



## Board Report

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

**SUBJECT: MANAGEMENT AUDIT SERVICES FY2018  
FIRST QUARTER REPORT**

**ACTION: RECEIVE AND FILE**

#### **RECOMMENDATION**

RECEIVE AND FILE the first quarter report of Management Audit Services (Management Audit) for the period ending September 30, 2017.

#### **ISSUE**

At its January 2005 meeting, the Board designated the Executive Management and Audit Committee (EMAC) as their audit committee. The EMAC requested a quarterly report from Management Audit on its audit activities. In July 2011, the audit responsibilities were transferred to the Finance, Budget and Audit Committee. This report fulfills the requirement for the first quarter of FY 2018.

#### **DISCUSSION**

Management Audit provides audit support to the Chief Executive Officer (CEO) and his executive management team. The audits we perform are categorized as either internal or external. Internal audits evaluate the processes and controls within the agency. External audits analyze contractors, cities or non-profit organizations that we conduct business with or receive Metro funds.

There are four groups in Management Audit: Performance Audit, Contract Pre-Award Audit, Incurred Cost Audit and Audit Support and Research Services. Performance Audit is primarily responsible for all audits for Operations, Finance and Administration, Planning and Development, Program Management, Information Technology, Communications, Risk, Safety and Asset Management and Executive Office. Contract Pre-Award and Incurred Cost Audit are responsible for external audits in Planning and Development, Program Management and Vendor/Contract Management. All of these units provide assurance to the public that internal processes are efficiently, economically, effectively, ethically, and equitably performed by conducting audits of program effectiveness and results, economy and efficiency, internal controls, and compliance. Audit Support and Research Services is responsible for administration, financial management, budget coordination, and audit follow-up and

resolution tracking.

The summary of Management Audit activity for the quarter ending September 30, 2017 is as follows:

Internal Audits: two internal audits were issued and fourteen were in process.

External Audits: four contract pre-award audits with a total value of \$10.4 million were completed and 14 incurred cost audits with a total value of \$300 million were completed. Two contract pre-award audits and 48 incurred cost audits were in process.

Audit Follow-up and Resolution: 21 recommendations were closed during the first quarter. At the end of the quarter, there were 37 open audit recommendations. In addition, 89 recommendations for the OIG were closed. Details of all open, extended, and closed recommendations can be found in the First Quarter Board Box titled "Status of Audit Recommendations".

Management Audit's FY 2018 first quarter report is included as Attachment A.

### **NEXT STEPS**

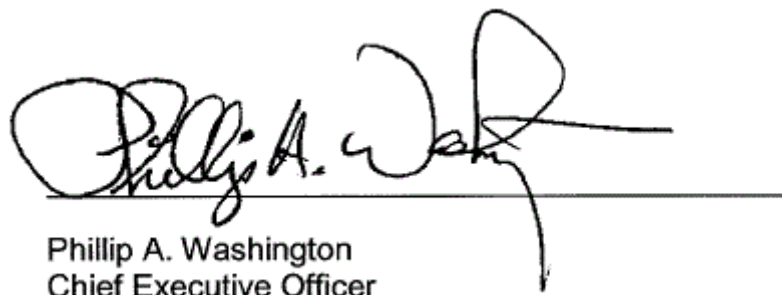
Management Audit will provide the FY 2018 Second Quarter report of audit activity to the Board at the February 2018 Finance, Budget and Audit Committee meeting.

### **ATTACHMENT**

Attachment A - Management Audit Services Quarterly Report

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Phillip A. Washington  
Chief Executive Officer

**MANAGEMENT AUDIT SERVICES  
QUARTERLY REPORT TO THE BOARD**

**Los Angeles County Metropolitan  
Transportation Authority**

***First Quarter  
FY 2018***



**Metro™**

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# *EXECUTIVE SUMMARY*

## Summary of Audit Activity

During the first quarter of FY 2018, 20 projects were completed. These include:

### Internal Audits

- Performance Audit of Accounts Receivable
- Annual Audit of Business Interruption Fund

### Pre-Award Audits

- Independent Auditor's Report on Agreed-Upon Procedures for the Cost Proposal for Inspection of Metro Structures Project;
- Independent Auditor's Report on Agreed-Upon Procedures for the Cost Proposal for Los Angeles Union Station Forecourt Esplanade Improvements Project;
- Independent Accountant's Report on Applying Agreed-Upon Procedures for Los Angeles Metro LAX/Crenshaw Transit Project Change Order No. 122.1; and
- Independent Accountant's Report on Applying Agreed-Upon Procedures for Los Angeles Metro LAX/Crenshaw Transit Project Change Order No.82.

### Incurred Cost Audits

- Two Independent Auditor's Reports on Agreed-Upon Procedures for the FY14 and FY15 Incurred Indirect Cost Rates for Westside Subway Extension Project;
- Independent Auditor's Report on Agreed-Upon Procedures for the FY14 and FY15 Incurred Overhead Rates for Westside Purple Line Extension Project;
- Independent Auditor's Report on Agreed-Upon Procedures for the FY15 Interim Incurred Cost for Regional Connector Transit Corridor Project;
- Independent Auditor's Report on Agreed-Upon Procedures of the Close-out Review of County of Los Angeles' Gateway Cities Traffic Signal Corridors Project;
- Independent Auditor's Report on Agreed-Upon Procedures of the Interim Review of Caltrans' I-5 Carmenita Road Interchange Improvement Project;
- Independent Auditor's Report on Agreed-Upon Procedures of the Close-out Review of City of Lawndale's Citywide Improvements Project;
- Independent Auditor's Report on Agreed-Upon Procedures of the Close-out Review of County of Los Angeles' San Gabriel Valley Forum Traffic Signal Corridors Project;
- Independent Auditor's Report on Agreed-Upon Procedures of the Close-out Review of City of Glendale's Verdugo Road / Honolulu Ave / Verdugo Blvd / Montrose Ave Intersection Modification Project;
- Independent Auditor's Report on Agreed-Upon Procedures of the Close-out Review of City of Glendale's Construction of Bicycle Facilities Project;
- Independent Auditor's Report on Agreed-Upon Procedures of the Close-out Review of City of Long Beach's Downtown Shoreline Drive Adaptive Traffic Management System Project;

## *EXECUTIVE SUMMARY*

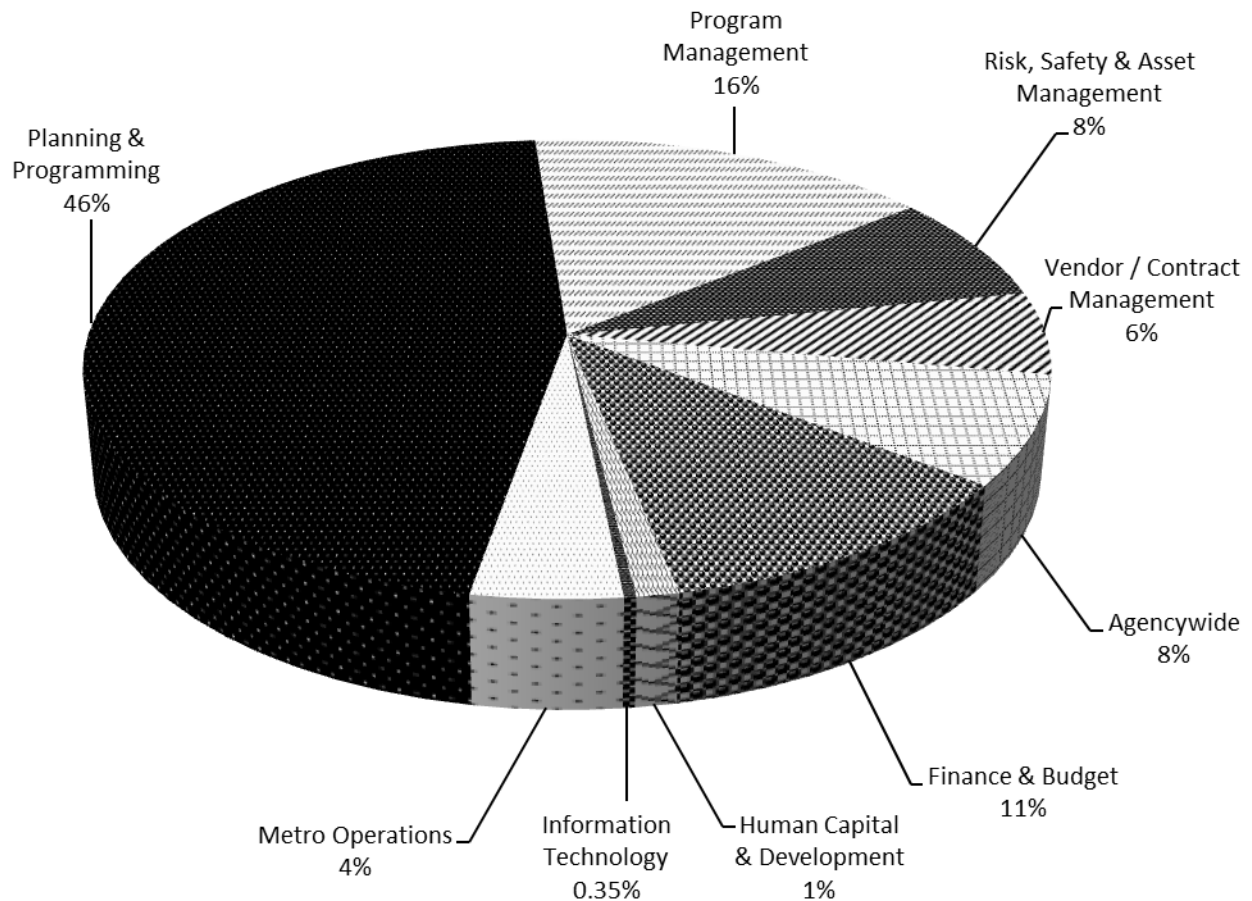
- Independent Auditor's Report on Agreed-Upon Procedures of the Close-out Review of City of Long Beach's Ocean Blvd Signal Synchronization and Enhancement Project;
- Independent Auditor's Report on Agreed-Upon Procedures of the Close-out Review of City of Carson's I-405 Avalon Blvd Access and Congestion Relief Project; and
- Independent Auditor's Report on Agreed-Upon Procedures of the Close-out Review of City of Industry's ATMS Signal Upgrade and CCTV Video Surveillance Project.

The completed external audits are discussed on page 4. Discussions of the internal audits begin on page 5.

# EXECUTIVE SUMMARY

Sixty-four projects were in process as of September 30, 2017; these include 14 internal audits, two contract pre-award audits, and 48 incurred cost audits.

The following chart identifies the functional areas where Management Audit focused audit staff time and efforts during first quarter FY 2018:



## Audit follow-up:

- Twenty-one recommendations were closed during the first quarter. At the end of the quarter there were 37 open audit recommendations.
- In addition, we closed 89 OIG recommendations. At the end of the quarter there were 42\* open audit recommendations.

\*This total does not include recommendations included in the Audit of Westside Purple Line Extension Section 2- Modification No. 52, and Review of Metro Safety Culture and Rail Operational Safety, as the management response and/or estimated completion dates are still pending. However, Operations has hired consultants to assist in addressing the most critical elements of the Review of Metro Safety Culture and Rail Operational Safety.

# *EXTERNAL AUDITS*

## Contract Pre-Award Audit

Contract Pre-Award Audit provides support to the Vendor/Contract Management Department for a wide range of large-dollar procurements and projects. This support is provided throughout the procurement cycle in the form of pre-award, interim, change order, and closeout audits, as well as assistance with contract negotiations.

During first quarter FY 2018, four audits were completed, reviewing a net value of \$10.4 million. Auditors questioned \$900 thousand or 9% of the proposed costs. The four audits supported procurements in the following areas:

- 2 Crenshaw Transit Project procurements;
- Los Angeles Union Station Improvement Project procurement; and
- Metro Structures Inspection Project procurement;

Two contract pre-award audits were in process as of September 30, 2017.

Details on Contract Pre-Award Audits completed during first quarter FY 2018 are in Appendix A.

## Incurred Cost Audit

Incurred Cost Audit conducts audits for Planning and Development's Call-for-Projects program, Program Management's highway projects, federally funded transportation programs, and various other transportation related projects, including CalTrans projects. The purpose of the audits is to ensure that funds are spent in accordance with the terms of the grants/contracts and federal cost principles.

Incurred Cost Audit completed 14 audits during first quarter FY 2018. We reviewed \$300 million of funds and identified \$3.7 million or 1% of unused funds that may be reprogrammed. Forty-eight incurred cost audits were in process as of September 30, 2017.

Details on Incurred Cost Audits completed during first quarter FY 2018 are in Appendix B.



# *INTERNAL AUDITS*

For the first quarter of FY 2018, two internal audits were completed. Fourteen internal audits were in process as of September 30, 2017. The internal audits in process are listed in Appendix C.

The following internal audits were issued in the first quarter FY 2018. The completed reports are listed in order of the magnitude of risks that their findings represent to the agency.

## *Performance Audit of Accounts Receivable*

We found that the internal controls are adequate to confirm whether outstanding accounts receivable balances were collected in a timely manner; accounts receivable amounts were recorded accurately; and adequate segregation of duties were in place to prevent staff from performing conflicting duties. There are no recommendations associated with this audit.

## *Annual Audit of Business Interruption Fund*

We found that the Business Interruption Fund is being administered in compliance with administrative guidelines and fund and disbursement procedures. There are no recommendations associated with this audit.

# AUDIT SUPPORT SERVICES

## Audit Follow-Up and Resolution

During the first quarter, 21 recommendations were completed and closed. At the end of this quarter there were 37 outstanding audit recommendations. The table below summarizes the first quarter activity.

### Summary of MAS and External Audit Recommendations As of September 30, 2017

Executive Area	Closed	Late	Extended	Not Yet Due/Under Review	Total Open
Program Management	1				
Vendor Contract Management	1				
Finance and Budget					
Information Technology	1			3	3
Metro Operations	12		17	1	18
Planning and Development	1		4		4
Communications			7		7
Systems Security & Law Enforcement					
Risk Management	5		5		5
Totals	21		33	4	37

In addition to the above MAS and external audit recommendations, we closed 89 recommendations for the Office of the Inspector General (OIG). At the end of the quarter there were 42\* outstanding OIG audit recommendations.

\*This total does not include recommendations included in the Audit of Westside Purple Line Extension Section 2- Modification No. 52, and Review of Metro Safety Culture and Rail Operational Safety, as the management response and/or estimated completion dates are still pending. However, Operations has hired consultants to assist in addressing the most critical elements of the Review of Metro Safety Culture and Rail Operational Safety.

## Appendix A

<b>Contract Pre-Award Audit FY 2018 - Audits Completed During Fiscal Year</b>						
<b>No.</b>	<b>Area</b>	<b>Audit Number &amp; Type</b>	<b>Contractor</b>	<b>Frequency</b>	<b>Requirement</b>	<b>Date Completed</b>
1	Planning & Development	17-PLN-A33 - Attestation Agreed-upon Procedures	Gruen Associates	Once for AE39616	VCM Policy	8/2017
2	Risk, Safety & Asset Management	17-RSK-A01 - Attestation Agreed-upon Procedures	Owen Group Inc.	Once for AE39820	VCM Policy	8/2017
3	Program Management	Attestation Agreed-upon Procedures	Walsh-Shea Corridor Constructors	Once for CO988 Change Order No. 122.1	VCM Policy	8/2017
4	Program Management	Attestation Agreed-upon Procedures	Walsh-Shea Corridor Constructors	Once for CO988 Change Order No. 82	VCM Policy	9/2017

## Appendix B

Incurred Cost Audit FY 2018 - Audits Completed During Fiscal Year						
No.	Area	Audit Number & Type	Contractor	Frequency	Requirement	Date Completed
1	Planning & Development	17-PLN-A02 - Closeout	County of Los Angeles	3rd Audit (Closeout)	Per Project Manager's request and MOU. P0004221 terms	7/2017
2	Program Management	12-PLN-A17 - Interim	Caltrans	1st Interim Audit	Per Project Manager's request and MOU. P0006376 terms	8/2017
3	Program Management	17-HWY-A12 - Closeout	City of Lawndale	Once	Per Project Manager's request and MOU. MR312.36 terms	8/2017
4	Planning & Development	16-PLN-A29 - Closeout	City of Long Beach	Once	Per Project Manager's request and MOU. P0006322 terms	8/2017
5	Program Management	17-HWY-A14 - Closeout	City of Glendale	Once	Per Project Manager's request and MOU. MR310.20 terms	8/2017
6	Planning & Development	17-PLN-A10 - Closeout	County Los Angeles	Once	Per Project Manager's request and MOU. P0008121 terms	8/2017
7	Program Management	17-CON-A41 - Attestation Agreed-upon Procedures	Intueor Consulting, Inc.	4th Audit	VCM Policy & Contract Terms	8/2017
8	Program Management	17-CON-A29 - Attestation Agreed-upon Procedures	ABA Global, Inc.	2nd Audit	VCM Policy & Contract Terms	8/2017
9	Program Management	17-HWY-A16 - Closeout	City of Glendale	Once	Per Project Manager's request and MOU. MR310.24 terms	9/2017
10	Planning & Development	17-PLN-A05 - Closeout	City of Long Beach	Once	Per Project Manager's request and MOU. P00F1341 terms	9/2017
11	Planning & Development	16-PLN-A08 - Closeout	City of Carson	Once	Per Project Manager's request and MOU. P00F3119 terms	9/2017

## Appendix B

<b>Incurred Cost Audit FY 2018 - Audits Completed During Fiscal Year</b>						
<b>No.</b>	<b>Area</b>	<b>Audit Number &amp; Type</b>	<b>Contractor</b>	<b>Frequency</b>	<b>Requirement</b>	<b>Date Completed</b>
12	Planning & Development	17-PLN-A25 - Closeout	City of Industry	Once	Per Project Manager's request and MOU. P00F3303 terms	9/2017
13	Program Management	17-CON-A28- Attestation Agreed-upon Procedures	Lenax Construction Services, Inc.	2nd Audit	VCM Policy & Contract Terms	9/2017
14	Program Management	17-CON-A27 - Attestation Agreed-upon Procedures	Kal Krishnan Consulting Services, Inc.	2nd Audit	VCM Policy & Contract Terms	9/2017

## Appendix C

Internal Audit FY 2018 - In Process as of September 30, 2017						
No	Area	Audit Number & Title	Description	Frequency	Requirement	Estimated Date of Completion
1	Information & Technology Services	Performance Audit of Information Technology Project Management	To evaluate the efficiency and effectiveness of the Information Technology Services (ITS) Department's Project Management Process. A sample from all information technology systems acquired, upgraded, developed and/or implemented during the period from July 1, 2013 through June 30, 2016 will be selected to assess the efficiency and effectiveness of the Project Management Process, including the projects' success from the end user perspective.	First Time	Per FY17 Audit Plan	11/2017
2	Program Management	16-CON-P04 - Performance Audit of Construction Quality Assurance	Evaluate the efficiency and effectiveness of the agency's Construction Quality Assurance Program over minor construction projects (less than \$100 million) and to follow up on the implementation of recommendations from the prior Performance Audit of Construction Quality Assurance, No. 11-CON-K02.	2nd Time; Last Audit 3 years ago	Per FY16 Audit Plan	11/2017
3	Metro Operations	17-OPS-P07 - Performance Audit of Track Allocation	Determine the effectiveness of the track allocation process.	First Time	Per FY16 Audit Plan	11/2017
4	Finance & Budget	17-OMB-P02 - Performance Audit of Farebox Collections	Evaluate the effectiveness of internal controls over Farebox cash collections.	First Time	Per FY17 Audit Plan	11/2017
5	Finance & Budget	17-OMB- P01 - Performance Audit of Cash Counting Process	Evaluate internal controls over Cash Counting Process.	2nd Time; Last Audit 7 years ago	Per FY17 Audit Plan	11/2017
6	Vendor / Contract Management	16-VCM- P01 - Performance Audit of P-Card	Evaluate compliance to P-card purchase requirements.	3rd Time; Last audits 4 and 8 years ago	Per FY16 Audit Plan	11/2017
7	Program Management	12-CON-P03 - Performance Audit for Follow-Up of the I-405 Sepulveda Pass Improvement Project	Verify implementation of agreed upon corrective actions from the initial audit of the I-405 Sepulveda Pass Improvement Project, Report No. 11-CON-K01, issued in August 2011.	2nd Time; Last Audit 6 years ago	CEO Request	12/2017
8	Vendor / Contract Management	17-VCM-P02 - Performance Audit of Change Order Process	To determine the extent of Vendor/Contract Management's compliance with policies and procedures. To determine Vendor/Contract Management's adequacy of the justification documentation for approving contract change orders/modifications. To determine the extent of key information utilization for contract change orders/modifications. Identify best practices and present to Vendor/Contract Management for consideration.	First Time	Per CEO Request	12/2017

## Appendix C

Internal Audit FY 2018 - In Process as of September 30, 2017						
No	Area	Audit Number & Title	Description	Frequency	Requirement	Estimated Date of Completion
9	Vendor / Contract Management	17-VCM-P04 - Performance Audit of Pre-Award Process	To determine the extent of Vendor/Contract Management's compliance with policies and procedures. To determine Vendor/Contract Management's adequacy of the justification documentation for the vendor contract selection method (e.g. best value, lowest bid). To determine the extent of key information utilization to select vendors for contract awards. Identify best practices and present to Vendor/Contract Management for consideration.	First Time	Per CEO Request	12/2017
10	Metro Operations	16-OPS-P03 - Performance Audit of Accident Prevention Program	Determine the efficiency and effectiveness of Operations' Accident Prevention Practices.	First Time	Per FY16 Audit Plan	12/2017
11	Employee & Labor Relations / Finance & Budget	17-OMB-P04 - Performance Audit of Position Reconciliation Process	To evaluate the adequacy of the Position Reconciliation Process between the Cost centers, Human Resources and Office of Management and Budget.	2nd Time; Last Audit 6 years ago	Per FY17 Audit Plan	12/2017
12	Congestion Reduction	16-CEO-P02 - Performance Audit for Follow- Up of 511	Follow Up on 511 Audit.	2nd Time; Last Audit 5 Years Ago	CEO Request	12/2017
13	Agency-Wide	17-AGW-P01 - Performance Audit of Consultant Hours	Evaluate efficiency and effectiveness of the use of consultants.	First Time	Per FY17 Audit Plan	12/2017
14	Risk Management	18-RSK-P01 - Performance Audit of Continuity of Operations Plan	Evaluate the adequacy of the Continuity of Operations Plan (COOP) based on guidelines specified by Federal Transit Administration Emergency Protective Measures and report on progress to date on the COOP as of September 30, 2017.	2nd Time; Last Audit 8 years ago	Per FY18 Audit Plan	12/2017

## Appendix D

Open Audit Recommendations						
No.	Area	Audit Number & Title	Rec. No.	Recommendation	Original Completion Date	Extended Completion Date
1	Operations	11-OPS-006 - HASTUS	5	We recommend the Chief Operations Officer consider utilizing more of HASTUS' Minbus module features by: Looking for opportunities to interline routes as a strategy for achieving a more cost effective solution. <b>Update: Upgrade of the HASTUS system to 2015 version is completed. Work on Minbus Module is in progress.</b>	6/30/2016	12/31/2017
2	Operations	11-OPS-006 - HASTUS	6	We recommend the Chief Operations Officer consider utilizing more of HASTUS' Minbus module features by: Developing a more robust, realistic deadhead matrix and use the matrix during the vehicle blocking process to globally optimize its bus system schedules. <b>Update: Upgrade of the HASTUS system to 2015 version is completed. Work on Minbus Module is in progress.</b>	6/30/2016	12/31/2017
3	Operations	11-OPS-006 - HASTUS	11	We recommend the Chief Operations Officer: Consider multi-division operator run cutting to optimize workforce distribution amongst divisions. <b>Update: Upgrade of the HASTUS system to 2015 version is completed. Work on Minbus Module is in progress.</b>	6/30/2016	12/31/2017
4	Operations	11-OPS-006 - HASTUS	12	We recommend the Chief Operations Officer: Adopt integrated scheduling to improve the efficiency of run cuts. <b>Update: Upgrade of the HASTUS system to 2015 version is completed. Service Planning &amp; Scheduling department is waiting for Giro to fine tune the CrewOpt module and train staff.</b>	6/30/2016	12/31/2017
5	Communications	16-COM-P01 - Special Fares Programs	14	We recommend the Communications Department update the B-TAP Program Policy and/or Agreement terms so that the language on these two documents are consistent with the intended pricing level for B-TAP customers. <b>Update: The B-TAP program is under review by OMB and TAP operations.</b>	3/31/2017	12/31/2017
6	Communications	16-COM-P01 - Special Fares Programs	20	We recommend the Communications Department to report the program performance periodically to the appropriate level of management to support decision making. <b>Update: Pending completion of MOU which is currently being reviewed by County Counsel.</b>	3/31/2017	12/31/2017
7	Communications	16-COM-P01 - Special Fares Programs	21	We recommend the Communications Department to renew the agreement with the Court to confirm mutual agreement. <b>Update: Pending completion of MOU which is currently being reviewed by County Counsel.</b>	3/31/2017	12/31/2017
8	Communications	16-COM-P01 - Special Fares Programs	22	We recommend the Communications Department to revisit the program purpose and guidelines/requirements to assess the current J-TAP Program performance. <b>Update: Pending completion of MOU which is currently being reviewed by County Counsel.</b>	3/31/2017	12/31/2017

Any findings that have not been corrected 90 days after the due date are reported as late.



Open Audit Recommendations						
No.	Area	Audit Number & Title	Rec. No.	Recommendation	Original Completion Date	Extended Completion Date
9	Communications	16-COM-P01 - Special Fares Programs	23	We recommend the Communications Department obtain a written agreement with DCFS to confirm the mutual agreement and to retain the legal rights to enforce DCFS to meet the Program guidelines and requirements. <b>Update: Pending completion of MOU which is currently being reviewed by County Counsel.</b>	3/31/2017	12/31/2017
10	Communications	16-COM-P01 - Special Fares Programs	25	We recommend the Communications Department to assess the program performance periodically, and report to the appropriate level of management. <b>Update: Pending completion of MOU which is currently being reviewed by County Counsel.</b>	3/31/2017	12/31/2017
11	Communications	16-COM-P01 - Special Fares Programs	26	We recommend the Communications Department to revisit the program purpose and assess the pricing model to generate the optimal program revenue. <b>Update: The B-TAP program is under review by OMB and TAP operations. Once MCS receives an update from OMB regarding the B-TAP pricing, MCS will be implementing new rules and pricing models to ensure optimal program revenue.</b>	3/31/2017	12/31/2017
12	Planning & Development	14-EDD-P01 - Real Estate Property	11	We recommend that Real Estate Management complete the required inspections and document inspection records on file. <b>Update: Master schedule is in development as well as logistics, after-action, and resource requirements for successful execution of any Inspection Master Schedule.</b>	6/30/2017	12/31/2017
13	Planning & Development	14-EDD-P01 - Real Estate Property	12	We recommend that Real Estate complete the write off process for delinquent accounts that are deemed uncollectable in accordance with the policy established for writing off uncollectable amounts. <b>Update: Property management is in the process of revising its write off process and procedures as defined in Audit Recommendation 13 and then will begin the process of writing off all customer accounts deemed uncollectable with an expected completion timeline of 12/31/2017.</b>	6/30/2017	12/31/2017
14	Planning & Development	14-EDD-P01 - Real Estate Property	13	We recommend that Real Estate Management develops policies and procedures for collecting and writing off past due accounts including when consultation with County Counsel is required. Policy should include timeframes to ensure timely actions are taken. <b>Update: Asset Management will revise its dollar thresholds once senior management positions have been filled.</b>	6/30/2017	12/31/2017

Any findings that have not been corrected 90 days after the due date are reported as late.

Open Audit Recommendations						
No.	Area	Audit Number & Title	Rec. No.	Recommendation	Original Completion Date	Extended Completion Date
15	Planning & Development	14-EDD-P01 - Real Estate Property	14	<p>We recommend that Real Estate Management will establish a process for investigating customer's payment that has no invoice reference so proper application of payments received can be made or invoice can be prepared.</p> <p><b>Update: Real Estate Management is working with Accounting to resolve the reconciliation of discrepancy between invoices and actual payments made by the customer because Asset Management in Real Estate Department is responsible for preparing billing schedules and Accounting is responsible for generating invoices.</b></p>	6/30/2017	12/31/2017
16	Operations	16-OPS-P01 - Wayside Systems - Track Maintenance	1	<p>We recommend the Chief Operations Officer require Track management to develop an inventory of linear assets and their components that can be the basis of a PMP to accurately forecast maintenance requirements and component replacements.</p> <p><b>Update: Currently, a software system called OpTram is in the initial stages of being developed that will have an inventory of linear assets, including Wayside track assets. This will be a short term solution for the inventory of assets as the long term plan is to replace the M3 system which should include a requirement for linear assets inventory. ITS plans to begin the procurement process by the end of 2017.</b></p>	6/30/2017	12/31/2017
17	Operations	16-OPS-P01 - Wayside Systems - Track Maintenance	2	<p>We recommend the Chief Operations Officer require Track management to develop a formal risk assessment of potential failures for track components or assets aimed at supplementing the current inspection program with a scheduled maintenance plan for selected components or maintenance practices.</p> <p><b>Update: Maintenance &amp; Engineering are working towards hiring consultants to pursue this effort.</b></p>	6/30/2017	12/31/2017
18	Operations	16-OPS-P01 - Wayside Systems - Track Maintenance	4	<p>We recommend the Chief Operations Officer require Track management to develop quality standards for track maintenance to proactively maintain Metro's unique track infrastructure.</p> <p><b>Update: Maintenance &amp; Engineering are working towards hiring consultants to pursue this effort.</b></p>	6/30/2017	12/31/2017

Any findings that have not been corrected 90 days after the due date are reported as late.

Open Audit Recommendations						
No.	Area	Audit Number & Title	Rec. No.	Recommendation	Original Completion Date	Extended Completion Date
19	Operations	16-OPS-P01 - Wayside Systems - Track Maintenance	6	We recommend that while the long-term recommendation is being evaluated, that the Chief Operations Officer require Track management to revise inspection forms/reports to include: applicable checklists with inspection criteria for the different types of inspections; condition description, and ranking description of conditions with estimated completion for corrective actions. <b>Update: The M3 Mobile apps for Bus, Rail and Wayside inspections is estimated to be completed in December 2017. However, 6 months are needed to train staff on how to use new M3 module for Wayside track.</b>	6/30/2017	12/31/2017
20	Operations	16-OPS-P01 - Wayside Systems - Track Maintenance	7	We recommend that while the long-term recommendation is being evaluated, that the Chief Operations Officer require Track management to train inspectors to properly complete both inspection and maintenance forms. <b>Update: Closed as of October 2017.</b>	6/30/2017	11/30/2017
21	Operations	16-OPS-P01 - Wayside Systems - Track Maintenance	8	We recommend that while the long-term recommendation is being evaluated, that the Chief Operations Officer require Track management to log all conditions that impact the track structure in the inspection reports, including water damage in the tunnels. <b>Update: This recommendation will potentially close in Quarter 2. Auditor will verify these tasks were included in new contract deliverables.</b>	06/30/2017	11/30/2017
22	Operations	16-OPS-P01 - Wayside Systems - Track Maintenance	10	We recommend that while the long-term recommendation is being evaluated, that the Chief Operations Officer require Track management to work with other business units who are responsible to implement any corrective actions that may impact track maintenance and/or track condition. <b>Update: This recommendation will potentially close in Quarter 2. Auditor will verify these tasks were included in new contract deliverables.</b>	6/30/2017	11/30/2017
23	Operations	16-OPS-P01 - Wayside Systems - Track Maintenance	12	We recommend that the Chief Operations Officer, require Track management to provide training for track management, supervisors and/or leads that create work orders in the M3 system. <b>Update: The M3 Mobile apps for Bus, Rail and Wayside inspections is estimated to be completed in December 2017. However, 6 months are needed to train staff on how to use new M3 module for Wayside track.</b>	6/30/2017	6/30/2018
24	Operations	16-OPS-P01 - Wayside Systems - Track Maintenance	13	We recommend that the Chief Operations Officer, require Track management to log all open maintenance conditions in M3, as they are identified, to produce meaningful reports. <b>Update: The M3 Mobile apps for Bus, Rail and Wayside inspections is estimated to be completed in December 2017. However, 6 months are needed to train staff on how to use new M3 module for Wayside track.</b>	6/30/2017	6/30/2018

Any findings that have not been corrected 90 days after the due date are reported as late.

Open Audit Recommendations						
No.	Area	Audit Number & Title	Rec. No.	Recommendation	Original Completion Date	Extended Completion Date
25	Operations	16-OPS-P01 - Wayside Systems - Track Maintenance	15	We recommend the Chief Operations Officer require Tracks Management to develop departmental policies and procedures specific to Track Maintenance activities and specify the track maintenance standards and/or guidelines that should be followed. <b>Update: An estimate for a consultant to work on developing a track maintenance manual, policies and procedures was completed in March 2017. Operations is looking into hiring consultants to assist in these tasks.</b>	6/30/2017	12/31/2017
26	Operations	16-OPS-P01 - Wayside Systems - Track Maintenance	16	We recommend the Chief Operations Officer require Tracks Management to develop an illustrative field manual based on Metro's own criteria for track maintenance and allocate the necessary budget to do this. <b>Update: An estimate for a consultant to work on developing a track maintenance manual, policies and procedures was completed in March 2017. Operations is looking into hiring consultants to assist in these tasks.</b>	6/30/2017	12/31/2017
27	Operations	16-OPS-P01 - Wayside Systems - Track Maintenance	20	We recommend that the Chief Operations Officer require Track Management to define training and certification program requirements for each task performed by the unit, including the frequency for each course. <b>Update: Closed as of October 2017.</b>	6/30/2017	11/30/2017
28	Operations	16-OPS-P01 - Wayside Systems - Track Maintenance	21	We recommend that the Chief Operations Officer require Track Management to bring inspectors current on all their training and re-certification requirements including refresher and welding courses. <b>Update: Closed as of October 2017.</b>	3/31/2017	11/30/2017
29	Operations	16-OPS-P01 - Wayside Systems - Track Maintenance	22	We recommend that the Chief Operations Officer require Track Management to consider collaborating with ITS to determine whether Operations' existing OTTS system can be modified and used by Rail Instruction or implement and automated Track Training Management system to gain greater visibility of employee training records and data.	12/31/2017	
30	Risk Management/ Operations	2016 Triennial Safety Review of the Los Angeles County Metropolitan Transportation Authority	1	LACMTA must review and/or revise Emergency Plans at intervals as required by LACMTA procedures. <b>Update: Closed as of October 2017.</b>	7/1/2017	10/1/2017

Any findings that have not been corrected 90 days after the due date are reported as late.

Open Audit Recommendations						
No.	Area	Audit Number & Title	Rec. No.	Recommendation	Original Completion Date	Extended Completion Date
31	Risk Management/ Operations	2016 Triennial Safety Review of the Los Angeles County Metropolitan Transportation Authority	2	LACMTA Management should properly complete and fill out the Ride Check Forms with accurate and correct information. <b>Update: Closed as of October 2017.</b>	7/15/2017	9/15/2017
32	Risk Management/ Operations	2016 Triennial Safety Review of the Los Angeles County Metropolitan Transportation Authority	8	LACMTA should keep hard copies of maintenance records. <b>Update: Closed as of October 2017.</b>	7/11/2017	9/15/2017
33	Risk Management/ Operations	2016 Triennial Safety Review of the Los Angeles County Metropolitan Transportation Authority	9	LACMTA should update the maintenance plans to reflect the systems equipment and conditions. <b>Update: Closed as of October 2017.</b>	9/1/2017	9/15/2017
34	Risk Management/ Operations	2016 Triennial Safety Review of the Los Angeles County Metropolitan Transportation Authority	10	LACMTA maintenance personnel should completely fill out checklists before closing out work order. <b>Update: Closed as of October 2017.</b>	7/11/2017	9/15/2017
35	Information Technology Services	16-ITS-P02 - Performance Audit of IT Asset Management	2	We recommend that the ITS Department Management complete the update of the Standards Compliance and Asset Management (IT 7) Policy to clarify the roles and responsibilities of the ITS department and other cost centers in tracking and managing IT assets. The policy should include the types of IT assets that need to be maintained in IT asset inventory records. The policy revision should also include the extent of the periodic physical inventory/reconciliation based on the risk associated with the type of IT assets and the amount of investment on various types of IT assets.	12/31/2017	
36	Information Technology Services	16-ITS-P02 - Performance Audit of IT Asset Management	3	We recommend that the ITS Department Management establish a process to maintain a complete and accurate IT asset list by improving the monitoring/tracking for IT asset acquisition, issuance, retirement, disposal, etc.	10/31/2017	
37	Information Technology Services	16-ITS-P02 - Performance Audit of IT Asset Management	4	We recommend that the ITS Department Management oversee the periodic physical inventory (at least annually) of IT assets that are excluded from the physical inventory/ reconciliation for federally funded assets (below \$5000 unit price), but had been determined material in amount due to high frequency/volume purchases. Resolve any discrepancies to ensure the accuracy and completeness of IT asset inventory records.	3/31/2018	

Any findings that have not been corrected 90 days after the due date are reported as late.

## Appendix E

OIG Open Audit Recommendations						
No.	Area	Audit Number & Title	Rec. No.	Recommendation	Original Completion Date	Extended Completion Date
1	Employee & Labor Relations	15-AUD-02 - Review of Metro Mandatory Training	1	Consider ways to proactively set up a system to identify all employees who require mandatory training, and notify the employees to sign up for the required classes.	3/31/2017	8/31/2017
2	Employee & Labor Relations	15-AUD-02 - Review of Metro Mandatory Training	2	Update the SharePoint database by: a. Reviewing the mandatory training classes listed in the SharePoint database to ensure that all mandatory training classes are annotated as "mandatory" in the database, and b. Periodic reviewing the database to ensure that the information listed is current and all mandatory training classes are annotated.	3/31/2017	12/31/2017
3	Employee & Labor Relations	15-AUD-02 - Review of Metro Mandatory Training	3	Update the Metro Policy on Training, HR 8-2, in accordance with General Management Policy GEN 5. <b>Update: Revised Policy is complete and awaiting comments and approval from other Strategic Business Units.</b>	8/31/2016	8/31/2017
4	Systems, Security & Law Enforcement	16-AUD-03 - Metro Policing and Security Workload and Staffing Analysis	8	The Metro System Safety and Law Enforcement Division should consider developing or acquiring and implementing a resource oversight and monitoring application for use on the smartphones currently used by Metro safety and security personnel. Metro should also consider identifying specific reporting requirements as input into the development of the new Computer Aided Dispatch (CAD) system by the LASD.	1/31/2017	9/31/2017
5	Program Management	16-AUD-01 - Capital Project Management Best Practices Study	38 total	The 109 recommendations included in this report address findings in low bid contracting, project delivery method selection process and criteria, contract administration, obtaining necessary approvals from cities to avoid delays, etc. <b>Update: As of September 30, 2017, 71 of 109 recommendations have been completed.</b>		

\*This total does not include recommendations included in the Audit of Westside Purple Line Extension Section 2- Modification No. 52, and Review of Metro Safety Culture and Rail Operational Safety, as the management response and/or estimated completion dates are still pending. However, Operations has hired consultants to assist in addressing the most critical elements of the Review of Metro Safety Culture and Rail Operational Safety.