



## Board Report

**File #:** 2017-0102, **File Type:** Informational Report

**Agenda Number:** 25

### FINANCE, BUDGET, AND AUDIT COMMITTEE MARCH 15, 2017

#### **SUBJECT: FY18 BUDGET DEVELOPMENT UPDATE**

#### **ACTION: RECEIVE AND FILE**

#### **RECOMMENDATION**

RECEIVE AND FILE **FY18 Budget Development Update.**

#### **ISSUE**

Metro is continuing the development of its FY18 Budget. This is the second in a series of monthly updates to the Board on this process. This report will present and describe projects and programs that will account for more than half of Metro's FY18 budget. Further, these elements demonstrate the incorporation of Measure M priorities, which put additional requirements on existing staff and will require the creation of new projects and addition of new staff in FY18.

This report provides a budget development update on the following topics:

- Public outreach efforts
- Fare revenue projections, based on preliminary assumptions for ridership
- Projections for service levels for directly-operated Metro bus and rail services
- Budget and descriptive information on efforts to maintain a state of good repair for our bus and rail fleet and facilities, as well as for regional transit facilities, like Union Station.
- Transit construction projects, which are funded through Measures R and M

#### **DISCUSSION**

##### **Public Outreach Update**

The prior FY18 Budget update report provided a comprehensive overview of the public and key stakeholder outreach efforts that are being included as part of the FY18 Budget development process.

An interactive Online Budgeting Tool, which engages the public in the budgeting process by walking users through a series of questions to garner input on their individual transportation priorities, was made available on February 12, 2017. The first round of stakeholder Budget workshops will be completed in March at the regularly scheduled Service Council Meetings, as well as at internal stakeholder meetings for the Technical Advisory Committee, Streets & Freeways Subcommittee, Bus Operations Subcommittee, Citizens Advisory Council, and Local Transit Systems Subcommittee. These workshops will outline the framework for the budget development process, including agency goals and how resource allocation will align with those goals. The presentations will also include sales tax assumptions and inflation projections to help shape expectations for each of the jurisdictions in the region. Finally, a review of bus and rail service levels, Metro's plans for maintaining assets, and the Measure R and Measure M projects underway will show the foundation for what is planned for LA County. The next round of Budget presentations is scheduled for May.

To date, staff has promoted outreach efforts in print ads run in community publications across the County and brochures placed on Metro vehicles. Owned channels, including the rotating banners on [metro.net](http://metro.net), Metro's blog and email subscriber list of more than 300,000 have also been utilized to drive engagement with the FY18 budget. In coming weeks, paid social media posts will also be used to notify the public of opportunities to engage with the budget process.

An interactive Telephone Town Hall on FY18 Budget development is also being put together, as requested by the Board of Directors. An automated telephone system will randomly call LA County residents to invite them to participate in a telephone meeting. Individuals will also be able to call into the meeting directly and that information will be added to the webpage [metro.net/budgetcomments](http://metro.net/budgetcomments). The meetings will be simulcast in both English and Spanish. Additional details on the Telephone Town Hall meeting will be included in a Board Box item delivered separately.

## **Fare Revenues**

### Fare per Boarding

Annual fare revenues are estimated by multiplying the fare per boarding by the estimated annual number of boardings. Since the latest fare restructuring took effect at the end of the first quarter of FY15, fare per boarding has remained stable at \$0.78. Therefore, FY18 fare per boarding is proposed at \$0.78.

### Projected Boardings

In 2016, systemwide boardings were 6% below the previous year. Accordingly, Metro is taking on various initiatives to increase ridership, with the goal of stopping the decline in boardings in FY18. As a result, projected boardings remain at 2016 levels of 415 million annually, with an increase in BRT/rail ridership offset by a slight decrease in bus ridership.

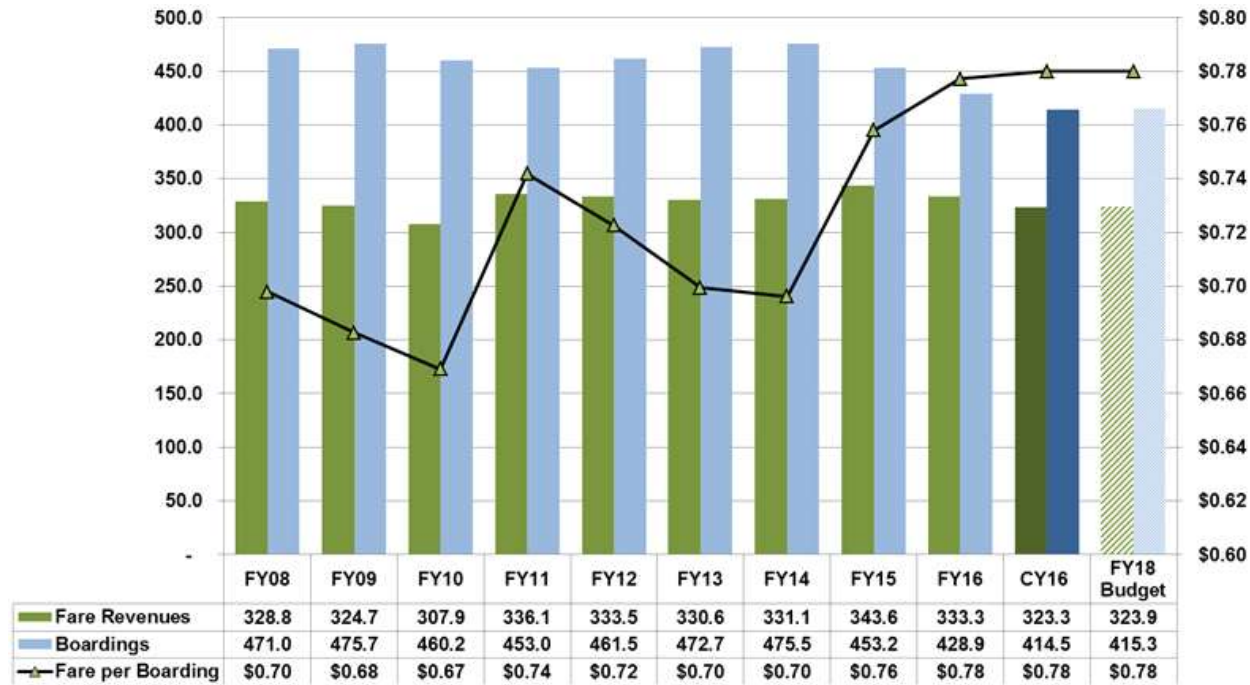
### Ridership Initiatives

Immediate near term ridership initiatives for FY18 are focused in three areas. First, the new multi-agency policing contract will provide the vehicle for increased security throughout the system, and an immediate systemwide security surge will be implemented to encourage increased ridership through safety and security improvements. In addition, system speed improvements will be pursued on both the bus and rail systems.

Past successes in this area, such as All-Door Boarding, will be considered in development of future pilot programs. Finally, the Regional Ridership Task Force convened in FY17 will work to address ridership impacts at the local level as well as countywide.

Figure 1 shows total boardings, fare revenues, and fare per boarding for the past 10 years, including a projection for FY18.

Figure 1:



Based on the projected \$0.78 fare per boarding and retaining the current ridership level, Metro is estimating FY18 fare revenue to be \$323.9 million.

**Bus & Rail Service Levels**

Bus service is projected to remain at FY17 budgeted services levels of 7 million revenue service hours. However, Operations anticipates right-sizing service levels along bus lines that parallel the Expo Line and reallocating those resources to improve the Owl Network and to increase peak-hour frequencies on select bus lines.

In FY17, rail scheduled service levels on the Expo and Gold Lines were limited by vehicle availability. FY18 marks the first year when sufficient rail cars will be available to meet the growing demand on the two lines. As a result, revenue vehicle service hours for rail are anticipated to increase 9% over the currently scheduled base rail service levels. In addition, rail special event service is proposed to increase by 60% to meet the growing demand for rail service to sports venues and special events.

Figure 2 below shows the changes in rail services that are projected for FY18 as a result of sufficient rail car availability for both the Expo and Gold Lines and their extensions.

Figure 2:

Rail Line	Weekdays	Weekend
Gold Line	• Increase all trains to 3 car consists	• No change
Expo Line	• Increase all trains to 3 car consists	• 3 car/6 min headway for 8 months of the year • 2 car/6 min headway for 4 months of the year
Green Line	• Increase peak period headway to 6 min	• No change
Blue Line	• No change	• No change
Red/Purple Line	• No change	• No change

### State of Good Repair

In support of our continued operation of a transit system with nearly 1.4 million daily boardings, Metro continues to maintain its fleet, rail lines, bus and rail stations, and facilities in a State of Good Repair. Major expenses in FY18 include the acquisition of light rail vehicles, heavy rail vehicles, and buses, plus midlife and component overhaul of buses and light rail vehicles. The FY18 budget also includes rehabilitation of bus and rail facilities, stations, and Maintenance of Way, as well as installation of systems on our regional transit centers. Figure 3 below shows total State of Good Repair expenses planned in FY18. Figure 3 is followed with additional details regarding each of the categories and budgeted expenses.

For a separate table showing State of Good Repair efforts on the Blue Line, our oldest rail line, refer to Attachment A. Blue Line State of Good Repair expenses are currently estimated at \$173.6 million, with an additional \$4.9 million pending approval.

Figure 3:

		(\$ IN MILLIONS)			
SGR Category		FY17 Budget	FY18 Proposed	% of Total FY18 SGR	Year Over Year Change
1	Bus Acquisition	\$ 57.94	\$ 59.77	14%	3%
2	Bus Maintenance	25.95	31.92	7%	23%
3	Bus Facilities Improvements	17.83	20.98	5%	18%
4	<b>Bus Subtotal</b>	<b>101.72</b>	<b>112.67</b>	<b>26%</b>	<b>11%</b>
5	Rail Vehicle Acquisition	55.61	134.20	31%	141%
6	Rail Vehicle Maintenance	55.06	42.02	10%	-24%
7	Rail Facilities Improvements	26.81	9.15	2%	-66%
8	Wayside Systems	53.80	47.18	11%	-12%
9	<b>Rail Subtotal</b>	<b>191.28</b>	<b>232.55</b>	<b>54%</b>	<b>22%</b>
10	Non-Revenue Vehicles	8.68	8.06	2%	-7%
11	IT/Communications	13.13	17.08	4%	30%
12	Regional Transit Center, Station & Fare Collection	38.85	56.52	13%	45%
13	<b>Other Subtotal</b>	<b>60.66</b>	<b>81.66</b>	<b>19%</b>	<b>35%</b>
14	<b>Total Proposed SGR Budget</b>	<b>\$ 353.66</b>	<b>\$ 426.88</b>		<b>21%</b>

### Bus Acquisition

Metro will spend \$59.8 million on bus acquisition activities. This effort includes procurement of two types of buses: fifty three (53) new Compressed Natural Gas (CNG) buses will replace existing CNG buses scheduled for retirement, and ten (10) new electrical buses will be received and tested on the Metro Orange and Silver Lines. Buses delivered in FY18 will reduce average fleet age in FY19 and beyond, as well as reduce our fleet maintenance costs.

### Bus Maintenance

Bus maintenance focuses on midlife maintenance and engine replacement for \$31.9 million in FY18. This work maximizes utilization of our buses through a total refurbishment, including structural integrity checks, corrective repairs, component change-outs, and performance and repair campaigns based on conditional fleet assessments. Performing these tasks increases bus reliability, reduces parts replacement costs, and reduces other preventative maintenance expenses once a bus is deployed back into revenue service.

### Bus Facilities Improvements

Bus facilities improvement activities total \$21 million and will address State of Good Repair maintenance requirements for bus divisions. Metro is developing master plans for facility upgrades, refurbishment, and site reconfigurations to upgrade critical facilities. Other safety initiatives include upgrades to fire and life safety equipment, ventilation, and emergency generators. To ensure regulatory compliance, we are also conducting underground fuel storage tank replacement.

### Rail Vehicle Acquisition

The FY18 budget includes \$134.2 million for rail vehicle delivery. Two major rail vehicle procurements are underway, for both light rail and heavy rail vehicles. In FY18, delivery of light rail vehicles continues, with another 48 vehicles - four per month - anticipated to arrive in the fiscal year. By the conclusion of FY18, we will have received 138 of the total 235 vehicles being purchased through the light rail vehicle contract. These new vehicles are going toward line extensions (e.g. Expo 2 and Gold Line Foothill 2A), new lines (e.g. Crenshaw/LAX), and vehicle replacement (e.g. Blue Line). Also in FY18, we are ramping up the heavy rail vehicle procurement approved by the Board in FY17 for the Purple Line Extension and for the replacement of aging fleet. The heavy rail vehicle procurement contract is in initial design and engineering phases, with the new cars scheduled to arrive in FY21.

### Rail Vehicle Maintenance

Starting in FY18, Metro is initiating two major rail vehicle overhauls, in order to maximize the usefulness of existing light and heavy rail fleet that are halfway into their anticipated 30-year lifespans. In our light rail fleet, Metro will be overhauling 52 vehicles that currently serve the Blue, Green and Expo Lines. The light rail vehicle overhaul is scheduled to complete in FY21. In our heavy rail fleet, Metro will be overhauling the 74 AC-powered vehicles that serve both the Red and Purple Lines. The heavy rail fleet overhaul is scheduled to complete in FY22, before the Purple Line Segment 1 to La Cienega is scheduled to open for revenue service.

### Rail Facilities and Wayside Systems Improvements

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Rail Facilities and Wayside Systems State of Good Repair efforts are directed toward rehabilitating the oldest lines in the rail network, such as the Blue Line. In the coming months, Metro plans to award a contract to address Blue Line State of Good Repair for Overhead Catenary System (OCS) replacements, signalization improvements, added interlocks, and other needed improvements. Continuing efforts to improve safety on our rail system, the Blue Line Pedestrian Safety at Grade Crossing project remains ongoing in FY18. Green Line improvements are also in progress as track circuits and control systems are upgraded to provide seamless travel to LAX and beyond upon completion of the Crenshaw LAX Transit project.

#### Non-Revenue Vehicles

Eight million dollars is slated for non-revenue vehicle and equipment purchases. Non-revenue vehicles consist of sedans, trucks, and other vehicles that allow Metro staff to get to locations to operate service and maintain system infrastructure across the agency's eleven bus divisions and six rail divisions. Non-revenue equipment includes bus lifts, utility vans, forklifts scrubbers, emergency generators, and high-rail response vehicles. These assets need to be replaced as they age, when mileage and condition standards are surpassed.

#### Information Technology & Communications

Metro remains steadfast in ensuring that our data is protected and secured from cyber-attacks by maintaining our equipment and infrastructure at industry standards. Upgrades and improvements will begin on our obsolete telephone system to a unified digital communication system with voice, email, and video conferencing capabilities. Wi-Fi continues to be installed at more rail lines and new buses for improved customer experience and security. These technology efforts will expend around \$17 million in FY18.

#### Regional Transit Centers, Stations & Fare Collection

Regional Transit Centers include Union Station, Patsaouras Plaza Bus Station, El Monte Transit Center, and Willowbrook/Rosa Parks Station. The FY18 Budget includes \$26.3 million, with \$18.0 million going to design and construction costs for Willowbrook/Rosa Parks Station and \$8.3 million going to the Patsaouras Plaza Bus Station. Regional projects, budgeted for \$21.9 million in FY18, provide benefits that span multiple regions and/or operators. These projects include TAP, Ticket Vending Machines (TVMs), regional signage improvements, bicycle projects at rail locations, and parking guidance system installations at Metro-owned Park and Ride lots.

#### Metro Blue Line State of Good Repair

Since opening in 1990, the Blue Line remains Metro's oldest rail line, and the FY18 budget includes \$173.6 million to enhance safety and improve service reliability. These efforts represent a fiscal year slice of a \$1.1 billion Life of Project total budget across all State of Good Repair projects benefiting the Blue Line. Planned expenses in FY18 include light rail vehicle fleet replacements and vehicle maintenance projects. The table in Attachment A shows a detailed list of projects occurring within the Blue Line Corridor as well as systemwide projects that provide a tangible benefit for Blue Line interoperability.

### **Transit Construction Projects**

#### Planning Phase

Many Measure R projects are currently in an active planning phase, which has been further supplemented by Measure M funding and accelerated for select projects. As shown on lines 4-6 of Figure 4 below, some near-term Measure M transit projects will incur planning-related expenses in FY18, such as EIR/EIS, preliminary engineering, and public outreach. These projects include Orange Line Improvements, the BRT Connector between Orange/Red Line and the Gold Line, and the Vermont Transit Corridor. The projects are anticipated to start the planning phases and will kick start about \$23.6 billion (Figure 4) of the total Measure M transit construction and highway projects. These projects are required by the Measure M Ordinance and are valued at \$40.6 billion (in 2015 dollars) over the next 40 years. These planning activities and expenses are incurred for at least 4 years in advance of the target construction groundbreaking dates.

Figure 4:

	Major Transit Planning Projects anticipated in FY18 (\$ in millions)	Ordinance	Sub Region	Ground breaking	Total Project Cost Est in 2015 \$
1	Crenshaw/LAX Light Rail Transit: Planning	R	sb		2,058.0
2	Eastside Light Rail Access	R	sg		30.0
3	Regional Connector: Planning	R	sc		1,750.8
4	Orange Line Improvements	M	sf	2019	286.0
5	BRT Connector Orange/Red Line to Gold Line	M	av / sf	2020	267.0
6	Vermont Transit Corridor	M	cc	2024	425.0
7	Westside Subway Extension Section 3: Planning	M / R	w	2018	1,980.4
8	Airport Metro Connector (Accomodations)	M / R	sc	2018	581.0
9	Gold Line Foothill Extension 2B: Planning (JPA)	M / R	sg	2019	1,097.0
10	San Fernando Valley East North/South Rapidways	M / R	sf	2021	1,331.0
11	West Santa Ana Branch Corridor	M / R	gc	2022	4,000.0
12	Sepulveda Pass Transit Corridor	M / R	sf / w	2024	5,934.0
13	Green Line Extension: to Crenshaw Blvd Torrance	M / R	sb	2026	891.0
14	Eastside Extension Phase II: Planning	M / R	gc / sg	2029	3,000.0
15	<b>Total</b>				<b>\$ 23,631.23</b>

Construction Phase

The FY18 budget continues to focus on the big three Measure R and M transit construction projects: (a) Crenshaw/LAX, (b) Regional Connector, and (c) Purple Line Extension (Sections 1, 2, and 3). The FY18 Budget includes \$1.55 billion in construction expenses for these three projects, including (a) \$432 million for Crenshaw/LAX, (b) \$202 million for Regional Connector, and (c) \$906 million for Purple Line Extension. As shown in Figure 5, this funding will bring the construction status to 88% complete for Crenshaw/LAX, with revenue operations anticipated in FY20. The Regional Connector is forecast to finish FY18 with 43% of construction complete, with revenue operations anticipated for the start of FY22. Purple Line Segment 1 construction is forecast to achieve 35% completion by the end of FY18, with an opening planned for Nov 2023.

Measure M mandates the groundbreaking for the Airport Metro Connector in FY18 and groundbreaking for the Gold Line Foothill Extension 2B from Azusa to Montclair in FY19. As a result, \$93 million in planning and construction expenses for these two projects is budgeted in FY18, including \$71 million for the Airport Metro Connector and \$22 million for Gold Line Foothill 2B.

Figure 5:

	Measure R Projects (\$ in millions)	Board Auth LOP	Est ITD \$ thru FY17	Est % ITD thru FY17	Proposed FY18	Est ITD % thru FY18	Est Prog % thru FY18	Target Rev Svc Date
1	Crenshaw/LAX Light Rail Transit	2,058.0	1,313.9		380.0			
2	Southwestern Maintenance Yard	157.0	78.9		46.4			
3	<b>Crenshaw Projects</b>	<b>2,215.0</b>	<b>1,392.9</b>	<b>63%</b>	<b>426.3</b>	<b>82%</b>	<b>88%</b>	<b>Oct 2019</b>
4	Regional Connector: Construction	1,750.8	805.5		201.0			
5	Regional Connector: Construction: Non-FFGA	40.0	33.0		0.8			
6	<b>Regional Connector Projects</b>	<b>1,790.8</b>	<b>838.6</b>	<b>47%</b>	<b>201.9</b>	<b>58%</b>	<b>43%</b>	<b>Jul 2021</b>
7	Westside Subway Purple Line Ext. Sect 1	2,773.9	1,112.0	40%	378.8	54%	35%	Nov 2023
8	Westside Subway PLE Sect 2	2,441.0	309.1	13%	267.5	24%		Aug 2025
9	Westside Subway PLE Sect 3 (est LOP)	2,500.0	63.8	3%	245.9	12%		TBD
10	WSE PLE Core Cap Enhanc @ Div 20	17.2	3.5		13.7			TBD
11	<b>Westside Purple Line Projects</b>	<b>7,732.0</b>	<b>1,488.4</b>		<b>905.9</b>			
12	Expo 1: Washington Siding	13.0	1.5		3.0			
13	Metro Orange Line Ext to Canoga: Closeout	215.6	144.2		0.2			
14	Gold Line Foothill Ext to Azusa 2A: Closeout	741.0	651.6		1.5			Mar 2016
15	Expo 2: Closeout	0.0	36.0		7.9			May 2016
16	<b>Closeouts</b>	<b>969.6</b>	<b>833.3</b>		<b>12.6</b>			
17	<b>Grand Total Measure R</b>	<b>\$12,707.5</b>	<b>\$4,553.1</b>		<b>\$1,546.7</b>			
	Measure M Projects (\$ in millions)	Bd Auth LOP			Proposed FY18			
18	Airport Metro Connector (New in FY18)	TBD	0.0	0	70.6			TBD
19	Foothill Extension 2B	TBD			22.0			TBD
20	<b>Grand Total Measure M</b>	<b>TBD</b>	<b>0.0</b>	<b>0.0</b>	<b>92.6</b>	<b>TBD</b>	<b>TBD</b>	

**FINANCIAL IMPACT**

Forecast ridership and bus and rail service levels will continue to guide the development of the FY18 Budget, and they may be adjusted as more specific information and guidance becomes available. Transit construction, state of good repair, bus and rail transit service levels, and project planning costs will account for three-fourths of the total FY18 budget.

**ALTERNATIVES CONSIDERED**

The annual budget serves as the legal authority to obligate and spend funds. Failure to adopt the budget would severely impact Metro’s stated goal of improving transportation in Los Angeles County.

**NEXT STEPS**

As stated previously, this report is the second in a series of monthly updates to the Board regarding the FY18 Budget development process. The remaining reports - and their expected content - are shown below, culminating in Final Board Approval in May 2017 for the FY18 Budget year that begins July 1, 2017.



- April 2017:
  - Preliminary FY18 Budget proposal, including Federal, State, and Local Revenues, and non-labor expenses
  - Agencywide labor expenses, including contract and non-contract positions
  - Outreach status update
- May 2017:
  - Public Hearing - May 17, 2017
  - Final Board Adoption - May 25, 2017

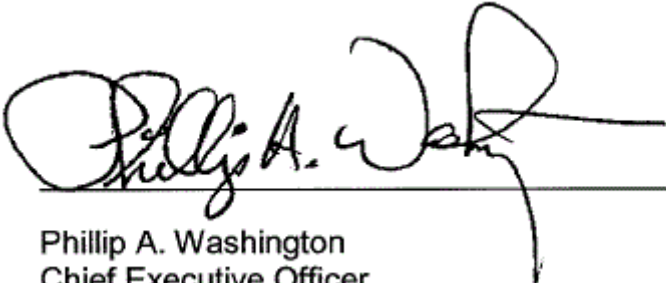
(in accordance with State Public Utilities Code Section 130051.12)

**ATTACHMENTS**

A. Metro Blue Line FY18 State of Good Repair Projects

Prepared by: Office of Management and Budget (OMB) Team  
Luke H. Klipp, Principal Transportation Planner, (213) 922-7412

Reviewed by: Nalini Ahuja, Chief Financial Officer, (213) 922-3088



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Phillip A. Washington  
Chief Executive Officer

## ATTACHMENT A

Project Description	Estimated Expenditure		Future Forecast	Life of Project
	thru FY17	FY18		
<b>Blue Line only Projects</b>				
1 Metro Blue Line Pedestrian Safety Enhancement at Grade Crossings	17,823,531	6,498,370	5,853,098	30,175,000
2 Light Rail Vehicle (P865/P2020) Midlife Overhaul	21,953,246	4,527,325	3,519,429	30,000,000
3 Washington Siding	9,014,865	2,985,135	-	12,000,000
4 Metro Blue Line Signal System Rehabilitation	10,773,786	18,372,065	34,854,149	64,000,000
5 Metro Blue Line Yard Signal System Rehabilitation	2,345,426	1,543,855	710,718	4,600,000
6 Metro Blue Line Overhead Catenary System Rehabilitation	2,720,385	2,166,561	8,113,054	13,000,000
7 Metro Blue Line Rail Replacement & Booting	6,154,661	545,833	6,299,506	13,000,000
8 Long Beach Duct Bank Upgrade Phase II	2,625,120	465,156	4,909,724	8,000,000
9 Metro Blue Line Station Refurbishments	27,401,912	-	5,550,888	32,952,800
10 Metro Blue Line Wheel True Machine	1,096,920	-	1,103,080	2,200,000
11 Pre FY18 Completed / Closeout Blue Line Projects	101,249,095	-	13,091,003	120,919,309
12 <b>Blue Line only Projects Subtotal</b>	<b>\$ 203,158,949</b>	<b>\$ 37,104,302</b>	<b>\$ 84,004,648</b>	<b>\$ 330,847,109</b>
<b>Multiple Line Rail Projects - Blue Line (only Blue Line portion shown)</b>				
14 Light Rail Vehicle Fleet Replacement	286,520,537	124,151,220	178,987,342	589,659,099
15 Professional Services to Support P3010 LRV Procurement Project	19,055,186	3,014,400	7,930,414	30,000,000
16 P2000 Vehicle Component Replacement	8,791,390	1,991,237	2,397,423	13,180,050
17 Metro Blue Line & Green Line Transit Passenger Info System	4,171,843	743,013	-	4,914,857
18 Light Rail Vehicle (P2000) Midlife Overhaul	15,479,818	886,597	49,033,585	65,400,000
19 Fire Control Panel Upgrade	296,665	327,395	275,940	900,000
20 Systemwide Corrosion Protection System Replacement	2,469,278	244,917	1,575,805	4,290,000
21 Digital Rail Radio System	\$ 3,906,981	\$ 200,626	\$ 2,142,393	\$ 6,250,000
22 Regional Rail Signage System Improvements	612,905	123,325	-	736,230
23 Metro Security Kiosks at Rail Stations	1,223,356	64,144	-	1,287,500
24 Public Plug-In Charge Station	127,737	54,980	11,883	194,600
25 Fiber Optic Main Loop Upgrade	72,483	49,999	90,018	212,500
26 Heavy Rail SCADA System Replacement	550,961	49,999	193,165	794,125
27 Rail Facilities Lighting Retrofit	849,177	25,000	177,098	1,051,275
28 FY14-FY15 Rail Facility Sub-Metering Project - Div 11, 22, and 60	61,620	17,613	-	79,233
29 Non-Revenue Vehicle for Rail	2,364,083	934,760	300,905	3,603,790
30 Pre FY18 Completed / Closeout Blue Line Projects	5,507,783	-	1,823,109	10,767,048
31 <b>Multiple Line Rail Projects Blue Line portion Subtotal</b>	<b>\$ 352,061,803</b>	<b>\$ 132,879,225</b>	<b>\$ 244,939,080</b>	<b>\$ 733,320,307</b>
<b>System-wide Projects benefiting Blue Line (only Blue Line portion shown)</b>				
33 Metro Emergency Operations Center	1,565,555	1,911,350	7,793,095	11,270,000
34 Other System Projects	12,218,371	648,258	312,592	13,179,221
35 Ticket Vending Machine Installations	676,261	130,509	35,230	842,000
36 GIRO HASTUS Upgrade & Enhancement	300,253	100,787	(0)	401,040
37 Internet-based Customer Help Desk	68,719	48,882	25,150	142,750
38 HASTUS Infrastructure Upgrade	99,338	18,770	50,592	168,700
39 Fare Gate Project	172,861	1,200	27,170	201,230
40 Non-Revenue Vehicle Procurement	2,057,841	771,964	53,779	2,883,585
41 Pre FY18 Completed / Closeout Blue Line Projects	45,302,870	-	2,178,553	47,632,870
42 <b>System-Wide Projects Blue Line Portion Subtotal</b>	<b>\$ 62,462,068</b>	<b>\$ 3,631,720</b>	<b>\$ 10,476,161</b>	<b>\$ 76,721,396</b>
43 <b>Grand Total</b>	<b>\$ 617,682,820</b>	<b>\$ 173,615,248</b>	<b>\$ 339,419,888</b>	<b>\$ 1,140,888,811</b>
Note: Include projects active since 2010 only.				
<b>FY18 New Proposals (pending approval)</b>				
45 Blue Line only Projects		3,072,311	16,735,426	19,807,737
46 Multiple Line Rail Projects - Blue Line (only Blue Line portion shown)		1,073,109	5,638,076	6,711,185
47 System-wide Projects benefiting Blue Line (only Blue Line portion shown)		786,073	5,957,698	6,743,771
48 <b>Total FY18 New Proposals</b>		<b>\$ 4,931,494</b>	<b>\$ 28,331,200</b>	<b>\$ 33,262,694</b>

# **FY18 Budget Development Status Update**

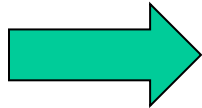
**March 15, 2017**

**Finance, Budget & Audit Committee**

# Monthly Board Report – Receive & File

- February 2017:

- Budget Development Process and Schedule
- Outreach
- Sales Tax Revenue and CPI Assumptions



- March 2017:

- **Public Outreach addition: Telephone Town Hall on 3/28/2017**
- Fare Revenue Projections
- Metro Bus and Rail Service Levels
- Transit Projects and State of Good Repair (SGR)

- April 2017:

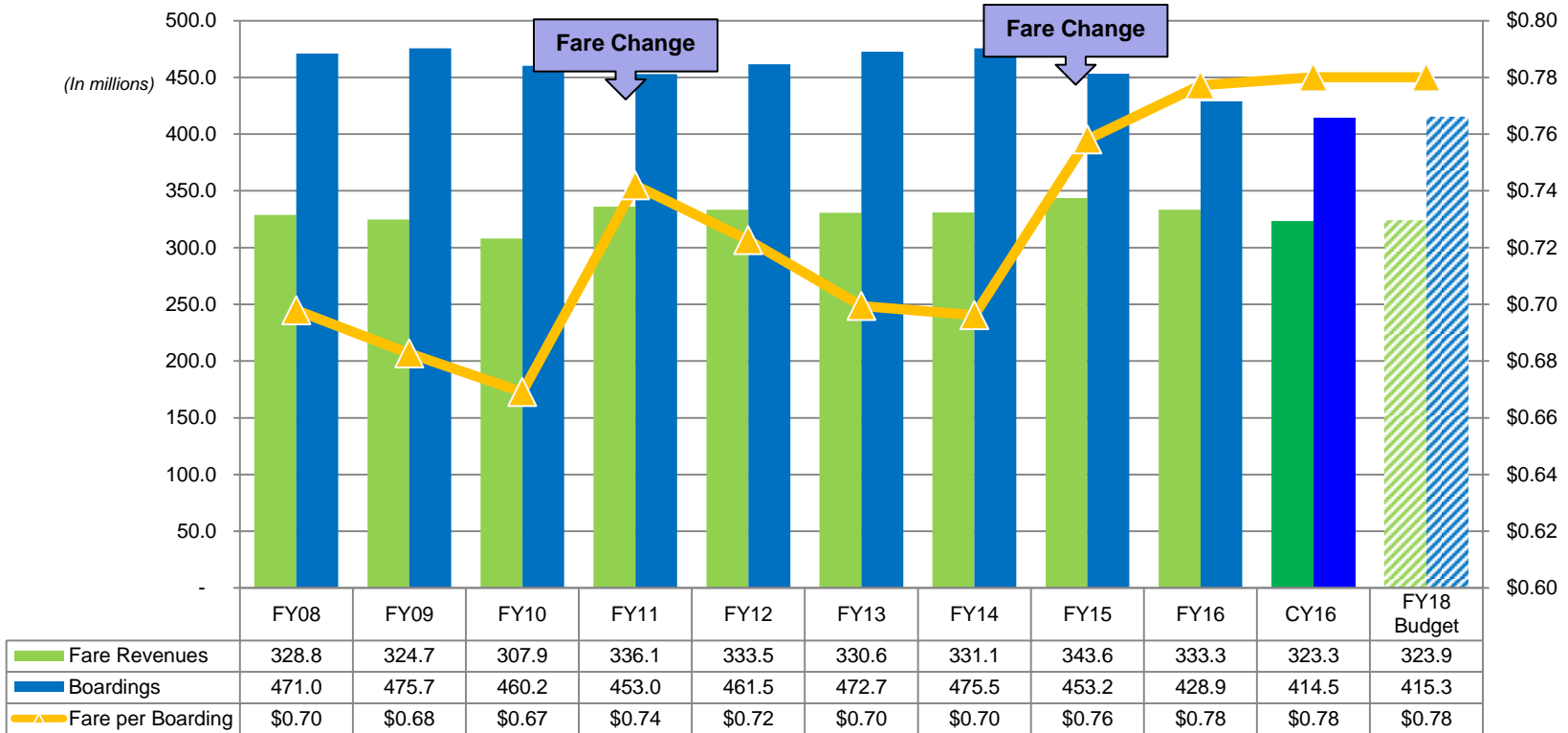
- Preliminary FY18 Budget proposal, Revenue Update, Labor and Expense
- Outreach status update

- May 2017:

- Public Hearing: May 17
- Final Board Adoption: May 25



# Fare Revenue and Boarding Trends



- Fare Revenue Budget = Fare Per Boarding \* Boarding Estimate
- Fare per Boarding has stayed at \$0.78 since the last Fare Change in FY15 Q3
- Systemwide boardings are targeted to remain around CY 2016 levels with a 2% decrease in bus and 2% increase in rail compared to the 2016 calendar year.
- FY18 Fare Revenue Budget is estimated at targeted Budget \$323.9 million

# Bus & Rail Service Levels

## Bus Revenue Service Hours (RSH):

- No change in overall RSH from FY17 Budget of 7,005,960 RSH
- Right-size service, improve reliability in the Owl Network

## Rail Revenue Vehicle Service Hours (RVSH):

- FY18 first year in which we can meet rail demand with new and existing rail vehicles on all rail lines since opening of Expo 2 and Foothill 2A extensions
- FY18 increases in service levels to accommodate rider demand and special events
- 9% increase in RVSH over currently-scheduled base service and 60% increase in special event service
- Continue to maximize revenue service while performing state of good repair work on the main lines

Rail Line	Weekdays	Weekend
Gold Line	<ul style="list-style-type: none"> <li>• Increase all trains to 3 car consists</li> <li>• <b>Currently 2/3 car consists</b></li> </ul>	<ul style="list-style-type: none"> <li>• No change</li> <li>• <b>Currently 2 car 12 min</b></li> </ul>
Expo Line	<ul style="list-style-type: none"> <li>• Increase all trains to 3 car consists</li> <li>• <b>Currently 2/3 car 6 min (Peak) and 3 car consists 12 min (Midday)</b></li> </ul>	<ul style="list-style-type: none"> <li>• 3 car/6 min headway for 8 months of the year</li> <li>• 2 car/6 min headway for 4 months of the year</li> </ul>
Green Line	<ul style="list-style-type: none"> <li>• Increase peak period headway to 6 min</li> <li>• <b>Currently only peak of the peak hour is 6 min with rest of peak period at 7.5 min</b></li> </ul>	<ul style="list-style-type: none"> <li>• No change</li> </ul>
Blue Line	<ul style="list-style-type: none"> <li>• No change</li> </ul>	<ul style="list-style-type: none"> <li>• No change</li> </ul>
Red/Purple Line	<ul style="list-style-type: none"> <li>• No change</li> </ul>	<ul style="list-style-type: none"> <li>• No change</li> </ul>

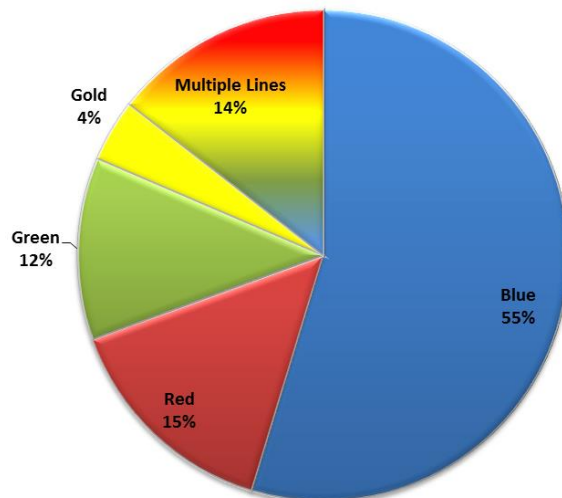
# State of Good Repair (SGR)

(\$ IN MILLIONS)

SGR Category	FY17 Budget	FY18 Proposed	% of Total FY18 SGR	Year Over Year Change
Bus Acquisition	\$ 57.94	\$ 59.77	14%	3%
Bus Maintenance	25.95	31.92	7%	23%
Bus Facilities Improvements	17.83	20.98	5%	18%
<b>Bus Subtotal</b>	<b>101.72</b>	<b>112.67</b>	<b>26%</b>	<b>11%</b>
Rail Vehicle Acquisition	55.61	134.20	31%	141%
Rail Vehicle Maintenance	55.06	42.02	10%	-24%
Rail Facilities Improvements	26.81	9.15	2%	-66%
Wayside Systems	53.80	47.18	11%	-12%
<b>Rail Subtotal</b>	<b>191.28</b>	<b>232.55</b>	<b>54%</b>	<b>22%</b>
Non-Revenue Vehicles	8.68	8.06	2%	-7%
IT/Communications	13.13	17.08	4%	30%
Regional Transit Center, Station & Fare Collection	38.85	56.52	13%	45%
<b>Other Subtotal</b>	<b>60.66</b>	<b>81.66</b>	<b>19%</b>	<b>35%</b>
<b>Total Proposed SGR Budget</b>	<b>\$ 353.66</b>	<b>\$ 426.88</b>	<b>21%</b>	

- Total SGR FY18 Budget is 21% greater than FY17 Budget, with major increases in rail vehicle delivery
- 54% is allocated to Rail. Excluding Rail Vehicles, most budget goes to the oldest system, Blue Line
- Safety and security capital projects (\$40.5M) embedded throughout Bus and Rail Projects, including projects such as Blue Line pedestrian crossings improvements, bus safety barriers, and bus video monitors
- Regional Transit Center Enhancement includes the design phase of Rosa Park/Willowbrook Station, as well as Transit Passenger Information System (TPIS) on Silver Line Stops from El Monte Transit Center to Harbor Transit Center

Non Vehicle Rail SGR by Line



# Metro Blue Line SGR

1	Description	Est Expd thru FY17	Proposed FY18	Future Forecast	Life of Project
2	<b>Blue Line Corridor only Projects</b>				
3	Metro Blue Line (MBL) Vehicle Maintenance	21,953,246	4,527,325	3,519,429	30,000,000
4	MBL Trackwork / Wayside Maintenance (incl safety efforts)	49,112,348	31,033,121	60,029,530	140,175,000
5	MBL Station Projects	27,401,912	-	5,550,888	32,952,800
6	MBL Division Projects	2,345,426	1,543,855	710,718	4,600,000
7	MBL Shop Equipment	1,096,920	-	1,103,080	2,200,000
8	PRE FY18 Completed / Closeout projects	101,249,095	-	13,091,003	120,919,309
9	<b>Blue Line only Projects Subtotal</b>	<b>\$ 203,158,948</b>	<b>\$ 37,104,302</b>	<b>\$ 84,004,647</b>	<b>\$ 330,847,109</b>
10	<b>Multiple Line Rail Projects Blue Line portion Subtotal</b>	<b>\$ 352,061,803</b>	<b>\$ 132,879,225</b>	<b>\$ 244,939,080</b>	<b>\$ 733,320,307</b>
11	<b>System-Wide Projects Blue Line Portion Subtotal</b>	<b>\$ 62,462,068</b>	<b>\$ 3,631,720</b>	<b>\$ 10,476,161</b>	<b>\$ 76,721,396</b>
12	<b>Grand Total</b>	<b>\$ 617,682,820</b>	<b>\$ 173,615,247</b>	<b>\$ 339,419,888</b>	<b>\$ 1,140,888,811</b>
	Note: Include projects active since 2010 only.				

- Since 2010, Metro has been actively maintaining SGR on the Blue Line by funding over \$1.14B total LOP
- At the conclusion of FY17, over \$617M will be invested on the Blue Line with \$203M directly within the corridor and \$414M on Blue Line related system improvements
- FY18 budget plans for an investment of \$173.6M for direct and indirect Blue Line SGR
  - Delivery of Light Rail Vehicles, Pedestrian Safety Enhancements
  - Over Head Catenary Replacement, Signal System Rehabilitation, Rail Track Replacements
  - Various Systemwide and Multi-Rail line projects to increase system reliability and safety
  - Digital Rail Radio Communications system, Fire Control Panel Upgrade and Transit Passenger Info System



# Measure R/M Projects in EIR/EIS/PE

	Major Transit Planning Projects anticipated in FY18 (\$ in millions)	Ordinance	Sub Region	Ground breaking	Cost Est in 2015 \$
1	Eastside Light Rail Access	R	sg	2008	30.0
2	Crenshaw/LAX Light Rail Transit	R	sb	2011	2,058.0
3	Regional Connector:	R	sc	2012	1,750.8
4	Orange Line Improvements	M	sf	2019	286.0
5	BRT Connector Orange/Red Line to Gold Line	M	av / sf	2020	267.0
6	Vermont Transit Corridor	M	cc	2024	425.0
7	Westside Subway Extension Section 3	M / R	w	2018	1,980.4
8	Airport Metro Connector (& Accomodations)	M / R	sc	2018	581.0
9	Gold Line Foothill Extension 2B: (JPA)	M / R	sg	2019	1,097.0
10	San Fernando Valley East North/South Rapidways	M / R	sf	2021	1,331.0
11	West Santa Ana Branch Corridor	M / R	gc	2022	4,000.0
12	Sepulveda Pass Transit Corridor	M / R	sf / w	2024	5,934.0
13	Green Line Extension: to Crenshaw Blvd Torrance	M / R	sb	2026	891.0
14	Eastside Extension Phase II	M / R	gc / sg	2029	3,000.0
15	<b>Total</b>				<b>\$ 23,601.23</b>

- FY18 budget will include the EIR/EIS/PE planning stage of the above Measure R/M projects
- Planning expenditures through EIR/EIS/PE phase are generally in the range of 2% or less of a project cost estimate and typically take a few years ahead of final design and construction phase
- Measure M cost estimates are in 2015 dollars and will be updated to current dollars as project FFGA's or designs are refined for procurement



# Transit Construction Projects

	Measure R Projects (\$ in millions)	Board Auth LOP	Est ITD \$ thru FY17	Est %ITD thru FY17	Proposed FY18	Est ITD % thru FY18	Est Prog % thru FY18	Target Rev Svc Date
1	Crenshaw/LAX Light Rail Transit	2,058.0	1,313.9		380.0			
2	Southwestern Maintenance Yard	157.0	78.9		46.4			
3	<b>Crenshaw Projects</b>	<b>2,215.0</b>	<b>1,392.9</b>	<b>63%</b>	<b>426.3</b>	<b>82%</b>	<b>88%</b>	<b>Oct 2019</b>
4	Regional Connector: Construction	1,750.8	805.5		201.0			
5	Regional Connector: Construction: Non-FFGA	40.0	33.0		0.8			
6	<b>Regional Connector Projects</b>	<b>1,790.8</b>	<b>838.6</b>	<b>47%</b>	<b>201.9</b>	<b>58%</b>	<b>43%</b>	<b>Jul 2021</b>
7	Westside Subway Purple Line Ext. Sect 1	2,773.9	1,112.0	40%	378.8	54%	35%	Nov 2023
8	Westside Subway PLE Sect 2	2,441.0	309.1	13%	267.5	24%		Aug 2025
9	Westside Subway PLE Sect 3 (est LOP)	2,500.0	63.8	3%	245.9	12%		TBD
10	WSE PLE Core Cap Enhanc @ Div 20	17.2	3.5		13.7			TBD
11	<b>Westside Purple Line Projects</b>	<b>7,732.0</b>	<b>1,488.4</b>		<b>905.9</b>			
12	Expo 1: Washington Siding	13.0	1.5		3.0			
13	Metro Orange Line Ext to Canoga: Closeout	215.6	144.2		0.2			
14	Gold Line Foothill Ext to Azusa 2A: Closeout	741.0	651.6		1.5			Mar 2016
15	Expo 2: Closeout	0.0	36.0		7.9			May 2016
16	<b>Closeouts</b>	<b>969.6</b>	<b>833.3</b>		<b>12.6</b>			
17	<b>Grand Total Measure R</b>	<b>\$12,707.5</b>	<b>\$4,553.1</b>		<b>\$1,546.7</b>			
	<b>Measure M Projects (\$ in millions)</b>	<b>Bd Auth LOP</b>			<b>Proposed FY18</b>			
18	Airport Metro Connector (New in FY18)	TBD	0.0	0	70.6			TBD
19	Foothill Extension 2B	TBD			22.0			TBD
20	<b>Grand Total Measure M</b>	<b>TBD</b>	<b>0.0</b>	<b>0.0</b>	<b>92.6</b>	<b>TBD</b>	<b>TBD</b>	

- Crenshaw/LAX plans for 88% Construction progress thru FY18 with an Oct-2019 Revenue Service Date
- Regional Connector recently increased its LOP to \$1,751M and is working to improve its reported 43% construction progress plan thru FY18
- Westside Purple Line Projects account for 58% (\$905.9M) of all Transit Construction in FY18 (\$1,546.7M)
- Airport Metro Connector begins design and construction work in FY18

