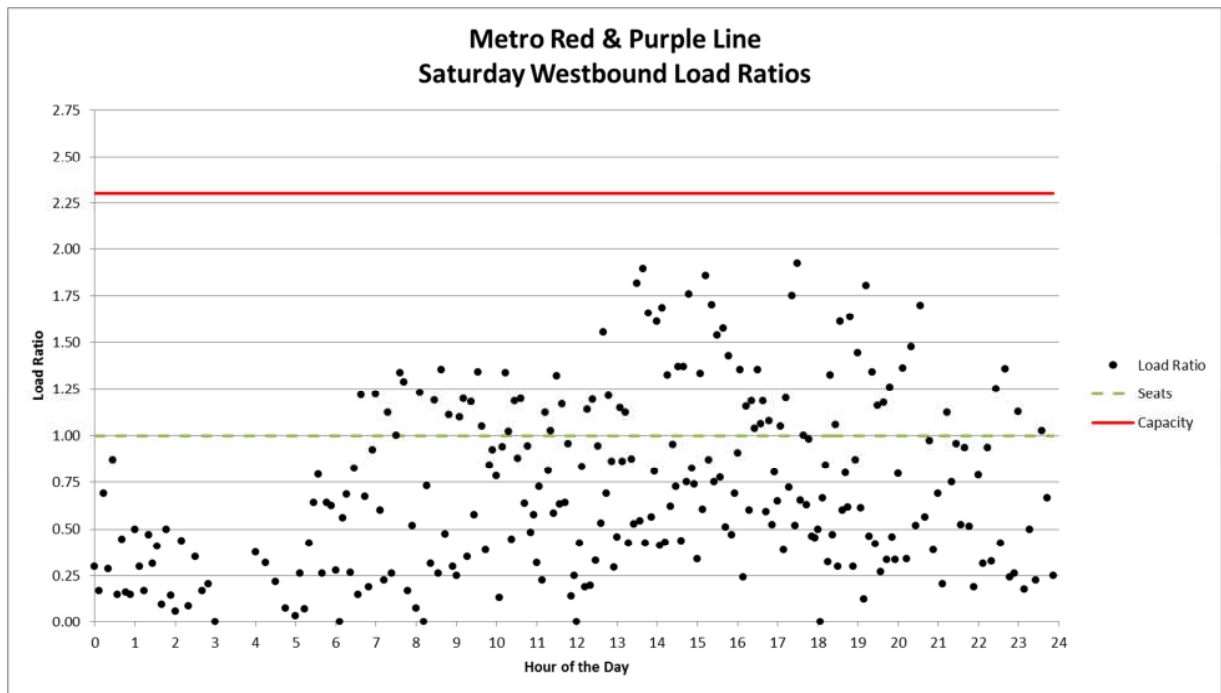
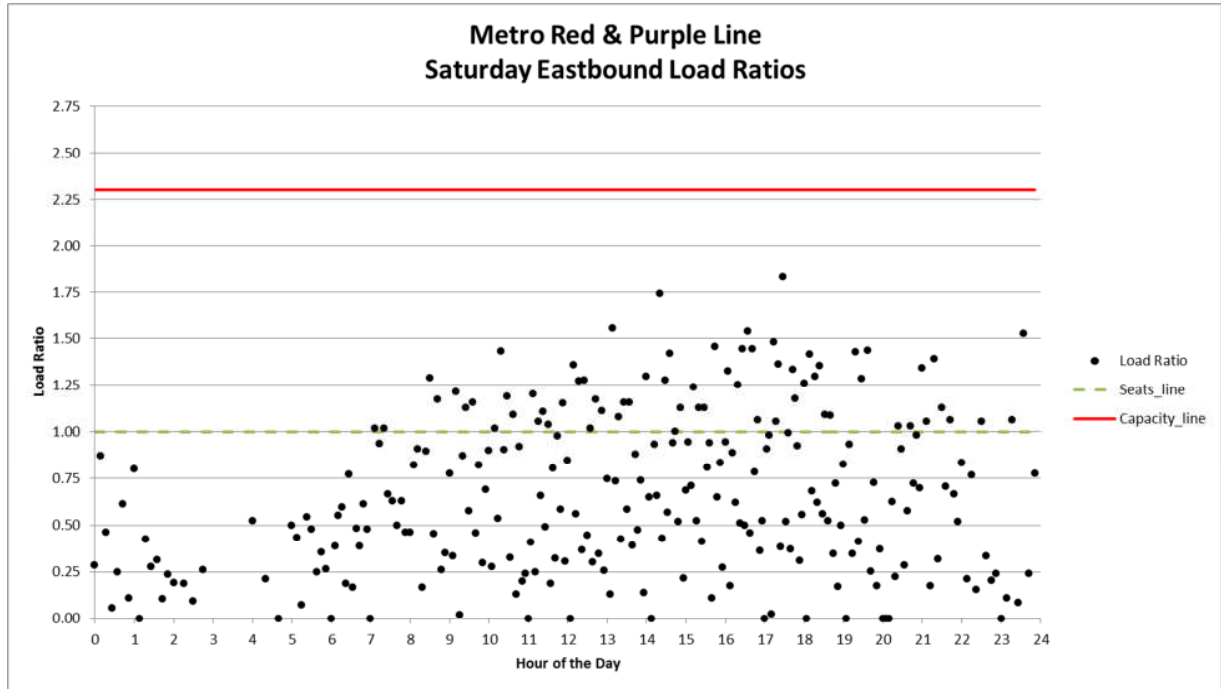
Metro EXPO Line Sunday Westbound Load Ratios



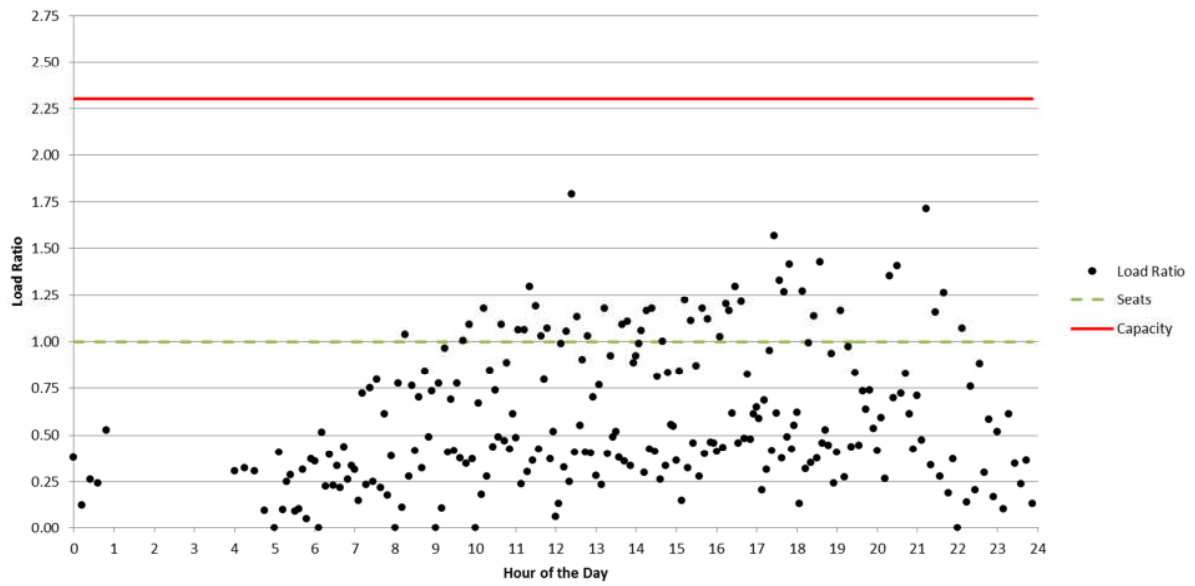
METRO RED/PURPLE LINE WEEKDAY LOAD RATIOS



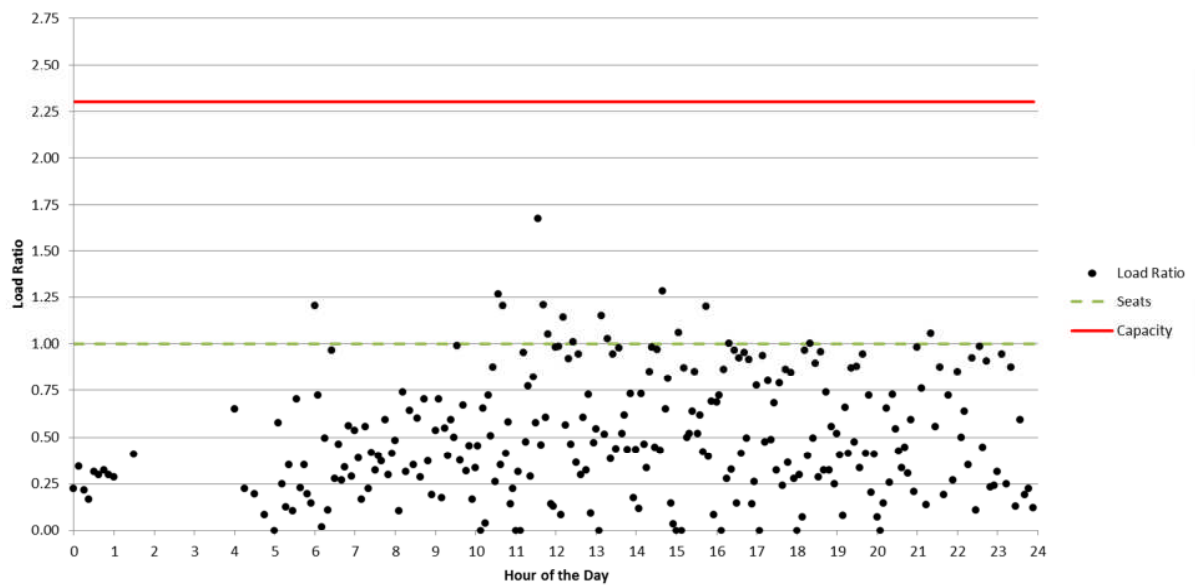
METRO RED/PURPLE LINE WEEKEND LOAD RATIOS



**Metro Red & Purple Line
Sunday Westbound Load Ratios**



**Metro Red & Purple Line
Sunday Eastbound Load Ratios**



**Board Report**

File #: 2017-0853, **File Type:** Informational Report**Agenda Number:** 28.

**SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTEE
APRIL 12, 2018****SUBJECT: WARNER CENTER SERVICE IMPROVEMENT PLAN****ACTION: RECEIVE AND FILE****RECOMMENDATION**

RECEIVE AND FILE report on the proposed Warner Center Service Improvement Plan.

ISSUE

The Orange Line currently provides service to a station in Warner Center at Owensmouth Av and Oxnard St by exiting the Right of Way at Canoga Station onto City streets. The Metro Board approved a motion to electrify the Orange Line by 2020. As a result, there is a need to keep the Orange Line on the Right of Way to allow for charging of the electric buses, which would remove service from Canoga Station to Warner Center. As a result, access between Warner Center and the Orange Line will be provided by a new Circulator operating every 10 minutes to and from the Canoga Station. The Circulator will improve access to the Orange Line by connecting to more destinations with 10 new additional stops. Local buses will also be routed to the Canoga Station to maintain transfers with the Orange Line. This set of service changes will be accomplished at no additional cost by streamlining existing local routes for faster and more direct service, and from removing Orange Line service through Warner Center.

DISCUSSION

There are a number of initiatives that are currently being implemented on the Orange Line and within Warner Center that warrant a comprehensive review of transit service in the area, including:

- 1) Orange Line Electric Bus Conversion - In October 2016, the Metro Board approved a motion to electrify the Orange Line by 2020. The current technology requires "in-line" charging of the buses to ensure adequate electricity is onboard to provide the scheduled service. At this time, charging stations can only be placed on Metro owned property, so the existing Warner Center Transit Hub on Owensmouth Av cannot accommodate this requirement. Therefore, a new Warner Center terminal must be identified along the Orange Line Right of Way.
- 2) Service to New Development - An Orange Line connection was requested to the recently opened Village at Westfield Topanga. Extending the Orange Line to this development would require a substantial investment in the Bus Rapid Transit (BRT) amenities such as Ticket Vending Machines and Next Bus information.

- 3) Better Connections to Employment - The existing one Orange Line stop on Owensmouth Av creates a long walk to nearby employment centers. Therefore, the Warner Center Association has requested that staff review alternatives to improve connections between the Orange Line and the employment centers located in South Warner Center.
- 4) Warner Center 2035 - The Warner Center 2035 Plan calls for enhanced transportation services to offset increased development. There are currently planned construction projects throughout Warner Center which are transit oriented development that support convenient access to the Orange Line as well as other destinations within the area.
- 5) U-Pass - Pierce College recently joined the Metro U-Pass program which is expected to generate additional Orange Line ridership. Therefore, any changes to Orange Line service levels should account for this opportunity.

Based on the comments and initiatives discussed above, staff concluded that a comprehensive review of all services in the Warner Center area was warranted to refocus transit service to reflect these opportunities. In order to better understand Warner Center and its future transportation needs, staff met with a number of key stakeholders in the area including developers, City Council Staff and local businesses. The staff received public input at presentations given at the San Fernando Valley Service Council. Ridership on all lines at each stop was analyzed, and a review of TAP data was conducted. The quantitative analysis and qualitative input revealed the following issues:

- Access to retail, new development, local businesses and employment from the Orange Line is limited.
- Local and Rapid routes are not intuitive due to out of direction moves and long one-way loops.
- Due to many turns along the routes, travel time through the area is slow.
- Most customers on Local and Rapid Lines are connecting to the Orange Line, with the greatest stop activity at the Warner Center Transit Hub.

Warner Center Service Improvement Plan

As a result of the analysis, the Warner Center Service Improvement Plan was developed. To guide the plan development, the following study goals were established:

- 1) Create a new transit hub that would allow for direct connections to the Orange Line, reduce transfers, and provide a terminal location for charging electric buses.
- 2) Provide more frequent and direct connections to and from the Orange Line and new transit oriented development planned in Warner Center.
- 3) Establish a simple and intuitive hierarchy of routes on key corridors through Warner Center.
- 4) Improve travel time through Warner Center by streamlining routes and eliminating

unnecessary out of direction moves.

- 5) Expand access to the Village at Westfield Topanga.
- 6) Ensure the Orange Line headway remains the same to Pierce College as scheduled today.

To achieve these goals, the Warner Center Service Improvement Plan includes the following service changes:

New Transit Hub - To address Goal #1, Canoga Station is recommended to be the new transit hub for Warner Center. This location will provide easier connections between the Orange Line and local buses. Existing platforms have shelters, TAP machines, P-Tels and are well lit. Curb space at the Canoga Station exit driveway will serve as layover locations for local buses, eliminating on-street layovers on Owensmouth Av.

New Circulator - As part of the study, a Public Hearing was conducted in May, 2017 to discuss options for a new circulator route that would connect the Orange Line with activity centers throughout Warner Center. Two options were evaluated. Option A would mirror the current Orange Line routing in Warner Center from Canoga Station to Owensmouth Av, and extending it north to Vanowen St to connect with The Village at Westfield. This service would run every 10 minutes throughout the day. Option B was to operate a similar route as Option A, but with an extension south to Burbank Av and Desoto Av. This service would operate every 15 minutes throughout the day.

Upon further review with the San Fernando Service Council, local elected staff and the public, a refined option was developed that will further extend Orange Line access in the south east direction to serve area employment and Kaiser Hospital. This option concentrates high frequency all day, every day service in the area where mixed use transit oriented development has and will continue to occur in the near future. The final Orange Line Circulator route is shown in Attachment A.

Routes Simplification - The recommendation to create a new transit hub at Canoga Station will provide improved access to the Orange Line. Therefore, lines that currently terminate at the Warner Center Transit Hub on Owensmouth Av will need to be routed to Canoga Station. Existing local lines operate large one-way loops, require out of direction moves and several turns, increasing travel time. Three local routes that terminate at the existing Warner Center Transit Hub will be extended to the new Canoga Station, providing a simplified two-way service eliminating a transfer, unnecessary out of direction moves, and improving travel time. Other route changes will provide better connections between Ventura Bl, Topanga Canyon Bl and Sherman Way, and provide improved service along Canoga Bl. Customers who used to transfer to and from local buses or to the Orange Line will still have the same options.

Orange Line Frequency - Currently, the headway to Warner Center is every 8 minutes during the peak travel periods because every other bus goes to either Chatsworth Station, or to Warner Center. By extending local lines to the Canoga Station, customers transferring to the Orange Line will wait only 4 minutes. This is a benefit that will reduce wait time by 100% and improve the overall travel experience.

DETERMINATION OF SAFETY IMPACT

The new proposed Canoga Station transit hub will provide increased safety for over 2,000 patrons that currently board and alight at four different stops stretched along Ownesmouth Av. Patrons will now be transferring between the Orange Line and other Metro buses at the Canoga Station, which provides improved lighting, seating, shade, and increased security. Also, due to the proposed straightening of bus routes in the area, numerous turns will be eliminated, thereby reducing accidents.

NEXT STEPS

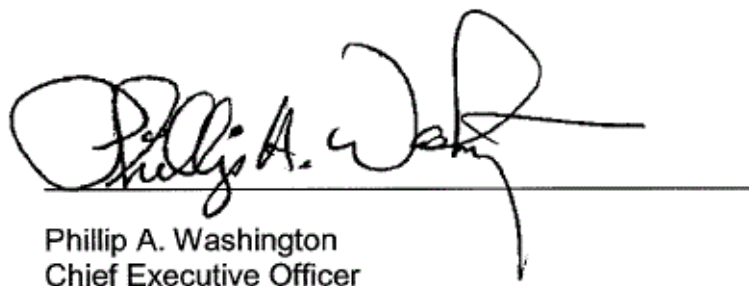
The Warner Center Service Improvement Plan will be implemented as part of the June 2018 service changes. Marketing and Communications staff will begin developing messaging and materials to support the service changes. Extensive marketing and public outreach will take place in the months prior to the proposed changes to support our customers through the transition to the new services.

ATTACHMENTS

Attachment A - Warner Center Service Improvement Plan

Prepared by: Scott Page, Senior Director, (213) 418-3400
Conan Cheung, Senior Executive Officer, (213) 418-3034

Reviewed by: James T. Gallagher, Chief Operations Officer, (213) 418-3108



Phillip A. Washington
Chief Executive Officer



Warner Center Service Improvement Plan

Warner Center Service Improvements

Project Goals





- 1) Create a new transit hub along the Orange Line right-of-way
 - Provide a terminal location for charging electric buses;
 - Improve Warner Center connections with the Orange Line; and
 - Provide direct connections and reduce transfers to the Orange Line.
- 2) Streamline routes for faster connections to communities, such as Valley Circle, Woodland Hills, and Canoga Park.
- 3) Make routes intuitive by eliminating large one-way loops in Warner Center.
- 4) Increase access to the Village at Westfield Topanga.
- 5) Ensure the Orange Line headway remains the same to Pierce College as scheduled today.
- 6) Set a foundation from which to improve service to new markets.

Plan Outreach

- Met with Warner Center stakeholders and Councilmember Blumenfield's office Spring 2017.
- Conducted Public Hearing in May 2017.
- Presented to the SFV Service Council in January 2018 with the Warner Center Improvement Plan update.
- Continued area outreach to Kaiser Hospital, Warner Center Association and
- Returned to SFV Service Council in February 2018 with a revised Plan that incorporated feedback received from Warner Center stakeholders and bus patrons.

Proposed New Circulator Service

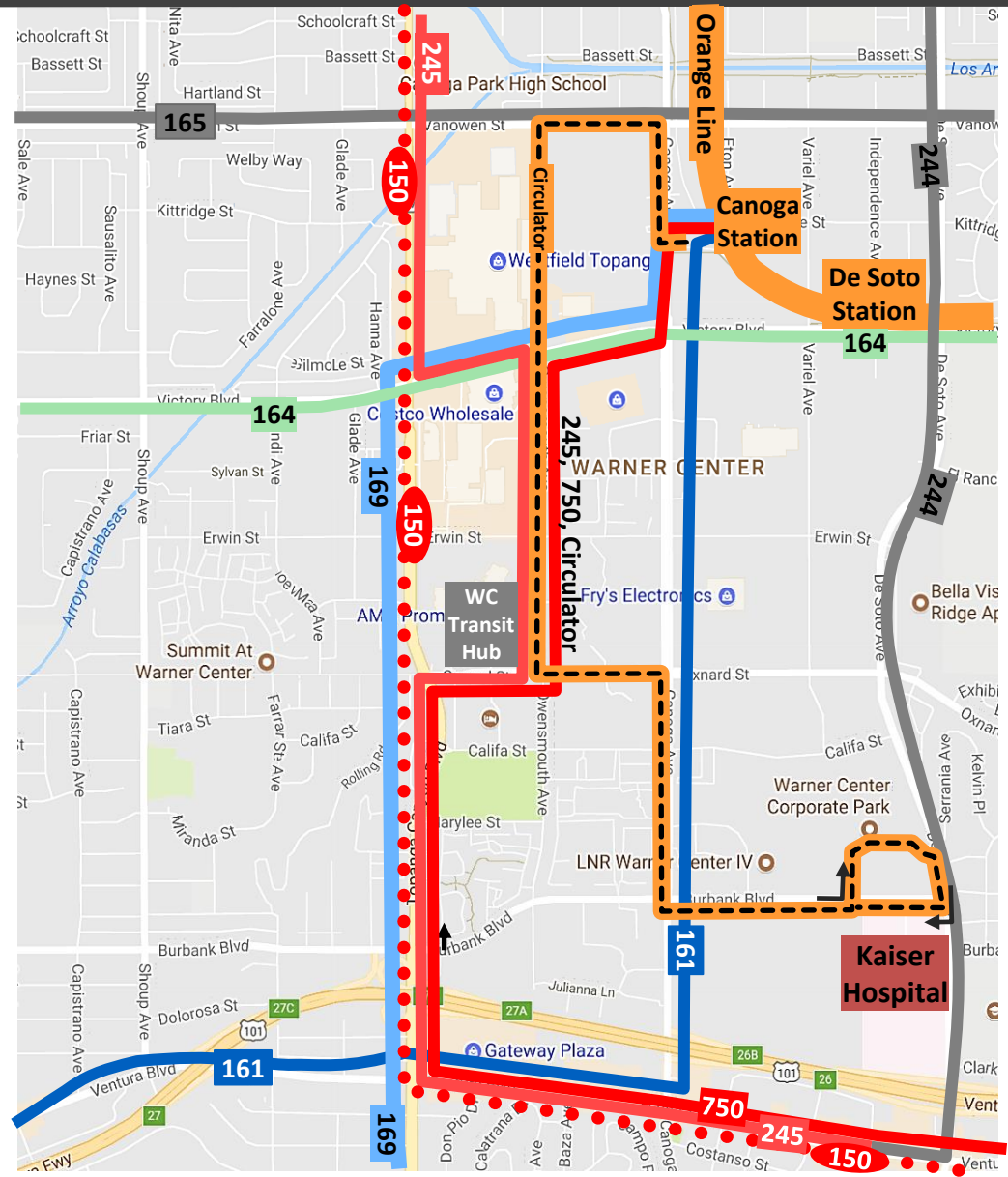
	Current Orange Line Service	Proposed Circulator Service
Transit Hub Location	On Street	Off Street
Orange Line Hub Connections	8 Minutes Peak	4 Minutes Peak
Stops within Warner Center	1	10
Routing	Serves only Warner Center Station	Extends service to Kaiser Hospital and WC Corp. Park
Warner Center Service Frequency	8" Peak/15" Base	10" All Day
Benefits	Eliminates one-way loop w/only one stop	Provides two-way service, 10 stops.

-  Proposed Circulator Route
-  Proposed Circulator Stops
-  Current Orange Line Route
-  Potential Future Stop



Bus Service Routing Plan

- Route Line 169 to provide additional service on Topanga Canyon between Erwin St and Victory Bl.
- Provides direct connection to the Orange Line.
- New Circulator provides two-way service.
- Streamlining Lines 150 and 164 saves approximately 10 minutes for 75% of customers traveling through Warner Center.



Next Steps

- Spring 2018 - Marketing and Community Relations develops outreach plan and final implementation plan
- Spring 2018 and Beyond – Outreach to new Warner Center TMO and local stakeholders
- June 2018 – Implementation of changes



Board Report

File #: 2017-0905, File Type: Contract

Agenda Number: 29.

SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTEE APRIL 12, 2018

SUBJECT: POWER SWEEPING SERVICES

ACTION: AWARD CONTRACT

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a three-year firm fixed unit rate Contract No. OP962800003367 to Nationwide Environmental Services Inc., to provide power sweeping services for Metro transit facilities for a not-to-exceed amount of \$5,314,860 effective June 1, 2018 through May 31, 2021.

ISSUE

The existing power sweeping services contract is due to expire on May 31, 2018.

To continue providing safe, quality, regularly scheduled and as-needed power sweeping services throughout Metro facilities, a new contract award is required effective June 1, 2018.

DISCUSSION

This Contract requires the contractor to provide power sweeping services for 108 parking lots and structures throughout Metro bus and rail facilities and 41 Caltrans owned Park and Ride (P&R) lots.

The services provided under the existing contract are based on an on-going frequency and as-needed services. Under the new Contract, service frequencies have been adjusted to provide the necessary service levels and ensure delivering clean and well maintained parking lots and structures throughout Metro facilities and 41 Caltrans owned P&R lots.

DETERMINATION OF SAFETY IMPACT

The approval of this item will ensure service continuity to provide on-going power sweeping services, improve Metro bus and rail facilities overall appearance and cleanliness, and continue providing safe, quality, on-time, and reliable services system-wide.

FINANCIAL IMPACT

The three year base contract value is \$5,314,860. Funding of \$147,635 for the remainder of FY18 is

included in the FY18 budget in cost center 3367 - Facilities Property Maintenance, account 50308, Service Contract Maintenance, under various operating projects.

Since this is a multi-year contract, the cost center manager and Sr. Executive Officer, Maintenance and Engineering will be accountable for budgeting the cost in future years.

Impact to Budget

Funding for this action will come from the Enterprise operating fund. The source of funds will be from State and local funds that are eligible for Bus and Rail Operating Projects. These funding sources will maximize fund use based on funding allocation provisions.

ALTERNATIVES CONSIDERED

Staff considered providing this service through Metro in-house staff. This would require the hiring and training of additional personnel, and purchase of additional equipment, vehicles, and supplies to support the expanded responsibility. Staff's assessment indicates that this is not a cost-effective option for Metro.

NEXT STEPS

Upon Board approval, staff will execute Contract No. OP962800003367 with Nationwide Environmental Services Inc., effective June 1, 2018, to provide power sweeping services throughout Metro bus and rail facilities and 41 Caltrans owned P&R lots.

In preparation for the next power sweeping services solicitation, staff is committed to conduct an industry review to reach out to a wider population of potential vendors, to solicit their input, consider recommendations, and encourage greater participation. Staff has started a review of the geographical service locations, scope of work, and technologies in an effort to identify opportunities for regional work distribution, efficiency betterments, and environmental improvements.

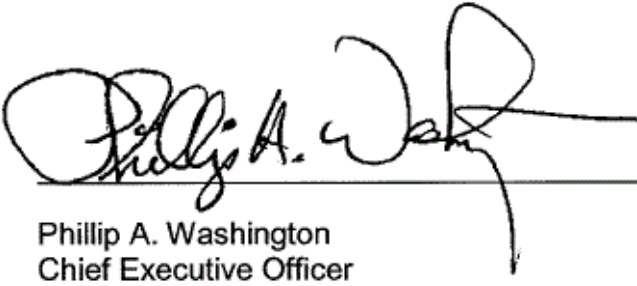
ATTACHMENTS

Attachment A - Procurement Summary

Attachment B - DEOD Summary

Prepared by: Brady Branstetter, DEO, Facilities Maintenance, (213) 922-6767
Lena Babayan, Sr. Director, Facilities Maintenance, (213) 922-6765

Reviewed by: James T. Gallagher, Chief Operations Officer, (213) 418-3108
Debra Avila, Chief Vendor/Contract Management Officer, (213) 418-3051



Phillip A. Washington
Chief Executive Officer

PROCUREMENT SUMMARY

POWER SWEEPING SERVICES / OP962800003367

1.	Contract Number: OP962800003367	
2.	Recommended Vendor: Nationwide Environmental Services Inc.	
3.	Type of Procurement (check one): <input type="checkbox"/> RFP <input checked="" type="checkbox"/> IFB <input type="checkbox"/> IFB-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	Procurement Dates:	
	A. Issued: November 22, 2017	
	B. Advertised/Publicized: November 22, 2017	
	C. Pre-Proposal/Pre-Bid Conference: December 13, 2017	
	D. Proposals/Bids Due: January 9, 2018	
	E. Pre-Qualification Completed: January 23, 2018	
	F. Conflict of Interest Form Submitted to Ethics: January 23, 2018	
	G. Protest Period End Date: February 20, 2018	
5.	Solicitations Picked up/Downloaded: 12	Bids/Proposals Received: 1
6.	Contract Administrator: Rommel Hilario	Telephone Number: (213) 922-4654
7.	Project Manager: Maral Minasian	Telephone Number: (213) 922-6760

A. Procurement Background

This Board Action is to approve a contract award to Nationwide Environmental Services Inc., for power sweeping services at all Metro transit facilities including bus divisions, terminals, busways, railroad trackways, layover areas, rail divisions and train/bus stations park-and-ride.

Invitation for Bid (IFB) No. OP47896 was issued as a competitive procurement in accordance with Metro's Acquisition Policy. The contract type is a firm fixed unit rate.

Three amendments were issued during the solicitation phase of this IFB:

- Amendment No. 1, issued on December 18, 2017, provided pre-bid conference material including sign-in sheets, planholder's list, and prevailing wage information.
- Amendment No. 2, issued on December 20, 2017, provided pre-bid conference PowerPoint slides.
- Amendment No. 3 issued on January 2, 2018, provided revised Schedule of Quantities and Prices.

A pre-bid conference was held on December 13, 2017. A total of three participants attended representing two firms.

One bid was received on the due date of January 9, 2018 from Nationwide Environmental Services Inc.

A market survey was conducted on January 12, 2018. The survey was sent out to ten firms on the planholders' list who did not submit a bid but downloaded the solicitation. Four firms submitted a response to the survey. One firm was already working with a prime as a potential subcontractor; another firm stated that the statement of work was too large in scope; and the remaining two firms stated that it was a business decision for them not to bid on the contract.

B. Evaluation of Bids

This procurement was conducted in accordance, and complies, with Metro's Acquisition Policy for a competitive sealed bid.

Nationwide Environmental Services Inc.'s bid was determined to be responsive and responsible to the IFB's minimum requirements. Nationwide also committed to meeting the mandatory 7% SBE and 3% DVBE goal required by the solicitation.

C. Cost/Price Analysis

The bid price from Nationwide Environmental Services, Inc. has been determined to be fair and reasonable based upon price analysis, an independent cost estimate, and technical review by the Program Manager.

BIDDER	BID AMOUNT	METRO ICE	AWARD AMOUNT
Nationwide Environmental Services	\$5,314,860.00	\$4,816,645.64	\$5,314.860.00

D. Background on Recommended Contractor

Nationwide Environmental Services (NES), a division of Joe's Sweeping, Inc., is one of the largest street sweeping companies in the nation. Founder Joe Samuelian started sweeping parking lots services in 1968, then created a company that has served over 50 municipalities throughout California. The company mission statement is to provide the highest level of customer satisfaction with quality services using state-of-the-art, environmentally friendly technologies. NES is Metro's current provider of power sweeping services for all Metro transit facilities.

DEOD SUMMARY

POWER SWEEPING SERVICES / OP962800003367

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) established a 7% Small Business Enterprise (SBE) and 3% Disabled Veteran Business Enterprise (DVBE) goal for this procurement. Nationwide Environmental Services, Inc. met the goal by making a 7% SBE and 3% DVBE commitment.

Small Business Goal	7% SBE 3% DVBE	Small Business Commitment	7% SBE 3% DVBE
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	SBE Subcontractor(s)	% Committed
1.	Islas Tires, Inc.	6.58%
2.	Rose Equipment, Inc.	0.42%
	Total SBE Commitment	7.00%

	DVBE Subcontractor(s)	% Committed
1.	Hunter Tires, Inc.	3.00%
	Total DVBE Commitment	3.00%

B. Living Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention Policy (LW/SCWRP) will not be applicable on this Contract.

C. Prevailing Wage Applicability

Prevailing Wage requirements are applicable to this project. DEOD will continue to monitor contractors' compliance with the State of California Department of Industrial Relations (DIR), California Labor Code, and, if federally funded, the U S Department of Labor (DOL) Davis Bacon and Related Acts (DBRA).

D. Project Labor Agreement/Construction Careers Policy

Project Labor Agreement/Construction Careers Policy is not applicable to this Contract.

**Board Report**

File #: 2018-0061, **File Type:** Contract**Agenda Number:** 30.

**SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTEE
APRIL 12, 2018****SUBJECT: ENGINEERING SUPPORT FOR RAIL MAINTENANCE
AND ENGINEERING****ACTION: AWARD CONTRACT****RECOMMENDATION**

AUTHORIZE the Chief Executive Officer to award Contract No. PS46172000 to Gannett Fleming Transit & Rail Systems for on-call engineering support services in support of Rail Maintenance and Engineering, for a total not-to exceed amount of \$31,000,000, inclusive of \$16,000,000 for the initial two-year base, and \$5,000,000 for each of the three, one-year options (effective May 2018 through April 2023); subject to resolution of protest(s), if any.

ISSUE

Metro Rail Maintenance and Engineering has limited scope and depth of engineering and technical resources to develop and execute capital projects and meet the day-to-day engineering needs necessary to maintain and improve railway infrastructure assets and systems. Establishment of an engineering support services contract will enable Metro to supplement internal resources on an on-call basis in situations where either Metro does not have sufficient capacity or the expertise necessary to perform a task.

DISCUSSION

This task order based contract establishes a range of services that includes train control, traction power, communications, track, mechanical electrical plumbing, civil design, and fare collection. Also included are support services for project management, construction management, and computer-aided design and drafting (CADD). Work assignments will be provided on a task order basis to augment support for existing capital projects, large scale construction projects, and ongoing day-to-day needs for Rail Maintenance and Engineering. Prior to each work task order authorization, Rail Maintenance and Engineering will develop the scope of work, schedule and independent cost estimate. Metro's Vendor/Contract Management (V/CM) will then request proposal details and pricing information and negotiate an acceptable amount in accordance with agreed upon Metro terms and conditions. Rail Maintenance and Engineering staff reviewed the rail maintenance capital work program in the amount of \$47 million per fiscal year for the next five years and calculated that maintaining a support cost of 10-15% was reasonable in order to deliver capital projects on time and

within budget. Refer to Attachment A for a list of proposed project uses.

A Disadvantaged Business Enterprise (DBE) participation goal of 25% has been established as part of this contract. Gannett Fleming Transit & Rail Systems made a 25% DBE commitment. A list of DBE firms who will have subcontracting opportunities for on-call engineering support services is shown in the DEOD Summary - Attachment C.

DETERMINATION OF SAFETY IMPACT

The engineering support services for rail maintenance are not directly related to a specific safety issue. However, the services provided via this Contract will contribute to maintaining the rail system in a State of Good Repair (SGR) as recommended by Metro's Transit Asset Management (TAM) Plan, which is essential to providing a safe and reliable service for riders who use the Metro rail system daily.

FINANCIAL IMPACT

This contract award action is for a not-to-exceed threshold amount of \$31,000,000. As work task orders become necessary, funding will be provided from the appropriate capital project requiring support. For FY 18, funding of \$100,000 is included in the operating budget and \$250,000 is included in the capital project budget under various cost centers and projects, including cost centers: 3910 - Maintenance and Engineering, 3922 - Rail Communications Systems, 3926 - Rail Signal Systems, 3927 - Rail MOW Track Maintenance, 3928 - Rail Traction Power Systems, 3960 - Rail Transit Engineering, and 3929 - Rail MOW Engineering, Account 50316 -Professional and Technical Services.

Since this is a multi-year contract, the Project Manager will ensure that the balance of funds is budgeted in future Fiscal Years.

Impact to Budget

The source of funds for operating related task orders is Enterprise operating funds. For capital related task orders, the source of funds will be dependent on the specific capital project funding. Use of all related funding will maximize allowable funding allocations given approved funding provisions.

ALTERNATIVES CONSIDERED

1) Solicit competitive bids for each individual task order as it becomes required. This is not recommended as it would require extensive additional staff time to process each request and result in project delays due to the lead time required to complete each procurement cycle. Additionally, procuring these services on a per-assignment basis would impose additional burden on the Vendor/Contract Management (V/CM) department.

2) Utilize existing Engineering staff to provide the required technical support. This is not feasible as the current budgeted MOW Engineering capacity is fully utilized to maintain Metro's existing systems and oversee the acceptance of the new rail lines. Also, there would not be sufficient existing staff to

re-assign to provide technical support to the various capital projects concurrently.

NEXT STEPS

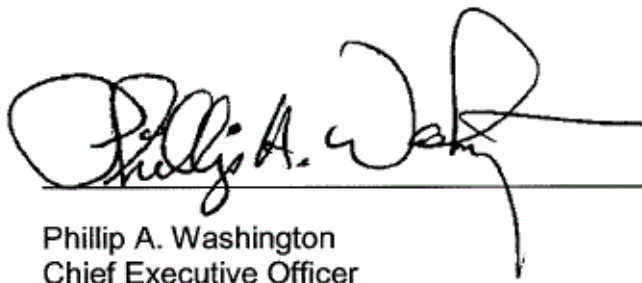
Upon Board approval, staff will execute Contract No. PS46172000 with Gannett Fleming Transit & Rail Systems to provide engineering support for Rail Maintenance and Engineering on an as needed task-orders basis.

ATTACHMENTS

- Attachment A - List of Proposed Project Uses
- Attachment B - Procurement Summary
- Attachment C - DEOD Summary
- Attachment D - Estimated Engineering Support Services

Prepared by: Marshall Epler, DEO, Systems Engineering, (213) 617-6232
Geyner Paz, Senior Administrative Analyst, (213) 617-6251
Errol Taylor, Senior Executive Officer, Rail Maintenance and Engineering, (213) 922-3227

Reviewed by: James T. Gallagher, Chief Operations Officer, (213) 418-3108
Debra Avila, Chief Vendor/Contract Management Officer, (213) 418-3051



Phillip A. Washington
Chief Executive Officer

LIST OF PROPOSED PROJECT USES

Description
Support for Correct Door Enable on LRT Project
Project to implement an Overhead Catenary System (OCS) Monitoring System
Support for MRL Gas Analyzer Upgrade Project
Project to upgrade Transit Passenger Information System (TPIS)
Support for various TPSS/COM/TP/UPS Battery Replacement Projects
Computer Aided Design (CAD) Support to Capture System Configuration
Project for SCADA to monitor Manual and Motor Operated OCS Section Switches
Project for Communication Based Train Control (CBTC) Upgrade to EXPO Line
Support for Corrosion Protection Project
Support for New Blue Project
Support for MGL Train Control and TWC Replacement Project
Project to add Generator Receptacles to Red Line Stations
Support for Various Facility Maintenance Projects
Support for MRL Train to Wayside Communication (TWC) Rehabilitation Project
Support for Radio Replacement Project
Support for Rehabilitation of MBL Emergency Trip System (ETS) Project
Support for various Rail Maintenance and Engineering Initiatives
Support for Rail Maintenance and Engineering Acceptance of Various Mega Projects
Support for Rail Maintenance and Engineering Capital Program
Project for replacement of Emergency Management Panels at Select Locations
Support for various Safe-7 projects
Support for Analysis of Traction Power system along Red / Purple Line trunked corridor
Support for Conversion of Various MGL Stations to 3 Car Platforms
Assessments and Inspections of Critical Fire/Life/Safety Elements and Infrastructure
Assessments and Inspections of Critical Wayside Control and Power Systems

PROCUREMENT SUMMARY

ENGINEERING SUPPORT FOR RAIL MAINTENANCE AND
ENGINEERING/PS46172000

1.	Contract Number: PS46172000	
2.	Recommended Vendor: Gannett Fleming Transit & Rail Systems	
3.	Type of Procurement (check one): <input type="checkbox"/> IFB <input type="checkbox"/> RFP <input checked="" type="checkbox"/> RFQ-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	Procurement Dates:	
	A. Issued: October 12, 2017	
	B. Advertised/Publicized: October 16, 2017	
	C. Pre-Proposal Conference: October 26, 2017	
	D. Proposals Due: November 28, 2017	
	E. Pre-Qualification Completed: February 8, 2018	
	F. Conflict of Interest Form Submitted to Ethics: November 29, 2017	
	G. Protest Period End Date: April 23, 2018	
5.	Solicitations Picked up/Downloaded: 78	Bids/Proposals Received: 2
6.	Contract Administrator: Victor Zepeda	Telephone Number: (213) 922-1458
7.	Project Manager: Marshall Epler	Telephone Number: (213) 617-6232

A. Procurement Background

This Board Action is to approve Contract No. PS46172000 for on-call engineering support services in support of rail maintenance and engineering. Board approval of contract awards are subject to resolution of any properly submitted protest.

The Request for Qualifications (RFQ) No. PS46172 was issued in accordance with Metro's Acquisition Policy and the contract type is task order based. The RFQ was issued with a DBE goal of 25%.

The period of performance is two base years with three, one-year options (from May 2018 to April 2023).

A pre-proposal conference was held on October 26, 2017 with 22 attendees representing 15 companies.

Two amendments were issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on October 27, 2017 clarified the DBE Contracting Outreach Mentoring Plan and corrected the Statement of Work.
- Amendment No. 2, issued on November 1, 2017, extended the due date from November 14 to November 28, 2017.

On November 28, 2017, Metro received two proposals as follows, in alphabetical order:

1. Gannett Fleming Transit & Rail Systems, Inc. (GFT&RS)
2. PacRim Engineering, Inc. (PacRim)

B. Evaluation of Proposals

A Proposal Evaluation Team (PET) consisting of staff from Project Engineering and Wayside Systems departments was convened and conducted a comprehensive technical evaluation of the proposals received.

The proposals were evaluated based on the following evaluation criteria and weights:

- | | |
|--|------------|
| • Minimum Qualifications (Project Management) | Pass/Fail |
| • Degree of the Prime's Skills and Experience | 50 Percent |
| • Proposer's Team | 20 Percent |
| • Effectiveness of Execution Plan | 25 Percent |
| • DBE Contracting Outreach and Mentor Protégé Approach | 5 Percent |

The evaluation criteria are appropriate and consistent with criteria developed for other similar engineering support procurements.

Both firms passed the minimum qualifications and were determined to be responsive and placed in the competitive range.

During the week of January 18, 2018, the PET met and interviewed both firms. The firms' project managers and key team members had an opportunity to present each team's qualifications and respond to the PET's questions. In general, each team's presentation addressed the requirements of the RFP, experience with all aspects of the required tasks, and stressed each firm's commitment to the success of the project. Also highlighted were staffing plans, work plans, and perceived project challenges.

Qualifications Summary of Firms within the Competitive Range:

Gannett Fleming Transit & Rail Systems

Since 1993, GFT&RS, has provided engineering services with a specialty in rail-related operation control systems, signal, and communications. GFT&RS is a division of Gannett Fleming that was established in 1915.

The firm has a local Los Angeles office and has teamed up with 16 different firms. GFT&RS has assembled a team of 16 subcontractors to ensure its qualifications are complimented with firms that specialize in various engineering services and offer ample opportunity to small businesses to participate in delivering services for this Contract.

PacRim Engineering, Inc.

PacRim Engineering, Inc. (PacRim) was established in 2007 and is a local SBE firm located in Santa Ana, CA. PacRim provides engineering services with specialty services in rail and civil engineering.

PacRim has assembled a team of 10 subcontractors to ensure its qualifications are complimented with firms that specialize in various engineering services and offer ample opportunity to small businesses to participate in delivering services for this contract.

The following is a summary of the PET's evaluation scores:

1	Firm	Average Score	Factor Weight	Weighted Average Score	Rank
2	GFT&RS				
3	Minimum Qualifications (Project Management)	Pass	Pass/Fail	Pass	
4	Degree of the Prime's Skills and Experience	86.34	50.00%	43.17	
5	Proposer's Team	74.15	20.00%	14.83	
6	Effectiveness of Execution Plan	78.40	25.00%	19.60	
7	DBE Contracting Outreach and Mentor Protégé Approach	80.00	5.00%	4.00	
8	Total		100.00%	81.60	1
9	PacRim				
10	Minimum Qualifications (Project Management)	Pass	Pass/Fail	Pass	
11	Degree of the Prime's Skills and Experience	79.66	50.00%	39.83	
12	Proposer's Team	72.50	20.00%	14.50	
13	Effectiveness of Execution Plan	72.68	25.00%	18.17	
14	DBE Contracting Outreach and Mentor Protégé Approach	40.00	5.00%	2.00	
15	Total		100.00%	74.50	2

C. Cost/Price Analysis

The recommended hourly rates are determined to be fair and reasonable based upon independent cost estimate, cost analysis, technical evaluation, and fact finding. All future task orders and modifications will be determined to be fair and reasonable in accordance with Metro's Acquisition Policy at the time of issuance and award.

D. Background on Recommended Contractor

The recommended firm, GFT&RS, is located in Los Angeles with 60 other offices nationwide. GFT&RS' parent company, Gannett Fleming, has been in business for over 100 years providing transportation engineering services. GFT&RS has been on Metro's General Engineering Consultant Bench Contract and has a similar on-call contract with Washington Metropolitan Area Transit Authority. Past similar contracts include San Diego Trolley (Metropolitan Transit System) – San Ysidro Yard, and Amtrak in the Northeast (Boston to D.C.) since 1992.

GFT&RS' project management team is led by Matthew Dixon, PE. Mr. Dixon is experienced in managing transit and rail system design projects on several rail projects within the State of California. The team led by Mr. Dixon has over 60 years of rail engineering and transit operation experience. Further, GFT&RS has in its employment over 450 registered professional engineers, a significant depth of resources available Metro's Engineering Support for Rail Maintenance Services.

DEOD SUMMARY

**ENGINEERING SUPPORT FOR RAIL MAINTENANCE AND
ENGINEERING/PS46172000**

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) established a 25% Disadvantaged Business Enterprise (DBE) goal for this project. Gannett Fleming Transit & Rail Systems formed a team that included DBE firms without schedules or specific dollar commitments prior to the establishment of this on-call Contract and has committed to meeting the 25% DBE goal. Overall DBE participation for the on-call Contract will be determined based on the aggregate of all Task Orders awarded.

Small Business Goal		25% DBE	Small Business Commitment	25% DBE	
	DBE Subcontractors	Scope of Work	NAICS Codes	Ethnicity	% Committed
1.	Armand Consulting, Inc.	Communication Systems Design	541330 - Engineering Services 541512- Computer Systems Design Services	Caucasian Female	TBD
2.	Birdi & Associates, Inc.	CADD Services Networking	541512 - Computer Systems Design Services 541519 - Other Computer Related Services	Subcontinent Asian American	TBD
3.	C2PM	Engineering Services	541330 - Engineering Services	Asian Pacific American	TBD
4.	GC Tech, Inc.	CADD Services Document Control	541430 - Graphic Design Services 541340 - Drafting Services 541618 - Other Management Consulting Services	African American	TBD
5.	JM Diaz, Inc.	Civil, Traffic, Rail, and Transit Engineering	541330 - Engineering Services	African American	TBD
6.	NBA Engineering, Inc.	Mechanical, Electrical, Plumbing, and Fire Protection Engineering	541330 - Engineering Services	Caucasian Female	TBD
7.	Pacific Railway Enterprises, Inc.	Signal and Communications System Design	541330 - Engineering Services 541340 - Drafting Services 541512 - Computer Systems Design	Caucasian Female	TBD

			Services		
8.	Rani Engineering, Inc.	Signal, Train Control	541330 - Engineering Services 541340 - Drafting Services	Asian Pacific American	TBD
9.	Wagner Engineering & Survey, Inc.	Land Surveying, Mapping, Right of Way Engineering	541370 - Surveying and Mapping 541330 - Engineering Services 541360 - Geophysical Surveying and Mapping	Caucasian Female	TBD
Total DBE Commitment					25%

B. Contracting Outreach and Mentoring Plan

To be responsive, proposers were required to submit a Contracting Outreach and Mentoring Plan (COMP) which included its strategy to mentor two DBE firms for protégé development. The selected DBE protégés are Pacific Railway Enterprise and GC Tech, Inc.

C. Living Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention Policy (LW/SCWRP) is not applicable to this Contract.

D. Prevailing Wage Applicability

Prevailing Wage requirements are applicable to this project. DEOD will monitor contractors' compliance with the State of California Department of Industrial Relations (DIR), California Labor Code, and, if federally funded, the US Department of Labor (DOL) Davis Bacon and Related Acts (DBRA).

E. Project Labor Agreement/Construction Careers Policy

Project Labor Agreement/Construction Careers Policy is not applicable to this Contract.

Potential Services Provided by the Engineering Support Bench

Type Task Order	Description	Cost	Years plus Options	Total	Comments
Staff Augmentation	CAD Services - Traction Power	\$ 213,750.00	5	\$ 1,068,750.00	Various CP
Staff Augmentation	CAD Services - Communications	\$ 213,750.00	5	\$ 1,068,750.00	Various CP
Staff Augmentation	CAD Services - Train Control	\$ 213,750.00	5	\$ 1,068,750.00	Various CP
Staff Augmentation	Project Manager No.1	\$ 320,625.00	5	\$ 1,603,125.00	Various CP
Staff Augmentation	Project Manager No.2	\$ 320,625.00	5	\$ 1,603,125.00	Various CP
Staff Augmentation	Track Engineer	\$ 427,500.00	5	\$ 2,137,500.00	Various CP
Staff Augmentation	COM Engineer	\$ 427,500.00	5	\$ 2,137,500.00	CP-205070
Staff Augmentation	Train Control Engineer	\$ 427,500.00	5	\$ 2,137,500.00	Various CP
Subtotal		\$ 2,565,000.00		\$ 12,825,000.00	

Type Task Order	Description	Cost	Years plus Options	Total	Comments
Design Task Order	Update of CCTV System	\$ 475,000.00	1	\$ 475,000.00	
Design Task Order	Update of TPIS	\$ 475,000.00	1	\$ 475,000.00	
Design Task Order	Update of MBL ETS	\$ 475,000.00	1	\$ 475,000.00	
Design Task Order	Red Line Generator Recepticle	\$ 112,500.00	1	\$ 112,500.00	
Design Task Order	EOS/MOS Switches	\$ 112,500.00	1	\$ 112,500.00	
Design Task Order	ETEL/PTEL Upgrade	\$ 112,500.00	1	\$ 112,500.00	CP-205100
Design Task Order	MRL TWC Rehab	\$ 143,750.00	1	\$ 143,750.00	CP-205100
Design Task Order	MGL Signal Rehab - Phase II	\$ 125,000.00	1	\$ 125,000.00	CP-205092
Design Task Order	System Wide Corrosion	\$ 500,000.00	1	\$ 500,000.00	
Design Task Order	Fare Gate Design	\$ 187,500.00	1	\$ 187,500.00	
Design Task Order	OCS Monitoring System	\$ 465,000.00	1	\$ 465,000.00	
Design Task Order	Correct Door Enable on LRT Project	\$ 465,000.00	1	\$ 465,000.00	Typical Yearly Work
Subtotal				\$ 3,648,750.00	
			5	\$ 18,243,750.00	
Grand Total				\$ 31,068,750.00	Max Value of Contract over Five Years