



EMERYVILLE TRANSPORTATION MANAGEMENT ASSOCIATION

AGENDA

Board of Directors Meeting
Bay Street Conference Room

5616 Bay Street

Emeryville, CA 94608

May 16th, 2019

Chair

Geoffrey Sears,
Wareham Development

Vice Chair

Betsy Cooley, At-Large
Residential Member

Secretary

Bobby Lee, At-Large
Residential Member

Treasurer

Andrew Allen
At-Large Business
Member

Directors

Julie Cai,
Bay Street

Peter Schreiber,
Pixar

Colin Osborne
At-Large Employer
Member

Ron Silberman,
At-Large Business
Member

Kassandra Kappelos
Public Market

1. Call to Order
2. Election of Officers
 - A. Chair
 - B. Vice Chair
 - C. Secretary
 - D. Treasurer
3. Public Comment
4. Approval of the Minutes of the April 18th, 2019 Board of Directors Meeting (Attachment)
5. Executive Directors Report
 - A. Status Update on EGR Bus Yard at Mandela Parkway
 - i. Airspace Lease – Deadline is August 23rd to go to CTC in October
 - ii. Project Costs to Date
 - iii. Design & Environmental Package Submittal to Caltrans – June 15th
6. Business Items
 - A. Review and Consider Approval of Cost Proposal from Syncromatics for Automated Passenger Counters (Attachment)
 - B. Review of First Quarter Financial Report (Attachment)
 - C. Review of First Quarter Performance Reports (Attachment)
 - i. Ridership
 - ii. Schedule Adherence
7. Suggestions/Requests from Board Members
8. Confirm date of Next Meeting – June 20th, 2019
9. Adjournment

EMERYVILLE TRANSPORTATION MANAGEMENT ASSOCIATION

ACTION SUMMARY MINUTES

Board of Directors Meeting

April 18th, 2019

1. Call to Order

The meeting was called to order at 9:17AM by Geoff Sears.

Directors Present: Geoff Sears, Betsy Cooley, Bobby Lee, Peter Schreiber, Colin Osborn, Julie Cai, Cassandra Kappelos, Ron Silberman, Andrew Allen

Staff Present: Roni Hatstrup, John S Tounger, CPA and David Low, Auditor

Others: Dina Keena, City of Emeryville

2. Public Comment

3. Approval of Minutes of the March 21st, 2019 Board of Directors Meeting (Attachment)

Julie Cai noted a correction to the year, to change from 2018 to 2019. Geoff Sears motioned for approval. Betsy Cooley seconded the motion.

This item was approved by a unanimous vote.

AYE: 9

NAY: 0

ABSTAIN: 0

4. Executive Director's Report

A. Status update on EGR Bus Yard at Mandela Parkway

Roni Hatstrup provided an update on the Oakland process noting the approval of the Major Conditional Use permit by the Oakland Planning Commission.

Brian Stewart provided an overall update of the project, including a review of the project milestone schedule.

The Board formed a committee of the following Directors, to review and comment on the Caltrans Airspace lease:

- *Geoff Sears*
- *Andrew Allen*
- *Ron Silberman*
- *Kassandra Kappelos*

Geoff Sears directed staff to send the boilerplate lease agreement to ETMA legal counsel for review and comment.

Betsy Cooley provided an update from the April 10th public meeting to discuss the Maze Freight Corridor project.

B. Upcoming Board Elections

Roni Hatstrup reminded the Board of the upcoming Business and Employer Director elections at the May 16th Annual Membership meeting.

EMERYVILLE TRANSPORTATION MANAGEMENT ASSOCIATION

ACTION SUMMARY MINUTES

Board of Directors Meeting

April 18th, 2019

Betsy Cooley informed the Board of the City's re-appointment of her and Bobby Lee to continue serving as Residential Members and Directors of the ETMA.

5. Business Items

A. Review and Accept the Independent Auditors Report on the Financial Statements for year ending December 31, 2018

Roni Hatstrup informed the Board of the Audit Committee meeting, which occurred on April 17th, 2019 with the following committee members:

- *Kassandra Kappelos*
- *Peter Schreiber*
- *Julie Cai*

David Low provided an overview of the Financial Statements and noted his clean opinion of the audit. Roni informed the board of the increase in the designated net assets to increase the operating reserve to 15% of the annual operating expenses, as required per the organizations administrative policies.

Peter Schreiber motioned for acceptance of the Independent Auditors report on the 2018 Financial Statements. Andrew Allen seconded.

This item was approved by a unanimous vote.

AYE: 9

NAY: 0

ABSTAIN: 0

B. Review and Authorize the signing and filing of the ETMA's 2018 Federal Tax Return and State Annual Information Return

John Tounger provided an overview of the tax documents, noting that they are reflective of the 2018 Financial Statements.

Roni informed the Board of a few changes to the tax documents, including the increase in membership classes, from 4 to 5, per the latest bylaws and the change in Directors and Officers.

Peter Schreiber motioned for approval of the 2018 tax filings. Andrew Allen seconded the motion.

This item was approved by a unanimous vote.

AYE: 9

NAY: 0

ABSTAIN: 0

C. Review of the Draft 2018 Annual Report

EMERYVILLE TRANSPORTATION MANAGEMENT ASSOCIATION

ACTION SUMMARY MINUTES

Board of Directors Meeting

April 18th, 2019

Roni Hattrup presented the draft report, noting the performance comparison of Emery Go-Round, relative to other Transit Agencies in the Bay Area.

Bobby Lee requested a sentence be added to emphasize ETMA's commitment to provide a safe and clean shuttle service.

This item required no action.

6. Suggestions/Requests from Board Members

None

7. Confirm Date of Next Meeting

The meeting date of May 16th was confirmed.

8. Adjournment

The meeting was adjourned at 10:24 AM.

Mandela Site - Project Budget Status

Project Management Oversight	Total Authorized Budget	Cost to Date (thru Mar 2019)	Remaining Balance	% of Work Completed	% of Budget Expended
Gray Bowen Scott	\$ 93,000.00	\$ 39,404.50	\$ 53,595.50	41%	42%

Project Engineering - BKF Engineers	Total Authorized Budget	Cost to Date (thru Mar 2019)	Remaining Balance	% of Work Completed	% of Budget Expended
Feasibility Study - Mandela Turn Pocket	\$ 5,000.00	\$ 4,995.77	\$ 4.23	100%	100%
Conceptual Site Plan	\$ 48,771.00	\$ 46,036.35	\$ 2,734.65	100%	94%
Design & Environmental	\$ 220,133.00	\$ 44,719.75	\$ 175,413.25	25%	20%
Total Project Engineering	\$ 273,904.00	\$ 95,751.87	\$ 178,152.13		

TOTAL PROJECT BUDGET/COST	\$ 366,904.00	\$ 135,156.37	\$ 231,747.63
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523 W. 6th Street Suite 444, Los Angeles, CA 90014
310-728-6997, sales@gmvsync.com

Quote

Date May 10, 2019

Quote # 2019 051021

Valid 60 days

Expires July 9, 2019

Account Manager Jeff Hunter

Phone 213-328-5471

Email jeff@gmvsync.com

Person Veronica Hattrup

Client Gray-Bowen-Scott, Emery Go-Round

Email roni@graybowenscott.com

Phone (925) 937-0980 x212

Tax Rate N/A

LN	Note	Item	Qty	Price Ea	Tax	Subtotal	
						Capital	Annual
1		<u>Automated Passenger Counters (IRIS)</u>					
2	a	Hardware, IRIS - 1 Door Bus	11	\$ 3,100		\$ 34,100	\$ -
3	a	Hardware, IRIS - 2 Door Bus	14	\$ 4,540		\$ 63,560	\$ -
4		Labor, APC Installation and Calibration	25	\$ 950		\$ 23,750	\$ -
5		Vehicle and System Licenses, APC	25	\$ 650		\$ 16,250	\$ -
6		Annual Service Fee, Automated Passenger Counter	25	\$ 132		\$ -	\$ 3,300
7							
8		<u>Project Management</u>					
9	b	Project Management, Training on New Features, Travel	1	\$ 14,500		\$ 14,500	\$ -

Total Capital Cost \$ 152,160

Total Annual Cost \$ 3,300

NOTES:

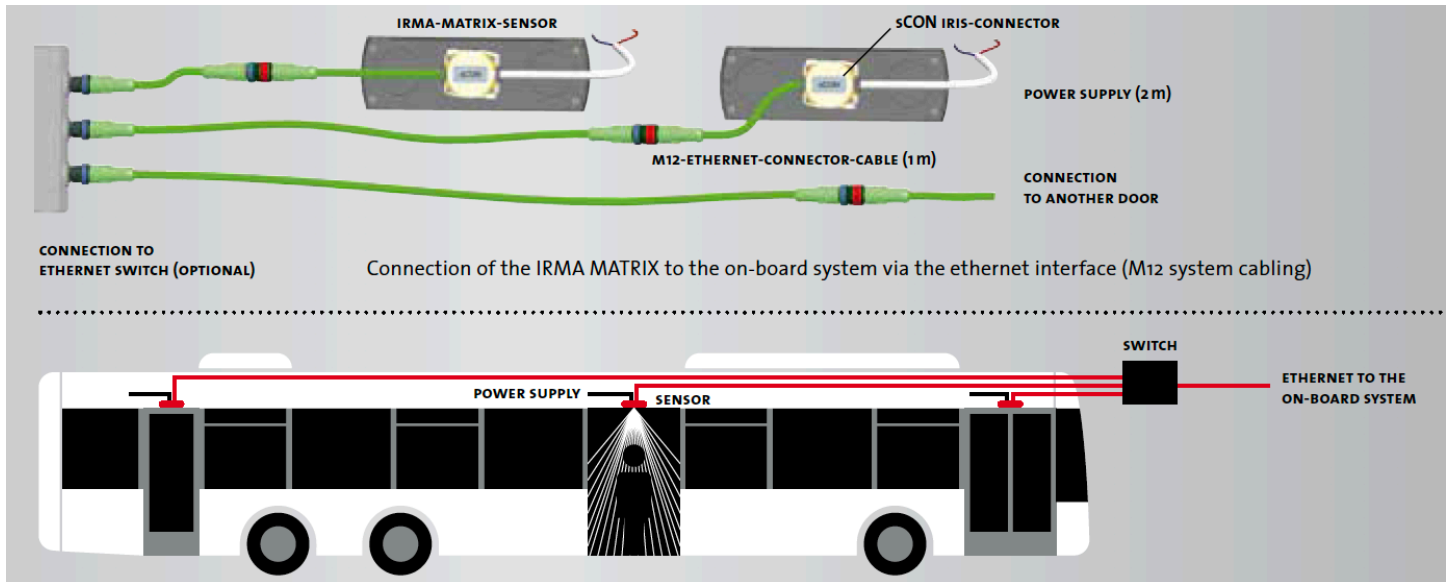
- a 1 Year Warranty Included
 - b Anticipates additional days on site due to limited yard access and limited vehicle access due to low spare ratio
- Pricing does not include local sales or use taxes

Automatic Passenger Counting (APC) System



GMV Syncromatics proposes to install the Iris IRMA Matrix APC system. We have worked extensively with APC vendors in the industry as a result of interacting with existing APC systems on clients' vehicles, and in our experience, the Iris system amongst the most reliable and accurate. Overall accuracy is dependent on a number of factors including driver interaction with the OpenMDT Plus and adherence to operating procedures such as logging in/logging out so that APC data is accurately associated with trips and stops.

This solution is composed of a networked smart sensor on each door that is wired in to the vehicle's Ethernet network via on-board router.

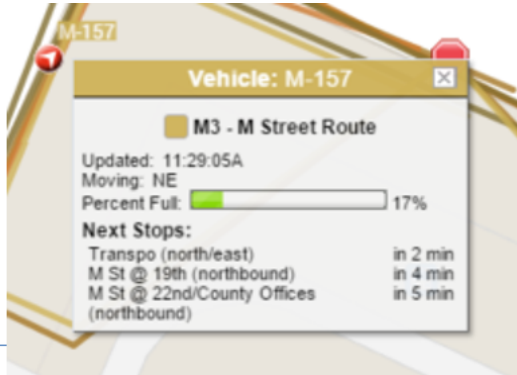


These advanced sensors look down from atop the doorway and generate a three-dimensional view of each person passing through the doorway and can distinguish between a person's head, shoulders, and any packages they may be carrying based on the distance from the top of the doorway. Even if passengers are very close together, moving quickly, passing each other in opposite directions, or carrying objects, the sensors will accurately count the boardings and alightings.



Like the other components in our system, the APC subsystem is directly integrated with all reports, stop records, and historical tools. GMV Syncromatics has developed its own software tools to enable advanced APC features like reporting of live bus loads and integration of APC data into standard performance reports.

GMV Syncromatics' APC solution transmits all information in real-time, to be accessed from anywhere via our web-based dispatch and reporting tools. GMV Syncromatics can also provide raw data (.csv) at the agency's request, which can be imported and manipulated through Excel in the Microsoft Office suite.



Real-time Passenger Load Reporting

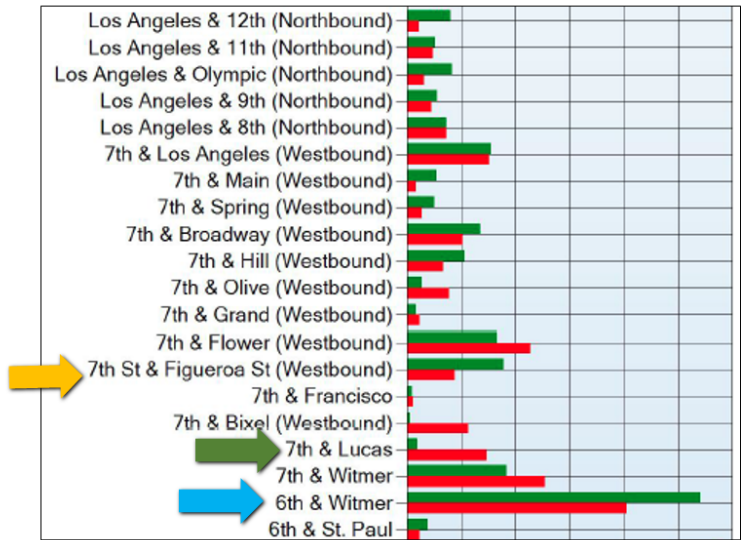
GMV Syncromatics is constantly processing counts of passengers boarding and alighting the bus, and our servers communicate with the bus in real-time to maintain an up to date passenger load. We make this passenger load information available to transit dispatchers, so they always know how many people are on a bus right now.

At our clients' discretion, we can also make this information available publicly. This helps riders know if they are likely going to get a seat on a bus or not.

Key Points: Software

- Once the APC data reaches the server, there are multiple different levels at which APC data is stored on the GMV Syncromatics ITS system:
- Vehicle level: APC data is associated with GPS points and can be viewed visually in the vehicle's breadcrumb history
- Stop level: The system uses a specific algorithm to match APC data with stops. Even if a bus opens and closes its doors multiple times at a stop, APC data can still be stored as one stop's counts.
- Route level: The system also stores the data at the route level for calculation of overall counts, daily/weekly/monthly/annual statistics and counts, activity by hour and day of week, etc.
- There are a number of reports for overall totals as well as hourly, weekday, day of week, monthly and annual data. Data is presented in percentages, average boardings/alightings per stop, and bar graphs.
- It is best to think of these reports as a flexible/modular system – you can query the data out of them in many different formats and filters, but they don't require any technical knowledge and are wizard-based.

HEAT MAP – PASSENGER COUNTS



Bar chart provides raw information



Map View provides local context

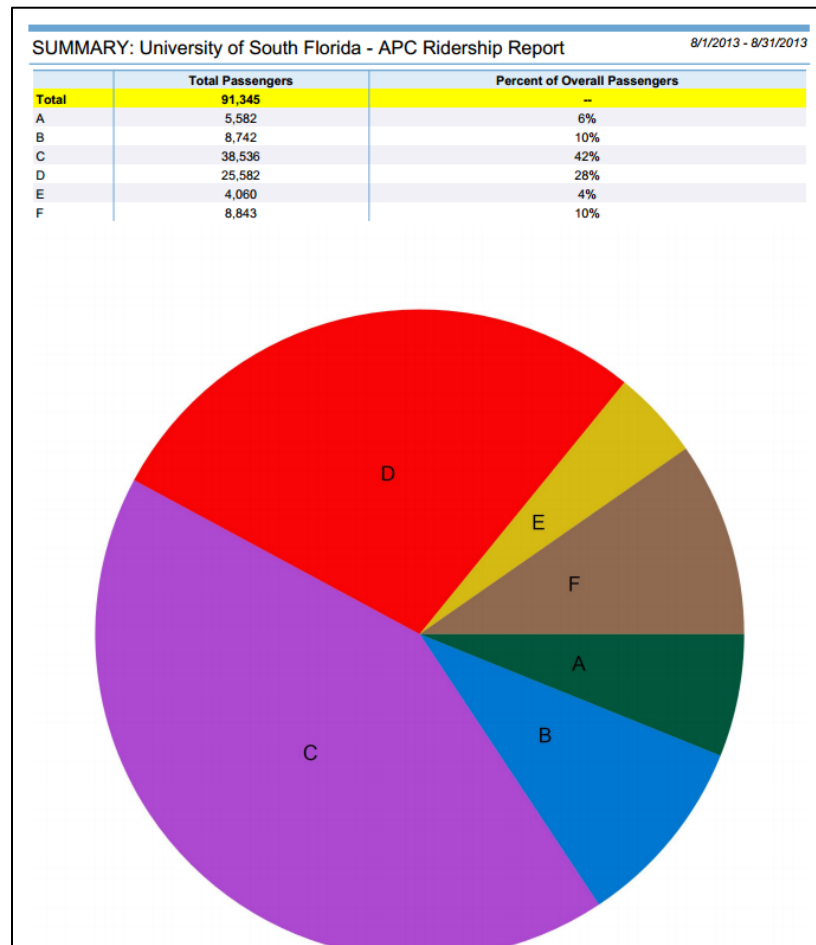
Which stops are most popular?

Why?

- Hospital
- Connection to rail station

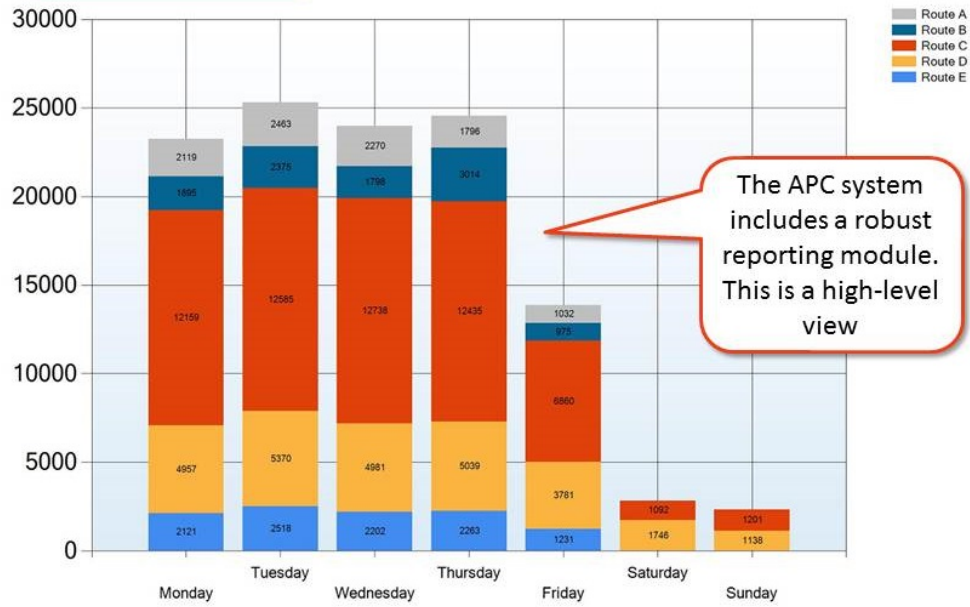
Why Not?

- Freeway



APC Report

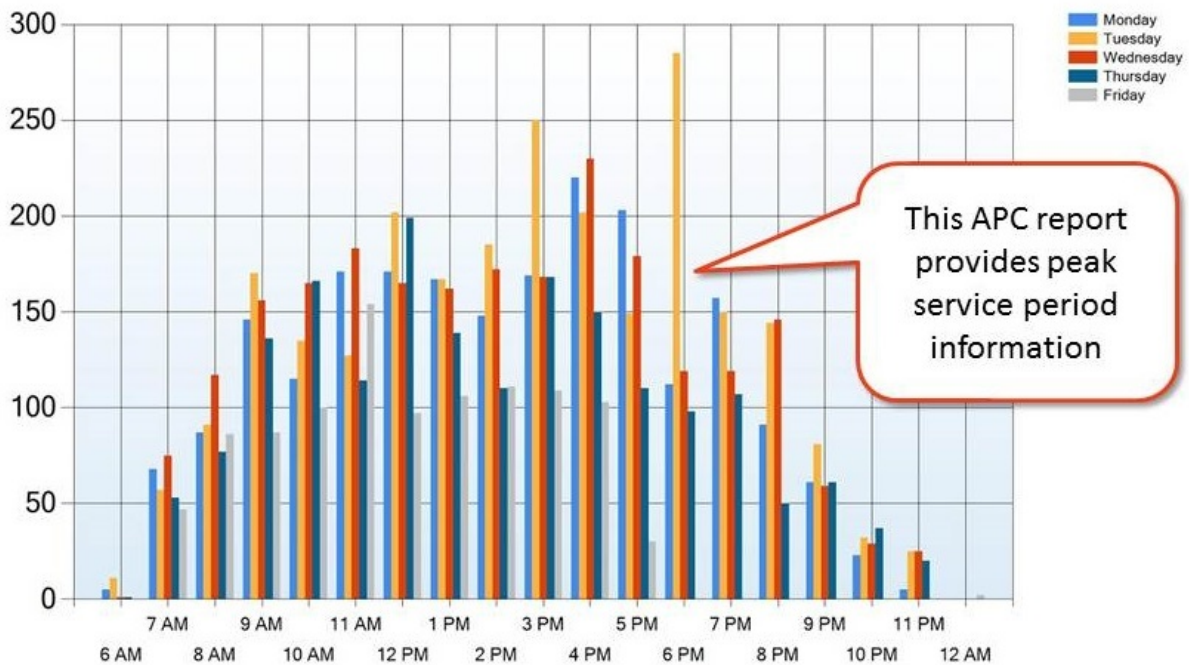
Ridership totals by day of week



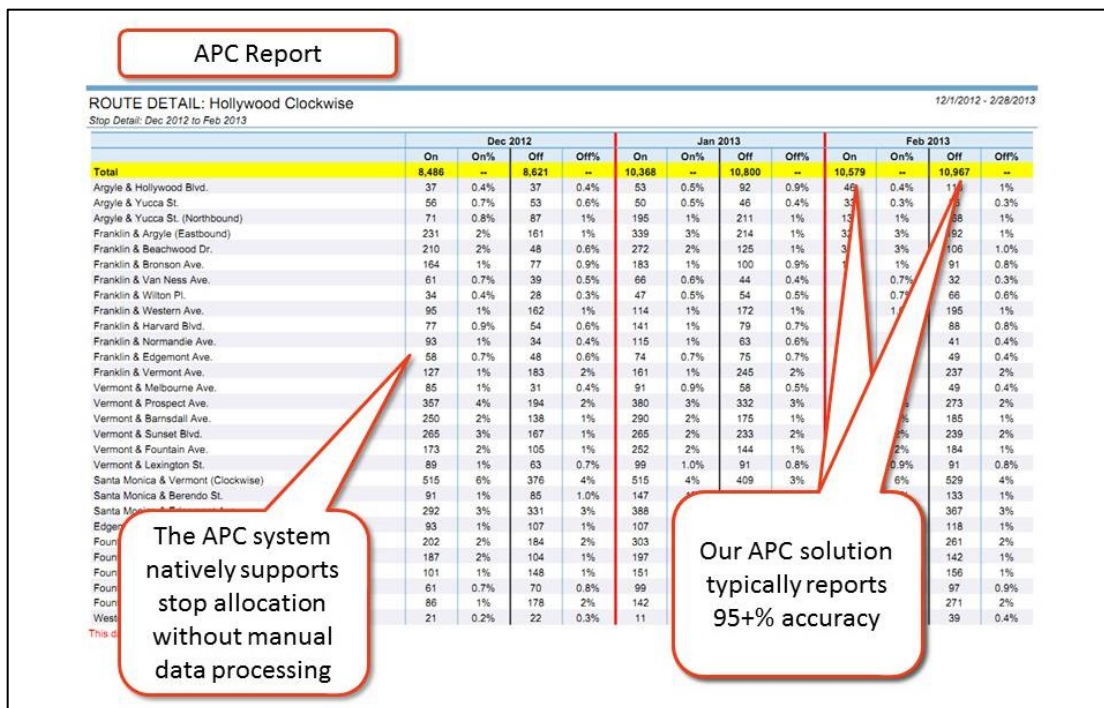
The APC system includes a robust reporting module. This is a high-level view

APC Report

Total Ridership by Day / Hour



This APC report provides peak service period information



Digital Passenger Counting to Augment APC Data

Digital passenger counting involves the bus driver manually counting passengers as they enter the bus by tapping on the MDT screen. Digital Passenger Counting is always included, for free, as part of the base system. When used in conjunction with APC, it would not be used to count total boardings, but rather can be used to count unique values such as the number of wheelchairs or bikes that board at each stop. The Count Fares Screen is fully customizable, so the agency can set any fare/passenger types it desires to keep track of. In addition to wheelchairs and bikes, this may be students and staff, or it may be adult, child, and senior fares.

Driver: Bigelow, Josh | Route: East Loop Off Route

SYNCHRONICS

Live Action

Count Fares

Messages

Break

Switch Trip

Sign Out

Emergency

0 - General On

0 - Bike

0 - Wheelchair

0 - Off

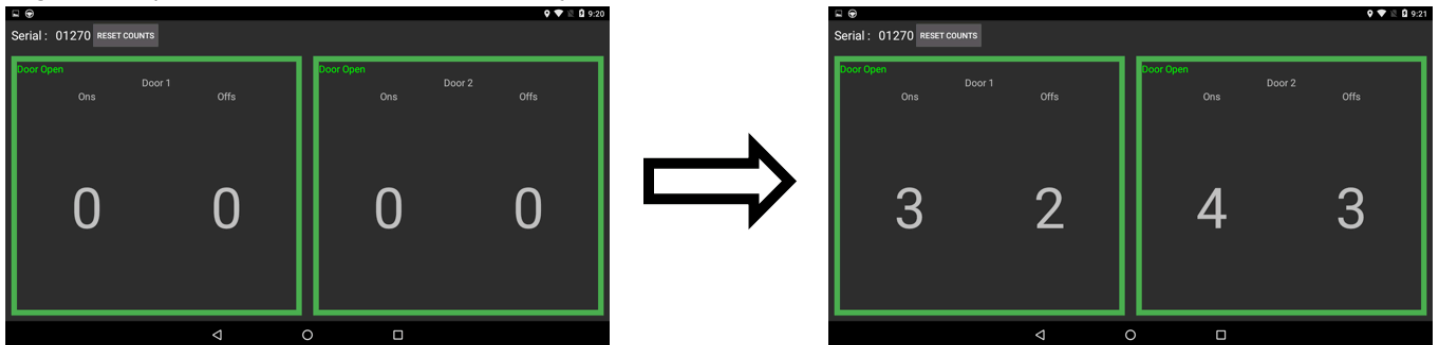
ZERO OUT

GO

Count Fares Screen. This screen can be used in place of or in addition to Automatic Passenger Counters, allowing drivers to manually count passengers on the MDT. It also allows drivers to note whether bikes, wheelchairs, senior fares, student fares, or others board. All fare and passenger types are customizable.

APC Diagnostics via OpenMDT Plus

The DIAGNOSTICS module on the OpenMDT Plus has an APC Test function that allows an operator or maintenance technician to confirm the proper function of the APC system without any special tools, computers, or high tech knowledge. Once APC Test mode, the MDT screen will display the results of APC On/Off counts as the tester walks on and off the bus through front and back doors. These numbers are large so they can be read from the doorways.



NTD Reporting Support

Service Statistics

Start Date End Date All Routes

All ☒ Weekday ☐ Saturday ☐ Sunday

Passenger Statistics

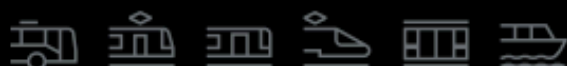
Month	Unlinked Passenger Trips ⓘ	Passenger Miles Traveled ⓘ	Average Trip Length ⓘ
Apr 2019	5,632	13,255	2.35
Total	5,632	13,255	2.35

Vehicle Service Statistics

Month	Vehicle Revenue Miles (VRM) ⓘ	Deadhead Miles ⓘ	Total Actual Vehicle Miles ⓘ	Vehicle Revenue Hours (VRH) ⓘ	Deadhead Hours ⓘ	Total Actual Vehicle Hours ⓘ
Apr 2019	37,060	2,162	39,222	4,587	355	4,942
Total	37,060	2,162	39,222	4,587	355	4,942

Schedule Statistics

Month	Vehicles Operated In Max Service ⓘ	Total Days Operated ⓘ	Weekdays Operated ⓘ	Saturdays Operated ⓘ	Sundays Operated ⓘ
Apr 2019	23	29	22	4	3



iris INTELLIGENT SENSING

IRMA MATRIX

The 5th generation of counting sensors from company iris. IRMA MATRIX reliably offers maximum accuracy thanks to its proven time-of-flight technology (ToF).

FEATURES



- 500-pixel sensor matrix with 3D Time-of-Flight Technology (ToF)
- HDR Image processing
- Integrated processor (DSP) for signal processing and counting
- Detection and evaluation of passenger's statures (Object Analyzer)
- Simultaneous detection of the direction of motion for boarding and alighting passengers (regardless of door height or crowds)
- Support of the CAN and Ethernet interfaces, Power over Ethernet (PoE)
- System interface adapter available for IBIS, J1708 to be used in existing telematics systems
- WiFi possible (additional hardware required)
- IRMA MATRIX Surface mount version for time-saving retrofitting available
- Easy installation using only 2 screws in vehicles without any adjustment work
- No door contact necessary: counting begins via telegram from the OBC
- Just one sensor per door required (standard vehicle doors only)
- Due to the sensor's own emitted infrared light there is no dependency from low ambient light. Also in complete darkness, like with defect door lamps at night, the sensor will deliver accurate counting results.
- The installation requires no free blind range below the sensor

IRMA MATRIX surface mount version





TRAINS



PLATFORM SCREEN DOORS



TRAMS



TROLLEY BUSES



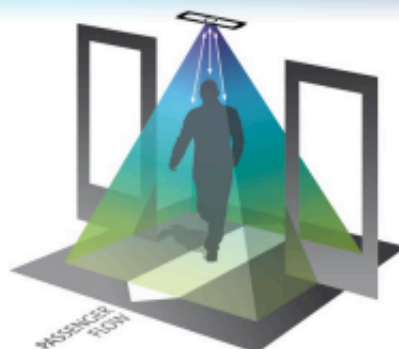
BUSES



FERRYBOATS

APPLICATIONS

- Real time capture of passenger load
- Precise revenue sharing facilitated by highly accurate monitoring of transport services, based on revenue passenger kilometers (RPK) and height classification of passengers
- Demand-based management of fleet deployment



TECHNICAL DATA

Dimensions (W×H×L)

Housing

Protection class

Interface

Connection

Wiring system

Type approvals, standards

Vehicle integration / System architecture

Power supply

Weight without Iris-Connector (sCON)

Pixel

MTBF

Required external lighting

Minimum installation height

Specifications subject to change.
Technically binding is the particular product data sheet.

- Sensor: 58 × 22 × 188 mm | see housing picture on the right
- Aluminum pressure casting housing
- Optical openings made of synthetic materials (polycarbonat)
- IP65 (IP67 on request)
- Ethernet, 100 Mbit/s
- CAN, max. 125 kbit/s
- Interface: iris-connector (sCON)
- M12 connectors for Ethernet or CAN
- cable according to EN45545-2 and EN50306
- EN50155, ECE, CE, EN50121-3-2, EN45545-2, EMV-D6
- Ethernet via API, VDV301, direct UDP
- CAN via API
- Gateway to IBIS and J1708
- 24 VDC or 48 V PoE
- power consumption: typically 6 W; 8 W PoE
- Surface mount version: approx. 260 g
- Flush mount version: approx. 340 g
- 500
- 1,2 million hours
- 0 LUX
- Allowing passengers to pass upright underneath the sensor, < 1,80 m

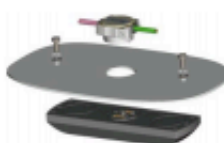
Flush mount version sCON-S:
58 × 43 × 188 mm (W × H × L)



Flush mount version sCON-F:
58 × 36 × 188 mm (W × H × L)



Surface mount version sCON-S:
53 × 43 × 165,5 mm (W × H × L)



Apc Accuracy Report

Start Time

End Time

Route

Pattern

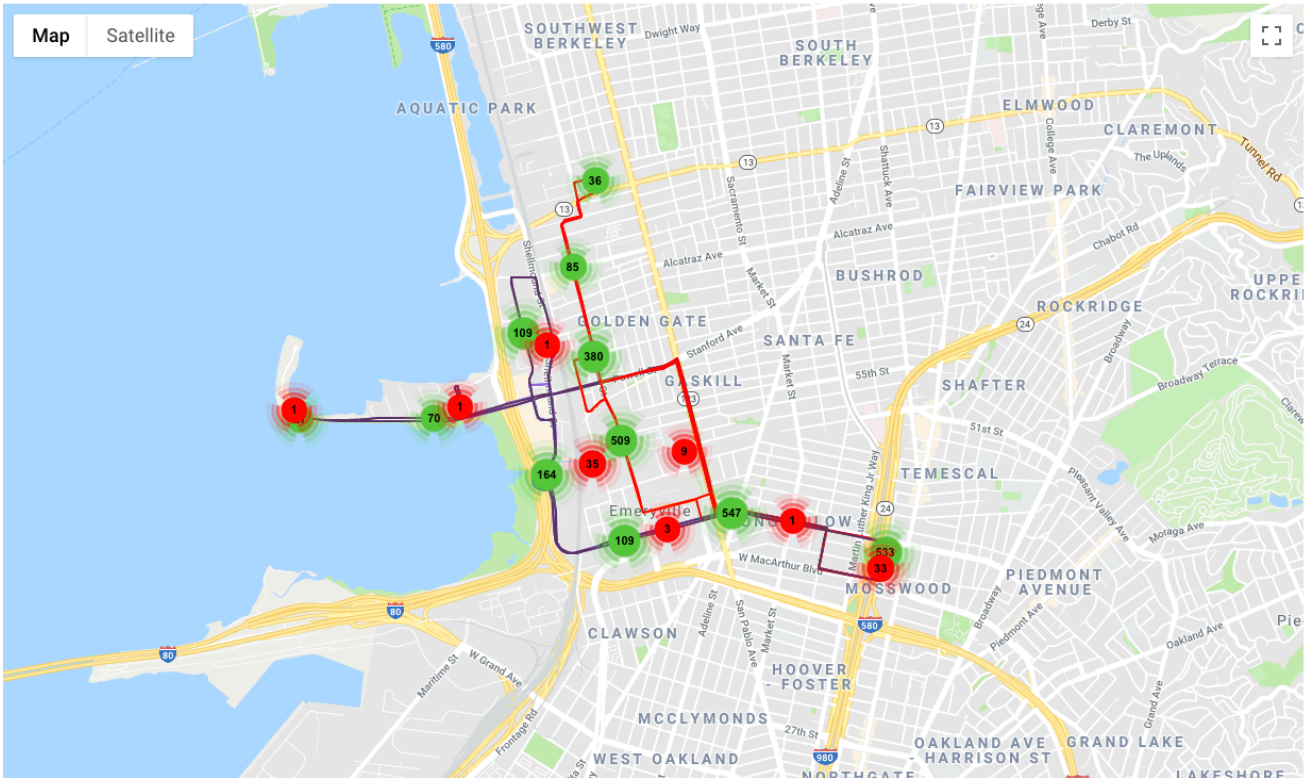
[View Report](#)

[Download CSV](#)

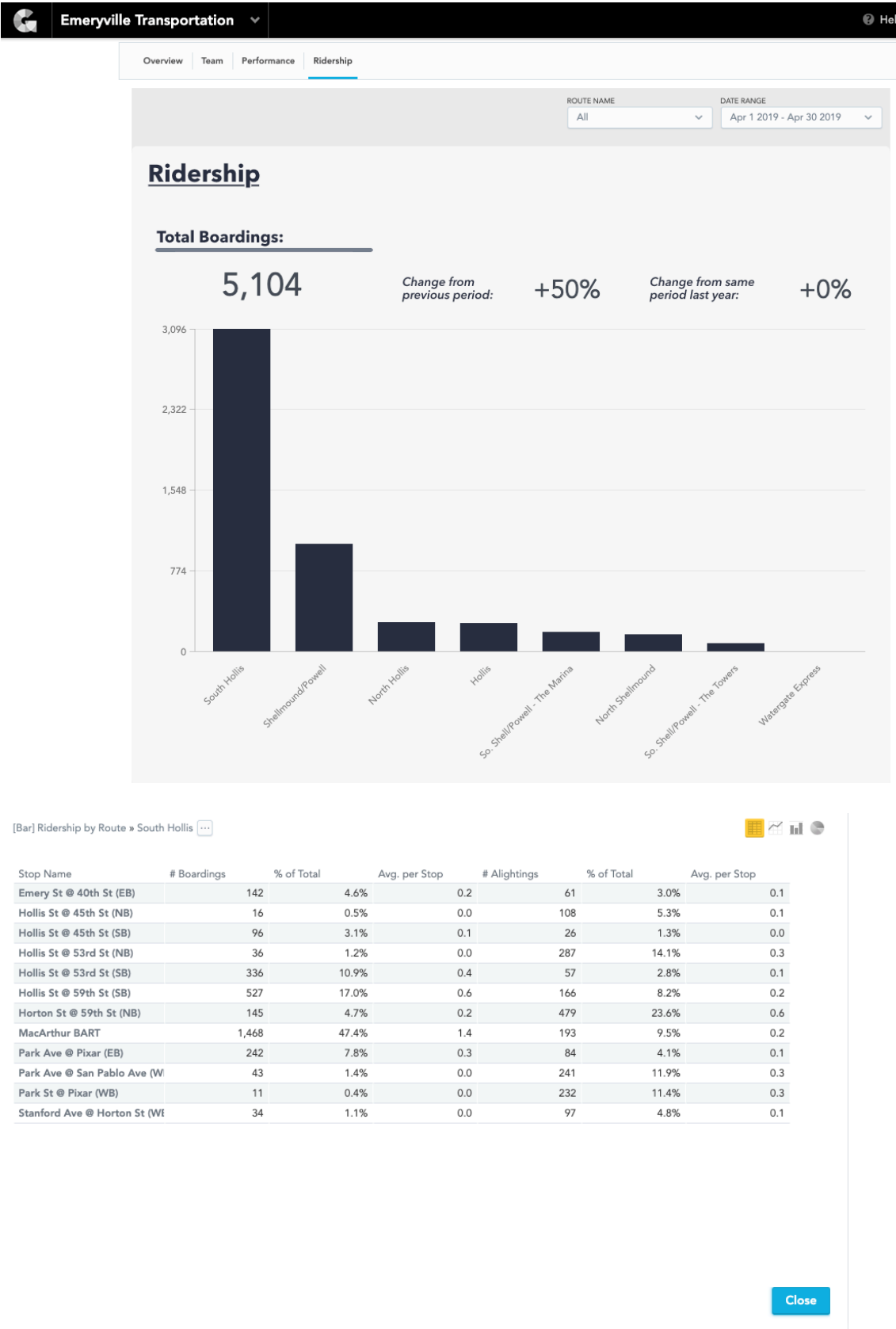
Vehicle Name	Total Apc On	Total Apc Off	Variance	Variance Percentage	Total Unknown On	Total Unknown Off	Unknown On Percentage	Unknown Off Percentage	Map All Vehicles
65	0	0	0	100%	0	0	0%	0%	Map Vehicle
920	0	0	0	100%	0	0	0%	0%	Map Vehicle
922	0	0	0	100%	0	0	0%	0%	Map Vehicle
651	0	0	0	100%	0	0	0%	0%	Map Vehicle
650	0	0	0	100%	0	0	0%	0%	Map Vehicle
649	0	0	0	100%	0	0	0%	0%	Map Vehicle
921	0	0	0	100%	0	0	0%	0%	Map Vehicle
696	0	0	0	100%	0	0	0%	0%	Map Vehicle
67	5658	5721	63	1.1%	487	436	8.6%	7.6%	Map Vehicle

Apc Accuracy Visualizer

[Back](#)

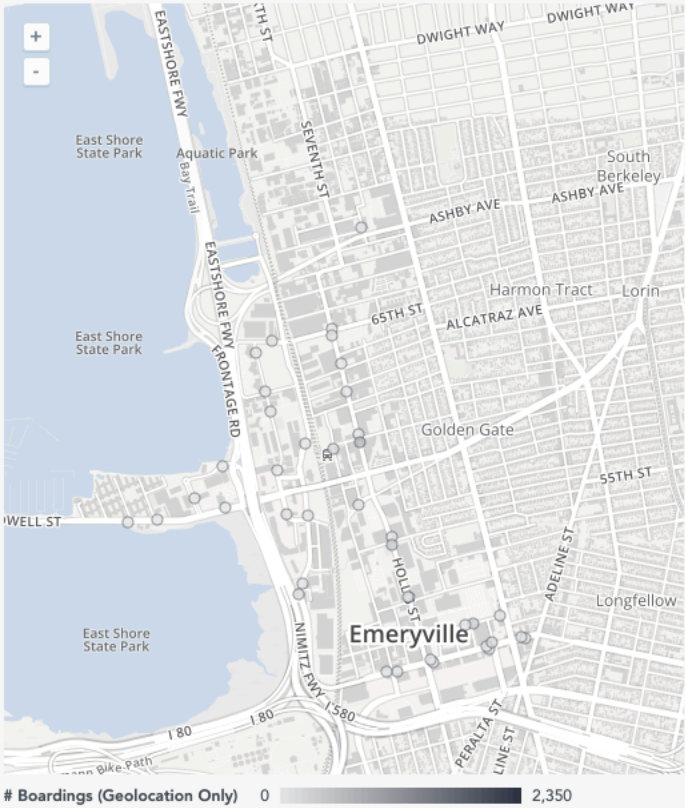


Near-Term Future State – 2019 Release



Ridership Heatmap

BOARDINGS:



Stop Details

Stop Name	# Boardings	▴ % of Total	Avg. per Stop	# Alightings	% of Total	Avg. per Stop
MacArthur BART	2,350	46.0%	0.3	515	14.0%	0.1
Hollis St @ 59th St (SB)	599	11.7%	0.3	179	4.9%	0.1
Hollis St @ 53rd St (SB)	344	6.7%	0.2	60	1.6%	0.0
Park Ave @ Pixar (EB)	250	4.9%	0.2	88	2.4%	0.1
Shellmound St @ Marriott (SB)	155	3.0%	0.1	18	0.5%	0.0
Horton St @ 59th St (NB)	153	3.0%	0.1	549	14.9%	0.2
Emery St @ 40th St (EB)	147	2.9%	0.1	68	1.8%	0.0
40th St @ Horton St (EB)	110	2.2%	0.1	107	2.9%	0.1
Hollis St @ 45th St (SB)	101	2.0%	0.1	29	0.8%	0.0
Christie Ave @ Trader Joe's (S)	97	1.9%	0.0	57	1.5%	0.0

ETMA 2019 - 1st Quarter Financial Reports
(Cash Basis)

5/9/2019

EMERY GO-ROUND

(Cash Basis)

1st Quarter Financials					
	2019 Budget	Actual Revenue Rec'd to Date	Variance	% of revenue received	Notes
Revenue					
<u>PBID Revenue</u>					
Net PBID Revenue	3,581,271	1,790,635	895,317	50%	
<u>Non-PBID Revenue</u>					
City - General Benefit Contribution	637,728	318,864	159,432	50%	
ETMA Billed Revenue	101,320	2,957	(22,373)	3%	
BGTMA (Net balance of WBS revenue)	45,000	-	(11,250)	0%	
Other Revenue	3,000	34,140	33,390	1138%	Grant Reimbursement from 2018 & Interest Income.
Subtotal Non-PBID Revenues	787,048	355,961	159,199	45%	
Total Revenue	4,368,319	2,146,596	1,054,517	49%	
Expenditures					
<u>Direct Costs</u>					
Bus Leases/Purchases	500,000	121,095	(3,905)	24%	
Maintenance	340,000	59,465	(25,535)	17%	
Operations Contract	2,300,000	696,333	121,333	30%	Includes payments for 4 months (Nov-Feb)
Fuel	300,000	55,806	(19,194)	19%	
Communications	180,000	2,996	(42,004)	2%	
Miscellaneous Operating Costs	15,000	-	(3,750)	0%	
Subtotal Direct Costs	3,635,000	935,696	26,946	26%	
<u>Indirect Costs</u>					
Professional Services	490,000	56,506	(65,994)	12%	
Occupancy (site lease, utilities, etc.)	150,000	34,708	(2,792)	23%	
Bus Yard (Site Development & Relocation)	850,000	53,087	(159,413)	6%	
Membership/Public Outreach Expenses	15,000	2,410	(1,340)	16%	
Pilot Projects and Research	25,000	-	(6,250)	0%	
TMA Insurance	20,000	12,569	7,569	63%	
Meeting expenses, supplies, licenses, fees, etc.	4,000	793	(207)	20%	
Subtotal Indirect Costs	1,554,000	160,073	(228,427)	10%	
<u>Replenishment of Cash Reserve</u>					
Estimated Revenue Shortfall	-	-	-		
Cash Reserve Replenishment	-	-	-	N/A	
Subtotal Cash Reserve Replenishment	-	-	-	N/A	
Total TMA Expenditures	5,189,000	1,095,769	(201,481)	21%	

2019 Revenue vs. Expenditures Balance: (820,681) 1,050,827

**ETMA 2019 - 1st Quarter Financial Reports
(Cash Basis)**

5/9/2019

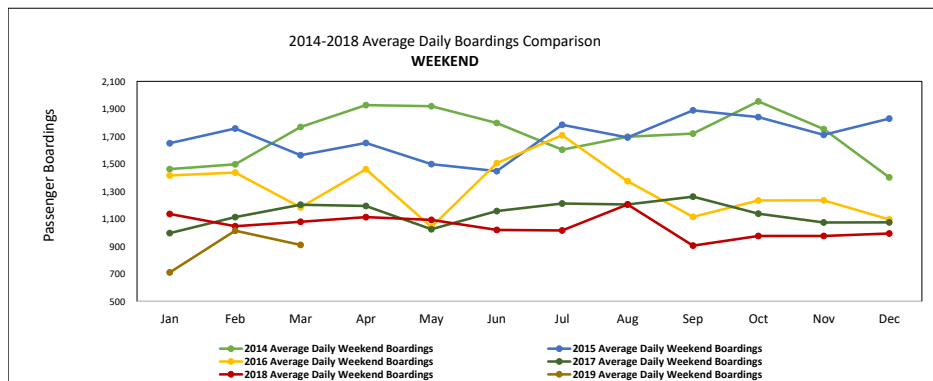
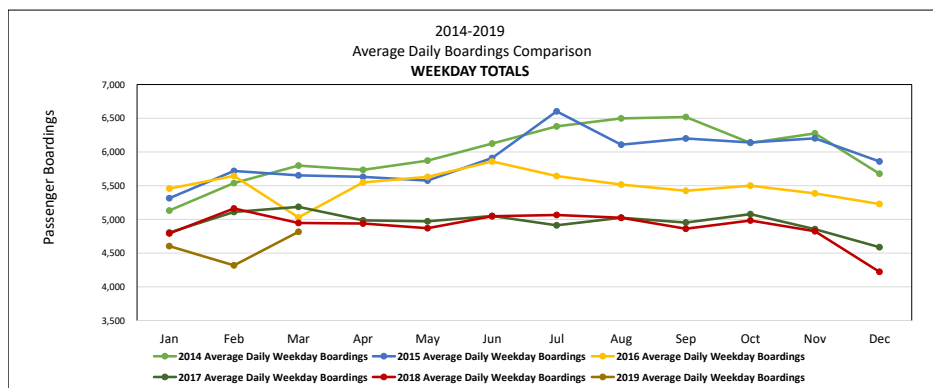
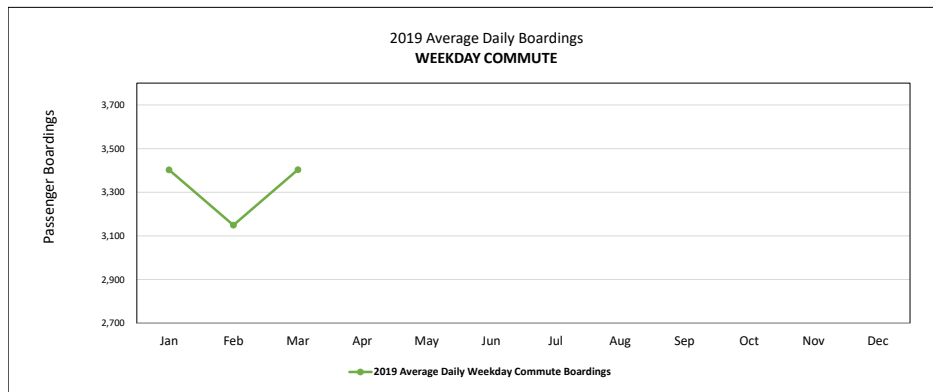
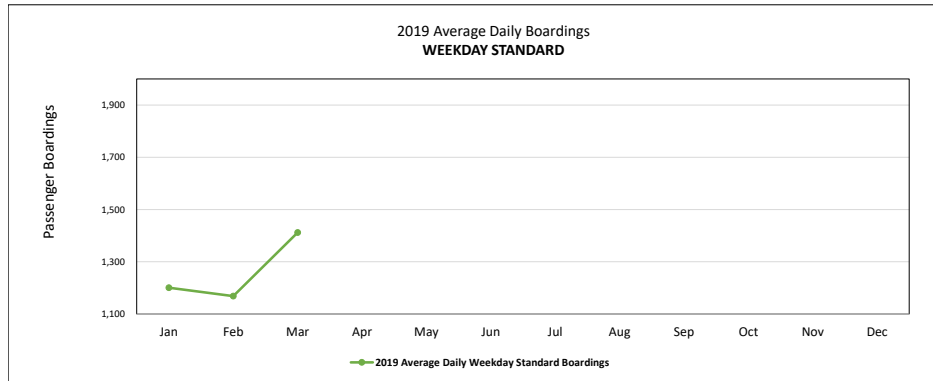
WEST BERKELY SHUTTLE		1st Quarter Financials			
<u>Revenue</u>	2019 Budget	Actual Revenue Rec'd to Date	Variance	% of Revenue Received	Notes
BGTMA & Bayer	345,000	-	(86,250)	0%	
Total Revenue - West Berkeley	345,000	0	(86,250)	0%	
<u>Expenditures</u>	2019 Budget	Actual Costs to Date	Variance	% Expended	Notes
Shuttle Operations	285,000	76,239	4,989	27%	
Professional Service Contracts	15,000	957	(2,793)	6%	
Total Expenditures - West Berkeley	300,000	77,196	2,196	26%	

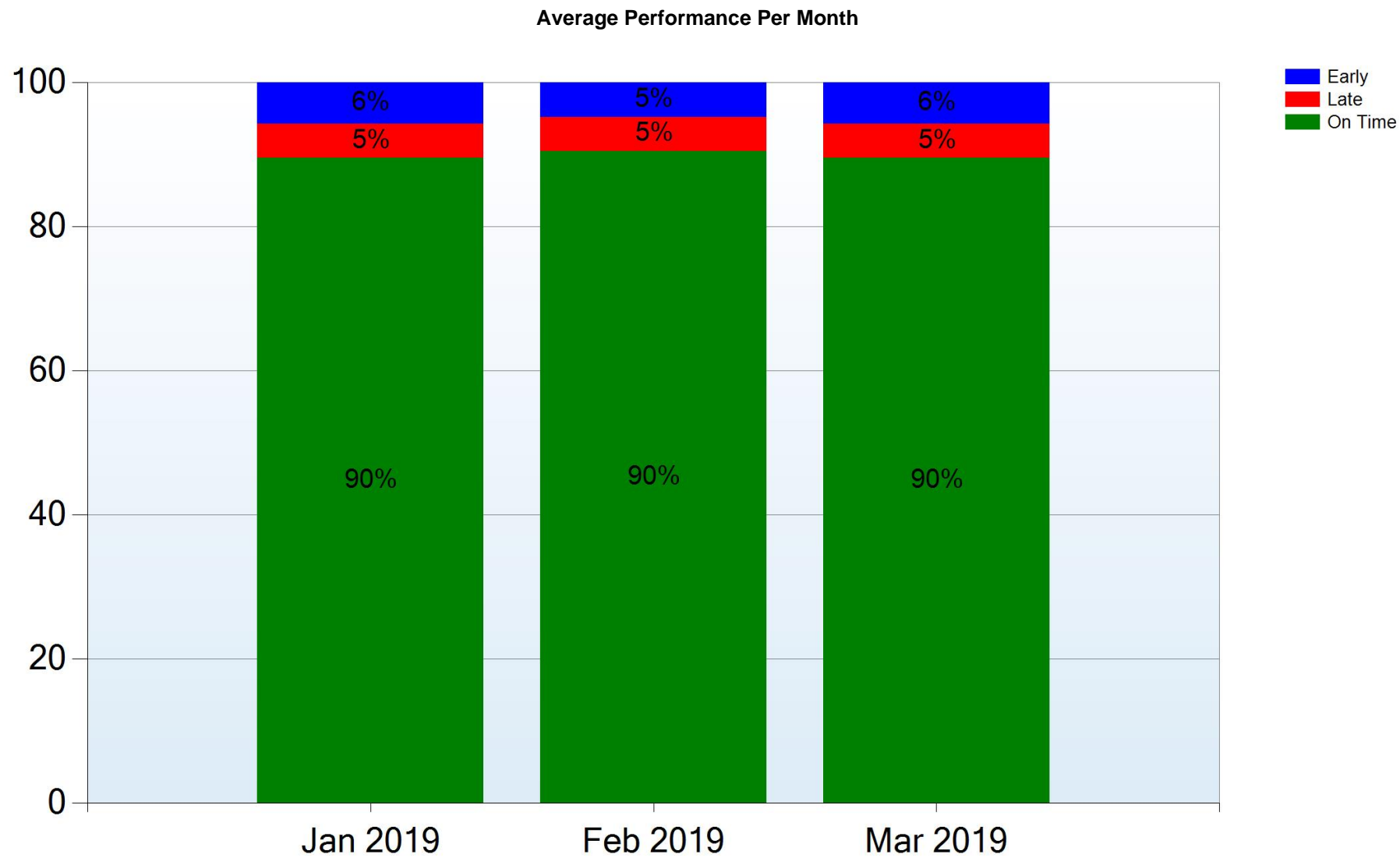
Balance 45,000 (77,196) Balance of revenue shown as ETMA revenue above.

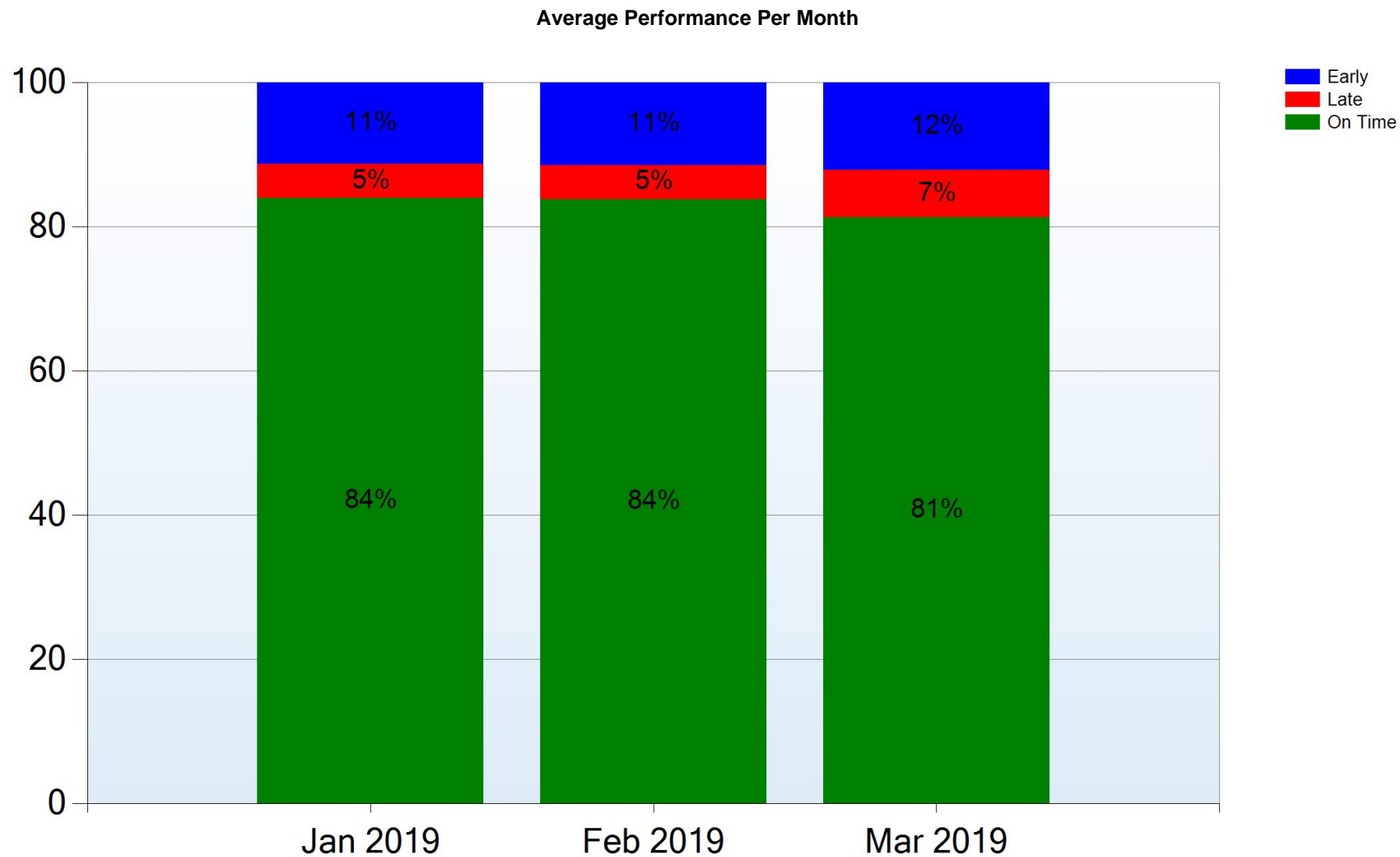
City of Emeryville - 8 to Go Paratransit		1st Quarter Financials			
<u>Revenue</u>	2019 Budget	Actual Revenue Rec'd to Date	Variance	% of Revenue Received	Notes
City of Emeryville - 8 to Go Paratransit	106,000	11,923	(14,577)	11%	
Total Revenue - City	106,000	11,923	(14,577)	11%	
<u>Expenditures</u>	2019 Budget	Actual Costs to Date	Variance	% Expended	Notes
Shuttle Operations & Maintenance	92,500	16,499	(6,626)	18%	
Fuel	3,500	409	(466)	12%	
Communications	1,000	247	(3)	25%	
Professional Service Contracts	9,000	801	(1,450)	9%	
Total Expenditures - City	106,000	17,956	(8,544)	17%	

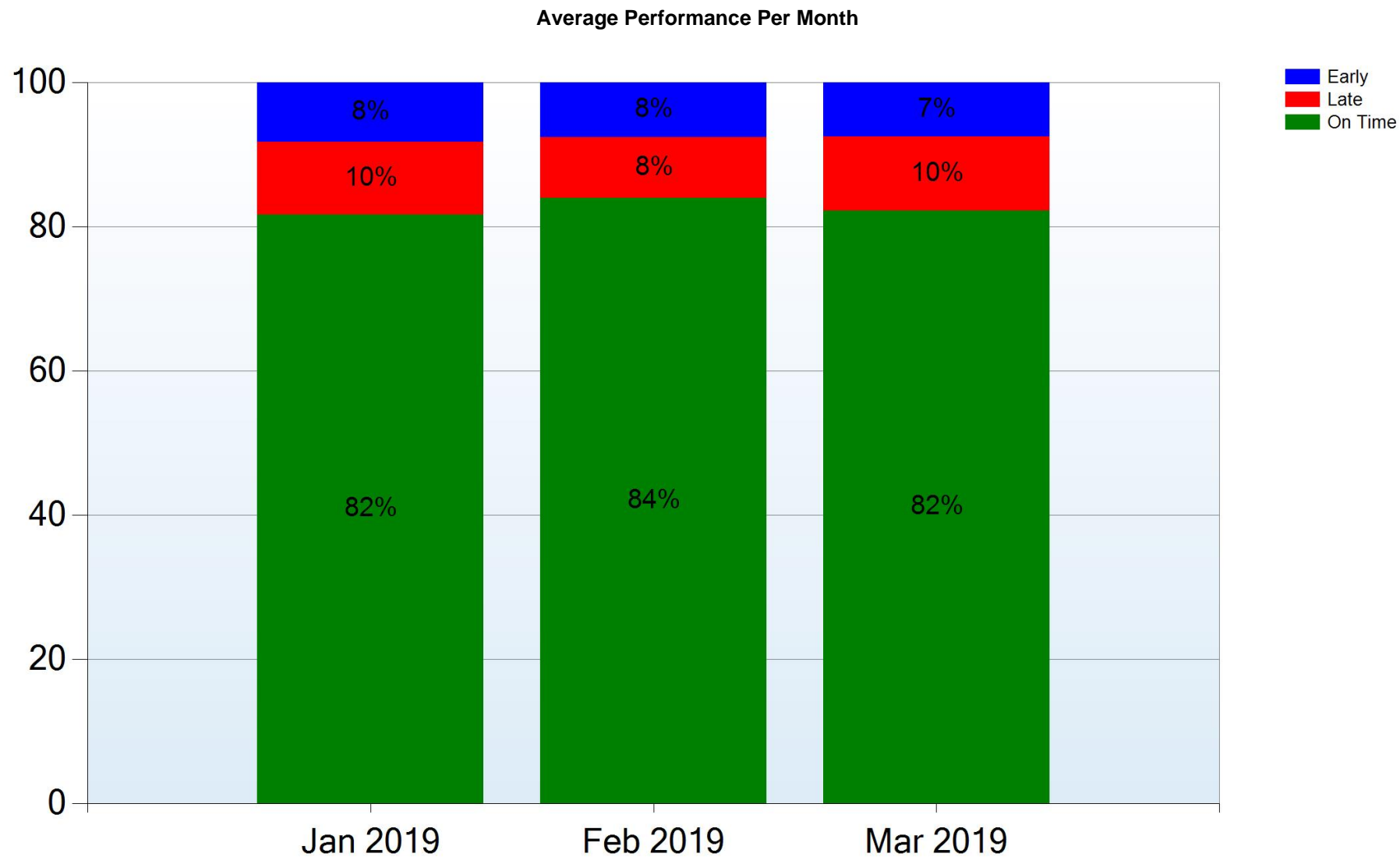
Balance (6,033)

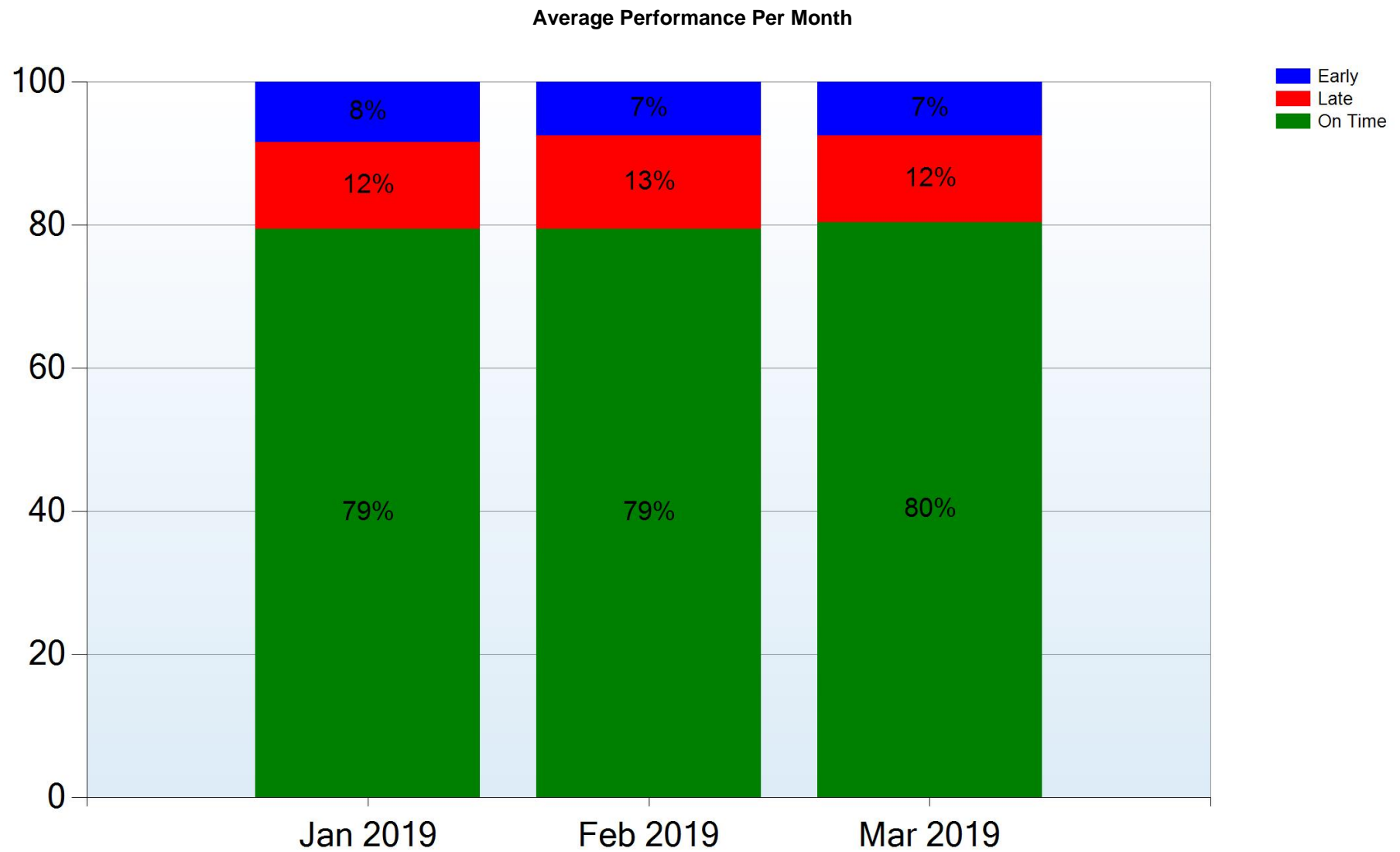
Total Passenger Boardings per Year/Quarter						
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total	% inc/dec from prior year
2019 Ridership	307,328				307,328	-9.5%
2018 Ridership	339,458	343,628	342,100	325,897	1,351,083	-2.6%
2017 Ridership	348,530	348,438	345,946	334,970	1,377,884	-10.1%
2016 Ridership	371,644	398,192	388,902	374,593	1,533,331	-7.7%
2015 Ridership	387,583	403,515	448,244	421,174	1,660,516	-1.2%
2014 Ridership	381,216	425,010	457,239	416,392	1,679,857	

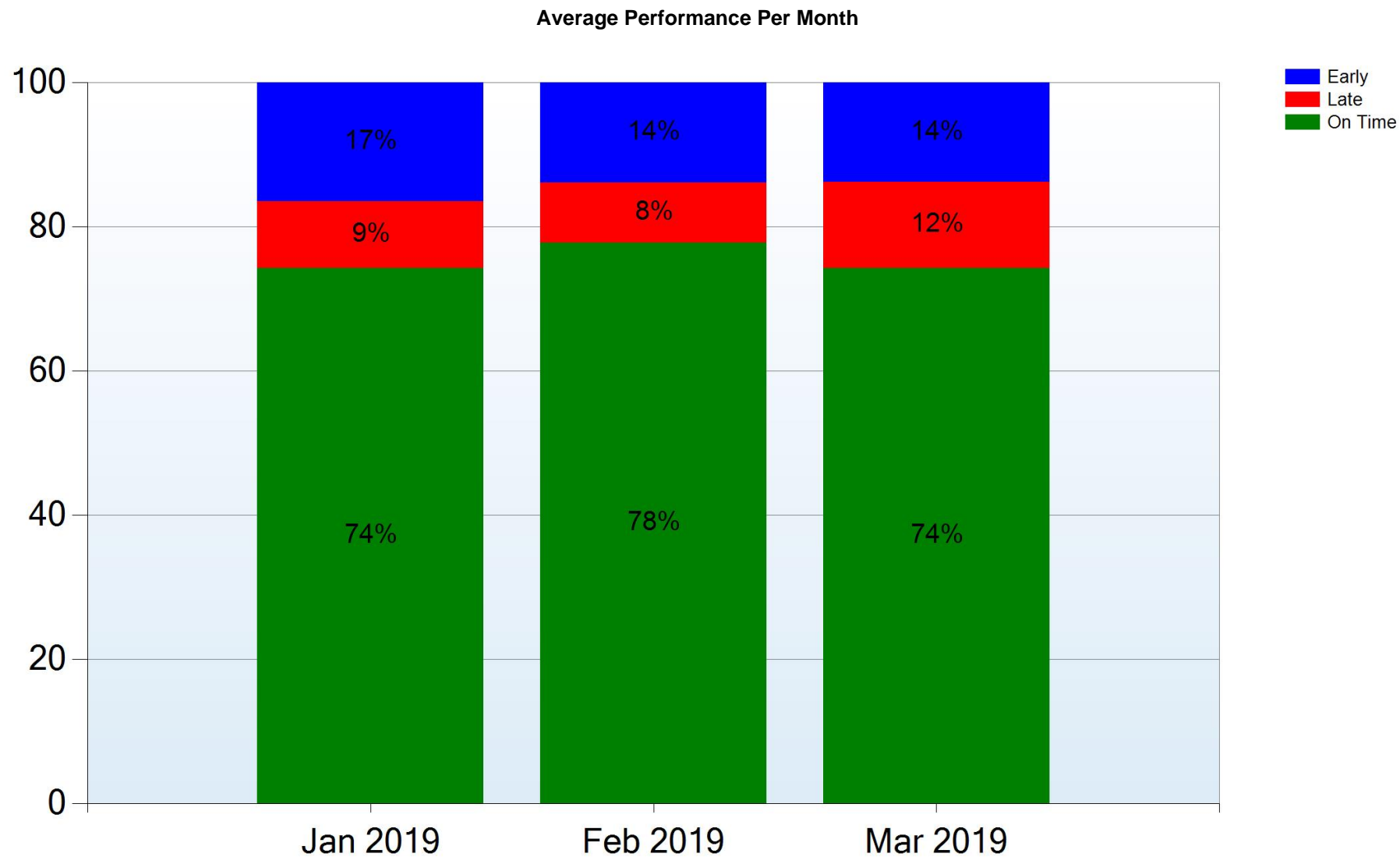


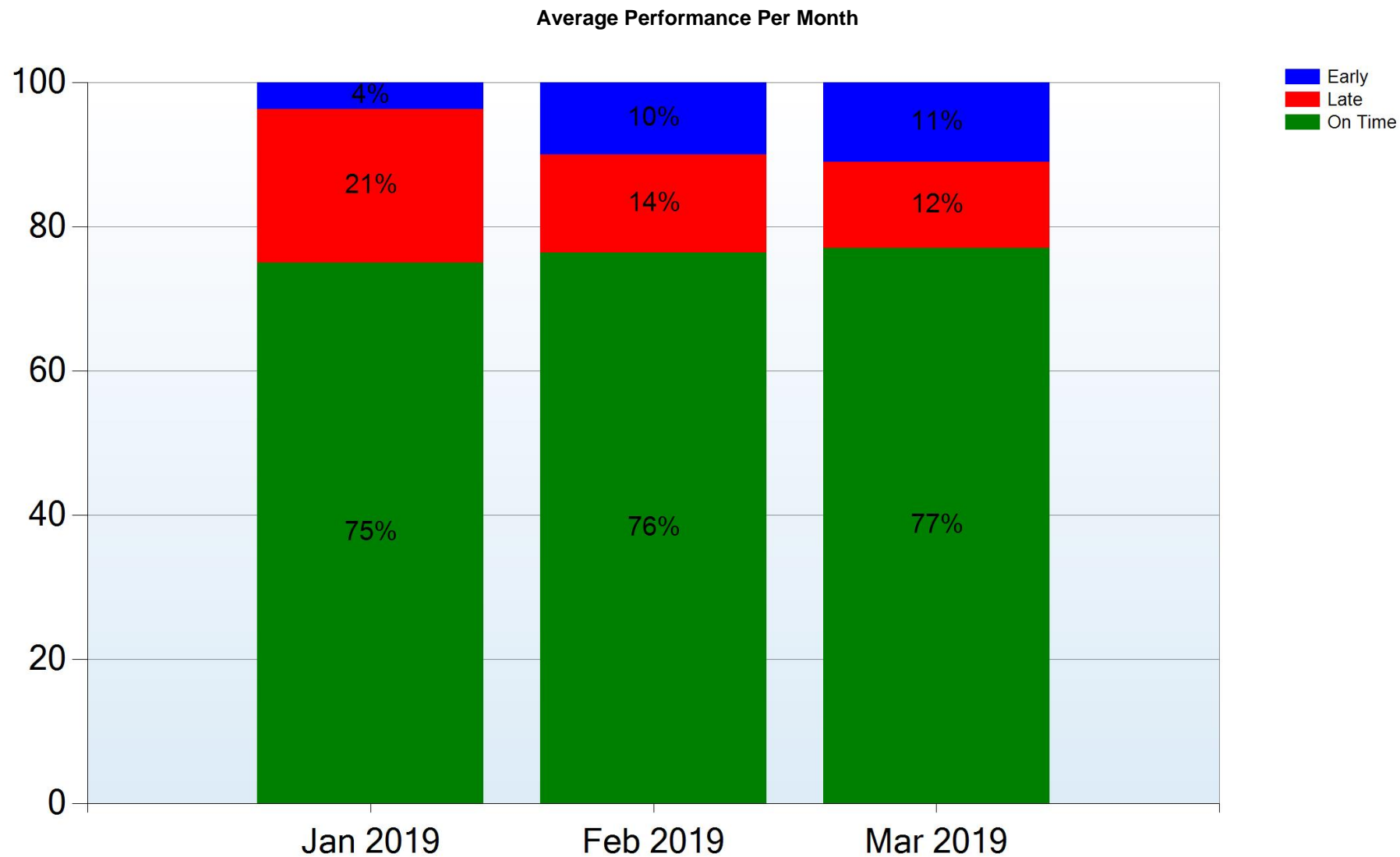


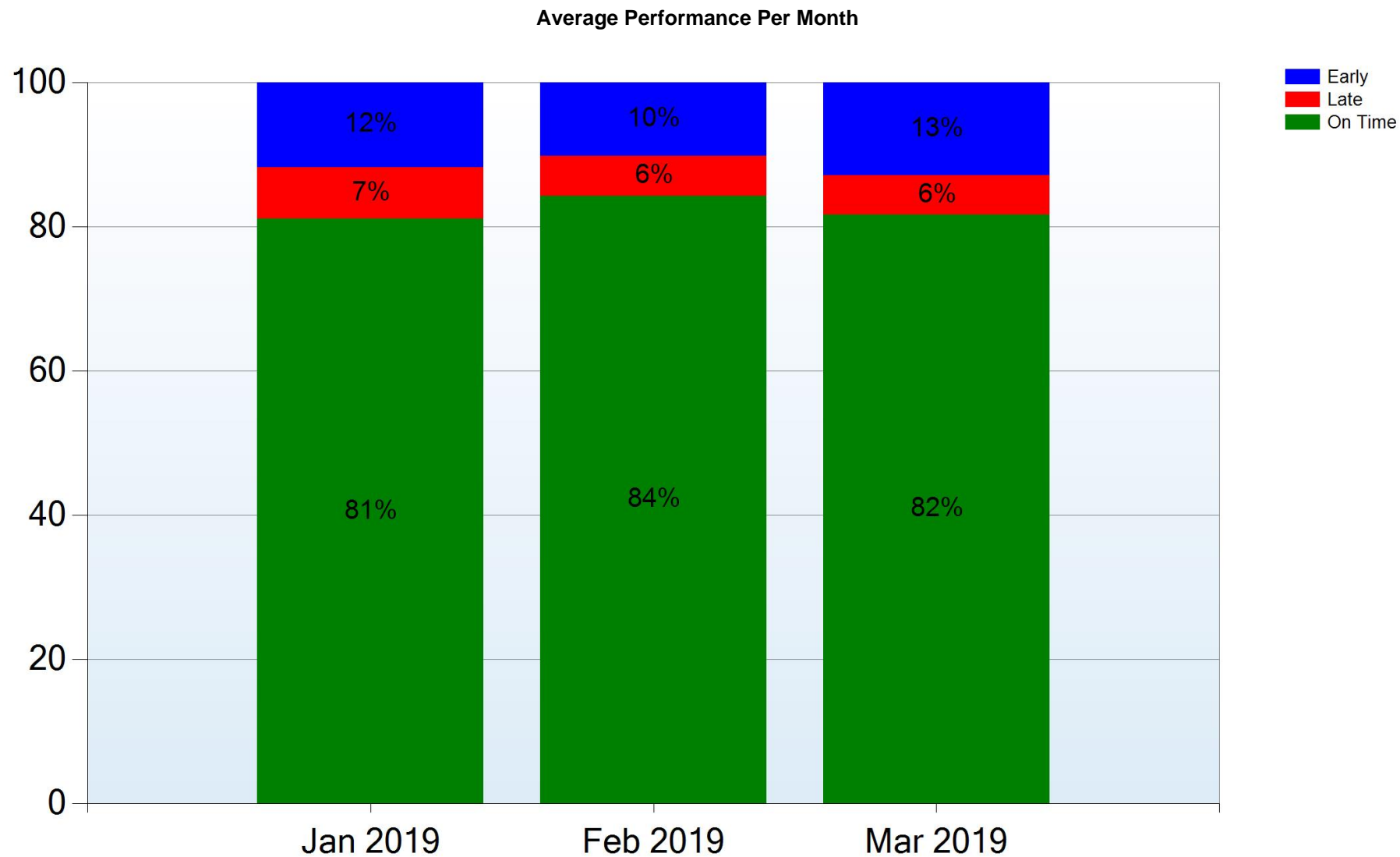












ROUTE DETAIL: Watergate Express

1/1/2019 - 3/31/2019

Average Performance Per Month

