

Metro

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



Agenda - Final

Wednesday, April 17, 2019

12:00 PM

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

Finance, Budget and Audit Committee

*Kathryn Barger, Chair
Paul Krekorian, Vice Chair
John Fasana
Ara Najarian
Mark Ridley-Thomas
John Bulinski, non-voting member*

Phillip A. Washington, Chief Executive Officer

METROPOLITAN TRANSPORTATION AUTHORITY BOARD RULES

(ALSO APPLIES TO BOARD COMMITTEES)

PUBLIC INPUT

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

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

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

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

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

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

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

INFORMATION RELATING TO AGENDAS AND ACTIONS OF THE BOARD

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

DISCLOSURE OF CONTRIBUTIONS

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

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LIMITED ENGLISH PROFICIENCY

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

CALL TO ORDER

ROLL CALL

APPROVE Consent Calendar Item(s): 7

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

CONSENT CALENDAR

7. SUBJECT: PROPERTY INSURANCE PROGRAM

[2019-0027](#)

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to negotiate and purchase All Risk Property and Boiler and Machinery insurance policies for all property at the current policy limits at a not to exceed price of \$3.1 million for the 12-month period May 10, 2019 through May 10, 2020.

Attachments: [Attachment A - Recommended Program](#)
 [Attachment B - Alternatives Considered](#)

NON-CONSENT

**8. SUBJECT: LEASE AGREEMENT WITH BLUM COURTYARD
ASSOCIATES FOR THE LA METRO SYSTEM SECURITY
AND LAW ENFORCEMENT OFFICE LOCATED AT 1300 W.
OPTICAL DRIVE, AZUSA**

[2019-0067](#)

RECOMMENDATION

AUTHORIZE the Chief Executive Officer (CEO) to execute a ten (10)-year lease agreement commencing August 1, 2019 with Blum Courtyard Associates ("Lessor") for the LA Metro System Security and Law Enforcement office located at 1300 W. Optical Drive in Azusa at a rate of \$40,010 per month with escalations of three percent (3%) annually for a total lease value of \$5,268,103 over the term.

Attachments: [Attachment A – Lease Location and Plans](#)
 [Attachment B - Deal Points](#)

9. SUBJECT: ACCESS SERVICES - QUARTERLY UPDATE

[2019-0149](#)

RECOMMENDATION

RECEIVE AND FILE status report on Access Services - ADA Paratransit.

10. SUBJECT: BASIC FINANCIAL STATEMENTS AND COMPONENT AUDITS [2019-0161](#)

RECOMMENDATION

RECEIVE AND FILE the Los Angeles County Metropolitan Transportation Authority's (Metro) basic financial statements and component financial statement audits completed by Crowe Horwath LLP (Crowe) for the fiscal year ended June 30, 2018.

Attachments: [Attachment A - SAS 114 Letter.pdf](#)
 [Attachment B - Single Audit Report.pdf](#)
 [Attachment C - Federal Funding Allocation Data.pdf](#)
 [Attachment D - National Transit Database Financial Data Procedures.pdf](#)
 [Attachment E - Transportation Development Act Operations Agency.pdf](#)
 [Attachment F - Transportation Development Act & Prop 1B PTMISEA Planning.](#)
 [Attachment G - State Transit Assistance Special Revenue Fund.pdf](#)
 [Attachment H - Crenshaw Project Corporation.pdf](#)
 [Attachment I - Service Authority for Freeway Emergencies.pdf](#)
 [Attachment J - Low Carbon Transit Operations Program Compliance Report.pdf](#)

11. SUBJECT: FY20 BUDGET DEVELOPMENT UPDATE [2019-0166](#)

RECOMMENDATION

RECEIVE AND FILE FY20 Budget Development Update.

12. SUBJECT: TAP SYSTEM SUPPORT SERVICES [2018-0330](#)

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to execute a modification to Contract No. OP02461010-MAINT, with Cubic Transportation Systems, Inc. ("Cubic"), for TAP System Support Services of all fare collection equipment, in the amount of \$68,220,642 increasing the total contract value from \$295,351,189, to \$363,571,831 and a contract modification extension of five and a half (5.5) years until December 2024.

Attachments: [Attachment A - Procurement Summary](#)
 [Attachment B - Contract Modification+Change Order Log](#)
 [Attachment C - DEOD Summary](#)
 [Attachment D - TAP System Support Services Agreement](#)
 [Attachment E - TAP Equip Maintained Under New Services Agreement](#)

SUBJECT: GENERAL PUBLIC COMMENT [2019-0213](#)

RECEIVE General Public Comment

GENERAL PUBLIC COMMENT

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

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

Adjournment



Board Report

File #: 2019-0027, **File Type:** Program

Agenda Number: 7.

FINANCE, BUDGET AND AUDIT COMMITTEE APRIL 17, 2019

SUBJECT: PROPERTY INSURANCE PROGRAM

ACTION: PURCHASE ALL RISK PROPERTY AND BOILER AND MACHINERY INSURANCE

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to negotiate and purchase All Risk Property and Boiler and Machinery insurance policies for all property at the current policy limits at a not to exceed price of \$3.1 million for the 12-month period May 10, 2019 through May 10, 2020.

ISSUE

The All Risk Property and Boiler and Machinery insurance policies expire on May 10, 2019.

DISCUSSION

Property insurance protects against losses to our structures, fleets and improvements, which are valued at approximately \$12.3 billion up from last year's \$12.1 billion. The increase in total insured value is primarily due to general replacement cost growth along with revaluation of both heavy and light rail vehicles and the addition of the Southwest Yard to Metro's property program. Property insurance is required by many contracts and agreements, such as our lease/leaseback deals involving a number of our operating assets.

Our insurance broker, USI Insurance Services ("USI") marketed the property program to qualified insurance carriers to obtain property insurance pricing with coverage limits of \$400 million. Quotations for our property insurance program were received from carriers with A.M. Best ratings indicative of acceptable financial soundness and ability to pay claims. Final pricing is pending, so the quotes serve as a not to exceed cost excluding contingency for unanticipated adjustments before policy binding.

The Recommended Program secures the All Risk deductible at \$250,000 with no earthquake coverage and a flood deductible at 5% per location subject to a \$250,000 minimum. USI continues negotiations with carriers regarding deductible limits on selected Metro assets including rolling stock, non-revenue vehicles and potential flooding in subway tunnels. If a loss exceeds the deductible, All Risk coverage is provided up to \$400 million per occurrence for losses except for flood related damages that are covered up to \$150 million. The recommended program is the same as the prior

year program. Attachment A shows the outline of the recommended program structure. The not to exceed premium price includes a contingency for premium adjustments, taxes and fees due to on-going negotiations with insurance carriers.

The recommended program does not include earthquake coverage. We received quotes estimated at \$4.65 million for \$50 million in limits with a 5% deductible. LACMTA has not purchased earthquake coverage in previous years. In the event of a major disaster, we believe funding would be available through Federal and State sources to restore public transportation in Southern California. The lack of earthquake coverage is consistent with decisions made by other large government agencies including most Los Angeles County and City locations, Department of Water and Power and Metropolitan Water District.

We evaluated terrorism coverage options this renewal cycle and have not opted to purchase the coverage. Terrorism coverage is available but does not appear to be cost effective at a quoted cost of nearly \$850,000. The Terrorism Risk Insurance Act (TRIA) provides government support by providing mechanisms for spreading losses across policyholders. In the past, we rejected this coverage because of the high likelihood of federal and state funding to restore transportation services as a result of a serious terrorism incident. For the present, we will continue to reject terrorism coverage.

The current and recommended programs of insurance are layered structures. Several insurance carriers participate in the program with each contributing a portion of coverage which maintains a diversified portfolio of insurance carriers. Continual monitoring through internal methods, as well as updates provided by USI, ensure that all carriers maintain the required financial ratings indicated by financial reporting agencies and as determined by A.M. Best.

In February and March, USI contacted multiple domestic and foreign insurance providers to present our property risks and supplemental data. USI provided an overview of the Metro transit system during discussions with the underwriters, including our extensive security infrastructure, fire protection, loss control and minimal risk of flood exposures. USI provided information and statistics on system operations, assets and our excellent loss history over the past nineteen years with one fixed property insurable event and under \$1.3 million insurable losses of rolling stock and non-revenue vehicles.

The LACMTA property program continues to be well received by insurers due to our favorable loss history and the growth of the account from \$6.7 billion in values in 2007 to \$12.3 billion for this renewal. As such, USI presented the submission to incumbent and competing insurers to create competition in the insurance program. The marketing effort resulted in maintaining most of our incumbent carriers for the recommended program. Our rate per million dollars of insurable value is \$252 for the recommended program which represents a 26.5% rate increase per million dollars of insured value over the prior year. Some of the major factors driving the rate increase are summarized in the following paragraphs.

The soft market for all lines of insurance coverage Metro has enjoyed for many years has hardened. The catastrophic events of 2018, including the California wildfires, will place renewed pressure on property specific pricing that produces an adequate risk adjusted rate of return to the insurance

carriers for property coverage. The near-term rate impacts will result in higher premiums because of current losses (size and frequency) being paid by property markets after many quarters of soft and declining pricing.

Jeff McNatt, executive vice president for AmWINS, one of the largest global specialty insurance distributors, explains, "The primary carriers have suffered the most over the last two years, and this has caused many primary markets to tighten their underwriting guidelines, push for rate (increases), or exit classes of business." (AmWINS State of the Market, Q1 2019 report) The report further states, "Carriers were hit globally by severe storms in 2018. Worldwide catastrophe (CAT) loss estimates for 2018 are expected to be close to \$80 billion, above the 20-year average of \$57 billion. Domestically, the fourth quarter saw both Hurricane Michael and wildfires in California, which combined are expected to generate losses between \$18-28 billion - well above the typical Q4".

Underwriting trends will include market hardening, carrier retrenching, and an emphasis on profit as discussed in a recent on-line article from AmWINS. "As we head deeper into the first quarter of 2019, one thing is clear: changes are coming to the insurance marketplace that buyers and brokers alike will experience as the year progresses. Carriers are feeling pain, not just in commercial auto and problematic property sectors, but across many other areas of property and casualty as well." ("The 2019 Market: Changes are Coming", AmWINS, March 6, 2019)

This year's renewal reflects our continuing favorable insurability and ability to take full advantage of USI marketing efforts in a very different and demanding market environment from previous years.

DETERMINATION OF SAFETY IMPACT

Approval of this procurement will not impact the safety of Metro's patrons or employees.

FINANCIAL IMPACT

The funding for two months of \$517,000 for this action is included in the FY19 budget in cost center 0531, Risk Management - Non Departmental Costs, under projects 100001 - General Overhead, 300022 - Rail Operations - Blue Line, 300033 - Rail Operations - Green Line, 300044 - Rail Operations - Red Line, 300055 - Gold Line, 300066 - Expo Line, 301012 - Metro Orange Line, 306001 - Operations Transportation, 306002 - Operations Maintenance, 320011 - Union Station, and 610061 - Owned Property in account 50601 (Ins Prem For Phys Damage). The remaining ten months of premiums will be included in the FY20 budget, cost center 0531, Risk Management - Non Departmental Costs, under projects 100001 - General Overhead, 300022 - Rail Operations - Blue Line, 300033 - Rail Operations - Green Line, 300044 - Rail Operations - Red Line, 300055 - Gold Line, 300066 - Expo Line, 301012 - Metro Orange Line, 306001 - Operations Transportation, 306002 - Operations Maintenance, 320011 - Union Station, and 610061 - Owned Property in account 50601 (Ins Prem For Phys Damage). In FY19, an estimated \$2.5 million will be expensed for property insurance.

Impact to Budget

There is no impact on the FY19 budget. The current fiscal year funding for this action will come from

the Enterprise, General and Internal Service funds. No other sources of funds were considered for this activity because these are the funds that benefit from the insurance. This activity will result in a negligible change to operating costs from the prior fiscal year.

ALTERNATIVES CONSIDERED

The current program, the recommended program and an option with earthquake coverage are summarized in Attachment B. Based upon our past history of favorable renewal and losses, we recommend continuing the current program of insurance as the most cost effective and prudent program. The option adding earthquake coverage is not recommended because the high cost of the earthquake premium does not justify the benefit of the coverage.

NEXT STEPS

Upon Board approval of this action, we will advise USI to proceed with placement of the property insurance program outlined herein effective May 10, 2019.

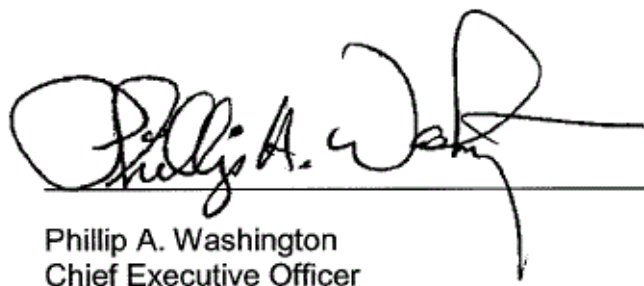
ATTACHMENTS

Attachment A - Recommended Pricing and Carriers

Attachment B - Alternatives Considered

Prepared by: Tim Rosevear, Manager, Risk Financing, (213) 922-6354

Reviewed by: Vijay Khawani, Interim Chief Risk, Safety and Asset Management Officer, (213) 922-4035



Phillip A. Washington
Chief Executive Officer

ATTACHMENT A

RECOMMENDED PROGRAM PRICING AND CARRIERS



USI Insurance Services
Proposed Property/B&M Insurance Summary 2019 - 2020
Los Angeles County Metropolitan Transportation Authority

Limit	Excess of	Coverage	Carrier - Best Rating	Participation (\$)	Participation (%)	Premium (layer)	Participation Premium
\$50M	\$350MM	All Risk Excluding Flood & Earthquake	Hallmark - A VIII	\$10,000,000	20.00%	\$125,000	\$25,800
			Starr Surplus Lines - A XV	\$10,000,000	20.00%	inc. below	inc. below
			Colony Ins. Co. - A XIV	\$5,000,000	10.00%	\$50,000	\$5,160
			AXIS - A+ XV	\$25,000,000	50.00%	\$100,000	\$51,600
				\$50,000,000	100.00%		\$82,560
\$200M	\$150MM	All Risk Excluding Flood & Earthquake	Hudson - A XV	\$30,000,000	15.00%	\$406,000	\$62,849
			Lloyd's of London - A XV	\$105,000,000	52.50%	\$380,000	\$205,884
			Mitsui - A+ XV	\$25,000,000	12.50%	\$380,000	\$47,500
			Starr Surplus Lines - A XV	\$40,000,000	20.00%	inc. below	inc. below
				\$200,000,000	100.00%		\$316,233
\$150M	Underlying Deductibles	All Risk Excluding Earthquake	Lexington Insurance Co - A XV	\$50,000,000	33.33%	\$2,143,180	\$749,754
			Pending**	\$35,000,000	23.33%	\$3,130,000	\$753,704
			Liberty Mutual Fire Insurance Co- A XV	\$15,000,000	10.00%	\$2,229,200	\$222,920
			Starr Surplus Lines - AXV ***	\$30,000,000	20.00%	\$2,482,118	\$524,214
			Houston Casualty - A++ XV	\$10,000,000	6.67%	\$2,449,529	\$168,562
			Ironshore Specialty Ins Co - A XV	\$10,000,000	6.67%	\$2,229,200	\$153,369
				\$150,000,000	100.00%		\$2,572,522

Estimated Program Premiums *	\$2,971,315
Contingency for carrier premium, tax and fee adjustments	\$128,685
Estimated Program Not-To-Exceed Total	\$3,100,000

* Subject to finalization of on-going negotiations with carriers. Amounts show are estimates only.

** Includes 40% of primary \$50M w/HDI (A XV) and \$150M x/s \$50M with Mitsui (not yet 100% complete)

*** Represents full \$400M layer price, participation premium includes mandatory engineering/inspection fee of \$15,000

Terrorism pricing is not included above.
Earthquake pricing is not included above.

ATTACHMENT B

ALTERNATIVES CONSIDERED

	Current Program	Recommended Program (Quota Share Primary)*	Recommended Program With Earthquake*
Deductibles	\$250,00 All Risk / 5% of location value for Flood	\$250,00 All Risk / 5% of location value for Flood **	\$250,000 All Risk/5% of structure value for Earthquake and Flood **
All Risk Limits	\$400 Million	\$400 Million	\$400 Million
Flood Limits	\$150 Million	\$150 Million	\$150 Million
Earthquake Limits	None	None	\$50 Million after first 5% per location deductible
Terrorism	None	None	None
Total not to Exceed or Actual Premium	\$2,408,519	\$3,100,000	\$7,750,000

* recommended programs are not to exceed amounts.

** deductibles are still under negotiation with insurance carriers.



Board Report

File #: 2019-0067, **File Type:** Agreement

Agenda Number: 8.

FINANCE, BUDGET AND AUDIT COMMITTEE APRIL 17, 2019

SUBJECT: LEASE AGREEMENT WITH BLUM COURTYARD ASSOCIATES FOR THE LA METRO SYSTEM SECURITY AND LAW ENFORCEMENT OFFICE LOCATED AT 1300 W. OPTICAL DRIVE, AZUSA

ACTION: APPROVE RECOMMENDATIONS

RECOMMENDATION

AUTHORIZE the Chief Executive Officer (CEO) to execute a ten (10)-year lease agreement commencing August 1, 2019 with Blum Courtyard Associates ("Lessor") for the LA Metro System Security and Law Enforcement office located at 1300 W. Optical Drive in Azusa at a rate of \$40,010 per month with escalations of three percent (3%) annually for a total lease value of \$5,268,103 over the term.

ISSUE

The System Security and Law Enforcement (SSLE) Department has indicated a need for an additional presence of law enforcement for the eastern portions of the Gold Line. The proposed lease site will provide an operating base for law enforcement and is intended to meet the current need, as well as provide future capacity for SSLE as the Gold Line expands eastward through Irwindale/Azusa and on to Montclair in the coming years. The proposed site to be leased exceeds \$500,000 and five years and therefore requires board approval.

BACKGROUND

SSLE has contracted with the Los Angeles County Sheriff's Department (LASD) to provide security services at Metro rail stations and along rail lines. To minimize security response times occurring on Metro operating lines, SSLE and LASD have determined that an additional substation is needed along the eastern extent of Gold Line operations. Beginning in May of 2018, the Real Estate department began working with SSLE, LASD, and brokers to secure a space which is fitted to the required specifications for law enforcement operations.

DISCUSSION

Security and safety is a priority for Metro riders and staff. Metro Real Estate and SSLE believe this lease will provide a base of operations from which our SSLE resources can ensure *Metro's Customer*

Code of Conduct is fully enforceable and enhance the customer experience for all riders as the system expands and provides greater transit modality to all LA County residents.

The Real Estate department, working with SSLE and LASD, reviewed six sites, of which two sites became clearly the most practical for law enforcement operational needs and reasonably priced.

This proposed site is ideally situated within eyesight of the Gold Line Irwindale Station. LASD has noted that proximity to the 10 Freeway will further shorten response time to other nearby stations for interception of incidents occurring during operations. It will increase Metro security presence and provide for a foundation to grow Metro's SSLE services, as needed, alongside the opening of Gold Line stations east of its current terminus. Not establishing this security office will continue to expose Metro customers to longer delays when law enforcement is needed.

Working with brokers and comparable market data, Real Estate is of the opinion that the cost of the lease over the term of the agreement is of fair-market value. Real Estate negotiated a ten-year agreement with two options to extend by five years.

EQUITY PLATFORM

This project aligns to Metro's equity platform by addressing security issues for all customers of the agency and ensures law enforcement is stationed to respond to more communities.

DETERMINATION OF SAFETY IMPACT

Establishment of a Metro presence with law enforcement agencies along active Metro ROW will provide greater protection, safety, and security along the Gold Line operating corridor for Metro riders and operators.

FINANCIAL IMPACT

Approval of the lease with Blum Courtyard will cost a total of \$5,268,103 over the ten-year term of the agreement. This cost is inclusive of three-percent annual increases to the rent provided for in the terms and conditions of the agreement. The three-percent increase is comparably lower than the CPI 3.3% inflation as provided by the Bureau of Labor Statistics.

Impact to Budget

For the financial obligations related to the lease that will occur prior to July 2019, Real Estate will use funding provided in Project 306006 for eligible Bus and Rail operations expenditures. Real Estate has planned and submitted the cost of this lease as a part of its FY2020 in the Non-Departmental Real Estate Cost Center budget (0651) under the Gold Line Project 300055.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Increasing the security and safety of ridership and Metro operators will directly impact the agency's ability to deliver "outstanding trip experiences" for all and is therefore directly tied into *Strategic Plan*

Goal 2.

ALTERNATIVES CONSIDERED

The alternative is to not place the lease site at this location and select an alternative which would be less costly. However, when the cost-to-benefit analysis was performed, the savings provided by locating the site at an alternative location completely negated the benefit of having a site for SSLE on the Gold Line.

NEXT STEPS

Upon board authorization, Real Estate will finalize the lease agreement with Blum Courtyard, forward to County Counsel for approval review, and submit for execution by the CEO for a ten-year period. After the first ten-year period, Metro will reevaluate to determine if continuing the lease site is still within Metro's interest as it relates to operational concerns and financial constraints.

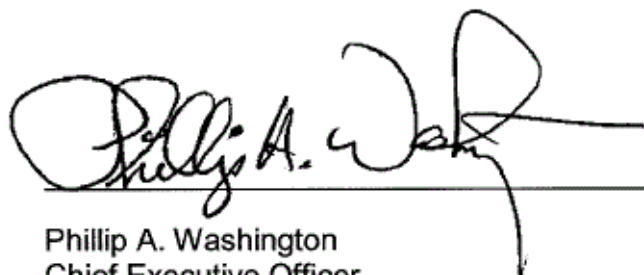
ATTACHMENTS

Attachment A - Lease Location and Plans

Attachment B - Deal Points

Prepared by: John Potts, DEO, Countywide Planning & Development, (213) 928-3397 Holly
Rockwell, SEO, Countywide Planning and Development (213) 922-5585

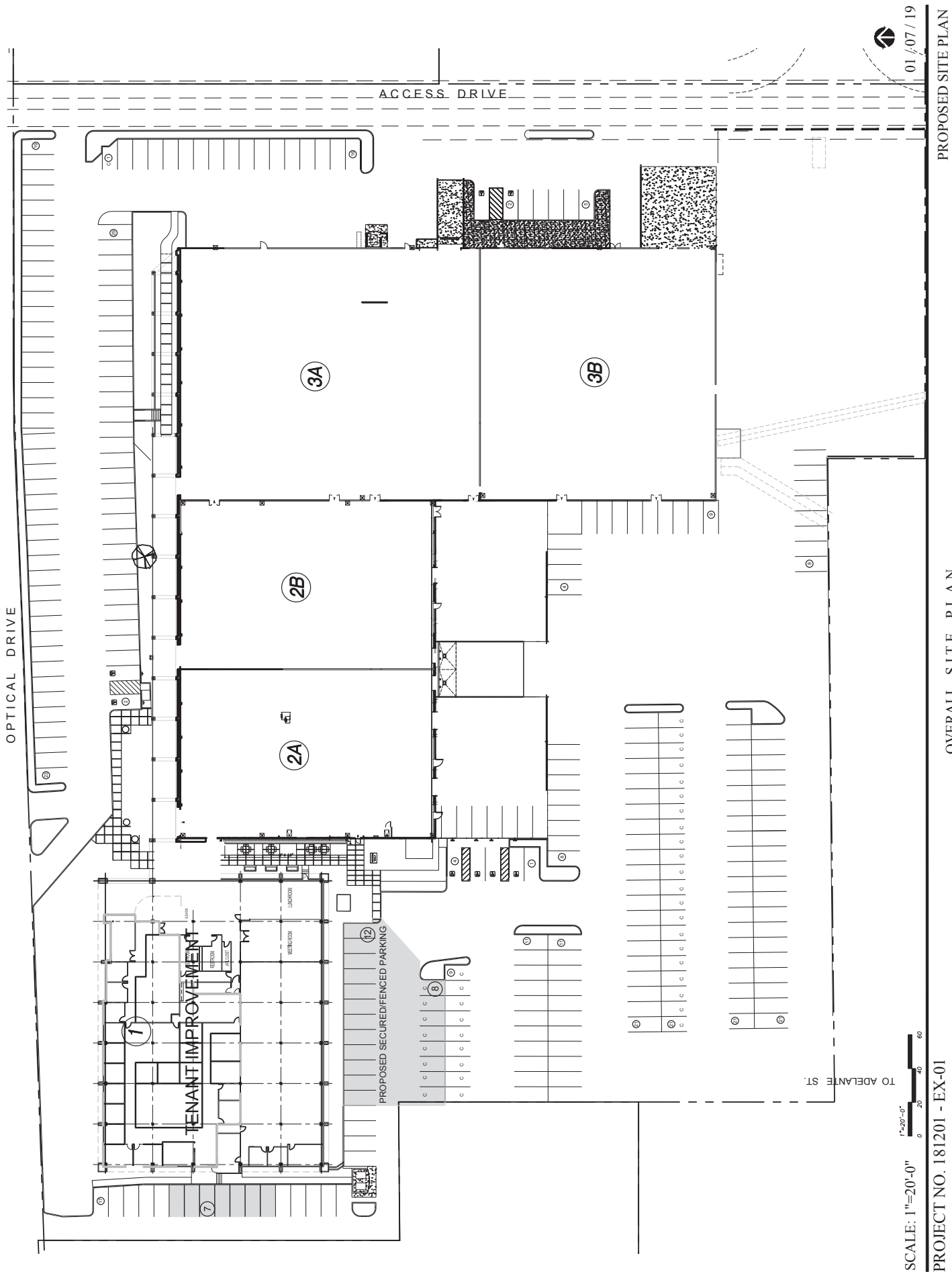
Reviewed by: Laurie Lombardi, Interim Chief Planning Officer, (213) 922-7077
Alex Z. Wiggins, Chief System Security and Law Enforcement Officer, (213) 922-4433



Phillip A. Washington
Chief Executive Officer

Proposed SSLE Lease Location





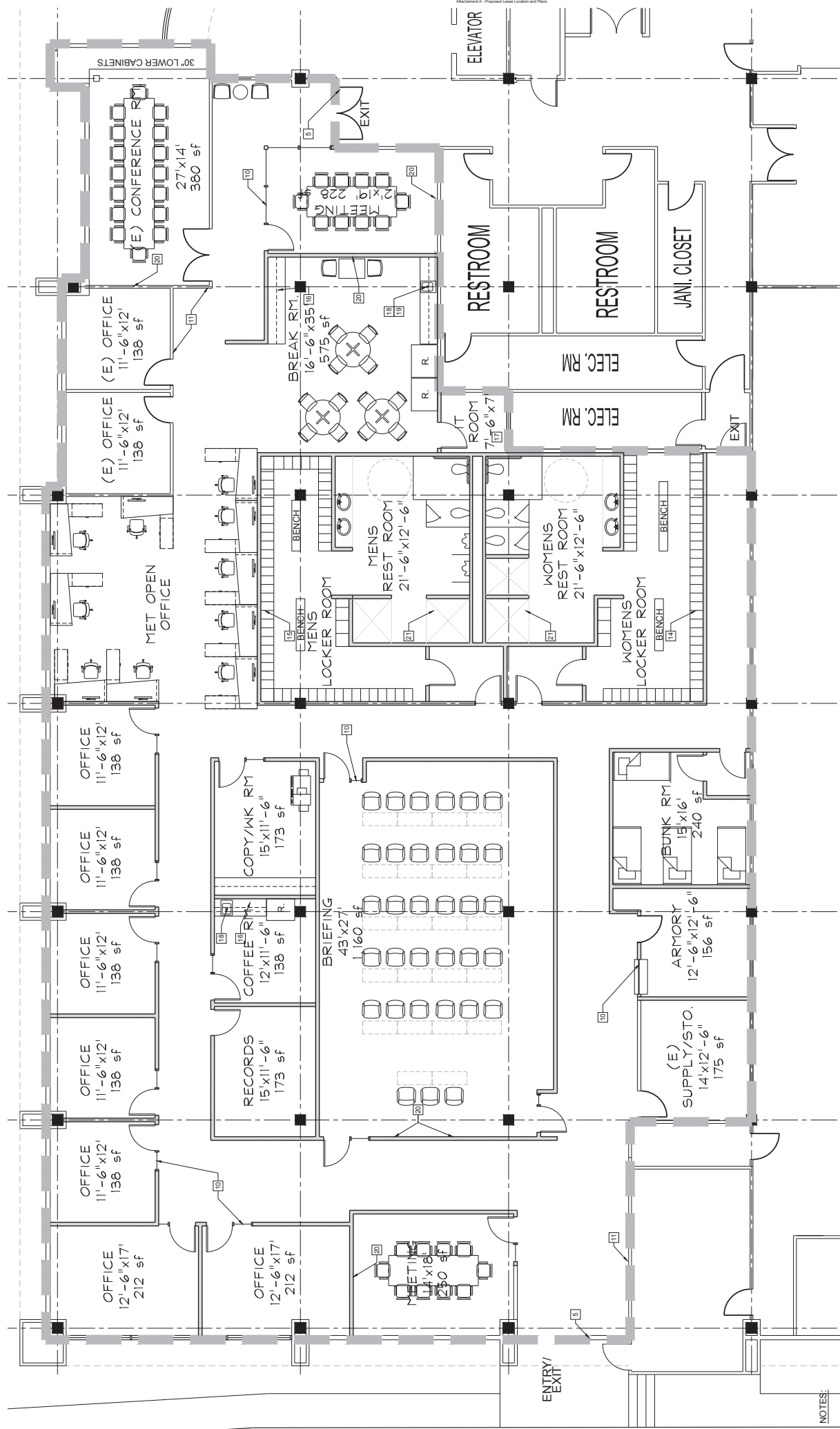
SCALE: 1"=20'-0"

PROJECT NO. 181201 - EX-01

01 / 07 / 19

PROPOSED SITE PLAN

OVERALL SITE PLAN



- NOTES:
- CARPET - PROVIDE CARPET TILES WITH 10 YR LIFE.
 - COUNTER TOPS - PROVIDE CORIAN SOLID SURFACE WITH RESILIENCE TECHNOLOGY W/ 10-YR WARRANTY. PROVIDE BULLNOSE EDGE W/ 3/4" PLYWOOD BASE AND 18" CORIAN BACK SPLASH.
 - DOORS - PROVIDE SOLID CORE STAIN GRADE DOORS.
 - DOOR HARDWARE - PROVIDE LOCKSETS ON ALL OFFICE DOORS, RECORDS AND ARMORY. INCLUDING PANIC HARDWARE ON ALL EXIT DOORS (3)
 - CARD READERS - PROVIDE CARD READERS AT ENTRY DOORS AND SECURED PARKING GATE.
 - PAINT - PROVIDE AN ACCENT WALL COLOR WITHIN EACH ROOM OR AREA
 - ARMORY WALLS TO BE REINFORCED WITH MESH IN THE WALLS. CEILING TO BE HARD LID/GYP. BD.
 - FURNISH CONFERENCE ROOMS AND BRIEFING ROOM WITH TABLES AND CHAIRS
 - SECURED PARKING - PROVIDE SECURED/FENCED PARKING WITH SLATS AND AN ELECTRIC GATE (INCLUDING CARD READER)
 - PROVIDE 18" COUNTER TOP AND 48" WIDE ROLL UP WINDOW FOR ARMORY
 - EXISTING WALLS TO REMAIN
 - TIMELY FRAMES - PROVIDE CLEAR ANODIZED STOREFRONT FRAMES WITH 2" SIDE LIGHT, TYP.
 - CEILING TO MATCH EXISTING CEILING HT.
 - 12X18X6" LOCKERS (52) IN WOMEN'S LOCKER ROOM (5% ACCESSIBLE).
 - 12X18X6" LOCKERS (60) IN MEN'S LOCKER ROOM (5% ACCESSIBLE).
 - PROVIDE CIRCUITS FOR 2 MICROWAVES IN BREAK ROOM AND ONE MICROWAVE IN COFFEE RM.
 - PROVIDE INDEPENDENT COOLING SYSTEM IN IT/ SERVER ROOM.
 - PROVIDE GARBAGE DISPOSAL IN BREAK ROOM AND COFFEE ROOM.
 - PROVIDE DISHWASHER IN BREAK ROOM.
 - PROVIDE WALL BACKING ALONG WITH POWER & DATA AT 66" A.F.F. ON ONE SIDE OF EACH CONFERENCE ROOM AND BREAK ROOM. PROVIDE TWO PAIRS OF POWER & DATA AT FRONT OF BRIEFING ROOM.
 - PROVIDE FULLY COMPLIANT ACCESSIBLE ROLL-IN SHOWERS AND BENCHES (ONE PER RESTROOM).
 - BULLET RESISTANT FILM ON ALL EXTERIOR WINDOWS.

SCALE: 1/4"=1'-0"

PROJECT NO. 181201 - EX-04

FLOOR PLAN

PROPOSED OFFICE REMODEL

01 / 22 / 19

Attachment B – Deal Points

New or renewal	New Lease
Landlord/Owner	Blum Courtyard Associates
Location	1300 Optical Drive, Irwindale, CA
Purpose	Operations facility for LA County Sheriff's Department in eastern extent of Goldline Operations under sponsorship of Metro's System Safety and Law Enforcement group.
Duration (note any extensions)	10-Years with two options to extend for five years. The total possible lease term would be 20-years.
Total Cost	\$5,268,103 over ten-year life for an average annual rent of \$526,810. This includes year-over-year increases of three percent.
Early Termination Clauses	None.
Determination of Lease Value	Market data provided by professional broker, Colliers International.
Background with this Landlord	None. This will be the first transaction with the landlord/owner, Blum Courtyard Associates.
Special Provisions	None.



Board Report

File #: 2019-0161, **File Type:** Informational Report

Agenda Number: 10.

FINANCE, BUDGET AND AUDIT COMMITTEE APRIL 17, 2019

SUBJECT: BASIC FINANCIAL STATEMENTS AND COMPONENT AUDITS

ACTION: RECEIVE AND FILE

RECOMMENDATION

RECEIVE AND FILE the Los Angeles County Metropolitan Transportation Authority's (Metro) basic financial statements and component financial statement audits completed by Crowe Horwath LLP (Crowe) for the fiscal year ended June 30, 2018.

ISSUE

Metro is required to be audited annually by independent certified public accountants. The resulting reports include Metro's basic financial statements and following component audits for the year ended June 30, 2018:

- Comprehensive Annual Financial Report for the Los Angeles County Metropolitan Transportation Authority for the year ended June 30, 2018;
- Independent Auditor's SAS 114 letter covering required communications; Los Angeles County Metropolitan Transportation Authority Single Audit Report for fiscal year ended June 30, 2018;
- Independent Accountant's Report on Applying Agreed-Upon Procedures on the Los Angeles County Metropolitan Transportation Authority's Federal Funding Allocation Data for the Transportation Operating Agency (ID# 90154) for the fiscal year ended June 30, 2018;
- Independent Accountant's Report on Applying Agreed-Upon Procedures National Transit Database Financial Data Procedures by the Los Angeles County Metropolitan Transportation Authority for the Transportation Operating Agency (ID# 90154) for the fiscal year ended June 30, 2018;
- Independent Auditor's Report on Compliance with the California Code of Regulations (Section 6667); Report on Internal Control over Compliance; and Report on 50% Expenditure Limitation Schedule for the Los Angeles County Metropolitan Transportation Authority Transportation Development Act Operations Agency for the fiscal year ended June 30, 2018;
- Independent Auditor's Report on Compliance with the California Code of Regulations (Sections 6640-6662); Report on Internal Control over Compliance; and Report on Schedule of Revenues, Expenditures, and Changes in Fund Balances for the Los Angeles County Metropolitan Transportation Authority Transportation Development Act & Prop 1B PTMISEA

- Planning Agency for the fiscal year ended June 30, 2018;
- Independent Auditor's Report on the Los Angeles County Metropolitan Transportation Authority State Transit Assistance Special Revenue Fund's basic financial statements as of and for the years ended June 30, 2017 and 2018;
 - Independent Auditor's Report on the Crenshaw Project Corporation (A Component Unit of the Los Angeles County Metropolitan Transportation Authority) basic financial statements as of June 30, 2018;
 - Independent Auditor's Report on the Service Authority for Freeway Emergencies (A Component Unit of the Los Angeles County Metropolitan Transportation Authority) financial statements for the year ended June 30, 2018; and
 - Independent Auditor's Report on Compliance with Rules and Regulations of the Low Carbon Transit Operations Program (LCTOP) and Report on Internal Control over Compliance for the Los Angeles County Metropolitan Transportation Authority's compliance with the LCTOP Guidelines for the fiscal year ended June 30, 2018.

DISCUSSION

Metro's basic financial statements include our audited financial statements, supplemental information and unmodified audit opinion from independent external auditor, Crowe. The independent auditor, Crowe, issued unmodified opinions on all audit reports for FY18. Unmodified opinion means that all financial statements for FY18 were fairly presented and that Metro complied in all material respects with the applicable financial reporting framework and compliance requirements respectively. However, in the Single Audit Report, Crowe noted one significant deficiency in our internal control over compliance with major federal programs pertaining to sub-recipient monitoring of federal awards. Specifically, City of Pasadena self-certified that it did not meet the threshold requirement for a single audit. Metro is required to verify that each pass-through sub-recipient entities is audited if required by the single audit requirements. Instead of relying on the sub-recipient's self-certification, Metro's Grants Management will implement preventative controls by clarifying to sub recipients that in completing their annual self-certification, the response applies to the entire entity federal awards and not just the particular grant. Additionally, Grants Management will verify the sub-recipients' responses using the search on Federal Audit Clearinghouse to ensure that no single audit is required for the sub-recipients.

Due to the considerable size of the document, we have not attached Metro's Comprehensive Annual Financial Report. Instead, as a savings measure a hard copy of the Comprehensive Annual Financial Report is on file with the Board Secretary and is also available on the Metro website.

[<https://media.metro.net/about_us/finance/images/fy18_cafr.pdf>](https://media.metro.net/about_us/finance/images/fy18_cafr.pdf)

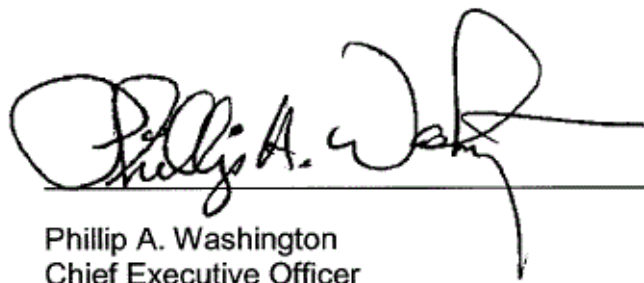
ATTACHMENTS

- Attachment A - SAS 114 letter covering required communications;
Attachment B - Single Audit Report for fiscal year ended June 30, 2018;
Attachment C - Federal Funding Allocation Data for the Transportation Operating Agency (ID# 90154) for the fiscal year ended June 30, 2018;
Attachment D - National Transit Database Financial Data Procedures by the Los

Angeles County Metropolitan Transportation Authority for the Transportation Operating Agency (ID# 90154) for the fiscal year ended June 30, 2018;
Attachment E - Transportation Development Act Operations Agency for the fiscal year ended June 30, 2018;
Attachment F - Transportation Development Act & Prop 1B PTMISEA Planning Agency for the fiscal year ended June 30, 2018;
Attachment G - State Transit Assistance Special Revenue Fund's basic financial statements as of and for the years ended June 30, 2017 and 2018;
Attachment H - Crenshaw Project Corporation (A Component Unit of the Los Angeles County Metropolitan Transportation Authority) basic financial statements as of June 30, 2018;
Attachment I - Service Authority for Freeway Emergencies (A Component Unit of the Los Angeles County Metropolitan Transportation Authority) financial statements for the year ended June 30, 2018;
Attachment J - Low Carbon Transit Operations Program (LCTOP) and Report on Internal Control over Compliance for the fiscal year ended June 30, 2018

Prepared by: Lauren Choi, Sr. Manager, Audit
(213) 922-3926
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Reviewed by: Diana Estrada, Chief Auditor
(213) 922-2161



Phillip A. Washington
Chief Executive Officer



Crowe LLP
Independent Member Crowe Global

December 19, 2018

Board of Directors
Los Angeles County Metropolitan Transportation Authority
Los Angeles, California

Professional standards require that we communicate certain matters to keep you adequately informed about matters related to the financial statement audit that are, in our professional judgment, significant and relevant to your responsibilities in overseeing the financial reporting process. We communicate such matters in this report.

AUDITOR'S RESPONSIBILITY UNDER AUDITING STANDARDS GENERALLY ACCEPTED IN THE UNITED STATES OF AMERICA

Our responsibility is to form and express an opinion about whether the financial statements that have been prepared by management with your oversight are presented fairly, in all material respects, in conformity with accounting principles generally accepted in the United States of America. The audit of the financial statements does not relieve you of your responsibilities and does not relieve management of their responsibilities. Refer to our engagement letter with LACMTA for further information on the responsibilities of management and of Crowe LLP.

AUDITOR'S RESPONSIBILITY UNDER GOVERNMENT AUDITING STANDARDS

As part of obtaining reasonable assurance about whether LACMTA's financial statements are free of material misstatement, we performed tests of LACMTA's compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts or disclosures. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion.

The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

PLANNED SCOPE AND TIMING OF THE AUDIT

We are to communicate an overview of the planned scope and timing of the audit. Accordingly, the following matters regarding the planned scope and timing of the audit were discussed with you.

- How we proposed to address the significant risks of material misstatement, whether due to fraud or error.
- Our approach to internal control relevant to the audit.
- The concept of materiality in planning and executing the audit, focusing on the factors considered rather than on specific thresholds or amounts.

- Where the entity has an internal audit function, the extent to which the auditor will use the work of internal audit, and how the external and internal auditors can best work together.
- Your views and knowledge of matters you consider warrant our attention during the audit, as well as your views on:
 - The allocation of responsibilities between you and management.
 - The entity's objectives and strategies, and the related business risks that may result in material misstatements.
 - Significant communications with regulators.
 - Other matters you believe are relevant to the audit of the financial statements.
- Matters relative to the use of other auditors/other accountants during the audit:
 - An overview of the type of work to be performed by other auditors/other accountants.
 - The basis for the decision to make reference to the audit of the other auditor in our report on the entity's financial statements.
 - An overview of the nature of our planned involvement in the work to be performed by the other auditor/other accountant.

SIGNIFICANT ACCOUNTING POLICIES AND MANAGEMENT JUDGMENTS AND ACCOUNTING ESTIMATES

Significant Accounting Policies: Those Charged with Governance should be informed of the initial selection of and changes in significant accounting policies or their application. Also, Those Charged with Governance should be aware of methods used to account for significant unusual transactions and the effect of significant accounting policies in controversial or emerging areas where there is a lack of authoritative consensus. We believe management has the primary responsibility to inform Those Charged with Governance about such matters. To assist Those Charged with Governance in its oversight role, we also provide the following.

Accounting Standard	Impact of Adoption
GASB Statement No. 75, "Accounting and Financial Reporting for Postemployment Benefits other than Pensions." The primary objective of this Statement is to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions (other postemployment benefits or OPEB). It also improves information provided by state and local governmental employers about financial support for OPEB that is provided by other entities.	Upon adoption of this Statement, LACMTA restated business-type activities net position as of July 1, 2017 by \$956,045,000.
Significant Unusual Transactions.	No such matters noted.
Significant Accounting Policies in Controversial or Emerging Areas.	No such matters noted.

Management Judgments and Accounting Estimates: Further, accounting estimates are an integral part of the financial statements prepared by management and are based upon management's current judgments. These judgments are based upon knowledge and experience about past and current events and assumptions about future events. Certain estimates are particularly sensitive because of their significance and because of the possibility that future events affecting them may differ markedly from management's current judgments and may be subject to significant change in the near term.

The following describes the significant accounting estimates reflected in LACMTA's year end financial statements, the process used by management in formulating these particularly sensitive accounting estimates and the primary basis for our conclusions regarding the reasonableness of those estimates.

Significant Accounting Estimate	Process Used by Management	Basis for Our Conclusions
Fair Values of Investment Securities and Other Financial Instruments	The disclosure of fair values of securities and other financial instruments requires management to use certain assumptions and estimates pertaining to the fair values of its financial assets and financial liabilities.	We tested the propriety of information underlying management's estimates.
Loss Contingencies	LACMTA consults with legal counsel to evaluate outstanding litigation, claims and assessments. Factors that affect management's evaluation of litigation contingencies requiring disclosure include the nature of the contingencies and whether the outcome could have an effect on the consolidated financial statements.	Based on information obtained from LACMTA's legal counsel regarding this matter and discussions with management, we concur with management's determination that the loss contingency does not meet conditions for accrual of being both probable and estimable, and, thus, no accrual is recorded and no specific disclosures are required.
Pension and Postretirement Obligations	Amounts reported for pension and postretirement obligations require management to use estimates that may be subject to significant change in the near term. These estimates are based on projection of the weighted average discount rate, rate of increase in future compensation levels, and weighted average expected long-term rate of return on pension assets.	We reviewed the reasonableness of these estimates and assumptions.

AUDITOR'S JUDGMENTS ABOUT QUALITATIVE ASPECTS OF SIGNIFICANT ACCOUNTING PRACTICES

We are to discuss with you our comments about the following matters related to LACMTA's accounting policies and financial statement disclosures. Accordingly, these matters will be discussed during our meeting with you.

- The appropriateness of the accounting policies to the particular circumstances of the entity, considering the need to balance the cost of providing information with the likely benefit to users of the entity's financial statements.
- The overall neutrality, consistency, and clarity of the disclosures in the financial statements.
- The effect of the timing of transactions in relation to the period in which they are recorded.
- The potential effect on the financial statements of significant risks and exposures, and uncertainties that are disclosed in the financial statements.
- The extent to which the financial statements are affected by unusual transactions including nonrecurring amounts recognized during the period, and the extent to which such transactions are separately disclosed in the financial statements.
- The issues involved, and related judgments made, in formulating particularly sensitive financial statement disclosures.
- The factors affecting asset and liability carrying values, including the entity's basis for determining useful lives assigned to tangible and intangible assets.
- The selective correction of misstatements, for example, correcting misstatements with the effect of increasing reported earnings, but not those that have the effect of decreasing reported earnings.

CORRECTED AND UNCORRECTED MISSTATEMENTS

Corrected Misstatements: We are to inform you of material corrected misstatements that were brought to the attention of management as a result of our audit procedures.

There were no such misstatements.

Uncorrected Misstatements: We are to inform you of uncorrected misstatements that were aggregated by us during the current engagement and pertaining to the latest and prior period(s) presented that were determined by management to be immaterial, both individually and in the aggregate, to the financial statements taken as a whole. For your consideration, we have distinguished misstatements between known misstatements and likely misstatements.

Refer to the discussion of uncorrected misstatements below as well as the attached summary of waived adjustments.

1. Two known misstatements and one likely misstatement were waived by management relating to the generation and sale of low carbon fuel standards (LCFS) credits, a program administered by the California Air Resources Board. LACMTA generates these credits through the usage of low carbon fuel options, such as CNG and propulsion power, activities that are recorded on the Enterprise fund (business-type activities). Thus, the revenue from the sales of these credits should be recorded on the Enterprise fund. However, management has recorded the revenue on the General fund to provide greater visibility to the revenue being generated.

The first known waived adjustment is to reverse the revenue recorded from the sale of credits in FY 2018 in the General fund and present it as an operating transfer from the Enterprise fund in the amount of \$20.3 million. The second waived adjustment records the \$20.3 million of revenue on the Enterprise fund and the transfer of the funds to the General fund in operating transfers out.

In addition to reclassifying the revenue between LACMTA's funds, we also noted that the number of credits held as of the reporting date, multiplied by their estimated fair value, should be recorded as an asset based on the GASB's definition of an asset. This resulted in a likely misstatement that understated Enterprise fund assets by approximately \$43.5 million, understated revenue by approximately \$16.9 million, and understated net position by approximately \$26.6 million. The misstatement of net position represents the estimated value of LCFS credits that were held as of June 30, 2017, which was reported as waived adjustment in the FY 2017 audit.

2. A known misstatement relating to interest relating to construction projects was waived by management. Certain of LACMTA's rail projects have related TIFIA loans that were issued specifically for their construction. The proceeds drawn on these loans were not removed from the balance of qualifying assets as prescribed by GASB 62. This errors resulted in an overstatement of assets and understatement of interest expense on the Enterprise fund of \$38.9 million.
3. A known misstatement was waived by management to reverse revenue and receivables relating to amounts originally billed to Caltrans that were subsequently determined to be billed internally. The result was an overstatement of revenue and receivables in the amount of \$3.9 million.
4. Known misstatements to properly defer revenue relating to receivables not collected within 90 days were waived by management. In October 2018, LACMTA received a late cleanup payment of sales tax which impacted the Proposition A fund, Proposition C fund, Measure R fund, Measure M fund, and TDA fund. As a result, deferred revenues were understated and revenues are overstated by \$12.5 million each for the Proposition A fund, Proposition C fund, Measure R fund, and Measure M fund and \$6.6 million for the TDA fund.
5. A known misstatement was waived by management to restate opening net position for revenue that related to a prior period. As a result, revenues were overstated and net position was understated by \$1.5 million.

OTHER COMMUNICATIONS

Communication Item	Results
<p>Other Information In Documents Containing Audited Financial Statements</p> <p>Information may be prepared by management that accompanies the financial statements. To assist your consideration of this information, you should know that we are required by audit standards to read such information and consider whether such information, or the manner of its presentation, is materially inconsistent with information in the financial statements. If we consider the information materially inconsistent based on this reading, we are to seek a resolution of the matter.</p>	<p>We understand that management has not prepared such information to accompany the audited financial statements.</p>
<p>Significant Difficulties Encountered During the Audit</p> <p>We are to inform you of any significant difficulties encountered in dealing with management related to the performance of the audit.</p>	<p>There were no significant difficulties encountered in dealing with management related to the performance of the audit.</p>
<p>Disagreements With Management</p> <p>We are to discuss with you any disagreements with management, whether or not satisfactorily resolved, about matters that individually or in the aggregate could be significant to LACMTA's financial statements or the auditor's report.</p>	<p>During our audit, there were no such disagreements with management.</p>
<p>Consultations With Other Accountants</p> <p>If management consulted with other accountants about auditing and accounting matters, we are to inform you of such consultation, if we are aware of it, and provide our views on the significant matters that were the subject of such consultation.</p>	<p>We are not aware of any instances where management consulted with other accountants about auditing or accounting matters since no other accountants contacted us, which they are required to do by Statement on Auditing Standards No. 50, before they provide written or oral advice.</p>
<p>Representations The Auditor Is Requesting From Management</p> <p>We are to provide you with a copy of management's requested written representations to us.</p>	<p>We direct your attention to a copy of the letter of management's representation to us provided separately.</p>
<p>Significant Issues Discussed, or Subject to Correspondence, With Management</p> <p>We are to communicate to you any significant issues that were discussed or were the subject of correspondence with management.</p>	<p>There were no such significant issues discussed, or subject to correspondence, with management.</p>
<p>Significant Related Party Findings and Issues</p> <p>We are to communicate to you significant findings and issues arising during the audit in connection with LACMTA's related parties.</p>	<p>There were no such findings or issues that are, in our judgment, significant and relevant to you regarding your oversight of the financial reporting process.</p>
<p>Other Findings or Issues We Find Relevant or Significant</p> <p>We are to communicate to you other findings or issues, if any, arising from the audit that are, in our professional judgment, significant and relevant to you regarding your oversight of the financial reporting process.</p>	<p>There were no such other findings or issues that are, in our judgment, significant and relevant to you regarding your oversight of the financial reporting process.</p>

We are pleased to serve LACMTA as its independent auditors and look forward to our continued relationship. We provide the above information to assist you in performing your oversight responsibilities, and would be pleased to discuss this letter or any matters further, should you desire. This letter is intended solely for the information and use of the Board of Directors and, if appropriate, management, and is not intended to be and should not be used by anyone other than these specified parties.

Crowe LLP
Crowe LLP

Los Angeles, California
December 19, 2018

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
WAIVED ENTRY SCHEDULE
June 30, 2018
(amounts in thousands)

Opinion Unit	Account Name	Debit	Credit	Increase (Decrease)						
				Assets / Deferred Outflows	Liabilities / Deferred Inflows	Net Position / Fund Balance	Revenues	Expenses / Expenditures	Other Financing Sources	
1 Business-type activities	LCFS asset	43,493		43,493						
	Other revenue		16,852				16,852			
	Net position		26,641			26,641				
	Operating transfers out Other revenue	20,332					20,332			(20,332)
General fund	Miscellaneous revenue	20,332					(20,332)			
	Operating transfers in		20,332							20,332
2 Business-type activities	Interest expense	38,881						38,881		
	Construction in progress			(38,881)						
3 Proposition C	Intergovernmental revenue Intergovernmental receivable	3,934				(3,934)				
4 Proposition A	Intergovernmental revenue Deferred revenue	12,540					(12,540)			
	Intergovernmental revenue Deferred revenue	12,540					(12,540)			
Measure R	Intergovernmental revenue Deferred revenue	12,540					(12,540)			
	Intergovernmental revenue Deferred revenue	12,524					(12,524)			
TDA	Intergovernmental revenue Deferred revenue	6,568					(6,568)			
	License and fines revenue Net position	1,458				1,458				

**LOS ANGELES COUNTY METROPOLITAN
TRANSPORTATION AUTHORITY**

SINGLE AUDIT REPORT

Fiscal year ended June 30, 2018

LOS ANGELES COUNTY METROPOLITAN
TRANSPORTATION AUTHORITY
Los Angeles, California

SINGLE AUDIT REPORT
Fiscal year ended June 30, 2018

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**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING
AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL
STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

Board of Directors
Los Angeles County Metropolitan Transportation Authority
Los Angeles, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of Los Angeles County Metropolitan Transportation Authority (LACMTA) as of and for the fiscal year ended June 30, 2018, and the related notes to the basic financial statements, which collectively comprise LACMTA's basic financial statements, and have issued our report thereon dated December 19, 2018. Our report includes a reference to other auditors who audited the financial statements of the defined benefit pension plan financial statements of the Los Angeles County Metropolitan Transportation Authority Retirement Income Plans, as described in our report on LACMTA's financial statements. The financial statements of the defined benefit pension plan of the Los Angeles County Metropolitan Transportation Authority Retirement Income Plans were not audited in accordance with *Government Auditing Standards*.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered LACMTA's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of LACMTA's internal control. Accordingly, we do not express an opinion on the effectiveness of LACMTA's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

(Continued)

Compliance and Other Matters

As part of obtaining reasonable assurance about whether LACMTA's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.


Crowe LLP

Los Angeles, California
December 19, 2018

**INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE FOR EACH MAJOR FEDERAL PROGRAM;
REPORT ON INTERNAL CONTROL OVER COMPLIANCE; AND REPORT ON THE SCHEDULE OF
EXPENDITURES OF FEDERAL AND STATE AWARDS REQUIRED BY THE UNIFORM GUIDANCE**

Board of Directors
Los Angeles County Metropolitan Transportation Authority
Los Angeles, California

Report on Compliance for Each Major Federal Program

We have audited Los Angeles County Metropolitan Transportation Authority's (LACMTA) compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on each of LACMTA's major federal programs for the fiscal year ended June 30, 2018. LACMTA's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

Management's Responsibility

Management is responsible for compliance with federal statutes, regulations, and the terms and conditions of its federal awards applicable to its federal programs.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for each of LACMTA's major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about LACMTA's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination of LACMTA's compliance.

Opinion on Each Major Federal Program

In our opinion, LACMTA complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the fiscal year ended June 30, 2018.

Report on Internal Control over Compliance

Management of LACMTA is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered LACMTA's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of LACMTA's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, we identified a deficiency in internal control over compliance, as described in the accompanying schedule of findings and questioned costs, as item 2018-001, that we consider to be a significant deficiency.

LACMTA's response to the internal control over compliance findings identified in our audit are described in the accompanying schedule of findings and questioned costs. LACMTA's response was not subjected to the auditing procedures applied in the audit of compliance and, accordingly, we express no opinion on the response.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

Report on Schedule of Expenditures of Federal and State Awards Required by Uniform Guidance

We have audited the financial statements of the governmental activities, business-type activities, each major fund, and the aggregate remaining fund information of LACMTA as of and for the fiscal year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise LACMTA's basic financial statements. We issued our report thereon dated December 19, 2018, which contained unmodified opinions on those financial statements. Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the basic financial statements. The accompanying schedule of expenditures of federal and state awards is presented for purposes of additional analysis as required by the Uniform Guidance and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of expenditures of federal and state awards is fairly stated in all material respects in relation to the basic financial statements as a whole.



Crowe LLP

Los Angeles, California
December 19, 2018

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
SCHEDULE OF EXPENDITURES OF FEDERAL AND STATE AWARDS
Fiscal year ended June 30, 2018

Federal Grants	Federal grantor/cluster title/program title/pass-through grantor/project title	CFDA Number	Direct Program and Pass-through Grant Identifying Number	Total Award	Total expended under federal/state/local for the fiscal year ended June 30, 2018			
					Total	Federal Share	State Share	Local Share
U.S. Department of Transportation Federal Transit Administration Passed through the State of California Department of Transportation: Highway Planning and Construction Cluster Highway Planning and Construction Extension of Transit way on 1-110 to Downtown LA Active Transportation Education Program Union Station Master Plan: Alameda Esplanade Freight Advanced Traveler Information System (FRA-TIS) Project Approval/Environmental Document for I-105 Express Lanes		20.205	FHWA 07-278008	6,272,631	898,221	718,577	-	179,644
		20.205	CMLN 6065 (190)	4,000,000	(135,487)	(133,747)	-	(1,739)
		20.205	07-6065F15-F022_A TPL-6065(209)	2,150,000	416,634	258,567	-	158,067
		20.205	ATCMTDL-6065(216)	3,000,000	11,530	5,765	-	5,765
		20.205	CML-6065(223)	2,607,000	873,235	275,593	-	597,642
	Direct Programs:							
	Pedestrian and Pedestrian Mobility	20.205	CA-15-X005	800,000	224,691	224,691	-	-
	Reconstruct Cabrillo Mole Terminal	20.205	CA-70-X017	2,400,000	168,312	168,312	-	42,078
	Highway Planning and Construction Cluster Total			21,229,631	2,492,214	1,517,757	-	981,457
Direct Programs:	Transportation Infrastructure Finance and Innovation Act (TIFIA) Program							
	Transportation Infrastructure Finance and Innovation Act (TIFIA) Program- Regional Connector	20.223	2013-1008A	160,000,000	55,894,820	55,894,820	-	-
	Transportation Infrastructure Finance and Innovation Act (TIFIA) Program- Westline Purple	20.223	2013-1009A	856,000,000	258,421,577	258,421,577	-	-
	Transportation Infrastructure Finance and Innovation Act (TIFIA) Program- Westline Purple	20.223	2013-1003A	307,000,000	207,000,000	207,000,000	-	-
	TIFA Program Total			1,323,000,000	521,316,397	521,316,397	-	-
Direct Programs:	Federal Transit Cluster							
	Federal Transit - Capital Improvement Grants							
	Meiro Rapid System Gap Closure	20.500	CA-03-0796	16,700,000	779,146	506,445	-	272,701
	Ped./pass enhan & 22' alt. Fuel bus	20.500	CA-03-0783	1,214,721	448,233	358,587	-	89,647
	Trans Ctr / Bus Park & Shelters	20.500	CA-04-0088	5,570,560	1,525,284	1,220,227	-	305,057
	Plg Engineering of Transit Centers	20.500	CA-04-0094	7,131,578	118,955	95,164	-	23,791
	Transit Centers & Expansion Buses	20.500	CA-04-0161	2,819,500	568,687	455,831	-	112,855
	Wishire Blvd., Bus Only Lane	20.500	CA-03-0815	23,317,000	2,344,532	1,855,598	-	488,934
	Regional Connection Transit Corridor Construction	20.500	CA-2016-046	300,000,000	160,289,294	111,903,278	-	48,386,015
	Passenger and Pedestrian Enhancements	20.500	CA-04-0067	2,502,232	521,604	417,283	-	104,321
Direct Programs:	Westside Purple Line Ext. - Section 1	20.500	CA-2016-017	300,000,000	36,749,859	142,836,944	-	(106,087,085)
	Westside Purple Line Extension 2 -FFGA	20.500	CA-2016-047	300,000,000	(37,446,713)	118,203,798	-	(155,650,511)
	Los Angeles Union Station/Cesar Chavez Bus Stop	20.500	CA-2016-123-00	1,668,557	228,622	182,897	-	45,724
	Map-2/ Section 20005(b) West Santa Ana Branch Transit Corridor TOD Strategic Implementation Plan							
	Federal Transit - Capital Improvement Grants Total	20.500	CA-2017-044	2,000,000	1,228,148	982,518	-	245,630
				962,924,148	167,355,650	379,018,571	-	(211,662,921)
	Federal Transit - Formula Grants							
	Subgrantee Vehicles/Transit facilities	20.507	CA-90-Y114	5,985,469	1,107,708	886,166	-	221,542
	Meiro Rapid Bus Stations/Signal Priority	20.507	CA-90-Y261	28,919,529	103,949	-	-	-
	Meiro Rapid Bus Program	20.507	CA-90-Y457	11,081,700	36,675	-	-	-
Direct Programs:	FY17 CMAQ Westside Purple Line Extension Section 1	20.507	CA-2018-009	476	826	476	-	350
	Regional Connection Transit Corridor Construction	20.507	CA-95-X251	64,000,000	181,046	160,280	-	20,766
	Light Rail Vehicle Acquisition	20.507	CA-95-X246-01	120,872,000	83,620,273	73,353,745	-	10,266,528
	Systemwide Light Rail Vehicles	20.507	CA-2016-026	47,030,000	59,831,814	53,118,214	-	6,713,600
	Systemwide Light Rail Vehicles - CMAQ	20.507	CA-2018-093	42,000,000	107,160	94,869	-	12,291
	Westside Purple Line Ext. - Section 2 CMAQ	20.507	CA-2016-045	43,000,000	79,975,316	20,297,480	-	59,678,837
	Pass / Ped. Enhancements and Improvements	20.507	CA-95-X227	2,996,000	1,504,681	1,203,745	-	300,936
	Subrecipient Bus Procurement	20.507	CA-95-X329	6,952,873	2,679,923	2,143,938	-	535,985
	Glendale Beeline CNG Mnic/Adm. Facility	20.507	CA-95-X061	3,650,000	75,000	60,000	-	15,000
	Signage and Lighting for Bus Stops	20.507	CA-2016-025	733,533	327,182	261,753	-	65,438
Direct Programs:	Willowbrook/Rosa Parks Pedestrian Promenade & Bike Mobility Hub	20.507	CA-2018-012	445,000	435,080	346,064	-	87,016

See accompanying notes to the schedule of expenditures of federal and state awards.

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
SCHEDULE OF EXPENDITURES OF FEDERAL AND STATE AWARDS
Fiscal year ended June 30, 2018

Total expended under federal/state/local for the fiscal year ended June 30, 2018								
Federal grantor/cluster title/program title/pass-through grantor/project title	CFDA Number	Direct Program and Pass-through Grant Identifying Number	Total Award	Total	Federal Share	Federal share passed through to subrecipients	State Share	Local Share
Airport Metro Connector and Crenshaw / LAX Accommodation	20.507	CA-2016-062	35,649,778	9,244,207	9,244,207	-	-	-
Metro Gold Line Footbll Extension Operating Assistance	20.507	CA-2016-029-01	41,400,000	30,185,052	24,148,041	-	1,619,179	4,417,832
Metro EXPO Line Phase II Operating Assistance	20.507	CA-2016-029-03	43,099,032	22,144,598	17,715,678	-	1,841,652	2,587,268
Congestion Mitigation and Air Quality Improvement (CMAQ) program	20.507	CA-2017-042	2,206,000	1,799,569	1,055,519	1,055,519	-	744,050
5307/5340 LA Metro FY18 Rail Preventive Maintenance - Growing State Funds	20.507	CA-2018-056-03	3,275,151	4,098,939	3,279,151	-	-	819,788
5307 LA Metro FY18 Rail Preventive Maintenance - Urbanized Area	20.507	CA-2018-056-04	5,103,189	6,378,986	5,103,189	-	-	1,519,797
FY18 Section 5307 Bus Preventive Maintenance	20.507	CA-2018-074	133,629,528	167,036,910	133,629,528	-	-	33,407,382
5307/5340 LA Metro FY18 Rail Preventive Maintenance - Growing State Funds	20.507	CA-2018-096-01	9,037,114	11,296,393	9,037,114	-	-	2,259,279
Federal Transit - Formula Grants Total			651,070,372	482,172,297	355,281,781	5,349,368	3,460,831	123,429,685
State of Good Repair Grants Program								
LA Metro FY17 Rail Preventive Maintenance - Fixed Guideway Funds	20.525	CA-2017-064-03	99,534,460	4,641,120	3,712,896	-	-	928,224
5337 LA Metro Rail Vehicle Overhauls	20.525	CA-2018-031	86,251,460	30,122,791	24,098,233	-	-	6,024,558
5337 LA Metro FY18 Rail Preventive Maintenance - Fixed Guideway Funds	20.525	CA-2018-056-01	9,780,202	12,225,253	9,780,202	-	-	2,445,051
5337 LA Metro FY18 Rail Preventive Maintenance - High Intensity Motorbus Funds	20.525	CA-2018-056-02	3,091,620	3,864,525	3,091,620	-	-	772,905
5337 LA Metro FY18 Rail Preventive Maintenance - High Intensity Motorbus Funds	20.525	CA-2018-056-02	6,076,930	7,596,163	6,076,930	-	-	1,519,233
5337 LA Metro FY18 Rail Preventive Maintenance - Fixed Guideway Funds	20.525	CA-2018-096-03	87,499,102	109,373,878	87,499,102	-	-	21,874,776
State of Good Repair Grants Program Total			292,233,774	167,823,730	134,258,983	-	-	33,564,747
Bus and Bus Facilities Formula Program								
FY16/17 Section 5339 Bus Acquisitions, CNG Lease, Workforce Dev/Training, and Preventive Maintenance	20.526	CA-2018-062	43,491,979	30,861,359	24,689,087	-	-	6,172,272
Bus and Bus Facilities Formula Program Total			43,491,979	30,861,359	24,689,087	-	-	6,172,272
Federal Transit Cluster Total								
			1,949,720,273	848,213,036	893,248,422	7,896,460	3,460,831	(48,496,217)
Transit Services Programs Cluster								
Enhanced Mobility of Seniors and Individuals with Disabilities	20.513	CA-16-0063	693,120	85,181	85,181	85,181	-	-
Enhanced Mobility of Seniors and Disabilities	20.513	CA-16-X066	6,092,451	2,261,766	1,934,545	1,934,545	-	327,221
30-ft Bus Procurement	20.513	CA-16-X067-01	7,072,604	163,698	139,277	139,277	-	24,420
L.A. County Section 5310 Program Administration	20.513	CA-2018-029	1,043,894	52,757	52,757	-	-	-
Enhanced Mobility of Seniors and Individuals with Disabilities Total			14,902,069	2,563,401	2,211,760	2,159,003	-	351,642
Job Access and Reverse Commute Program								
L.A. County Job Access and Reverse Commute Program: Administration, FY 06-12	20.516	CA-37-X071	5,032,849	238,094	238,094	-	-	-
Job Access and Reverse Commute Program: Project - LA County Job Access and Program Project	20.516	CA-37-X100	10,343,881	901,679	704,028	704,028	-	197,651
Job Access and Reverse Commute - Capital/Operating Assist.	20.516	CA-37-X123	13,878,024	408,634	204,317	138	-	204,317
LA County Job Access and Program Project - Capital/Operating Assist. Job Access and Reverse Commute Program Total	20.516	CA-37-X171	7,711,637	679,203	679,203	679,203	-	-
			36,966,391	2,227,610	1,825,643	1,383,369	-	401,967
New Freedom Program								
New Freedom- Program Adm. FY 06-12	20.521	CA-57-X003	2,152,346	151,099	151,099	-	-	-
New Freedom- Capital & Operating, Assistance	20.521	CA-57-X048	1,755,553	121,280	86,261	86,261	-	35,019
New Freedom- Capital & Operating, Assistance	20.521	CA-57-X084-01	8,702,026	1,474,193	1,435,097	1,435,097	-	39,096
New Freedom- Capital & Operating, Assistance	20.521	CA-57-X100	7,354,678	396,582	203,807	203,807	-	192,776
New Freedom Program Total			19,964,603	2,143,154	1,876,264	1,725,165	-	266,890
Transit Services Cluster Total								
			71,833,063	6,934,165	5,913,667	5,267,538	-	1,020,499

See accompanying notes to the schedule of expenditures of federal and state awards.

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
SCHEDULE OF EXPENDITURES OF FEDERAL AND STATE AWARDS
Fiscal year ended June 30, 2018

Total expended under federal/state/local for the fiscal year ended June 30, 2018								
Federal grantor/cluster title/program title/pass-through grantor/project title	CFDA Number	Direct Program and Pass-through Grant Identifying Number	Total Award	Total	Federal Share	Federal share passed through to subrecipients	State Share	Local Share
Research and Development Cluster								
Public Transportation Research, Technical Assistance, and Training								
Platform Track Intrusion Detection Demo	20.514	CA-26-7015	1,722,400	304,569	169,329	-	-	135,240
LA County and Puget Sound First / Last Mile Partnership with Lyft	20.514	CA-2017-018	1,350,000	16,546	16,546	-	-	-
Public Transportation Research, Technical Assistance, and Training Total			3,072,400	321,115	185,876	-	-	135,240
Research and Development Cluster Total			3,072,400	321,115	185,876	-	-	135,240
Federal Transit Administration Total			3,368,855,367	1,379,283,928	1,422,182,119	13,557,000	3,460,831	(46,359,022)
Office of the Secretary								
National Infrastructure Investments								
Eastside Access Improvements	20.933	CA-79-0005	11,800,000	431,152	303,323	-	-	127,828
Willowbrook/Rosa Parks Station Improvements	20.933	CA-2016-010	10,250,000	3,940,269	38,506	-	-	3,901,763
National Infrastructure Investments Total			22,050,000	4,371,421	341,829	-	-	4,029,592
Office of the Secretary Total			22,050,000	4,371,421	341,829	-	-	4,029,592
U.S. Department of Homeland Security:								
Direct Programs:								
Rail and Transit Security Grant Program	97.075	EMW-2015-RA-00001	6,521,328	5,396,727	5,395,955	-	-	-
Sustainment of Threat Interdiction Unit								
U.S. Department of Homeland Security Total								
Total Federal Grants			\$3,397,426,695	\$1,389,052,076	\$1,427,919,904	\$13,557,000	\$3,460,831	\$ (42,329,430)
State Grants								
Prop 1B Security - FY 08-09		6161-002, FFS#037-91170	\$ 16,103,000	\$ 10,712	\$ -	\$ -	\$ 1,215	\$ 9,496
Prop 1B Security - FY 10-11		6361-002, FFS#037-91170	16,103,043	2,042,508	-	-	2,042,508	-
Crenshaw/LAX Transit Corridor		07A00374-13 A3	6,880,000	276,964,942	-	-	6,880,000	270,084,942
Crenshaw/LAX Transit Corridor		State - Prop 1B PTMSEA	10,729	10,729	-	-	10,729	-
Systemwide Light Rail Vehicles		07A0034-14-A2, EA R241TF	27,000,000	29,006,477	-	-	27,000,000	2,006,477
Conservation for Regional Climate Action and Sustainability		3012-568	1,000,000	(3,949)	-	-	(4,069)	120
Proposition 1B Intercity Rail (ICR) Van Nuys North Platform Project		ICRB-A1314-01 75A0407	4,000,000	27,443	-	-	12,909	14,534
Alternative & Renewable Fuel & Vehicle Technology Program		ARV-13-054	492,000	240,683	-	-	159,833	80,850
Permeable Pavement and Bioretention Pilot Project, LACMTA Division 4 Maintenance Facility		14-440-550	752,000	701	-	-	52,522	(51,821)
Sustainable South Bay Transportation and Land Use Implementation Framework		3014-616	885,048	357,468	-	-	321,185	36,283
Metro Blue Line First / Last Mile Plan		ATPLN-0065(200)	280,000	398,193	-	-	146,671	251,522
Regional Transportation Planning and Program Development		STIP-PPM16-0065(204)	3,098,000	4,388,505	-	-	1,802,219	2,586,286
Blue Line Light Rail Signal Improvement Project		EA R353GA, TIFCR-1617-02	38,494,000	22,485,104	-	-	11,742,788	10,742,316
STIP PPM (State Transportation Improvement Program) - Planning, Programming & Monitoring Program		STIP-PPM17-6065(212)	6,136,000	3,519,239	-	-	1,759,619	1,759,619
Division 20 Turnback and Portal Widening		EA R360GA, TIFCR-1617-05	1,908,000	85,111,817	-	-	1,878,940	83,232,877
Los Angeles - San Fernando Valley North-South Bus Transit		07A00034-05 A11	27,000,000	266,636	-	-	266,636	-
I-710 Livability Initiative for Complete Streets & Active Transportation		74A0912	500,000	335,927	-	-	266,511	69,416
Total State Grants			\$ 150,641,820	\$ 425,163,134	\$ -	\$ -	\$ 54,340,217	\$ 370,822,916

See accompanying notes to the schedule of expenditures of federal and state awards.

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
NOTES TO THE SCHEDULE OF EXPENDITURES OF FEDERAL AND STATE AWARDS
Fiscal year ended June 30, 2018

NOTE 1 – GENERAL

The accompanying schedule of expenditures of federal and state awards (the Schedule) presents the grant activity of all expenditures of federal and state award programs of the Los Angeles County Metropolitan Transportation Authority (LACMTA) in accordance with the requirements of Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). All federal awards received directly from federal agencies, as well as federal awards passed through other government agencies, are included in the Schedule. The Schedule also includes state grants that do not participate in the federal awards. LACMTA is the reporting entity as defined in Note 1 to the financial statements of LACMTA's basic financial statements.

NOTE 2 – BASIS OF PRESENTATION

Expenditures reported on the Schedule are reported on the accrual basis of accounting. Expenditures are recognized following, as applicable, either the cost principles in OMB Circular A-87, *Cost Principles for State, Local, and Indian Tribal Governments* or the cost principles contained in Uniform Guidance, wherein certain types of expenditures are not allowable or are limited as to reimbursement. Negative amounts shown on the Schedule represent adjustments or credits made in the normal course of business to amounts reported as expenditures in prior years. LACMTA has elected not to use the 10-percent de minimis indirect cost rate as allowed under the Uniform Guidance.

NOTE 3 – STATE AND LOCAL FUNDS REIMBURSEMENT

LACMTA utilizes state and local funds when federal funds are not received in a timely manner. Upon receipt of federal funds, LACMTA reimburses state and local funds that were utilized for expenditures for federal programs. Reimbursements are shown as credit balances in the Schedule. Expenditures incurred during the current fiscal year, but before a federal grant is executed are included as state or local on the Schedule in the year the expenditures are incurred and are reported as federal on the Schedule in the year the grant was executed.

NOTE 4 – FEDERAL FINANCIAL ASSISTANCE

Pursuant to the Single Audit Act and Uniform Guidance Compliance Supplement, the federal financial assistance is defined as assistance provided by a federal agency, either directly or indirectly, in the form of grants, contracts, cooperative agreements, loans, loan guarantees, property, interest subsidies, insurance, or direct appropriations. Accordingly, nonmonetary federal assistance is included in federal financial assistance and, therefore, is reported on the Schedule, if applicable. Federal financial assistance does not include direct federal cash assistance to individuals. Solicited contracts between the state and federal government for which the federal government procures tangible goods or services are not considered to be federal financial assistance. For CFDA #20.223, \$343,227,963 included in the Schedule represent current year loan proceeds for expenditures that were originally incurred in prior years.

NOTE 5 – MAJOR PROGRAMS

The Single Audit Act and Uniform Guidance establish criteria to be used in defining major federal financial assistance programs. Major programs for LACMTA are those programs selected for testing by the auditor using a risk assessment model, as well as certain minimum expenditure requirements, as outlined in Uniform Guidance. Programs with similar requirements may be grouped into a cluster for testing purposes.

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
Fiscal year ended June 30, 2018

SECTION I - SUMMARY OF AUDITORS' RESULTS

Financial Statements:

Type of report the auditor issued on whether
the financial statements audited were prepared
in accordance with GAAP:

Unmodified

Internal control over financial reporting:

Material weakness(es) identified?

_____ Yes X No

Significant deficiency(ies) identified?

_____ Yes X None reported

Noncompliance material to financial statements noted?

_____ Yes X No

Federal Awards:

Internal control over major federal programs:

Material weakness(es) identified?

_____ Yes X No

Significant deficiency(ies) identified?

 X Yes _____ None reported

Type of auditor's report issued on compliance for
major federal programs:

Unmodified

Any audit findings disclosed that are required to be
reported in accordance with 2 CFR 200.516(a)?

 X Yes _____ No

Identification of major federal programs:

CFDA 20.513 / 20.516 / 20.521

Transit Services Programs Cluster

CFDA 97.075

Rail and Transit Security Grant Program

CFDA 20.223

Transportation Infrastructure Finance
and Innovation Act (TIFIA) Program

Dollar threshold used to distinguish type A and B programs:

 \$ 4,283,760

Auditee qualified as low-risk auditee?

 X Yes _____ No

(Continued)

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
Fiscal year ended June 30, 2018

SECTION II - FINDINGS RELATING TO THE FINANCIAL STATEMENTS, WHICH ARE REQUIRED TO BE REPORTED IN ACCORDANCE WITH GENERALLY ACCEPTED GOVERNMENT AUDITING STANDARDS

None.

SECTION III - FINDINGS AND QUESTIONED COSTS FOR FEDERAL AWARDS INCLUDING AUDIT FINDINGS AS DEFINED IN TITLE 2 U.S. CODE OF FEDERAL REGULATIONS PART 200, UNIFORM ADMINISTRATIVE REQUIREMENTS, COST PRINCIPLES, AND AUDIT REQUIREMENTS FOR FEDERAL AWARDS

Finding 2018-001 – Subrecipient Monitoring (Significant Deficiency)

Information on Federal Program:

CFDA Numbers and Program Names: Transit Services Programs Cluster
20.513 Enhanced Mobility of Seniors and Individuals with Disabilities
20.516 Job Access and Revenue Commute Program
20.521 New Freedom Program

Federal Agency: Department of Transportation

Criteria:

2 CFR 200.331 REQUIREMENTS FOR PASS-THROUGH ENTITIES.

All pass-through entities must:

(f) Verify that every subrecipient is audited as required by Subpart F—Audit Requirements of this part when it is expected that the subrecipient's Federal awards expended during the respective fiscal year equaled or exceeded the threshold set forth in §200.501 Audit requirements.

Condition: Management is required to verify that each subrecipient is audited if required by §200.501 Audit requirements. For the programs listed above, we noted that management did not have adequate controls in place to ensure compliance with this requirement.

Questioned Costs: None noted.

Context: In our sample of five subawards under the Transit Service Programs Cluster, management did not obtain the single audit report for the City of Pasadena (City), a subrecipient of Grant CA-37-X100, for fiscal year 2017. The City indicated in its annual self-certification form that the threshold to require a single audit was not met for fiscal year 2017. We noted that the City's response was inaccurate through verification on the Federal Audit Clearinghouse.

Cause: LACMTA's policy requires subrecipient to complete an annual self-certification form to indicate whether the entity is subject to audit under §200.501 Audit requirements, however, management does not verify the accuracy of the subrecipient's response through review of submissions within the Federal Audit Clearinghouse. The City of Pasadena incorrectly completed the annual self-certification form and disclosed that they did not meet audit requirement for fiscal year 2017.

Effect: Management relied on the City's response, and therefore did not obtain the audit report as required by 2 CFR 200.331(f).

(Continued)

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
Fiscal year ended June 30, 2018

Recommendation: We recommend that management corroborate each subrecipient's response in the annual self-certification form by searching the Federal Audit Clearinghouse. This verification should be maintained with the subrecipient's annual self-certification form to evidence the review was performed. We also recommend management consider requiring subrecipients to submit their annual financial audit report and related management letter to review for any deficiencies internal control from the financial statement audit that could have an impact on internal controls surrounding the management of federal awards.

Management's Response: Management agrees with this finding and acknowledges that the policies in place do not require verifying that the annual self-certification responses are correct. In the future we plan to communicate to individuals completing the self-certification that the response applies to the entire entity, not just the particular grant or cluster.

**LOS ANGELES COUNTY METROPOLITAN
TRANSPORTATION AUTHORITY**

FEDERAL FUNDING ALLOCATION DATA

Transportation Operating Agency (ID# 90154)

**Independent Accountant's Report
On Applying Agreed-Upon Procedures**

Fiscal year ended June 30, 2018

Independent Accountant's Report
on Applying Agreed Upon Procedures

Management and the Board of Directors
Los Angeles County Metropolitan Transportation Authority
Los Angeles, California

The Federal Transit Administration (FTA) has established the following standards with regard to the data reported to it in the Federal Funding Allocation Statistics form (FFA-10) of the Los Angeles County Metropolitan Transportation Authority's (the Authority) annual National Transit Database (NTD) report:

- A system is in place and maintained for recording data in accordance with NTD definitions. The correct data are being measured and no systematic errors exist.
- A system is in place to record data on a continuing basis, and the data gathering is an ongoing effort.
- Source documents are available to support the reported data and are maintained for FTA review and audit for a minimum of three years following FTA's receipt of the NTD report. The data are fully documented and securely stored.
- A system of internal controls is in place to ensure the data collection process is accurate and that the recording system and reported comments are not altered. Documents are reviewed and signed by a supervisor, as required.
- The data collection methods are those suggested by FTA or otherwise meet FTA requirements.
- The deadhead miles, computed as the difference between the reported total actual vehicle miles data and the reported total actual vehicle revenue miles (VRM) data, appear to be accurate.
- Data is consistent with prior reporting periods and other facts known about the Authority's operations.

We have applied the procedures, as described in Attachment A, to the data contained in the accompanying FFA-10 for the fiscal year ending June 30, 2018. Such procedures, which were agreed to and specified by FTA in the Declarations section of the *2018 Policy Manual* and were agreed to by the Authority management and the Board of Directors, were applied to assist the Authority in evaluating whether the Authority complied with the standards described in the first paragraph of this part and that the information included in the NTD report FFA-10 for the fiscal year ending June 30, 2018 is presented in conformity with the requirements of the *Uniform System of Accounts (USOA) and Records and Reporting System; Final Rule*, as specified in 49 CFR Part 630, Federal Register, January 15, 1993 and as presented in the *2018 Policy Manual*. The District management is responsible for the FFA-10 and compliance with NTD requirements. The sufficiency of these procedures is solely the responsibility of the parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures enumerated below either for the purpose for which this report has been requested or for any other purpose.

The procedures in Attachment A were applied separately to each of the information systems used to develop the reported actual vehicle revenue miles (VRM), fixed guideway (FG), directional route miles (DRM), passenger miles traveled (PMT), and operating expenses (OE) of the Authority for the fiscal year ending June 30, 2018 for each of the following modes:

- Motor Bus – directly operated
- Motor Bus – purchased transportation
- Rapid Bus – directly operated
- Heavy Rail – directly operated
- Light Rail – directly operated
- Vanpool – purchased transportation

In performing the procedures, except for the information identified in Attachment A to this report, no matters came to our attention that would be required to be reported to you regarding the information included in the NTD report on the FFA-10 Form for the fiscal year ending June 30, 2018. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. We were not engaged to and did not conduct an examination or review, the objective of which would be the expression of an opinion or conclusion, respectively, on conformity with the requirements of the *Uniform System of Accounts (USOA) and Records and Reporting System; Final Rule*, as specified in 49 CFR Part 630, Federal Register, January 15, 1993 and as presented in the *2018 Policy Manual*. Accordingly, we do not express such an opinion or conclusion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you. This report relates only to the information described above, and does not extend to the Authority's financial statements taken as a whole, or the forms in the Authority's NTD report other than the FFA-10 form, for any date or period.

This report is intended solely for the information and use of the Board of Directors, the management of the Authority, and the FTA and is not intended to be and should not be used by anyone other than these specified parties.



Crowe LLP

Los Angeles, California
October 31, 2018

LOS ANGELES COUNTY METROPOLITAN
TRANSPORTATION AUTHORITY
ATTACHMENT A – AGREED UPON PROCEDURES
June 30, 2018

FTA Suggested Procedures:

- a. Obtain and read a copy of written procedures related to the system for reporting and maintaining data in accordance with the NTD requirements and definitions set forth in 49 CFR Part 630, Federal Register, dated January 15, 1993 and as presented in the 2018 Policy Manual. If procedures are not written, discuss the procedures with the personnel assigned responsibility of supervising the NTD data preparation and maintenance.

Step performed without exception.

- b. Discuss the procedures (written or informal) with the personnel assigned responsibility of supervising the preparation and maintenance of NTD data to determine:
- The extent to which the transit agency followed the procedures on a continuous basis, and
 - Whether they believe such procedures result in accumulation and reporting of data consistent with the NTD definitions and requirements set forth in 49 CFR Part 630, Federal Register, dated January 15, 1993 and as presented in the 2018 Policy Manual.

Step performed without exception.

- c. Ask these same personnel about the retention policy that the transit agency follows as to source documents supporting NTD data reported on the Federal Funding Allocation Statistics form (FFA-10).

Step performed without exception.

- d. Based on a description of the transit agency's procedures obtained in items a and b above, identify all the source documents that the transit agency must retain for a minimum of three years. For each type of source document, select three months out of the year and determine whether the document exists for each of these periods.

Selected source documents from all modes and from several different months in fiscal years 2017, 2016, and 2015 to ensure they were retained for a minimum of three years. We observed that the source documents were maintained for each fiscal year as required.

- e. Discuss the system of internal controls. Inquire whether separate individuals (independent of the individuals preparing source documents and posting data summaries) review the source documents and data summaries for completeness, accuracy, and reasonableness and how often these individuals perform such reviews.

Per inquiry with the management, the individuals reviewing source documents are independent of individuals preparing the information and the review is done on a periodic basis depending on the data being reviewed.

- f. Select a haphazard sample of source documents and determine whether supervisors' signatures are present as required by the system of internal controls. If supervisors' signatures are not required, inquire how personnel document supervisors' review.

Selected a haphazard sample of 40 source documents, noting the required approval on all source documents. Step performed without exception.

LOS ANGELES COUNTY METROPOLITAN
TRANSPORTATION AUTHORITY
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- g. Obtain the worksheets used to prepare the final data that the transit agency transcribes onto the Federal Funding Allocation Statistics form. Compare the periodic data included on the worksheets to the periodic summaries prepared by the transit agency. Test the arithmetical accuracy of the summaries.

We obtained the worksheets and agreed the data on the worksheets to the summaries provided and verified the arithmetical accuracy of the summaries without exception for the VP-PT, HR-DO, LR-DO, MB-DO, and RB-DO modes. For the MB-PT mode, we noted that the Dodger Express vehicle revenue hours (VRH) data was not included on the FFA-10 form. As a result, 9,351 VRH's were excluded. Total VRH's reported on the FFA-10 form was 482,596.

- h. Discuss the procedure for accumulating and recording passenger miles traveled (PMT) data in accordance with NTD requirements with transit agency staff. Inquire whether the procedure is one of the methods specifically approved in the 2018 Policy Manual.

For the rail and van pool modes, the Authority utilized a statistical sampling method as described in FTA Circulars 2710.1A. For the motor bus modes, the Authority utilized a 100% count verification for passenger trips and an estimate of passenger miles based on a statistical sampling method as described in FTA Circulars 2710.2A.

- i. Discuss with transit agency staff, the transit agency's eligibility to conduct statistical sampling for PMT data every third year. Determine whether the transit agency meets NTD criteria that allow transit agencies to conduct statistical samples for accumulating PMT data every third year rather than annually. Specifically:
- a. According to the 2010 Census, the public transit agency serves an urbanized area (UZA) of less than 500,000 population.
 - b. The public transit agency directly operates fewer than 100 revenue vehicles in all modes in annual maximum revenue service (VOMS) (in any size UZA).
 - c. Service purchased from a seller is included in the transit agency's NTD report.
 - d. For transit agencies that meet one of the above criteria, review the NTD documentation for the most recent mandatory sampling year (2018) and determine that statistical sampling was conducted and meets the 95% confidence and +10% precision requirements.
 - e. Determine how the transit agency estimated annual PMT for the current report year.

Per inquiry with the Authority management, the Authority does not meet any of the three criteria that allows transit agencies to conduct statistical samples for accumulating passenger mile data every third year. Therefore, the Authority conducts statistical sampling annually as described in procedure h.

- j. Obtain a description of the sampling procedure for estimation of PMT data used by the transit agency. Obtain a copy of the transit agency's working papers or methodology used to select the actual sample of runs for recording PMT data. If the transit agency used average trip length, determine that the universe of runs was the sampling frame. Determine that the methodology used to select specific runs from the universe resulted in a haphazard selection of runs. If the transit agency missed a selected sample run, determine that a replacement sample run was haphazard. Determine that the transit agency followed the stated sampling procedure.

Step performed without exception.

LOS ANGELES COUNTY METROPOLITAN
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- k. Select a haphazard sample of the source documents for accumulating PMT data and determine that the data are complete (all required data are recorded) and that the computations are accurate. Select a haphazard sample of the accumulation periods and re-compute the accumulations for each of the selected periods. List the accumulation periods that were tested. Test the arithmetical accuracy of the summarization.

Selected a haphazard sample of 128 source documents across all modes from all twelve months in fiscal year 2018, used for accumulating passenger miles traveled (PMT) data and determined they were complete and mathematically accurate. We tested the average trip length and the total trips for each of the samples and recomputed the accumulations for each period. Step performed without exception.

- l. Discuss the procedures for systematic exclusion of charter, school bus, and other ineligible vehicle miles from the calculation of actual vehicle revenue miles with transit agency staff and identify that stated procedures are followed. Select a haphazard sample of source documents used to record charter bus service and test the arithmetical accuracy of the computations.

Step performed without exception.

- m. For actual vehicle revenue miles (VRM) data, document the collection and recording methodology and identify that deadhead miles are systematically excluded from the computation. This is accomplished as follows:
- If actual VRMs are calculated from schedules, document the procedures used to subtract missed trips. Select a haphazard sample of the days that service is operated, and re-compute the daily total of missed trips and missed VRMs. Test the arithmetical accuracy of the summary.
 - If actual VRMs are calculated from hubodometers, document the procedures used to calculate and subtract deadhead mileage. Select a haphazard sample of the hubodometer readings and determine that the stated procedures for hubodometer deadhead mileage adjustments are applied as prescribed. Test the arithmetical accuracy of the summary of intermediate accumulations.
 - If actual VRMs are calculated from vehicle logs, select haphazard samples of the vehicle logs and determine that the deadhead mileage has been correctly computed in accordance with FTA definitions.

Vehicle logs are used to compute the VRM data for non-fixed routes. For fixed routes, the Authority uses monthly services reports and daily loss service records to record any missed trips. The VP-PT mode does not have any deadhead miles. Selected a haphazard sample of 114 source documents across all modes and recalculated the VRMs for the sample of trips, excluding deadhead miles. Step performed without exception.

- n. For rail modes, obtain and read the recording and accumulation sheets for actual VRM's and identify that locomotive miles are not included in the computation.

Step performed without exception. There are no locomotives.

LOS ANGELES COUNTY METROPOLITAN
TRANSPORTATION AUTHORITY
ATTACHMENT A – AGREED UPON PROCEDURES
June 30, 2018

- o. If fixed guideway or High Intensity Bus directional route miles (FG or HIB DRM) are reported, interview the person responsible for maintaining and reporting the NTD data whether the operations meet the FTA definition of fixed guideway (FG) or High Intensity Bus (HIB) in that the service is:
- Rail, trolleybus (TB), ferryboat (FB), or aerial tramway (TR) or
 - Bus (MB) service operating over exclusive or controlled access rights-of-way (ROW), and
 - Access is restricted
 - Legitimate need for restricted access is demonstrated by peak period level of service D or worse on parallel adjacent highway, and
 - Restricted access is enforced for freeways; priority lanes used by other high occupancy vehicles (HOV) (i.e., vanpools (VP), carpools) must demonstrate safe operation (see Fixed Guideway Segments form (P-40))
 - High Occupancy / Toll (HO/T) lanes meet FHWA requirements for traffic flow and use of toll revenues, and that the transit agency has provided to NTD a copy of the State's certification to the US Secretary of Transportation that it has established a program for monitoring, assessing and reporting on the operation of the HOV facility with HO/T lanes.

Step performed without exception.

- p. Discuss the measurement of FG and HIB DRM with the person reporting NTD data and determine that the he or she computed mileage in accordance with the FTA definitions of FG/HIB and DRM. Inquire of any service changes during the year that resulted in an increase or decrease in DRMs. If a service change resulted in a change in overall DRMs, re-compute the average monthly DRMs, and reconcile the total to the FG/HIB DRM reported on the Federal Funding Allocation Statistics form.

Per inquiry of management, no new FG segments were added in fiscal year 2018.

- q. Inquire if any temporary interruptions in transit service occurred during the report year. If these interruptions were due to maintenance or rehabilitation improvements to a FG segment(s), the following apply:
- Report DRMs for the segment(s) for the entire report year if the interruption is less than 12 months in duration. Report the months of operation on the FG/HIB segments form as 12. The transit agency should document the interruption.
 - If the improvements cause a service interruption on the FG-DRMs lasting more than 12 months, the transit agency should contact their validation analyst to discuss. FTA will make a determination on how the DRMs should be reported.

Per inquiry of management there were no interruptions in service during fiscal year 2018 that would require a change in reporting.

- r. Measure FG/HIB DRM from maps or by retracing route.

We measured all of the FG/HIB maps. Step performed without exception.

- s. Discuss whether other public transit agencies operate service over the same FG/HIB as the transit agency. If yes, determine that the transit agency coordinated with the other transit agency (or agencies) such that the DRMs for the segment of FG/HIB are reported only once to the NTD on the Federal Funding Allocation form. Each transit agency should report the actual VRM, PMT, and OE for the service operated over the same FG/HIB.

Per inquiry of management, the Authority is the approved operator for all of their FG and the Authority is reporting their actual VRM, PMT, and OE for their services. Step performed without exception.

LOS ANGELES COUNTY METROPOLITAN
TRANSPORTATION AUTHORITY
ATTACHMENT A – AGREED UPON PROCEDURES
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- t. Review the FG/HIB segments form. Discuss the Agency Revenue Service Start Date for any segments added in the 2018 report year with the persons reporting NTD data. This is the commencement date of revenue service for each FG/HIB segment. Determine that the date reported is the date that the agency began revenue service. This may be later than the Original Date of Revenue Service if the transit agency is not the original operator. If a segment was added for the 2018 report year, the Agency Revenue Service Date must occur within the transit agency's 2018 fiscal year. Segments are grouped by like characteristics. Note that for apportionment purposes, under the State of Good Repair (§5337) and Bus and Bus Facilities (§5339) programs, the 7-year age requirement for fixed guideway/High Intensity Bus segments is based on the report year when the segment is first reported by any NTD transit agency. This pertains to segments reported for the first time in the current report year. Even if a transit agency can document an Agency Revenue Service Start Date prior to the current NTD report year, the FTA will only consider segments continuously reported to the NTD.

Per inquiry of management, no new FG segments were added in fiscal year 2018.

- u. Compare operating expenses with audited financial data after reconciling items are removed.

Step performed without exception.

- v. If the transit agency purchases transportation (PT) services, interview the personnel reporting the NTD data on the amount of PT-generated fare revenues. The PT fare revenues should equal the amount reported on the Contractual Relationship form (B-30).

We agreed the fare revenue for the vanpool and motor bus PT without exception.

- w. If the transit agency's report contains data for PT services and assurances of the data for those services is not included, obtain a copy of the Independent Auditor Statement for Federal Funding Allocation (IAS-FFA) data of the PT service. Attach a copy of the statement to the report. Note as an exception if the transit agency does not have an Independent Auditor Statement for the PT data.

We inquired to management and noted that the report does include PT from private operators, but that an Independent Auditor Statement is not required since the Authority is a public transportation provider and the PT expenditures are included on the B-30 form of the NTD.

- x. If the transit agency purchases transportation services, obtain a copy of the PT contract and determine that the contract specifies the public transportation services to be provided; the monetary consideration obligated by the transit agency or governmental unit contracting for the service; the period covered by the contract (and that this period overlaps the entire, or a portion of, the period covered by the transit agency's NTD report); and is signed by representatives of both parties to the contract. Interview the person responsible for retention of the executed contract, and determine that copies of the contracts are retained for three years.

We obtained a copy of the PT contract for each provider and noted that the contract included a description of the services to be provided, the monetary consideration obligated by the Authority for the service and the period covered by the contract and that this period is the same as, or a portion of, the period covered by the Authority's NTD report; and is signed by representatives of both parties to the contract. Management stated that copies of the executed contracts are retained for the last three years, as applicable.

LOS ANGELES COUNTY METROPOLITAN
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- y. If the transit agency provides service in more than one UZA, or between an UZA and a non-UZA, inquire of the procedures for allocation of statistics between UZAs and non-UZAs. Obtain and review the FG segment worksheets, route maps, and urbanized area boundaries used for allocating the statistics, and determine that the stated procedure is followed and that the computations are correct.

Per management, the Authority provides most of their services in one UZA and therefore it is all allocated to that one UZA. Additionally, all of the services provided are in urbanized areas and allocations to non-urbanized areas are not required, therefore the procedure is not applicable.

- z. Compare the data reported on the Federal Funding Allocation Statistics Form to data from the prior report year and calculate the percentage change from the prior year to the current year. For actual VRM, PMT or OE data that have increased or decreased by more than 10%, or FG DRM data that have increased or decreased. Interview transit agency management regarding the specifics of operations that led to the increases or decreases in the data relative to the prior reporting period.

We compared and agreed the data reported on the Federal Funding Allocation Statistics form (Form FFA-10) to comparable data for the prior report year and calculated the percentage change from the prior year to the current year. There were no variances greater than 10% in any mode except for VP-PT and RB-DO. In those two modes, we inquired to the Authority and documented the explanations for the variances.

- aa. The auditor should document the specific procedures followed, documents reviewed, and tests performed in the work papers. The work papers should be available for FTA review for a minimum of three years following the NTD report year. The auditor may perform additional procedures, which are agreed to by the auditor and the transit agency, if desired. The auditor should clearly identify the additional procedures performed in a separate attachment to the statement as procedures that were agreed to by the transit agency and the auditor but not by the FTA.

Step performed without exception.

**LOS ANGELES COUNTY METROPOLITAN
TRANSPORTATION AUTHORITY**

NATIONAL TRANSIT DATABASE FINANCIAL DATA PROCEDURES

Transportation Operating Agency (ID# 90154)

**Independent Accountant's Report
On Applying Agreed-Upon Procedures**

Fiscal year ended June 30, 2018

INDEPENDENT ACCOUNTANT'S REPORT ON APPLYING AGREED-UPON PROCEDURES

Management
Los Angeles County Metropolitan Transportation Authority
Los Angeles, California

We have performed the procedures enumerated below, on the application of the requirements of the Federal Transit Administration (FTA) as set forth in its applicable National Transit Database (NTD) Uniform System of Accounts (USOA) by the Los Angeles County Metropolitan Transportation Authority (LACMTA) for the fiscal year ended June 30, 2018. Such procedures, which were agreed to by the management of LACMTA and the FTA, were performed to assist LACMTA and FTA in determining conformance with USOA requirements based on the following assertion by LACMTA's management:

The accounting system from which the NTD reports for the year ended June 30, 2018 were derived, uses the accrual basis of accounting and is directly translated, using a clear audit trail, to the accounting treatment and categories specified by the USOA.

LACMTA's management is responsible for conformance with the requirements described above. The sufficiency of these procedures is solely the responsibility of the parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

The agreed-upon procedures and associated findings are as follows:

1. Procedure: NTD Crosswalk

- a. Obtain the following NTD Reporting Forms prepared by management for the year ended June 30, 2018:
 - NTD Form F-10, Sources of Funds – Funds Expended and Funds Earned (USOA Section 2)
 - NTD Form F-20, Uses of Capital (USOA Section 3)
 - NTD Form F-30, Operating Expenses (USOA Section 4, 5, and 6 and Appendix A)
 - NTD Form F-40, Operating Expenses Summary
 - NTD Form F-60, Financial Statement
- b. Obtain the reconciliation documentation management prepares (referred to as “the crosswalk” throughout this report) to reconcile the chart of accounts, general ledger, and/or trial balance and other supporting documents such as Excel spreadsheets (collectively referred to as the accounting system) to the respective NTD Reporting Forms identified above.
- c. Inquire of management as to whether the crosswalk obtained in procedure 1.b is supported by the accounting system.

- d. For a transit agency that is part of a larger reporting entity, inquire of management as to whether the crosswalk includes the full cost of providing transit service, including costs incurred by the larger reporting entity to specifically support the agency's transit service.
- e. Inspect the crosswalk to determine that it incorporates NTD reporting using the applicable modes and types of service identified in the bulleted list below:
 - Sources of Funds, Form F-10 – Funding sources, passenger fares by mode and service type, passenger fares by passenger paid or by organization paid fares, revenue object class, and funds expended on operations and capital fund types
 - Uses of Capital, Form F-20 - Type of use, asset classifications, and modes and service types
 - Operating Expenses, Form F-30 - Modes, service types, object classes and functions
 - Operating Expenses Summary, Form F-40 - Expense reconciling items
 - Financial Statement, Form F-60 - Current assets, non-current assets, deferred outflows of resources, current liabilities, non-current liabilities, and deferred inflows of resources.

Findings:

No exceptions were found as a result of this procedure.

2. Procedure: Accrual Accounting

- a. Obtain the most recent audited financial statements that include the transit agency and inspect the notes to the financial statements to determine whether the accrual basis of accounting was used.
- b. Inquire of management as to whether the accrual basis of accounting has continued to be used since the last audited reporting period and that it is used for NTD reporting in the current period.
- c. If the notes to the financial statements indicate that an accrual basis of accounting is not being used, or the results of the inquiry to management in procedure 2.b indicate the accrual basis of accounting is not being used in the current period, inspect the crosswalk to determine that the transit agency made adjustments to convert to an accrual basis for NTD reporting.

Findings:

No exceptions were found as a result of this procedure.

3. Procedure: Sources of Funds (Form F-10)

- a. Trace and agree total sources of funds from Form F-10 to revenue reported in the accounting system using the crosswalk.
- b. Inspect the crosswalk for a written reconciliation between total revenues reported in the audited financial statements or the accounting system and the total revenues reported on Form F-10.
- c. Trace and agree the two largest directly generated fund passenger fare revenue modes (all service types) from Form F-10 to the accounting system.
- d. Trace and agree the largest revenue object class (other than passenger fares) in the following major categories of funds from Form F-10 to the accounting system: (1) Local Government; (2) State Government; (3) Federal Funds; and (4) Other Directly Generated Funds (i.e., 4100 and 4200 combined).
- e. Inspect the crosswalk to determine that it identifies, evaluates, and classifies financial transactions into categories of funds expended on operations and funds expended on capital (USOA Section 2) for the reporting year.

Findings:

No exceptions were found as a result of this procedure.

4. Procedure: Uses of Capital (Form F-20)

- a. Obtain accounting system documentation on capital asset additions for the reporting period.
- b. Trace and agree total uses of capital from Form F-20 to the crosswalk reconciliation of total capital asset additions.
- c. Trace and agree types of use (existing service and expansion of service) from Form F-20 to the crosswalk or other supporting documentation reflecting the nature of the uses of capital.
- d. Trace and agree asset classifications (guideway, revenue vehicles, etc.) from Form F-20 to the crosswalk or other documentation reflecting the assets classes of capital additions.
- e. For the largest mode/service type, trace and agree the type of use classification and asset classification from Form F-20 to the crosswalk or other documentation reflecting the uses of capital.
- f. If capital projects support multiple modes/types of services or and/or asset classifications, inquire of management as to whether management reported the use of capital considering the predominant use rules as described in the "Predominant Use" section of the 2018 NTD Policy Manual.
- g. If capital projects involve: 1) Rehabilitation/Reconstruction/Replacement/Improvement for Existing Service; and 2) Expansion of Service; inquire of management as to whether project costs were allocated between the two project purposes and whether such allocation was documented in the crosswalk or other supporting documentation.

Findings:

No exceptions were found as a result of this procedure.

5. Procedure: Operating Expenses (Form F-30)

- a. For the two largest modes/type of services, trace and agree functions (vehicle operations, vehicle maintenance, etc.) from Form F-30 to the crosswalk or other written documentation of functional expenses.
- b. For the two largest modes/type of services, trace and agree object classes (natural expenses) from Form F-30 to the crosswalk or other written documentation of object class categories.
- c. If management allocated shared operating expenses, inquire of management as to whether (1) the operating expenses are split between direct and shared costs; (2) shared costs were allocated across modes, services types and functions, (3) the allocation was documented in the crosswalk or other supporting documentation; and (4) the driving variables used are updated annually.

Findings:

No exceptions were found as a result of this procedure.

6. Procedure: Operating Expenses Summary (Form F-40)

- a. Obtain total expenses from the accounting system for the reporting period. Trace and agree total expenses from Form F-40 to the accounting system using the crosswalk.
- b. Trace and agree the reconciling items appearing on Form F-40 through the crosswalk to the accounting system.

Findings:

No exceptions were found as a result of this procedure.

7. Procedure: Financial Statement (Form F-60)


- a. Trace and agree (1) Current Assets; (2) Non-Current Assets; (3) Deferred Outflows of Resources; (4) Current Liabilities; (5) Non-Current Liabilities; and (6) Deferred Inflows of Resources appearing on Form F-60 to the crosswalk or other supporting documentation.

Findings:

No exceptions were found as a result of this procedure.

This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. We were not engaged to, and did not, conduct an examination or review, the objective of which would be the expression of an opinion or conclusion, respectively, LACMTA's conformance with the requirements described above, for the year ended June 30, 2018. Accordingly, we do not express such an opinion or conclusion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the information and use of management of LACMTA and the FTA and is not intended to be and should not be used by anyone other than these specified parties.



Crowe LLP

Los Angeles, California
November 7, 2018



**LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
TRANSPORTATION DEVELOPMENT ACT
OPERATIONS AGENCY**

**50% EXPENDITURE LIMITATION SCHEDULE
FOR THE FISCAL YEAR ENDED JUNE 30, 2018**

**LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY
TRANSPORTATION DEVELOPMENT ACT
OPERATIONS AGENCY**

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**INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE WITH THE CALIFORNIA CODE OF
REGULATIONS (SECTION 6667); REPORT ON INTERNAL CONTROL OVER COMPLIANCE; AND
REPORT ON 50% EXPENDITURE LIMITATION SCHEDULE**

The Board of Directors
Los Angeles County Metropolitan Transportation Authority
Los Angeles, California

Report on Compliance with the Transportation Development Act

We have audited the Los Angeles County Metropolitan Transportation Authority (LACMTA) compliance with the types of compliance requirements described in the Transportation Development Act Guidelines, including Public Utility Code Section 99245 as enacted and amended by statute, and the allocation instructions and resolutions of the Los Angeles County Metropolitan Transportation Authority (as Planning Agency) as required by Section 6667 of the California Code of Regulations adopted by the California Department of Transportation (collectively, Transportation Development Act [TDA]) that could have a direct and material effect on LACMTA's compliance with the Transportation Development Act for the fiscal year ended June 30, 2018.

Management's Responsibility

Management is responsible for compliance with the requirements of laws, regulations, contracts, and grants applicable to the Transportation Development Act.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for LACMTA's TDA program based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the Transportation Development Act. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on the TDA program occurred. An audit includes examining, on a test basis, evidence about LACMTA's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for the TDA program. However, our audit does not provide a legal determination of LACMTA's compliance.

Opinion on the Transportation Development Act Program

In our opinion, LACMTA complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on the TDA program for the fiscal year ended June 30, 2018.

Report on Internal Control over Compliance

Management of LACMTA is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered LACMTA's internal control over compliance with the types of requirements that could have a direct and material effect on the TDA program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance on the TDA program and to test and report on internal control over compliance in accordance with the TDA program, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of LACMTA's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a TDA program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of the TDA program will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of the TDA program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Transportation Development Act. Accordingly, this report is not suitable for any other purpose.

Report on 50% Expenditure Limitation Schedule

We have audited the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of LACMTA as of and for the fiscal year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise LACMTA's basic financial statements. We issued our report thereon dated December 19, 2018, which contained unmodified opinions on those financial statements. Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the basic financial statements. The accompanying 50% expenditure limitation schedule is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the 50% expenditure limitation schedule is fairly stated in all material respects in relation to the basic financial statements as a whole.



Crowe LLP

Los Angeles, California
December 19, 2018

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
TRANSPORTATION DEVELOPMENT ACT
50% EXPENDITURE LIMITATION SCHEDULE
FOR THE FISCAL YEAR ENDED JUNE 30, 2018
(Amounts expressed in thousands)

1	Total operating cost	\$	1,736,005
2	Total capital requirements		1,768,792
3	Total debt service		467,140
4	Total of lines 1, 2, and 3		3,971,937
5	Less federal grant received		913,257
6	Less State Transit Assistance (STA) funds received		49,008
7	Total of lines 5 and 6		962,265
8	Total of line 4 less line 7		3,009,672
	50% of line 8		1,504,836
	Total permissible Local Transportation Fund expenditures	\$	1,504,836



**LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
TRANSPORTATION DEVELOPMENT ACT
AND
PROP 1B PTMISEA PLANNING AGENCY
SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES
FOR THE FISCAL YEAR ENDED JUNE 30, 2018**

**LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
TRANSPORTATION DEVELOPMENT ACT
AND
PROP 1B PTMISEA PLANNING AGENCY**

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**INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE WITH THE CALIFORNIA
CODE OF REGULATIONS (SECTIONS 6640-6662); REPORT ON INTERNAL CONTROL
OVER COMPLIANCE; AND REPORT ON SCHEDULE OF REVENUES, EXPENDITURES,
AND CHANGES IN FUND BALANCES**

The Board of Directors
Los Angeles County Metropolitan Transportation Authority
Los Angeles, California

Report on Compliance with the Transportation Development Act

We have audited the Los Angeles County Metropolitan Transportation Authority (LACMTA) compliance with the types of compliance requirements described in the Transportation Development Act Guidelines, including California Code of Regulations (Sections 6640-6662) (Transportation Development Act [TDA]) that could have a direct and material effect on LACMTA's compliance with the Transportation Development Act for the fiscal year ended June 30, 2018.

Management's Responsibility

Management is responsible for compliance with the requirements of laws, regulations, contracts, and grants applicable to the Transportation Development Act.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for LACMTA's TDA program based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the Transportation Development Act. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on the TDA program occurred. An audit includes examining, on a test basis, evidence about LACMTA's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for the TDA program. However, our audit does not provide a legal determination of LACMTA's compliance.

Opinion on the Transportation Development Act Program

In our opinion, LACMTA complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on the TDA program for the fiscal year ended June 30, 2018.

Report on Internal Control over Compliance

Management of LACMTA is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered LACMTA's internal control over compliance with the types of requirements that could have a direct and material effect on the TDA program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance on the TDA program and to test and report on internal control over compliance in accordance with the TDA program, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of LACMTA's internal control over compliance.


A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a TDA program on a timely basis. *A material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of the TDA program will not be prevented, or detected and corrected, on a timely basis. *A significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of the TDA program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Transportation Development Act. Accordingly, this report is not suitable for any other purpose.

Report on Schedule of Revenues, Expenditures, and Changes in Fund Balances

We have audited the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the LACMTA as of and for the fiscal year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise LACMTA's basic financial statements. We issued our report thereon dated December 19, 2018, which contained unmodified opinions on those financial statements. Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the basic financial statements. The accompanying schedule of revenues, expenditures, and changes in fund balances is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of revenues, expenditures, and changes in fund balances is fairly stated in all material respects in relation to the basic financial statements as a whole.


Crowe LLP

Los Angeles, California
December 19, 2018

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
TRANSPORTATION DEVELOPMENT ACT
AND
PROP 1B PTMISEA PLANNING AGENCY
SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES
FOR THE YEAR ENDED JUNE 30, 2018
(Amounts expressed in thousands)

	<u>Transportation Development Act</u>			<u>PTMISEA</u>
	<u>Planning</u>	<u>Administration</u>	<u>Total</u>	
Revenues:				
Local grants and contracts	\$ 5,015	\$ 3,485	\$ 8,500	\$ —
Expenditures:	<u>5,015</u>	<u>3,485</u>	<u>8,500</u>	<u>—</u>
Excess of revenues over expenditures	—	—	—	—
Other financing uses:				
Transfers out	<u>—</u>	<u>—</u>	<u>—</u>	<u>(10)</u>
Net change in fund balances	—	—	—	(10)
Fund balances - beginning of year	<u>—</u>	<u>—</u>	<u>—</u>	<u>10</u>
Fund balances - end of year	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

See notes to Schedule of Revenues Expenditures, and Changes in Fund Balances.

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
TRANSPORTATION DEVELOPMENT ACT
AND
PROP 1B PTMISEA PLANNING AGENCY
NOTES TO SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES
FOR THE YEAR ENDED JUNE 30, 2018

(1) Transportation Planning Agency

The Los Angeles County Metropolitan Transportation Authority (LACMTA) is the regional transportation planning agency responsible for long-range transportation planning and is designated under the provisions of Section 65080 of the California Government Code (the Code) to prepare and adopt the Regional Transportation Plan (RTP) and the Regional Transportation Improvement Program (RTIP). Both the RTP and RTIP are directed to achieve a coordinated and balanced regional transportation system for the county in its jurisdiction. LACMTA is also the administrator of the Local Transportation Fund (LTF) under the provisions of Section 9532 of the Code.

The LTF was created by the Transportation Development Act (TDA) to fund transit projects in each county. The LTF retail sales taxes collected statewide by the California Department of Tax and Fee Administration and which are returned to individual counties according to the amount collected within that county. Los Angeles County sales tax receipts are deposited in the Los Angeles County Treasurer's Office. LACMTA, as administrator of the LTF, is authorized to distribute funds from the Treasurer's Office to claimants for transit projects that are in accordance with the Code.

(2) Prop 1B PTMISEA

The Public Transportation Modernization, Improvement and Service Enhancement Account (PTMISEA) was created by the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006. Of the \$19.9 billion available to transportation, \$3.6 billion was allocated to PTMISEA to be available to transit operators over a ten-year period. PTMISEA funds may be used for transit rehabilitation, safety or modernization improvements, capital service enhancements or expansions, new capital projects, bus rapid transit improvements, and rolling stock (buses and rail cars) procurement rehabilitation or replacement. Funds in this account are appropriated annually by the Legislature to the State Controller's Office (SCO) for allocation in accordance with Public Utilities Code formula distributions: 50% is allocated to Local Operators based on fare box revenue and 50% to Regional Entities based on population. LACMTA has fully drawn down the Prop 1B PTMISEA fund in fiscal year 2017. The residual balance of \$10 was transferred to the LACMTA enterprise fund for capital projects. As of June 30, 2018, the Prop 1B PTMISEA fund has no fund balance.

(3) Basis of Accounting

The TDA Fund and PTMISEA fund use the modified accrual basis of accounting as required by generally accepted accounting principles. Under this basis of accounting, revenues are recognized when they become measurable and available, and expenditures are recognized when the related fund liability is incurred.

**LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY
STATE TRANSIT ASSISTANCE
SPECIAL REVENUE FUND**

**Financial Statements
Fiscal Years Ended June 30, 2018 and 2017**

**LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY
STATE TRANSIT ASSISTANCE
SPECIAL REVENUE FUND**

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INDEPENDENT AUDITOR'S REPORT

The Board of Directors
Los Angeles County Metropolitan Transportation Authority
Los Angeles, California

Report on the Financial Statements

We have audited the accompanying financial statements of the State Transit Assistance Fund (the STA Fund), a special revenue fund of the Los Angeles County Metropolitan Transportation Authority (LACMTA), as of and for the years ended June 30, 2018 and 2017, and the related notes to the financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the STA Fund, of the LACMTA, as of June 30, 2018 and 2017, and the changes in financial position thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 1, the financial statements present only the STA Fund and do not purport to, and do not, present fairly the financial position of the Los Angeles County Metropolitan Transportation Authority, as of June 30, 2018 and 2017, the changes in its financial position, or, where applicable, its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Other Matter***Supplementary Information***

Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The management's discussion and analysis, budgetary comparison information, schedule of allocations, and schedule of expenditures and transfers are presented for purposes of additional analysis and are not a required part of the financial statements.

The management's discussion and analysis, as listed in the table of contents, is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the management's discussion and analysis is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The budgetary comparison information, schedule of allocations, and schedule of expenditures and transfers, as listed in the table of contents, has not been subjected to the auditing procedures applied in the audit of the financial statements and accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 4, 2018 on our consideration of the STA Fund's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the STA Fund's internal control over financial reporting and compliance.


Crowe LLP

Los Angeles, California
December 4, 2018

**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING
AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL
STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

The Board of Directors
Los Angeles County Metropolitan Transportation Authority
Los Angeles, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the State Transit Assistance Fund (the STA Fund), a special revenue fund of the Los Angeles County Metropolitan Transportation Authority (LACMTA), as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the STA Fund's basic financial statements, and have issued our report thereon dated December 4, 2018. As discussed in Note 1, the financial statements present only the STA Fund and do not purport to, and do not, present fairly the financial position of LACMTA, the changes in its financial position, or where applicable, its cash flows in conformity with accounting principles generally accepted in the United States of America.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the STA Fund's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the STA Fund's internal control. Accordingly, we do not express an opinion on the effectiveness of the STA Fund's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the STA Fund's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

A handwritten signature in black ink that reads "Crowe LLP". The script is cursive and fluid.

Crowe LLP

Los Angeles, California
December 4, 2018

Los Angeles County
Metropolitan Transportation Authority
State Transit Assistance
Special Revenue Fund
Management's Discussion and Analysis (Unaudited)
Fiscal years ended June 30, 2018 and 2017

The Los Angeles County Metropolitan Transportation Authority's State Transit Assistance Special Revenue Fund (the STA Fund) was created in accordance with the provisions of the Transportation Development Act (the Act) as administered by the Department of Transportation of the State of California (the State). Sales tax revenues of the STA Fund represent an allocation of sales tax on diesel fuel and gas fuel collected by the California Department of Tax and Fee Administration. Expenditures from the STA Fund are made by Los Angeles County (the County) in accordance with written instructions issued by the Los Angeles County Metropolitan Transportation Authority (LACMTA) under the terms of the Act.

Our discussion and analysis of STA Fund's financial performance presents an overview of the STA Fund's financial activities during the fiscal years ended June 30, 2018 and 2017. We encourage readers to consider information presented here in conjunction with the financial statements (beginning on page 8). The financial statements, notes to the financial statements, and this discussion and analysis were prepared by management and are the responsibility of the management.

All amounts are expressed in thousands of dollars unless otherwise indicated.

2018 Financial Highlights

- Sales tax collected for the year increased by \$76,913 or 103.90% compared with prior year. The increase was mainly due to additional sales tax received with the passage of Senate Bill 1 (SB 1). The bill created the Road Maintenance and Rehabilitation Program that addressed the maintenance on the state highway system and the local street and road system. The bill required the California Transportation Commission to adopt performance criteria, consistent with the specified asset management plan, to ensure efficient use of certain funds available for the program. The bill provided for the deposit of various funds for the program in the Road Maintenance and Rehabilitation Account which creates revenue in the State Transportation Fund, including revenues attributable to a \$0.12 per gallon increase in the motor vehicle fuel (gasoline) tax imposed by the bill with an inflation adjustment, as provided, 50% of a \$0.20 per gallon increase in the diesel excise tax, with an inflation adjustment, as provided, a portion of a new transportation improvement fee imposed under the Vehicle License Fee Law with a varying fee between \$25 (amount not in thousand) and \$175 (amount not in thousand) based on vehicle value and with inflation adjustment, as provided, and a new \$100 (amount not in thousand) annual vehicle registration fee applicable only to zero-emission vehicles model year 2020 and later, with an inflation adjustment, as provided. The fuel excise tax increases took effect on November 1, 2017, the transportation improvement fee took effect on January 1, 2018, and the zero-emission vehicle fee takes effect on July 1, 2020.
- Actual sales tax received from the State totaled \$150,940 compared with original and final budget of \$60,000 resulting in a favorable variance of \$90,940 due mainly to the supplemental allocation received as a result of passage of SB 1 which was not budgeted during the fiscal year 2018.

Los Angeles County
Metropolitan Transportation Authority
State Transit Assistance
Special Revenue Fund
Management's Discussion and Analysis (Unaudited)
Fiscal years ended June 30, 2018 and 2017

- Total other financing uses of funds increased by \$11,480 or 30.59% compared with the prior year brought about by an increase in State allocation received and made available to subsidize the LACMTA Enterprise Fund for bus and rail operation and maintenance.

2017 Financial Highlights

- Sales tax collected for the year decreased by \$4,659 or 5.92% compared with prior year. The decrease was mainly due to lower allocations received from the State brought about by changes in consumer purchases and price of the diesel fuel. Actual sales tax received from the State totaled \$74,027 compared to original and final budget of \$52,855 resulting in a favorable variance of \$21,172.
- Total other financing uses of funds decreased by \$54,981 or 59.43% compared with prior year due mainly to prior year negative fund balances which resulted in the decrease in the subsidy to the LACMTA Enterprise Fund for bus and rail operation and maintenance.

Overview of Financial Statements

This discussion and analysis serves as an introduction to the basic financial statements. The STA Fund's basic financial statements consisted of two components: (1) the fund financial statements, and (2) the notes to the financial statements. This report also contains other supplementary information in addition to the basic financial statements.

The condensed balance sheets show the STA Fund's assets and liabilities as of June 30, 2018, 2017, and 2016. The differences between the assets and liabilities are reported as fund balances. The fund balance may serve as a useful indicator of the STA Fund's financial health.

The comparative statements of revenues, expenditures and changes in fund balance for the fiscal years show the underlying events or activities of the fund that impacted the fund balances.

Condensed Balance Sheets

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Total assets	<u>\$ 114,973</u>	<u>\$ 33,829</u>	<u>\$ 43,801</u>
Total liabilities	9,544	24,224	56,895
Fund balances	105,429	9,605	(13,094)
Total liabilities and fund balances	<u>\$ 114,973</u>	<u>\$ 33,829</u>	<u>\$ 43,801</u>

Total assets increased by \$81,144 or 239.86% as of June 30, 2018 compared to June 30, 2017 primarily due to higher allocation and larger receivable accrued in FY18 compared to the prior year. Total liabilities decreased by \$14,680 or 60.60% as of June 30, 2018 compared to June 30, 2017 mainly due to

Los Angeles County
Metropolitan Transportation Authority
State Transit Assistance
Special Revenue Fund
Management's Discussion and Analysis (Unaudited)
Fiscal years ended June 30, 2018 and 2017

the disbursement in FY17 of the amounts due to Enterprise Fund for its operating and capital expenses.

Total assets decreased by \$9,972 or 22.77% as of June 30, 2017 compared to June 30, 2016 primarily due to lower allocation receipts from the State and smaller receivable accrued in FY17 compared to the prior year. Total liabilities decreased by \$32,671 or 57.42% as of June 30, 2017 compared to June 30, 2016 mainly due to higher subsidy to the Enterprise Fund for its bus and rail operating and capital expenses.

Condensed Statement of Revenues, Expenditures, and Changes in Fund Balances

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Revenues	\$ 151,635	\$ 74,170	\$ 78,863
Expenditures and other financing uses of funds	<u>(55,811)</u>	<u>(51,471)</u>	<u>(100,511)</u>
Net change in fund balances	95,824	22,699	(21,648)
Fund balances – beginning of year	<u>9,605</u>	<u>(13,094)</u>	<u>8,554</u>
Fund balances – end of year	<u><u>\$ 105,429</u></u>	<u><u>\$ 9,605</u></u>	<u><u>\$ (13,094)</u></u>

Total revenues increased \$77,465 or 104.44% during fiscal year 2018 compared to fiscal year 2017 primarily due to the supplemental sales tax allocations received from the State as a result of passage of SB 1. Expenditures and other financing uses increased \$4,340 or 8.43% during fiscal 2018 compared to fiscal year 2017 mainly due to higher bus and rail operating subsidies to the LACMTA Enterprise Fund.

Total revenues decreased by \$4,693 or 5.95% during fiscal year 2017 compared to fiscal year 2016 primarily due to lower sales tax allocation received from the State. Expenditures and other financing uses decreased \$49,040 or 48.79% during fiscal 2017 compared to fiscal year 2016 mainly due to lower bus and rail operating subsidies to the LACMTA Enterprise Fund.

Los Angeles County
Metropolitan Transportation Authority
State Transit Assistance
Special Revenue Fund
Balance Sheets
June 30, 2018 and 2017
(Amounts expressed in thousands)

	<u>2018</u>	<u>2017</u>
Assets		
Cash and cash equivalents	\$ 66,803	\$ 13,175
Interest receivable	266	32
Sales tax receivable	47,866	20,622
Due from other funds	38	—
Total assets	<u>114,973</u>	<u>33,829</u>
Liabilities		
Accounts payable and accrued liabilities	2,655	1,670
Due to other funds	6,889	22,554
Total liabilities	<u>9,544</u>	<u>24,224</u>
Fund balances		
Restricted	105,429	9,605
Total fund balances	<u>105,429</u>	<u>9,605</u>
Total liabilities and fund balances	<u>\$ 114,973</u>	<u>\$ 33,829</u>

See accompanying notes to financial statements.

**Los Angeles County
Metropolitan Transportation Authority
State Transit Assistance
Special Revenue Fund**

Statements of Revenues, Expenditures, and Changes in Fund Balances
Fiscal years ended June 30, 2018 and 2017
(Amounts expressed in thousands)

	<u>2018</u>	<u>2017</u>
Revenues:		
Sales tax	\$ 150,940	\$ 74,027
Investment income	695	143
Total revenues	<u>151,635</u>	<u>74,170</u>
Expenditures:		
Transportation subsidies	<u>6,803</u>	<u>13,943</u>
Excess of revenues over expenditures	<u>144,832</u>	<u>60,227</u>
Other financing uses:		
Transfers out	<u>(49,008)</u>	<u>(37,528)</u>
Net change in fund balances	95,824	22,699
Fund balances - beginning of year	<u>9,605</u>	<u>(13,094)</u>
Fund balances - end of year	<u><u>\$ 105,429</u></u>	<u><u>\$ 9,605</u></u>

See accompanying notes to financial statements.

**Los Angeles County
Metropolitan Transportation Authority
State Transit Assistance
Special Revenue Fund**

Notes to Financial Statements
June 30, 2018 and 2017

1. Summary of Significant Accounting Policies

(a) General Description

The Los Angeles County Metropolitan Transportation Authority's State Transit Assistance Special Revenue Fund (the STA Fund) was created in accordance with the provisions of the Transportation Development Act (the Act) as administered by the Department of Transportation of the State of California (the State). Sales tax revenues of the STA Fund represent an allocation of retail sales tax on diesel fuel and gas fuel collected by the California Department of Tax and Fee Administration. Expenditures from the STA Fund are made by Los Angeles County (the County) in accordance with written instructions issued by the Los Angeles County Metropolitan Transportation Authority (LACMTA) under the terms of the Act.

(b) Basis of Accounting

The STA Fund is reported using the current financial resources measurement focus and the modified accrual basis of accounting. Revenues are recognized as they become both measurable and available. Revenues are considered to be available when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, LACMTA considers revenues to be available if they are collected within 90 days of the end of the current fiscal period. Expenditures generally are recorded when a liability is incurred and a valid claim is presented. Transportation subsidies are recorded when all of the eligibility requirements have been met, including the receipt of the reimbursement request.

(c) Fund Accounting

LACMTA utilizes fund accounting to report its financial position and the results of its operations. Fund accounting is designed to demonstrate legal compliance and to aid financial management by segregating transactions related to certain governmental functions or activities. The STA Fund is considered a governmental fund. The measurement focus is the determination of changes in financial position, rather than net income determination. Additionally, the STA Fund is considered a special revenue governmental fund. Special revenue funds are used to account for proceeds of specific revenue sources including sales tax that are legally restricted to expenditures for specified purposes.

(d) Financial Statement Presentation

The accompanying financial statements present only the STA Fund and do not purport to, and do not, present fairly the financial position of the LACMTA as of June 30, 2018 and 2017, the changes in its financial position, or where applicable, its cash flows for the year then ended in conformity with U.S. generally accepted accounting principles.

**Los Angeles County
Metropolitan Transportation Authority
State Transit Assistance
Special Revenue Fund**

Notes to Financial Statements
June 30, 2018 and 2017

(e) Cash and Cash Equivalents

The STA Fund's cash and cash equivalents include deposits with the Los Angeles County Investment Pool (LACIP). The STA Fund is an involuntary participant in the LACIP.

(f) Sales Tax Receivable

Sales tax receivables represent uncollected amounts from the allocation of retail sales tax on diesel fuel and gas fuel collected by the California Department of Tax and Fee Administration. As of June 30, 2018 and 2017, the STA Fund had receivables of \$47,866 and \$20,622, respectively.

2. Cash and Investments

Cash balances of the STA Fund are pooled with other County funds and invested by the Los Angeles County Treasurer (the Treasurer). These funds are subject to withdrawal from the Treasurer's pool upon demand.

STA Fund's pooled cash and investments with the LACIP amounted to \$66,803 at June 30, 2018 and \$13,175 at June 30, 2017. The County Board of Supervisors provides regulatory oversight for the LACIP. The value of the position in the investment pool is the same as the value of the pool. The investment pool is not rated for purposes of evaluating credit risk as of June 30, 2018 and 2017.

Detailed information concerning the County's pooled cash and investments can be found in the County of Los Angeles Comprehensive Annual Financial Report (CAFR). A copy of the County's CAFR can be obtained by writing to the Los Angeles County Auditor-Controller, 500 West Temple Street, Room 525, Los Angeles, CA 90012-2766.

3. Due to/from Other Funds

Due to or from other funds represent payables owed to or receivable from a particular LACMTA fund for temporary loans, advances, goods delivered, or services rendered. As of June 30, 2018 and 2017, the STA Fund had a net payable to LACMTA's Enterprise Fund for \$6,851 and \$22,554, respectively, for various unpaid operating and capital subsidies.

4. Interfund Transfers

Transfers represent permanent, legally authorized transfers from a fund receiving revenue to the fund through which resources are to be expended. These transfers represent operating and capital subsidies given out from one fund to another fund. For the fiscal years ended June 30, 2018 and 2017, the STA Fund transferred \$49,008 and \$37,528 to LACMTA Enterprise Fund, respectively.

**Los Angeles County
Metropolitan Transportation Authority
State Transit Assistance
Special Revenue Fund**

Notes to Financial Statements
June 30, 2018 and 2017

5. Sales Tax Revenue

Sales tax revenue represents amounts from the allocation of retail sales tax on diesel fuel and gas fuel collected by the California Department of Tax and Fee Administration. For the years ended June 30, 2018 and 2017, the STA Fund received an allocation of \$150,940 and \$74,027, respectively.

6. Payable to Cities and Jurisdictions

As of June 30, 2018 and 2017, the STA Fund had accrued liabilities to various cities and jurisdictions of \$2,655 and \$1,670, respectively. These accrued liabilities represented claims for the current fiscal year allocation that were disbursed by the STA Fund in the following fiscal year.

**Los Angeles County
Metropolitan Transportation Authority
State Transit Assistance
Special Revenue Fund**

Schedule of Revenues, Expenditures, and Changes in Fund Balances – Budget and Actual
(Unaudited)
Fiscal year ended June 30, 2018

	Original Budget	Final Budget	Actual	Variance with Final budget
Revenues:				
Sales tax	\$ 60,000	\$ 60,000	\$ 150,940	\$ 90,940
Investment income	—	—	695	695
Total revenues	60,000	60,000	151,635	91,635
Expenditures:				
Transportation subsidies	3,516	3,516	6,803	(3,287)
Excess of revenues over expenditures	56,484	56,484	144,832	88,348
Other financing sources (uses):				
Transfers out	(42,119)	(42,119)	(49,008)	(6,889)
Net change in fund balances	14,365	14,365	95,824	81,459
Fund balances – beginning of year	9,605	9,605	9,605	—
Fund balances – end of year	\$ 23,970	\$ 23,970	\$ 105,429	\$ 81,459

Los Angeles County
Metropolitan Transportation Authority
State Transit Assistance
Special Revenue Fund
Supplemental Schedule of Allocations (Unaudited)
Fiscal years ended June 30, 2018 and 2017
(Amounts expressed in thousands)

CCR Code	Operating 6730(a)	Capital 6730(b)	Rail 6730(c)	2018 Total	2017 Total
Jurisdiction					
Arcadia	\$ 42	\$ —	\$ —	\$ 42	\$ 22
Claremont	24	—	—	24	14
Commerce	65	—	—	65	30
Culver City	807	—	—	807	415
Foothill Transit	3,606	—	—	3,606	1,842
Gardena	798	—	—	798	410
La Mirada	18	—	—	18	9
Long Beach	3,494	—	—	3,494	1,813
LACMTA	41,885	—	42,205	84,090	51,397
Montebello	1,237	—	—	1,237	653
Norwalk	449	—	—	449	234
Redondo Beach	109	—	—	109	56
Santa Monica	2,989	—	—	2,989	1,547
Torrance	956	—	—	956	500
Antelope Valley	410	—	—	410	—
LADOT	839	—	—	839	—
Santa Clarita	416	—	—	416	—
Foothill –BSCP	183	—	—	183	—
Total STA fund allocations	<u>\$ 58,327</u>	<u>\$ —</u>	<u>\$ 42,205</u>	<u>\$ 100,532</u>	<u>\$ 58,942</u>

:

**Los Angeles County
Metropolitan Transportation Authority
State Transit Assistance
Special Revenue Fund**

**Supplemental Schedule of Expenditures and Transfers (Unaudited)
Fiscal years ended June 30, 2018 and 2017
(Amounts expressed in thousands)**

CCR Code	Jurisdiction	FY2018				FY2017			
		Operating 6730(a)	Capital 6730(b)	Rail 6730(c)	Total	Operating 6730(a)	Capital 6730(b)	Rail 6730(c)	Total
\$	Arcadia	16	\$	—	\$ 16	41	\$	—	\$ 41
	Claremont	3	—	—	3	10	29	—	39
	Commerce	46	—	—	46	56	—	—	56
	Culver City	195	37	—	232	798	—	—	798
	Foothill Transit	1,991	—	—	1,991	3,531	—	—	3,531
	Gardena	441	—	—	441	792	9	—	801
	La Mirada	6	—	—	6	16	—	—	16
	Long Beach	1,930	—	—	1,930	3,490	—	—	3,490
	LACMTA	10,119	—	38,889	49,008	21,732	—	15,796	37,528
	Montebello	299	—	—	299	1,261	—	—	1,261
	Norwalk	369	—	—	369	395	—	—	395
	Redondo Beach	82	—	—	82	54	—	—	54
	Santa Monica	722	—	—	722	2,996	—	—	2,996
	Torrance	666	—	—	666	465	—	—	465
Total STA fund expenditures		16,885	\$ 37	\$ 38,889	\$ 55,811	\$ 35,637	\$ 38	\$ 15,796	\$ 51,471

INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE

The Board of Directors
Los Angeles County Metropolitan Transportation Authority
Los Angeles, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the State Transit Assistance Fund (the STA Fund), a special revenue fund of the Los Angeles County Metropolitan Transportation Authority (LACMTA), which comprise the balance sheet as of June 30, 2018 and 2017, and the related statement of revenues, expenditures, and changes in fund balance for the years then ended, and have issued our report thereon dated December 4, 2018.

In connection with our audit, nothing came to our attention that caused us to believe that LACMTA failed to comply with the terms, covenants, provisions, or conditions of Section 6751 of the California Code of Regulations, insofar as they relate to accounting matters. However, our audit was not directed primarily toward obtaining knowledge of such noncompliance. Accordingly, had we performed additional procedures, other matters may have come to our attention regarding LACMTA's noncompliance with the above-referenced terms, covenants, provisions, or conditions, insofar as they relate to accounting matters.

This report is intended solely for the information and use of management, LACMTA's Board of Directors, others within LACMTA, and regulatory agencies, and is not intended to be and should not be used by anyone other than these specified parties.


Crowe LLP

Los Angeles, California
December 4, 2018



Crowe LLP
Independent Member Crowe Global

Crenshaw Project Corporation

**(A Component Unit of the Los Angeles County
Metropolitan Transportation Authority)**

Financial Statements

For the Year Ended June 30, 2018

Crenshaw Project Corporation
(A Component Unit of the Los Angeles County Metropolitan Transportation Authority)
Financial Statements
For the Fiscal Year Ended June 30, 2018

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INDEPENDENT AUDITOR'S REPORT

To the Board of Directors
Crenshaw Project Corporation
Los Angeles, California

Report on the Financial Statements

We have audited the accompanying financial statements of the Crenshaw Project Corporation (CPC), a blended component unit of the Los Angeles County Metropolitan Transportation Authority, as of and for the year ended June 30, 2018 and the related notes to the financial statements, which collectively comprise the CPC's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the CPC, as of June 30, 2018, and the changes in its financial position and its cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matter

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 5 and 6 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 5, 2018 on our consideration of the CPC's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the CPC's internal control over financial reporting and compliance.

Crowe LLP

Crowe LLP

Los Angeles, California
October 5, 2018



**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING
AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL
STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

To the Board of Directors
Crenshaw Project Corporation
Los Angeles, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Crenshaw Project Corporation (CPC) as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the CPC's basic financial statements, and have issued our report thereon dated October 5, 2018.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the CPC's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the CPC's internal control. Accordingly, we do not express an opinion on the effectiveness of the CPC's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the CPC's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

A handwritten signature in black ink that reads "Crowe LLP". The signature is written in a cursive, flowing style.

Crowe LLP

Los Angeles, California
October 5, 2018

Crenshaw Project Corporation
(A Component Unit of the Los Angeles County Metropolitan Transportation Authority)
Management's Discussion and Analysis (Unaudited)
For the Fiscal Year Ended June 30, 2018

As management of the Crenshaw Project Corporation (CPC), we offer readers of our financial statements this narrative overview and analysis of the financial activities of the CPC for the fiscal year ended June 30, 2018. This discussion and analysis is designed to assist the readers in focusing on the significant financial issues and activities of the CPC.

We encourage the readers to consider the information presented herein in conjunction with the financial statements beginning on page 7. The financial statements, the notes to the financial statements, and this discussion and analysis were prepared by management and are the responsibility of management.

All amounts are expressed in thousands of dollars unless otherwise indicated.

Background

The Crenshaw Project Corporation (CPC) was formed on March 23, 2012 for the sole purpose of participating in financing public transportation projects of the Los Angeles County Metropolitan Transportation Authority (LACMTA).

The CPC currently serves as the conduit borrower as part of a financing agreement with the United States Department of Transportation (USDOT) under its Transportation Infrastructure Finance and Innovation Act (TIFIA) program to partially finance the construction of LACMTA's Crenshaw/LAX Transit Corridor Project (Project).

Financial Highlights

- In September, 2012, the CPC secured a \$545,900 TIFIA loan from the USDOT to partially finance the Project. The loan under the TIFIA program is secured by Measure R sales tax revenues allocated to the Project. As of June 30, 2018, CPC has drawn down the full amount of TIFIA loan proceeds.
- Total assets of \$580,664 represent advances to LACMTA and total liabilities of \$580,664 consist of the principal amount of \$545,900 and interest accretion of \$34,764 on the TIFIA loan. Therefore, there is no net position as of June 30, 2018.
- Total expenses of \$23 consisted mostly of loan fees and other administration charges, which were reimbursed by LACMTA.
- As of June 30, 2018, \$1.8 billion has been expended on the Project, which is recorded in LACMTA's Comprehensive Annual Financial Report (CAFR) under the Capital Assets section of the Statement of Net Position of the Enterprise fund.

Crenshaw Project Corporation
(A Component Unit of the Los Angeles County Metropolitan Transportation Authority)
Management's Discussion and Analysis (Unaudited)
For the Fiscal Year Ended June 30, 2018

Overview of the Basic Financial Statements

This Management's Discussion and Analysis serves as an introduction to the CPC's basic financial statements. The CPC's basic financial statements are: 1) the Statement of Net Position, 2) the Statement of Revenues, Expenses, and Changes in Net Position, 3) the Statement of Cash Flows, and 4) the Notes to the Financial Statements.

The CPC's basic financial statements are prepared on the accrual basis of accounting in accordance with U.S. generally accepted accounting principles as promulgated by the Government Accounting Standards Board (GASB). The CPC is structured as an Enterprise Fund. Revenues are recognized when they are earned and expenses are recognized when they are incurred. See the notes to the financial statements for the summary of the CPC's significant accounting policies.

The Statement of Net Position presents information on all of the CPC's assets and liabilities, with the difference between the two reported as net position. The Statement of Revenues, Expenses, and Changes in Net Position presents the results of the CPC's operations. The Statement of Cash Flows presents the cash flows generated by the CPC to meet its current maturing obligations. The Notes to the Financial Statements provide additional information that is essential to a full understanding of the data provided in the basic financial statements.

Presented below are the condensed Statement of Net Position and condensed Statement of Revenues, Expenses, and Changes in Net Position as of and for the year ended June 30, 2018.

Condensed Statement of Net Position	
Non-current assets	\$ 580,664
Total assets	<u>580,664</u>
 Non-current liabilities	 580,664
Total liabilities	<u>580,664</u>
Net position	<u><u>—</u></u>
Condensed Statement of Revenues, Expenses, and Changes in Net Position	
Revenues	\$ 23
Expenses	23
Net income (loss)	<u>—</u>
Changes in net position	<u>—</u>
Net position - beginning of year	<u>—</u>
Net position - end of year	<u><u>\$ —</u></u>

Crenshaw Project Corporation
(A Component Unit of the Los Angeles Metropolitan Transportation Authority)
Statement of Net Position
June 30, 2018
(Amounts expressed in thousands)

Assets

Non-current assets	
Advances to LACMTA	\$ 580,664
Total Assets	<u>580,664</u>

Liabilities

Non-current liabilities	
Notes payable	580,664
Total Liabilities	<u>580,664</u>

Net Position	<u><u>\$ —</u></u>
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The notes to the financial statements are an integral part of this statement.

Crenshaw Project Corporation
(A Component Unit of the Los Angeles County Metropolitan Transportation Authority)
Statement of Revenues, Expenses, and Changes in Net Position
For the Fiscal Year Ended June 30, 2018
(Amount expressed in thousands)

Operating revenues	
Charges for services	\$ 23
Operating expenses	
Professional, technical and other services	23
	<hr/>
Change in net position	—
Net position - beginning of year	—
	<hr/>
Net position - end of year	\$ —
	<hr/> <hr/>

The notes to the financial statements are an integral part of this statement.

Crenshaw Project Corporation
(A Component Unit of the Los Angeles County Metropolitan Transportation Authority)
Statement of Cash Flows
For Fiscal Year Ended June 30, 2018
(Amounts expressed in thousands)

Cash flows from operating activities	
Receipts from LACMTA	\$ 23
Payments to vendors	(23)
Net cash flows from operating activities	<u>—</u>
Net increase (decrease) in cash and cash equivalents	—
Cash and cash equivalents - beginning of year	—
Cash and cash equivalents - end of year	<u>\$ —</u>
Non-cash financing activity	
Interest accretion on notes payable	\$ 13,895

The notes to the financial statements are an integral part of this statement.

Crenshaw Project Corporation
(A Component Unit of the Los Angeles County Metropolitan Transportation Authority)
Notes to the Financial Statements
June 30, 2018

The notes to the financial statements are a summary of significant accounting policies and other disclosures considered necessary for a clear understanding of the accompanying basic financial statements.

Unless otherwise stated, all dollar amounts are expressed in thousands.

Note 1 - Summary of Significant Accounting Policies

Reporting Entity

The Crenshaw Project Corporation (CPC) was formed for the specific purpose of securing a loan from United States Department of Transportation (USDOT) under the Transportation Infrastructure Finance and Innovation Act (TIFIA) program for the construction of LACMTA's Crenshaw/LAX Transit Corridor Project (Project). The Project has an approved life-of-project (LOP) budget of \$2.05 billion that covers the design and construction of a new 8.5-mile double-track Light Rail Transit (LRT) line, including eight transit stations, procurement of a minimum of 20 light rail vehicles, and the construction of a full service maintenance facility known as the "Southwestern Yard". The Project will extend from the EXPO Line (at the intersection of Exposition and Crenshaw Boulevards) and the Metro Green Line near the existing Aviation/LAX Station. The expected revenue operation for this Project is October 2019.

The CPC is governed by a Board of Directors (CPC Board) consisting of the same members of the Board of Directors of LACMTA (Metro Board). The Chair, First-Chair and Second-Chair of the Metro Board shall have the corresponding positions on the CPC Board. The Board members may serve only as long as they are members of the Metro Board. Each Director shall serve a term commensurate with his or her term on the Metro Board. The CPC is a blended component unit of LACMTA because it is financially dependent upon LACMTA, and LACMTA's approval is needed for the CPC to expend its budgets or charges and issue long-term debt. Although the CPC is a legally separate entity, it is in-substance part of LACMTA's operations, and therefore the data from the CPC is included in LACMTA's financial data. These financial statements present only the CPC and do not purport to, and do not, present fairly the financial position of LACMTA, as of June 30, 2018, or the changes in the financial position for the year then ended.

Fund Accounting

The proprietary fund type is used to account for ongoing operations and activities similar to those found in the private sector, where the determination of net income is necessary or useful for sound financial administration. The CPC uses the proprietary fund type to account for the goods and services provided to LACMTA on a cost reimbursement basis. Proprietary funds distinguish operating revenues and expenses from non-operating items. Operating revenues include reimbursements from LACMTA for operating expenses. Operating expenses include professional services and administrative expenses. The CPC applies all applicable Government Accounting Standard Board (GASB) pronouncements in accounting and reporting for its

Crenshaw Project Corporation
(A Component Unit of the Los Angeles County Metropolitan Transportation Authority)
Notes to the Financial Statements
June 30, 2018

proprietary operations. Revenues are recorded when earned and expenses are recorded when incurred, regardless of the timing of related cash flows.

Cash and Cash Equivalents

For purposes of the statement of cash flows, all highly liquid investments, including restricted assets with an original maturity date of 90 days or less, are considered to be cash and cash equivalents. Otherwise, they are considered to be investments.

Receivables and Payables

Interagency receivables/payables are amounts owed to/due from other LACMTA funds for services performed. Payables are amounts due to vendors for goods or services received.

Note 2 - Advances to LACMTA

Advances to LACMTA consist of cash advances to partially finance the construction of the Project. As of June 30, 2018, the outstanding balance of advances to LACMTA totaled \$580,664.

Note 3 - Notes Payable

In September, 2012, the CPC secured a loan not to exceed \$545,900 from the USDOT under the TIFIA program to partially finance the construction of the Project. The loan, secured by a portion of LACMTA's Measure R sales tax revenues allocated to the Project, bears interest at 2.43% per annum on the outstanding balance with maturity date of June 1, 2034. On each June 1 and December 1, interest accrued in the six-month period ending on such date is capitalized and added to the outstanding balance of the TIFIA loan. The principal amount is payable in annual installments on June 1 of each year commencing on June 1, 2021, while the interest payments are payable semi-annually on June 1 and December 1 of each year commencing on December 1, 2020. As of June 30, 2018, the outstanding balance of the TIFIA loan, including \$34,764 in interest accretion, was \$580,664.

Crenshaw Project Corporation
(A Component Unit of the Los Angeles County Metropolitan Transportation Authority)
Notes to the Financial Statements
June 30, 2018

The CPC's annual debt service requirements (including future interest accretion to principal) are as follows:

Year Ending June 30	Principal	Interest	Total
2019	\$ (13,010)	\$ 13,010	\$ —
2020	(14,534)	14,534	—
2021	(59)	14,759	14,700
2022	8,619	14,781	23,400
2023	8,829	14,571	23,400
2024-2028	156,383	67,217	223,600
2029-2033	348,642	37,658	386,300
2034	85,794	2,085	87,879
	<u>\$ 580,664</u>	<u>\$ 178,615</u>	<u>\$ 759,279</u>

The annual debt service requirements were calculated based on allocation of loan payments from the principal amount of \$545,900.



SERVICE AUTHORITY FOR FREEWAY EMERGENCIES
(A Component Unit of the
Los Angeles County Metropolitan Transportation Authority)
Financial Statements
June 30, 2018

SERVICE AUTHORITY FOR FREEWAY EMERGENCIES

(A Component Unit of the
Los Angeles County Metropolitan Transportation Authority)

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INDEPENDENT AUDITOR'S REPORT

The Board of Directors
Los Angeles County Metropolitan Transportation Authority
Los Angeles, California

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities and the special revenue fund of the Service Authority for Freeway Emergencies (SAFE), a component unit of the Los Angeles County Metropolitan Transportation Authority (LACMTA), as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprises SAFE's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of SAFE as of June 30, 2018, and the changes in financial position thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 4 to the basic financial statements, the governmental activities beginning net position and the special revenue fund beginning fund balance as of July 1, 2017 have been restated to correct a misstatement. Our opinions are not modified with respect to this matter.

Other Matters

Required Supplementary Information

Management has omitted management's discussion and analysis that accounting principles generally accepted in the United States of America require to be presented to supplement the basic financial statements. Such missing information, although not a part of the basic financial statements, is required by Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. Our opinions on the basic financial statements are not affected by this missing information.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise SAFE's basic financial statements. The budgetary comparison information is presented for purposes of additional analysis and are not a required part of the basic financial statements.

The budgetary comparison information, as listed in the table of contents, is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. This information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 20, 2018 on our consideration of SAFE's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the SAFE's internal control over financial reporting and compliance.


Crowe LLP

Los Angeles, California
December 20, 2018

SERVICE AUTHORITY FOR FREEWAY EMERGENCIES

(A Component Unit of the

Los Angeles County Metropolitan Transportation Authority)

Statement of Net Position

June 30, 2018

(Amounts expressed in thousands)

	<u>Governmental Activities</u>
Assets:	
Cash and cash equivalents	\$ 12,836
Investments	10,492
Intergovernmental receivable	698
Interest receivable	63
Total assets	<u>24,089</u>
Liabilities:	
Accounts payable and accrued expenses	<u>513</u>
Total liabilities	<u>513</u>
Net position:	
Restricted for motorist aid system projects	<u>23,576</u>
Total net position	<u><u>\$ 23,576</u></u>

See accompanying notes to the basic financial statements.

SERVICE AUTHORITY FOR FREEWAY EMERGENCIES

(A Component Unit of the
Los Angeles County Metropolitan Transportation Authority)

Statement of Activities
For year ended June 30, 2018
(Amounts expressed in thousands)

	<u>Governmental Activities</u>
Program expenses, net of revenues:	
Transit operations:	
Congestion relief operations	\$ 4,687
Subsidies to LACMTA	500
Total program expenses	<u>5,187</u>
General revenues:	
License fees	8,223
Investment income	208
Total general revenues	<u>8,431</u>
Change in net position	3,244
Net position – beginning of year	18,874
Prior period adjustment (Note 4)	1,458
Net position – beginning of year, as restated	<u>20,332</u>
Net position – end of year	<u><u>\$ 23,576</u></u>

See accompanying notes to the basic financial statements.

SERVICE AUTHORITY FOR FREEWAY EMERGENCIES

(A Component Unit of the
Los Angeles County Metropolitan Transportation Authority)

Balance Sheet

June 30, 2018

(Amounts expressed in thousands)

	Special Revenue Fund
Assets:	
Cash and cash equivalents	\$ 12,836
Investments	10,492
Intergovernmental receivable	698
Interest receivable	63
Total assets	<u>\$ 24,089</u>
Liabilities:	
Accounts payable	<u>513</u>
Fund balance:	
Restricted for motorist aid system projects	<u>23,576</u>
Total liabilities and fund balance	<u>\$ 24,089</u>

See accompanying notes to the basic financial statements.

SERVICE AUTHORITY FOR FREEWAY EMERGENCIES
(A Component Unit of the
Los Angeles County Metropolitan Transportation Authority)
Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Fiscal year ended June 30, 2018
(Amounts expressed in thousands)

	Special Revenue Fund
Revenues:	
License fees	\$ 8,223
Investment income	208
Total revenues	<u>8,431</u>
Expenditures:	
Administration and other transportation projects	4,687
Subsidies to LACMTA	500
Total expenditures	<u>5,187</u>
Net change in fund balance	3,244
Fund balance – beginning of year	18,874
Prior period adjustment (Note 4)	1,458
Fund balance – beginning of year, as restated	<u>20,332</u>
Fund balance – end of year	<u><u>\$ 23,576</u></u>

See accompanying notes to the basic financial statements.

SERVICE AUTHORITY FOR FREEWAY EMERGENCIES

(A Component Unit of the
Los Angeles County Metropolitan Transportation Authority)
Notes to the Basic Financial Statements
June 30, 2018

The notes to the basic financial statements are a summary of significant accounting policies and other disclosures considered necessary for a clear understanding of the accompanying basic financial statements.

Unless otherwise indicated, all dollar amounts are expressed in thousands.

(1) Summary of Significant Accounting Policies

(a) *Reporting Entity*

The Service Authority for Freeway Emergencies (SAFE) was created in February 1988 pursuant to California Streets and Highway Code Section 2550 et seq., and is responsible for the operation, maintenance, and administration of the Los Angeles County Kenneth Hahn Call Box system. Under the authority of the above section, the Los Angeles County Metropolitan Transportation Authority (LACMTA) is the designated SAFE for Los Angeles County.

As LACMTA's board is SAFE's board, SAFE is a component unit of LACMTA and is included in LACMTA's financial statements as a blended component unit.

(b) *Operations*

SAFE is responsible for the implementation, maintenance, operation, and administration of motorist aid on the network of freeways, highways, and unincorporated county roads within Los Angeles County. SAFE operates and maintains approximately 625 (not in thousands) call boxes along 436 (not in thousands) miles of freeways, state highways, and selected county roads in Los Angeles County. SAFE also funds, operates, and manages the Southern California 511 traveler information system. This system provides real-time and planned traffic, transit and other related traveler information to the public via the phone, web and mobile application.

(c) *Government-wide Financial Statements*

SAFE's financial statements, prepared in accordance with Governmental Accounting Standards Board (GASB) Statement No. 34, *Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments*, consist of government-wide statements, including a statement of net position, statement of activities, and fund financial statements, which provide a more detailed level of financial information.

SERVICE AUTHORITY FOR FREEWAY EMERGENCIES

(A Component Unit of the
Los Angeles County Metropolitan Transportation Authority)
Notes to the Basic Financial Statements
June 30, 2018

The government-wide financial statements report information on all of the non-fiduciary activities of the agency and are reported using the economic resources measurement focus and the accrual basis of accounting.

The statement of activities demonstrates the degree to which the direct expenses, including centralized expenses of a given function or segment, are offset by program revenues. Direct expenses are those that are clearly identifiable with a specific function or segment. License fees and investment earnings not considered program revenues are reported as general revenues.

(d) ***Fund Accounting***

SAFE utilizes fund accounting to report its financial position and the results of its operations. Fund accounting is designed to demonstrate legal compliance and to aid financial management by segregating transactions related to certain governmental functions or activities. A fund is a separate accounting entity with a self-balancing set of accounts. Funds are classified into three categories: governmental, proprietary, and fiduciary.

Governmental funds are used to account for SAFE's activities. The governmental fund financial statements are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Additionally, the SAFE fund is considered a special revenue governmental fund. Special revenue funds are used to account for specific revenue sources that are legally restricted to specific purposes. Revenues are recognized as soon as they are both measurable and available. Revenues are considered to be available when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, SAFE considers revenues to be available if they are collected within 90 days of the end of the current fiscal period. Expenditures generally are recorded when a liability is incurred and a valid claim is presented.

(e) ***Fund Balance and Net Position***

Restricted fund balance and net position include amounts that can be spent only for specific purposes stipulated by enabling legislation, by grants, creditors, or by regulations of other governments. SAFE's fund balance and net position were classified as restricted as they can only be used in accordance with the provisions of the California Streets and Highway Code Section 2550 et seq by which the fund was created.

SERVICE AUTHORITY FOR FREEWAY EMERGENCIES

(A Component Unit of the
Los Angeles County Metropolitan Transportation Authority)
Notes to the Basic Financial Statements
June 30, 2018

(f) ***Budgetary Accounting***

Enabling legislation and adopted policies and procedures provide that the SAFE Board of Directors approve an annual budget. The Board of Directors conducts a public hearing for discussion of the proposed annual budget prior to adoption of the final budget. Unexpended appropriations lapse at year-end. The legal level of control is at the fund level, and expenses may not exceed total appropriations without board approval. By policy, the board has provided procedures for management to make revisions within operational or project budgets when there is no net dollar impact to total appropriations. The budget is prepared on a generally accepted accounting principles (GAAP) basis.

(g) ***Cash and Investments***

SAFE maintains a minimum balance with the Los Angeles County Treasurer's external investment pool. Balances in excess of \$50 are withdrawn and deposited into the LACMTA internal investment pool. Cash and investments are reported at fair market value which is the quoted market price.

(h) ***Receivables***

Receivables are net of estimated allowances for uncollectible accounts which are determined based on past experience. Receivables include license fees due from the State Department of Motor Vehicles. As of June 30, 2018, SAFE has a receivable for license fees of \$698.

(i) ***Vehicle Registration Fees***

Vehicle registration fees revenue is recognized when earned and is generated by a \$1 (amount not in thousands) per each car registered in Los Angeles County, which is collected by the State Department of Motor Vehicles.

(j) ***Effects of New GASB Pronouncements***

There were no new GASB Pronouncements applicable to SAFE for the year ended June 30, 2018.

SERVICE AUTHORITY FOR FREEWAY EMERGENCIES

(A Component Unit of the
Los Angeles County Metropolitan Transportation Authority)
Notes to the Basic Financial Statements
June 30, 2018

(2) Cash and Investments

The following is a breakdown of SAFE's cash and investments as of June 30, 2018.

LACMTA investment pool	\$	21,870
Los Angeles County investment pool		1,458
Total	\$	<u>23,328</u>

SAFE's cash balances are pooled with other LACMTA funds participating in the investment pool by the LACMTA Treasurer. These funds are subject to withdrawal from the Treasurer's pool upon demand. The LACMTA Board of Directors provides regulatory oversight for the LACMTA pool. Each fund maintains an equity interest in the pool and is presented as cash and investments in the Statement of Net Position. The value of the position in the investment pool is the same as the value of the pool. The investment pool is not rated for purposes of evaluating credit risk as of June 30, 2018. Detailed information regarding the LACMTA's pooled cash and investments can be found in the LACMTA Comprehensive Annual Financial Report (CAFR). A copy of the LACMTA's CAFR can be obtained by submitting a written request to the Accounting Department, One Gateway Plaza, Los Angeles, CA 90012-2952.

SAFE's cash balances are also pooled with other County funds and invested by the Los Angeles County Treasurer. These funds are subject to withdrawal from the Treasurer's pool upon demand. The County Board of Supervisors provides regulatory oversight for the Los Angeles County Investment Pool (LACIP). The value of the position in the investment pool is the same as the value of the pool. The investment pool is not rated for purposes of evaluating credit risk as of June 30, 2018. Detailed information regarding the County's pooled cash and investments can be found in the County of Los Angeles Comprehensive Annual Financial Report (CAFR). A copy of the County's CAFR can be obtained by submitting a written request to the Los Angeles County Auditor-Controller, 500 West Temple Street, Room 525, Los Angeles, CA 90012-2766.

In accordance with GASB Statement No. 40, *Deposit and Risk Disclosure - an Amendment of GASB Statement No. 3*, certain required disclosures regarding investment policies and practices with respect to the risk associated with their concentration of credit risk, custodial credit risk, interest rate risk, and foreign currency risk are discussed in the following paragraphs:

SERVICE AUTHORITY FOR FREEWAY EMERGENCIES

(A Component Unit of the
Los Angeles County Metropolitan Transportation Authority)
Notes to the Basic Financial Statements
June 30, 2018

(a) Concentration of Credit Risk

Concentration of credit risk is the risk associated with a lack of diversification or having too much invested in a few individual shares. SAFE maintains investment policies that establish thresholds for holdings of individual securities. SAFE does not have any holdings meeting or exceeding these threshold levels. As of June 30, 2018, SAFE does not have any investments with more than 5% of the total investments under one issuer except for obligations of the U.S. government or obligations explicitly guaranteed by the U.S. government.

(b) Custodial Credit Risk

SAFE has no known custodial credit risk for deposits as financial institutions are required by the California Government Code to collateralize deposits of public funds by pledging government securities as collateral. Such collateralization of public funds is accomplished by pooling.

(c) Interest Rate Risk

Interest rate risk is the risk that changes in interest rate will adversely affect the fair value of an investment. SAFE measures interest rate risk on its short-term investments using the effective duration method. SAFE maintains policy requiring the average duration of the externally managed short-term investments not to exceed 150% of the benchmark duration and the average duration of the internally managed short-term investments not to exceed three years.

(d) Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair values of the cash deposits or investments. As of June 30, 2018, there is no exposure to currency risk as all SAFE cash deposits and investments are denominated in U.S. dollar currency.

SERVICE AUTHORITY FOR FREEWAY EMERGENCIES

(A Component Unit of the
Los Angeles County Metropolitan Transportation Authority)
Notes to the Basic Financial Statements
June 30, 2018

(3) Significant Commitments

SAFE has entered into a Memorandum of Understanding (MOU) with the Public Transportation Services Corporation (PTSC), a blended component unit of LACMTA, for PTSC to provide cost reimbursable administrative support services to SAFE. The MOU will remain in effect until terminated by either party with a minimum of sixty (60) days written notice.

SAFE had \$580 of outstanding contractual commitments as of June 30, 2018 that had not been claimed or disbursed.

(4) Restatement of Prior Year Financial Statements

Subsequent to the issuance of the June 30, 2017 financial statements, management determined that it had improperly excluded certain transactions related to its June 30, 2017 financial statements.

The 2017 financial statements excluded \$1,458 in License Fees revenues which related to May 2017 and June 2017. Beginning special revenue restricted fund balance and beginning governmental activities restricted net position have been restated to reflect this adjustment.

The effect of restatement is as follows:

Net position / fund balance at July 1, 2017	\$ 18,874
Prior period adjustment	1,458
Net position / fund balance at July 1, 2017, as restated	<u>\$ 20,332</u>

SERVICE AUTHORITY FOR FREEWAY EMERGENCIES

(A Component Unit of the

Los Angeles County Metropolitan Authority)

Schedule of Revenues, Expenditures, and Changes in Fund Balances - Budget and Actual

For the year ended June 30, 2018

(Amounts expressed in thousands)

	Original Budget*	Final Budget*	Actual	Variance with Final Budget
Revenues:				
License fees	\$ 7,500	\$ 7,500	\$ 8,223	\$ 723
Investment income	75	75	208	133
Total revenues	7,575	7,575	8,431	856
Expenditures:				
Administration and other transportation projects	7,935	7,962	4,687	3,275
Subsidies to LACMTA	1,000	1,000	500	500
Total expenditures	8,935	8,962	5,187	3,775
Net change in fund balance	(1,360)	(1,387)	3,244	4,631
Fund balances – beginning of year	18,874	18,874	18,874	—
Prior period adjustment (Note 4)	—	—	1,458	1,458
Fund balances – beginning of year, as restated	18,874	18,874	20,332	1,458
Fund balances – end of year	\$ 17,514	\$ 17,487	\$ 23,576	\$ 6,089

*Budget prepared in accordance with GAAP.

**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING
AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL
STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

The Board of Directors
Los Angeles County Metropolitan Transportation Authority
Los Angeles, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities and the special revenue fund of the Service Authority for Freeway Emergencies (SAFE), a component unit of the Los Angeles County Metropolitan Transportation Authority (LACMTA), as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise SAFE's basic financial statements, and have issued our report thereon dated December 20, 2018. Our report included an emphasis of matter regarding the beginning net position and beginning fund balance as of July 1, 2017 being restated to correct a misstatement. Our opinions are not modified with respect to this matter.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered SAFE's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of SAFE's internal control. Accordingly, we do not express an opinion on the effectiveness of SAFE's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. We did identify a deficiency in internal control, described in the accompanying schedule of findings and responses as item 2018-001, that we consider to be a material weakness.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether SAFE's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

SAFE's Response to Finding

SAFE's response to the finding identified in our audit is described in the accompanying Schedule of Findings and Responses. SAFE's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.


Crowe LLP

Los Angeles, California
December 20, 2018

SERVICE AUTHORITY FOR FREEWAY EMERGENCIES
(A Component Unit of the Los Angeles County Metropolitan Transportation Authority)
Schedule of Findings and Responses
Year ended June 30, 2018

FINDINGS RELATING TO THE FINANCIAL STATEMENTS, WHICH ARE REQUIRED TO BE REPORTED IN ACCORDANCE WITH GAGAS

Finding 2018-001 – Accounting for Revenue in the Proper Period (Material Weakness)

Condition: May 2017 and June 2017 license fee revenue, totaling \$1,458,262, were improperly accounted for as fiscal year 2018 revenue.

Criteria: As per GASB Statement No. 33 par. 16, revenue is to be recognized when the underlying exchange has occurred and the resources are available.

Effect: Prior year revenue and net position were understated and current year revenue was overstated by \$1,458,262. Management corrected this error through a restatement of beginning net position and fund balance.

Cause: Management had not obtained the appropriate supporting documentation to ensure revenue is recorded in the proper period. Warrants, which identify the appropriate period the revenue was earned, are sent directly to the Los Angeles County Treasurer and had not been requested by management. The error was identified in the current year as management began requesting the warrants for the current year receipts.

Recommendation: We recommend that management obtain all relevant documentation for revenue to support the proper application of revenue recognition.

Management's Response: Management has modified their monthly process to include securing the warrants to identify the applicable month the remittances are recorded.

**LOS ANGELES COUNTY METROPOLITAN
TRANSPORTATION AUTHORITY**

**LOW CARBON TRANSIT OPERATIONS PROGRAM
COMPLIANCE REPORT**

Fiscal year ended June 30, 2018



**INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE WITH RULES AND
REGULATIONS OF THE LOW CARBON TRANSIT OPERATIONS PROGRAM (LCTOP) AND
REPORT ON INTERNAL CONTROL OVER COMPLIANCE**

The Board of Directors
Los Angeles County Metropolitan Transportation Authority
Los Angeles, California

Report on Compliance with Low Carbon Transit Operations Program Guidelines

We have audited the Los Angeles County Metropolitan Transportation Authority (LACMTA) compliance with the types of compliance requirements described in the Low Carbon Transit Operations Program (LCTOP) Guidelines adopted by the California Department of Transportation that could have a direct and material effect on LACMTA's compliance with the LCTOP Guidelines for the fiscal year ended June 30, 2018.

Management's Responsibility

Management is responsible for compliance with the requirements of laws, regulations, contracts, and grants applicable to the LCTOP Guidelines.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for LACMTA's LCTOP program based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the LCTOP Guidelines. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on the LCTOP program occurred. An audit includes examining, on a test basis, evidence about LACMTA's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for the LCTOP program. However, our audit does not provide a legal determination of LACMTA's compliance.

Opinion on the LCTOP Guidelines

In our opinion, LACMTA complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on the LCTOP program for the fiscal year ended June 30, 2018.

Report on Internal Control over Compliance

Management of LACMTA is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered LACMTA's internal control over compliance with the types of requirements that could have a direct and material effect on the LCTOP program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance on the LCTOP program and to test and report on internal control over compliance in accordance with the LCTOP program, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of LACMTA's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a LCTOP program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of the LCTOP program will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of the LCTOP program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the LCTOP Guidelines. Accordingly, this report is not suitable for any other purpose.



Crowe LLP

Los Angeles, California
December 19, 2018



Board Report

File #: 2018-0330, **File Type:** Contract

Agenda Number: 12.

FINANCE, BUDGET AND AUDIT COMMITTEE APRIL 17, 2019

SUBJECT: TAP SYSTEM SUPPORT SERVICES

ACTION: APPROVE CONTRACT MODIFICATION

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to execute a modification to Contract No. OP02461010-MAINT, with Cubic Transportation Systems, Inc. ("Cubic"), for TAP System Support Services of all fare collection equipment, in the amount of \$68,220,642 increasing the total contract value from \$295,351,189, to \$363,571,831 and a contract modification extension of five and a half (5.5) years until December 2024.

ISSUE

The current TAP System Support Services contract was approved in 2013 for a period of six (6) years and will expire June 30, 2019.

Staff recommends an extension to maintain continuous support and align the periods of performance with the Board-approved Cubic contract for Mobile App and NextLink services. NextLink allows the integration of third-party programs with the TAP system. Cost for the support services extension has increased due to cost of living increases, Payment Card Industry (PCI) security software updates, real-time communications for upgraded bus fareboxes, security enhancements for Mobile App, Transfer on 2nd Boarding (inter-agency transfers), and internal transfers.

DISCUSSION

The continuation of support services is required to operate and maintain the regional fare collection system to ensure uninterrupted sales, access, and system management of the faregates, TAP Vending Machines (TVM), including TVMs at municipal operator locations, station validators, bus farebox TAP readers, bus mobile validators (BMVs), division and system computers, servers and Metro and Regional TAP partner system software.

Background

The original Contract No. OP02461010 was awarded on March 7, 2002 and the support service contract was renewed by the Board in June 2013 for an additional six (6) years. The current services agreement ensures continuous performance of all TAP equipment data and software including: fare

collection devices, sales units, the central computer system, operational support services, asset management, and back office systems.

TAP has grown significantly over the years. TAP is now accepted on 26 transit agencies including, but not limited to, Culver CityBus, Foothill Transit, Long Beach Transit, Santa Monica Big Blue Bus, and even Angels Flight. TAP can be purchased at over 450 locations throughout Los Angeles County including Los Angeles County Libraries, online at *taptogo.net*, and at 101 rail stations and major bus stops.

In 2018, Metro recorded over 212 million TAP boardings, 133 million on buses and 79 million on the rail system. Bus TAP transactions totaled \$36,677,235 in revenue and TAP Vending Machines (TVM) processed over 23 million transactions resulting in \$98,352,480 in revenue, as well as \$48,707,803 in cash collections, for a total of \$147,060,283. Metro fare revenue accounts for 86% of the annual fare revenue collected from Metro and municipal TAP partners.

Improved and Expanded Scope

This new extension includes 20 additional improvements such as additional key performance indicators (KPI) and assessments, on-site software testing and engineering services, two additional test engineers to assist with software complexity, full responsibility of the database and cooperation with PCI audits as necessary. Details of additional services are provided in Attachment D.

Cubic will also provide 105 bus mobile validators (BMVs) of which 90 will be installed on the bus fleet at Bus Division 13 to support the expanded All-Door Boarding on Metro Rapid Line 720. The City of Glendora has joined TAP and 15 BMVs will be installed on their fleet. Services include back office integration and maintenance.

Cubic Service Agreements

Current Cubic service agreements have different expiry dates as outlined below:

- System Support Services: June 2019
- NextLink Agreement: December 2024

Staff recommends aligning the Support Services Agreement to expire on the furthest expiry date of the NextLink contract in December 2024 to maintain unified support of the entire system.

Disadvantaged Business Enterprise

Cubic made a 5.65% Disadvantaged Business Enterprise (DBE) commitment and has met and exceeded their current commitment with a DBE participation of 7.83%.

DETERMINATION OF SAFETY IMPACT

No adverse safety impacts are anticipated. Increased performance measures within the extended support services contract positively impact safety on the Metro system.

FINANCIAL IMPACT

The funding for this service is included in the proposed FY20 budget in the Revenue Collection Department for contracted maintenance services. Since this is a multi-year contract, the cost center manager and Executive Officer of TAP Operations will be accountable for budgeting funding needs for future years.

The funding source is Proposition C 40%. These funds are eligible for Metro and regional bus and rail operations and capital improvements.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of this recommendation supports Metro Strategic Plan Goal #2 - Deliver outstanding trip experience for all. With a seamless transition in TAP Support Services, Metro can continue its commitment to improve ease of use and travel for all users of the transportation system.

ALTERNATIVES CONSIDERED

The alternative to the proposed TAP System Support Services is to not renew. This is not recommended as the system is highly complex and requires expert maintenance to ensure its operation.

NEXT STEPS

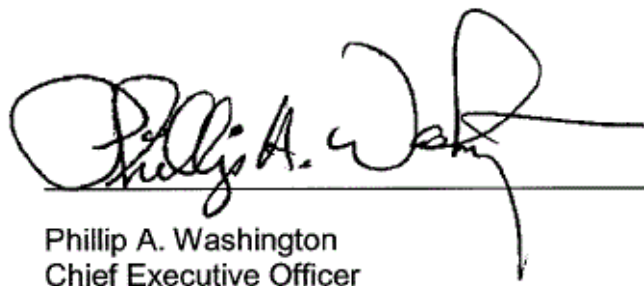
Upon approval by the Board, the CEO or his designee will execute the contract modification to implement the increased performance standards from the TAP System Support Services.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - Contract Modification/Change Order Log
Attachment C - DEOD Summary
Attachment D - TAP System Support Services Agreement
Attachment E - TAP Equipment Maintained Under New Services Agreement

Prepared by: Mauro Arteaga, Senior Director, TAP, (213) 922-2953
David Sutton, Executive Officer, Finance/TAP, (213) 922-5633

Reviewed by: Nalini Ahuja, Chief Financial Officer, (213) 922-3088
Debra Avila, Chief Vendor/Contract Management Officer, (213) 418-3051



Phillip A. Washington
Chief Executive Officer

PROCUREMENT SUMMARY

UNIVERSAL FARE SYSTEM, SUPPORT SERVICES/OP02461010-MAINT

1.	Contract Number: OP02461010-MAINT			
2.	Contractor: Cubic Transportation Systems, Inc.			
3.	Mod. Work Description: Extend Support Services for the Universal Fare System			
4.	Contract Work Description: Universal Fare System			
5.	The following data is current as of: 3/18/19			
6.	Contract Completion Status		Financial Status	
	Contract Awarded:	2/20/2002	Contract Award Amount:	\$84,003,444
	Notice to Proceed (NTP):	3/7/2002	Total of Modifications Approved:	\$211,347,745
	Original Complete Date:	9/1/2007	Pending Modifications (including this action):	\$68,220,642
	Current Est. Complete Date:	12/31/2024	Current Contract Value (with this action):	\$363,571,831
7.	Contract Administrator: Anush Beglaryan		Telephone Number: (213) 418-3047	
8.	Project Manager: Mauro Arteaga		Telephone Number: (213) 922-2953	

A. Procurement Background

This Board Action is to approve Contract Modification No.155 issued to extend the Support Services Contract (OP02461010-Maintenance) through December 2024, in order to maintain continuous support of the Universal Fare Collection System.

This Contract Modification will be processed in accordance with Metro's Acquisition Policy and the contract type is firm fixed price.

On February 20, 2002, Contract No. OP02461010 was awarded by Metro's Board to Cubic Transportation Systems, Inc. (Cubic). The Contract provides a countywide fare collection system and on-going system support to serve Metro's public transit customers. Cubic developed and maintains the NextFare software application and related databases which is the core technology used by Metro to manage the bus and rail equipment and devices that make up the Transit Access Pass (TAP) network. The current System Support Services Contract expires June 30, 2019 and its continuation is critical if Metro is to operate and maintain its integrated fare collection system (sales, access, and system management of the fare gates and Ticket Vending Machines (TVMs)) without interruption.

Please refer to Attachment B – Contract Modification/Change Order Log.

B. Cost/Price Analysis

The recommended price has been determined to be fair and reasonable based upon staff's price analysis, technical evaluations and negotiations.

Proposal Amount	Metro ICE	Negotiated Amount
\$69,989,266	\$66,303,365	\$68,220,642

CONTRACT MODIFICATION/CHANGE ORDER LOG

UNIVERSAL FARE SYSTEM / OP02461010

Mod. No.	Description	Status	Date	Amount
1	Table X-1 Milestone Changes	Approved	8/19/2002	\$0.00
2	Ticket Vending Machine Soft Keys	Approved	9/4/2002	\$0.00
3	San Fernando Valley BRT, Additional Quantities	Approved	4/13/2004	\$7,454,844
4	Modification to General Conditions	Approved	10/8/2002	\$0.00
5	TVM Third Coin Hopper	Approved	8/22/2003	\$416,858
6	Stand Alone Validator Video Clips	Approved	3/3/2003	\$0.00
7	Gold Line Functional Test Waiver	Approved	2/13/2003	\$0.00
8	Languages Supported	Approved	2/13/2004	\$0.00
9	Modifications to Compensation & Payment	Approved	2/20/2003	\$0.00
10	Smart Card to Smart Card Value Transfer	Approved	3/3/2003	\$0.00
11	SCADA Cable Installation on Gold Line	Approved	3/3/2003	\$48,476
12	Gold Line Functional Test Waivers	Approved	4/8/2003	\$0.00
13	Farebox Coin Dejam	Approved	4/8/2003	\$0.00
14	Change in Milestone Schedule	Approved	4/16/2003	\$0.00
15	Time Extension, Gold Line	Approved	7/1/2003	\$0.00
16	Change from Datastream MP5 to Express Metrix	Approved	7/1/2003	\$0.00
17	Final Design Review, changes in CDRLS	Approved	7/18/2003	\$0.00
18	Deletion of Printer from Hand Held Validator	Approved	1/6/2004	-\$35,252
19	Variable Message Sign	Approved	2/19/2004	\$243,828
20	Changes to Compensation and Payment	Approved	4/7/2004	\$0.00
21	PCMCIA Card Slot use for WAN	Approved	4/13/2004	\$0.00
22	Data Transmission System	Approved	6/22/2004	\$675,000
23	Mifare Card Initialization and Verification	Approved	6/8/2004	\$9,629
24	Farebox Mounting Adapter for NABI Buses	Approved	7/9/2004	\$32,485
25	Provide Regional CDCS	Approved	2/25/2005	\$5,348,335
25.01	Regional CDCS Overhead Rate Adjustment	Approved	1/17/2007	-\$31,621
25.02	Regional CDCS Acceptance Test Participants	Approved	8/7/2008	\$0.00
26	Remove Requirement for Focus Groups	Approved	12/20/2004	-\$111,704
27	Farebox Rotation	Approved	1/4/2005	\$74,967
28	Metro Gold Line Eastside Extension, Fare Equipment	Approved	7/25/2006	\$3,808,722

ATTACHMENT B

29	Stainless Steel Panels for TVM Alcoves	Approved	4/25/2005	\$45,521
30	Data Communication Cabling for Orange Line	Approved	6/10/2005	\$41,560
31	(Not Used)			
32	Additional Spare Part Quantities for Eastside Ext.	Approved	7/25/2005	\$15,480
33	Mifare Card Functionality on UFS	Approved	8/15/2005	\$33,105
34	Revisions to Project Schedule	Approved	10/26/2000	\$0.00
35	OCU Mount	Approved	11/15/2005	\$87,634
36	(Not Used)			
37	Deductive Change for Line 1.36	Approved	4/6/2007	-\$33,116
38	Installation of Third TVM and Relocation of Two SAVs and Blue Line Willow Station	Approved	7/6/2006	\$10,084
39	Upgrade the CDCS System from IB SSA Disk Storage Subsystem to Fiber Disk	Approved	10/2/2006	\$20,000
40	UFS Equipment for Expo Line	Approved	2/16/2007	\$5,197,204
41	(Not Used)			
42	(Not Used)			
43	HHV, PMOS and CPOS Interim Maintenance Deductive Change	Approved	2/16/2007	-\$162,628
44	UFS Additional Quantities for Contracted Services	Approved	2/16/2007	\$2,499,916
45	Replace Go-Cards with Mi-Fare Cards	Approved	2/16/2008	-\$1,157,850
46	Relocation of Data Probes and Receive Vaults at Division 7	Approved	4/9/2007	\$29,787
47	Revisions to US Base and Regional Manuals for Release to ACS	Approved	4/23/2007	\$46,000
48	Expo Line, Pico Station Infrastructure	Approved	7/18/2007	\$18,542
49	Relocation of UFS Lab Equipment	Approved	6/2/2008	\$106,905
50	Expo 7 th and Metro Additional Infrastructure	Approved	8/30/2007	\$81,719
50.01	Expo 7 th and Metro Infrastructure Deductive change	Approved	8/30/2007	-\$30,173
51	Handheld Validator Holster	Approved	10/16/2007	\$6,184
52	Installation and Testing of Farebox at Transportation Concepts	Approved	3/6/2008	\$16,091
53	Relocate OCUs on Ford Cutaways and MST Buses at Contracted Services	Approved	5/14/2008	\$79,170
54	Installation of one Farebox and Testing for two Fareboxes at Contracted Services	Approved	5/27/2008	\$18,842
55	UFS Quantity Adjustments	Approved	10/9/2008	\$0.00
56	Contracted Bus Service Equipment Change	Approved	12/3/2008	\$36,704
57	Installation and Acceptance Testing of One Farebox at First Transit	Approved	12/19/2008	\$3,040

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58	Provide UFS Equipment for Expo from Culver City to Venice/Robertson Aerial Station	Approved	3/4/2009	\$304,246
59	Regional CDCS Electrical Power Reconfiguration	Approved	2/9/2009	\$17,186
60	Rail Equipment Warranty and Bus Equipment Warranty	Approved	2/19/2009	\$0.00
61	TAP Enables Turnstile Fare Gates for Rail Stations	Approved	4/9/2009	\$10,000,000
62	Provide UFS Equipment for Expo Truesdale Station	Approved	3/4/2009	\$284,167
63	System Support Services	Approved	6/8/2010	\$33,988,558
63.01	SSS, Additional Costs	Approved	3/22/2013	\$677,631
63.02	SSS, Orange Line Credits	Approved	3/22/2013	-\$58,243
63.03	SSS, One-year Extension	Approved	3/22/2013	\$8,148,263
64	\$5 Dollar Bill handling Unit for Fareboxes and TVMs	Approved	7/27/2009	\$304,658
65	Installation of Additional SAVs for Eastside Extension	Approved	1/4/2010	\$34,077
66	Relocation of Wing Gate at MRL Wilshire/Normandie Station	Approved	2/2/2010	\$18,905
67	(Not Used)	Approved		
68	UFS Equipment for Orange Line Extension	Approved	11/2/2010	\$2,749,476
68.01	Transfer Maintenance Dollars to 63.01	Approved	1/25/2013	-\$677,631
68.02	UFS Equipment for Orange Line Extension, Credits	Approved	3/22/2013	-\$10,982
69	Additional TVM at Aviation Greenline Station	Approved	4/2/2010	\$13,031
70	TAP Card Physical Testing	Approved	4/28/2010	\$41,844
70.01	TAP Card Physical Testing	Approved	3/22/2013	\$12,658
71	Concession Light Functionality	Approved	6/30/2010	\$96,726
72	(Not Used)	Approved		
73	API Test Server Imaging	Approved	9/9/2010	\$45,024
74	Contract Services Relocation	Approved	11/1/2010	\$33,854
75	Limited Function Sales Office Terminals, Increase Quantity	Approved	2/15/2011	\$993,795
76	CISCO ASA Acquisition and Implementation for API Test and Production Servers	Approved	2/28/2011	\$59,209
77	Cubic LU Key Installation	Approved	3/3/2011	\$69,097
78	Updates Farebox Configuration to Support ARUB Wireless Security Data Transfer	Approved	3/3/2011	\$40,204
79	Relocation of UFS Test Lab Equipment	Approved	4/25/2011	\$80,911
80	7 Byte UID Support	Approved	4/20/2011	\$362,069

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81	Fare Gate Fencing Installation Modifications, North Hollywood and Avalon Stations	Approved	4/25/2011	\$24,004
82	Additional TVM at Hollywood/Western Redline Station	Approved	4/25/2011	\$15,531
83	Purchase Drive Control Unit Light Validators DCU-LV	Approved	4/25/2011	\$363,492
84	Install TVMs at Three Metro customer Centers	Approved	6/6/2011	\$386,680
85	Cubic Modification to Gate Software/Locking Commands	Approved	6/29/2011	\$111,188
86	UFS Equipment for Expo Phase I Farmdale Station	Approved	7/26/2011	\$415,184
87	Relocation of TVMs at the Green Line Long Beach Station	Approved	8/25/2011	\$15,909
88	Mobile Validator Non-Recurring Engineering System Development	Approved	10/12/2011	\$611,677
89	Expo Pico Station North Platform TVM/SAV Work	Approved	3/5/2012	\$17,592
90	Deletion of Contract Line Items 1.03, 1.04 & 1.33	Approved	2/15/2012	-\$20,622
91	Orange Line Installation of 12 Metro Provided SAVs	Approved	2/15/2012	\$34,483
92	(Not Used)			
93	(Not Used)			
94	System Support Services, Six Year Extension	Approved	7/1/2013	\$55,000,000
94.01	(Not Used)			
94.02	System Support Services for Expo II and Foothill Extension	Approved	3/2/2015	\$1,152,749
94.03	Maintenance Support Services for 54 TVMs	Approved	4/14/16	\$838,211
95	UFS Equipment Storage Costs	Approved	6/13/2012	\$4,129
96	Faregating, Three Additional Swing Gates	Approved	2/4/2013	\$44,611
97	Green Line Faregating Additional Fire Key Switches at Vermont Station	Approved	4/1/2013	\$8,392
98	Emergency Swing Gate Upgrades	Approved	4/15/2013	\$252,145
99	Removal of TVM from Wilshire/LaBrea Customer Center	Approved	10/8/2013	\$4,883
100	Supplying and Supporting a Turn Key Mobile Validator System	Approved	7/1/2013	\$2,996,113
101	Bus Division Vault Relocation	Approved	8/1/2013	\$995,940
102	Install One TVM at East Portal Customer Service Center and One at Culver City Station	Approved	10/8/2013	\$252,905
103	El Monte Bus Facility TVMs	Approved	10/15/2013	\$474,753

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104	Fare Gate Consoles for Expo 2, Colorado/4 th Street Station	Approved	5/26/2014	\$380,000
105	TVM and SAV Relocations	Approved	12/16/2013	\$1,456,632
106	Modification to Nextfare to Allow For Segregation of Facility Specific Data	Approved	1/29/2014	\$647,869
107	Passback Modification	Approved	2/18/2014	\$70,301
108	UFS PCI Compliance	Approved	10/23/2014	\$9,015,319
109	Service Provider Support	Approved	6/14/2014	\$66,777
110	Autoload Segregation by Muni	Approved	6/30/2014	\$111,707
111	SAV Three Distinct Tones	Approved	8/4/2014	\$46,634
112	Modify TAP Vending Machine to Improve Purchases	Approved	8/4/2014	\$250,000
113	ADA TVM Upgrades for CN No. 162 and 150 Replacement TVMs	Approved	8/5/2014	\$416,815
114 A	UFS Equipment for Gold Line Foothill Extension	Approved	8/25/2014	\$1,878,756
114 B	UFS Equipment for Expo Phase	Approved	8/25/2014	\$3,783,200
115	FBX External Interface Spec Changes	Approved	8/19/2014	\$20,488
116	Willowbrook Station Blue Line SAVs	Approved	11/19/2014	\$62,882
117	TAP-In, TAP-In, Transfer Gate	Approved	11/19/2014	\$88,598
118	Virtual Gate Arrangement of SAVs at Gold Line Union Station Entrance	Approved	11/19/2014	\$84,964
119	Conversion of Expo 1 Aerial Stations to Fare Gates	Approved	3/2/2015	\$3,077,952
120	Change in Service Level Agreement for TVM & GC Network Additions at No Cost	Approved	3/2/2015	\$0
121	Emergency Swing Gate External Alarm Mode	Approved	11/19/2014	\$0
122	Installation of Colorado & 4 th Faregates & ESGs	Approved	3/2/2015	\$163,143
123	OCDC Replacement Equipment Software and Installation	Approved	5/12/2015	\$681,068
124	Expo One Claim No. 1 Settlement	Approved	5/26/2015	\$19,648
125	UFS Global Network, Change for Credit/Debit Processing at TVM	Approved	5/12/2015	\$52,735
126	Metrolink Integration Support	Approved	5/12/2015	\$56,073
127	Metro Network Assistance	Approved	5/12/2015	\$48,758
128	Division 13 Bus Operations TVMs	Approved	5/12/2015	\$99,401
129	Fare Equipment Changes at MRL North Hollywood Station	Approved	5/12/2015	\$577,401
130	Installation of Additional TVM at MRL Civic Center Station North Entrance	Approved	7/15/2015	\$21,593
131	Relocate One TVM From Hawthorne to Hollywood	Approved	9/2/2015	\$31,983
132	Service Provider Support – Deductive Change (Mod 109)	Approved	6/13/2015	-\$66,777

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133	Additional Emergency Swing Gate for Expo 2	Approved	6/3/2015	\$10,970
134	Metrolink Support for LU Encoding	Approved	10/7/2015	\$13,666
135	Emergency Swing Gate Hinge Post Substitution at Expo 2 Bundy Station – No Cost Change	Approved	10/21/2015	\$0
136	Relocation of TVMs at MGL Artesia Station	Pending		\$0
137	(Not Used)			
138	Vertiba Support (Salesforce – CRM)	Approved	8/20/2015	\$9,671
139	Regional Inter Agency Transfer Policy Change	Approved	1/21/2015	\$435,000
139.01	Regional Inter Agency Transfer (IAT) Policy Change	Approved	7/15/16	\$480,000
140	54 TVMs, purchase and install	Approved	4/14/16	\$5,194,834
141	(Not Used)			
142	Network, back office station configuration and IAT support	Approved	4/25/17	\$14,578
143	Reduction in monthly PM services	Approved	5/8/17	(\$404,550)
144	20 BMV Install Kits	Approved	5/8/17	\$10,310
145	Sales, Use, Activate, Initialize and read transactions into Nextfare	Approved	5/25/17	\$0
146	TVM Screen Flow Phase 2	Approved	6/30/17	\$475,000
147	Revisions to Mod 140/CN 185.03 TVM Deployment Scope of Work	Approved	8/28/17	\$0
148	405 BMVs and 480 Install Kits	Approved	11/20/17	\$990,059
149	UFS Equipment for Crenshaw/LAX	Approved	12/1/2017	\$5,920,997
150	CPA Change to Include Terminal ID	Approved	10/18/17	\$45,487
151	UFS Equipment for Regional Connector	Approved	12/1/2017	\$3,316,556
152	TAP System Patching	Approved	4/4/18	\$165,337
153	Network Back Office Configuration	Approved	4/12/18	\$37,222
154	TAP System Wide Upgrades	Approved	6/28/18	\$22,104,750
155	TAP System Support Services	Pending	4/25/19	\$68,220,642
156	Latitude/Longitude to A102 Reports	Approved	6/29/18	\$14,994
157	Willowbrook/Rosa Parks Station Improvements	Approved	10/25/18	\$2,622,560
	Modification Total:			\$211,347,745
	Original Contract:			\$84,003,444
	Total:			\$363,571,831

DEOD SUMMARY

UNIVERSAL FARE SYSTEM / OP02461010

A. Small Business Participation

Cubic Transportation Systems, Inc. made a Disadvantaged Business Enterprise (DBE) participation commitment of 5.65%. The project is 88% complete. Cubic Transportation is exceeding its DBE commitment with a current participation of 7.83%.

Small Business Commitment	DBE 5.65%	Small Business Participation	DBE 7.83%
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	DBE/SBE Subcontractors	Ethnicity	% Committed	Current Participation¹
1.	American Alloy Fabrication	Caucasian Female	0.25%	0.34%
2.	Lows Enterprises	African American	0.13%	0.04%
3.	TechProse	Caucasian Female	0.41%	0.07%
4.	Robnett Electrical	African American	2.53%	6.96%
5.	Priority Manufacturing (GFI)	Caucasian Female	0.93%	0.03%
6.	J-Tec Metal Products	Hispanic American	0.13%	0.03%
7.	KLI, Inc.	Asian Pacific American	0.25%	0.09%
8.	Kormex Metal Craft	Asian Pacific American	1.02%	0.27%
	Total		5.65%	7.83%

¹Current Participation = Total Actual amount Paid-to-Date to DBE firms ÷ Total Actual Amount Paid-to-date to Prime.

B. Living Wage and Service Contract Worker Retention Policy Applicability

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

C. Prevailing Wage Applicability

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

D. Project Labor Agreement/Construction Careers Policy

Project Labor Agreement/Construction Careers Policy is not applicable to this Contract. PLA/CCP is applicable only to construction contracts that have a construction related value in excess of \$2.5 million.

Automatic Fare Collection System



Scope of Work
TAP System Support Services

CONTRACT

15. SYSTEM SUPPORT SERVICES AND WARRANTY PLAN

15.1 Scope of Work

GENERAL STATEMENT

15.1.1 Services

The Contractor shall provide System support services ("System Support Services") and Warranty Plan described herein for all System Components excluding the bus fare box hardware and software, which are serviced and maintained by LACMTA or its agents from July 1st, 2019 to December 31st, 2024. LACMTA expects to provide its customers with the best possible service from its Fare Collection System. LACMTA expects that all of the System Components will be fully functional at all times subject to scheduled maintenance. However, it is understood that there may be times when System Components may be out of service while waiting for Service hereunder. It is LACMTA and the Contractor's intention and the objective of the System Support Services and Warranty Plan program to minimize these times by implementing service level agreements ("SLAs") aimed at keeping the System Components running optimally.

15.1.2 Warranty Plan

Contractor warrants that each System Component as provided under this System Support Services and Warranty Plan shall meet the SLAs indicated in Section 15.7, for the Base Equipment Term for the Base Equipment and for the Gating Term for the fare gates leased under the Master Lease ("Gating Equipment"), and Gating Equipment maintenance after the Master Lease expires ("Warranty"). If these requirements are not met, Contractor shall take immediate corrective action to bring the performance of all System Components into compliance with the SLA requirements of Section 15.7 and the Software KPI requirements in Section 15.7 without additional cost to LACMTA. The Warranty Plan shall include without limitation, all System Components that constitute a part of the System and all labor costs. The Contractor shall be responsible for all Warranty repair costs, including without limitation, the shipping charges to and from the Contractor's repair facilities, and the costs associated with re-installation. The Contractor shall meet as necessary with LACMTA to determine the schedule of repairs. The necessary personnel, tools and materials shall be at the Contractor's sole expense. This Section 15 describes the requirements and operating procedures that the Contractor must follow for all Warranty Work and constitutes the Warranty Plan, superseding Section SP-7 of the Special Provisions and Section 19.10 of the Technical Specification of the Base Contract.

The only warranties made by the Contractor are those expressly provided herein and elsewhere in the Contract. THE WARRANTIES SET FORTH HEREIN AND ELSEWHERE IN THE CONTRACT ARE EXCLUSIVE AND NO OTHER WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, INCLUDING ALL WARRANTIES OF

CONTRACT

MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL WARRANTIES ARISING FROM THE COURSE OF DEALING OR USAGE OF TRADE, SHALL APPLY. THE REMEDIES SET FORTH IN THIS CONTRACT ARE THE SOLE AND EXCLUSIVE REMEDIES OF THE LACMTA FOR ANY CLAIMS, EXPENSES, OR DAMAGE ARISING OUT OF OR RELATED TO PRODUCTS AND SOFTWARE DELIVERED UNDER THIS CONTRACT. IN NO EVENT SHALL THE CONTRACTOR BE LIABLE IN TORT OR IN CONTRACT FOR ANY INCIDENTAL, SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES.

15.2 Management Services

15.2.1 Out of Scope Work

Prior to the performance of any out-of-scope work, the Contractor shall submit to LACMTA, in writing, a Request for Change as provided for under GC-24, Changes.

15.2.2 Fraud and Vandalism

If during the course of the Systems Support Services and Warranty Plan program, any one of the Contractor's staff detects or identifies any vandalism or misuse to the equipment, attempted fraud, or fraudulent actions by the Contractor's staff, LACMTA employees, or any persons, the Contractor shall immediately notify the appropriate LACMTA staff person as directed by LACMTA and call LACMTA's fraud hotline at 1-800-221-1142, as appropriate. If any System Component is involved, the System Component shall be set aside where possible, and wait inspection and/or direction from LACMTA. Contractor shall address compliance with LACMTA's process for reporting vandalism in the Contractor's Operations Plan.

15.2.3 System Support Service Changes

The Contractor shall perform all maintenance and repair at the Contractor's expense until System Components provided under this System Support Services and Warranty Plan successfully pass their respective Installation Acceptance Test criteria.

15.2.4 Operational Plan

The Contractor shall prepare and submit to LACMTA for Acceptance an updated operational service and maintenance plan annually in accordance with this Section 15.2.4 ("Operational Plan"). This Operational Plan shall be submitted a minimum of thirty (30) days after notice to proceed and shall include at a minimum the following:

- Location of the Contractor's facilities and contact information for agency service requests
- The Contractor's staffing approach, including responsibilities of all personnel
- Plan for conducting the maintenance and other services described throughout this

**System Support Services and Warranty Plan for the
LA Metro TAP Automatic Fare Collection System**

CONTRACT

System Support Services and Warranty Plan including specific reference to the service categories: Management Services, Patron and Business Support Services, Central System Services, Operational Support Services, Asset Management Services, Service Level Agreement and Revised Performance and Warranty Requirements, Cybersecurity and Compliance, and Patching.

- The processes and procedures for responding to LACMTA requests for services hereunder
- The processes and procedures for tracking and documenting activities hereunder
- The processes and procedures for controlling System Component and data access and for responding to LACMTA's requests for data processing activities such as personnel access authorization changes, fare table and display screen message modifications, etc.
- Means of tracking and adjusting service levels hereunder to ensure a high level of service is provided.

15.2.5.1 The Operational Plan will detail all applicable tasks procedures and process flow. Upon approval by LACMTA, the Operational Plan shall be maintained as a controlled document.

15.2.6 Standard of Work

All maintenance work at a minimum must conform to industry standards and in addition shall be in accordance with any Contractor or third-party manufacturers' requirements found in applicable operations and maintenance manuals.

15.2.7 LACMTA Supervised Work

If directed by LACMTA the Contractor shall not perform any service activities, or service activities requiring specific procedures, except in the presence of an authorized LACMTA representative.

15.2.8 Access to Facilities

LACMTA shall have the right to observe any maintenance activity conducted by the Contractor, including work taking place at the Contractor's facility. Staff designated by LACMTA's Project Manager shall have unrestricted access to this facility at all times.

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15.2.9 Services and Warranty Plan

The Services and Warranty Plan described in this document shall address the following purchased and/or installed systems or equipment components as of July 1st, 2019:

Device or System	Equipment Quantity*
RCDCS (Regional)	1
CDCS (LACMTA)	1
TVM	495
SAV	305
GATE	467
ESG	154
AFC communications network	1
SOT	50 FFSOT & 1,155 LFSOT
Garage Computer systems (GCs)	17
Bus Mobile Validator (BMV)	515
Special Event Bus Mobile Validator (SEBMV)	20

Station	TVM	SAV	RVG	ECX	SAG	ESG
7th and Metro	16	20	16	5	3	8
Civic Center	6	0	6	2	1	3
Hollywood/Highland	7	0	6	1	1	2
Hollywood/Vine	5	0	5	1	1	2
Hollywood/Western	3	0	5	1	1	2
N. Hollywood	10	0	11	2	2	4
Pershing Square	6	0	11	2	1	6
Union Station	10	0	19	4	2	7
Universal City	5	0	6	1	1	2
Vermont/Beverly	4	0	4	1	1	2
Vermont/Santa Monica	4	0	6	2	2	4
Vermont/Sunset	4	0	5	2	2	4
Westlake/MacArthur	7	0	9	4	1	4
Wilshire/Normandie	2	0	4	1	1	2
Wilshire/Vermont	4	0	8	2	1	3
Wilshire/Western	3	0	5	2	1	3
Norwalk	6	0	5	2	2	4
Lakewood	4	0	4	4	4	4
Long Beach Blvd	4	0	4	4	4	4
Wilmington / Imperial	7	7	14	9	4	10
Avalon	4	0	6	4	2	4
Harbor Freeway	3	0	4	4	2	6
Vermont	4	0	4	4	2	2
Crenshaw	4	0	4	4	2	4
Hawthorne	5	0	4	3	2	3
Aviation	5	0	4	3	1	3
Mariposa	4	0	5	2	1	3
El Segundo	5	0	4	3	2	3
Douglas	4	0	4	2	1	3

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Station	TVM	SAV	RVG	ECX	SAG	ESG
Marine/Redondo Beach	4	0	4	4	2	4
Soto Station	2	0	4	1	1	1
Mariachi Plaza	2	0	8	2	1	3
Lake Avenue Station	4	0	1	2	1	1
Allen Avenue Station	2	0	1	1	1	1
Sierra Madre Villa Station	4	0	3	1	1	1
Union Station	4	7	0	0	0	0
Chinatown Station	6	7	0	0	0	0
Lincoln Heights/Cypress Park	4	6	0	0	0	0
Heritage Square/Arroyo	4	4	0	0	0	0
Southwest Station	2	2	0	0	0	0
Highland Park	4	5	0	0	0	0
Mission Station	8	7	0	0	0	0
Fillmore Station	2	3	0	0	0	0
Del Mar Station	4	4	0	0	0	0
Memorial Park Station	4	5	0	0	0	0
Little Tokyo Station	4	6	0	0	0	0
Pico/Aliso Station	2	2	0	0	0	0
Indiana Station	4	6	0	0	0	0
Maravilla Station	4	6	0	0	0	0
East LA Civic Center Station	4	6	0	0	0	0
Atlantic Station	4	8	0	0	0	0
Warner Center Transit Hub	2	2	0	0	0	0
De Soto	4	2	0	0	0	0
Pierce College	4	2	0	0	0	0
Tampa	4	2	0	0	0	0
Reseda	4	3	0	0	0	0
Balboa	4	3	0	0	0	0
Woodley	4	2	0	0	0	0
Sepulveda	4	3	0	0	0	0
Van Nuys	4	5	0	0	0	0
Woodman	4	3	0	0	0	0
Valley College	4	2	0	0	0	0
Laurel Canyon	4	3	0	0	0	0
No. Hollywood Transit Center	2	5	0	0	0	0
Willow	3	3	0	0	0	0
Pico	6	12	0	0	0	0
Grand Avenue	5	4	0	0	0	0
San Pedro	2	2	0	0	0	0
Washington	2	2	0	0	0	0
Vernon	3	2	0	0	0	0
Slauson	2	0	2	2	1	2
Florence	3	4	0	0	0	0
Firestone	3	0	3	2	1	2
103rd Street	3	2	0	0	0	0
Compton	4	0	3	1	1	2
Artesia	3	0	3	1	1	1
Del Amo	4	0	3	2	1	2
Wardlow	4	4	0	0	0	0

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Station	TVM	SAV	RVG	ECX	SAG	ESG
Pacific Coast Highway	3	2	0	0	0	0
Anaheim	4	4	0	0	0	0
5th Street	4	4	0	0	0	0
1st Street	4	4	0	0	0	0
Transit Mall	3	4	0	0	0	0
Pacific	4	4	0	0	0	0
23rd Street	4	4	0	0	0	0
Expo / Crenshaw	4	5	0	0	0	0
Farmdale	4	6	0	0	0	0
Jefferson	4	2	0	0	0	0
La Brea	4	0	7	5	4	5
La Cienega	4	4	0	0	0	0
USC/EXPO	4	4	0	0	0	0
Expo / Vermont	8	7	0	0	0	0
Expo / Western	4	4	0	0	0	0
Canoga	7	6	0	0	0	0
Sherman Way	4	2	0	0	0	0
Roscoe	4	3	0	0	0	0
Nordhoff	4	2	0	0	0	0
Chatsworth	2	3	0	0	0	0
4th Floor Lab	4	2	2	1	1	0
Baldwin Hills Customer Service Center	1	0	0	0	0	0
East Portal Customer Service Center	1	0	0	0	0	0
East LA Customer Service Center	1	0	0	0	0	0
Cal State University Northridge	0	2	0	0	0	0
Colorado / 17th	4	4	0	0	0	0
Olympic / 26th	6	12	0	0	0	0
Colorado / 4th	7	0	6	2	2	4
Expo / Bundy	4	0	5	4	4	4
Culver City	5	3	8	4	2	4
National / Palms	2	0	5	1	1	2
Expo / Sepulveda	4	0	5	4	4	4
Expo / Westwood	2	3	0	0	0	0
Arcadia	2	3	0	0	0	0
Alameda	4	4	0	0	0	0
Citrus	2	3	0	0	0	0
Duarte	4	4	0	0	0	0
Irwindale	4	4	0	0	0	0
Monrovia	4	4	0	0	0	0
Harbor Gateway	4	0	0	0	0	0
Rosecrans	2	0	0	0	0	0
Manchester	2	0	0	0	0	0
Slauson	1	0	0	0	0	0
37th Street	1	0	0	0	0	0
Patsaouras Bus Plaza	1	0	0	0	0	0
LAC / USC Medical Center	1	0	0	0	0	0
Cal State LA	1	0	0	0	0	0
El Monte Station	6	0	0	0	0	0
Totals	495	305	265	121	81	154

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The Equipment Quantity does not necessarily reflect the System Components being serviced or warranted at any given time. LACMTA does not pay for Services, maintenance or warranties for System Components until they are installed and accepted by LACMTA in accordance with the technical specifications for each one. Any additional equipment that is additive to the quantities listed above will be subject to the same rates for long term maintenance coverage defined for each device type for each year defined in Table A below. Correspondingly, any equipment that is deductive to the quantities listed above will not affect the long-term maintenance coverage rate defined for each device type for each year for the device type quantities that remain in service.

Table A - Device Maintenance Rates

Pricing is per unit per month by calendar year											
2018 & 2019		2020		2021		2022		2023		2024	
TVM		TVM		TVM		TVM		TVM		TVM	
Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
\$505.69		\$522.12		\$539.09		\$556.61		\$574.70		\$593.38	
GATE		GATE		GATE		GATE		GATE		GATE	
Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
\$144.48		\$149.18		\$154.03		\$159.03		\$164.20		\$169.54	
SAV		SAV		SAV		SAV		SAV		SAV	
Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
\$72.24		\$74.59		\$77.01		\$79.52		\$82.10		\$84.77	
ESG		ESG		ESG		ESG		ESG		ESG	
Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
\$72.24		\$74.59		\$77.01		\$79.52		\$82.10		\$84.77	
BMV		BMV		BMV		BMV		BMV		BMV	
Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
\$7.46		\$7.70		\$7.95		\$8.21		\$8.48		\$8.75	
DCU 4		DCU 4		DCU 4		DCU 4		DCU 4		DCU 4	
Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
\$10.90		\$11.25		\$11.62		\$12.00		\$12.39		\$12.79	

15.2.10 Contractor's Management and Organization

The Contractor's ongoing management responsibilities are:

15.2.10.1 The Contractor shall designate a Senior Corporate Executive to provide general oversight and guidance to the Contractor's Customer Service Director. This Senior Corporate Executive shall provide an executive point for LACMTA to escalate resolution of problems that have not been satisfactorily dealt with at the local office level, and for identifying and correcting performance issues before they become problems.

15.2.10.2 The Contractor shall designate a Customer Service Director who

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shall be located on-site at the local office and shall be responsible for the overall operation of the Services Program relative to personnel, performance and quality of Work. The Contractor's Customer Service Director shall act as the main point of daily contact between the Contractor and LACMTA.

15.2.10.3 The Contractor shall designate additional assistant managers or supervisors as required for proper operation of the System Support Services and Warranties. A designated manager or supervisor shall be available at all times during transit operating hours.

15.2.10.4 Software Engineer Services. The Contractor shall designate a full time Software Engineer that is a specialist in the Nextfare software environment to be based at LACMTA's premises. This software engineer will work full time at the LACMTA offices alongside LACMTA engineers supporting the system for so long as Contractor provides this System Support Services and Warranty Plan under the Contract. The support provided by this person, or as augmented by additional people, shall include daily assessment of the System, support upon delivery of new software or an upgrade that requires testing and acceptance prior to field deployment. The Contractor's software engineer is to work with LACMTA staff during testing in LACMTA's TAP Test lab as outlined in section 15.7.10.

15.2.10.5 The Contractor will conduct monthly Services review meetings with LACMTA staff and submit a monthly Service Review Report that will contain the Contractor's performance for the relevant period, including the reporting of all applicable Service Level Agreements (SLAs), as well as the other items referenced in this System Support Services and Warranty Plan to be included in such monthly report.

15.2.10.6 The Contractor shall submit the Service Review Report within five (5) business days after the end of each calendar month. The Contractor and LACMTA shall hold a Service review meeting ("Service Review Meeting") five (5) business days thereafter. The Contractor shall thereafter submit in accordance with the Contract its invoice for the calendar month that is the subject of such Service Review Report, which is payable within 30 days in accordance with the Contract. LACMTA will review such invoices within 15 days and should LACMTA dispute the amount or completed work related to the invoice, the parties will work together to reasonably resolve any such issues within the following 15 days.

15.2.10.7 The Contractor shall maintain a quality assurance (QA) program including visit and inspection of location and systems where Services work is being performed. The QA Program will include documented corrective action to any non-conformity.

15.2.10.8 The Contractor will inform the LACMTA project manager reasonably in advance of specific resource requirements to facilitate and

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coordinate timely access. The Contractor will cooperate with LACMTA to minimize disruptions to LACMTA's normal business operations.

15.2.11 Education and Background

15.2.11.1 All Contractor technical personnel shall be subject to an intensive training program, conducted by the Contractor at its own facility and at its own expense prior to placement at LACMTA. Training shall be conducted in subjects such as component or module repair, Preventive Maintenance, revenue handling equipment (vault, cashbox, cart, and related System Components as appropriate) maintenance, and Data System operations. At the conclusion of the training, each technical person shall be subject to testing to assure competency in the required task(s).

15.2.11.2 Each technical person shall have, as a minimum, the following background: high school diploma, electronic engineering associate's degree or equivalent military school.

15.2.11.3 Each technician must be able to speak, read and write in the English language and have had courses in AC and DC electrical circuits, reading schematic diagrams, electrical/electronic measurements and electronic repairs. The Contractor shall provide written Certification that the above requirements have been met, and upon request provide supporting documentation.

15.2.12 On-Going Training and Testing

15.2.12.1 If it is necessary to replace employees for any reason during the Term, the new employees shall be subject to the same requirement as established by this article. Performance review and testing shall be conducted by the Contractor to determine the technical staff's level of comprehension and competency. Periodic training and testing of the technical staff shall be conducted by the Contractor to maintain a high level of technical competency. LACMTA shall be provided documentation that the above requirements are being met. Contractor staff that supports this System Support Services and Warranty Plan shall attend all required LACMTA Rail Safety Training meetings/seminars as required by LACMTA.

15.2.12.2 Certification/Training: Contractor shall employ an adequate number of technician(s) and other personnel to support all System Support Services and Warranty Plan activities hereunder and Specifications as mentioned in section 15.2.13 "Staffing Levels". All Contractor System Support Services and Warranty Plan personnel shall be Certified by Contractor (and as may be necessary, by third-party manufacturers) to perform all Remedial Maintenance and Preventive Maintenance tasks hereunder. Contractor, at LACMTA's request, shall provide evidence of certification (i.e., original diplomas, original letters of certification from OEM, etc.) and resumes that detail the experience of each employee who

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shall be utilized in performance of the Contract. System Support Services and Warranty Plan personnel who are not qualified to perform the necessary Work requirements shall not be permitted to work.

15.2.13 Staffing Identification and Reporting

15.2.13.1 Employee Identification Badges: All Contractor System Support Services and Warranty Plan personnel (including employees of Subcontractors) who perform Work at LACMTA locations shall have a picture identification badge, provided by LACMTA. Such personnel must wear their identification badge, in a clearly visible manner, at all times when on LACMTA property. At LACMTA's option, the identification badge shall be the same smart card used for access to System Components. If the identification badges are lost or stolen, the Contractor shall notify LACMTA immediately in writing of such an event. Badges shall be secured by the Contractor, or its subcontractor, upon termination of employment of any employee. These badges shall be promptly returned to LACMTA.

15.2.13.2 Contractor shall submit a comprehensive staffing plan, which shall include field technicians scheduling during system peak hours, Monday thru Friday and special event days. LACMTA will be responsible to provide the special event days, and any changes to such days, to Contractor in sufficient time to submit the staffing plan.

15.2.14 Security

15.2.14 The Contractor shall cooperate fully with LACMTA in establishing a secure repair process that provides the optimal protection against losses of revenue consistent with the provisions of this System Support Services and Warranty Plan.

15.2.14.1 LACMTA shall receive all keys for the System Components from the Contractor and in turn issue such keys as may be required to the Contractor's personnel. The Contractor's personnel shall be responsible for the safeguarding of any and all keys issued for the purpose of System Component and System Warranty maintenance. If a maintenance key is lost by one of the Contractor's staff, the Contractor shall immediately notify LACMTA's Project Manager and the Revenue Operations Service Desk ("ROSD"). Failure by the Contractor or its staff to follow these procedures will be considered by the LACMTA as a serious breach of the Contract. In the event that a specific key is missing for more than eight (8) hours, LACMTA shall review the matter. If LACMTA determines that the combination to that lock has been compromised LACMTA may direct the Contractor to replace all keys/locks (or recode tumblers, if possible) in the System of the same combination with corresponding new combinations. LACMTA will also obtain new keys associated with the new combinations. The Contractor will be responsible for all costs associated with changing the lock combination in addition to the cost of new keys.

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15.2.14.2 LACMTA shall establish procedures for safeguarding of revenues, including tickets with encoded value or rides. The Contractor shall be required to comply, in full, with these procedures. If during the process of repairing or maintaining the System Components it is noted by a Contractor's employee that the System Component contains revenue, the employee shall notify the appropriate LACMTA personnel so that arrangements can be made to remove the revenue prior to completing the repair or maintenance, or to provide a witness during the repair process.

15.2.14.3 It is to be expressly understood that the Contractor's personnel shall not be in contact with cashboxes or vault containers unless under the specific supervision of a designated LACMTA employee.

15.2.14.4 Revenue found in System Components is the property of LACMTA. The Contractor shall cooperate with LACMTA's requirements for accounting for revenue so that it is properly returned or credited to LACMTA.

15.2.14.5 The Contractor shall be responsible for providing secured storage areas for parts, spare units and other security sensitive items, satisfactory to LACMTA.

15.2.14.6 Contractor shall obtain background checks for all Contractor personnel involved in System Support Services and Warranty Plan Work with access to revenue, fare media, spare parts, or Data Systems.

15.2.14.7 The Contractor shall cooperate fully with the proper authorities during investigations or inquiries into problems as may be identified by the Contractor or LACMTA. The Contractor is required to submit all personnel and records to examination by LACMTA or personnel designated by LACMTA, and to allow observation of procedures, inspection and search of facilities and vehicles owned by or provided by the Contractor for purposes of this System Support Services and Warranty Plan. The Contractor's personnel shall be subject to polygraph tests at the request of LACMTA, consistent with applicable State and Federal law.

15.3 Patron and Business Support Services

15.3.1 Patron Support Services

Though Patron support services are primarily the responsibility of LACMTA or a LACMTA contractor, there may be occasions when the Contractor shall be called upon to assist in the resolution of specific issues related to Patron back office support.

In the event that a patron inquiry requires resolution or detailed investigation at the

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Software application or equipment level, the Contractor will provide assistance as requested. Should the Contractor fail to respond to a request generated via a formal LACMTA ticket within five business days with a reasonable solution or plan of action, the Contractor will be levied an assessment of \$500.00 per day beginning the day after LACMTA notifies Contractor it intends to assess and ending once the reasonable response is provided. This request will be processed via the ROSD.

15.3.2 Business Support Services

The Contractor shall be responsible to provide the following services:

- Support to LACMTA fare policy planning analysis.
- Fare change management, consisting of the implementation of three (3) updated fare schedules within a three-year period, starting upon execution of the services extension, as part of the Contract baseline. Additional fare change requests by LACMTA beyond the three (3) allotted for the three (3) year period will be covered by GC-24, CHANGES.
- A total of three (3) non-software modifications to update text and/or parameters within a three (3) year period starting upon execution of the services extension as part of the Contract baseline. Any additional requests by LACMTA beyond the three (3) allotted for the three (3) year period will be covered by GC- 24, Changes.
- If the Base Equipment Term is extended by contract modification, or new System device introduction or muni contractor added, Contractor shall provide one fare table change and one software build for changing controlled text/parameters, including ticket layout changes for each extended year which may be utilized at any time during the extended term. For fare table and software build changes for controlled text/parameter and ticket layout changes greater than the number of years in an extended term during the extended term, Contractor shall submit a cost proposal for each change in accordance with GC-24, CHANGES.
- Assistance with report issues.
- Degraded mode support.
- Assistance to resolve business related issues (settlement, recovery, card stock, card loading).
- Ongoing support as required to deal with day-to-day business-related issues such as reporting, report interpretation, business analysis, and program expansion.

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15.3.3 Software Recommended Changes

The Contractor shall make timely software upgrade recommendations related to emerging technologies and System improvement, including RCDACS/CDCS and NCS applications. The Contractor shall be responsible to provide an upgrade plan, however, LACMTA shall make the determination whether to proceed with a recommended change. The Contractor shall work with LACMTA staff to categorize and prioritize the upgrade process, if adopted. Any decision by LACMTA not to proceed with recommended change shall not impact the Contractor's obligation hereunder. RCDACS/CDCS upgrades included in the System Support Services and Warranty Plan are described in Section 15.4.13.

Should LACMTA request changes to the System outside the scope of Work, the Contractor will advise LACMTA about the feasibility of such change and options for implementation of such changes. Any implementation of such change shall be covered by GC-24, CHANGES.

15.4 Central Systems Services

15.4.1 Central System Computers and Operators

Central Systems is defined as the Regional Central Data Collection System (RCDACS), the LACMTA Central Data Collection System (CDCS) and the Participant NCS Systems as defined in Contractor submittal 8200-62213.C.00 dated August 1, 2006, ("Central Systems") for the following current Affiliated Agencies:

- Antelope Valley Transit Authority
- Culver City Bus
- Foothill Transit
- Gardena Transit
- LA DOT
- Pasadena (BMV)
- Santa Monica (BMV)
- South LA (BMV)
- Redondo Beach (BMV)
- East LA (BMV)
- Long Beach Transit (BMV)
- Montebello Transit
- Norwalk Transit
- Santa Clarita Transit
- Torrance Transit
- Glendale (BMV)
- Burbank (BMV)
- LAWA (BMV)
- Palos Verdes (BMV)
- LA County DPW (BMV)

If any additional Affiliated Agencies, other than those listed in this Section above, elect to become TAP-enabled and therefore require the System Support Services as described in this document, the Contractor may be required to extend such System Support Services to the additional Affiliated Agencies. The Contractor shall be compensated for such System Support Services over and above the amount(s) due under the terms of this System Support Services and Warranty Plan. Payment shall be made as required under GC-24, CHANGES.

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15.4.2 Central System Maintenance

The Contractor shall provide various support functions to the Central Systems installed at LACMTA, including, but not limited to:

- Ensure that established security levels are maintained, including Contractor maintained firewalls and Contractor responsibilities per Attachment (A) Patching Modification 152.00 to the Base Contract, which Modification is extended to cover the term of this System Support Services and Warranty Plan.
- Ensure financial reports and management information is maintained and updated as required by LACMTA.
- Maintain on-line database access to CDCS from all workstations in support of the daily operations.

15.4.3 Database Administration

While LACMTA reserves the right to perform database administration, Contractor shall perform primary database administration responsibilities, with the exception of tape management of the database backups and restore procedures for the backups. Contractor shall troubleshoot database issues, maintain the database configuration and monitor database performance.

15.4.4 Capacity Monitoring and Management

The Contractor shall provide LACMTA with performance monitoring and maintenance services related to the Central System. The Contractor will monitor the system and alert appropriate groups (as designated by LACMTA) in case of any abnormal trend.

The Contractor shall also ensure that services are monitored continuously and will provide ad-hoc or automated, schedule reports to LACMTA.

15.4.5 Recommendations for Hardware Upgrade

The Contractor shall periodically recommend hardware upgrades to best take advantage of emerging technologies, facilitate extensions to the system, or to ensure compatibility with other changes to the Central System or other systems. The Contractor shall be responsible to provide an upgrade plan, however, LACMTA shall make the determination whether to proceed with a recommended change, issue a Change Order if proceeding, and will be responsible to purchase any related hardware and/or software as set forth in the Change Order. The Contractor shall work with LACMTA staff to categorize and prioritize the upgrade process, if adopted.

15.4.6 Perform Hardware Upgrades (Information Technology)

The Contractor shall assist LACMTA with best practices, tips, and techniques for executing each upgrade step, critical success factors for upgrade planning and the latest

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upgrade tools and resources. The Contractor shall assess the compatibility of various software/ hardware combinations and with other existing systems.

15.4.7 Scheduled Maintenance

LACMTA shall support the Contractor during the scheduled maintenance of the Nextfare Central System (NCS) by providing the Contractor the opportunity to troubleshoot and fix issues, apply patches, apply new configurations and release new updates in an orderly fashion.

15.4.8 Table Maintenance

The Contractor shall provide the Table Maintenance Services pertaining to the Central System as described below.

15.4.10.1 Fare Table Maintenance

LACMTA is responsible for modification and testing of the Fare Tables and Fare Table settings, provided that should LACMTA require assistance, Contractor shall assist and/or perform the necessary work. Fare Table Maintenance shall address fare instrument creations/updates, transfer logic, use controls, purchase controls and all modules listed in the Nextfare GUI under "Fare Table Settings". The Contractor will require access to LACMTA's test facility to provide the necessary assistance.

15.4.10.2 Device Table Maintenance

LACMTA is responsible for modification and testing of the Device Table, provided that should LACMTA require assistance, Contractor shall assist and/or perform the necessary work. The Contractor will require access to LACMTA's test facility to provide the necessary assistance.

15.4.10.3 Facility Table Maintenance

The Contractor shall maintain the Facility Tables associated with each LACMTA facility.

15.4.11 Device Status

The Contractor shall monitor error and warning events and conditions. This will include the configuration management of the System Devices (or groups of devices), tables, software versions and data files.

15.4.12 Application Maintenance

The Contractor shall provide the following services as part of Application Support pertaining to the Central System:

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15.4.12.1 Monitor Data Latency

The Contractor shall monitor the data latency coming to the Central System and report operational concerns to LACMTA within 24 hours of any data latency incident.

15.4.12.2 Data Accuracy Monitoring

The Contractor shall monitor data correctness and assist in the reprocessing of transactions that are rejected by the Central System.

15.4.12.3 Application Tuning and Monitoring

The Contractor shall establish the System schedule, based on the needs of the LACMTA departments for reporting.

15.4.12.4 End of Day (EOD) Completion Monitoring

The Contractor shall be responsible to schedule and sequence various processes to ensure they do not interfere with business operations. The Contractor shall also monitor the EOD processes to ensure they are completed, and report the results to LACMTA. In case of problems, the Contractor shall notify LACMTA. If the problem is related to Contractor's Work, the Contractor shall initiate corrections.

15.4.12.5 Suspended Data Monitoring

The Contractor shall monitor suspended data transactions to ensure they are not lost and take steps, if necessary, to reprocess these transactions once system connection is reestablished. The Contractor shall publish a report that will identify the number of suspended transactions to both LACMTA and Regional Hummingbird server, and schedule this report for weekly delivery to LACMTA staff. Suspended transactions that are caused by system issues will be processed within two business days of re-establishment of system connections. Suspended transactions that are caused by human error will be processed within two weeks of the municipal operator or LACMTA correcting the issue (typically forgetting to add a device ID to the system).

15.4.12.6 Recommend Application Changes

The Contractor shall review organizational needs/objectives and providerecommendations to LACMTA to modify or extend the current functionality to address these needs. LACMTA is responsible to authorize the requisite changes and funding for such additional functionality.

15.4.13 RCDCS/CDCS Software Management and Change Control

The Contractor shall implement the RCDCS/CDCS NCS application upgrades within 30 calendar days after a) a major upgrade is available, b) it contains applicable

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functionality, c) it has been tested and d) it has been approved by LACMTA as suitable. Additional upgrade requests by LACMTA beyond functionality included in then-available upgrades will be covered by Section 15.3.3 and GC-24, Changes. At the time of an application upgrade, the Contractor shall provide LACMTA with upgraded APIs, a list of changes, as well as documentation on modifications.

15.4.14 Application Troubleshooting

The Contractor shall troubleshoot and escalate any problems to LACMTA identified during the evaluation. If a problem item pertains to fare tables, reporting system or databases, the Contractor will continue to support until corrections are complete.

15.4.15 Health Check – System Audit

The Contractor will examine the system logs routinely each day. The Contractor shall be responsible for noting the differences in operating time and monitor the trends for any degradation. Any stop and restart of a system process shall be investigated to determine if there is any conflict for a system resource or other timing issues that must be eliminated. Upon determination, a report will be generated and submitted to LACMTA within five business days. The report shall include an explanation and resolution process for any unscheduled stop and restart incidence. Contractor will include in the Operational Plan a procedure for who, how, and how often to inform based on severity of the incident.

15.4.15.1 System Dashboards

The Contractor shall provide system dashboards that monitor the health checks of SolarWinds and AFCMS for the covered System Equipment excluding CPOS and MPOS but including the covered garage computers. LACMTA will have direct network access to these dashboards which will display real time events and status of the health of the System, along with indicators showing system degradation and failure warnings. The System visibility will be at the device level which LACMTA will be able to access and monitor on a daily basis. The Contractor shall schedule quarterly review meetings with LACMTA to discuss status of dashboards and evaluate any required improvements. These meetings will be documented by the Contractor and provided in the monthly Service Review Report including details of all discussed improvements made which will be covered under this System Support Services and Warranty Plan.

15.4.16 Communication Network Performance

The Contractor will provide and maintain connectivity between:

- LACMTA CDCS and all connected AFC devices,
- LACMTA CDCS and RCDSCS,
- Third party retail network and RCDS,
- CGS and on onboard bus devices via RFLAN, and
- RCDSCS and debit/credit network.

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- The Contractor will monitor these connections twenty-four (24) hours a day and will immediately notify LACMTA of any connectivity issues that impact the performance of the network.

15.4.17 Central System Operations

System Operations addresses the operation and management of the Central System. The Contractor shall be responsible for performing all activities required to maintain the Central System Services and Warranty requirements through the duration of this System Support Services and Warranty Plan.

15.4.17.1 CDCS & RCDSCS System Network Maintenance

CDCS and RCDSCS system network maintenance shall include all equipment associated with the CDCS and RCDSCS system network including the communication lines and associated components. Upon learning that a communication line has a problem, the ROSD operator will immediately take the appropriate steps to ensure that the communications are restored within the time requirements as specified in this System Support Services and Warranty Plan.

15.4.17.2 System Monitoring and Tuning

The Central Systems shall be operational 24/7 with no unscheduled downtime. The Contractor shall maintain the system uptime within the SLAs as defined in this System Support Services and Warranty Plan. The Contractor shall specifically be responsible for the following:

- System monitoring,
- Performance tuning and management, and
- Network monitoring and troubleshooting

15.4.17.3 AFC Table and File Download Management

The Contractor shall monitor the download of tables and files. These include fare table updates, delivery of benefits, autoload, hotlists, etc. The Contractor shall perform this monitoring as part of daily system health checks.

15.4.17.4 Job Scheduling

The Contractor will be responsible to oversee the scheduling of various jobs, including end of day processing and autoload/hotlist table delivery to devices. The Contractor shall configure various scheduled jobs and system-wide timing. Contractor is also responsible for monitoring the scheduled jobs as part of overall system monitoring. The Contractor shall send a daily notification of any scheduled job that failed to run.

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15.4.17.5 Backup and Recovery

The basic database administration shall be performed by LACMTA database administrators. Basic database activities performed by LACMTA shall include:

- Backup tapes rotation

The Contractor shall be responsible to perform the following database activities:

- Monitoring table size,
- Monitoring performance of the archiving process,
- Monitoring Oracle log files, and
- Provide a schedule for database backups, migration, and recovery process in the Operational Plan.
- Perform database backups per schedule.
- Complete Data restoration process.
- Complete Data migration.

The Contractor shall include a section in the Operational Plan outlining all backup and recovery process and procedures.

15.4.17.6 Monitor Table and File Download

The Contractor will support LACMTA to monitor the system table sizes (hotlist, autoload, offender, line/route, stopping and employee) as part of the daily health check to make sure the devices in the system receive no more than the load they are designed to handle. If necessary, the Contractor shall recommend applications of filters at the RCDACS/CDCS level to LACMTA for their review to ensure the capacity is not exceeded. The filters will allow only the specified amount of records to be transmitted to the devices.

15.4.18 Reports System Management

Reports system management pertains to the reports provided as part of the System based upon data housed in the Central System.

The Contractor shall provide reporting based upon the CDCS and RCDACS. Reporting will be provided for the Affiliated Agencies listed in Section 15.4.1. The Contractor shall provide the following support with respect to reports:

15.4.18.1 Troubleshoot Problems Within Reports

The Contractor shall troubleshoot and resolve report problems in the event that report setup is not functioning properly. Contractor shall notify LACMTA of report problems and resolutions.

Report issues resulting from factors outside the scope of the Contractor's System Operations responsibilities (such as network connectivity disruption, including those caused by LACMTA and/or its agents, etc.) shall be covered by GC-24, Changes.

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15.4.18.2 Schedule Reports

The Contractor shall support and/or schedule the reports on behalf of LACMTA.

15.4.19 Software Support

Contractor shall provide, license and maintain all covered system software as outlined in Attachment (A) Patching Modification 152.00. LACMTA shall have the right to sublicense such system software pursuant to the terms and conditions as stated in GC-11. Contractor shall maintain for LACMTA's review a complete listing of all System Software and copies of all current licenses, including third party licenses. .

15.4.19.1 The Contract price includes the cost of all software licenses, and maintenance thereof, supplied by the Contractor, including third-party software, to support the following System software and any other System Software for the Term, as summarized below:

Base Hardware	Communications Hardware	Base and Regional Software
<ul style="list-style-type: none">• ASA Firewalls• Cisco Switches• RSA Appliance• Raritan Console Switch• KVM	<ul style="list-style-type: none">• MX2800 MUX• 4500 Switches• CISCO 2960• AS5350 Router• LACMTA Garage Computers• Bus Mobile Validators	<ul style="list-style-type: none">• Hummingbird BIWEB• Hummingbird BIAdmin• Hummingbird BIQuery• MacAfee• Shavlik Patching app• Nextfare• RedHat Linux• SolarwindsVeritas

15.5 Operational Support Services

15.5.1 Telephone Support

Contractor shall provide telephone support for technical-related problems and questions. Telephone support shall be available during normal business hours (Monday through Friday, 8:00 am to 5:00 pm), and evening and weekends on an as-needed basis.

15.5.2 Engineering Support

This service activity provides for ongoing engineering resources to monitor and improve reliability, manage system life cycle and address obsolescence issues.

The Contractor shall provide the following Engineering Support services:

- Manage device software updates/upgrades (develop, test, certify and deliver device software to LACMTA for LACMTA installation).

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- Manage Central System updates/upgrades (develop, test, certify and delivery Central System software to LACMTA for LACMTA installation).
- Provide support with Nextfare Central System (NCS) application issues.
- Support third party software updates and evaluate impacts on the NCS System.
- Support Asset Management and Revenue services with device application or hardware issues.
- Provide telephone support for technical-related problems and questions. Telephone support shall be available during normal business hours, and evening and weekends on an as-needed basis.

15.5.3 Revenue Operations Service Desk (ROSD)

The Contractor shall provide a Revenue Operations Service Desk that operates seven days a week, 24 hours per day. The ROSD operator shall manage all AFC System alarms and handle all calls.

On a day-to-day basis the ROSD is the central point of contact for all technical and business support services. The Contractor currently utilizes the Metrix Service Management Application as the monitoring and workflow tool to track and manage all incoming calls or service work assignments. All calls are logged and assigned work orders. The orders are then assigned, either to an individual resource, or, in the case of asset maintenance calls, to a dispatcher.

In addition, the ROSD shall perform the following duties:

- Real-time monitoring of all System components, data and alarms that are automatically created by the System.
- Determine the priority level of each alarm or data anomaly and proceed appropriately in accordance with the Operational Plan approved by LACMTA.
- Manage repair calls made to the ROSD by LACMTA staff or by automated means. These calls shall be entered into a database log and dispatched to field support staff for action.
- Handle all calls from the field support staff and maintain a database of actions taken.
- Provide analysis of asset maintenance reports including report summaries as well as ad hoc reports and report summaries on system performance as may be requested by LACMTA.
- Track all asset maintenance activities for each Field Service person including repairs, routine and Remedial Maintenance, vandalism, and problems found and repaired by field service personnel.
- Provide reports covering all service support actions, including the individual performance of asset maintenance activities and responsiveness to calls of each Field Service person.
- Provide monthly asset maintenance and Contractor performance reports.
- Handle and/or dispatch any calls as prescribed by LACMTA that pertain to the

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GCS and wireless system.

- Handle and/or dispatch any calls as prescribed by LACMTA that pertain to LACMTA treasury operations and equipment revenue servicing, with the exception of those related to specific fareboxes, which will be handled by LACMTA radio dispatchers and/or LACMTA farebox maintenance staff – except for a service deficiency or failure attributable to Contractor-built software operating on fareboxes referenced here.
- Maintain contact with both Contractor and LACMTA supervisory personnel as directed by LACMTA.
- Coordinate closely with LACMTA rail and bus operations control centers to provide information and respond to requests from operations control personnel relating to operation of the AFC System.
- Securely handle keys and other security related items as directed by LACMTA in emergency, overtime, and normal situations, in accordance with the Operational Plan.

15.6 Asset Management Services

15.6.1 Preventive and Remedial Management Responsibilities

The Contractor shall be responsible for damage, repair or replacement of System Component parts and consumables due to any acts, omissions, misuse including forcing entry via paddle or gate manipulation, damage, vandalism, or other use of the system that exceeds Contractor's or OEM's documented recommended MCBF, or external events not subject to coverage hereunder (such as fire or water damage and/or accident), or wear and tear that is less than \$1000 per incident. Bezel replacement for any and all reasons, including solar-induced damage, is capped at \$10,000 per year in material costs for the term of the System Services and Warranty Plan.

The Contractor is not responsible for damage, repair or replacement of System Component parts and consumables due to any acts, omissions, misuse including forcing entry via paddle or gate manipulation, damage, vandalism, or other use of the system that exceeds Contractor's or OEM's documented recommended MCBF, or external events not subject to coverage hereunder (such as fire or water damage and/or accident), or wear and tear unless such a) is not or are not a direct consequence of a failure to provide Preventive Maintenance and/or Remedial Maintenance and b) cost at least \$1000 per incident. LACMTA shall compensate the Contractor under GC-24, Changes for repairs or replacements in such instances.

15.6.2 Replacement Parts and Consumables

The Contractor shall be responsible for all costs associated with the securing of necessary consumables, hardware and supplies to perform all levels of maintenance and repair to the System to include all System Components. The consumables used, such as greases, solder, flux remover, PCB sealer, solvents, lubricants, cleaners, etc., shall be approved by the System Components manufacturer for their use. The Contractor shall strive to repair or replacement System Components with parts that are identical to those originally specified

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with the installed System Components. If repair/replacement by an identical part is not possible, the repaired/replaced System Component part shall be comparable in both quality and performance to the part originally installed or delivered. Only approved OEM upgrades shall be allowed. No substitute, after-market or nonconforming materials shall be allowed. All materials are subject to inspection and Acceptance by LACMTA's Project Manager.

15.6.2.1 Spare Parts and Inventory Control

The Contractor shall be responsible for providing, storing, controlling and securing all spare parts and consumables required for asset maintenance of the LACMTA system.

Contractor shall be responsible for the security and control of any spare parts inventory provided by LACMTA as well as advising on obsolescence issues that could impact performance of System Components. It is understood that over time, model numbers and versions may change. Any replacement or substitution of listed spare parts must be fully compatible with the System Component it is intended to replace. All materials, spare parts and consumables associated with this System Support Services and Warranty Plan and as supplied by LACMTA shall be the sole property of LACMTA. The Contractor shall be responsible for the proper maintenance of all furnished System Components for the duration of the Support Services Contract and any options. The Contractor shall maintain an auditable inventory of Spare Parts, System Components, consumables and tools necessary for all maintenance hereunder, which shall be readily available if requested by LACMTA.

The Contractor shall maintain an appropriate inventory of spares to meet SLA levels identified in this System Support Services and Warranty Plan at Contractor's cost. On-site Contractor staff will monitor consumption and reorder at Contractor's cost as required, and those spares will be the property of the Contractor.

At the conclusion of the Contract, all spare parts that are not the property of Contractor as described above will be turned over to LACMTA at no additional cost.

15.6.2.2 Serial Numbers

The Contractor shall permanently imprint all fare collection, computer, repair, diagnostic and any other LRUs supplied with serial numbers. The serial number shall be entered into the computer database for purposes of tracking inventory, repair reporting and tracking, and the System Support Services and Warranty Plan. System Components designated by LACMTA shall have a LACMTA inventory number and label applied.

15.6.3 Field Support

The Contractor shall provide sufficient field support so as to meet the requirements as stated herein. Field Support staff will perform all repairs and Remedial Maintenance. Once the maintenance action is performed, the maintenance person will notify the ROSD of the action taken and the time when the System Component was placed back into full

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service. In addition, the maintenance person will record the details of the

maintenance action, which will include maintenance person's name, badge, date, time, station, System Component number, and action taken. This information will be entered into a database for historical records and analysis.

Field Support Staff shall perform the following:

- All preventive maintenance of Fare Gates, Swing Gates, TVMs, SAVs, LACMTA Fourth Floor Lab SOTs, LACMTA Division Garage Computers and network System Components.
- Communicate with the ROSD Operators in administering service calls.
- Remedial Maintenance including bezel replacement due to solar-induced fading, cleaning, fingertip clearing of jams of all the above System Components as required.
- Periodic diagnostic checks between Gating Equipment, Swing Gates, TVMs, SAVs, and the CDCS & RDCS and the Financial Clearing Service.
- Record-keeping of all maintenance work performed and generation of weekly and monthly report.
- Field Support staff will log on to a TVM or other System Component capable of accepting the log-on at the beginning and end of their shift in addition to once every hour during their shift. If over time is needed the maintenance person shall log on at the beginning and end of the over time-period.
- All malfunctioning parts or subassemblies removed from the equipment must be properly tagged by the Field Support Staff prior to being sent to the Shop for re- pair. The tag shall include the Field Support person's name, time and date re- moved, machine number part was removed from, and a description of the defect.
- Field Support Staff will notify the service desk when a maintenance action is completed, whether by phone or over the System.

15.6.4 Repair Shop Operations

15.6.4.1 The Contractor shall staff and operate a shop that will coordinate all mechanical and electronic repairs of all elements of the system. This includes all subassemblies, components, bill and coin cashboxes and cassettes. All repairs will be performed according to the manufacturers' guidelines.

15.6.4.2 Repair Shop Operations will include:

- An area for equipment repair and testing.
- A secure area for storage of supplies, parts, subassemblies, spare equipment, and unit exchange items.
- An additionally secured and restricted area where repairs are made to the bill handling unit assembly, and bill cassettes.
- An additional restricted area for mechanical repairs to security related equipment.
- Maintaining an Auditable inventory control system and current files/databases for spare units, spare parts, maintenance items/tools, and consumables procured by

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LACMTA under this System Support Services and Warranty Plan.

- Furnishing any spare parts in addition to LACMTA inventory, test System Components, and consumables needed for maintenance.

15.6.4.3 Repair Shop Operations will include a Unit Exchange program where components coming from the field and going to the field will be tracked, repaired, and tested. Once repaired in the Shop, the Unit Exchange items will be placed in a holding area to be reissued to the Field Support Staff. The Contractor will also implement a Quality Control area where all Unit Exchange items are tested after repair, to ensure adherence to the Manufacturers' requirements.

15.6.5 Maintenance

15.6.5.1 Personnel and Organization

15.6.5.1.1 The Contractor shall provide all the necessary personnel to operate the System Support Services and Warranty Plan successfully. Personnel shall meet minimum standards outlined herein.

15.6.5.1.2 All Contractor personnel will follow and conform to all LACMTA operating rules and regulations. Contractor shall screen and factory train all participants. The employees shall be professional and experienced personnel in the management and supervision of the program. All personnel shall wear distinctive uniforms for easy identification. All the Contractor's personnel are subject to polygraph testing.

15.6.6 Contractor's On-Site and Support Staff

15.6.6.1 The Contractor shall provide a full complement of technical, clerical, inspection, repair and supervisory personnel to perform all tasks associated with the Work as indicated herein.

15.6.6.2 In addition to the required complement of on-site personnel, the Contractor shall provide the services of competent, professional and experienced staff of computer programmers, who shall provide all of the required programming support in the development of the specialized reports and data gathering requirements, and to respond to and analyze programs relating to the operations of the fare collection System electronics and the Data System installed.

15.6.7 Reporting

15.6.7.1 In addition to the System requirements in this System Support Services and Warranty Plan, the Contractor shall utilize a computer-based system to track the maintenance, inventory and performance of the fare collection System ("Metrix"). This system shall be capable of tracking both Rail and Bus System Components. The computer systems shall be used to log repairs and analyze the

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status of the Support services Program. The system shall be on Contractor's LAN/WAN, and Contractor shall provide reports "as required" to LACMTA's Management.

15.6.7.2 Reports shall include, without limitation:

- Daily 10:00AM morning system status report or "dashboard" including current events or projects impacting the LACMTA system.
- Preventive maintenance schedules for all System Components and modules.
- System Components maintenance performed.
- Projected Preventive maintenance.
- Date installed, System Component or module.
- Date removed, System Component or module.
- Employee identification to work performed.
- System Component history.
- Module history.
- Retired System Components.
- Retired modules.
- System Components, LRUs, or other materials replaced or repaired under warranty.
- Hours, days or cycles of operation by System Component and major module.
- Labor hours, warranty.
- Labor hours, support services program.
- Warranty repair work, System Components.
- Preventive maintenance work performed, by unit, employee, etc.
- Repair maintenance work performed, by unit, employee, etc.
- Problems by type, affected module, quantity, frequency.
- Data System history files.
- Key assignments.
- Personnel assignments, hours and cost.
- Expenditure of parts, warranty - type, quantity, dollar value.
- Expenditures of parts, Preventive maintenance program - type, quantity dollar value.
- Expenditures of parts, repair maintenance program - type, quantity dollar value.
- Comparison between division locations to highlight common or isolated problems.

15.6.7.3 Metrix shall also have the capability of providing database searches and relational analysis as required by LACMTA.

15.6.7.4 All data generated by Metrix shall be the property of LACMTA and shall be made available by the Contractor within twenty-four (24) hours of any request by LACMTA in either hard copy or machine readable form. Data shall be treated by the Contractor as proprietary and confidential to LACMTA and shall

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not be released to any other organization without express written authorization by LACMTA.

15.6.7.5 Appropriate support System Components shall also be provided for all computers.

15.6.7.6 If directed by LACMTA Contractor field personnel shall be required to generate accountancy tickets for transmittal to LACMTA.

15.6.8 Remedial and Preventive Maintenance Services

15.6.8.1 Remedial Maintenance

15.6.8.1.1 Remedial Maintenance shall consist of the unscheduled maintenance of System Components (and any specific assemblies, components, parts or subsystems thereof) performed to return the failed item to full operational status. Remedial Maintenance shall include repairs and maintenance necessary due to wear and tear and damage as the result of normal usage. Such maintenance services shall be considered part of standard maintenance and LACMTA shall incur no additional charge therefore.

15.6.9 Work Authorization

LACMTA shall supply Contractor with a list of the titles of all individuals authorized to request Preventive Maintenance, special maintenance on equipment in service, repair of equipment, or relocation of equipment. Thereafter, LACMTA shall give written notification of any changes to such list. Contractor shall not be required to respond to any requests from personnel not on said list for the above types of Work. Contractor shall, however, respond to any LACMTA employee who is reporting System Components out of service.

15.6.10 Unscheduled Preventive or Remedial Maintenance

If during Remedial Maintenance, it is apparent that a Preventive Maintenance procedure is required to ensure sustained operation of the System Components, the Contractor must complete the required Preventive Maintenance and notify LACMTA of this condition and action. In addition, if during Preventive Maintenance it is apparent that Remedial Maintenance is required, the Contractor must complete the required Remedial Maintenance and notify LACMTA of this condition and action. If field staff finds defects while performing their normal duties, these defects are to be repaired immediately.

15.6.11 Reporting

For each Remedial Maintenance call the Contractor shall complete a Contractor Maintenance/Repair Report in a form as Accepted by LACMTA. Contractor shall provide LACMTA these reports in an Approved database format. All diagnostic reports, either hard

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copy or electronic files (as preferred by LACMTA), obtained from System Components as part of any Remedial Maintenance activity shall be given to LACMTA representative at the time of service.

15.6.12 Return to Service

Contractor shall be responsible to ensure that all Malfunctioning Assemblies, Components or parts removed from System Components are repaired and function

properly when they are returned to service. All Assemblies, Components or parts shall be repaired by a technician Certified by the Contractor and/or the OEM for such repair, and for diagnostics. Replacement parts shall be either new parts or parts equivalent in performance to new parts when used with the System Components. Parts removed from the System Components shall become Contractor's property. The cost of replacement parts (where not covered by warranty) shall be included in the cost of the Maintenance Services, unless specifically otherwise provided herein. It shall be the responsibility of the Contractor to repair all parts and assemblies as expeditiously as possible, so as to adhere to the Contract's Availability and Response Time requirements. All Malfunctioning parts must be properly tagged when removed from the System Components.

15.6.13 Preventive Maintenance

Preventive Maintenance shall consist of regularly scheduled maintenance activities, required to ensure optimal performance of all System Components. Preventive Maintenance tasks, and the intervals at which they are to be performed, shall be submitted for LACMTA review and Acceptance. In no event shall Preventive Maintenance intervals be greater than any Contractor or manufacturer recommendations applicable to the System Components. Preventive Maintenance intervals shall not be changed without the prior Acceptance of LACMTA. Details of the Contractor's Preventive Maintenance practices shall be detailed in the Operational Plan.

15.6.14 Asset Management Services

The objective of the Asset Management service is to minimize system component downtime, asset maintenance costs, spare parts inventory, and consumable costs. An important function is to assure asset life for Gating Equipment, swing gates, TVMs, SAVs and LACMTA Division Garage Computers for the Term of this System Support Services and Warranty Plan. The Contractor shall provide all labor, equipment, materials and consumables to ensure proper asset maintenance and the highest feasible availability for all System Components covered by the Asset Maintenance responsibility. The inventory of LACMTA-owned spares used or consumed in the performance of the Services under this System Support Services and Warranty Plan shall be replenished by the Contractor at the conclusion of the term.

All asset maintenance work must conform to contractual standards and specifications at a minimum and shall comply with any Contractor or third-party manufacturers' requirements

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found in applicable operations and asset maintenance manuals.

At LACMTA's option, and if so directed by LACMTA, the Contractor shall not perform any asset maintenance activities including asset maintenance activities requiring specific procedures, except in the presence of an authorized LACMTA representative.

15.6.15.1 Contractor's Asset Management Responsibilities

- The Contractor must maintain a working business office that is staffed by Supervisory personnel, 5:00 a.m.–5:00 p.m. weekdays (subject to change by LACMTA). During time periods when this office is not staffed or Supervisory personnel are not physically present, there must be an automated message paging service available to pass on service requests to responsible supervisory personnel. During off-hours, Contractor shall assign an On-Call Duty Supervisor who will be available to provide supervision to Contractor field staff.
- The Contractor shall provide all parts (exclusive of LACMTA-owned spares), materials, labor (including adequate staffing levels to handle all asset maintenance demands), testing System Components, tools, vehicles, asset maintenance facilities and all other items required to perform the asset maintenance services to be provided hereunder. The Contractor must maintain a readily available inventory of parts, components and tools necessary for all asset maintenance hereunder.
- The Contractor shall furnish any spare parts in addition to LACMTA inventory, test System Components, and consumables needed for asset maintenance.
- The Contractor shall maintain an auditable inventory control system and current files/databases for spare units, spare parts, asset maintenance items/tools, and consumables procured by LACMTA under this System Support Services and Warranty Plan.
- LACMTA shall have the right to observe any asset maintenance activity conducted by the Contractor, including work taking place at the Contractor's facility. Staff designated by LACMTA's project manager shall have unrestricted access to this facility at all times.
- The Contractor shall staff and operate a shop that will coordinate mechanical and electronic repairs of all elements of the system. This includes subassemblies, components, bill and coin cashboxes and cassettes. All repairs will be performed in accordance with manufacturer's guidelines.
- Field support staff shall travel from station to station using LACMTA rail service as long as their response time can be achieved. If not, the Contractor will provide other means for traveling to each asset maintenance call. Contractor shall utilize a Warranty tracking system, using commercially available software for the acknowledgment of beginning and ending of Warranty dates by product and sub-product.

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- Field support staff shall utilize Contractor provided service vehicles for each asset maintenance call at any and all non-rail equipment locations such as Regional Muni and customer service centers. These vehicles will be marked for security identification and will be reasonably stocked by Contractor with spare parts for proper maintenance of non-rail and rail equipment. LACMTA will allow Contractor's continued use of LACMTA field storage lockers in place as of May 2018.

15.6.15.2 Scope of Services – Asset Maintenance

The equipment types that are subject to Asset Maintenance are as defined in the Table below.

The Contractor shall also be responsible for asset maintenance and service for the garage computer and wireless LAN.

Asset Maintenance shall include the functions shown below.

		LACMTA			Bus Systems	SOT	BMV	DCU 4
	Central Systems	Gating Equipment	TVM	SAV	Wireless LAN and LACMTA Garage Computers			
Level 1 Maintenance (or cleaning)		√	√	√	√			
Level 2 Maintenance	√	√	√	√	√			
Depot		√	√	√	√	√	√	√
Asset Life Cycle Management		√	√	√	√		√	√

15.6.15.3 Level 1 & 2 Maintenance

The Contractor shall be responsible to provide Level 1 and 2 asset maintenance to the equipment. Level 1 and Level 2 asset maintenance is defined as follows:

- Level 1 - Preventive
- Level 2 - Corrective/Remedial.

Dependent on the type of asset maintenance required, Level 1 and/or 2 asset maintenance actions may require removal of parts/equipment from the location for repair at the Contractor's facility.

Field Support staff shall perform the following:

- All Preventive Maintenance of TVMs, Gating Equipment, Swing Gates, SAVs,

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LACMTA Fourth Floor Lab SOTs, and LACMTA Division Garage Computers.

- Communicate with the ROSD operators in administering service calls.
- Remedial asset maintenance, which includes cleaning, fingertip clearing of jams of all the above System Components as required. All such repairs shall be performed by the Contractor in a timely fashion.
- Periodic diagnostic checks between TVMs, Gating Equipment, Swing Gates, SAVs, MPVs, LACMTA Division Garage Computers and the Central System.
- Recordkeeping of all asset maintenance work performed, and generation of weekly and monthly reports.

15.6.15.3.1 Preventive Maintenance (Level 1)

Preventive Maintenance shall be performed on relevant system elements at regular intervals, based on the manufacturer's recommendations, and with sufficient frequency to support the availability targets set forth in this System Support Services and Warranty Plan. In addition, the Contractor shall regularly clean the interiors and exteriors of all units as needed. The Contractor shall specifically provide a Preventive Maintenance schedule for the following system elements:

- Preventive Maintenance tasks, and the intervals at which they are to be performed, shall be submitted for LACMTA review and approval. In no event shall Preventive Maintenance intervals deviate or change from the Contractor's or manufacturer's recommendations applicable to the System Components without the prior approval of LACMTA. Contractor shall be responsible for the determination of Preventive Maintenance interval rates and shall communicate any rate deviation or adjustment to LACMTA prior to performance.

15.6.15.3.2 Preventive Maintenance Schedule

The Contractor shall develop a Preventive Maintenance schedule for all System Components, which shall be included in the Operational Plan.

Performance of Preventive Maintenance shall be coordinated with LACMTA. For example, LACMTA may require that Preventive Maintenance shall only be performed on certain days of the week (including weekends), or restricted from certain days of the month (such as the last three and first two days of the month), or days before or following certain holidays.

In the event that Preventive Maintenance personnel are unable to perform scheduled asset maintenance due to any actions attributable to LACMTA, the Contractor must be afforded a re-schedule opportunity to complete deferred Preventive Maintenance tasks within seventy-two (72) hours of the originally scheduled time.

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15.6.15.3.3 Preventive Maintenance Checklists

Contractor will use mobile devices that track Preventive Maintenance ("Preventive Maintenance" or "PM") as they are performed and will be recorded in a Metrix PM service report. The Metrix PM service reports will be stored in the Contractor's database.

Contractor will maintain a Preventive Maintenance checklist for each device, outlining all Preventive Maintenance work to be performed at each device on a monthly basis. This checklist format will be included in the Operational Plan.

Preventive Maintenance tasks that are not completed as scheduled must be specifically identified on a separate checklist, including an explanation for non-completion of the task.

15.6.15.3.4 Corrective/Remedial Maintenance (Level 2)

Corrective/remedial asset maintenance shall consist of the unscheduled asset maintenance of System Components (and any specific assemblies, components, parts or subsystems thereof), upon notice of failure of such System Components to return the failed item to full operational status. Corrective/Remedial Maintenance shall include repairs and asset maintenance necessary due to wear and tear as the result of normal usage. Such asset maintenance services shall be considered part of standard asset maintenance and LACMTA shall incur no additional charge.

15.6.16 Non-Fair Wear & Tear (NFWT)

In the event of damage to the System Components or portions thereof due to abnormal wear and tear defined here as direct and intentional misuse of the system (such as forcing entry via paddle or gate manipulation), or use of the system that exceeds Contractor's or OEM's documented recommended MCBF or external events not otherwise covered hereunder, Contractor shall provide notification to LACMTA of a NFWT condition and upon receiving approval from LACMTA to proceed, replace or repair the affected portions of the System Component, treating such action as a Remedial Maintenance action, except that the work shall be covered by GC-24, Changes.

NFWT items will be classified as non-chargeable in terms of equipment availability until such time as NFWT item has been replaced or repairs where applicable.

15.6.17 Work Authorization

LACMTA shall supply the Contractor with a list of all individuals (and their titles) authorized to request Preventive Maintenance, special asset maintenance on equipment in service, repair of equipment, or relocation of equipment. Thereafter, LACMTA shall give written notification of any changes to such list. Contractor shall not be required to respond to any requests from persons not on the LACMTA list for the above types of Work. Contractor shall, however, respond to any LACMTA employee who is reporting System Components out of service.

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15.6.18 New Currency

The baseline Contract scope does not encompass the introduction of new or modified currency. All hardware/software modifications necessary due to the introduction of new or modified currency will be covered by GC-24, CHANGES.

15.6.19 Depot Maintenance

Depot maintenance refers to all asset maintenance and Warranty activities that are performed at the Contractor's facility. These activities may be performed on machines, components, etc. and includes all depot maintenance personnel to provide these services, as well as pick-up, repair, testing, delivery and redeployment.

Limited Function Sales Office Terminals (LFSOTs) and BMVs shall be maintained as Depot repair. LACMTA and/or its agents shall notify Contractor of a faulty LFSOT, or MPV/MPE, or BMV and the Contractor shall provide a return material authorization (RMA) number. The LFSOT, BMV shall then be delivered to the Contractor and Contractor shall provide a fully functional LFSOT, BMV in exchange the same day.

The Contractor shall maintain a sufficient inventory of LFSOTs, and BMVs to accommodate typical Corrective/Remedial Maintenance activities. This inventory does not cover maintenance required as a result of accident, vandalism, criminal activity including cybercrime, and/or natural disasters, or damage caused by LACMTA third party agents' actions.

The Depot operations will include:

- An area for equipment repairs and testing.
- A secure area for storage of supplies, parts, subassemblies, spare equipment, and unit exchange items.
- An additionally secured and restricted area where repairs are made to the bill handling unit assembly, and bill cassettes.
- An additional restricted area for mechanical repairs to security related equipment.
- An auditable inventory control system and current files/databases for spare units, spare parts, asset maintenance items/tools, and consumables procured under this System Support Services and Warranty Plan.

Provision of any additional spare parts over and above LACMTA-supplied spare parts inventory, test system components, and consumables needed for asset maintenance and to meet defined SLA levels. Contractor shall be responsible for all shipping charges for replacement System Components, parts and other material.

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15.6.20 Asset Life Cycle Management

Asset life cycle management is intended to ensure the equipment is supportable during the term of Contractor's provision of this System Support Services and Warranty Plan. The Contractor is responsible to manage the asset life cycle applicable to each component of the equipment so designated in this System Support Services and Warranty Plan. The asset life cycle management includes Asset Refresh, the identification and proposed resolution of any component obsolescence issues, and periodic recommendations for the upgrade/replacement of specific components to ensure required performance targets are maintained.

The objective of asset life cycle management is to ensure that failure rates do not increase due to component fatigue or obsolescence during the life of this System Support Services and Warranty Plan. The Contractor will be responsible for asset life cycle management on all System Components.

15.6.21 Principle of Planned Asset Renewals/Overhauls

"Asset Refresh" is the replacement or overhaul of modules that will be carried out in advance of the module displaying an increased failure rate and is provided as part of the Warranty provided by Contractor hereunder. The modules serviced by Asset Refresh shall be TVMs, Gating Equipment, SAVs and LACMTA Garage Computers. The driving factor behind Asset Refresh and overhaul of AFC and associated equipment is to ensure that failure levels do not increase over time. In addition, consideration is given to items that may become "life expired" through obsolescence. A pre-planned schedule will be implemented to maintain the health of the assets to ensure that performance and service level requirements are met. Contractor shall be responsible for all shipping charges for replacement or overhaul of System Components, parts and other material.

In addition to Corrective/Remedial Maintenance, the Contractor will coordinate with LACMTA to recommend any separate overhaul requirements during the Term of the System Support Services and Warranty Plan. If LACMTA opts to not fund/implement a recommended change, the Contractor and LACMTA will mutually agree on revised performance parameters, which shall be reflected in the appropriate SLA categories shown in Section 15.7.

This System Support Services and Warranty Plan includes Asset Refresh provisions relating to LACMTA RCDCS hardware. Details of such refresh are included in Contractor's Asset Refresh plan.

15.6.22 Preliminary Asset Refresh Schedule

The Contractor will submit on an annual basis, the Asset Refresh and Asset Overhaul Plan for the remaining term of this System Support Services and Warranty Plan. The first of such plans shall be delivered within thirty (30) days of execution of this Amendment.

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15.7 Service Level Agreement and Revised Performance and Warranty Requirements

15.7.1 Purpose

This Section defines the Service Level Agreements (SLAs) for the LACMTA System under the Warranty provided by Contractor. In particular, it addresses the following key areas:

- The levels of performance to be achieved for each equipment and system type, and for each Operational Service.
- The methodology to be used for performance measurement.
- The units of measurement of performance.
- The formulation of Service Levels to be applied to Services and Warranty charges according to Contractor's actual performance against the SLAs.

The SLA Service Level structure should create an incentive to achieve superior performance. Reporting calculations and determinations shall occur monthly. In addition to the data and sources listed in each of sections 15.7.2 through 15.7.6 and 15.7.9, LACMTA may utilize and make available to Contractor a variety of data, systems, databases, and network reporting and monitoring mechanisms, inclusive of the Nextfare system, database and network tools, as well as LACMTA, databases and network tools and data sources, to validate Contractor's availability reports. In the event LACMTA determines a lesser availability than the Contractor's reports, LACMTA shall deliver notice of such determination of lesser availability to Contractor and LACMTA's determined availability percentage shall establish such availability for the purposes of calculation of payment. If Contractor disputes the determination of lesser availability Contractor shall have the burden of proof to justify higher percentage availability, with supporting data delivered to LACMTA within thirty (30) days after LACMTA's determination of lesser availability.

The applicable Service Level, if any, will be assessed against the monthly payment due for Services and Warranty in the following calendar months. If the performance of any component falls below Level 1, the payment shall be calculated as the availability percentage times the payment for the lowest acceptable service level.

e.g., If Service Level 1 requires 98% availability, and results in a payment of 80%, then an availability of 90% would result in a payment of 90% x 80%, or 72% of the total. The dollar amount of each level of payment as utilized herein has been agreed to by LACMTA and Contractor for the period from commencement of the Base Equipment Term for the Base Equipment and from January 15, 2010 for the Gating Equipment, as set forth in the LACMTA/Contractor System Support Services Warranty Plan and Gate Maintenance Monthly Payment Forecast, dated January 13, 2010 incorporated herein.

by reference, and as may be modified from time to time through invoice submissions from Contractor to LACMTA once such modifications are accepted and approved in

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writing by LACMTA.

At the end of each contract year, LACMTA and the Contractor may reassess the SLA figures based on actual field data. However, LACMTA shall not retroactively reassess SLA figures or weightings to any previous month in which Contractor has previously provided Warranty and Services as described herein. LACMTA and the Contractor shall mutually discuss and agree on the schedule of any forthcoming SLA figure or weighting reassessment or change.

Contractor shall provide all labor and material to replace, during the period of this Warranty, without additional expense to LACMTA, all System Components that may be damaged due to defects in, or failure of such System Components or of any other System Component furnished under this System Support Services and Warranty Plan. Contractor shall be solely responsible for all materials and workmanship, including all specialties and accessories, whether manufactured by it or others, used in the construction of the System and for adequate installation and connection of all System Components constituting the System. Under no condition shall Contractor delegate this responsibility to Suppliers or other sources without express pre-approval of LACMTA. Contractor shall, at no additional charge, correct any Deficiency in the System or any System Component, including without limitation, defect repair, programming corrections, and remedial programming, and provide such Work required to maintain the System so that it operates properly and in accordance with the System Specifications and these SLAs. Environmental conditions, as defined in the technical specifications for each System Component, shall be considered normal operating conditions for the System and all System Components in the System.

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SLA 1 Central Systems – Function Availability

Function	Required Availability Over Period	Period Svc Chg Apportionment	Level 1 Payment	Level 2 Payment	Level 3 Payment	Level 4 Payment
Reports Available	99.5%	5%	97.50 - 97.99%	98.00 - 98.99%	99.00 - 99.49%	Equal/ Greater than 99.5%
Customer Service Interface	99.5%	5%	97.50 - 97.99%	98.00 - 98.99%	99.00 - 99.49%	Equal/ Greater than 99.5
Credit/Debit Payment Interface	99.5%	20%	97.50 - 97.99%	98.00 - 98.99%	99.00 - 99.49%	Equal/ Greater than 99.5
Transactions Processed	99.5%	20%	97.50 - 97.99%	98.00 - 98.99%	99.00 - 99.49%	Equal/ Greater than 99.5
System Communication Network	99.5%	30%	97.50 - 97.99%	98.00 - 98.99%	99.00 - 99.49%	Equal/ Greater than 99.5
Data Reconciliation Accuracy	99.73%	20%	See Bullet #5 in Section 15.7.2.1			Equal/ Greater than 99.73%

What Is Measured

- **Reports Available:** Ability for LACMTA or operators to access Central System reports.
- **Customer Service Interface:** Ability for the Patron Call Centre representatives to access the NCS GUI in order to support patron enquiries.
- **Credit/Debit Payment Processing:** Ability for patrons to use credit and debit cards at the TVMs, and the Central System to process credit/debit transactions.
- **Transactions Processed:** All transactions transmitted to the Central System are processed and available for reporting or viewing on-line.
- **Data Reconciliation Accuracy:** All data, financial and otherwise throughout the entire System shall reconcile with an accuracy rate of 99.73%. If accuracy falls below this threshold, and the anomaly persists after 72 hours, the availability metric is unmet.

15.7.2.1 How Is It Measured

- **Reports Available:** Reports availability will be determined by monitoring the status of the Hummingbird and Oracle Database server using monitoring software, as well as any reported and verified outages from users to the ROSD. Downtime will be

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calculated from the reported downtime until functionality is restored. This period downtime will be applied to the formula and criteria detailed in Section 15.7.7.

- **Nextfare GUI:** Nextfare GUI availability will be determined by monitoring the status of the GUI URL using system and network monitoring software, as well as any reported and verified outages from users. Downtime will be calculated from the reported downtime until functionality is restored. This period downtime will be applied to the formula and criteria detailed in Section 15.7.7.
- **Credit/Debit Payment Processing:** Credit/Debit Payment Processing availability will be determined by monitoring the status of the Debit Credit Switch URL using system and network monitoring software, as well as any reported and verified system wide outages to the ROSD. Downtime will be calculated from the reported downtime until functionality is restored. This period downtime will be applied to the formula and criteria detailed in Section 15.7.7.
- **Transactions Processed:** The End-of-Day (EOD) process will be monitored to ensure it has completed successfully by the start of business
- **System Communication Network:** The Communication equipment including Switches and Routers will be monitored using network and communication equipment monitoring software and tools. Downtime from the monitoring systems or downtime due to user reports to the ROSD will be applied to the formula detailed in Section 15.7.7 to calculate the period availability. It is assumed that the Contractor will have 24-hour access to LACMTA's or it's agent's facilities where various communication equipment is situated.
- **Data Reconciliation Accuracy:** Data reconciliation accuracy shall be determined by reconciling any or all data elements across any or all reports and device transaction, for all data financial and otherwise. After completion and acceptance of the Contractor SIT, LACMTA will measure the accuracy on a quarterly basis using reports and/or device data and will work with the Contractor to determine if the accuracy requirement is met for that period.

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15.7.3 SLA 2: Operation Support Services

Service	Target periodic Availability Requirement	Period Svc Chg Apportionment	Level 1 Payment	Level 2 Payment	Level 3 Payment	Level 4 Payment
Support Call Centre (ROSD)	100% / 24 Hour Availability	50%	97.50 - 97.99%	98.00 - 99.79%	99.80 - 100%	100%
Call Answer Rate	25 second average	10%	Greater than 45 seconds average	45 -30 seconds average.	29-26 seconds average	Less than or equal to 25 seconds average
Engineering Support	100% / 8am - 6pm weekdays	40%	Less than 80.00%	Less than 90.00%	90 - 99.99%	100%

15.7.3.1 What is measured

- **Support Call Centre:** Percent availability of ROSD 24x7 during each period.
- **Call Answer Rate:** Average length of time it takes for the Support Call Centre representatives to answer the phone during the reporting period.
- **Call Abandoned Rate:** Percent of calls that disconnect without being answered by a Support Call Centre representative.
- **Engineering Support:** Percent availability of engineering support during normal business operating hours.

15.7.3.2 How is it measured

- The IVR system is configured to capture and report on all relevant call data, including the ROSD availability and Call Answer Rate.
- The Service Management System will capture the immediate assignment of Service Calls passed to Engineering Support for resolution.
- Reports used
 - IVR System Reports
 - Metrix Service Management System reports applying the Period Availability report detailed in section 15.7.7

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15.7.4 SLA 3: Asset Management Services – LACMTA Rail Device Availability

Fixed Device	Equipment Quantity ²	Target periodic Availability Requirement	Period Svc Chg Apportionment	Payment Level					
				Level 1 Payment	Level 2 Payment	Level 3 Payment	Level 4 Payment	Level 5 Payment	Level 6 Payment
TVM	496	99.5%	40%	98.50 - 98.99%	99.00- 99.39	99.40- 99.44	99.45- 99.50	99.51- 99.70	Equal/ Greater than 99.71
SAV	305	99.8%	10%	98.50 - 98.99%	99.00- 99.39	99.40- 99.69	99.70- 99.80	99.81- 99.90	Equal/ Greater than 99.91
Gating Equipment	323 aisles	99.7%	50%	98.50 - 98.99%	99.00- 99.39	99.40- 99.59	99.60- 99.70	99.71- 99.80	Equal/ Greater than 99.81

Notes

¹The availability targets for the above equipment groups will remain unchanged should quantities increase.

² Due to the remote location and service hours of the Metro Customer Service Centers, Contractor will only respond to service calls for the three Customer Service Center TVMs between Monday – Saturday, 9:00AM – 6:00PM. All service calls generated or received after 4:00PM will be responded to on the next customer service business day. Contractor's respond and repair time will be no more than four (4) hours for these three TVMs. Due to the unique location and service hours of these devices, the three Customer Service TVMs are not included in this document's Availability agreement or SLA-3 TVM Equipment Quantity count, but shall be maintained by the aforementioned agreement. However, Contractor shall still track and include its monthly performance for the three Customer Service Center TVMs in the Monthly Service Report.

15.7.4.1 What is measured

- **For all devices:** Percentage of time the devices are available during hours of operation.

15.7.4.2 How is it measured

- Metrix has an inherent function to calculate and report on cumulative downtime. This period downtime will be applied to the formula and criteria detailed in section 15.7.7.
- Reports used
 - Metrix availability by device type

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15.7.5 SLA 4: Asset Management Services – Maximum Repair Times

Minimum Requirement per event	LACMTA Rail Equipment	Requirement	Assessment charge per event	Assessment charge for each additional 4-hour period
Max shall not exceed four hours	TVM, SAV, Gate	98%	\$1,000	\$1,500
Max shall not exceed 90 minutes	TVM, SAV, Gate If 50% or more at any station becomes OOS	98%	\$1,000	\$1,500
Max shall not exceed 90 minutes	TVM, SAV, Turnstile During peak service hours (6-9am, 3- 6pm).	98%	\$1,000	\$1,500
Max shall not exceed 90 minutes	ADA Gate	98%	\$1,000	\$1,500

WHAT IS MEASURED

All relevant failures of LACMTA Rail Equipment as determined in the monthly Service Review Meetings in the second column of SLA 4 shall be repaired and the equipment returned to service within the not to exceed period stated in the first column (Minimum Requirement per event) of SLA 4.

- How is it measured**

Metrix has an inherent function to calculate and report on individual response time and repair time.

- Reports used
- Metrix response and repair time per incident

15.7.6 SLA 5: FFSOT Availability/LFSOT, or BMV Exchange

Device or System	Equipment Quantity	Repair Returns	Period Svc Chg Apportionment	Payment Levels					
				Level 1 Payment	Level 2 Payment	Level 3 Payment	Level 4 Payment	Level 5 Payment	Level 6 Payment
FFSOT	50	N/A	20%	98.50 - 98.99%	99.00 - 99.39%	99.40 - 99.59%	99.60 - 99.69%	99.70 - 99.79%	Equal/ Greater than 99.80%
LFSOT or BMV	1220	98%	80%	_____	93.00 – 93.99%	94.00 – 95.99%	96.00 – 98.00%	98.01 – 99.00%	Equal/ Greater than 99.01%

15.7.6.1 What is measured

- Onsite repair of an FFSOT by Contractor: Upon notification to the ROSD

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of a failed FFSOT unit located in Southern California, a Contractor technician shall be dispatched for an onsite repair and the unit shall be returned to service the same day. Availability of the FFSOTs wherever located is measured in accordance with the first line of this SLA 5 chart.

- One-for-one exchange by the drop-off of an LFSOT or BMV by LACMTA or its agent for repair: Upon notification for an RMA exchange to the ROSD, a full functional LFSOT or BMV unit shall be exchanged the same day.

The availability calculation for depot maintenance items (e.g. LFSOT, BMV) shall be the percentage of spare devices exchanged the same day for faulty devices at the ROSD.

15.7.6.2 How is it measured

For FFSOTs:

- Metrix has an inherent function to calculate and report on cumulative downtime. This period downtime will be applied to the formula and criteria detailed in Section 15.7.7.

Reports used:

- Metrix availability by device type

For LFSOT or BMVs:

- Metrix has the inherent function to raise RMAs and log the date and time of when the individual RMA was raised and when the replacement unit was dispatched.

Reports used:

- Metrix RMA fulfillment report

15.7.7 Availability Calculation

Availability will be calculated for each Period for each device or system type using the following formula:

$$\text{Period Availability}^4 = \frac{\text{Period Operational Hours}^1 - \text{Period OOS Hours}^{2, 3}}{\text{Period Operational Hours}^1}$$

Notes:

1. Period Operational Hours = mean equipment quantity (monthly period) x Daily Operating Hours (24 hours x period days)
2. Period Out of Service (OOS) hours shall exclude hours for predefined scheduled

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- equipment and system maintenance, LACMTA funded or requested upgrades/enhancements provided in the Period Operational Hours by agreement, non-chargeable, and any delays resulting from access not being provided.
3. Period OOS Hours for TVMs, Gating Equipment and SAVs shall include the aggregate time elapsed from the time of the reported failure until the Contractor has fixed or remedied such failure. Failures and Period Availability shall be subject to LACMTA concurrence and shall be reviewed every month in the Service Review Meeting.
 4. The precision of the calculation of Period Availability shall be limited to 3 decimal places (the value of the 4th decimal place shall be used to increment or decrement the value of 3rd decimal place as follows:
 - a. If the Period Availability to 4 decimal places is less than the Required Availability, then the 3rd decimal place shall be incremented.
 - b. If the Period Availability to 4 decimal places is greater than the Required Availability, then the 3rd decimal place shall be decremented).

The Contractor's performance in terms of the applicable Service Level payment adjustment shall be assessed monthly.

15.7.8 Repair Time, System Component

"Repair Time" is defined as the elapsed time from the time a maintenance-required condition is reported (either automatically or manually) and established to the time the System Component is restored to full service level and the maintenance person calls the Revenue Operations Service Desk to report that the problem is fully repaired and the System Component is back in full use.

Problems associated with communications lines not included in the Contractor's scope or provided by a subcontractor will not be included in the calculation of Response Time once the problem has been reported to the provider of the communications lines.

SLA 6: Software Key Performance Indicator (KPI)

Table 1

Priority	CARDS AFFECTED TOTAL IMPACT ASSESSMENT		Grace Period (Calendar days before abatement is assessed)	DAILY ABATEMENT
	From	To		
1	1	9,999	180 Days	\$150.00
2	10,000	999,999	60 Days	\$150.00
3	1,000,000	1,999,999	45 Days	\$300.00
4	2,000,000	+	0 Days	\$600.00

The Software KPI applies to all System Components and software detailed in the Contract with the exception of Modification 145 to the Contract for NextLink Services & Mobile Solutions,

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which provides stand-alone KPIs and service credits. This section outlines the process for all other existing and new software releases from Contractor. Part of this process will include onsite engineering support from Contractor for each new software release. The assigned onsite personnel must be familiar with the LACMTA TAP environment, specializing in working through LACMTA TAP function testing and LACMTA TAP business logic. The Contractor engineering support will work with LACMTA to correct software, run tests, and remain onsite until LACMTA deems the new software release acceptable for field testing and final system wide deployment based on conformity to LACMTA business rules outlined in original software release request.

The Software KPI shall be eligible for assessment upon deviations from, or non-conformity of, the software requirements as defined in the Contract, including changes thereto in accordance with GC-24, and as otherwise specified in this Section 15.7.

15.7.10.1 Software Deliverable Process

In order to streamline the software release process and have minimal impact to patrons, the following software deliverable process will be followed for every new software release the Contractor provides LACMTA:

- LACMTA requests new software build based on a reported software bug or other deviation from, or non-conformity of, the software requirements as defined in the Contract, including changes thereto in accordance with GC-24, or an executed Change Notice
- Contractor software engineering receives new request tracked through a generated metrix ticket number and informs LACMTA of request through metrix report ticket number process generation which includes test plan and test plan execution process for each software build.
- When Contractor is prepared to release new software build LACMTA is contacted via the ROSD “Metrix” report process.
- A “software deliverable date” is agreed upon and new certified software release is delivered to LACMTA which includes same day onsite software engineering support specializing in LACMTA function testing and LACMTA business rules.
- Contractor engineering support works with LACMTA engineering support onsite as necessary throughout function and business testing until LACMTA deems the new software build bug free, and ready for system wide deployment based on conformity to LACMTA business rules outlined in original software release request.

15.7.11 What Is Measured

The Software Key Performance Indicator is comprised of three elements of assessment: Qualitative Impact, Quantitative Impact and Time-To-Fix. The Total Impact is derived by multiplying the Qualitative Impact by the Quantitative Impact. The Total Impact Assessment will determine the priority, allowable grace period, and daily abatement value as defined in Table 1. The Total Impact Assessment and abatement value will be determined after the

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software issue has been Corrected and is based upon the total number of calendar days Contractor required to fix the problem after the applicable grace period. "Corrected" is defined as Contractor notice and delivery of software that specifically resolves an issue documented by an established Software Incident Report (SIR) to a shared eRoom (or equivalent) for subsequent LACMTA download and test.

15.7.12 How Is It Measured

Qualitative Impact (QLI) is broken down into four areas: patron loss, patron unearned gains, data corruption or loss, and the required effort of both TAP and non-TAP LACMTA departments to identify, mitigate and/or analyze the software problem. Each of these qualitative areas is further broken down into a series of yes/no questions that are weighted depending upon the level of impact. An Excel spreadsheet calculates the overall qualitative score.

1. Patron Loss – this category is weighted at fifty percent (50%) and attempts to capture the qualitative impact of loss on LACMTA and/or its patrons. Loss is defined by the following types:
 - a. Citation potential (30%)
 - b. Loss of dollar amount or pass (10%)
 - c. Prevent boarding (10%)
 - d. New card required (10%)
 - e. Inconvenience (5%)
 - f. Limit payment types (5%)
 - g. Limit number of devices accepting (5%)
 - h. Limit use time by hours (10%)
 - i. Limit use time by days (15%)
2. Patron unearned gains – this category is weighted at twenty five percent (25%) and attempts to capture the impact of LACMTA lost dollar values:
 - a. Give away dollar amount or pass (40%)
 - b. Extra use time by hours (20%)
 - c. Extra use time by days (40%)
3. Data – this category is weighted at fifteen percent (15%) and attempts to capture the impact caused by potential data corruption or the result of corrupted data.
 - a. Data corruption temporary (5%)
 - b. Data corruption permanent (25%)
 - c. Data loss temporary (10%)
 - d. Data loss permanent (40%)
 - e. Reports effected (20%)
4. General – this category is weighted at ten percent (10%) and attempts to capture the impact of the required involvement of TAP and/or non-TAP LACMTA departments to identify mitigate and/or analyze a software problem.

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- a. TAP involvement beyond identification of problem (65%)
- b. Other department involvement (25%)
- c. High management level of involvement (10%)

Quantitative impact (QNI) measures the effect based upon the number of cards affected or incidents that occurred during the time period from when the KPI clock begins and ends.

15.7.12.1 Impact Assessment Calculation

LACMTA TAP formula impact spreadsheet automatically calculates the impact based on a series of defined incident types as such:

Qualitative Impact (QLI, patron impact) x Quantitative Impact (QNI, tap card impact)
Total impact (TI) = (QLI x QNI)

15.7.13 Software Incident Reporting Process

1. LACMTA formally submits via email, a completed Software Incident Report (SIR) to the ROSD, which for this purpose, shall be assigned to the Contractor Project Manager, the Procurement Manager and the Maintenance and Operations Manager at the Contractor's Norwalk facility.
2. A one-day evaluation and data sharing period commences for the purpose of diagnosing the software issue.
3. Once the software issue is identified by the SIR, it is subject to the impact assessment criteria defined in section 15.7.11 and 15.7.12. At this moment the KPI clock shall commence and Contractor begins work to resolve the issue.
4. The KPI clock ends when Contractor delivers an updated version of software that resolves the issue.
5. Qualitative and Quantitative impact will be reconciled after a software fix has been delivered to LACMTA.
6. The Qualitative Impact score will be mutually agreed to between delegates from both LACMTA and Contractor based upon analysis of all reasonably available data.
7. Only the number of cards or documented incidents that occurred during the period between when the KPI clock begins and ends will be used to determine the Quantitative Impact score.

15.8 Patching, Cybersecurity and Compliance

Contractor responsibilities are as identified in Reference (A) Patching Modification 152.00 and Reference (B) PCI Modifications 108.00, 108.01, 108.02 and 146.00.

CONTRACT

15.9 Disentanglement

Contractor agrees that in the event of termination of all or any part of this System Support Services and Warranty Plan for any reason during the Term, or in the event LACMTA elects to discontinue use of Contractor Services at the end of the Term, including but not limited to if LACMTA decides to establish an in-house maintenance program or awards the maintenance function to a successor contractor, Contractor shall fully cooperate with LACMTA in the transition of LACMTA to a new provider of goods and services, toward the end that there be no interruption of day-to-day Services operations. Contractor will assist LACMTA in developing a potential Transition Plan at 24 months prior to the end of the Term.

The Transition Plan will be mutually agreed upon by the parties and include the following "wind down" operations on the part of the Contractor:

- One week of Preventive Maintenance procedure train-the-trainer training for System Components.
- Turning applicable records over to a LACMTA Manager.
- Providing a "closeout" audit of all System Components, materials, supplies, storage cabinets, doors, security systems, structures and other locks and/or devices and items, as applicable.
- Providing a recommended listing of future Work to be done which is required to keep the System in full operations.

**System Support Services and Warranty Plan for the
LA Metro TAP Automatic Fare Collection System**

CONTRACT

15.10 Revised Performance Requirements (Service Level Agreements)

The following Sections from the Technical Specification of Base Contract shall not be applicable or enforceable with regard to the Contractor's delivery, performance and requirements pertaining to Services, as described within the entirety of this document:

- 2.10.2a,
- 2.10.2b
- 2.10.2c
- 2.10.2d
- 2.10.2e
- 2.10.2f
- 2.10.2g
- 2.10.2h
- 2.10.2i
- 2.10.2j
- 2.10.4a
- 2.10.4b
- 2.10.4c
- 2.10.4d
- 2.10.4e
- 2.10.5a
- 2.10.8.2a
- 2.10.8.2b
- 2.10.8.2c
- 2.10.9a
- 2.11.2a
- 2.11.3a
- 2.11.3b
- 2.11.3c
- 2.11.3d
- 2.11.3e
- 2.11.3f
- 19.8
- 19.11a-k

Additionally, Sections 8.0 - Maintenance and 9.0 – Warranty of Change Order 25 (The Regional Central Data Collect System), and SP-5 and SP-7 of the Base Contract, are now superseded in their entirety by the terms and conditions of this Section 15.

###

TAP Assets Maintained
TAP System Support Services - Contract OP-02-4610-10

Equipment	No. of Assets Maintained
Regional Central Data Collection System *	1
Metro Central Data Collection System **	1
Faregate Gating Equipment	467
Swing Gate Equipment	154
Stand Alone Validators ("SAV")	305
TAP Vending Machines ("TVM")	495
Automated Fare Collection Communication Network	1
Full Functional Sales Office Terminals ("SOT")	50
Limited Functional Sales Office terminals	1,155
Garage Computer	17
Bus Mobile Validator (BMV)	515
Special Event Bus Mobile Validator (SEBMV)	20

* Regional CDCS – The RCDCS is the final repository for all Tap transactions across the region. Tap is a store-and-forward system in which each subsystem, garage computer and sales device, sends its full set of transactions to the RCDCS. All Tap data is derived from the information stored and managed on the RCDCS.

** Metro CDCS – The Metro CDCS handles all of the data created on Metro devices including TVMs, SAVs, SOTs, Bus Mobile Validators, as well as Metro's garage computers and Fare Gates.

TAP Vision

David Sutton
Executive Officer, TAP
Regular Board Meeting
April 25, 2019



Where are we today?



- Contactless, chip-based smart card system
- 26 TAP agencies including 3800 regional buses, 123 rail stations (growing exponentially!) + paratransit
- 29M regional transactions/month
- Over 750 different products on fare table
- Over 1.5M passes and \$12M of Stored Value sold/month
- 440 LA county outlets selling \$16M/month
- Website sales of over \$1M/month
- 20 Terabytes of data/month

TAP Supports 26 Transit Agencies



Proprietary equipment & software covered by the Support Services contract

2973
Fare Boxes



1000 +
Compact
Point of Sales



1339 Bus
Mobile
Validators



305 Station
Validators



100+ Servers
34 Garage computers



367 Gates
154 Emergency Gates

495 Ticket
Vending
Machines

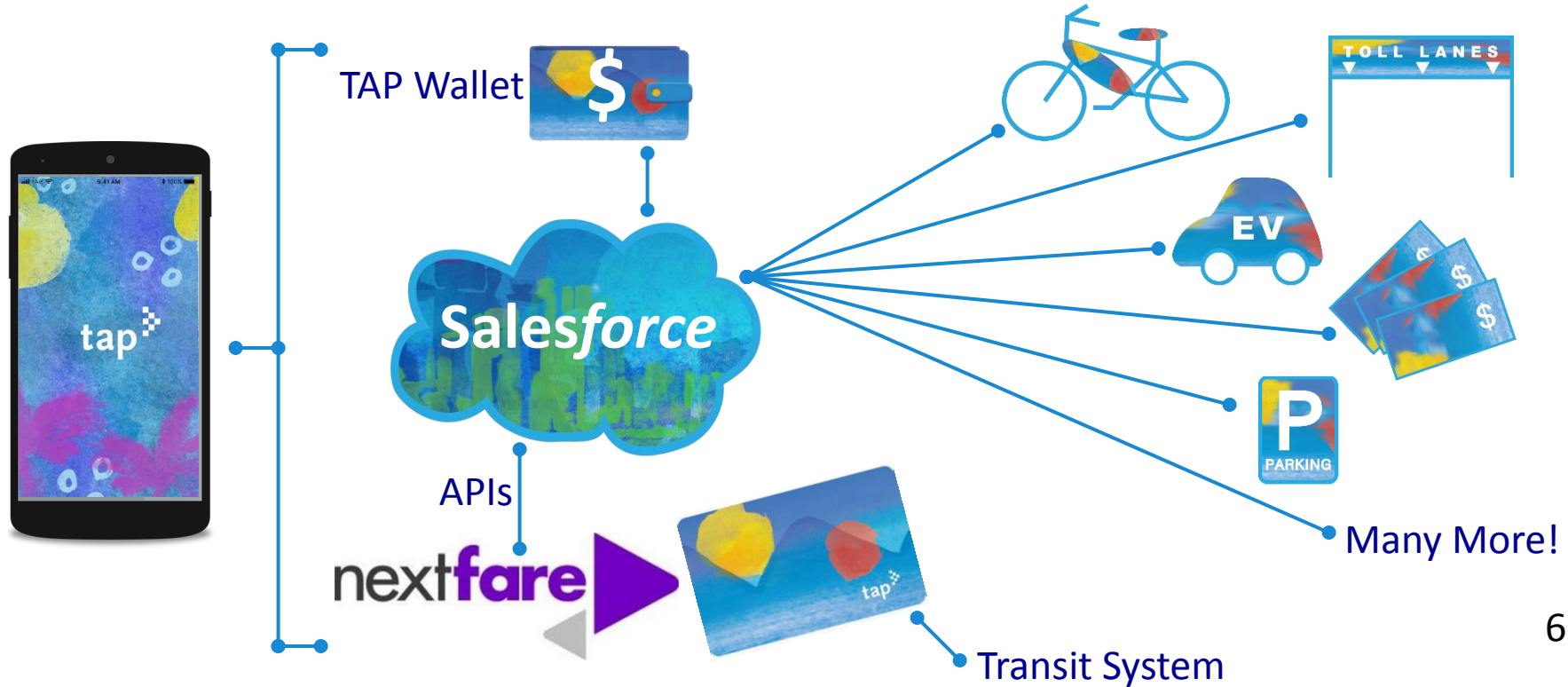


Non-Cubic TAP Integration



Vendor	Equipment/Service
Axiom xCell, Inc.	Fare Enforcement Devices
CA Signs	Bus Farebox Decals
Conduent, Inc.	TAP – ATMS connection
Genfare SPX, Inc.	Farebox hardware upgrade components
Golden Star Technology, Inc.	Bus Driver Control Units
PAX Technology, Inc.	Retail Sales Devices
PSI Repair, Inc.	Repair of bus farebox control boards
Publicis Sapient	Salesforce integrator for account-based Customer Relationship Management System
Robnett Electric, Inc.	Installation of TAP fare collection equipment
Salesforce	New system for customer relationship management and web
TBD (developing scope)	Regional data warehouse to store TAP
In-house Metro labor	Farebox repair and maintenance

What are the plans for the future?



5-year Vision



- Continue Support Services Contract
 - Closely monitor technology trends
 - Compare our hybrid system with systems being built by Cubic
 - NY (\$500M+)
 - Boston (\$750M)
 - Chicago (\$500M+)
 - San Francisco (\$461M +)
 - In two years do comparative analysis to choose:
 - Go out to bid
- Or
- Stay with current hybrid system

TAP System Support Services

Board of Directors Meeting

April 25, 2019



Proprietary Cubic Services

This is what Cubic maintains:

- Metro Hardware
 - 495 TAP Vending Machines (TVMs)
 - 305 Station Validators
 - 467 Turnstiles and ADA Gates
 - 154 Emergency Swing Gates
 - 17 Garage Computers (at bus divisions)
 - 535 Bus Mobile Validators
- Muni Hardware
 - 17 Garage Computers
 - 804 Bus Mobile Validators
 - 1,337 TAP Readers
- Other Cubic Support
 - Regional farebox software and hardware upgrade
 - Nextlink for TAP Mobile and Merchant app

Support Services Agreement Summary

- Cubic's 5.5 year proposal is in alignment with NextLink and the TAP Mobile App contract end date (December 2024)
 - 20 additional improvements including more KPIs, more engineers & maintenance staff
 - 105 mobile validators for Metro Rapid All-Door Boarding, and the City of Glendora
- Funding is from Prop C 40%
- Cubic has exceeded their DBE goal by 2.18% for a total of 7.83%
- Staff's recommendation is to approve this agreement