SUPPLEMENT DATED JULY 16, 2018 TO PRELIMINARY OFFICIAL STATEMENT DATED JUNE 29, 2018

\$127,980,000* City of Los Angeles Solid Waste Resources Bonds, Series 2018-A

The City of Los Angeles's Preliminary Official Statement, dated June 29, 2018 (the "Preliminary Official Statement"), relating to the above-captioned bonds is hereby amended in part by deleting the last sentence of the second paragraph under the caption "CONTINUING DISCLOSURE" and replacing it with the following text:

The City did not file timely notices of rating changes on several issues of Obligations based on changes in the ratings of certain bond insurers and liquidity providers within the last five years. Notices of all of these rating changes have been filed on the EMMA website. With respect to the Obligations, the City has not failed to comply with its previous disclosure undertakings for the past five years in all material respects.

* * *

This Supplement must be read together with the Preliminary Official Statement.

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^{*} Preliminary, subject to change.

PRELIMINARY OFFICIAL STATEMENT DATED JUNE 29, 2018

DAC Bond

NEW ISSUE--FULL BOOK-ENTRY ONLY

RATINGS: Moody's: Aa2 Kroll: AA

(See "Ratings" herein)

In the opinion of Orrick, Herrington & Sutcliffe, LLP, Bond Counsel, based upon an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and is exempt from State of California personal income taxes. In the further opinion of Bond Counsel, interest on the Bonds is not a specific preference item for purposes of the federal alternative minimum tax. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the Bonds. See "TAX MATTERS."



CITY OF LOS ANGELES

\$127,980,000* Solid Waste Resources Revenue Bonds, Series 2018-A

Dated: Date of Delivery

Due: February 1, as shown on inside cover page

The Solid Waste Resources Revenue Bonds, Series 2018-A (the "Bonds") are being issued by the City of Los Angeles, California (the "City"). The Bonds are being issued to (i) finance the acquisition and installation of certain equipment and vehicles and the construction and renovation of certain real property improvements related to the refuse, collection and disposal system of the City and (ii) to pay the costs of issuance of the Bonds. See "PLAN OF FINANCE" herein. No reserve will be funded for the Bonds. Parity Bonds are supported by a Reserve Fund under the Trust Agreement, but the Bonds will not be secured by such fund. The Bonds are authorized under the Charter of the City and Ordinance No. 174129 adopted July 24, 2001, codified at Sections 11.27.50 through 11.27.58 of Division 11, Chapter 1, Article 6.4 of the Los Angeles Administrative Code, and are being issued under a Master Trust Agreement, dated as of September 1, 2001, as amended and supplemented by the various supplemental trust agreements (collectively, the "Master Trust Agreement"), by and between the City and U.S. Bank National Association, as successor trustee (the "Trustee"), including as amended and supplemented by a Twelfth Supplemental Trust Agreement, dated as of July 1, 2018 (the "Twelfth Supplemental Trust Agreement") and a Thirteenth Supplemental Trust Agreement, dated as of July 1, 2018. The Master Trust Agreement, as so amended and supplemented, is referred to herein as the "Trust Agreement."

Interest on the Bonds is payable semiannually on each February 1 and August 1, commencing February 1, 2019 until maturity thereof. The Bonds will be delivered in fully registered form and, when issued, will be registered in the name of Cede & Co. as nominee of The Depository Trust Company, New York, New York, ("DTC"). The Bonds will be in denominations of \$5,000 each or any integral multiple thereof. Beneficial owners of the Bonds will not receive physical certificates representing the Bonds purchased. Principal of and interest on the Bonds will be paid by the Trustee to DTC or its nominee, Cede & Co., so long as DTC or Cede & Co. is the registered owner of the Bonds. Disbursement of such payments to the beneficial owners of the Bonds is the responsibility of DTC's Participants and Indirect Participants, as more fully described herein. See "The Bonds - General Terms" and APPENDIX E - "BOOK-ENTRY ONLY SYSTEM."

The Bonds are subject to redemption prior to their maturity, as described herein. See "THE BONDS – Redemption."

The Bonds are special, limited obligations of the City and are secured solely by and payable from a pledge of the Revenues (as defined in the Trust Agreement) which include (i) the Solid Waste Collection, Transfer, Recycling, Recovery of Waste Resources and Disposal Fee received by the Solid Waste Resources Revenue Fund (or any successor fund held by the City, the "SWR Revenue Fund"), after deduction of costs of administration charges by the Department of Water and Power of the City, (ii) any other legally available income, rates, fees, charges and other moneys which the City designates by ordinance or resolution for deposit in the SWR Revenue Fund, including the Extra Capacity Fee (defined herein), and (iii) the earnings on and income derived from the investment of the amounts set forth in (i) and (ii).

The Bonds are payable from the Revenues on a parity with \$147.365 million aggregate principal amount of bonds issued and outstanding under the Master Trust Agreement that will be outstanding when the Bonds are issued. The City may issue additional debt or incur additional obligations under the Trust Agreement ("Additional Bonds") on a parity with the Bonds, but only in accordance with the provisions contained in the Trust Agreement. See "SECURITY AND SOURCES OF PAYMENT FOR THE BONDS."

MATURITY SCHEDULE

(See Inside Cover)

THE BONDS ARE SPECIAL, LIMITED OBLIGATIONS OF THE CITY AND ARE SECURED SOLELY BY AND PAYABLE FROM A PLEDGE OF THE REVENUES. THE BONDS DO NOT CONSTITUTE AN OBLIGATION OF THE CITY FOR WHICH THE CITY IS OBLIGATED TO LEVY OR PLEDGE ANY FORM OF TAXATION OR FOR WHICH THE CITY HAS LEVIED OR PLEDGED ANY FORM OF TAXATION. THE BONDS DO NOT CONSTITUTE A DEBT OR AN INDEBTEDNESS OF THE CITY, THE COUNTY OF LOS ANGELES, THE STATE OF CALIFORNIA OR ANY OF ITS POLITICAL SUBDIVISIONS IN CONTRAVENTION OF THE CONSTITUTION OR STATUTES OF THE STATE.

This cover contains information for general reference only. Investors must read the entire Official Statement to obtain information essential to making an informed investment decision.

> BIDS FOR THE PURCHASE OF THE BONDS WILL BE RECEIVED BY THE CITY UNTIL 9:00 A.M., CALIFORNIA TIME ON JULY 17, 2018 UNLESS POSTPONED OR CANCELLED AS SET FORTH IN THE NOTICE INVITING BIDS.

The Bonds are offered when, as and if issued by the City and accepted by the purchaser, subject to the approval of legality by Orrick, Herrington & Sutcliffe LLP, Los Angeles, California, Bond Counsel, and certain other conditions. Certain legal matters will be passed on for the City by Michael N. Feuer, City Attorney, and by Norton Rose Fulbright US LLP, Los Angeles, California, as Disclosure Counsel. It is anticipated that the Bonds will be available for delivery through the facilities of DTC in book-entry form on or about July 31, 2018.

Dated: July __, 2018

^{*} Preliminary, subject to change.

MATURITY SCHEDULE*

\$127,980,000* Solid Waste Resources Revenue Bonds, Series 2018-A

(Base CUSIP[†] Number: 54463P)

Maturity (February 1)	Principal <u>Amount</u>	Interest <u>Rate</u>	<u>Yield</u>	Price	CUSIP [†]
2018					
2019					
2020					
2021					
2022					
2023					
2024					
2025					
2026					
2027					
2028					
2029					
2030					
2031					
2032					
2033					

Preliminary, subject to change.

[†] Copyright 2018, American Bankers Association. CUSIP® is a registered trademark of the American Bankers Association. CUSIP data herein is provided by the CUSIP Service Bureau, managed on behalf of the American Bankers Association by Standard & Poor's. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP Service Bureau. CUSIP numbers have been assigned by an independent company not affiliated with the City and are included solely for the convenience of the registered owners of the Bonds. None of the City, the Trustee or the Co-Municipal Advisors are responsible for the selection or uses of these CUSIP numbers, and no representation is made as to their correctness on the applicable Bonds or as included herein. The CUSIP number for a specific maturity is subject to being changed after the issuance of the Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part or as a result of the procurement of secondary market portfolio insurance and other similar enhancement by investors that is applicable to all or a portion of certain maturities of the Bonds.

CITY OF LOS ANGELES, CALIFORNIA

Mayor

Eric Garcetti

City Council

Gilbert Cedillo, *District 1*Paul Krekorian, *District 2*Bob Blumenfield, *District 3*David E. Ryu, *District 4*Paul Koretz, *District 5*

Nury Martinez, *District 6*Monica Rodriguez, *District 7*Marqueece Harris-Dawson, *District 8*Curren D. Price, Jr., *District 9*Herb J. Wesson, Jr., *District 10*

Mike Bonin, District 11 Mitchell Englander, District 12 Mitch O'Farrell, District 13 José Huizar, District 14 Joe Buscaino, District 15

City Officials

Michael N. Feuer, City Attorney Ron Galperin, City Controller Richard H. Llewellyn, Jr., City Administrative Officer Holly L. Wolcott, City Clerk Claire Bartels, City Treasurer

Board of Public Works

Kevin James, President

Heather Repenning, Vice President Mike Davis, President Pro Tem Joel F. Jacinto, Commissioner Aura Garcia, Commissioner

Bureau of Sanitation Enrique C. Zaldivar, Director

City Department Issuing Debt

Office of the City Administrative Officer
Debt Management Group

Bond Counsel

Orrick, Herrington & Sutcliffe LLP Los Angeles, California

Co-Municipal Advisor
Fieldman, Rolapp & Associates, Inc.
Irvine, California

Disclosure Counsel

Norton Rose Fulbright US LLP Los Angeles, California

Co-Municipal Advisor

Urban Futures, Inc. Tustin, California

Trustee

U.S. Bank National Association Los Angeles, California No dealer, broker, salesperson, or other person has been authorized by the City to give any information or to make any representations other than those contained herein and, if given or made, such other information or representations must not be relied upon as having been authorized by the City. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of the Bonds by a person in any jurisdiction in which it is unlawful for such person to make an offer, solicitation or sale.

This Official Statement is not to be construed as a contract with the purchasers of the Bonds. Statements contained in this Official Statement which involve estimates, forecasts or matters of opinion, whether or not expressly so described herein, are intended solely as such and are not to be construed as a representation of facts.

The information set forth herein has been obtained from the City and other sources which are believed to be reliable. The information and expressions of opinions herein are subject to change without notice and neither delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the City or the Solid Waste Resources Revenue Fund since the date hereof. This Official Statement is submitted with respect to the sale of the Bonds referred to herein and may not be reproduced or used, in whole or in part, for any other purpose, unless authorized in writing by the City. All summaries of the documents and laws are made subject to the provisions thereof and do not purport to be complete statements of any or all such provisions.

Certain statements included or incorporated by reference in the following information constitute "forward-looking statements." Such statements are generally identifiable by the terminology used such as "plan," "expect," "estimate," "budget," "pro forma" or other similar words. The achievement of certain results or other expectations contained in such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements described to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. No assurance is given that actual results will meet the City's forecasts in any way, regardless of the level of optimism communicated in the information. Except as set forth in the continuing disclosure certificate (see APPENDIX D – "FORM OF CONTINUING DISCLOSURE CERTIFICATE"), the City does not plan to issue any updates or revisions to those forward-looking statements if or when its expectations, or events, conditions or circumstances on which such statements are based occur.

The information in APPENDIX E – "BOOK-ENTRY-ONLY SYSTEM" attached hereto has been furnished by The Depository Trust Company and no representation has been made by the City as to the accuracy or completeness of such information.

IN CONNECTION WITH THIS OFFERING, THE PURCHASER MAY OVERALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE BONDS AT LEVELS ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

This Official Statement, including any supplement or amendment hereto, is intended to be deposited with the Municipal Securities Rulemaking Board through the Electronic Municipal Marketplace Access website. A wide variety of other information, including financial information, concerning the City, is available from publications and websites of the City, the County of Los Angeles and others. No such information is a part of or incorporated into this Official Statement, except as expressly noted herein.

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CITY OF LOS ANGELES

\$127,980,000* Solid Waste Resources Revenue Bonds, Series 2018-A

INTRODUCTION

This Official Statement is provided for the purpose of setting forth information concerning the issuance and sale by the City of Los Angeles, California (the "City") of the \$127,980,000* Solid Waste Resources Revenue Bonds, Series 2018-A (the "Bonds"). The Bonds are authorized under the Charter of the City and Ordinance No. 174129 adopted July 24, 2001, codified at Sections 11.27.50 through 11.27.58 of Division 11, Chapter 1, Article 6.4 of the Los Angeles Administrative Code, and are being issued under a Master Trust Agreement, dated as of September 1, 2001, as amended and supplemented by the various supplemental trust agreements (collectively, the "Master Trust Agreement"), by and between the City and U.S. Bank National Association, as successor trustee (the "Trustee"), including as amended and supplemented by a Twelfth Supplemental Trust Agreement, dated as of July 1, 2018 (the "Twelfth Supplemental Trust Agreement, dated as of July 1, 2018. The Master Trust Agreement, as so amended and supplemented, is referred to herein as the "Trust Agreement." See APPENDIX B – "SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT" for the definitions of certain capitalized terms and further information regarding the City's obligations under the Trust Agreement.

The Bonds are being issued to (i) finance the acquisition and installation of certain equipment and vehicles and the construction and renovation of certain real property improvements related to the refuse collection and disposal system of the City and (ii) to pay the costs of issuance of the Bonds. See "PLAN OF FINANCE" herein. No reserve will be funded for the Bonds.

The Bonds are special, limited obligations of the City and are secured solely by and payable from a pledge of the Revenues (as defined in the Trust Agreement) which include (i) the Solid Waste Collection, Transfer, Recycling, Recovery of Waste Resources and Disposal Fee received by the Solid Waste Resources Revenue Fund (or any successor fund held by the City, the "SWR Revenue Fund"), after deduction of costs of administration charges by the Department of Water and Power of the City, (ii) any other legally available income, rates, fees, charges and other moneys which the City designates by ordinance or resolution for deposit in the SWR Revenue Fund, including the Extra Capacity Fee (defined herein), and (iii) the earnings on and income derived from the investment of the amounts set forth in (i) and (ii). The City may designate hereafter as Revenues any other income, rates, fees, charges and other legally available moneys as the City chooses and, by ordinance, may expand the permitted uses of the Solid Waste Resources Fee. For additional information on the Solid Waste Resources Fee and the Extra Capacity Fee (defined herein), see "SECURITY AND SOURCES OF PAYMENT FOR THE BONDS – Revenue Pledge" and "SOLID WASTE RESOURCES FEE" herein.

The Bonds are payable from the Revenues on a parity with \$147.365 million aggregate principal amount of bonds issued and outstanding under the Trust Agreement (the "Parity Bonds") that will be outstanding when the Bonds are issued. See "PLAN OF FINANCE" herein. In connection with the issuance of the Parity Bonds, the City and the Trustee entered into certain supplemental trust agreements, collectively referred to herein as the "Parity Bond Documents." See "SECURITY AND SOURCES OF PAYMENT FOR THE BONDS – Parity Bonds" herein.

^{*} Preliminary, subject to change.

The Parity Bonds are supported by a Reserve Fund under the Trust Agreement, but the Bonds will not be secured by such fund.

In addition, the City may issue additional bonds (whether in the form of contracts, notes, installment purchase agreements, lease or sublease agreements, or otherwise) of the City ("Additional Bonds") secured by the Revenues on a parity with the Bonds and the Parity Bonds, but only in accordance with the provisions of the Trust Agreement. See "SECURITY AND SOURCES OF PAYMENT FOR THE BONDS – Limitations on Parity and Superior Obligations; Additional Bonds." See also "DEPARTMENT OF PUBLIC WORKS, BUREAU OF SANITATION SOLID WASTE OPERATIONS – Future Capital Projects and Borrowing Plans." Under the Trust Agreement, the City may not issue or incur any future obligations payable from Revenues which would create a lien prior to the lien of the Bonds and Parity Bonds on the Revenues.

THE BONDS ARE SPECIAL, LIMITED OBLIGATIONS OF THE CITY AND ARE SECURED SOLELY BY AND PAYABLE FROM A PLEDGE OF THE REVENUES. THE BONDS DO NOT CONSTITUTE AN OBLIGATION OF THE CITY FOR WHICH THE CITY IS OBLIGATED TO LEVY OR PLEDGE ANY FORM OF TAXATION OR FOR WHICH THE CITY HAS LEVIED OR PLEDGED ANY FORM OF TAXATION. THE BONDS DO NOT CONSTITUTE A DEBT OR AN INDEBTEDNESS OF THE CITY, THE COUNTY OF LOS ANGELES, THE STATE OF CALIFORNIA OR ANY OF ITS POLITICAL SUBDIVISIONS IN CONTRAVENTION OF THE CONSTITUTION OR STATUTES OF THE STATE.

For a discussion of the collection of the Solid Waste Resources Fee and the City's solid waste collection and disposal system, see "SOLID WASTE RESOURCES FEE" and "DEPARTMENT OF PUBLIC WORKS, BUREAU OF SANITATION SOLID WASTE OPERATIONS." In addition, certain economic and demographic and other information with respect to or affecting the City is contained in APPENDIX A – "CITY OF LOS ANGELES GENERAL INFORMATION" herein.

Certain risk factors relating to the collection of the Solid Waste Resources Fee and the Revenues are discussed herein under "SOLID WASTE RESOURCES FEE"— Risk Factors Relating to Fee Collections and Revenues."

This Official Statement contains brief descriptions of, among other things, the Bonds, the Trust Agreement, the City, the SWR Revenue Fund and the Project. Such descriptions do not purport to be comprehensive or definitive. All references in this Official Statement to documents are qualified in their entirety by references to such documents and references to the Bonds are qualified in their entirety by reference to the form of Bond included in the Trust Agreement.

THE BONDS

General Terms

The Bonds will be dated their date of delivery. The Bonds, when issued, will be initially registered in the name of Cede & Co., as registered owner and nominee of The Depository Trust Company, New York, New York ("DTC"). Purchases of the Bonds may be made in book-entry form only, through brokers and dealers who are, or who act through, DTC Participants (as defined in APPENDIX E – "BOOK-ENTRY ONLY SYSTEM"). So long as DTC, or its nominee, Cede & Co., is the registered owner of the Bonds, all payments on the Bonds and any notice with respect to any Bond will be sent directly to DTC, and disbursement of such payments and delivery of such notices to the DTC Participants will be the responsibility of DTC. Disbursement of such payments and delivery of such

notices to the Beneficial Owners of the Bonds will be the responsibility of the DTC Participants as more fully described herein. See APPENDIX E – "BOOK-ENTRY ONLY SYSTEM."

Interest on the Bonds will be payable semiannually on February 1 and August 1 of each year, commencing February 1, 2019 (each, a "Payment Date"), at the rates set forth on the inside cover page hereof, to the holders of record on the immediately preceding January 15 and July 15 (each, a "Record Date") and will mature on February 1 in each of the designated years in the principal amounts set forth on the inside cover page hereof. Each Bond shall bear interest from the Payment Date next preceding the date of authentication thereof unless such date of authentication is a Payment Date, in which event such Bond shall bear interest from said subsequent Payment Date, in which event such Bond shall bear interest from said subsequent Payment Date or unless such date of authentication is on or before January 15, 2019, in which event such Bond shall bear interest from the initial date of issuance.

Redemption*

Optional Redemption. The Bonds due on or after February 1, 2029 are subject to redemption at the option of the City, on or after February 1, 2028, in whole or in part on any date, from any moneys that may be provided for such purpose. The Bonds so redeemed shall be redeemed at a redemption price equal to the principal amount of such Bonds, without premium, plus accrued interest to the date fixed for redemption.

Mandatory Sinking Fund Redemption. The Bonds maturing February 1, 20__ shall be subject to mandatory sinking fund redemption, in part, on February 1 in each year, commencing February 1, 20__, at a redemption price equal to the principal amount of the Bonds maturing February 1, 20__ to be redeemed, without premium, plus accrued interest thereon to the date of redemption, in the aggregate respective principal amounts in the respective years as follows:

Sinking Fund Redemption Date (February 1) Principal Amount to be Redeemed

(maturity)

If some but not all of the Bonds maturing on February 1, 20_ are optionally redeemed, the principal amount of the Bonds maturing on February 1, 20_ to be redeemed by mandatory sinking fund redemption on any subsequent February 1 shall be reduced, by \$5,000 or an integral multiple thereof, as designated by the City in a written request of the City filed with the Trustee; provided, however, that the aggregate amount of such reductions shall not exceed the aggregate amount of the Bonds maturing on February 1, 20_ optionally redeemed pursuant to the Twelfth Supplemental Trust Agreement.

Notices to Bondholders. The Trustee shall give notice of an optional redemption to Bondholders as provided in the Master Trust Agreement and the Trustee shall, at least 30 days and not more than 60 days before each redemption, send such notice of redemption by first-class mail (or with respect to the Bonds held by the Depository by facsimile or an express delivery service for delivery on the next following Business Day) to each Bondholder of the Bond to be redeemed; each such notice shall be sent to the Bondholder's registered address. Failure by any Bondholder to receive notice as provided herein shall not affect the validity of any such redemption. With respect to any notice of any optional redemption of the Bonds, unless at the time such notice is given the Bonds to be redeemed shall be deemed to have

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^{*} Preliminary, subject to change.

been paid within the meaning of the Master Trust Agreement, such notice shall state that such redemption is conditional upon receipt by the Trustee, on or prior to the date fixed for such redemption, of moneys that, together with other available amounts held by the Trustee, are sufficient to pay the redemption price of, and accrued interest on, the Bonds to be redeemed, and that if such moneys shall not have been so received said notice shall be of no force and effect and the City shall not be required to redeem such Bonds. In the event a notice of redemption of the Bonds contains such a condition and such moneys are not so received, the redemption of the Bonds as described in the conditional notice of redemption shall not be made and the Trustee shall, within a reasonable time after the date on which such redemption was to occur, give notice to the persons and in the manner in which the notice of redemption was given, that such moneys were not so received and that there shall be no redemption of the Bonds pursuant to such notice of redemption.

Selection of Series 2018-A Bonds for Redemption; Series 2018-A Bonds Redeemed in Part. The Bonds are subject to redemption in such order of maturity as the City may direct and by lot, selected in such manner as the Trustee shall deem appropriate, within a maturity. Upon surrender of a Bond to be redeemed in part, the Trustee shall authenticate for the Bondholder a new Bond or Bonds of the same maturity equal in principal amount to the unredeemed portion of the Bond surrendered.

PLAN OF FINANCE

General

Pursuant to the Twelfth Supplemental Trust Agreement, proceeds of the Bonds will be applied to (i) finance the acquisition and installation of certain equipment and vehicles and the construction and renovation of certain real property improvements related to the refuse collection and disposal system of the City (collectively, the "Projects") and (ii) pay the costs of issuance of the Bonds. See "ESTIMATED SOURCES AND USES OF FUNDS" herein.

In addition to the acquisition of certain equipment and vehicles for use by the Bureau, the City expects proceeds of the Bonds to be applied to finance the following capital projects.

Liquefied/Compressed Natural Gas Fuel Site Expansion and Modification

In compliance with the South Coast Air Quality Management District ("SCAQMD") rules implemented in 2000, the City's Department of Public Works, Bureau of Sanitation (the "Bureau") has converted more than two-thirds of the collection vehicle fleet to liquefied natural gas ("LNG") and compressed natural gas ("CNG") vehicles and has invested nearly \$100 million in the development of an alternative fuel infrastructure including four Liquefied/Compressed Natural Gas ("LCNG") fueling stations. These LCNG fueling facilities were designed for ample LNG capacity, but provide limited CNG dispensing. As the City converts more vehicles to CNG, the demand has increased, and the current facilities are no longer sufficient. The expansion project will upgrade the existing facilities to provide more CNG fueling capabilities as well as improving the pumping systems technology to improve efficiency and reduce the risk of gas emissions.

Other Capital Improvement Projects

In addition to the LCNG Fuel Site Expansion project, proceeds will be utilized to fund other capital projects which are designed to improve the Bureau's transfer station, collection yards, and landfill properties. Such projects include the Central Los Angeles Recycling and Transfer Station ("CLARTS") Solar Roof Panels and Mezzanine Project which will upgrade CLARTS structures with solar panel installations to increase eligibility for Green Building Certification as well as CLARTS facility design

improvements to promote workplace productivity, increase communications, and improve safety within the facility. Collection yard improvement includes development of an onsite North Central Truck Washing Facility to replace the old system demolished during construction of the LCNG fueling station. Post-closure maintenance of city landfills will also require capital improvements such as the Lopez Canyon Flare Systems Upgrades for continued safety of methane gas collections. For a comprehensive listing of future capital projects, see "DEPARTMENT OF PUBLIC WORKS, BUREAU OF SANITATION SOLID WASTE OPERATIONS – Future Capital Projects and Borrowing Plans" herein.

Substitution of Projects

Sources of Funds:

The City may substitute other capital items for the Projects described above and may add additional items in compliance with the provisions of the Trust Agreement.

ESTIMATED SOURCES AND USES OF FUNDS

The estimated sources and uses of funds are as follows:

Sources of Funds.	
Principal Amount of Bonds	\$
[Net] Premium	
TOTAL SOURCES	\$
Uses of Funds:	
Deposit to Series 2018-A Acquisition Fund	\$
Deposit to Costs of Issuance Fund ⁽¹⁾	
Underwriter's Discount	
TOTAL USES	\$

⁽¹⁾ Includes rating agencies' fees, Bond Counsel fees and expenses, Disclosure Counsel fees and expenses, Co-Municipal Advisor fees and expenses, Trustee fees and expenses, printing costs, and other costs of issuance.

SECURITY AND SOURCES OF PAYMENT FOR THE BONDS

Revenue Pledge

The Bonds are special, limited obligations of the City and are secured solely by and payable from a pledge of the Revenues (as defined in the Trust Agreement) which include (i) the Solid Waste Collection, Transfer, Recycling, Recovery of Waste Resources and Disposal Fee received by the Solid Waste Resources Revenue Fund (or any successor fund held by the City, the "SWR Revenue Fund"), after deduction of costs of administration charges by the Department of Water and Power of the City ("DWP"), (ii) any other legally available income, rates, fees, charges and other moneys which the City designates by ordinance or resolution for deposit in the SWR Revenue Fund, including the Extra Capacity Fee (defined herein), and (iii) the earnings on and income derived from the investment of the amounts set forth in (i) and (ii). The term "SWR Revenue Fund" (formerly known as the Sanitation Equipment Charge Revenue Fund) includes any successor fund held by the City.

The Solid Waste Resources Fee was first established by Ordinance effective July 21, 1983 (the "SWR Ordinance"). The SWR Ordinance has been amended from time to time such that the Solid Waste Resources Fee currently may be imposed for all costs related to the collection, transfer, recycling, recovery of waste resources and/or disposal of solid waste collected by the City, as well as certain internal costs of the City. See "SOLID WASTE RESOURCES FEE – Charges" herein.

Effective February 19, 1996, the City approved an Extra Capacity Fee (the "Extra Capacity Fee") by Ordinance No. 170868 and began collection of the Extra Capacity Fee, which is a component of Revenues in July 1996. See "SOLID WASTE RESOURCES FEE – Charges" herein. The Extra Capacity Fee accounts for approximately 3% of funds deposited in the SWR Revenue Fund.

All Revenues and all amounts on deposit in the SWR Revenue Fund are irrevocably pledged to the payment of the Bonds as provided in the Trust Agreement and to the payment of any Parity Bonds and any Additional Bonds. The Revenues shall not be used during any month of any Fiscal Year for any other purpose if any of the transfers required by the Trust Agreement and the Parity Bond Documents to be made from the SWR Revenue Fund (i) to the debt service funds for the Bonds, the Parity Bonds and any Additional Bonds, (ii) to reserve fund(s) for any Parity Bonds, and (iii) to the debt service funds for any subordinate obligations, is delinquent. Following such transfers out of the SWR Revenue Fund, the City may use remaining Revenues in the SWR Revenue Fund for any lawful purpose. This pledge constitutes a first lien on the Revenues, subject to application of amounts on deposit therein as provided in the Trust Agreement and the Parity Bond Documents for the payment of debt service on the Bonds, the Parity Bonds and any Additional Bonds in accordance with the terms of the Trust Agreement and the Parity Bond Documents.

Subject to the covenants of the City under the Trust Agreement and applicable law, the City may by ordinance modify the Solid Waste Resources Fee rate and the Extra Capacity Fee. See APPENDIX B – "SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT – REVENUES AND FUNDS – Alternative Receipt and Deposit of Revenues; Withdrawals."

The City has the option to transfer moneys from the SWR Revenue Fund to the Debt Service Fund for debt service payments on the Bonds, the Parity Bonds and any Additional Bonds on a semiannual, rather than a monthly, basis under the conditions specified in the Trust Agreement. Commencing February 2009, the City has made the transfers for debt service payments on the Parity Bonds on a semi-annual basis and will make semi-annual transfers for debt service payments on the Bonds. See APPENDIX B – "SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT – REVENUES AND FUNDS – Alternative Receipt and Deposit of Revenues; Withdrawals."

Moneys in the SWR Revenue Fund will be used and applied by the City as provided in the Trust Agreement. The City will maintain all Revenues in the SWR Revenue Fund separate and apart from other funds of the City so long as the Bonds, the Parity Bonds or Additional Bonds remain unpaid. All moneys in the SWR Revenue Fund shall be used and applied to pay Debt Service as defined in the Trust Agreement (See APPENDIX B – "SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT"), including principal of and interest on the Bonds, the Parity Bonds and any Additional Bonds, and to replenish all reserve funds established for the Parity Bonds and any Additional Bonds, or for other purposes of the City permitted by law. See APPENDIX B – "SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT – REVENUES AND FUNDS – Alternative Receipt and Deposit of Revenues; Withdrawals."

Parity Bonds

The City has issued Parity Bonds, comprised of Sanitation Equipment Charge Revenue Bonds and Solid Waste Resources Revenue Bonds, under the Trust Agreement, as further described in the following table. The payment of principal and interest on the Parity Bonds is payable from the Revenues on a parity with payment of principal of and interest on the Bonds. See "SECURITY AND SOURCES OF PAYMENT FOR THE BONDS – Parity Bonds" and "– Debt Service Schedule" herein.

OUTSTANDING PARITY BONDS (As of June 30, 2018)

Series Designation	Dated Date	Original Principal <u>Amount</u>	Principal Amount Outstanding	Final <u>Maturity</u>
Revenue Bonds, Series 2009-A ⁽¹⁾	December 23, 2009	\$65,020,000	\$ 9,820,000	02/01/2019
Revenue Bonds, Series 2009-B	December 23, 2009	49,485,000	10,390,000	02/01/2020
Revenue Bonds, Series 2013-A	February 26, 2013	73,665,000	56,665,000	02/01/2027
Refunding Revenue Bonds, Series 2013-B	February 26, 2013	78,780,000	17,085,000	02/01/2029
Refunding Revenue Bonds, Series 2015-A	April 7, 2015	76,670,000	53,405,000	02/01/2024
-	-	\$343,620,000	\$147,365,000	

⁽¹⁾ Defeased in part as of the date of delivery of the 2015-A Bonds.

Limitations on Parity and Superior Obligations; Additional Bonds

No Obligations Superior to Debt Service Payments on the Bonds and Parity Bonds. The City has covenanted in the Trust Agreement and in the supplemental trust agreements relating to the Parity Bonds (the "Parity Bond Documents") that it will not, so long as any Bonds or Parity Bonds are Outstanding under the Trust Agreement, issue or incur any obligations secured by a pledge of Revenues superior to the pledge securing the payment of principal of and interest on the Bonds and the Parity Bonds.

Obligations on a Parity with the Bonds; Additional Bonds. The City may at any time issue Additional Bonds, provided:

- (1) The Revenues for the most recent Fiscal Year for which the City has unaudited financial statements certified by a City Representative preceding the date of adoption by the City Council of the City of the resolution authorizing the issuance of such Additional Bonds, as evidenced by a calculation prepared by the City Representative on file with the Trustee, shall have produced a sum equal to at least 125% of the Debt Service (See APPENDIX B "SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT") for such Fiscal Year; and
- (2) The Revenues for the most recent Fiscal Year preceding the date of adoption by the City Council of the City of the resolution authorizing the issuance of such Additional Bonds, including adjustments to give effect as of the first day of such Fiscal Year to increases or decreases in the Solid Waste Resources Fee or other rates and charges described in clause (2) of the definition of Revenues approved and in effect as of the date of calculation, as evidenced by a calculation prepared by the City Representative and on file with the Trustee, shall have produced a sum equal to at least 125% of the Debt Service for such Fiscal Year plus the Debt Service which would have accrued had such Additional Bonds been issued at the beginning of such Fiscal Year; and
- (3) The estimated Revenues for the then current Fiscal Year and for the first Fiscal Year thereafter, as evidenced by a certificate of the City Representative on file with the Trustee, plus an allowance for estimated Revenues for each of such Fiscal Years arising from any increase or decrease in the Solid Waste Resources Fee or other rates and charges described in clause (2) of the definition of Revenues estimated to be fixed and prescribed to the extent such increases or decreases shall take effect during such period, as evidenced by a certificate of the City

Representative on file with the Trustee, shall produce a sum equal to at least 125% of the estimated maximum annual Debt Service for each of such Fiscal Years, after giving effect to the issuance of such Additional Bonds.

Maintenance of Solid Waste Resources Fee

The City has covenanted in the Trust Agreement that if at any time during the Fiscal Year the City determines that the Solid Waste Resources Fee is not being maintained at a level sufficient to provide for payment of all Debt Service within the Fiscal Year, together with any amount required to replenish the Reserve Fund following a withdrawal therefrom and to pay all costs, fees and expenses to be paid by the City under the Trust Agreement, the City will take action at that time to maintain the Solid Waste Resources Fee at a level sufficient to provide for payment of all Debt Service within the Fiscal Year, together with any amount required to replenish the Reserve Fund following a withdrawal therefrom and to pay all costs, fees and expenses required to be paid by the City under the Trust Agreement; provided, however, that to the extent the City designates other legally available funds for such payment, it need not increase the Solid Waste Resources Fee. Under Proposition 218, approved by California voters in November 1996, any increase in the Solid Waste Resources Fee may require a public hearing, preceded by mailed notice, and be subject to a majority written protest. See "SECURITY AND SOURCES OF PAYMENT FOR THE BONDS – Proposition 218" below.

Proposition 218

On November 5, 1996, the voters of the State approved Proposition 218, known as the "Right to Vote on Taxes Act." Proposition 218 added Articles XIIIC and XIIID to the California Constitution and contains a number of interrelated provisions affecting the ability of the City to levy and collect both existing and future taxes, assessments and property related fees and charges. Article XIIID contains several provisions affecting property related "fees" and "charges," which are defined for purposes of Article XIIID to mean "any levy other than an ad valorem tax, a special tax, or an assessment, imposed by a local governmental entity upon a parcel or upon a person as an incident of property ownership, including user fees or charges for a property related service."

Notice, Public Hearing and Majority Protest. Article XIIID requires that any local government imposing or increasing any property related fee or charge must provide written notice thereof to the record owner of each identified parcel upon which such property related fee or charge is proposed to be imposed, and must conduct a public hearing with respect thereto. The proposed property related fee or charge may not be imposed or increased if a majority of owners of the identified parcels file written protests against it. As a result, if the Solid Waste Resources Fee or the Extra Capacity Fee is determined to be a "fee" or "charge" for a property related service as defined in Proposition 218, any increase in the Solid Waste Resources Fee or the Extra Capacity Fee would require a public hearing, preceded by mailed notice, and would be subject to a majority written protest.

The City currently provides written notices to all property owners receiving service in connection with proposed increases in Solid Waste Resources Fee and the Extra Capacity Fee and holds public hearings with respect to such proposed increases as if they were subject to the provisions of Proposition 218.

Election Requirement for Certain Fees or Charges. In addition, Article XIIID provides that, except for fees or charges for sewer, water and refuse collection services, no property related fee or charge may be imposed or increased unless such fee or charge is submitted and approved by a majority vote of the property owners of the property subject to the fee or charge, or at the option of the local governmental entity, by a two-thirds vote of the electorate residing in the affected area.

The City believes that the Solid Waste Resources Fee and the Extra Capacity Fee would be deemed to be fees and charges for "refuse collection services" and not subject to this election requirement, although there can be no assurance that a court would not determine otherwise.

Limitations on Uses of Fees or Charges. Article XIIID also includes the following limitations applicable to property related fees or charges: (i) revenues derived from the fee or charge may not exceed the funds required to provide the property related service; (ii) revenues derived from the fee or charge may not be used for any purpose other than that for which the fee or charge was imposed; (iii) the amount of a fee or charge imposed upon any parcel or person as an incident of property ownership may not exceed the proportional costs of the service attributable to the parcel; and (iv) no fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question. The City believes that the Solid Waste Resources Fee and the Extra Capacity Fee satisfy these requirements, although there can be no assurance that a court would not determine otherwise. See "DEPARTMENT OF PUBLIC WORKS, BUREAU OF SANITATION SOLID WASTE OPERATIONS – Department of Public Works, Bureau of Sanitation Budgeted Expenditures."

Judicial Interpretation of Article XIIID. In Bighorn-Desert View Water Agency v. Verjil, 39 Cal. 4th 205 (2006) ("Bighorn"), the California Supreme Court held that fees and charges for ongoing water service through an existing connection were property related fees and charges imposed on a person as an incident of property ownership for purposes of Article XIIID, whether the fees and charges are calculated based on consumption or are imposed as a fixed monthly fee.

Initiative Power. Article XIIIC provides that the initiative power shall not be prohibited or otherwise limited in matters of reducing or repealing any local tax, assessment, fee or charge and that the power of initiative to affect local taxes, assessments, fees and charges shall be applicable to all local governments. Article XIIIC does not define the terms "local tax," "assessment," "fee" or "charge."

Judicial Interpretation of Article XIIIC. In its review in Bighorn, the California Supreme Court stated that the absence of a restrictive definition of "fee" or "charge" in Article XIIIC suggests that those terms include all levies that are ordinarily understood to be fees or charges, including all of the property-related fees and charges subject to Article XIIID. Although the Supreme Court did not arrive at an exact definition of such terms, it did conclude that fees and charges within the meaning of Article XIIID are fees and charges within the meaning of Article XIIIC. See "— Judicial Interpretation of Article XIIID" above. The interpretation and application of Proposition 218 will likely be subject to further judicial determinations, and it is not possible at this time to predict with certainty the outcome of such determinations.

Future Initiatives. No assurance can be given that the voters of the City will not, in the future, approve an initiative which reduces or repeals local taxes, assessments, fees or charges, including a reduction of all or any portion of the Solid Waste Resources Fee or the Extra Capacity Fee securing the Bonds. The use of the initiative power is arguably limited in the case of levies directly pledged to bonded indebtedness, such as the Solid Waste Resources Fee and the Extra Capacity Fee securing the Bonds. However, there can be no assurance that the voters of the City will not approve an initiative which attempts to reduce the Solid Waste Resources Fee or the Extra Capacity Fee.

Effect on Compliance with Trust Agreement Covenants. The ability of the City to comply with the covenants in the Trust Agreement, including the rate covenant described under "Maintenance of Solid Waste Resources Fee" above, could be adversely affected by actions taken (or not taken) by voters, property owners or other persons obligated to pay the Solid Waste Resources Fee or Extra Capacity Fee.

No Reserve Fund

No reserve will be funded for the Bonds. Parity Bonds are supported by a Reserve Fund under the Trust Agreement, but the Bonds will not be secured by such fund.

Investment of Funds

Moneys on deposit in the SWR Revenue Fund are currently held and invested by the Treasurer of the City in the Treasurer's general pooled investment fund (the "Pool"). See APPENDIX A – "CITY OF LOS ANGELES GENERAL INFORMATION – FINANCIAL OPERATIONS – Investment Practices" for information on the City's investment practices. Certain proceeds of the Bonds and other moneys required to be deposited by the City to the funds and accounts established under the Trust Agreement will be held and invested by the Trustee, at the direction of the City, in Permitted Investments, as defined in the Trust Agreement. See APPENDIX B – "SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT – REVENUES AND FUNDS."

Limited Liability

Notwithstanding anything contained in the Trust Agreement, the City shall not be required to advance any moneys derived from any source of income other than the Revenues, the SWR Revenue Fund and the other funds provided in the Trust Agreement for the payment of principal of and interest on the Bonds. The City may, however, advance moneys for any such purpose so long as such moneys are derived from a source legally available for such purpose and which may be legally used by the City for such purpose. THE BONDS ARE SPECIAL, LIMITED OBLIGATIONS OF THE CITY AND ARE SECURED SOLELY BY AND PAYABLE FROM A PLEDGE OF THE REVENUES. THE BONDS DO NOT CONSTITUTE AN OBLIGATION OF THE CITY FOR WHICH THE CITY IS OBLIGATED TO LEVY OR PLEDGE ANY FORM OF TAXATION OR FOR WHICH THE CITY HAS LEVIED OR PLEDGED ANY FORM OF TAXATION. THE BONDS DO NOT CONSTITUTE A DEBT OR AN INDEBTEDNESS OF THE CITY, THE COUNTY OF LOS ANGELES, THE STATE OF CALIFORNIA OR ANY OF ITS POLITICAL SUBDIVISIONS IN CONTRAVENTION OF THE CONSTITUTION OR STATUTES OF THE STATE.

The Bonds are not secured by, and the Bondholders have no security interest in or mortgage on, the Project, or the solid waste collection and disposal system of the City or any other property of the City (other than the SWR Revenue Fund). Default by the City on the payment of the Bonds will not result in loss of the Project. Should the City default, the Trustee may take whatever actions are available legally to enforce performance and observance of any obligation, agreement or covenant of the City under the Trust Agreement. Neither the Trustee nor the Bondholders are permitted to accelerate the payment by the City of the principal of and interest on the Bonds under any circumstances. See APPENDIX B – "SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT."

Debt Service Schedule

The following table sets forth the amounts required in each fiscal year for the payment of principal of and interest on the Bonds and the Parity Bonds, assuming in each case no optional redemptions. Totals may not sum due to independent rounding. The debt service payments on the Parity Bonds are secured by the Revenues on parity with the Bonds. See "SECURITY AND SOURCES OF PAYMENT FOR THE BONDS – Parity Bonds."

TABLE NO. 1
DEBT SERVICE SCHEDULE
(In Dollars)

	Series 2	009-A	Series 20)09-B	Series 2	2013-A	Series 2	2013-В	Series 2	2015-A	Series 2	018-A	Total	Fiscal Year Total
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Debt Service*	Debt Service*
8/1/2018	-	245,500.00	-	237,187.50	-	852,775.00	-	339,637.50	-	1,335,287.50	-	-	3,010,387.50	-
2/1/2019	9,820,000.00	245,500.00	5,090,000.00	237,187.50	3,000,000.00	852,775.00	4,340,000.00	339,637.50	9,310,000.00	1,335,287.50	-	-	34,570,387.50	37,580,775.00
8/1/2019	-	-	-	132,500.00	-	777,775.00	-	231,137.50	-	1,079,262.50	-	-	2,220,675.00	-
2/1/2020	-	-	5,300,000.00	132,500.00	3,000,000.00	777,775.00	4,555,000.00	231,137.50	19,615,000.00	1,079,262.50	-	-	34,690,675.00	36,911,350.00
8/1/2020	-	-	-	-	-	702,775.00	-	117,262.50	-	539,850.00	-	-	1,359,887.50	-
2/1/2021	-	-	-	-	6,000,000.00	702,775.00	795,000.00	117,262.50	8,590,000.00	539,850.00	-	-	16,744,887.50	18,104,775.00
8/1/2021	-	-	-	-	-	552,775.00	-	97,387.50	-	325,100.00	-	-	975,262.50	-
2/1/2022	-	-	-	-	4,075,000.00	552,775.00	835,000.00	97,387.50	6,500,000.00	325,100.00	-	-	12,385,262.50	13,360,525.00
8/1/2022	-	-	-	-	-	450,900.00	-	76,512.50	-	162,600.00	-	-	690,012.50	-
2/1/2023	-	-	-	-	6,730,000.00	450,900.00	875,000.00	76,512.50	4,580,000.00	162,600.00	-	-	12,875,012.50	13,565,025.00
8/1/2023	-	-	-	-	-	383,600.00	-	67,762.50	-	48,100.00	-	-	499,462.50	-
2/1/2024	-	-	-	-	6,860,000.00	383,600.00	895,000.00	67,762.50	4,810,000.00	48,100.00	-	-	13,064,462.50	13,563,925.00
8/1/2024	-	-	-	-	-	315,000.00	-	58,812.50	-	-	-	-	373,812.50	-
2/1/2025	-	-	-	-	9,000,000.00	315,000.00	915,000.00	58,812.50	-	-	-	-	10,288,812.50	10,662,625.00
8/1/2025	-	-	-	-	-	213,750.00	-	48,518.75	-	-	-	-	262,268.75	-
2/1/2026	-	-	-	-	9,000,000.00	213,750.00	935,000.00	48,518.75	-	-	-	-	10,197,268.75	10,459,537.50
8/1/2026	-	-	-	-	-	112,500.00	-	38,000.00	-	-	-	-	150,500.00	-
2/1/2027	-	-	-	-	9,000,000.00	112,500.00	960,000.00	38,000.00	-	-	-	-	10,110,500.00	10,261,000.00
8/1/2027	-	-	-	-	-	-	-	26,000.00	-	-	-	-	26,000.00	-
2/1/2028	-	-	-	-	-	-	980,000.00	26,000.00	-	-	-	-	1,006,000.00	1,032,000.00
8/1/2028	-	-	-	-	-	-	-	13,750.00	-	-	-	-	13,750.00	-
2/1/2029	-	-	-	-	-	-	1,000,000.00	13,750.00	-	-	-	-	1,013,750.00	1,027,500.00
8/1/2029	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/1/2030	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/1/2030	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/1/2031	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/1/2031	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/1/2032	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/1/2032	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/1/2033	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	9,820,000.00	491,000.00	10,390,000.00	739,375.00	56,665,000.00	8,723,700.00	17,085,000.00	2,229,562.50	53,405,000.00	6,980,400.00			166,529,037.50	166,529,037.50

^{*} Total debt service does not include the anticipated debt service on the Series 2018-A Bonds.

SOLID WASTE RESOURCES FEE

Background

The Solid Waste Resources Fee, which is the primary component of Revenues, is imposed on all single family dwellings in the City and those multiple unit dwellings for which the City provides solid waste collection services. The City provides household solid waste collection services to any residential dwelling on the basis of whether solid waste containers are placed upon the street for City collection. In practice, most multiple unit dwellings that receive City collection consist of buildings with four or fewer units. A moratorium, imposed by the City Council in 1990, stipulates that no new multiple unit dwellings over four units may be added for City solid waste collection service. Any units not serviced by the Department of Public Works, Bureau of Sanitation (the "Bureau") have service provided by a private hauler. The Bureau has entered into exclusive franchise agreements with private haulers to provide this service. Since the franchise agreements are to provide service to customers who are not served by the City, there will be no impact on the Revenues.

The Solid Waste Resources Fee was instituted by the City Council pursuant to Ordinance No. 157819 effective July 21, 1983 (as amended to date, the "SWR Ordinance"). The SWR Ordinance has been amended from time to time such that the Solid Waste Resources Fee currently may be imposed for all costs related to the collection, transfer, recycling, recovery of waste resources and/or disposal of solid waste collected by the City including, but not limited to: salaries, direct and indirect overhead, equipment, ancillary equipment, refuse and recycling containers and vehicles, landfill costs, whether for disposal or for resource recovery facilities or refuse to energy and fuel facilities or closure of City owned facilities, development, acquisition, construction, operation and maintenance of equipment, alternative fuel infrastructure, buildings or facilities used in the collection, recycling, recovery of waste resources and/or disposal of solid waste or storage of solid waste related equipment, transfer facilities, resource recovery facilities or transfer equipment, maintenance of transfer facilities or equipment, or for facilities and equipment used in the recovery of waste resources in the form of energy, alternative fuels or manufacturing feedstocks, and all related costs of the services provided in the collection, the availability of collection, transfer, recycling, the availability of recycling, the recovery of waste resources, disposal and the availability of disposal of solid waste.

Charges

The Trust Agreement requires that the City maintain the Solid Waste Resources Fee at a level sufficient at all times to provide for payment of all Debt Service in each Fiscal Year, and other costs of the City. See "Security And Sources Of Payment For the Bonds – Maintenance of Solid Waste Resources Fee" herein. The City annually reviews the Solid Waste Resources Fee and the actual receipts thereof in order to ensure that its obligations under the Trust Agreement are met. The Solid Waste Resources Fee is calculated to cover the program costs of all departments of the City supporting the program. All City charges are reviewed annually by the City Administrative Officer as part of the budgetary process.

The Solid Waste Resources Fee was first enacted in 1983 and levied at a rate of \$1.50 per month for all single family residences and \$1.00 per month per unit in a multiple dwelling unit residence served by the City. The Solid Waste Resources Fee has been increased many times and decreased one time by the City Council since 1983.

Residents currently can dispose of 240 gallons a week per single family residence (60 gallons for general household refuse, 90 gallons for yard trimmings and 90 gallons for recyclable materials) and 60 gallons a week per unit in multiple unit dwellings for general household refuse (with an additional 90

gallons provided to each parcel for yard trimmings and an additional 90 gallons provided to each parcel for recyclable materials), at a rate of \$36.32 per month for single family dwellings and \$24.33 per month per unit for multiple unit dwellings. The following table sets forth the monthly Solid Waste Resources Fee for single family and multiple dwelling unit residences for the fiscal years shown.

TABLE NO. 2 SOLID WASTE RESOURCES FEE RATE HISTORY

	Monthly Charge					
Fiscal Years	Single-Family Dwelling Unit	Multi-Family Dwelling Unit				
1984-1991 ⁽¹⁾	\$1.50	\$1.00				
1991-1993 ⁽²⁾	3.00	2.00				
1993-1994 ⁽³⁾	6.00	4.00				
1995-1996 ⁽⁴⁾	4.50	3.00				
1997-2004 ⁽⁵⁾	6.00	4.00				
$2004^{(6)}$	10.00	6.60				
$2005 - 2007^{(7)}$	11.00	7.27				
$2007^{(8)}$	18.00	11.88				
$2008^{(9)}$	22.00	14.52				
$2008-2009^{(10)}$	26.00	17.16				
$2009-2018^{(11)}$	36.32	24.33				

⁽¹⁾ Established July 21, 1983.

Source: Department of Public Works, Bureau of Sanitation.

The current rates are expected to provide sufficient revenues to pay operations and facilities costs and debt service on all Outstanding Bonds and Outstanding Parity Bonds. The City Council will consider further increases as necessary to recover the costs of solid waste operations and facilities in the future. See "DEPARTMENT OF PUBLIC WORKS, BUREAU OF SANITATION SOLID WASTE OPERATIONS – Department of Public Works, Bureau of Sanitation Budgeted Expenditures."

The City Council approved the Extra Capacity Fee Ordinance, Ordinance No. 170868, on January 3, 1996. The Extra Capacity Fee, which was first imposed in July 1996, is a charge of \$5.00 per month for each additional 30 gallons of refuse, \$2.50 per month for each additional 30 gallons of yard trimmings, or \$2.00 for a tag to allow 30 gallons of intermittent extra capacity. Effective August 22, 2002, the City amended the Extra Capacity Fee by Ordinance No. 174699 to increase the standard yard trimming allowance to 90 gallons.

⁽²⁾ Increase effective July 5, 1990.

⁽³⁾ Increase effective January 20, 1993.

⁽⁴⁾ Decrease effective July 1, 1994.

⁽⁵⁾ Increase effective July 1, 1996.

⁽⁶⁾ Increase effective October 25, 2003.

⁽⁷⁾ Increase effective July 1, 2004.

⁽⁸⁾ Increase effective September 1, 2006.

⁽⁹⁾ Increase effective July 1, 2007.

⁽¹⁰⁾ Increase effective September 20, 2007.

⁽¹¹⁾ Increase effective September 8, 2008.

Subject to the covenants of the City under the Trust Agreement and applicable law, the City may by ordinance modify the Solid Waste Resources Fee rate and the Extra Capacity Fee. See "SECURITY AND SOURCES OF PAYMENT FOR THE BONDS – Charges" and "– Proposition 218." See, also, APPENDIX B – "SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT – Alternate Receipt and Deposit of Revenues; Withdrawals." The following table presents Changes in Operating Cash of the City's Solid Waste Program.

TABLE NO. 3 SOLID WASTE PROGRAM CHANGES IN OPERATING CASH Fiscal Years 2013-14 through 2017-18 (Unaudited)

	2013-14 ⁽¹⁾ Actual	2014-15 ⁽¹⁾ Actual	2015-16 ⁽¹⁾ Actual	2016-17 ⁽¹⁾ Actual	2017-18 Estimated
Revenues					
Solid Waste Resources Fee	\$267,594,618	\$270,955,262	\$311,859,776	\$286,501,703	\$287,000,000
General Fund Lifeline Reimbursement	5,562,226	8,691,433	2,801,444	9,929,185	5,700,000
Interest	2,535,765	2,110,813	2,090,919	2,214,725	2,000,000
Reimbursement From Other					
Funds/Departments	10,855,770	10,516,317	23,086,782	18,911,733	17,637,992
Miscellaneous Other Revenues	2,703,463	4,475,523	3,009,295	3,989,444	3,059,568
Total Revenues	\$289,251,842	\$296,749,348	\$342,848,216	\$321,546,790	\$315,397,560
Expenditures					
Debt Service	\$45,207,493	\$44,932,556	\$39,957,351	\$39,607,450	\$38,904,025
Operational Expenditures	232,120,437	275,095,371	285,021,282	286,047,273	280,054,144
Capital Infrastructure	6,153,051	2,912,408	5,031,127	6,044,942	9,889,841
Total Expenditures ⁽²⁾	\$283,480,981	\$322,940,335	\$330,009,760	\$331,699,665	\$328,848,010
Operating Cash					
Beginning Cash Balance	\$198,559,247	\$204,330,108	\$178,139,121	\$190,977,577	\$180,824,702
Change in Operating Cash	5,770,861	(26,190,987)	12,838,456	(10,152,875)	(13,450,450)
Ending Cash Balance	\$204,330,108	\$178,139,121	\$190,977,577	\$180,824,702	\$167,374,252

⁽¹⁾ Figures reflect actual revenue received and costs incurred within the Fiscal Year.

Source: Department of Public Works, Bureau of Sanitation.

Exemptions From and Discounts to the Solid Waste Resources Fee

Certain exemptions from the Solid Waste Resources Fee are allowed pursuant to the SWR Ordinance. Multiple dwelling unit residences which do not utilize household solid waste collection services from the City are not subject to the Solid Waste Resources Fee imposed by the SWR Ordinance. An exemption for this reason is available as long as a multiple dwelling unit residence can be verified as not receiving solid waste collection services from the City. Such exemptions are granted or removed upon verification of lack of service by field inspectors from the Bureau. Upon verification, exemption information is provided to DWP by the Bureau to update billing and collection information.

⁽²⁾ Figures only represent expenditures from the SWR Revenue Fund.

The Solid Waste Resources Lifeline program is available to those residents who meet income requirements for a low income household, as defined in the SWR Ordinance, and are either 62 years and older or disabled. Lifeline residents receive a discount of 30% on their Solid Waste Resources Fee. As of April 2018, there were 47,258 Solid Waste Resources Lifeline customers. The City has a cap of 51,400 residents who may qualify for this discount; enrollment is currently below the cap. The City Council has discretion to raise the cap. The Bureau is reimbursed from the General Fund in each fiscal year an amount equal to the financial relief provided. For the Fiscal Year 2017-18, the budgeted reimbursement amount is estimated to be \$5.7 million.

Billing and Collection

The collection of the Solid Waste Resources Fee imposed by the SWR Ordinance occurs under the direction, supervision, and control of the City's Director of Finance. However, the SWR Ordinance also calls for the Director of Finance to arrange for the billing and collection of, and accounting for, the Solid Waste Resources Fee through and by available facilities of the DWP and to pay for the costs of such services. Under the SWR Ordinance, the Director of Finance has the ability to establish separate billing and collection services; however, since the inception of the Solid Waste Resources Fee, billing and collection services have been provided by DWP. The City currently expects to continue to use the billing and collection services of DWP but may elect not to do so at any time.

As the exclusive provider of water service and practically the sole provider of electric service to the City's residents, DWP regularly bills for its services and collects accounts receivable from its customers. DWP includes the Solid Waste Resources Fee on its bimonthly bill which also includes charges for water, electric and sewer services and certain taxes. Beginning in Fiscal Year 2007-08, the City began also including on the DWP bill the Multifamily Bulky Item Fee, imposed on multiple dwelling unit residences for which the City provides bulky item collection services, but which are not subject to the Solid Waste Resources Fee. Payments received by DWP are credited first to the accounts in arrears in the following order: (i) water charges, (ii) electric charges, (iii) State and local taxes, (iv) sewer service charge and (v) Solid Waste Resources Fee. After payments credited to accounts in arrears, payments are then credited to the current accounts for each charge in the priority described above.

The normal DWP policy for most customers is that when a utility bill (water or electric) is in arrears by \$150 or more, a Late Payment Charge of 18 percent per annum is applied. When the total accounts receivable in arrears reaches \$250, collection procedures are started. The first step in this procedure is a "final notice." This notice is mailed to the bi-monthly and monthly customer 20 days after the current bill issue date, when the past due balance of the account reaches a certain threshold in arrears (varies depending on the customer's credit standing with DWP). This notice provides the customer a "last day to pay," typically identified two weeks from the date this final notice is issued. Approximately seven days prior to this "last day to pay," customers with delinquent balances greater than \$100 are eligible to receive an outbound call notifying the customer their bill is past due.

A five-day shut off notice is issued to the bi-monthly and monthly customer after the "last day to pay" date has been exceeded, at approximately 37 days from the bill issue date, if the delinquent amount remains over \$250. A customer's failure to pay by the conclusion of the five-day period leads to a temporary shut off of water and/or electrical service on the first field call. Should the bill remain unpaid ten days after the initial shut off, the water and/or electrical service may be permanently discontinued if a follow-up check in the field confirms this customer is no longer at the location.

Certain DWP customers receive water and electric service by means of a master meter which may serve multiple dwelling units. Water and electrical service to multiple dwelling unit residences served by a master meter may be disconnected for non-payment. In February 1998, DWP implemented the Utility

Maintenance Program ("UMP") as an alternative to the termination of master-metered service. This program is an extension of the existing Rent Escrow Accounts Program, or REAP. Tenants who participate in the program have the option of putting their rent into an escrow trust fund established by the Los Angeles Housing Department to maintain utility services until such time as the delinquent bill is paid in full.

Customer accounts where the water and/or electrical service are disconnected due to non-payment are monitored by DWP collections personnel. Unless a customer vacates the service location, DWP collections personnel will continue to regard the customer's account as an active account and attempt collection of the delinquent amounts owing. Should the customer vacate the service location, a closing bill is generated which initiates further collection efforts. An outside collection agency may be used on accounts with \$10.00 to \$7,499.99 outstanding as soon as 45 days after the closing bill is issued. Accounts with \$7,500.00 or more outstanding are referred to the City Attorney for legal action. If the delinquent amount remains outstanding approximately three months after the closing bill has been issued, the amount owed is transferred into write off, where collection efforts will be maintained for up to four years from the closing bill issue date. The four year period may be extended by up to one year, if payment is received within the fourth year. On a weekly basis, the DWP transfers an amount equal to that week's projected collection of the Solid Waste Resources Fee revenue to Sanitation. On a monthly basis, an adjustment is made to reflect the actual Solid Waste Resources Fee revenue collected for the previous month. The amount remitted to Sanitation is also reduced by administrative charges (currently \$328,800 per quarter), refunds of incorrectly billed charges, bank returned checks and other adjustments.

The following table summarizes the collection history for the previous ten fiscal years for the Solid Waste Resources Fee. The amount shown for billings and collections represents the amounts billed and the amounts collected by DWP. The remittance to the City reflects collections less (i) DWP's administration charges, (ii) refunds of incorrectly billed charges and (iii) any corrections. The remittance to the City does not include interest earnings on collections. Remittances are deposited in the SWR Revenue Fund held by the City Treasurer.

TABLE NO. 4
DEPARTMENT OF WATER AND POWER
BILLINGS AND COLLECTIONS
SOLID WASTE RESOURCES FEE
Fiscal Years 2007-08 through 2016-17

Solid Waste

<u>Fiscal Year</u>	<u>Billings</u>	Collections	Collection Rate ⁽¹⁾	Resources Fee Remitted to City
2007-08	\$191,110,979	\$182,899,335	95.70	\$191,040,176
2008-09	261,232,839	250,405,893	95.86	246,057,329
2009-10	260,521,177	256,622,113	98.50	259,031,507
2010-11	272,139,496	275,381,471	101.19	276,304,047
2011-12	288,733,227	286,562,787	99.25	281,709,908
2012-13	290,403,456	290,801,586	100.14	291,125,302
2013-14	292,427,811	265,804,255	$90.90^{(2)}$	267,594,618
2014-15	295,361,246	275,764,833	$93.37^{(2)}$	270,955,262
2015-16	294,867,611	301,592,386	102.28	311,859,776
2016-17	292,236,428	290,329,008	99.35	286,501,703

(See footnotes on next page.)

Source: Department of Public Works, Bureau of Sanitation.

Application of Revenues

The Solid Waste Resources Fee and Extra Capacity Fee amounts received by the Bureau are deposited when received into the SWR Revenue Fund. Such amounts are applied first to pay debt service on the Bonds, the Parity Bonds and any Additional Bonds, including any required reserve fund deposits, and to pay debt service on any subordinate obligations. See "SECURITY AND SOURCES OF PAYMENT FOR THE BONDS – Revenue Pledge." Amounts remaining following payment of debt service are retained in the SWR Revenue Fund and may be applied to any lawful purposes of the Solid Waste Program, including payment of operations and maintenance costs. The Bureau has historically maintained significant balances in the SWR Revenue Fund to apply to future capital costs. See "DEPARTMENT OF PUBLIC WORKS, BUREAU OF SANITATION SOLID WASTE OPERATIONS – Future Capital Projects and Borrowing Plans."

Historical Debt Service Coverage

The following table provides a history of debt service coverage on the Parity Bonds from Fiscal Year 2012-13 through Fiscal Year 2016-17.

TABLE NO. 5
HISTORICAL DEBT SERVICE COVERAGE
Fiscal Years 2012-13 through 2016-17
(Dollar Amounts in Thousands)

	2012-13	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>
Solid Waste Resources Fee and					
Extra Capacity Fee	\$291,125	\$267,595	\$270,955	\$311,860	\$286,502
Interest	2,268	2,536	2,111	2,091	2,215
Other Revenues	20,069	19,121	23,683	28,897	32,830
Pledged Revenues	\$313,462	\$289,252	\$296,749	\$342,848	\$321,547
Debt Service	\$40,043	\$45,207	\$44,933	\$39,957	\$39,607
Debt Service Coverage	7.83x	6.40x	6.60x	8.58x	8.12x

Source: Department of Public Works, Bureau of Sanitation.

Pro Forma Statement of Debt Service Coverage

The following table presents a projection of Revenues available to pay debt service payable in the fiscal years shown on the Bonds and the Parity Bonds. The projections also assume that the Solid Waste Resources Fee and the Extra Capacity Fee remain at current levels, but are escalated at 0.10% per year based on projected customer growth. See "SOLID WASTE RESOURCES FEE – Charges" herein. See also "DEPARTMENT OF PUBLIC WORKS, BUREAU OF SANITATION SOLID WASTE OPERATIONS – Future Capital Projects and Borrowing Plans."

⁽¹⁾ The collection rate varies from year to year and may exceed 100% because of differences in the average time taken by customers to pay their bills and differences in the estimations used to calculate remittances of the Solid Waste Resources Fee at fiscal year-end.

⁽²⁾ In Fiscal Year 2013-14, DWP transitioned to a new customer information system. This transition decreased Operating Cash for Fiscal Years 2013-14 and 2014-15.

TABLE NO. 6
PRO FORMA STATEMENT OF DEBT SERVICE COVERAGES
Fiscal Years 2017-18 through 2021-22
(Dollar Amounts in Thousands)

	2017-18 ⁽¹⁾	<u>2018-19</u>	2019-20 ⁽⁵⁾	<u>2020-21</u>	<u>2021-22</u>
Revenues					
Solid Waste Resources Fee					
and Extra Capacity Fee ⁽²⁾	\$287,000	\$287,287	\$287,574	\$287,862	\$288,150
Interest	2,000	1,700	1,300	800	400
Other Revenues	26,398	25,578	26,082	24,449	24,661
Total Pledged Revenues	\$315,398	\$314,565	\$314,956	\$313,111	\$313,211
Debt Service ⁽³⁾					
Series 2009-A Bonds ⁽⁴⁾	4,906	10,311	-	-	-
Series 2009-B Bonds	5,560	5,564	5,565	-	-
Series 2013-A Bonds	2,756	4,706	4,556	7,406	5,181
Series 2013-B Bonds	12,093	5,019	5,017	1,030	1,030
Series 2015-A Bonds	13,590	11,981	21,774	9,670	7,150
Series 2018-A Bonds	<u>-</u>	<u>5,711</u>	11,357	11,355	11,359
Total Debt Service ⁽⁶⁾	\$38,904	\$43,291	\$48,268	\$29,460	\$24,720
Debt Service Coverage	8.11x	7.27x	6.53x	10.63x	12.67x

⁽¹⁾ Budgeted amount.

Source: Department of Public Works, Bureau of Sanitation and Office of City Administrative Officer, Debt Management Group and Fieldman, Rolapp & Associates, Inc.

The City may in the future issue one or more series of Additional Bonds secured by a pledge of Revenues on a parity with the pledge thereof securing the Bonds and the Parity Bonds. See "DEPARTMENT OF PUBLIC WORKS, BUREAU OF SANITATION SOLID WASTE OPERATIONS – Future Capital Projects and Borrowing Plans."

RISK FACTORS RELATING TO FEE COLLECTION AND REVENUES

No assurances can be given that the above levels of projected revenues from the Solid Waste Resources Fee and Extra Capacity Fee (together, the "Fees") which comprise the majority of Revenues securing the Bonds will, in fact, be realized. Although the Bureau's services are essential to property owners in the City, the operations of the Bureau and the collection of the Fees are affected to some degree by the overall economic conditions affecting the City, particularly the real estate economy of the City affecting owners and occupants of single family real properties in the City.

⁽²⁾ Based on Fiscal Year 2017-18 Adopted Budget. Future years escalated by 0.10% a year.

⁽³⁾ Comprised of bond payments on the August 1 and the following February 1 occurring in the applicable Fiscal Year.

⁽⁴⁾ Defeased in part as of the date of delivery of the Series 2015-A Bonds.

⁽⁵⁾ City staff anticipates proposing a rate increase to Council to be effective in Fiscal Year 2019-20. No such increase is reflected in this pro forma. The City cannot guarantee the timing of any proposed increase.

⁽⁶⁾ Totals may not add due to rounding.

Economic conditions which adversely affect the ability of property owners to pay for property-related costs and services, such as mortgages, property taxes and utility bills, including trash collection fees, may also have an adverse effect on the collection of the Fees. It can be expected that property owners whose property is in foreclosure or who have lost their jobs will likely be delinquent in paying their property-related fees and charges, such as the Fees. It is possible that the Bureau could experience a dip in Fee collections, netted against any reduced operating costs, during the duration of weak or adverse economic conditions.

In addition to the effects of economic conditions on the Fees, the scope of the Bureau's operations could change over time. For example, the number of single family and multiple dwelling unit residences served by the City could change due to several factors. The number of households eligible for solid waste collection and disposal service could increase due to the construction of new single family residences or multiple unit dwellings. Likewise, the number of households eligible for solid waste collection and disposal service could be reduced to the extent that single family residences are replaced with multiple unit dwellings which do not utilize City solid waste collection, or by the conversion of dwelling units to commercial or industrial uses. See "SOLID WASTE RESOURCES FEE – Billing and Collection."

DEPARTMENT OF PUBLIC WORKS, BUREAU OF SANITATION SOLID WASTE OPERATIONS

General

The City collects refuse, green material, and recyclables throughout the City from single family dwellings and smaller multiple unit dwelling residences (typically from buildings of four or fewer units) where containers are placed at the curb. The Solid Waste Resources Fee, which is the primary component of Revenues, however, is imposed on all single family dwellings in the City and those multiple unit dwellings for which the City provides solid waste collection services regardless of whether containers are placed at the curb.

Commercial businesses and large apartment complexes are currently provided service through permitted private waste haulers. The City is not obligated, nor does it presently intend, to provide solid waste collection services to commercial and industrial customers. Throughout the County, commercial and industrial solid waste collection services are typically performed pursuant to exclusive franchise service agreements with private companies.

Organization and Management

The Board of Public Works manages and controls the Department of Public Works, which administers the City's solid waste and solid resources collection and disposal program, and is responsible for the following bureaus: Contract Administration, Engineering, Sanitation, Street Lighting and Street Services and the Office of Accounting of the Board of Public Works. The Board of Public Works is composed of five full-time salaried members appointed by the Mayor, and confirmed by the City Council, for a term of four years. The Board of Public Works advertises and invites proposals for bids, awards contracts for the construction of public buildings and coordinates the issuance of certain activity permits for use of City-owned property.

The Bureau of Sanitation is responsible for the collection, management and disposal of all solid waste and other solid resources, including its own residential collection programs and services. The Bureau also has responsibility for the operation and maintenance of all facilities required for the conveyance and treatment of wastewater, including industrial waste enforcement, for maintenance of local storm drains, and for the reduction of pollutants in urban runoff.

The Office of Accounting of the Public Works Department prepares accounting documents, maintains budget data and cost accounts for Public Works, and accounts for special funds affecting Public Works activities, including the Acquisition Fund and the SWR Revenue Fund. The Office of Accounting of the Public Works Department also prepares and maintains a record of Public Works payroll data, maintains records of accounts receivable and payable, prepares statements and issues reports for use by management to control expenditures and operations, and develops and installs cost systems for various public works projects.

Collection

The City provides collection service to approximately 740,000 households within six collection districts: East Valley, West Valley, West Los Angeles, North Central Los Angeles, South Los Angeles, and Harbor. Collection service is accomplished by a fleet of over 721 heavy-duty vehicles. Each solid waste collection district of the City is divided by the five days of the week and is divided, in turn, into five sections. The district is supervised by a district superintendent and his or her staff. Additional personnel assist with the collection of dead animals, white goods (composed of metal and composite materials, such as appliances) and bulky items. During Fiscal Year 2016-17, the City collected an average of 3,657 tons of refuse, 1,599 tons of green material, and 861 tons of recyclables per day. The Bureau's vehicles, including solid resources collection equipment, are maintained by the Fleet Services Division of the City's General Services Department.

In April 2014, the Zero Waste Los Angeles Commercial and Multifamily Solid Waste Franchise (recycLA) System was approved by City Council. In Fiscal Year 2016-17, the City awarded exclusive franchises to seven service providers for providing recycling, organics, and waste collection services to commercial businesses and multifamily residences not served by the City. See "– Zero Waste LA Commercial and Multi-family Franchise System" below.

On August 3, 2007, the Los Angeles City Council, with concurrence of the Mayor, voted to expand the Department of Public Works, Bureau of Sanitation, Bulky Item Collection Program to include 541,000 residents and owners of apartment complexes comprised of five or more units. The Multifamily Bulky Item ("MFBI") Program commenced operations on October 1, 2007. A Multifamily Monthly Bulky Item Fee of \$1.28 per residential unit, split equally between the owner and tenants, funds this service. The fee is included on the DWP municipal services bill. This fee is later deposited into an independent special fund, separate from the SWR Revenue Fund, and is not commingled with the Solid Waste Resources Fee. The cost and revenue associated with this special fund have been excluded from Table No. 3.

Multifamily residents, in need of bulky item collections, are instructed to call the citywide toll free 3-1-1 number to schedule collections. In addition to scheduled requests, collections result from reports of illegal dumping, proactive sweeps, and neighborhood clean-up events. MFBI truck drivers are deployed according to requests for service and reports of abandoned items. Neighborhood sweeps are conducted in areas with frequent reports of abandoned items and upon requests by City Council and Neighborhood Council representatives.

The table below shows the amount of City solid waste collections for Fiscal Years 2007-08 through 2016-17.

TABLE NO. 7 ANNUAL SOLID WASTE COLLECTIONS Fiscal Years 2007-08 through 2016-17

Fiscal <u>Year</u>	Green Material (Tons)	Recyclables ⁽¹⁾ (Tons)	Refuse (Tons)	Total <u>(Tons)</u>
2007-08	485,376	254,792	942,799	1,682,967
2008-09	401,524	214,000	868,867	1,484,391
2009-10	474,657	211,290	867,113	1,553,060
2010-11	492,341	207,000	882,005	1,581,346
2011-12	470,527	197,432	851,434	1,519,393
2012-13	476,333	194,576	848,890	1,519,799
2013-14	424,164	192,500	852,635	1,469,299
2014-15	425,070	209,924	872,802	1,507,796
2015-16	417,325	216,542	907,875	1,541,743
2016-17	418,694	226,700	932,093	1,577,487

⁽¹⁾ Includes tonnage collected from all Solid Waste programs and contamination tonnage.

Source: Department of Public Works, Bureau of Sanitation.

Labor and Employment

Several City departments and bureaus contribute labor and employee time to the operation of the Solid Waste Program. See "– Organization and Management" above. The Bureau's workforce is 99% unionized. Most of the Bureau's employees are represented by bargaining units that are members of the Coalition of Los Angeles City Unions and are currently in negotiation with the City for approximately 18 successor Memoranda of Understanding to replace those that expired at the end of June 2018. After an MOU expires, the terms continue to be observed during negotiations of a new contract unless a provision has a specific termination date. Other non-Coalition bargaining units, such as Engineers & Architects Association do not expire until the end of June 2019. See APPENDIX A – "CITY OF LOS ANGELES GENERAL INFORMATION – FINANCIAL OPERATIONS – LABOR RELATIONS" attached hereto.

Retirement and Other Postemployment Benefits Contributions

Members of the Bureau of Sanitation workforce are members of the Los Angeles City Employee's Retirement System ("LACERS"). As discussed above under the caption "— Department of Public Works, Bureau of Sanitation Budgeted Expenditures," a portion of the costs of Bureau of Sanitation costs include payment to the City for various costs related to the Solid Waste Program, including, among other things, contributions to LACERS for retirement benefits and other postemployment healthcare benefits ("OPEB") of City employees who work on the Solid Waste Program, which are attributable to the SWR Revenue Fund. For a discussion of funding of the City Retirement and OPEB, see APPENDIX A – "CITY OF LOS ANGELES GENERAL INFORMATION – FINANCIAL OPERATIONS – Retirement and Pension System" and " – Other Post-Employment Benefits" attached hereto.

Zero Waste LA Commercial and Multi-family Franchise System

The City began its recycling program plan in 1989 with the adoption of the "Recycling Implementation Plan." The same year, the State passed AB 939, which established a mandate to achieve a waste diversion rate of 25% by the year 1995 and 50% by the year 2000. See "REGULATION – California Integrated Waste Management Act." The City exceeded these goals with diversion rates of 44% in 1995, and 60% in 2000. This act was modified in 2008 by the passage of SB 1016, which modified the method for determining compliance with the measure from a diversion rate calculation, to a disposal measurement system. The City is in compliance with all requirements regarding program implementation, and has a diversion rate equivalent to 76% when the study was conducted in 2012. No further study has been conducted since that time, but the City has adopted a Zero Waste plan and goal to reach 90% diversion by 2025 through a combination of policies, programs, and facility development.

The Bureau's curbside recycling programs collect and recycle approximately 226,700 tons of blue bin recyclables and approximately 418,700 tons of green materials annually. These programs represent a significant component of the City's successful diversion efforts. The Bureau also provides solid waste services and recycling collection and support to all City Departments, as well as Los Angeles Unified School District schools within the City. Materials accepted for Blue Bin recycling include glass, plastic containers, plastic bags polystyrene, bi-metal cans, metal hangers, aluminum, empty paint and aerosol cans, and any color or type of uncontaminated paper products.

In December 2010, the City adopted a mandatory construction and demolition recycling ordinance, which directs all mixed construction waste to recycling facilities, and provides rebates to encourage restaurants to recycle food and organics. Additionally, the City adopted an ordinance to ban single use plastic bags in 2013 and place a \$.10 charge on paper bags in certain retailers, mirroring a policy adopted by the majority of neighboring jurisdictions.

The Bureau also implemented an exclusive franchise system incorporating all privately served commercial and multifamily buildings in the City. This system is designed to reduce and recycle over 50% of the solid waste currently disposed by these sectors, by 2025. The implementation of the system provides environmental benefits through clean fuel vehicles and efficient routing, expansion of blue bin style recycling to all remaining residents and businesses, and neighborhood benefits such as reduced traffic, clean bins and predictable rates. In Fiscal Year 2016-17, the Bureau awarded exclusive franchises to seven service providers. The implementation of the franchise system does not have any material impact on the revenues deposited into the SWR Revenue Fund.

Solid Waste Integrated Resources Plan

SWIRP is a long-range plan for the City's solid waste management needs through 2030. SWIRP identifies the policies, programs and facilities that will be needed to reach the City's goal of 90 percent landfill diversion by 2025. On June 6, 2017, the Bureau presented the SWIRP and Final Programmatic Environmental Impact Report documents to the Energy, Climate Change, and Environmental Justice ("ECCEJ") Council Committee. The Committee instructed the Bureau to update SWIRP and the Final PEIR, and include a definition of environmental justice ("EJ") along with a set of proposed policies and criteria to be applied to the City of Los Angeles. The Bureau is developing a Task Order Solicitation ("TOS") to solicit proposals from qualified consultant firms to assist in this endeavor. After selection of a consulting firm, the Bureau and selected consultant will work on the ECCEJ Committee requests, and report back for adoption. SWIRP'S Zero Waste Plan and the Program Environmental Impact Report can be accessed at http://lacitysan.org/srssd/swirp/home/index.html. The information set forth on such website is not incorporated herein by reference.

Automated Collection

The City has been collecting nearly all household solid waste through an automated collection process since August 1995. Automated collection is accomplished by a special-purpose vehicle having a mechanical arm which can reach out, grasp a 60 or 90 gallon wheeled plastic container, lift and empty the container into the body of the truck and then place the container back on the ground. This particular type of vehicle eliminates manual lifting by the operator and enables a single driver to collect from at least twice as many homes as compared to manual collection.

Automated Container Systematic Replacement Program

To reduce costly service request calls and increase the level of customer service, the City replaced solid waste containers that have exceeded their service life. The Automated Container Systematic Replacement Program ("ACSRP") was launched on July 15, 2002 to replace containers after the end of their ten-year service life. The ACSRP replaced a total of 835,874 units of black and green containers and was completed on August 14, 2010. Moreover, the City also has an Ad Hoc container services operation, an ongoing program, which provides containers upon request and replaces lost or broken containers at an average of 160,000 per year.

Alternative Clean Fuel Program

In June 2000, the City Council adopted a Clean Fuel Policy as part of its effort to reduce air toxins and pollutant emissions, and recommended support of SCAQMD's Proposed Rule 1193 ("Rule 1193"). Rule 1193 requires solid waste collection fleet operators with 15 or more solid waste collection vehicles to acquire alternative-fuel solid waste collection heavy-duty vehicles when procuring or leasing such vehicles. Later that month, the SCAQMD adopted Rule 1193 with amendments as requested by the City Council.

Consistent with the City Council's Clean Fuel Policy and in furtherance of the City's role as a leader in the clean air arena, the Bureau is committed to the development of LNG and/or CNG fueling capabilities at its solid waste district yards. The six completed fueling stations provide LNG and/or CNG for the Bureau and other City departments operating in the vicinity of the fueling stations. The first fueling facility was constructed at the new East Valley Solid Resources Management Complex in Sun Valley. The East Valley facility is equipped with four 15,000-gallon LNG storage tanks, six LNG dispensers, and three CNG dispensers. The second LNG/CNG fueling facility is now operational at the West Valley Collection Yard. This facility is equipped with three 15,000-gallon LNG storage tanks, six LNG dispensers, and two CNG dispensers. A third LNG facility was constructed at the South Los Angeles Yard. This facility is equipped with three 15,000-gallon LNG storage tanks and has been operational since summer of 2006. The fourth LNG fueling facility was installed at the Harbor Collection Yard and equipped with 6,000-gallon LNG storage tank and dispensing equipment to fuel approximately 30 collection vehicles. The fifth LNG/CNG fueling station was built at the North Central District Yard. Completed in 2010, this station is equipped with three 20,000-gallon LNG storage tanks and dispensing equipment to accommodate LNG/CNG fueling service to approximately 150 solid waste collection vehicles. Construction of a CNG fueling station at the West Los Angeles District yard was completed in 2014. This station is equipped with CNG compressors and other equipment to provide time fill and fast fill fueling to a fleet of approximately 130 collection vehicles. Furthermore, the Bureau has retrofitted its existing diesel-powered solid waste collection trucks with particulate traps in conjunction with the use of ultra-low-sulfur diesel.

Processing and Disposal

The Bureau currently uses the Falcon Disposal Transfer Station ("Falcon") in Wilmington, Southern California Disposal Transfer Station ("SCD") in Santa Monica, and the CLARTS in the City for the transfer of solid waste collected from City residential units. CLARTS, SCD, and Falcon are completely enclosed facilities and utilize transfer tipping ports. The transfer stations are permitted to accept residential, commercial/industrial, and demolition wastes.

The City currently delivers an average of 200 tons per day ("tpd") of municipal solid waste ("MSW") collected from the Harbor Collection District to the Falcon Transfer Station for disposal at the Sunshine Canyon Landfill. The City pays a tipping fee of \$49.01 per ton to Republic Services Company for the transfer of MSW at the Falcon Transfer Station and disposal of the MSW at the Sunshine Canyon Landfill in Granada Hills. The City also transfers a daily average of 350 tons of MSW collected from the West Los Angeles Collection District at the Southern California Disposal for disposal at the Sunshine Canyon Landfill. The City pays \$26.33 per ton to SCD for the transfer of refuse to the Sunshine Canyon Landfill.

CLARTS is located Southeast of Downtown Los Angeles. CLARTS has a permitted capacity of 4,025 tpd, is completely enclosed and utilizes a forty thousand square foot tipping floor with two transfer tipping ports. The Bureau uses CLARTS for transferring of the residential MSW collected within the North Central, South Los Angeles, and West Los Angeles Solid Waste Collection districts for disposal at Sunshine Canyon and El Sobrante Landfills. A daily average of 1,600 tons of City-collected MSW is transferred from CLARTS, where 1,000 tons is disposed at the Sunshine Canyon Landfill and 600 tons at El Sobrante Landfill. In addition, an average 300 tpd of privately hauled refuse is brought to CLARTS for transfer and disposal at Sunshine Canyon Landfill. Also, an average of 800 tpd of commercially hauled refuse is brought to CLARTS for trans-loading into tractor/trailers owned or contracted by the commercial hauler, and an average of 300 tpd of City-collected green waste is transferred for processing at the WM-Bradley Landfill. The City owns and operates the CLARTS with City staff.

Green Recycling Facilities. The Bureau operates two green waste facilities for the processing of curbside collected yard trimmings into mulch and compost for land application. The Harbor Green Recycling Facility in San Pedro, an average of 80 tons per day of yard trimmings are mulched. This material is then supplied to several farmers and local colleges.

Also, the Lopez Canyon Environmental Center (formerly known as the Lake View Terrace Green Recycling Facility) began operation in December 2003 on a closed portion of the Lopez Canyon Landfill. The facility presently processes about 300 tpd of curbside collected green waste into mulch and compost, which is distributed at several sites throughout the City for public use at no cost. Also, the mulch and compost are distributed to agricultural end-users in Los Angeles and Ventura Counties, to local colleges and universities, and to the California Department of Transportation for spreading along freeway right-of-ways.

Landfill Closure Activities. The Bureau is responsible for the maintenance and closure construction of City-owned sanitary landfills, as well as the construction of roads, support facilities and methane gas recovery systems, among other functions.

Closure of the Gaffey Street, Bishops Canyon, Lopez Canyon, Sheldon Arleta and Toyon Canyon landfills are complete and two of these closed landfills (Gaffey and Bishop) have been developed into active recreational facilities. Sheldon Arleta is currently undergoing conversion into an active recreational facility.

Solid Waste Disposal Alternatives

Since MSW disposal operations ceased at the City-owned Lopez Canyon Landfill in 1996, City-collected refuse has been disposed primarily at the Sunshine Canyon Landfill.

In 2000, the City approved a new disposal contract with BFI (now Republic Services Company) for disposing of the majority of City-collected refuse at the Sunshine Canyon Landfill. This contract, which began in July 2001, allowed the City to deliver material at an increasing cost per ton for the first five years, with increases based on the CPI beginning in the sixth year. The City has the sole option to renew each five years, and the contract terminates in 2021.

Future Capital Projects and Borrowing Plans

The Bureau has proposed several future capital projects, and equipment purchases, which may require further increases to the Solid Waste Resources Fee and future borrowing to finance these projects and equipment as shown in Table No. 8. Facilities costs are adjusted to reflect an inflation rate of 5.0% per annum. The capital projects and the rate increases are subject to future Mayor and Council review and approval. Any further rate increases may also be subject to the provisions of Proposition 218. See "SECURITY AND SOURCES OF PAYMENT FOR THE BONDS – Proposition 218" herein.

In each of the years shown, certain costs are expected to be funded from proceeds of previous bond issues, reprogrammed funds, cash, grant funds and other sources, in addition to the proceeds of future bond issues. The Bureau has historically maintained significant cash balances which amounts are intended to be applied to future capital needs and other program purposes.

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TABLE NO. 8 DEPARTMENT OF PUBLIC WORKS, BUREAU OF SANITATION PROPOSED CAPITAL IMPROVEMENT PROGRAM AND EQUIPMENT **Fiscal Years 2018-19 through 2022-23**

CURRENT CIP PROJECTS	<u>2018-19</u>	2019-20	2020-21	2021-22	2022-23
CLARTS Stormwater & Safety Phase II	\$5,861	\$-	\$-	\$-	\$-
GIS Support for Implementation of Routing Programs	1,470	_	_	-	-
Jefferson Master Plan	133	_	-	_	-
Lopez Canyon Equestrian Staging Area and Trail	131	_	_	_	_
Lopez Canyon Landfill Waterline Replacement Project	577	_	_	_	_
PWB 10th Floor Customer Care Division Office Expansion	102	_	_	_	_
Sanitation Customer Service System (DWP AND ITA	892	892	892	_	_
System Interface)					
South LA Yard Locker Room Ventilation Improvement	136	_	_	_	_
SR Clean Fuel Program - Electric Vehicle Pilot Study	235	_	_	_	_
Washington Yard CSLA Modular Office (Phase 1)	1,189	_	_	_	_
West Los Angeles Women's Mobile Trailer	148	_	_	_	_
SUBTOTAL CURRENT CIP	\$10,874	\$892	\$892	\$0	\$0
PROPOSED CIP PROJECTS	\$10,674	\$072	\$072	\$0	φU
CLARTS Air Conditioning Upgrades	\$150	\$-	\$-	\$-	\$-
CLARTS Exit Scale House	150	100	Ψ_	Ψ_	Ψ_
CLARTS Solar Roof Panels and Mezzanine Project	2,500	2,500	_	_	_
East Valley Security Camera System Upgrade	50	2,500	_	_	_
East Valley Waterwise Landscaping	75	_	_	_	_
Griffith Office Trailer Replacement/Retrofit	350	_		_	_
Harbor Community Garden Irrigation	95	_		_	_
Harbor Environmental Learning Center	184	_	_	_	_
Harbor Yard Parking Lot Lighting Upgrade	50	_	_	_	_
Harbor Yard Security Camera System Upgrade	75	_	_	_	_
LCNG Fueling Station Upgrade	1,000	2,000	2,153	-	-
Lopez Canyon Education Park	500	2,000	2,133	_	_
Lopez Canyon Education 1 ark Lopez Canyon Environmental Paving Expansion (LCEC)	275	275	_	_	_
Lopez Canyon Flare System Upgrades	167	167	167	_	_
Lopez Canyon Hydroseeding/Irrigation System	300	75	107	-	-
Lopez Canyon Training Academy	250	250	_	_	_
North Central Gym Improvement	230	150	-	-	-
	70	100	-	-	-
North Central Security Camera System Upgrade North Central Truck Washing Facility	70	100	650	650	-
North Central Women's Personal Hygiene Facility	75	75	030	030	-
North Central Yard Tenant Improvement	75 75	75 75	-	-	-
San Pedro Tower Retrofit	73	-	750	750	-
South LA Security Camera System Upgrade	60	60	730	730	-
South LA Yard Tenant Improvement	85	00	-	-	-
South LA Women's Personal Hygiene Facility	75	75	-	-	-
	13	73	400	600	-
SR Clean Fuel Program Phase 1 - Electric Vehicle Implementation	-	-	400	000	-
Toyon Flare System Upgrades	-	-	-	250	250
Toyon Hydroseeding/Irrigation System	-	300	-	-	-
Toyon OfficeTrailer Retrofit/Replacement	800	800	-	-	-
Valley CSLA Office	800	800	-	-	-
Washington Yard CSLA Modular Office (Phase 2)	250	-	-	-	-
Washington Security Camera System	60	-	-	-	-
West LA Security Camera System Upgrade	50	50	-	-	-

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West LA Master Planning (Phase 2)	_	_	-	200	600
West LA Street Vacation (Phase 1)	50	150	150	-	-
West LA CSLA Office	800	800	-	-	-
West LA Tenant Improvement	60	-	-	-	-
West Valley Security Camera System Upgrade	80	80	-	-	-
Future CIP Projects	-	226	4,838	7,550	9,150
SUBTOTAL PROPOSED CIP	\$ 9,561	\$ 9,108	\$ 9,108	\$10,000	\$10,000
Subtotal Capital Facilities	\$20,435	\$10,000	\$10,000	\$10,000	\$10,000
EQUIPMENT					
Automated Solid Resources Containers	\$14,684	\$14,934	\$15,232	\$15,537	\$15,848
Automated Collection Vehicles and Other Equipment	\$43,605	\$53,709	\$48,717	\$49,531	\$48,551
Subtotal Equipment	\$58,289	\$68,643	\$63,949	\$65,068	\$64,399
TOTAL CAPITAL FACILITIES AND EQUIPMENT	\$78,724	\$78,643	\$73,949	\$75,068	\$74,399

Source: Department of Public Works, Bureau of Sanitation.

The Bureau's Capital Improvement Expenditure Program ("CIEP") comprises three general areas of need in the foreseeable future: landfill, transfer station, and collection yard improvements. The Bureau currently anticipates annual expenditures of approximately \$10 million through Fiscal Year 2022-23 to finance the CIEP.

Transfer Station. There are very few local landfills available to the City for direct haul by the City's fleet of refuse collection vehicles. The City depends on the use of solid waste transfer stations to reduce travel time to and from the landfills, reducing truck traffic and transporting the MSW to landfills outside the City boundaries. The majority of the City's solid waste is disposed at Sunshine Canyon Landfill located in Granada Hills and the remainder is hauled to El Sobrante Landfill in Riverside. City refuse collection trucks directly haul the MSW collected from the northern area (West and East Valleys) of the City to the Sunshine Canyon landfill. MSW from the rest of the City is taken to MSW transfer station where it is transferred into transfer trailers (20 tons per load) from the CLARTS, Falcon Disposal Transfer Station, and Southern California Disposal for disposal at the landfills.

Ongoing facility maintenance and upgrades need to be made at CLARTS to maintain the necessary level of transloading services. CLARTS operates six days per week (except Sundays), transloading an average of 3,300 tons per day of residential and commercial solid waste. These improvements include retopping the tipping floor, repaving the truck travel routes and truck rear parking area with concrete, installing energy efficient lighting fixtures, replacing wall and roof panels, painting the building interior and exterior, upgrading security camera system, upgrading the drainage system, upgrading the truck scales, building exterior restroom, installing overhead doors, installing bullet-proof scale house, installing storm water collection/treatment system, and upgrading the hazardous waste storage area.

Landfills. City-owned sanitary landfills (Lopez Canyon, Toyon Canyon, Sheldon Arleta, Gaffey Street and Bishops) are closed and are in post-closure maintenance. Post-closure activities include: landfill gas collection and monitoring, road construction and repair, decks repair, storm water compliance, landfills flare systems maintenance and upgrades, maintenance of support facilities (office trailers, storage containers, mechanic's shop, etc.), and development into active recreational facilities.

Various areas within the Lopez Canyon landfill were renovated including the office trailer complex, parking lot, installation of a security surveillance system, guard house, and barrier gates to provide security to employees and capital assets. The landfill buffer property in the White Horse neighborhood adjacent to Lopez Canyon will be developed into a picnic area, and an equestrian hitching post and trail head.

Collection Yards. Most of the collection yards were built over 30 years ago, prior to current environmental health and safety, and seismic stability regulations. While regular updates are being made to comply with regulations, the upgrades have not addressed present day needs and sustainability in design and construction.

At the East Valley District Yard, the LCNG fueling facility is being proposed to be upgraded to expand the LCNG production capability of the site, which will add a CNG time-fill system and associated control, boil-off gas recovery and compression system, and a backup diesel generator. The upgrade is designed to meet the increasing number of CNG-powered collection vehicles servicing the East Valley district. At the North Central District Yard, construction of a new truck washing facility is being proposed to replace the old truck wash that was demolished during the construction of the LNG/CNG fueling station.

Construction of personal hygiene facilities is being planned for the West Los Angeles, South Los Angeles, and North Central collection yards. These proposed facilities will provide restroom, locker, and shower rooms for women truck drivers and women maintenance laborers at these yards.

The existing security camera systems at the collection yards are also being planned to be upgraded. With a large inventory of assets, traffic, and potential for theft and vandalism at the yards, additional cameras need to be installed to provide adequate coverage to enhance safety and security at the sites. In addition, the current cameras are also old and outdated with poor video quality.

REGULATION

Potential Restrictions on Solid Waste Disposal

There are serious, often unforeseeable, risks and potentially substantial cost exposures associated with waste processing and disposal facilities. These risk factors include, but are not limited to: (i) an increasing shortage of disposal capacity available to the City, coupled with the difficulty of obtaining permits to expand or establish new sites and facilities, and public and private opposition to the location, expansion and operation of these facilities, (ii) increasing governmental actions at all levels that seek to restrict the operation of disposal facilities as well as the interstate movement of waste for disposal, (iii) landfill costs associated with liner requirements, leachate and methane gas control, greenhouse gas emission control, post-closure monitoring, site cleanup, other remedial work and maintenance, and perpetual care obligations, (iv) alleged possible adverse effects on groundwater and the environment, (v) substantial regulatory compliance expenditures, fines or other sanctions and civil damage liabilities, (vi) demonstrating financial responsibility (see "– Federal and State Laws Governing Solid Waste Disposal" below) and conforming to prescribed or changing standards and methods of operation, (vii) judicial and administrative proceedings regarding alleged possible adverse environmental and health effects of landfills or treatment and disposal facilities, and (viii) legislation that requires waste recycling, minimization and incineration.

Provision for City Landfill Closure and Post-closure Maintenance Costs

In 1987, the State enacted the Solid Waste Disposal Site Hazard Reduction Act ("AB 2448"), which requires landfill operators to submit closure and post-closure maintenance plans to the California Integrated Waste Management Board ("CIWMB") for approval, including evidence of financial responsibility to provide for landfill closure and 30 years of post-closure maintenance. Evidence of financial responsibility is required in the form of a trust fund or other financial mechanism acceptable to the CIWMB into which sufficient funds are deposited to provide for these costs.

In 1989, Ordinance No. 164896 established the Landfill Closure and Post-closure Maintenance Trust Fund and began funding for closure and post-closure maintenance of City-owned landfills. In 1993, by Ordinance No. 168581, the Landfill Closure and Post-closure Maintenance Trust Fund was amended to provide for a new special fund entitled "Lopez Canyon Landfill Closure Trust Fund." The Lopez Canyon Landfill Closure Trust Fund was established for the purposes of receiving and expending monies for the closure costs of the Lopez Canyon Landfill. Funds previously appropriated in the Landfill Closure and Post-closure Maintenance Trust Fund for Lopez Canyon Landfill were transferred to the new Trust Fund.

In accordance with AB 2448, the City estimated that \$17.54 million (in 1994 dollars) in construction costs would be required to close the Lopez Canyon Landfill. That amount was made available to the Lopez Canyon Landfill Closure Trust Fund for closure activities in March 1995. Closure construction was completed in March 2012 and final closure certification was given by the Local Enforcement Agency in September 2012. In October 2012 the remaining Trust Fund balance (\$3.47 million) was released back and deposited to the City's Landfill Closure/Post-closure Fund (Fund 488).

Ordinance No. 168581 also established the Landfill Maintenance Special Fund for the purpose of receiving all revenues received by the Department of Public Works from the sale of recyclable materials from curbside recycling. Money in the Maintenance Fund would be used for post-closure maintenance costs of City-owned landfills. Also, a Pledge of Revenue Agreement was signed by the City with the CIWMB pledging that money in the Landfill Maintenance Special Fund will be used for purposes of post-closure maintenance at the Lopez Canyon Landfill. Post-closure maintenance costs are estimated to be about \$1.2 million per year for the 30-year period from 2012 through 2042, or approximately \$36 million.

Federal and State Laws Governing Solid Waste Disposal

Since the passage of the Hazardous and Solid Waste Amendments of 1984 ("HSWA Amendments") to the Resource Conservation and Recovery Act of 1976 ("RCRA"), the emphasis of the Federal waste regulatory program has been the reduction of waste volumes and encouragement of recycling and treatment of waste instead of land disposal. The HSWA Amendments prohibit the land disposal of untreated hazardous waste. Restriction on land disposal of certain hazardous waste became effective in 1986, 1987, 1988 and 1989. These restrictions identified treatment levels that the waste must meet before it can be land disposed. Currently, the City's wastes are not considered "hazardous wastes" for purposes of Federal and State regulations.

Since its enactment, RCRA included the authority for the Environmental Protection Agency ("EPA") to control the disposal of solid waste, as well as the management of hazardous waste. In the past, the EPA relied on general solid waste management guidelines and did not develop a comprehensive solid waste regulatory program. The regulatory framework covering solid waste management was developed by individual states and the stringency of these frameworks was highly variable. In August 1988, the EPA proposed comprehensive location, design, operating, groundwater monitoring, corrective action, closure and post-closure, and financial assurance criteria for municipal solid waste landfills. The EPA released final criteria referred to as "Subtitle D" regulations whereby the states were required to develop state regulatory programs at least as stringent as the EPA's criteria. In 1993, the State of California adopted the EPA criteria with minor and stricter revisions. Currently, the regulatory regime for controlling solid waste management is substantially similar to that in place for hazardous waste management facilities.

The HSWA Amendments to RCRA have substantially increased the quantity of hazardous waste brought under regulation, including large quantities of organic waste that were brought under the regulatory system for the first time in 1990. Land disposal regulations require increased use of treatment technologies and the Federal "Subtitle D" landfill regulations have resulted in the closure of a significant

number of smaller, older existing landfills, increasing the demand for solid waste capacity at other landfills that comply with the new regulations. The EPA's financial responsibility regulations require owners or operators of hazardous waste facilities to demonstrate financial assurance for sudden and accidental pollution occurrences. For facilities with surface impoundments, landfills and land treatment units, the owner or operator must also demonstrate financial assurance for non-sudden or gradual pollution occurrences.

State regulations also require owners and operators of waste facilities to provide financial assurance of their ability to cover the estimated costs of proper closure and post-closure monitoring and maintenance of these facilities. The City has been able to rely on its financial position, rather than upon other very costly financial assurance mechanisms, to satisfy these requirements. See "REGULATION – Provision for City Landfill Closure and Maintenance Costs."

Pursuant to California Code of Regulations Chapter 23, Section 66273.1 et seq. effective February 8, 2006, the regulatory exemption that allowed households and conditionally exempt small quantity generators ("CESQG") to dispose of universal waste in the refuse stream had expired making it unlawful to dispose of universal waste in the trash. Under California Health and Safety Code Section 25 163(e), a solid waste operator who unknowingly transports hazardous waste to a solid waste facility, incidental to the collection of solid waste is not subject to hazardous waste transporter registration requirements. A solid waste transporter that discovers, after the fact, that it has unknowingly transported universal waste in a load of solid waste may have the universal waste removed at the solid waste facility and manage it as part of the facility's load check program in accordance with the State of California, Department of Toxic Substances Control's regulations.

The Bureau is responsible for the implementation of the City's Household Hazardous, Electronic, and Universal Waste programs which serve residents and CESOG with collection points and proper management and recycling disposal. The City has permanent **SAFE** six (solvents/automotive/flammable/electronics disposal) centers that are available year-round to residents and CESQG. In addition, several one-day events are held to collect and manage these materials. Partnerships with many retailers have resulted in convenient drop-off locations for materials such as used motor oil, batteries, cell phones, and other materials that are banned from landfill disposal. All materials collected by the City are managed locally and in an environmentally sound manner.

Regulatory Agencies

Certain regulatory agencies, including CalRecycle (formerly known as CIWMB), the County Department of Health Services (the "CHSD"), the SCAQMD, the Los Angeles Regional Water Quality Control Board (the "RWQCB"), the City's Local Enforcement Agency ("LEA"), and the Tri-Technical Advisory Committee (the "TRI-TAC") representing the League of California Cities, the California Association of Sanitation Agencies and the California Water Pollution Control Association, are involved in developing plans and monitoring compliance with Federal RCRA requirements associated with solid waste disposal operations. The CHSD, SCAQMD and RWQCB are responsible for issuing permits to apply minimum standards for control of pollution involving the environment that typically arise during the handling of solid wastes.

Recycling Regulations Including the California Integrated Waste Management Act

Revisions to State law constituting the California Integrated Waste Management Act of 1989 ("AB 939"), which became effective January 1, 1990, among other things, directs all California cities and counties to maximize all feasible source reduction, recycling and composting options in order to reduce the amount of solid waste that must be disposed by transformation (through waste-to-energy projects or other processes) and land disposal.

By January 1, 1995, each city in the State was required to achieve a 25% reduction, through waste reduction or recycling, in solid waste disposed of to landfills or by incineration. A 50% reduction was required to be achieved by January 1, 2000. Cities are responsible for these goals and are given the right and responsibility under state law to manage their solid waste systems. Cities could face monetary fines of up to \$10,000 per day or up to \$3.65 million per year if the CIWMB deems local plans to be inadequate or if localities fail to satisfactorily implement programs to achieve the 25% and 50% goals.

Under AB 939, each city was required to submit four reports: (1) a waste characterization study, which categorizes the wastestream of the city, (2) a Source Reduction and Recycling Plan ("SRRP"), which details the means by which the city will achieve, finance and document the mandated 25% and 50% goals through source reduction, recycling and composting; anticipated revenues, costs and revenue sources; and the proposed program for education and public information, (3) a Household Hazardous Waste Element ("HHWE"), which outlines the city's efforts to reduce the amount of household hazardous wastes reaching landfills through safe collection and recycling or proper disposal and (4) a Non-Disposal Facility Element ("NDFE"), which describes the nondisposal facilities such as transfer stations and composting facilities which exist in the jurisdiction.

To demonstrate compliance with the 50% waste diversion mandate by the year 2000, the City conducted a series of studies including audits of over 500 Los Angeles businesses and surveys of waste diversion facilities, non-City government facilities, City departments, landscapers and contractors. The results of the diversion study demonstrated that the City of Los Angeles has achieved a 60% diversion rate for the year 2000 and complied with AB 939.

Additional California legislation has modified the requirements for recycling and waste diversion. In 2011, AB 341 was adopted by the State Legislature, which requires mandatory recycling programs for all commercial and industrial businesses that generate more than four cubic yards of waste per week, as well as all multifamily buildings of five or more units. Also, AB 1826 was adopted in 2014. AB 1826 expands the requirements set in AB 939 to include the diversion of organic materials such as yard trimmings and food from landfill disposal from large multifamily complexes and commercial businesses of a certain size. Implementation of the new franchise system is designed to continue the City's compliance with these regulations.

The City also led an effort to partner with other jurisdictions in the County by creating a joint powers authority to cooperatively monitor and report on compliance with AB 939 and new regulations, as well as conduct joint public education, outreach, and recognition programs. The Los Angeles Area Regional Agency ("LARA") was approved by the CIWMB (now CalRecycle) in 2003. LARA is administered by the Bureau, and members share the cost of data collection and annual reporting.

Annual reports are submitted to CalRecycle which include descriptions and results of program implementation. Every four years, CalRecycle determines the compliance, "good faith effort," or non-compliance of each jurisdiction or Regional Agency in the State. LARA, and its member cities, submit annual reports on time, and are in compliance.

CONTINUING DISCLOSURE

The City will execute a Continuing Disclosure Certificate, to be dated the date of delivery of the Bonds (the "Continuing Disclosure Certificate"), which provides for certain disclosure obligations on the part of the City. Under the Continuing Disclosure Certificate, the City will covenant for the benefit of Bondholders and Beneficial Owners of the Bonds to provide certain financial information and operating data relating to the City by not later than June 30 of each year, commencing June 30, 2019 for the report for the Fiscal Year 2017-18, or if the fiscal year-end changes from June 30, not later than 365 days after the end of the City's fiscal year (the "Annual Reports"), and to provide notices of the occurrence of certain enumerated events (the "Listed Events"). The Annual Reports and the notices of Listed Events will be filed with the Municipal Securities Rulemaking Board through its Electronic Municipal Market Access ("EMMA") site at http://emma.msrb.org. These covenants will be made in order to assist the underwriter of the Bonds in complying with Securities and Exchange Commission Rule 15c2-12, as amended (the "Rule"). For the form of the Continuing Disclosure Certificate, see APPENDIX D – "FORM OF CONTINUING DISCLOSURE CERTIFICATE."

The City and its related entities issue a variety of bonds, notes and obligations ("Obligations"), including Obligations issued through its proprietary enterprise programs and for its housing program and other conduit borrowers, as well as Obligations secured by special taxes and special assessments. The representations made by the City in this section regarding its previous continuing disclosure undertakings relate only to those Obligations which are managed by the City Administrative Officer and its staff, including Obligations secured by the City's general fund (including the City's Judgment Obligation Bonds and the bonds and notes issued through the Los Angeles Convention and Exhibition Center Authority and the Municipal Improvement Corporation of Los Angeles), General Obligation Bonds, Wastewater System Revenue Bonds, Tax and Revenue Anticipation Notes, Solid Waste Revenue Bonds, and Landscape and Lighting District 96-1 Bonds. With respect to the Obligations, the City has not failed to comply with its previous disclosure undertakings for the past five years.

The City's Department of Airports, Department of Water and Power and Harbor Department (each of which is governed by a Board of Commissioners that is separate from the City Council) enter into continuing disclosure undertakings in connection with the bonds and notes that are secured and payable from their respective enterprise revenues.

TAX MATTERS

In the opinion of Orrick, Herrington & Sutcliffe, LLP, Bond Counsel, based upon an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 (the "Code") and is exempt from State of California personal income taxes. Bond Counsel is of the further opinion that interest on the Bonds is not a specific preference item for purposes of the federal alternative minimum tax. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the Bonds. A complete copy of the proposed form of opinion of Bond Counsel is set forth in Appendix C hereto.

To the extent the issue price of any maturity of the Bonds is less than the amount to be paid at maturity of such Bonds (excluding amounts stated to be interest and payable at least annually over the term of such Bonds), the difference constitutes "original issue discount," the accrual of which, to the extent properly allocable to each Beneficial Owner thereof, is treated as interest on the Bonds which is excluded from gross income for federal income tax purposes and State of California personal income taxes. For this purpose, the issue price of a particular maturity of the Bonds is the first price at which a

substantial amount of such maturity of the Bonds is sold to the public (excluding bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers). The original issue discount with respect to any maturity of the Bonds accrues daily over the term to maturity of such Bonds on the basis of a constant interest rate compounded semiannually (with straight-line interpolations between compounding dates). The accruing original issue discount is added to the adjusted basis of such Bonds to determine taxable gain or loss upon disposition (including sale, redemption, or payment on maturity) of such Bonds. Beneficial Owners of the Bonds should consult their own tax advisors with respect to the tax consequences of ownership of Bonds with original issue discount, including the treatment of Beneficial Owners who do not purchase such Bonds in the original offering to the public at the first price at which a substantial amount of such Bonds is sold to the public.

Bonds purchased, whether at original issuance or otherwise, for an amount higher than their principal amount payable at maturity (or, in some cases, at their earlier call date) ("Premium Bonds") will be treated as having amortizable bond premium. No deduction is allowable for the amortizable bond premium in the case of obligations, like the Premium Bonds, the interest on which is excluded from gross income for federal income tax purposes. However, the amount of tax-exempt interest received, and a Beneficial Owner's basis in a Premium Bond, will be reduced by the amount of amortizable bond premium properly allocable to such Beneficial Owner. Beneficial Owners of Premium Bonds should consult their own tax advisors with respect to the proper treatment of amortizable bond premium in their particular circumstances.

The Code imposes various restrictions, conditions and requirements relating to the exclusion from gross income for federal income tax purposes of interest on obligations such as the Bonds. The City has made certain representations and covenanted to comply with certain restrictions, conditions and requirements designed to ensure that interest on the Bonds will not be included in federal gross income. Inaccuracy of these representations or failure to comply with these covenants may result in interest on the Bonds being included in gross income for federal income tax purposes, possibly from the date of original issuance of the Bonds. The opinion of Bond Counsel assumes the accuracy of these representations and compliance with these covenants. Bond Counsel has not undertaken to determine (or to inform any person) whether any actions taken (or not taken), or events occurring (or not occurring), or any other matters coming to Bond Counsel's attention after the date of issuance of the Bonds may adversely affect the value of, or the tax status of interest on, the Bonds. Accordingly, the opinion of Bond Counsel is not intended to, and may not, be relied upon in connection with any such actions, events or matters.

Although Bond Counsel is of the opinion that interest on the Bonds is excluded from gross income for federal income tax purposes and is exempt from State of California personal income taxes, the ownership or disposition of, or the accrual or receipt of amounts treated as interest on, the Bonds may otherwise affect a Beneficial Owner's federal, state or local tax liability. The nature and extent of these other tax consequences depends upon the particular tax status of the Beneficial Owner or the Beneficial Owner's other items of income or deduction. Bond Counsel expresses no opinion regarding any such other tax consequences.

Current and future legislative proposals, if enacted into law, clarification of the Code or court decisions may cause interest on the Bonds to be subject, directly or indirectly, in whole or in part, to federal income taxation or otherwise prevent Beneficial Owners from realizing the full current benefit of the tax status of such interest. The introduction or enactment of any such legislature proposals or clarification of the Code or court decisions may also affect, perhaps significantly, the market price for, or marketability of, the Bonds. Prospective purchasers of the Bonds should consult their own tax advisors regarding the potential impact of any pending or proposed federal or state tax legislation, regulations or litigation, as to which Bond Counsel is expected to express no opinion.

The opinion of Bond Counsel is based on current legal authority, covers certain matters not directly addressed by such authorities, and represents Bond Counsel's judgment as to the proper treatment of the Bonds for federal income tax purposes. It is not binding on the Internal Revenue Service ("IRS") or the courts. Furthermore, Bond Counsel cannot give and has not given any opinion or assurance about the future activities of the City or about the effect of future changes in the Code, the applicable regulations, the interpretation thereof or the enforcement thereof by the IRS. The City has covenanted, however, to comply with the requirements of the Code.

Bond Counsel's engagement with respect to the Bonds ends with the issuance of the Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend the City or the Beneficial Owners regarding the tax-exempt status of the Bonds in the event of an audit examination by the IRS. Under current procedures, parties other than the City and its appointed counsel, including the Beneficial Owners, would have little, if any, right to participate in the audit examination process. Moreover, because achieving judicial review in connection with an audit examination of tax-exempt bonds is difficult, obtaining an independent review of IRS positions with which the City legitimately disagrees, may not be practicable. Any action of the IRS, including but not limited to selection of the Bonds for audit, or the course or result of such audit, or an audit of bonds presenting similar tax issues may affect the market price for, or the marketability of, the Bonds, and may cause the City or the Beneficial Owners to incur significant expense.

CERTAIN LEGAL MATTERS

The validity of the Bonds and certain other legal matters are subject to the approving opinion of Orrick, Herrington & Sutcliffe LLP, Los Angeles, California, Bond Counsel. See APPENDIX C – "PROPOSED FORM OF BOND COUNSEL OPINION." Certain legal matters will be passed on for the City by the City Attorney of the City of Los Angeles, California. Bond Counsel undertakes no responsibility for the accuracy, completeness or fairness of this Official Statement. Certain legal matters will be passed on for the City by Michael N. Feuer, City Attorney, and by Norton Rose Fulbright US LLP, Disclosure Counsel. Bond Counsel and Disclosure Counsel will receive compensation contingent upon the sale and delivery of the Bonds.

LITIGATION

There is no controversy of any nature now pending against the City or, to the knowledge of its officers, threatened, seeking to restrain or enjoin the issuance, sale, execution or delivery of the Bonds or in any way contesting or affecting the validity of the Bonds or any proceedings of the City taken with respect to the issuance or sale thereof or the pledge or application of any moneys or security provided for the payment of the Bonds or the use of the Bond proceeds. There is no claims or lawsuits pending against the City which the City believes would have a material adverse effect on its ability to pay debt service on the Bonds.

FINANCIAL STATEMENTS

The City's Comprehensive Annual Financial Report for the Fiscal Year ended June 30, 2017 (the "Financial Statements"), including the Independent Auditor's Report, are available on the EMMA website at https://emma.msrb.org/ES1112705-ER879181-ER1279830.pdf. No other information from the EMMA website is incorporated by reference into this Official Statement. The Financial Statements have been audited by Macias Gini & O'Connell LLP, certified public accountants. Macias Gini & O'Connell LLP has not consented to the inclusion by reference of its report in this Official Statement and has not undertaken to update its report or to take any action intended or likely to elicit information concerning the accuracy, completeness or fairness of the statements made in this Official Statement, and no opinion is

expressed by Macias Gini & O'Connell LLP with respect to any event subsequent to the date of the Independent Auditor's Report, included in the Financial Statements.

RATINGS

Moody's Investors Service, Inc. ("Moody's") and Kroll Bond Rating Agency ("Kroll") have assigned ratings of "Aa2" and "AA," respectively, to the Bonds. The ratings provided by each of the rating agencies reflect only the views of such organizations and an explanation of the significance of such ratings may only be obtained from the respective agencies at the following website addresses: Moody's, at www.moodys.com; and Kroll, at www.krollbondratings.com. No information from such websites is incorporated by reference herein. There is no assurance that such ratings will continue for any given period of time or that they will not be revised downward or withdrawn entirely by the rating agencies, if in the judgment of such rating agency, circumstances so warrant. Any such downward revisions or withdrawals of such ratings may have an adverse effect on the market price of the Bonds. The City undertakes no responsibility to maintain any rating on the Bonds or to take any action, except as may be required by the Continuing Disclosure Certificate, in the event of a downgrade, suspension or withdrawal of a rating.

SALE OF THE BONDS

Following a competitive bid process conducted on	, 2018, the City awarded the Bonds to
(the "Purchaser") at a purchase price of \$	(which amount represents the
principal amount of the Bonds, plus bond premium of \$, less an underwriter's discount of
\$). Under the terms of its bid, the Purchaser will be	obligated to purchase all of the Bonds if
any are purchased, the obligation to make such purchase being	subject to the approval of certain legal
matters by Bond Counsel, and certain other conditions to be sa	tisfied by the City. The Purchaser may
offer and sell Bonds to certain dealers and others at prices low	er than the offering prices stated on the
inside cover. The offering prices may be changed from time to tir	ne by the Purchaser.

CO-MUNICIPAL ADVISORS

Fieldman, Rolapp & Associates, Inc. and Urban Futures, Inc. have acted as Co-Municipal Advisors to the City in conjunction with the issuance of the Bonds. The Co-Municipal Advisors have assisted the City in matters related to the planning, structuring, execution and delivery of the Bonds. The Co-Municipal Advisors will receive compensation contingent upon the sale and delivery of the Bonds.

The Co-Municipal Advisors have not audited, authenticated or otherwise independently verified the information set forth in this Official Statement, or any other related information available to the City, with respect to accuracy and completeness of disclosure of such information. Because of this limited participation, the Co-Municipal Advisors make no guaranty, warranty or other representation with respect to the accuracy or completeness of this Official Statement or any other matter related to this Official Statement.

AVAILABILITY OF DOCUMENTS

Copies of this Official Statement, the Trust Agreement and the Continuing Disclosure Certificate will be available, upon written request, from the Office of the City Administrative Officer, Debt Management Group, 200 North Main Street, City Hall East, Room 1500, Los Angeles, California 90012, Telephone: (213) 473-7500.

MISCELLANEOUS

References are made herein to certain documents and reports that are brief summaries thereof that do not purport to be complete or definitive, and reference is made to such documents and reports for a full and complete statement of the contents thereof.

Any statements in this Official Statement involving matters of opinion, whether or not expressly so stated, are intended as such and not as representations of fact. This Official Statement is not to be construed as a contract or agreement between the City and the purchasers or Bondholders of any of the Bonds.

The execution and delivery of this Official Statement has been duly authorized by the City.

CITY OF LOS ANGELES

By:	
	Assistant City Administrative Officer

APPENDIX A CITY OF LOS ANGELES GENERAL INFORMATION



APPENDIX A CITY OF LOS ANGELES INFORMATION STATEMENT

Certain statements included or incorporated by reference in this Appendix A constitute "forward-looking statements." Such forward-looking statements are generally identifiable by the terminology used such as "plan," "expect," "estimate," "project," "budget" or other similar words. The achievement of certain results or other expectations contained in such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements to be materially different from the results, performance or achievements expressed or implied by such forward-looking statements. No assurance is given that actual results will meet City forecasts in any way, regardless of the level of optimism communicated in the information. The City has no plans to issue any updates or revisions to those forward-looking statements if or when its expectations, or events, conditions or circumstances on which such statements are based, occur, do not occur, or change. In addition, in some cases numbers in tables do not sum to the total due to rounding.

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HISTORIC, ECONOMIC AND DEMOGRAPHIC INFORMATION

Founded in 1781, Los Angeles was for its first century a provincial outpost under successive Spanish, Mexican and American rule. The City experienced a population boom following its linkage by rail with San Francisco in 1876. Los Angeles was selected as the Southern California rail terminus because its natural harbor seemed to offer little challenge to San Francisco, home of the railroad barons. But what the region lacked in commerce and industry, it made up in temperate climate and available real estate, and soon tens and then hundreds of thousands of people living in the Northeastern and Midwestern United States migrated to new homes in the region. Agricultural and oil production, followed by the creation of a deep-water port, the opening of the Panama Canal, and the completion of the City-financed Owens Valley Aqueduct to provide additional water, all contributed to an expanding economic base. The City's population climbed to 50,000 persons in 1890, and then swelled to 1.5 million persons by 1940. During this same period, the motor car became the principal mode of American transportation, and the City developed as the first major city of the automotive age. Following World War II, the City became the focus of a new wave of migration, with its population reaching 2.4 million persons by 1960.

The City and its surrounding metropolitan region have continued to experience growth in population and in economic diversity. The City's 470 square miles contain 11.5% of the area and about 39% of the population of the County of Los Angeles, California (the "County"). Tourism and hospitality, professional and business services, direct international trade, entertainment (including motion picture and television production), and wholesale trade and logistics all contribute significantly to local employment. Emerging industries are largely technology driven, and include biomedical technology, digital information technology, environmental technology and aerospace. The County is a top-ranked county in manufacturing in the nation. Important components of local industry include apparel, computer and electronic components, transportation equipment, fabricated metal, and food processing. Fueled by trade with the Pacific Rim countries, the Ports of Los Angeles and Long Beach combined are the busiest container ports in the nation. As home to the film, television and recording industries, as well as important cultural facilities, the City serves as a principal global cultural center.

Although the economic and demographic information provided below has been collected from sources that the City considers to be reliable, the City has made no independent verification of the information provided by non-City sources and the City takes no responsibility for the completeness or accuracy thereof. The current state of the economy of the City, State of California (the "State") and the United States of America may not be reflected in the data discussed below, because more up-to-date information is not publicly available. This information is provided as general background.

Additional information on economic highlights for the City was prepared by Beacon Economics, and is available on the City's web site at http://cao.lacity.org/debt/2018.06.01%20-%20City%20of%20Los%20Angeles%20-%20Comparative%20Analysis%20Updated.pdf. This report is not incorporated by reference.

Population

The table below summarizes City, County, and State population, estimated as of January 1 of each year.

Table 1
CITY, COUNTY AND STATE POPULATION STATISTICS

	City of Los Angeles	Annual Growth Rate ⁽¹⁾	County of Los Angeles	Annual Growth Rate ⁽¹⁾	State of California	Annual Growth Rate ⁽¹⁾
2000(1)	3,694,742	-	9,519,330	-	33,873,086	-
2005(1)	3,769,131	0.40%	9,816,153	0.62%	35,869,173	1.18%
2010(1)	3,792,621	0.12	9,818,605	0.00	37,253,956	0.77
2015(1)	3,959,840	0.88	10,149,661	0.67	38,912,464	0.89
2016	3,985,114	0.64	10,180,169	0.30	39,179,627	0.69
2017	4,021,488	0.91	10,231,271	0.50	39,500,973	0.82
2018	4,054,400	0.82	10,283,729	0.51	39,809,693	0.78

⁽¹⁾ For five-year time series, figures represent average annual growth rate for each of the five years.

Source: State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001-2010, with 2000 and 2010 Census Counts, Sacramento, California, November 2012. State of California, Department of Finance, E-4 Population Estimates for Cities, Counties, and the State, 2011-2018, with 2010 Census Benchmark. Sacramento, California, May 2018.

Industry and Employment

The following table summarizes the average number of employed and unemployed residents of the City and the County, based on the annual "benchmark," an annual revision process in which monthly labor force and payroll employment data, which are based on estimates, are updated based on detailed tax records. The "benchmark" data is typically released in March for the prior calendar year.

Table 2
ESTIMATED AVERAGE ANNUAL EMPLOYMENT AND UNEMPLOYMENT OF RESIDENT LABOR FORCE⁽¹⁾

Civilian Labor Force	2013	2014	2015	2016	2017
City of Los Angeles					
Employed	1,801,000	1,845,900	1,875,700	1,920,200	1,942,200
Unemployed	207,300	176,400	142,100	113,000	99,000
Total	2,008,200	2,022,300	2,017,800	2,033,200	2,041,200
County of Los Angeles					
Employed	4,482,600	4,591,100	4,671,100	4,789,500	4,883,600
Unemployed	484,600	413,000	331,200	265,400	240,300
Total	4,967,200	5,004,100	5,002,300	5,054,900	5,123,900
Unemployment Rates					
City	10.3%	8.7%	7.0%	5.6%	4.8%
County	9.8	8.3	6.6	5.3	4.7
State	8.9	7.5	6.2	5.4	4.8
United States	7.4	6.2	5.3	4.9	4.4

⁽¹⁾ March 2017 Benchmark report as of May 29, 2018; not seasonally adjusted.

Note: Based on surveys distributed to households; not directly comparable to Industry Employment data reported in Table 3.

Sources: California Employment Development Department, Labor Market Information Division for the State and County; U.S. Bureau of Labor, Department of Labor Statistics for the U.S.

The California Employment Development Department has reported preliminary unemployment figures for April 2018 of 3.8% statewide, 4.0% for the County, and 4.1% for the City (not seasonally adjusted).

The following table summarizes the California Employment Development Department's estimated annual employment for the County, which includes full-time and part-time workers who receive wages, salaries, commissions, tips, payment-in-kind, or piece rates. Separate figures for the City are not maintained. Percentages indicate the percentage of the total employment for each type of employment for the given year. For purposes of comparison, the most recent employment data for the State is also summarized.

Table 3
LOS ANGELES COUNTY
ESTIMATED INDUSTRY EMPLOYMENT AND LABOR FORCE⁽¹⁾

		County				State of California	
	2000	% of <u>Total</u>	<u>2017</u>	% of <u>Total</u>	<u>2017</u>	% of <u>Total</u>	
Agricultural	7,700	0.2%	5,800	0.1%	427,600	2.5%	
Mining and Logging	1,800	0.0	2,200	0.0	22,000	0.1	
Construction	131,500	3.2	137,700	3.1	809,100	4.7	
Manufacturing	617,800	15.0	350,100	7.9	1,311,900	7.6	
Trade, Transportation and Utilities	785,000	19.0	838,900	18.9	3,042,600	17.6	
Information	244,300	5.9	214,500	4.8	528,700	3.1	
Financial Activities	223,400	5.4	221,100	5.0	830,500	4.8	
Professional and Business Services	589,100	14.3	613,400	13.8	2,563,100	14.9	
Educational and Health Services	464,900	11.3	794,300	17.9	1,636,600	9.5	
Leisure and Hospitality	344,900	8.3	523,900	11.8	1,951,300	11.3	
Other Services	140,200	3.4	154,100	3.5	563,300	3.3	
Government	581,400	14.1	585,500	13.2	2,553,500	14.8	
Total ⁽²⁾	4,132,000	100.0%	4,441,400	100.0%	17,240,200	100.0%	

⁽¹⁾ The California Economic Development Department has converted employer records from the Standard Industrial Classification coding system to the North American Industry Classification System.

Note: Based on surveys distributed to employers; not directly comparable to Civilian Labor Force data reported in Table 2.

Source: California Employment Development Department, Labor Market Information Division. Based on March 2017 Benchmark report released March 23, 2018.

Personal Income

The U.S. Census Bureau defines personal income as the income received by all persons from all sources, and is the sum of "net earnings," rental income, dividend income, interest income, and transfer receipts. "Net earnings" is defined as wages and salaries, supplements to wages and salaries, and proprietors' income, less contributions for government social insurance, before deduction of personal income and other taxes.

The following table summarizes the latest available estimate of personal income for the County, State and United States.

Table 4 COUNTY, STATE AND U.S. PERSONAL INCOME

Year and Area	Personal Income (thousands of dollars)	Per Capita Personal Income ⁽¹⁾ (dollars)		
2013	0 402 570 504	© 40 202		
County ⁽²⁾ State ⁽²⁾	\$ 483,578,594	\$ 48,283		
United States ⁽²⁾	1,861,956,514 14,068,960,000	48,555 44,489		
Officed States	14,008,900,000	44,469		
2014				
County ⁽²⁾	\$ 514,516,564	\$51,111		
State ⁽²⁾	1,986,025,976	51,317		
United States ⁽²⁾	14,811,388,000	46,486		
2015 County ⁽²⁾ State ⁽²⁾ United States ⁽²⁾	\$ 549,073,019 2,133,664,158 15,547,661,000	\$54,298 54,664 48,429		
2016				
County ⁽²⁾	\$ 563,907,868	\$55,624		
State ⁽²⁾	2,212,691,221	56,308		
United States ⁽²⁾	15,912,777,000	49,204		
2017				
County ⁽³⁾	N/A	N/A		
State ⁽²⁾	\$ 2,303,870,496	\$58,272		
United States ⁽²⁾	16,413,550,863	50,392		

⁽¹⁾ Per capita personal income was computed using Census Bureau midyear population estimates. Per capita personal income is total personal income divided by total midyear population. Estimates for 2013 to 2017 reflect Census Bureau midyear state population estimates as of December 2017. Estimates for 2013 to 2016 reflect county population estimates as of March 2017.

Source: U.S. Bureau of Economic Analysis, "Table SA1 Personal Income Summary" and "Table CA1 Personal Income Summary".

⁽²⁾ Last updated: March 22, 2018 – new estimates for 2017; revised estimates for 2013 - 2016.

⁽³⁾ Last updated: November 16, 2017 – new estimates for 2016; revised estimates for 2013 – 2015.

Retail Sales

As the largest city in the County, the City accounted for \$45 billion (or 29.2%) of the total \$154.2 billion in County taxable sales for 2016. The following table sets forth a history of taxable sales for the City for calendar years 2012 through 2016, 2016 being the last full year for which data is currently available.

Table 5 CITY OF LOS ANGELES TAXABLE SALES (in thousands)							
	2012	2013	<u>2014</u>	2015	<u>2016</u>		
Motor Vehicle and Parts Dealers	\$3,662,657	\$3,983,625	\$4,158,168	\$ 4,616,450	\$ 4,769,093		
Home Furnishings and Appliance Stores	1,676,926	1,683,805	1,725,981	1,826,089	1,945,181		
Bldg. Materials and Garden Equip. and Supplies	1,942,915	2,086,608	2,179,954	2,335,497	2,384,196		
Food and Beverage Stores	2,322,695	2,444,701	2,582,338	2,718,199	2,781,424		
Gasoline Stations	5,090,496	4,954,380	4,822,894	4,252,397	3,670,450		
Clothing and Clothing Accessories Stores	2,884,984	3,032,886	3,102,222	3,190,617	3,201,152		
General Merchandise Stores	2,759,578	2,873,530	2,899,454	2,725,354	2,500,015		
Food Services and Drinking Places	6,564,652	6,946,625	7,534,764	8,194,963	8,775,092		
Other Retail Group	3,716,658	3,943,616	3,969,898	4,112,670	4,229,201		
Total Retail and Food Services	30,621,561	31,949,776	32,975,673	33,972,239	34,355,804		
All Other Outlets	9,502,364	9,806,938	10,480,659	10,074,458	10,624,426		
TOTAL ALL OUTLETS	\$40,123,926	\$41,756,714	\$43,456,334	\$44,046,697	\$44,980,230		
Year-over-year growth	6.0%	4.1%	4.1%	1.4%	2.1%		

Source: California State Board of Equalization, Research and Statistics Division.

The City experienced a 2.9% growth in Fiscal Year 2016-17 (excluding additional receipts from the restoration of the 1% local tax rate), estimates 3.6% growth for Fiscal Year 2017-18, and projects 3.5% growth in sales tax receipts for the Fiscal Year 2018-19 Adopted Budget.

Land Use

The following table, derived from data maintained by the Los Angeles County Assessor, indicates various land uses within the City based on assessed valuation and the number of parcels.

Table 6 CITY OF LOS ANGELES ASSESSED VALUATION AND PARCELS BY LAND USE

	2017-18	% of	No. of	% of
Non-Residential	Assessed Valuation ⁽¹⁾	Total	Parcels	Total
Commercial Office	\$ 81,696,410,903	14.94%	35,982	4.58
Vacant Commercial	2,229,933,010	0.41	1,217	0.15
Industrial	38,694,352,154	7.07	19,997	2.54
Vacant Industrial	1,841,327,493	0.34	4,094	0.52
Recreational	1,968,622,688	0.36	802	0.10
Government/Social/Institutional	3,424,152,581	0.63	3,754	0.48
Miscellaneous	412,305,160	0.08	2,867	0.36
Subtotal Non-Residential	\$130,267,103,989	23.81%	68,713	8.74%
Residential				
Single Family Residence	\$288,756,702,948	52.79%	498,231	63.41%
Condominium/Townhouse	36,815,358,543	6.73	86,529	11.01
Mobile Homes and Lots	114,122,340	0.02	3,294	0.42
Mobile Home Park	176,813,031	0.03	90	0.01
2-4 Residential Units	28,453,236,579	5.20	74,218	9.45
5+ Residential Units/Apartments	59,349,537,762	10.85	34,850	4.44
Vacant Residential	3,065,831,860	0.56	19,833	2.52
Subtotal Residential	\$416,731,603,063	76.19%	717,045	91.26%
Total	\$546,998,707,052	100.00%	785,758	100.00%

⁽¹⁾ Local Secured Assessed Valuation, excluding tax-exempt property.

Source: California Municipal Statistics, Inc.

Construction Activity

The able below provides a summary of building permits issued by the City by calendar year.

Table 7 CITY OF LOS ANGELES RESIDENTIAL BUILDING PERMIT VALUATIONS AND NEW UNITS

<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
\$4,246	\$6,416	\$6,808	\$6,822	\$7,924
1,732	2,668	3,385	3,359	3,522
605	968	880	729	1,197
48	18	28	25	134
31	18	40	56	87
1,254	1,852	2,246	2,393	3,148
<u>7,136</u>	<u>9,607</u>	13,246	11,495	10,984
8,390	11,459	15,492	13,888	14,132
0	326	613	97	630
536	274	393	672	4,701
323	267	736	1,036	100
9,249	12,326	17,234	15,693	19,563
	\$4,246 1,732 605 48 31 1,254 7,136 8,390 0 536 323	\$4,246 \$6,416 1,732 2,668 605 968 48 18 31 18 1,254 1,852 7,136 9,607 8,390 11,459 0 326 536 274 323 267	\$4,246 \$6,416 \$6,808 1,732 2,668 3,385 605 968 880 48 18 28 31 18 40 1,254 1,852 2,246 7,136 9,607 13,246 8,390 11,459 15,492 0 326 613 536 274 393 323 267 736	\$4,246 \$6,416 \$6,808 \$6,822 1,732 2,668 3,385 3,359 605 968 880 729 48 18 28 25 31 18 40 56 1,254 1,852 2,246 2,393 7,136 9,607 13,246 11,495 8,390 11,459 15,492 13,888 0 729 13,888 0 729 13,888 0 729 72 736 736 736 736 736 736 736 736 736 736

⁽¹⁾ In millions of dollars. "Valuation" represents the total valuation of all construction work for which the building permit is issued.

Source: City of Los Angeles, Department of Building and Safety.

⁽²⁾ Valuation of permits issued for Single-Family Dwellings, Duplexes, Apartment Buildings, Hotel/Motels, and Condominiums.

⁽³⁾ Valuation of permits issued for Special Permits, Airport Buildings, Amusement Buildings, Churches, Private Garages, Public Garages, Gasoline Service Stations, Hospitals, Manufacturing Buildings, Office Buildings, Public Administration Buildings, Public Utilities Buildings, Retail Stores, Restaurants, School Buildings, Signs, Private Swimming Pools, Theater Buildings, Warehouses, Miscellaneous Buildings/Structures, Prefabricated Houses, Solar Heaters, Temporary Structures, Artists-in-Residence, Foundation Only, Grade – Non-Hillside, Certificates of Occupancy – Use of Land, Grading – Hillside.

⁽⁴⁾ Valuation of permits issued for "Additions Creating New Units – Residential" and "Alterations Creating New Units – Residential."

⁽⁵⁾ Valuation of permits issued for "Additions Creating New Units - Commercial" and "Alterations Creating New Units - Commercial."

⁽⁶⁾ Number of dwelling units permitted for Single-Family Dwellings and Duplexes.

⁽⁷⁾ Number of dwelling units permitted for new Apartment Buildings, Hotel/Motels, and Condominiums.

⁽⁸⁾ Number of dwelling units permitted for Airport Buildings, Amusement Buildings, Churches, Private Garages, Public Garages, Gasoline Service Stations, Hospitals, Manufacturing Buildings, Office Buildings, Public Administration Buildings, Public Utilities Buildings, Retail Stores, Restaurants, School Buildings, Signs, Private Swimming Pools, Theater Buildings, Warehouses, Miscellaneous Buildings/Structures Prefabricated Houses, Solar Heaters, Temporary Structures, Artists-in-Residence.

⁽⁹⁾ Number of dwelling units added includes "Addition Creating New Units - Residential" and "Alterations Creating New Units - Residential."

⁽¹⁰⁾ Number of dwelling units added includes "Additions Creating New Units - Commercial" and "Alterations Creating New Units - Commercial."

MUNICIPAL GOVERNMENT

The City is a charter city originally incorporated in 1850. Under the State Constitution, charter cities such as the City are generally independent of the State Legislature in matters relating to municipal affairs. Charter cities, however, are subject to State Constitutional restrictions; see "LIMITATIONS ON TAXES AND APPROPRIATIONS". The most recent charter was adopted in 1999, became effective July 1, 2000, and has been amended a number of times by voter approval. In an amendment approved by voters in 2015 (Charter Amendment 1), the City's primary and general election dates were moved to June and November of even-numbered years, beginning in 2020, in order to align them with federal and state elections. The measure also extended the terms of officials elected in 2015 and 2017; these candidates were given five and a half-year terms instead of the customary four to transition to the new election dates.

The City is governed by the Mayor and the Council. The Mayor is elected at-large for a four-year term. As executive officer of the City, the Mayor has the overall responsibility for administration of the City. The Mayor recommends and submits the annual budget to the Council and passes upon subsequent appropriations and transfers, approves or vetoes ordinances, and appoints certain City officials and commissioners. He supervises the administrative process of local government and works with the Council in matters relating to legislation, budget, and finance. As prescribed by the Charter and City ordinances, the Mayor operates an executive department, of which he is the ex-officio head. The current Mayor, Eric Garcetti, assumed office on July 1, 2013 and was elected to a second term on March 7, 2017, which will end in 2022 due to the change in election dates.

The Council, the legislative body of the City, is a full-time council. The Council enacts ordinances subject to the approval of the Mayor and may override the veto of the Mayor by a two-thirds vote. The Council orders elections, levies taxes, authorizes public improvements, approves contracts, adopts zoning and other land use controls, and adopts traffic regulations. The Council adopts or modifies the budget proposed by the Mayor. It authorizes the number of employees in budgetary departments, creates positions and fixes salaries. The Council consists of 15 members elected by district for staggered four-year terms.

The other two elective offices of the City are the Controller and the City Attorney, both elected for four-year terms. The Controller is the chief accounting officer for the City. The current Controller, Ron Galperin, assumed office on July 1, 2013, and was elected to a second term on March 7, 2017, which will end in 2022 due to the change in election dates.

The City Attorney is attorney and legal advisor to the City and to all City boards, departments, officers, and entities, and prosecutes misdemeanors and violations of the Charter and City ordinances. The current City Attorney, Mike Feuer, assumed office on July 1, 2013, and was elected to a second term on March 7, 2017, which will end in 2022 due to the change in election dates.

All citywide elected officials are subject to term limits of two four-year terms, while Council members are subject to term limits of three four-year terms.

The City Administrative Officer ("CAO") is the chief fiscal advisor to the Mayor and Council and reports directly to both. The CAO is appointed by the Mayor, subject to Council confirmation. In February 2017, the Mayor appointed Richard H. Llewellyn, Jr. as Interim City

Administrative Officer; he was permanently appointed to the position by the Mayor and confirmed by the Council in February 2018.

The City Treasurer (the "Treasurer") receives, invests and is the custodian of the City's funds and those of affiliated entities. The Treasurer also serves as the City's Investment Officer. The Treasurer is appointed by the Mayor and confirmed by the Council. On July 1, 2011, the Office of the Treasurer was consolidated into the Office of Finance. Claire Bartels, the Director of Finance, also serves as the City Treasurer.

The City has 38 departments and bureaus for which operating funds are annually budgeted by the Council. In addition, three departments (the Department of Water and Power ("DWP"), the Harbor Department, and the Department of Airports) and one state-chartered public agency (the Housing Authority of the City) are under the control of boards appointed by the Mayor and confirmed by the Council. The City obtains water and electricity from DWP, the largest municipally-owned utility in the nation. Two departments, the Los Angeles City Employees' Retirement System and the Fire and Police Pension System, are under the control of boards whose membership is comprised of Mayoral appointees and representatives elected by system members.

Public services provided by the City include police, fire and paramedics; residential refuse collection and disposal, wastewater collection and treatment, street maintenance, traffic management, storm water pollution abatement, and other public works functions; enforcement of ordinances and statutes relating to building safety; public libraries; recreation and parks; community development; housing and aging services; and planning.

BUDGET AND FINANCIAL OPERATIONS

Risk Management and Retention Program

Because of its size and its financial capacity, the City has long followed the practice of directly assuming most insurable risks without procuring commercial insurance policies. The extent and variety of City exposure is such that the cost of the premiums outweighs the benefits of such coverage. The City administers, adjusts, settles, defends and pays claims from budgeted resources. The City is self-insured for workers' compensation as permitted under State law. The City procures commercial insurance when required by bond or lease financing covenants and for other limited purposes.

Funds are budgeted annually to provide for claims and other liabilities based both on the City's historical record of payments and an evaluation of known or anticipated claims. The Fiscal Year 2018-19 Adopted Budget provides funding of \$89.1 million for these liabilities, of which \$80 million is dedicated to liabilities that must be paid from the General Fund. The 2018-19 Adopted Budget also includes an additional \$20 million in the Unappropriated Balance, Reserve for Extraordinary Liabilities, which is also available for this purpose. From time to time, the City may issue judgment obligation bonds to finance larger judgments or settlements, as it did in Fiscal Year 2008-09 and Fiscal Year 2009-10. Claims and other liabilities against the Solid Waste Program are paid from the Solid Waste Resources Fund.

The Program's recent claims payment experience is listed in the table below.

Table 8 SOLID WASTE RESOURCES FUND LIABILITY CLAIMS PAID

Fiscal Year	Claims Paid
2014-15	\$32,255,999(1)
2015-16	5,031,126
2016-17	3,141,604
2017-18 (Estimated)	5,000,000
2018-19 (Adopted Budget)	5,000,000

⁽¹⁾ Reflects the settlement of a class action suit alleging violations of the Fair Labor Standards Act involving employees of the Solid Waste Program (*Gravina v. City of Los Angeles*). At issue was the City's forbidding certain activities by sanitation drivers during meal breaks, such as sleeping in their vehicles. The settlement was for \$26 million and paid out of the Solid Waste Resources Fund.

Source: City of Los Angeles, Office of the City Administrative Officer.

Workers' Compensation, Employee Health Care and Other Human Resources Benefits

The City appropriates funds to a Human Resources Benefits Fund to account for various programs to provide benefits to its employees, in addition to retirement and other post-employment benefits as described below. The Fund is administered by the Personnel Department, and does not account for retirement or other post-employment benefits. Total benefits expenditures are shown in the following table.

Table 9 HUMAN RESOURCES BENEFITS⁽¹⁾ (\$ in thousands)

	<u>2014-15</u>	<u>2015-16</u>	2016-17	Estimated <u>2017-18</u>	Adopted 2018-19
Workers' Compensation/Rehabilitation	\$161,500	\$169,601	\$175,831	\$189,500	\$194,000
Contractual Services	26,480	21,141	20,152	23,230	25,830
Civilian FLEX Program ⁽²⁾	227,017	235,918	255,129	276,415	286,257
Supplemental Civilian Union Benefits	4,094	4,318	4,889	4,607	5,113
Police Health and Welfare Program	129,359	134,340	139,498	145,526	158,068
Fire Health and Welfare Program	46,437	47,037	49,348	52,523	56,927
Unemployment Insurance	5,000	2,989	2,538	2,900	2,800
Employee Assistance Program	1,250	1,463	1,535	1,587	1,662
Total	\$601,137	<u>\$616,807</u>	<u>\$648,919</u>	<u>\$696,288</u>	<u>\$730,657</u>

⁽¹⁾ Cash basis.

Source: City of Los Angeles, Office of the City Administrative Officer.

The Solid Waste Program pays its pro-rata share of these and certain other costs through a line item budgeted as "Reimbursement of General Fund Costs" in the Solid Waste Resources Revenue Fund budget. The volatility in these reimbursements reflects changes in the City's cost allocation plan and occasional overpayments of related costs, which are reconciled in subsequent years.

⁽²⁾ Reflects all civilian health, dental, union supplemental benefit and life insurance subsidies.

Table 10 REIMBURSEMENT OF GENERAL FUND COST (\$ in thousands)

		Fiscal Year	Expenditures ⁽¹⁾
		2014-15	\$49,499
		2015-16	81,255
		2016-17	68,375
		2017-18 (Estimated)	58,309
		2018-19 (Adopted Budget)	61,433
(1)	Cash basis.		

Source: City of Los Angeles, Office of the City Administrative Officer.

Labor Relations

In 1971, the City adopted an employee relations ordinance under the provisions of the Meyers-Milias-Brown Act ("MMBA"). Under the MMBA, management must bargain with recognized employee organizations on terms and conditions of employment, including wages, hours, and other working conditions. The CAO is the formal management representative on employee relations matters, representing the Mayor and Council in negotiations with recognized employee organizations. The CAO receives direction from the Executive Employee Relations Committee ("EERC"), consisting of the Mayor, the President of the Council, the President Pro-Tempore of the Council and the chairpersons of the Council's Budget and Finance, and Personnel and Animal Welfare Committees. Formal Memoranda of Understanding ("MOUs") are executed between the City and the employee organizations incorporating the negotiated wages and working conditions for each bargaining unit. For expired contracts, the terms continue to be observed during negotiations of a new contract, unless a provision has a specific termination date.

There are 41 individual MOUs, affecting about 36,400 full-time City employees (these bargaining units include employees of the Airport and Harbor departments, but exclude DWP employees) that are represented by 22 labor unions/employee associations. The remaining approximately 800 employees are not represented. The vast majority of employees that are members of the Los Angeles City Employees' Retirement System ("LACERS") are considered to be "civilian" employees. Employees that are members of the City of Los Angeles Fire and Police Pension Plan ("LAFPP") are considered to be "sworn" or "safety" employees. See "BUDGET AND FINANCIAL OPERATIONS—Retirement and Pension Systems—Los Angeles City Employees' Retirement System ("LACERS")."

Multi-year agreements are currently in place with the Los Angeles Police Protective League; the United Firefighters of Los Angeles City; the 19 bargaining units that comprise the "Coalition of LA City Unions" (which includes 17 full-time and two part-time bargaining units); and the five bargaining units represented by the Engineers and Architects Association. The agreements provide for salary increases as shown on the table below.

The following table summarizes the membership and status of the largest unions and employee associations. Most current labor contracts will expire at the end of Fiscal Year 2017-18 or Fiscal Year 2018-19.

Table 11 STATUS OF LABOR CONTRACTS LARGEST EMPLOYEE ORGANIZATIONS (As of July 1, 2018)

<u>Organization</u>	Full-Time Employees Represented(1)	Number of Bargaining <u>Units</u>	Status of Memorandum of Understanding	Cost of Living Adjustment ⁽²⁾
Los Angeles Police Protective League	9,897	1	Contract expires 7/31/19	2% on 7/8/18 2% on 7/7/19
United Firefighters of Los Angeles City	3,282	1	Contract expires 6/30/19	4% effective 6/26/16 2% effective 7/9/17 2% effective 1/7/18 2% effective 7/8/18
Coalition of LA City Unions ⁽³⁾	15,653	17	Contracts expire 6/30/18	2% on 7/9/17 2.75% step on 1/7/18 Salaries restructured
Engineers and Architects Association	4,937	4	Contracts expire 6/22/19	1.5% increase effective 12/13/15. 2.25% effective 6/26/16 2.25% effective 6/25/17 2.25% effective 6/24/18
Municipal Construction Inspectors Association	866	1	Contract expires 6/22/19	3% effective 11/13/16 2% effective 6/25/17 1.5% effective 12/10/17 2% effective 6/10/18 2% effective 6/23/19 Salaries restructured

⁽¹⁾ Total employees in all departments except DWP.

Source: City of Los Angeles, Office of the City Administrative Officer.

⁽²⁾ Adjustments for the term covered by the specific MOU. Also includes certain "step increases" for variation in pay based on longevity.

⁽³⁾ Includes Service Employees International Union, Local 721, American Federation of State, County and Municipal Employees, Laborers' International Union of North America Local 777, Los Angeles/Orange County Building & Construction Trades Council, IUOE Local 501, and the Teamsters, Local 911.

The table below shows total authorized City staffing for all departments except Airports, Harbor, DWP, LACERS, and LAFPP. The Los Angeles Police Department ("LAPD") represents the single largest department in terms of authorized positions.

Table 12 AUTHORIZED CITY STAFFING ⁽¹⁾						
	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>2018-19</u>	
Sworn						
Police	10,480	10,522	10,545	10,547	10,549	
Fire	3,232	3,292	3,350	3,350	3,363	
Subtotal Sworn	13,712	13,814	13,895	13,897	13,912	
Civilian						
Police	3,227	3,313	3,330	3,335	3,388	
Fire	342	342	379	383	397	
All Others	14,594	<u>15,107</u>	<u>15,501</u>	15,760	16,063	
Subtotal Civilian	<u>18,163</u>	18,762	<u>19,210</u>	19,478	19,805	
Total	31,875	32,576	33,105	33,375	33,760	

⁽¹⁾ As authorized in the Adopted Budget. Includes permanent ("regular") positions and excludes temporary personnel (also referred to as "resolution authority positions"), which total 2,400 for Fiscal Year 2018-19. Also excludes personnel of the departments of Airports, Harbor, DWP, LACERS and LAFPP.

Source: City of Los Angeles, Office of the City Administrative Officer.

Los Angeles City Employees' Retirement System ("LACERS")

The City has three single-employer defined benefit pension plans created by the City Charter: the Los Angeles City Employees' Retirement System ("LACERS"), the City of Los Angeles Fire and Police Pension Plan ("LAFPP") and, for employees of DWP, the Water and Power Employees' Retirement, Disability and Death Benefit Insurance Plan (the "Water and Power Plan"). Both LACERS and LAFPP (collectively, the "Pension Systems") are funded primarily from the City's General Fund, while the Water and Power Plan is funded by that department's proprietary revenues. Employees of the City's Solid Waste Program are members of LACERS.

LACERS, established in 1937 under the Charter, is a contributory plan covering most City employees except uniformed fire and police personnel who are members of Los Angeles Fire and Police Pensions, and employees of the Department of Water and Power. As of June 30, 2017, the date of its most recent actuarial valuation, LACERS had 25,457 active members, 18,805 retired members and beneficiaries, and 7,428 inactive members. The number of retired members was significantly increased, and the number of active members significantly decreased, as a result of the City's Early Retirement Incentive Program in Fiscal Year 2009-10. LACERS is funded pursuant to the Entry Age Cost Method, which is designed to produce stable employer contributions in amounts that increase at the same rate as the employer's payroll (i.e., level percent of payroll).

LACERS provides retirement, disability, death benefits, post-employment healthcare and annual cost-of-living adjustments to plan members and beneficiaries. As required by the City Charter, the actuarial valuations for LACERS are prepared on an annual basis and the applicable actuary recommends contribution rates for the fiscal year beginning after the completion of that

actuarial valuation. When approved by LACERS' board of administration, these become the City's contribution rates for such years.

LACERS' annual valuations determine the contribution rate, as a percentage of covered payroll, needed to fund the normal retirement costs accrued for current employment and to amortize any unfunded actuarial accrued liability ("UAAL"). The UAAL represents the difference between the present value of estimated future benefits accrued as of the valuation date and the actuarial value of assets currently available to pay these liabilities. The valuation is an estimate based on relevant economic and demographic assumptions, with the goal of determining the contributions necessary to sufficiently fund over time the benefits for currently active, vested former members and retired employees and their beneficiaries. Various actuarial assumptions are used in the valuation process, including the assumed rate of earnings on the assets of the plan in the future, the assumed rates of general inflation, salary increases, inflation in health care costs, assumed rates of disability, the assumed retirement ages of active employees, the assumed marital status at retirement, and the post-employment life expectancies of retirees and beneficiaries. As plan experience differs from adopted assumptions, the actual liabilities will be more or less than the liabilities calculated based on these assumptions. The contribution rates in the following year's valuations are adjusted to take into account actual plan performance in the current and prior years. In addition, LACERS performs an experience study every three years and further adjusts its assumptions accordingly.

A number of assumptions are made in calculating the actuarial valuation of retirement benefits. The following are some of the key assumptions used by LACERS' actuary, The Segal Company, in preparing LACERS' actuarial report as of June 30, 2017.

Table 13 LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM ACTUARIAL ASSUMPTIONS As of June 30, 2017

Investment rate of return	7.25%
Inflation rate	3.00%
Real across-the-board salary increase (net of inflation)	0.50%
Projected salary increases	Ranges from 3.90% to 10.00%, based on service
Cost of living adjustments for pensioners	3.00% for Tier 1; 2.00% for Tier 3

Source: Los Angeles City Employees' Retirement System Actuarial Valuation and Review of Retirement and Health Benefits as of June 30, 2017.

Over the past several years, LACERS has adopted various changes to its actuarial assumptions, including reducing the assumed investment return from 7.75% to 7.50% in 2014, and further reducing its assumed return to 7.25% in 2017. These new assumptions were reflected in the June 30, 2017 valuation, which impact the Fiscal Year 2018-19 contribution.

LACERS' actuary (Segal Consulting) recommended in 2017 three combinations of economic assumption alternatives to reduce the assumed investment return and price inflation, from 7.50% and 3.25% respectively to: 7.00% and 3.00%; 7.25% and 3.00%; or 7.00% and 2.75%. The LACERS Board adopted a 7.25% assumed investment return and 3.00% price inflation, with

a plan to conduct a full experience study of economic and demographic assumptions in the summer of 2018. Based on Segal's recommendations to its other clients, the 2018 recommendations may include a 7.00% assumed investment return, a 2.75% inflation assumption, and/or a change to the mortality table. Any of these assumption changes could increase the City's contribution rate for 2019-20.

The valuations incorporate a variety of actuarial methods, some of which are designed to reduce the volatility of contributions from year to year. When measuring the value of assets for determining the UAAL, many pension plans, including LACERS, "smooth" market value gains and losses over a period of years to reduce volatility. These smoothing methodologies result in an actuarial value of assets that are lower or higher than the market value of assets.

LACERS' Board uses a market value corridor of 40%. A "corridor" is used in conjunction with asset smoothing, in order to keep the actuarial value of assets within a certain percentage of the market value of assets. For example, if a system has a 40% corridor, the actuarial value of assets must be between 60% and 140% of the market value of assets. Market losses and gains are recognized under a seven-year asset smoothing period, where only 1/7 of annual market gains or losses are recognized in the actuarial value of assets each year. The remaining gains or losses are spread equally over the next six years.

To limit future fluctuations in asset values due to large unrecognized gains reflecting several years of fairly large annual market gains and losses from a volatile market, the LACERS Board adopted a one-time adjustment, as of June 30, 2014, to its current asset smoothing policy by combining the unrecognized gains and losses of the prior years into one layer and spreading it evenly over six years. As of June 30, 2017, there was a total unrecognized net gain of \$2.6 million. The following table shows the original market gains and losses, and the unrecognized gains and losses as of June 30, 2017.

Table 14
LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM
CALCULATION OF UNRECOGNIZED RETURN DUE TO ASSET SMOOTHING
As of June 30, 2017

Year Ended June 30	Original Market Gain (Loss)	Portion Not Recognized	Amount Not Recognized
2013	\$ (81,571,421)	2/6	\$ (27,190,474)(1)
2014	1,246,285,581	3/7	534,122,392
2015	(707,760,540)	4/7	(404,434,594)
2016	(1,065,023,569)	5/7	(760,731,121)
2017	770,969,472	6/7	660,830,976
Total unreco	gnized return (loss)		\$ 2,597,179

⁽¹⁾ All deferred unrecognized investment gains as of June 30, 2013 were combined into a single layer, to be recognized over the six-year period beginning July 1, 2013.

Source: Los Angeles City Employees' Retirement System Actuarial Valuation and Review of Retirement and Health Benefits as of June 30, 2017.

LACERS amortizes components that contribute to its UAAL over various periods of time, depending on how the unfunded liability arose, layering separate, fixed amortization periods. Under current funding policy, actuarial losses and gains are amortized over fixed 15-year periods. Liabilities or surpluses due to assumption changes are funded or credited over 15 and 20 years for retiree health care benefits and retirement benefits, respectively. Liabilities caused by future early retirement incentives will be funded over five years; other benefit changes will be amortized over 15 years.

The table below shows the actuarial value of the City's liability for retirement benefits (excluding retiree health care and other post-employment benefits), the actuarial value of assets available for retirement benefits, and two indicators of funding progress for LACERS, the funded ratio and the ratio of UAAL to annual payroll.

Table 15 LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM SCHEDULE OF FUNDING PROGRESS FOR RETIREMENT BENEFITS ACTUARIAL VALUE BASIS (\$ in thousands)(1)

Actuarial Valuation As of June 30	Actuarial Value of <u>Assets</u>	Actuarial Accrued Liability (AAL)	Unfunded <u>AAL</u> ⁽²⁾	Funded <u>Ratio</u> ⁽³⁾	Covered Payroll ⁽⁴⁾	Unfunded AAL as a Percentage Of Covered Payroll ⁽⁵⁾
2008	\$ 9,438,318	\$11,186,404	\$1,748,085	84.4%	\$1,977,645	88.4%
2009	9,577,747	12,041,984	2,464,237	79.5	1,816,171	135.7
2010	9,554,027	12,595,025	3,040,998	75.9	1,817,662	167.3
2011	9,691,011	13,391,704	3,700,693	72.4	1,833,392	201.9
2012	9,934,959	14,393,959	4,458,999	69.0	1,819,270	245.1
2013	10,223,961	14,881,663	4,657,702	68.7	1,846,970	252.2
2014	10,944,751	16,248,853	5,304,103	67.4	1,898,064	279.5
2015	11,727,161	16,909,996	5,182,835	69.4	1,907,665	271.7
2016	12,439,250	17,424,996	4,985,746	71.4	1,968,703	253.3
2017	13,178,334	18,458,188	5,279,854	71.4	2,062,316	256.0

⁽¹⁾ Table includes funding for retirement benefits only. Other Post-Employment Benefits (OPEB) are not included.

Los Angeles City Employees' Retirement System Actuarial Valuation and Review of Retirement and Health Benefits as of June 30, 2017.

The actuarial value of assets is different from the market value of assets as gains and losses are smoothed over a number of years. The following table shows the funding progress of LACERS based on the market value of the portion of system assets allocated to retirement benefits.

⁽²⁾ Actuarial Accrued Liability minus Actuarial Value of Assets, commonly referred to as UAAL. Positive numbers represent a funded ratio less than 100%.

⁽³⁾ Actuarial value of assets divided by Actuarial Accrued Liability.

⁽⁴⁾ Annual payroll for members of LACERS.

⁽⁵⁾ UAAL divided by covered payroll.

Table 16 LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM SCHEDULE OF FUNDING PROGRESS FOR RETIREMENT BENEFITS MARKET VALUE BASIS

(\$ in thousands)(1)

Actuarial Valuation As of June 30	Market Value of <u>Assets</u>	Actuarial Accrued Liability (AAL)	Unfunded <u>Liability⁽²⁾</u>	Funded Ratio (<u>Market Value</u>) ⁽³⁾	Covered Payroll ⁽⁴⁾	Unfunded Liability as a Percentage Of Covered Payroll (Market <u>Value</u>) ⁽⁵⁾
2008	\$9,059,551	\$11,186,404	\$2,126,853	81.0%	\$1,977,645	107.5%
2009	7,122,911	12,041,984	4,919,073	59.2	1,816,171	270.9
2010	7,804,223	12,595,025	4,790,802	62.0	1,817,662	263.6
2011	9,186,697	13,391,704	4,205,007	68.6	1,833,392	229.4
2012	9,058,839	14,393,959	5,335,120	62.9	1,819,270	293.3
2013	10,154,486	14,881,663	4,727,177	68.2	1,736,113	272.3
2014	11,791,079	16,248,853	4,457,774	72.6	1,802,931	247.3
2015	11,920,570	16,909,996	4,989,426	70.5	1,835,637	271.8
2016	11,809,329	17,424,996	5,615,667	67.8	1,968,703	285.2
2017	13,180,516	18,458,188	5,277,672	71.4	2,062,316	256.0

⁽¹⁾ Table includes funding for retirement benefits only. Other Post-Employment Benefits (OPEB) are not included.

Source: Calculated based on data from Los Angeles City Employees' Retirement System Actuarial Valuation reports.

LACERS has adopted asset allocation plans to guide their investments in stocks, bonds, real estate, alternatives and cash equivalents over a three- to five-year period. The asset allocations of LACERS are summarized further below. Market value investment returns for the past 10 fiscal years are shown in the table below. Any return below the actuarial assumed rate of return (lowered to 7.25% for as of its June 30, 2017 actuarial valuation) represents an actuarial investment loss, while any return above the assumed rate of return represents an actuarial investment gain.

Table 17
LOS ANGELES LACERS
HISTORICAL MARKET VALUE INVESTMENT RETURNS

Fiscal Year	<u>LACERS</u>	
2007-08	(5.7)%	
2008-09	(19.5)	
2009-10	12.9	
2010-11	22.6	
2011-12	1.1	
2012-13	14.3	
2013-14	18.4	
2014-15	2.8	
2015-16	0.5	
2016-17	13.3	

Source: City of Los Angeles, the respective LACERS.

⁽²⁾ Actuarial Accrued Liability minus Market Value of Assets. Positive numbers represent a funded ratio less than 100%.

⁽³⁾ Market value of assets divided by actuarial accrued liability.

⁽⁴⁾ Annual payroll for members of LACERS.

⁽⁵⁾ Unfunded liability divided by covered payroll.

The City has never issued pension obligation bonds to fund any of its pension systems. The City does pre-pay its annual contribution to LACERS out of the proceeds of its annual issuance of tax and revenue anticipation notes.

The table below summarizes the City's payments to LACERS over the past five years, including the budgeted payment for Fiscal Year 2018-19. This table includes costs for retirement, as well as for retiree health care (see "BUDGET AND FINANCIAL OPERATIONS —Other Post-Employment Benefits"), and other miscellaneous benefits.

Table 18 LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM SOURCES AND USES OF CONTRIBUTIONS (\$ in thousands)⁽¹⁾

Sources of Contributions	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	Adopted Budget 2017-18	Adopted Budget 2018-19
Contributions for Council-controlled					
Departments	\$411,509	\$434,639	\$459,400	\$450,813	\$488,414
Airport, Harbor Departments,					
LACERS, LAFPP	94,209	103,120	106,766	102,214	110,370
Total	\$505,718	\$537,759	\$566,166	\$553,027	\$598,784
Percent of payroll – Tier 1	26.56%	28.75%	28.16%	27.22%	28.31%
Percent of payroll – Tier 2	19.63%	26.42%			
Percent of payroll – Tier 3			24.96%	24.64%	25.88%
Uses of Contributions Current Service Liability (Normal	\$193,769	\$190,777	\$206,982	\$214,403	\$223,667
cost)	4-7-2,1-07	4	*	4 =- 1,100	+==+,++,
UAAL	305,891	363,929	366,172	359,542	397,617
Adjustments ⁽²⁾	6.058(3)	$(16,947)^{(4)}$	$(6,988)^{(5)}$	$(20,918)^{(6)}$	$(22,500)^{(7)}$
Total	\$505,718	\$537,759	\$566,166	\$553,027	\$598,784
10111	Ψ505,710	Ψυυ 1,100	φ500,100	Ψ555,027	Ψ270,704

⁽¹⁾ Includes funding for OPEB.

Source: City of Los Angeles, Office of the City Administrative Officer.

In 2012, the City Council adopted a new civilian retirement tier ("Tier 2"), which applied to all employees hired on or after July 1, 2013. Subsequently, as part of an agreement with the Coalition of Los Angeles City Unions, both the City and the Coalition agreed to transfer all Tier 2 employees into Tier 1 effective February 21, 2016. Any new employee hired into a position eligible for LACERS members on or after February 21, 2016 will, unless eligible for Tier 1 membership under specific exemptions, be enrolled in a new "Tier 3".

⁽²⁾ Includes the excess benefit plan, the family death benefit plan, and the limited term plan fund. Beginning with the 2014-15 payment, the true-up obligation for the prior year is also reflected in this line item.

⁽³⁾ Payment for a 2013-14 true-up in the amount of \$5,191,511 (all agencies) was made in 2014-15.

⁽⁴⁾ Adjustments for 2015-16 include the 2014-15 true-up which consists of an \$18,052,498 credit (all agencies), which is partially offset by \$1,105,000 in excess benefit, family death and limited term plan costs.

⁽⁵⁾ Adjustments for 2016-17 include the 2015-16 true-up, which consists of a \$24,031,072 credit (all agencies) and which is partially offset by a \$15,854,076 one-time lump sum payment for the retroactive upgrade of past Tier 2 members to Tier 1, and \$1,189,000 in excess benefit, family death and limited term plan costs.

⁽⁶⁾ Adjustments for 2017-18 include the 2016-17 true-up which consists of a \$22,341,265 credit (all agencies) and \$1,423,000 in excess benefit family death, and limited term plan costs. The entire portion of the City's contribution attributed to the enhanced benefit for the Airport Peace Officers who remain in LACERS will be borne exclusively by the Airports Department. As a result, the final contribution obligation for all agencies has been adjusted accordingly.

⁽⁷⁾ Adjustments for 2018-19 include the 2017-18 true-up which consists of a \$23,745,605 credit (all agencies) and \$1,246,000 in excess benefit, family death, and limited term plan costs. The final contribution obligation for all agencies has been adjusted accordingly for the enhanced benefit for the Airport Peace Officers who remain in LACERS.

The following table includes a summary of the major plan design changes from Tier 1 to Tier 3.

Table 19 COMPARISON OF LACERS TIER I AND TIER III PLAN DESIGNS						
Plan Feature Normal Retirement (Age / Years of Service ("YOS"))	Tier I ⁽¹⁾ 60 / 10 70 / Any	<u>Tier III</u> 60 / 30 60 / 10				
Early, Unreduced Retirement Eligibility	55 / 30	55 / 30				
Benefit Factors	2.16%@ 55 / 30	1.5% @ 60 / 10 2.0% @ 60 / 30 2.0% @ 55 / 30 2.0% @ 63 / 10 2.1% @ 63 / 30				
Compensation Used to Determine Retirement Allowance	Highest consecutive 12 months, including most bonuses	Last 36 months prior to retirement, including most MOU bonuses				
Maximum Benefit	100%	80%				
Employee Contribution Base	6%	7%				
Early Retirement Incentive Program Employee Contribution	1% Until 2026 or when ERIP debt is paid, whichever is sooner	N/A				
Other Post-Employment Benefits (OPEB), e.g., retiree healthcare Employee Contribution	4%	4%				
Maximum Annual COLA	3%	2%				
COLA Bank	Yes	No				
Survivor Continuance	50%	50%				
Death Benefit	\$2,500	\$2,500				
Retiree Health Subsidy	Eligible at 55 / 10 Subsidy two-party Kaiser rate Vesting 40% at 10 Years of Service (YOS), 100% at 25 YOS	Eligible at 55 / 10 Subsidy two-party Kaiser rate Vesting 40% at 10 YOS, 100% at 25 YOS				
Disability Retirement	More than 5 YOS Maximum 1.43% per YOS or 33% of final compensation Less than 5 YOS, return contributions	More than 5 YOS Maximum 1.43% per YOS or 33% of final compensation Less than 5 YOS, return contributions				
Government Service Buyback	Member contribution	Member pays employee and employer contributions, except for limited military or maternity leave time.				
(1) Does not reflect Tier 1 Enhanced Benefits for approximately 500 Airport Peace Officers.						

Source: City of Los Angeles, Office of the City Administrative Officer

Table 20 LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM ASSET CLASS MARKET VALUE AND ALLOCATION (\$ in million)

As of April 10, 2018

Asset Class	Market Value	Actual Allocation (%)	New Target Allocation Approved April 2018 (%)
U.S. Equity	\$ 4,537	26.44%	19.00%
Non-U.S. Equity	5,525	32.20	27.00
Fixed Income Securities	2,963	17.27	13.75
Credit Opportunities	793	4.62	12.25
Real Assets	1,574	9.17	13.00
Private Equity	1,650	9.62	14.00
Cash	118	0.68	1.00
Total Portfolio	\$17,161	100.00%	100.00%

Source: LACERS Portfolio Performance Review for the Quarter Ending June 30, 2017.

The information contained in this section and the following section, "Other Post-Employment Benefits," is primarily derived from information produced by LACERS and its independent actuaries. The City has not independently verified the information provided by LACERS. The comprehensive annual financial reports of LACERS, actuarial valuations for retirement and health benefits, and other information concerning LACERS are available on LACERS' website, at www.lacers.org/aboutlacers/reports/index.html. Information set forth on such website is not incorporated by reference herein. For additional information regarding the LACERS, see also Note 5 in the "Notes to the City's Basic Financial Statements" in the City's Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2017.

Investors are cautioned that, in considering information on LACERS, including the amount of the UAAL for retirement and other benefits, the funded ratio, the calculations of normal cost, and the resulting amounts of required contributions by the City, this is "forward looking" information. Such "forward looking" information reflects the judgment of the board LACERS and its actuaries as to the value of future benefits over the lives of the currently active employees, vested terminated employees, and existing retired employees and beneficiaries. These judgments are based upon a variety of assumptions, one or more of which may prove to be inaccurate and/or be changed in the future.

Other Post-Employment Benefits

Retired members and surviving spouses and domestic partners of LACERS members are eligible for certain subsidies toward their costs of medical and dental insurance and other benefits. These benefits are paid by the respective retirement system. These retiree health benefits are accounted for as "Other Post-Employment Benefits" ("OPEB").

The City began making payments to LACERS to pre-fund its OPEB obligations in Fiscal Year 1989-90, in an amount then determined by LACERS and their actuaries. The calculations of OPEB funding requirements are made by the same actuaries that perform the analysis of LACERS'

retirement benefits, and generally rely on the same actuarial assumptions, other than those assumptions such as medical inflation specific to OPEB.

As of June 30, 2017, the unfunded healthcare benefits liabilities of LACERS are as follows:

Table 21
LOS ANGELES CITY EMPLOYEE'S RETIREMENT SYSTEM
SCHEDULE OF FUNDING PROGRESS FOR OTHER POST-EMPLOYMENT BENEFITS
(\$ in thousands)

Actuarial Valuation As of June 30	Actuarial Value of <u>Assets</u>	Actuarial Accrued Liability (AAL)	Unfunded $\underline{AAL}^{(1)}$	Funded <u>Ratio</u> ⁽²⁾	Covered Payroll ⁽³⁾	Unfunded AAL as a Percentage of Covered Payroll ⁽⁴⁾
2008	\$1,342,920	\$1,928,043	\$585,123	69.7%	\$1,977,645	29.6%
2009	1,342,497	2,058,177	715,680	65.2	1,816,171	39.4
2010	1,425,726	2,233,874	808,148	63.8	1,817,662	44.5
2011	1,546,884	1,968,708	421,824	78.6	1,833,392	23.0
2012	1,642,374	2,292,400	650,027	71.6	1,819,270	35.7
2013	1,734,733	2,412,484	677,751	71.9	1,846,970	36.7
2014	1,941,225	2,662,853	721,628	72.9	1,898,064	38.0
2015	2,108,925	2,646,989	538,065	79.7	1,907,665	28.2
2016	2,248,753	2,793,689	544,935	80.5	1,968,703	27.7
2017	2,438,458	3,005,806	567,348	81.1	2,062,316	27.5

⁽¹⁾ Actuarial Accrued Liability minus Actuarial Value of Assets, commonly referred to as UAAL. Positive numbers represent an actuarial deficit.

Source: The City of Los Angeles City Employees' Retirement System Actuarial Valuations.

Historically, plan members did not contribute towards healthcare subsidy benefits; all such costs were funded from the employer's contribution and investment returns thereon. The City negotiated bargaining agreements that require a 4% active employee contribution toward retiree healthcare for its entire civilian workforce and the option of a 2% active employee contribution toward retiree healthcare for its sworn workforce hired before July 1, 2011. Sworn employees hired after July 1, 2011, are members of Tier 6 which requires a 2% contribution toward retiree healthcare. Employees who contribute to retiree healthcare benefits are vested in future subsidy increases authorized by the retirement boards. For those sworn employees that opted not to make an additional contribution toward retiree healthcare, their retiree health subsidy has been frozen and cannot surpass the maximum subsidy level in effect as of July 1, 2011.

⁽²⁾ Actuarial value of assets divided by Actuarial Accrued Liability.

⁽³⁾ Annual payroll against which UAAL amortized.

⁽⁴⁾ UAAL divided by covered payroll.

Projected Retirement and Other Post-Employment Benefit Expenditures

The table below illustrates the City's projected contributions to LACERS for the next four fiscal years based on projected rates from the City's actuary applied against projected payroll by the CAO. These contributions illustrate the projected cost of both pension and OPEB under the existing assumptions.

Table 22
LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM
PROJECTED CONTRIBUTIONS
(\$ in thousands)

LACERS	Adopted Budget 2018-19	Projection 2019-20	Projection <u>2020-21</u>	Projection <u>2021-22</u>	Projection <u>2022-23</u>
Contributions for Council- controlled Departments ⁽¹⁾⁽²⁾	\$488,414	\$518,838	\$518,242	\$520,768	\$537,555
Percentage of Payroll ⁽³⁾	28.02%	27.81%	28.34%	26.94%	27.27%
Incremental Change % Change	\$37,601 8.34%	\$30,424 6.23%	\$(596) (0.11)%	\$2,526 0.49%	\$16,787 3.22%

⁽¹⁾ Includes the General Fund and various special funds.

Source: City of Los Angeles, Office of the City Administrative Officer, based on information from the system's actuary.

⁽²⁾ Assumes 7.25% return on investment.

⁽³⁾ Reflects combined rates for all benefit tiers.

City Treasury Investment Practices and Policies

The Treasurer invests available cash for the City, including that of the proprietary departments, as part of a pooled investment program that combines general receipts with special funds for investment purposes and allocates interest earnings on a pro-rata basis when the interest is earned, and distributes interest receipts based on the previously established allocations. The Treasurer also maintains a limited number of special pools established for specific purposes.

The City's General Pool is further divided into a core pool and a reserve pool. The core or liquidity portion is targeted at the City's net liquidity requirements for six months. All investments in the core section of the portfolio have maturities of one year or less. The balance of the General Pool not required for the City's six-month liquidity requirement is invested in the reserve portfolio. The reserve portfolio holds investments ranging from one to five years.

Table 23 POOLED INVESTMENT FUND GENERAL POOL Investments as of April 30, 2018

Description	Par	Value	Mark	tet Value	Percent of Total Funds (Market Value)	Average Days
Bank Deposits ⁽¹⁾	\$ 89,300,701		\$ 89,300,701		0.90%	0
Money Market Funds	4,776,244		4,776,244		0.05	0
LAIF (State of California)	0		0		0.00	0
Subtotal Cash and Overnight Investments	\$ 94,0	76,945	\$ 94,	076,945	0.95%	0
CDARS (2)	\$	0	\$	0	0.00%	0
Commercial Paper	1,967,0	91,000	1,961,	882,245	19.83	46
Negotiable Certificates of Deposit		0		0	0.00	0
Corporate Notes	207,200,000		206,672,981		2.09	170
U.S. Agencies/Munis/Supras	304,046,000		303,323,525		3.07	82
U.S. Treasuries	595,000,000		591,870,200		4.98	301
Subtotal: Pooled Investments	\$3,073,3	37,000	\$3,063,	748,952	30.96%	107
Total Short Term Core Portfolio	\$3,167,4	13,945	\$3,157,	825,897	31.91%	104
Money Market Funds	\$	0	\$	0	0.00%	0
Commercial Paper		0		0	0.00	0
Negotiable Certificates of Deposit		0		0	0.00	0
Corporate Notes	1,238,905,000		1,216,317,095		12.29	945
Asset-Backed Securities	115,337,000		113,886,872		1.15	1,276
U.S. Agencies/Munis/Supras	634,830,000		621,517,375		6.28	926
U.S. Treasuries		4,890,000,000		4,785,490,650		1,019
Total Long-Term Reserve Portfolio	\$6,879,072,000		\$6,737,211,993		68.09%	1,001
Total Cash and Pooled Investments	\$10,046,485,945 Short-Term Core Portfolio		\$9,895,037,890		100.00%	715
-			Long-Term Reserve Portfolio		Consolidated	
Average Weighted Maturity Effective Yield	104 Days 1.84%		2.7 Years 1.77%		2.0 Years	
Effective rieid	1.0	5470	1	.//70	1.80%	

⁽¹⁾ Collected balance for Wells Fargo Active Accounts.

Source: City of Los Angeles, City Treasurer.

⁽²⁾ Certificate of Deposit Account Registry Service, which provides capital to community banks that lend and provide services in economically distressed areas. Deposits are insured through FDIC.

The City's treasury operations are managed in compliance with the California Government Code and according to the City's Statement of Investment Policy (the "Investment Policy"), which sets forth liquidity parameters, maximum maturities and permitted investment vehicles, which include U.S. Treasuries, U.S. Government Agencies and Corporate Notes.

Additionally, daily investment activity is reviewed independently by an outside investment advisor to ensure that all security transactions are in accordance with all policies as delineated above.

The Treasurer does not invest in structured or range notes, securities that could result in zero interest accrual if held to maturity, variable rate, floating rate or inverse floating rate investments, or mortgage-derived interest or principal-only strips, among other instruments prohibited by State law and the City's Investment Policy.

The Investment Policy permits the Treasurer to engage custodial banks to enter into short-term arrangements to loan securities to various brokers. Cash and/or securities (United States Treasuries and Federal Agencies) collateralize these lending arrangements, the total value of which is at least 102% of the market value of securities loaned out. The securities lending program is limited to a maximum of 20% of the market value of the Treasurer's pool by the City's Investment Policy and the California Government Code.

OTHER MATTERS

Seismic Considerations

The City is subject to unpredictable and significant seismic activity. A number of known faults run through the City, and the City lies near the San Andreas Fault, which is the boundary between the Pacific and North American tectonic plates. The complex Los Angeles fault system interacts with the alluvial soils and other geologic conditions in the hills and basins of the area. This interaction poses a potential seismic threat for every part of the City, regardless of the underlying geologic and soils conditions. In addition, there are likely to be unmapped faults throughout the City. The most recent major earthquake, the Northridge earthquake in 1994, occurred along a previously unmapped blind thrust fault. The City generally does not maintain earthquake insurance coverage; see "BUDGET AND FINANCIAL OPERATIONS—Risk Retention Program."

Climate Change

The change in the earth's average atmospheric temperature, generally referred to as "climate change", is expected to, among other things, increase the frequency and severity of extreme weather events and cause substantial flooding. The City's Sustainable City pLAn (the "Plan"), released in 2015, provides a 20-year framework intended to both prepare for climate change and mitigate its effects on the City's economy, infrastructure and communities. The Plan sets forth several actions that may be taken by the City, including improving emergency response functions and disaster preparedness, reducing air and water pollution, and managing rising temperatures in urban environments. In addition, the City has begun construction of a series of groundwater remediation projects to reduce the City's reliance on imported water as drought conditions continue, is exploring the use of specially designed "cool roofs" to manage the effect of rising temperatures in urban environments and is testing the effects of "cool pavement" (a

special coating applied to city streets) to manage urban temperatures. The City continues to explore various other adaptive actions within the framework established by the Plan.

The City cannot predict the timing, extent, or severity of climate change and its impact on the City's operations and finances. Also, additional actions to address climate change may be necessary and the City can give no assurances regarding the impact of such actions on the City's operations and finances.

Cybersecurity

The City relies on a large and complex technology environment to conduct its operations. As a recipient and provider of personal, private and sensitive information, the City and its departments face multiple cyber threats including, but not limited to, hacking, viruses, malware and other attacks on computers and other sensitive digital networks and systems. There have been, however, only limited cyber-attacks on the City's computer system. For example, the City recently experienced a ransomware attack which impacted a single computer at a City department for one business day. The computer was immediately discovered and the malicious file was quarantined to prevent it from spreading to other computers and no data was lost or breached. Following this incident, certain City personnel attended awareness training and the City installed an endpoint detection and response system, which identifies and responds to malicious and other suspicious activities. Also, recently a City department's website was compromised and was unavailable for a few hours. No data was lost and the website was subsequently restored. The City has since increased its server security.

In 2013, the City created the Cyber Intrusion Command Center (the "CICC") under a Mayoral Executive Directive to coordinate cybersecurity preparation and response across City departments. The CICC is comprised of key City departments, cybersecurity professionals, and local and federal law enforcement experts. The CICC has assisted the City in establishing policies for data classification, information handling, and cybersecurity prevention and response protocols. In 2015, the City established an Integrated Security Operations Center (the "ISOC") with cybersecurity professionals for cyber-attack monitoring and response. In addition, the City has identified critical data assets and applied additional cyber defenses through its Critical Asset Protection program. The City has conducted cyber security awareness training for all City employees with computer access, conducts phishing email tests, and provides periodic cybersecurity newsletters and workshops to its employees. Also, the City conducts annual "penetration tests" to identify and remediate any potential weaknesses in its networks.

No assurances can be given that the City's security and operational control measures will be successful in guarding against any and each cyber threat and attack. The results of any attack on the City's computer and information technology systems could impact its operations and damage the City's digital networks and systems, and the costs of remedying any such damage could be substantial.



APPENDIX B

SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT

The following is a summary of certain provisions contained in the Trust Agreement, and is not a full description or statement thereof. In addition to the provisions summarized below, certain provisions of the Trust Agreement are described earlier in the Official Statement; however, the defined terms "Bonds" and "Parity Bonds" as described earlier in the Official Statement differ from the defined terms "Bond" or "Bonds," and "Outstanding Parity Bonds" as used in this summary and in the Trust Agreement. Reference should be made to the complete copy of the Trust Agreement for a full description of its terms.

Defined Terms

- "Acquisition Fund" shall mean the fund or funds held by the Trustee or the City consisting of a portion of the proceeds of the Bonds used to pay the Costs of a Project.
- "Additional Bonds" shall mean the indebtedness issued pursuant to terms and conditions of the Master Trust Agreement.
- **"Authorized City Representative"** shall mean the City Administrative Officer, any Assistant City Administrative Officer, or such other official or employee of the City designated as an Authorized City Representative in a Supplemental Trust Agreement or by written notice to the Trustee signed by the City Administrative Officer. Any action required or authorized to be taken by the City in the Master Trust Agreement or any Supplemental Trust Agreement may be taken by an Authorized City Representative to the extent authorized by a Supplemental Trust Agreement or such written notice.
- **"Bond"** or **"Bonds"** shall mean any evidence of indebtedness of the City issued under and in accordance with the provisions of Article II of the Master Trust Agreement, including, but not limited to the Initial Bonds and all Additional Bonds issued pursuant to the Master Trust Agreement. As distinguished from the defined term "Bonds" described earlier in the Official Statement, "Bonds" as used in this summary and in the Master Trust Agreement includes the Parity Bonds (as described earlier in the Official Statement) and any Additional Bonds (as described earlier in the Official Statement) and does not refer solely to the Series 2018-A Bonds.
- **"Bond Counsel"** shall mean an attorney or firm of attorneys acceptable to the City who are nationally recognized as experts in the area of municipal finance and who are familiar with the transactions contemplated under the Master Trust Agreement.
- "Bondholder," "holder," "owner" or "registered owner" shall mean the person in whose name any Bond or Bonds are registered on the books maintained by a Registrar and shall include any Credit Provider or Liquidity Provider to which a Repayment Obligation is then owed, to the extent that such Repayment Obligation is deemed to be a Bond under the provisions of the Master Trust Agreement.
- **"Business Day"** shall mean any day other than a Saturday, a Sunday or a day on which banks in the State of California or the City in which the principal corporate trust office of the Trustee is located are authorized or obligated by law or executive order to close.
 - "Charter" shall mean the Charter of the City of Los Angeles, as amended from time to time.
 - "City" shall mean City of Los Angeles, California.

"City Attorney" shall mean legal counsel to the City who otherwise acts as provided for in Section 42 of the Charter.

"Code" shall mean the Internal Revenue Code of 1986, as amended, and the United States Treasury Regulations applicable thereto.

"Consultant" shall mean any Independent consultant, consulting firm, engineer, architect, engineering firm, architectural firm, accountant or accounting firm, or other expert recognized to be well-qualified for work of the character required and retained by the City to perform acts and carry out the duties provided for such consultant in the Master Trust Agreement.

"Continuing Disclosure Certificates" means those certain Continuing Disclosure Certificates executed by the City, dated the date of issuance and delivery of a Series of Bonds, as originally executed and as may be amended from time to time.

"Corporation Representative" means any person designated by the Board of Directors of the Municipal Improvement Corporation of Los Angeles, a non-profit public benefit corporation duly organized and existing under and by virtue of the laws of the State to act on behalf thereof with respect to the Master Trust Agreement.

"Costs" or "Costs of a Project" shall mean all costs of planning, developing, financing, constructing, installing, equipping, furnishing, improving, acquiring, enlarging and/or renovating a Project and placing the same in service.

"Credit Facility" shall mean a policy of municipal bond insurance, a letter of credit, surety bond, line of credit, guarantee, standby purchase agreement or other financial instrument which obligates a third party to make payment of or provide funds to the Trustee for the payment of the principal of and/or interest on Bonds.

"Credit Provider" shall mean the party obligated to make payment of principal of and interest on Bonds under a Credit Facility.

"Debt Service" means, for any Fiscal Year, the sum of (1) the interest accruing during such Fiscal Year on all Bonds (including all Outstanding Additional Bonds) and all Outstanding Parity Bonds, assuming that all Outstanding serial Bonds and all Outstanding serial Parity Bonds are retired as scheduled and that all Outstanding term Bonds and all Outstanding term Parity Bonds are prepaid or paid from sinking fund payments as scheduled (except to the extent that such interest is to be paid from the proceeds of sale of any Outstanding Bonds or Outstanding Parity Bonds), (2) that portion of the principal amount of all Outstanding serial Bonds and Outstanding serial Parity Bonds maturing in such Fiscal Year or maturing in the next succeeding Fiscal Year accruing during such Fiscal Year in each case computed as if such principal maturity were deemed to accrue daily during such Fiscal Year in equal amounts over a twelve-month period ending on the maturity date, and (3) that portion of the principal amount of all Outstanding term Bonds and all Outstanding term Parity Bonds required to be prepaid or paid in such Fiscal Year or during the next succeeding Fiscal Year in each case computed as if such principal amounts were deemed to accrue daily during such Fiscal Year in equal amounts over a twelve-month period ending on the payment or prepayment date; provided that, as to any such Bonds and Outstanding Parity Bonds bearing or comprising interest at other than a fixed rate, the rate of interest used to calculate Debt Service shall be one hundred ten percent (110%) of the greater of (a) the daily average interest rate on such Bonds and Outstanding Parity Bonds during the twelve (12) calendar months preceding the date of calculation (or the portion of the then current Fiscal Year that such Bonds and Outstanding Parity Bonds have borne interest) or (b) the most recent effective interest rate on such Bonds and Outstanding Parity Bonds prior to the date of calculation; and provided further that if any Series or issue of such Bonds and Outstanding Parity Bonds have twenty-five percent (25%) or more of the aggregate principal amount of such Series or issue due in anyone year, Debt Service shall be determined for the Fiscal Year of determination as if the principal of and interest on such Series or issue of such Bonds and Outstanding Parity Bonds

were being paid from the date of incurrence thereof in substantially equal annual amounts over a period of ten (10) years from the date of calculation; and provided further that, as to any such Bonds and Outstanding Parity Bonds or portions thereof bearing no interest but which are sold at a discount and which discount accretes with respect to such Bonds and Outstanding Parity Bonds or portions thereof, such accreted discount shall be treated as interest in the calculation of Debt Service at maturity in the year in which it matures; and provided further that the amount on deposit in a debt service reserve fund on any date of calculation of Debt Service shall be deducted from the amount of principal due at the final maturity of the Bonds and Outstanding Parity Bonds for which such debt service reserve fund was established and in each preceding year until such amount is exhausted.

"Debt Service Fund" shall mean the Debt Service Fund required to be created by the Master Trust Agreement.

"Event of Default" shall mean any occurrence or event specified as an "Event of Default" in the Master Trust Agreement.

"Fiscal Year" shall mean the period of time beginning on July 1 of each given year and ending on June 30 of the immediately subsequent year, or such other twelve-month period as the City designates as its fiscal year.

"Government Obligations" shall mean (1) United States Obligations (including obligations issued or held in book-entry form) and (2) prerefunded municipal obligations meeting the following conditions: (a) the municipal obligations are not subject to redemption prior to maturity, or the trustee has been given irrevocable instructions concerning their calling and redemption and the issuer has covenanted not to redeem such obligations other than as set forth in such instructions; (b) the municipal obligations are secured by cash and/or United States Obligations, which United States Obligations may be applied only to interest, principal and premium payments of such municipal obligations; (c) the principal of and interest on the United States Obligations (plus any cash in the escrow fund) are sufficient to meet the liabilities of the municipal obligations; (d) the United States Obligations serving as security for the municipal obligations are held by an escrow agent or trustee; (e) the United States Obligations are not available to satisfy any other claims, including those against the trustee or escrow agent; and (f) the municipal obligations are rated in the highest rating category of any Rating Agency which then maintains a rating on any of the Bonds.

"Independent" shall mean, when used with respect to any specified firm or individual, such a firm or individual who (i) does not have any direct financial interest or any material indirect financial interest in the operations of the City, other than the payment to be received under a contract for services to be performed, and (ii) is not connected with the City as an official, officer or employee.

"Initial Bonds" shall mean the \$86,640,000 Sanitation Equipment Charge Revenue Bonds, Series 2001-A authorized pursuant to the First Supplemental Trust Agreement.

"Liquidity Facility" shall mean a letter of credit, line of credit, standby purchase agreement or other financial instrument, including a Credit Facility, which is available to provide funds with which to purchase Bonds.

"Liquidity Provider" shall mean the entity, including a Credit Provider, which is obligated to provide funds to purchase Bonds under the terms of a Liquidity Facility.

"Master Trust Agreement" shall mean the Master Trust Agreement dated as of September 1, 2001 between the City and the Trustee, as the same may be amended from time to time.

"Maximum Annual Debt Service" shall mean the greatest Debt Service in any Fiscal Year during the period beginning with the current Fiscal Year and ending with the Fiscal Year in which the last Outstanding Bonds mature by their terms.

- "Notes" shall mean Bonds issued under the provisions of Article II of the Master Trust Agreement, which have a maturity of one year or less from their date of original issuance.
- "Operations and Maintenance Expense Fund" shall mean the fund by that name created pursuant to the Master Trust Agreement.
- "Outstanding" when used with respect to Bonds shall mean all Bonds, which have been authenticated and delivered under the Master Trust Agreement, except:
- (a) Bonds cancelled or purchased by the Trustee for cancellation or delivered to or acquired by the Trustee for cancellation and, in all cases, with the intent to extinguish the debt represented thereby;
- (b) Bonds deemed to be paid in accordance with Article VI of the Master Trust Agreement (Defeasance);
- (c) Bonds in lieu of which other Bonds have been authenticated under the Master Trust Agreement (in connection with mutilated, lost, stolen or destroyed Bonds, registration and transfer or exchange of Bonds or temporary Bonds, destruction of Bonds and temporary Bonds);
- (d) Bonds that have become due (at maturity or on redemption, acceleration or otherwise) and for the payment of which sufficient moneys, including interest accrued to the due date, are held by the Trustee or a Paying Agent;
- (e) Bonds which, under the terms of the Supplemental Trust Agreement pursuant to which they were issued, are deemed to be no longer Outstanding;
 - (f) Repayment Obligations deemed to be Bonds under the Master Trust Agreement; and
- (g) for purposes of any consent or other action to be taken by the holders of a specified percentage of Bonds under the Master Trust Agreement, Bonds known to the Trustee to be held by or for the account of the City or by any person controlled by or under common control with the City.
- "Outstanding Parity Bonds" shall mean all revenue bonds, contracts (whether in the form of installment purchase agreements, lease or sublease agreements, or otherwise) or notes of the City, authorized, executed, issued and delivered by the City prior to the date of execution and delivery of the Master Trust Agreement, the payments of which are on a parity with the Bonds, said Outstanding Parity Bonds consisting of the base rental payments and installment payments supporting the Series 1997-A Bonds and the Series 1999-A Bonds. As distinguished from the defined term "Parity Bonds" described earlier in the Official Statement, "Outstanding Parity Bonds" as used in this summary and in the Master Trust Agreement only refers to the base rental payments and installment payments supporting the Series 1997-A Bonds and the Series 1999-A Bonds which are no longer outstanding and does not refer to the Series of bonds issued and delivered by the City under the Master Trust Agreement as Additional Bonds prior to the date of execution and delivery of the Twelfth Supplemental Trust Agreement.
- **"Paying Agent"** or **"Paying Agents"** shall mean, with respect to any Bonds or Series of Bonds, the Treasurer or such banks, trust companies or other financial institutions or other entities designated in a Supplemental Trust Agreement as the place where such Bonds shall be payable.
- "Permitted Investments" shall mean any of the following securities if and to the extent the same are permitted by law and shall include such other securities as are set out in an applicable Supplemental Trust Agreement:

- (1) Cash (insured at all times by the Federal Deposit Insurance Corporation or otherwise collateralized with obligations described in paragraph (2) below);
- (2) Direct obligations of (including obligations issued or held in book entry form on the books of) the Department of the Treasury of the United States of America;
- (3) Obligations of any of the following federal agencies which obligations represent the full faith and credit of the United States of America, including:
 - Export-Import Bank
 - Farm Credit System Financial Assistance Corporation
 - Farmers Home Administration
 - General Service Administration
 - U.S. Maritime Administration
 - Small Business Administration
 - Government National Mortgage Association
 - (GNMA)
 - U.S. Department of Housing & Urban Development
 - (PHA's)
 - Federal Housing Administration
- (4) senior debt obligations rated "AAA" by S&P and "Aaa" by Moody's issued by the Federal National Mortgage Association or the Federal Home Loan Mortgage Corporation;
- (5) U.S. dollar denominated deposit accounts, federal funds and banker's acceptances with domestic commercial banks, which have a rating on their short-term certificates of deposit on the date of purchase of "A-1" or "A-1 +" by S&P and "P-1" by Moody's and maturing no more than 360 days after the date of purchase, (Ratings on holding companies are not considered as the rating of the bank);
- (6) commercial paper which is rated at the time of purchase in the single highest classification, "A-1+" by S&P and "P-1" by Moody's and which matures not more than 270 days after the date of purchase;
- (7) investments in a money market fund rated "AAAm" or "AAAm-G" or better by S&P or "Aaa" or "Aa" by Moody's;
- (8) Pre-refunded Municipal Obligations defined as follows: Any bonds or other obligations of any state of the United States of America or of any agency, instrumentality or local governmental unit of any such state which are not callable at the option of the obligor prior to maturity or as to which irrevocable instructions have been given by the obligor to call on the date specified in the notice; and
 - (A) which are rated, based on an irrevocable escrow account or fund (the "escrow"), in the highest rating category of S&P and Moody's or any successors thereto; or
 - (B) with the prior written approval of S&P, (i) which are fully secured as to principal and interest and redemption premium, if any, by any escrow consisting only of cash or obligations described in paragraph (2) above, which escrow may be applied only to the payment of such principal of and interest and redemption premium, if any, on such bonds or other obligations on the maturity date or dates thereof or the specified redemption date or dates pursuant to such irrevocable instructions, as appropriate, and (ii) which escrow is sufficient, as verified by a nationally recognized independent certified public accountant, to pay principal of and interest and redemption

- premium, if any, on the bonds or other obligations described in this paragraph on the maturity date or dates specified in the irrevocable instructions referred to above, as appropriate;
- (9) investment agreements approved in writing for a Series of Bonds by the applicable Credit Provider, supported by appropriate opinions of counsel, with notice to S&P;
- (10) other investments and forms of investments (including repurchase agreements) approved in writing for a Series of Bonds by the applicable Credit Provider, with notice to S&P;
 - (11) the State of California Local Agency Investment Fund (LAIF); and
- (12) the City Treasurer's general pooled investment fund; provided that such fund is rated "AA" or better by S&P or "Aa" or better by Moody's.
- **"Project"** shall mean any and all equipment, property and facilities financed or to be financed in whole or in part with proceeds of one or more Series of Bonds, or any refinancings thereof.
- **"Rating Agency"** shall mean a nationally recognized rating agency providing a rating for any Outstanding Bonds and the Outstanding Parity Bonds.
- "Rebate Fund" shall mean any fund created by the City pursuant to a Supplemental Trust Agreement in connection with the issuance of any Bonds for the purpose of complying with the Code and providing for the collection and holding for and payment of amounts due to the United States of America.
- **"Redemption Account"** shall mean any of the Redemption Accounts created pursuant to the Master Trust Agreement and further described in a Supplemental Trust Agreement.
- "Refunding Bonds" shall mean any Bonds issued pursuant to Article II of the Master Trust Agreement to refund or defease all or a portion of any Outstanding Bonds or Outstanding Parity Bonds or Subordinated Obligations.
- "Registrar" shall mean, with respect to any Bonds, the bank, trust company or other entity designated in a Supplemental Trust Agreement to perform the function of Registrar under the Master Trust Agreement or any Supplemental Trust Agreement, and which entity has accepted the position in accordance with the Master Trust Agreement.
- **"Repayment Obligations"** shall mean an obligation arising under a written agreement of the City and a Credit Provider pursuant to which the City agrees to reimburse the Credit Provider for amounts paid through a Credit Facility to be used to pay debt service on any Bonds or an obligation arising under a written agreement of the City and a Liquidity Provider pursuant to which the City agrees to reimburse the Liquidity Provider for amounts paid through a Liquidity Facility to be used to purchase Bonds.
- **"Reserve Fund"** shall mean the trust fund and the accounts therein created pursuant to the Master Trust Agreement and that is required to be funded for the purpose of providing additional security for Outstanding Bonds issued pursuant to the terms of the Master Trust Agreement and the Outstanding Parity Bonds. Reference to Outstanding Bonds in this definition does not include the Series 2018-A Bonds.
- "Reserve Fund Surety Policy" shall mean an insurance policy, surety bond or a letter of credit deposited with the Trustee for the credit of a bond reserve account within the Reserve Fund in lieu of or partial substitution for cash or securities on deposit therein.

- **"Reserve Requirement"** means, with respect to each Series of Bonds, as of the date of calculation, the least of (a) the maximum annual Debt Service with respect to such Series of Bonds, (b) 125% of the average annual aggregate Debt Service with respect to such Series of the Bonds, and (c) 10% of the proceeds of such Series of Bonds; provided, however, the Reserve Requirement with respect to the Outstanding Parity Bonds and all Series of Bonds combined shall not exceed the maximum annual Debt Service with respect to the Outstanding Parity Bonds and all Series of Bonds combined. References to "Bonds" and "Series of Bonds" in this definition do not include the Series 2018-A Bonds.
- "Responsible Officer" shall mean an officer, trust officer or assistant trust officer of the Trustee assigned by the Trustee to administer the Trust Agreement.
- "Revenues" shall mean (1) the Solid Waste Collection, Transfer, Recycling, Recovery of Waste Resources and Disposal Fee received by the Solid Waste Resources Revenue Fund after deduction of administration charges by the Department of Water and Power of the City, (2) any other legally available income, rates, fees, charges and other moneys which the City designates by ordinance or resolution for deposit in the Solid Waste Resources Revenue Fund, and (3) the earnings on and income derived from the investment of the amounts set forth in clause (1) and (2) above and from amounts on deposit in the Reserve Fund.
 - "Series" shall mean Bonds designated as a separate Series by a Supplemental Trust Agreement.
- "Series 1997-A Bonds" shall mean the \$15,585,000 Municipal Improvement Corporation of Los Angeles Sanitation Equipment Charge Revenue Bonds Series 1997-A, dated January 15, 1997.
- **"Series 1999-A Bonds"** shall mean the \$22,255,000 Municipal Improvement Corporation of Los Angeles Sanitation Equipment Charge Revenue Bonds Series 1999-A, dated January 1, 1999.
- **"Series 2003-A Bonds"** shall mean the \$47,825,000 Sanitation Equipment Charge Revenue Bonds, Series 2003-A authorized pursuant to the Second Supplemental Trust Agreement, dated April 1, 2003.
- "Series 2003-B Bonds" shall mean the \$61,120,000 Sanitation Equipment Charge Revenue Bonds, Series 2003-B authorized pursuant to the Third Supplemental Trust Agreement, dated December 1, 2003.
- **"Series 2004-A Bonds"** shall mean the \$56,230,000 Sanitation Equipment Charge Revenue Bonds, Series 2004-A authorized pursuant to the Fourth Supplemental Trust Agreement, dated March 15, 2004.
- "Series 2005-A Bonds" shall mean the \$47,750,000 Sanitation Equipment Charge Revenue Bonds, Series 2005-A authorized pursuant to the Fifth Supplemental Trust Agreement, dated July 1, 2005.
- "Series 2006-A Bonds" shall mean the \$58,370,000 Solid Waste Resources Revenue Bonds, Series 2006-A authorized pursuant to the Sixth Supplemental Trust Agreement, dated September 1, 2006.
- "Series 2009-A Bonds" shall mean the \$65,020,000 Solid Waste Resources Revenue Bonds, Series 2009-A authorized pursuant to the Seventh Supplemental Trust Agreement, dated as of December 1, 2009.
- "Series 2009-B Bonds" shall mean the \$49,485,000 Solid Waste Resources Revenue Bonds, Series 2009-B authorized pursuant to the Eighth Supplemental Trust Agreement, dated as of December 1, 2009.
- "Series 2013-A Bonds" shall mean the \$73,665,000 Solid Waste Resources Revenue Bonds, Series 2013-A authorized pursuant to the Ninth Supplemental Trust Agreement, dated as of February 1, 2013.

- **"Series 2013-B Bonds"** shall mean the \$78,780,000 Solid Waste Resources Revenue Bonds, Series 2013-B authorized pursuant to the Tenth Supplemental Trust Agreement, dated as of February 1, 2013.
- "Series 2015-A Bonds" shall mean the \$76,670,000 Solid Waste Resources Refunding Revenue Bonds, Series 2015-A authorized pursuant to the Eleventh Supplemental Trust Agreement, dated as of March 1, 2015.
- "Series 2018-A Bonds" shall mean the Solid Waste Resources Revenue Bonds, Series 2018-A authorized pursuant to the Twelfth Supplemental Trust Agreement, dated as of July 1, 2018.
- "Series 2018-A Continuing Disclosure Certificate" shall mean the Continuing Disclosure Certificate, dated as of July 1, 2018, executed by the City, as originally executed and as it may from time to time be amended in accordance with the provisions thereof.
- "Series 2018-A Tax Certificate" shall mean the Tax Certificate executed by the City at the time of issuance of the Series 2018-A Bonds relating to the requirements of Section 148 of the Code, as originally executed and as it may be amended from time to time in accordance with the terms thereof.
- "Solid Waste Collection, Transfer, Recycling, Recovery of Waste Resources and Disposal Fee" shall mean the Solid Waste Collection, Transfer, Recycling, Recovery of Waste Resources and Disposal Fee imposed by Section 66.40 et seq. of Article 6.1 of Chapter VI of the Municipal Code of the City, including penalties and delinquencies, as such charge may be revised from time to time.
- **"Solid Waste Resources Fee"** shall mean the Solid Waste Resources Fee imposed by Section 66.40 et seq. of Article 6.1 of Chapter VI of the Municipal Code of the City, including penalties and delinquencies, as such charge may be revised from time to time.
- **"Solid Waste Resources Revenue Fund"** shall mean the fund by that name created pursuant to Article 7 of Chapter 6 of Division 5 (Section 5.121.5) of the Administrative Code of the City, or any successor fund held by the City.
 - "State" shall mean the State of California.
- **"Subordinated Obligation"** shall mean any bond, note or other indebtedness issued or incurred by the City which ranks junior and subordinate to the Bonds.
- "Supplemental Trust Agreement" shall mean any document supplementing or amending the Master Trust Agreement or providing for the issuance of Bonds and entered into as provided in Article IX of the Master Trust Agreement.
 - "Treasurer" shall mean the Treasurer of the City as set forth in the Charter.
- "Trustee" shall mean the entity named as such in the heading of the Master Trust Agreement until a successor replaces it and, thereafter, shall mean such successor.
- "United States Obligations" shall mean direct and general obligations of the United States of America, or obligations that are unconditionally guaranteed as to principal and interest by the United States of America, including, with respect only to direct and general obligations and not to guaranteed obligations, evidences of ownership of proportionate interests in future interest and/or principal payments of such obligations, provided that investments in such proportionate interests must be limited to circumstances wherein: (1) a bank or trust company acts as custodian and holds the underlying United States Obligations; (2) the owner of the investment is the real party in interest and has the right to proceed directly and individually against the obligor of the underlying United

States Obligations; and (3) the underlying United States Obligations are held in a special account separate from the custodian's general assets and are not available to satisfy any claim of the custodian, any person claiming through the custodian or any person to whom the custodian may be obligated. "United States Obligations" shall include any stripped interest or principal portion of United States Treasury securities and any stripped interest portion of Resolution Trust Corporation securities.

Issuance of Bonds

Issuance of Bonds, Form. Bonds may be issued by the City under the terms of the Master Trust Agreement for any purpose payable from the Solid Waste Resources Revenue Fund for which the City, at the time of such issuance, may incur such debt. Bonds may be issued under the Master Trust Agreement only if the terms and conditions of the Master Trust Agreement for the issuance of Additional Bonds are satisfied. Bonds may be in certificated or uncertificated form. Bonds issued in certificated form may be freely transferable or may be immobilized and held by a custodian for the beneficial owners, all as shall be set forth or permitted in the Supplemental Trust Agreement providing for the issuance of such Bonds. Bonds may have notations, legends or endorsements required by law or usage and shall be numbered and dated as provided in the applicable Supplemental Trust Agreement.

All Bonds shall state that they are issued under and secured by the Master Trust Agreement and shall further contain a statement substantially to the following effect:

"Neither the faith and the credit nor the taxing power of the City of Los Angeles, the State of California or any public agency, other than the City of Los Angeles to the extent of Revenues, is pledged to the payment of the principal of, premium, if any, or interest on, this Bond."

Terms, Medium and Place of Payment. Bonds shall be issued in the principal amount, shall bear interest at a rate or rates, which may include a rate of 0% and/or including variable or adjustable rates or rates set by auction, or by such other methods as the City may determine, and such interest may be payable periodically, in whole or in part, or may be accumulated and paid at maturity or at such other time or times as the City shall determine. Bonds shall mature and shall be subject to redemption prior to their respective maturities, all as shall be set forth in the applicable Supplemental Trust Agreement. Payments with respect to the Bonds shall be made as provided in the Supplemental Trust Agreement providing for the issuance of such Bonds, which provisions shall include the designation of the currency in which such payments shall be made. In addition, each such Supplemental Trust Agreement may provide for the appointment of a Registrar or Registrars and a Paying Agent or Paying Agents and such other agents as the City shall determine to be necessary in addition to or in place of the Trustee.

Execution and Authentication. Bonds, if in certificated form, will be signed for the City as provided in the Supplemental Trust Agreement or in a resolution of the City authorizing such Bonds. A Bond in certificated form will not be valid until the Trustee or its agent or an authenticating agent designated by the City manually signs the certificate of authentication on the Bond. Such signature will be conclusive evidence that the Bond has been authenticated under the Master Trust Agreement. Different authenticating agents may be appointed for different Series of Bonds.

With respect to Bonds issued under the Master Trust Agreement in uncertificated form, the procedures for issuance and delivery and evidence of validity, ownership, transfer and exchange shall be as provided in a Supplemental Trust Agreement, and neither the provisions of this Section nor any other provision of the Master Trust Agreement shall be deemed to prohibit or restrict the issuance of uncertificated Bonds.

<u>Bond Register</u>. Bonds of each Series may be presented at the principal corporate trust office of the Registrar for such Series, unless a different office has been designated for such purpose, for registration, transfer and

exchange. The Registrar for a Series of Bonds will keep a register of such Series of Bonds and of their transfer and exchange.

<u>Issuance of Series of Bonds; Supplemental Trust Agreement; Application of Bond Proceeds.</u> Bonds, including Refunding Bonds, may be issued, from time to time under the Master Trust Agreement, provided that prior to or simultaneously with the original delivery of each Series of Bonds there shall be filed with the Trustee the following:

- (i) an original executed counterpart or a copy of the Master Trust Agreement, together with all prior Supplemental Trust Agreements;
- (ii) an original executed counterpart or a copy of the Supplemental Trust Agreement or Supplemental Trust Agreements providing for the issuance of such Series of Bonds and setting forth the terms of such Series of Bonds;
- (iii) the certificate of the Authorized City Representative or the Consultant or Consultants, if any, required by the Master Trust Agreement (coverage test for issuance of Bonds);
- (iv) a certificate of the Authorized City Representative stating that none of the Events of Default have occurred and remain uncured;
- (v) an opinion of Bond Counsel to the effect that the issuance of such Bonds has been duly authorized and that the Bonds are valid and binding obligations of the City; and
- (vi) written instructions from the City to authenticate the Bonds and, upon receipt of the purchase price, to deliver the Bonds to or upon the order of the purchasers named in such instructions.

When the documents mentioned in clauses (i) to (vi), inclusive, of the immediately preceding paragraph shall have been filed with the Trustee and when such Bonds shall have been executed and authenticated, the Trustee or authenticating agent shall deliver such Bonds to or upon the order of the purchasers thereof, but only upon payment by the purchasers of the purchase price of such Bonds.

Mutilated, Lost, Stolen or Destroyed Bonds. If any Bond is mutilated or defaced but identifiable by number and description, the City shall execute and the Trustee shall authenticate and deliver a new Bond of like Series, date, maturity and denomination as such Bond, upon surrender thereof to the Trustee; provided that there shall first be furnished to the Trustee clear and unequivocal proof satisfactory to the Trustee that the Bond is mutilated or defaced. The Bondholder shall accompany the above with a deposit of money required by the Trustee for the cost of preparing the substitute Bond and all other expenses connected with the issuance of such substitute. The Trustee, in conjunction with the relevant Registrar, if applicable, shall then cause proper record to be made of the cancellation of the original, and thereafter the substitute shall have the validity of the original.

If any Bond is lost, stolen or destroyed, the City may execute and the Trustee may authenticate and deliver a new Bond of like Series, date, maturity and denomination as that Bond lost, stolen or destroyed, provided that there shall first be furnished to the Trustee evidence of such loss, theft or destruction satisfactory to the Trustee, together with indemnity satisfactory to it. The Trustee, in conjunction with the relevant Registrar, if applicable, shall then cause proper record to be made of the cancellation of the original, and thereafter the substitute shall have the validity of the original.

Except as limited by any Supplemental Trust Agreement, the Trustee may charge the holder of any such Bond all governmental charges and transfer taxes, if any, and its reasonable fees and expenses in this connection. All substitute Bonds issued and authenticated pursuant to this Section shall be issued as a substitute and numbered,

if numbering is provided for by the Supplemental Trust Agreement or the Trustee, as determined by the Trustee. If any such Bond has matured or been called for redemption, instead of issuing a substitute Bond, the Trustee may pay the same at its maturity or redemption without surrender thereof upon receipt of indemnity satisfactory to the Trustee.

Registration and Transfer or Exchange of Bonds; Persons Treated as Owners. Unless otherwise provided by a Supplemental Trust Agreement, all Bonds shall be issued in fully registered form. Upon surrender for transfer of any Bond at the principal corporate trust office of the Registrar for such Bond, the Trustee shall authenticate and the Registrar for such Bond shall deliver in the name of the transferee or transferees a new fully authenticated and registered Bond or Bonds of authorized denominations of the same Series and same maturity for the same aggregate principal amount. Bondholders may present Bonds at the principal corporate trust office of the applicable Registrar for exchange for Bonds of different authorized denominations and, upon such presentation, the Trustee shall authenticate and the Registrar shall deliver to the Bondholder a new fully authenticated and registered Bond or Bonds of the same Series and same maturity for the same aggregate principal amount. All Bonds presented for transfer or exchange shall be accompanied by a written instrument or instruments of transfer or authorization for exchange, in form and with guaranty of signature satisfactory to the Trustee and the applicable Registrar, duly executed by the Bondholder or by his duly authorized attorney. Except as limited by any Supplemental Trust Agreement, the Trustee and the applicable Registrar also may require payment from the Bondholder of a sum sufficient to cover any tax, or other governmental fee or charge that may be imposed in relation thereto. Such taxes, fees and charges shall be paid before any such new Bond shall be delivered. Supplemental Trust Agreements may designate certain limited periods during which Bonds may not be exchanged or transferred.

Bonds delivered upon any exchange or transfer as provided above, or as provided in the Master Trust Agreement, shall be valid limited obligations of the City, evidencing the same debt as the Bond or Bonds surrendered, shall be secured by the Master Trust Agreement and shall be entitled to all of the security and benefits hereof to the same extent as the Bond or Bonds surrendered. The City, the Trustee, any Registrar and any Paying Agent shall treat the Bondholder of a Bond, as shown on the registration books kept by the applicable Registrar, as the person exclusively entitled to payment of principal, premium, if any, and interest on such Bond and as the party entitled to the exercise of all other rights and powers of the Bondholder, except that all interest payments will be made to the party who, as of the record date of such Bond (as established in the applicable Supplemental Trust Agreement), is the Bondholder.

Temporary Bonds; Destruction of Bonds and Temporary Bonds. Pending preparation of definitive Bonds of any Series, the City may execute and the Trustee shall authenticate and deliver, in lieu of definitive Bonds and subject to the same limitations and conditions, temporary bonds or certificates which shall be exchanged for the Bonds. If temporary Bonds shall be issued, the City shall cause the definitive Bonds to be prepared and to be executed, authenticated and delivered to the Trustee, and the Trustee, upon presentation to it of any temporary bond, shall cancel the same and deliver in exchange therefor at the place designated by the Bondholder, without charge to the Bondholder thereof, definitive Bonds of an equal aggregate principal amount of authorized denominations, of the same Series, date, maturity and bearing interest the same as the temporary Bonds surrendered. Until so exchanged, the temporary Bonds shall in all respects be entitled to the same benefit and security of the Master Trust Agreement as the definitive Bonds to be issued and authenticated under the Master Trust Agreement. Whenever any Bonds or temporary bonds shall be delivered to the Trustee, a Paying Agent or a Registrar for cancellation pursuant to the Master Trust Agreement, upon payment of the principal amount and interest represented thereby or for replacement or exchange or transfer pursuant to the Master Trust Agreement, such Bond shall be cancelled and destroyed by the Trustee, such Paying Agent or such Registrar, as applicable, and counterparts of a certificate of destruction evidencing such destruction shall be furnished by the Trustee, such Paying Agent or such Registrar, as applicable, to the City.

<u>Test for Issuance of Bonds</u>. The City may at any time issue Bonds, including any Additional Bonds, in accordance with the Master Trust Agreement; provided:

- (a) The Revenues for the most recent Fiscal Year for which the City has unaudited financial statements certified by a City Representative preceding the date of adoption by the City Council of the City of the resolution authorizing the issuance of such Bonds, as evidenced by a calculation prepared by the City Representative on file with the Trustee, shall have produced a sum equal to at least one hundred twenty-five percent (125%) of the Debt Service for such Fiscal Year; and
- (b) The Revenues for the most recent Fiscal Year preceding the date of adoption by the City Council of the City of the resolution authorizing the issuance of such Bonds, including adjustments to give effect as of the first day of such Fiscal Year to increases or decreases in the Solid Waste Resources Fee or other rates and charges described in clause (2) of the definition of Revenues approved and in effect as of the date of calculation, as evidenced by a calculation prepared by the City Representative and on file with the Trustee, shall have produced a sum equal to at least one hundred twenty-five percent (125%) of the Debt Service for such Fiscal Year plus the Debt Service which would have accrued had such proposed Bonds been issued at the beginning of such Fiscal Year; and
- (c) The estimated Revenues for the then current Fiscal Year and for the first Fiscal Year thereafter, as evidenced by a certificate of the City Representative on file with the Trustee, plus an allowance for estimated Revenues for each of such Fiscal Years arising from any increase or decrease in the Solid Waste Resources Fee or other rates and charges described in clause (2) of the definition of Revenues estimated to be fixed and prescribed to the extent such increases or decreases shall take effect during such period, as evidenced by a certificate of the City Representative on file with the Trustee, shall produce a sum equal to at least one hundred twenty-five percent (125%) of the estimated maximum annual Debt Service for each of such Fiscal Years, after giving effect to the issuance of such proposed Bonds.

The tests set forth above shall not be required for the issuance of Refunding Bonds (other than Refunding Bonds issued to refund or defease Subordinate Obligations) if the City shall instead deliver to the Trustee a certificate of an Authorized City Representative showing that Maximum Annual Debt Service on all Outstanding Bonds and Outstanding Parity Bonds payable from the Revenues after the issuance of said Series of Refunding Bonds will not exceed the Maximum Annual Debt Service on all Outstanding Bonds and Outstanding Parity Bonds payable from the Revenues prior to the issuance of said Series of Refunding Bonds. In addition, the documents relating to each Series of Additional Bonds issued in accordance with the Section shall provide that, prior to or simultaneous with the issuance of such Series of Bonds, there shall be deposited into the Reserve Fund an amount equal to the difference between the Reserve Requirement for the Outstanding Bonds, the Outstanding Parity Bonds and the new Bonds and the amount on deposit therein on the date of issuance of the new Bonds. Notwithstanding the foregoing, such deposit may be in the form of a Credit Facility as provided in the Master Trust Agreement (see "-REVENUES AND FUNDS-Reserve Fund" below).

For purposes of this test, the calculation of Revenues shall not include, for any Fiscal Year, the amount deposited or to be deposited into the Operations and Maintenance Expense Fund relating to such Fiscal Year.

Repayment Obligations Afforded Status of Bonds. If a Credit Provider or Liquidity Provider makes payment of principal of a Bond or advances funds to purchase or provide for the purchase of Bonds and is entitled to reimbursement thereof, pursuant to a separate written agreement with the City, but is not reimbursed, the City's Repayment Obligation under such written agreement may, if so provided in the written agreement and to the extent provided in such agreement and the applicable Supplemental Trust Agreement(s), be afforded the status of a Bond issued under the Master Trust Agreement.

Redemption of Bonds

Effect of Redemption Call. (a) On the date so designated for redemption, notice having been given in the manner and under the conditions provided in the Master Trust Agreement and in the Supplemental Trust Agreement relating to such Bonds as are to be redeemed and moneys for payment of the redemption price being held in trust

to pay the redemption price, unless otherwise provided in a Supplemental Trust Agreement, the Bonds so called for redemption shall become and be due and payable on the redemption date, interest on such Bonds shall cease to accrue, such Bonds shall cease to be entitled to any lien, benefit or security under the Master Trust Agreement and the owners of such Bonds shall have no rights in respect thereof except to receive payment of the redemption price.

(b) Bonds which have been duly called for redemption under the provisions of the Master Trust Agreement and for the payment of the redemption price of which moneys shall be held in trust for the holders of the Bonds to be redeemed, all as provided in the Master Trust Agreement, shall not be deemed to be Outstanding under the provisions of the Master Trust Agreement.

Purchase in Liu of Redemption. In lieu of redemption of any Bonds which are payable before their specified maturity dates from mandatory sinking account payments established for that purpose and calculated to retire such Bonds on or before their specified maturity dates, amounts on deposit in the Principal Account of the Debt Service Fund may also be used and withdrawn by the Trustee at any time, upon the written request of the City signed by an Authorized City Representative, for the purchase of such Bonds at public or private sale as and when at such prices (including brokerage and other charges, but excluding accrued interest, which is payable from the Interest Account of the Debt Service Fund) as the City may in its discretion determine; provided, however, that no Bonds shall be purchased by the Trustee under the provisions of the Master Trust Agreement as summarized in this subsection with the settlement date more than 90 days prior to the redemption date. The principal amount of any Bonds so purchased by the Trustee in any twelve-month period ending 60 days prior to any Payment Date in any year shall be credited towards and shall reduce the principal amount of such Bonds required to be redeemed on such Payment Date in such year.

Revenues and Funds

Bonds Secured by Pledge of and Lien on Revenues. All Revenues and all amounts on deposit in the Solid Waste Resources Revenue Fund are hereby irrevocably pledged to the payment of the Bonds as provided herein and to the payment of any Outstanding Parity Bonds, and the Revenues shall not be used during any month of any Fiscal Year for any other purpose if any of the transfers required by the Master Trust Agreement (described under "-Alternative Receipt and Deposit of Revenues; Withdrawals" below) are delinquent; provided that, subsequent to the transfers required by the Master Trust Agreement (described under "-Alternative Receipt and Deposit of Revenues; Withdrawals" below) if the alternative procedures set forth therein are utilized, there may be apportioned such sums for such purposes as may be permitted to be paid from the Solid Waste Resources Revenue Fund out of the Revenues constituting surplus as set forth in paragraph (c) under "-Alternative Receipt and Deposit of Revenues; Withdrawals." This pledge shall constitute a first and exclusive lien on Revenues and, subject to application of amounts on deposit therein as permitted herein, the Solid Waste Resources Revenue Fund and the other funds and accounts created under the Master Trust Agreement for the payment of the Bond and all Outstanding Parity Bonds in accordance with the terms hereof. Except for the Outstanding Parity Bonds, the City hereby represents and states that the City has not previously created any charge or lien on or any security interest in the Revenues, and the City covenants that, until all the Bonds authorized and issued under the provisions of the Master Trust Agreement and the interest thereon shall have been paid or are deemed to have been paid, it will not, except as specifically provided in the Master Trust Agreement, grant any parity pledge of or any security interest in the Revenues or any of the other security which is pledged pursuant to the Granting Clause of the Master Trust Agreement, or create or permit to be created any charge or lien thereon or any security interest therein ranking prior to or on a parity with the charge or lien of the Bonds from time to time Outstanding under the Master Trust Agreement.

<u>Provisions of Trust Agreement Subject to Charter Provisions and City Administrative Code</u>. The City covenants to cause the appropriations and transfers of Revenues required by the Master Trust Agreement to be made only in accordance with Section 5.121.5 of the City's Administrative Code and the Master Trust Agreement. The

City further covenants not to amend or revise such provisions in a manner that might have a material adverse effect on the Bonds while any Bonds are Outstanding.

<u>Establishment of Funds and Accounts</u>. The City hereby establishes or authorizes the establishment of the following special trust funds and accounts:

- (a) <u>Acquisition Funds</u>. Proceeds of each Series of Bonds which are to be used to pay Costs of a Project shall be deposited into a fund created for such Series of Bonds at the time of issuance of such Series which shall be designated "Solid Waste Resources Revenue Bonds Acquisition Fund, Series ____" (each, respectively, an "Acquisition Fund") which shall be held, maintained, disbursed and accounted for in accordance with the provisions of the Charter of the City, the Master Trust Agreement and, to the extent consistent therewith, the applicable Supplemental Trust Agreement.
- (b) <u>Debt Service Fund</u>. There is created and established under the terms of the Master Trust Agreement a fund to be designated the "Solid Waste Resources Revenue Bonds Debt Service Fund" (the "Debt Service Fund"). There are created in the Debt Service Fund three separate accounts designated "Interest Account," "Principal Account" and "Redemption Account." There is created in the Interest Account a subaccount for each Series of Bonds. There is created in the Principal Account a subaccount for each Series of Bonds. There is created in the Redemption Account a subaccount for each Series of Bonds. The Debt Service Fund and the accounts and subaccounts therein shall be held, maintained, disbursed and accounted for by the Trustee in accordance with the provisions of the Master Trust Agreement including the provisions of the Master Trust Agreement (described under "Alternative Receipt and Deposit of Revenues; Withdrawals" below).
- (c) Reserve Fund. There is created and established under the terms of the Master Trust Agreement a fund to be designated "Solid Waste Resources Revenue Bonds Reserve Fund" (the "Reserve Fund"), which shall be held as a separate and distinct fund for the pro rata benefit of all Outstanding Bonds and Outstanding Parity Bonds as measured by outstanding principal amount. The City may, at the time of the issuance of each Series of Bonds, authorize the creation of a separate bond reserve account within the Reserve Fund for such Series, provided that any separate account established within the Reserve Fund is for accounting purposes only and does not affect the pledge of the Reserve Fund in the Granting Clause of the Master Trust Agreement. The Reserve Fund shall be held by the Trustee or any agent of the Trustee, and amounts therein shall be deposited, maintained, disbursed and accounted for in accordance with the provisions of the Master Trust Agreement (described under "–Reserve Fund" below). No reserve shall be funded for the Series 2018-A Bonds and references to "Outstanding Bonds" and "Series of Bonds" in this paragraph do not include the Series 2018-A Bonds
- (d) <u>Additional Funds, Accounts and Subaccounts</u>. The City may, in its discretion, create or authorize the creation of additional funds, accounts or subaccounts for a particular Series of Bonds pursuant to the terms of a Supplemental Trust Agreement, which funds or accounts may be held by it or the Trustee. The Trustee may create such other temporary accounts or subaccounts not inconsistent with the provisions of the Master Trust Agreement, which the Trustee finds to be convenient in the performance of its duties under the Master Trust Agreement.

<u>Alternative Receipt and Deposit of Revenues; Withdrawals</u>. By written request effective on the date of issuance of the Series 2018-A Bonds, the City has elected to utilize the payment provisions described below.

All Revenues shall be retained by the City in the Solid Waste Resources Revenue Fund except that amounts on deposit therein shall be transferred from the Solid Waste Resources Revenue Fund for the following purposes at the following times in the following order of priority and all moneys in such fund shall be held in trust and shall be applied, used and withdrawn only for the purposes hereinafter authorized in this Section:

(a) <u>Debt Service Fund</u>; <u>Reserve Fund</u>. Not later than 10 days prior to each interest payment date, the City shall withdraw from the Solid Waste Resources Revenue Fund and transfer to the Trustee an amount sufficient,

with other available moneys, if any, provided to the Trustee to make such deposits, to make the deposits described in clause (1) through (3) inclusive below and the Trustee shall deposit such sums so withdrawn to the credit of the following accounts in the following priority:

- (1) to the credit of the Interest Account of the Debt Service Fund an amount (together with any available moneys in such account) equal to the interest payable on the Outstanding Bonds on such Payment Date;
- (2) to the credit of the Principal Account of the Debt Service Fund an amount (together with any moneys in such account) equal to the principal and Accreted Value coming due and payable (whether by maturity or mandatory sinking fund payments) on the Outstanding Bonds on such Payment Date: and
- (3) to the credit of the Reserve Fund such portion of the balance, if any, remaining after making the deposits described in clauses (1) and (2) above to increase the amount on deposit in the Reserve Fund to an amount equal to the Reserve Fund Requirement, or if the entire balance is less than the amount necessary, then the entire balance shall be deposited into the Reserve Fund;
- (b) If the Revenues are at any time insufficient to make the deposits required by this Section, the City may, at its election, deposit with the Trustee funds from any available sources with the direction that such funds be deposited into the funds and accounts or specified funds and accounts held by the Trustee. If the Revenues and any other funds provided by the City are insufficient to make the full deposits required by such sections (a)(1) or (a)(2) above, the Trustee shall credit the respective subaccounts on a pro rata basis.
- (c) Unless otherwise provided in a Supplemental Trust Agreement, any moneys remaining in the Solid Waste Resources Revenue Fund after making all of the deposits described in this Section for any Bond Year moneys on deposit in the Solid Waste Resources Revenue Fund may be expended by the City for any purpose permitted by law and will no longer constitute "Revenues,"

No deposit need be made in the Debt Service Fund for the Bonds if the amount in the Debt Service Fund is at least equal to the amount of the due and payable on the Bonds on the next succeeding Payment Date.

Reserve Fund. Each Supplemental Trust Agreement providing for the issuance of a Series of Bonds shall require as a condition of issuance that an amount be deposited in the Reserve Fund so that, together with any Reserve Fund Surety Policy, the amount on deposit therein will be equal to the Reserve Requirement. Any cash to be deposited in the Reserve Fund may be derived from proceeds of a Series of Bonds or any other legally available source of funds. In the event that federal tax law in the opinion of Bond Counsel would prohibit the Reserve Requirement or any portion thereof from being paid from the proceeds of any such Series of Bonds, the City shall be permitted to pay the portion of the Reserve Requirement not permitted to be paid from such Bond proceeds from Revenues, to the extent permissible under federal tax laws, in not less than equal monthly installments within sixty (60) months from the date of issuance of said Series of Bonds.

Moneys held in the Reserve Fund shall be used for the purpose of paying principal and interest on Outstanding Bonds and Outstanding Parity Bonds as described below. If, on any principal or interest payment date for any Bonds, the amounts in the Debt Service Fund for any Bonds available therefor are insufficient to pay in full the amount then due on the Bonds, moneys held in the Reserve Fund shall be used and withdrawn by the Trustee for the payment of principal and interest thereon. If amounts in the Reserve Fund consist of both cash and one or more Reserve Fund Surety Policies, the Trustee shall make any required payments of amounts in the Reserve Fund first from any cash held invested therein, prior to making a draw used to make any deposit required to be made to the Rebate Fund created for the Bonds at the written direction of the City if the City does not have other funds available from which such deposit can be made.

No reserve shall be funded for the Series 2018-A Bonds and references to "Outstanding Bonds" and "Series of Bonds" under this subcaption ("-Reserve Fund") do not include the Series 2018-A Bonds

The Trustee shall semiannually on or about February 1 and August 1 of each year and at such other times as the City shall request, value the Reserve Fund on the basis of the cost value thereof. For purposes of determining the amount on deposit in the Reserve Fund, any Reserve Fund Surety Policy held by, or the benefit of which is available to, the Trustee shall be deemed to be a deposit in the face amount of the Reserve Fund Surety Policy or the stated amount of the Reserve Fund Surety Policy provided, except that, if the amount available under a Reserve Fund Surety Policy has been reduced as a result of a payment having been made thereunder or as a result of the termination, cancellation or failure of such Reserve Fund Surety Policy and not reinstated or another Reserve Fund Surety Policy provided, then, in valuing the Reserve Fund, the value of such Reserve Fund Surety Policy shall be reduced accordingly. Upon each such valuation, the Trustee shall prepare a written certificate setting forth the Reserve Requirement as of such valuation date and the value of the Reserve Fund and deliver a copy thereof to an Authorized City Representative, upon any valuation of the Reserve Fund at cost value, the value of the Reserve Fund exceeds the aggregate Reserve Requirement for all Bonds then Outstanding, the amount in excess of the Reserve Requirement may, at the option of the City, be withdrawn and paid to the City to be used for any lawful purpose, unless an Event of Default exists under the Master Trust Agreement, in which event the excess amount shall be retained in such fund; provided that, if such amounts are used for a purpose other than payment of the related Series of Bonds, there shall be delivered to the Trustee with the request for such funds an opinion of Bond Counsel that the purpose for which such funds are to be used is a lawful purpose for which such proceeds may be used under the Charter and that such use shall not result in the inclusion of interest on any Bonds issued as taxexempt Bonds in gross income of the recipient thereof for federal income tax purposes. If, upon any valuation of the Reserve Fund at cost value, the value is less than the relevant Reserve Requirement, the City shall replenish such amounts within twelve (12) months after the date of such valuation, in accordance with the provisions below.

A Reserve Fund Surety Policy shall be acceptable in lieu of a deposit of cash or securities into the Reserve Fund, or may be substituted for amounts on deposit in the Reserve Fund, only if at the time of such deposit (i) such Reserve Fund Surety Policy extends to the maturity of the related Series of Bonds, or the City has agreed, by Supplemental Trust Agreement, that it will replace such Reserve Fund Surety Policy prior to its expiration with another Reserve Fund Surety Policy which shall have no adverse effect on the ratings, if any, then in effect on the Bonds, or with cash and (ii) the face amount of the Reserve Fund Surety Policy, together with amounts on deposit in the Bond Reserve Fund, including the face amount of any other Reserve Fund Surety Policy benefitting such account, is at least equal to the Reserve Requirement. Any moneys in the Reserve Fund in excess of the Reserve Requirement as a result of the substitution of a Reserve Fund Surety Policy shall be used to pay costs associated with obtaining the Reserve Fund Surety Policy.

If moneys have been withdrawn from a bond reserve account in the Reserve Fund or a payment has been made under a Reserve Fund Surety Policy constituting all or a portion of the Reserve Fund, and deposited into the Debt Service Fund to prevent a default on the Bonds, then the City will pay to the Trustee but only as provided in the Master Trust Agreement (described under "–Alternative Receipt and Deposit of Revenues; Withdrawals" above), the full amount so withdrawn, together with interest, if any, required under the terms of the Reserve Fund Surety Policy, or so much as shall be required to restore the Reserve Fund to the Reserve Requirement and to pay such interest, if any. Such repayment shall be made in no more than twelve (12) substantially equal monthly installments each due on the first Business Day of the month commencing with the first month after such withdrawal occurs. If such repayment is with respect to a draw under a Reserve Fund Surety Policy, the Trustee shall pay to the provider of such Reserve Fund Surety Policy the amount received by the Trustee from the City which is designated to be used to reimburse the provider of such Reserve Fund Surety Policy. The Trustee shall immediately notify the paying agent for the Reserve Fund Surety Policy, if any, of such reimbursement.

Moneys in the Reserve Fund shall be invested and reinvested by the Trustee at the written direction of an Authorized City Representative in Permitted Investments. Investments in the Reserve Fund shall not have maturities

which extend beyond five years from the date of the investment unless the investment is subject to redemption at par. No investment in the Reserve Fund may have a maturity in excess of the final maturity dates of the Bonds.

All money remaining in the Reserve Fund on the final payment date of a Series of Bonds, in excess of the amount required to make provisions for the payment in full of the interest and/or the principal of all such Bonds shall be transferred to the City for deposit in the Solid Waste Resources Revenue Fund.

Acquisition Fund. Each Acquisition Fund established to pay the Costs of a Project shall be held by the City or the Trustee. All moneys in each Acquisition Fund shall be held and disbursed as provided in the Supplemental Trust Agreement or Supplemental Trust Agreements under which such fund is created, and, absent such directions, shall be held and disbursed as determined by the City. Notwithstanding this provision, no Acquisition Fund shall be required for a given Series of Bonds if such Bonds are Refunding Bonds or if the City otherwise determines that there is no need to create an Acquisition Fund for such Series.

Moneys Held in Trust for Matured Bonds; Unclaimed Moneys. All moneys which shall have been withdrawn from a Debt Service Fund and set aside or deposited with a Paying Agent for the purpose of paying any of the Bonds, either at the maturity thereof or upon call for redemption, or which are set aside by the Trustee for such purposes and for which Bonds the maturity date or redemption date shall have occurred, shall be held in trust for the respective holders of such Bonds. But any moneys which shall be so set aside or deposited and which shall remain unclaimed by the holders of such Bonds for a period of one (1) year after the date on which such Bonds shall have become due and payable (or such longer period as may be required by State law) shall be paid to the City, and thereafter the holders of such Bonds shall look only to the City for payment and the City shall be obligated to make such payment, but only to the extent of the amounts so received without any interest thereon, and neither the Trustee nor any Paying Agent shall have any responsibility with respect to any of such moneys.

Investments. Moneys held by the Trustee or any Paying Agent in the Reserve Fund (subject to the penultimate paragraph under the caption "-Reserve Fund" above), a Debt Service Fund, an Acquisition Fund or any other fund or account established and held by the Trustee or any Paying Agent pursuant to the Master Trust Agreement or any Supplemental Trust Agreement shall be invested and reinvested as directed by the City in Permitted Investments, subject (except in the case of the Reserve Fund) to any additional restrictions set forth in the Supplemental Trust Agreement creating such fund or account. The City shall direct such investments by written certificate (upon which the Trustee or a Paying Agent may conclusively rely) of an Authorized City Representative or by telephone instruction followed by prompt written confirmation by an Authorized City Representative, in either case at least two Business Days before the investment date; in the absence of any such instructions, the Trustee or a Paying Agent shall, to the extent practicable, invest in the Permitted Investments described in paragraph (7) of the definition thereof. Investments shall mature not later than such times as shall be necessary to provide moneys when needed for payments to be made from such funds and accounts. The Trustee or a Paying Agent, as applicable, shall sell and reduce to cash a sufficient amount of any such investments whenever the cash balance in any such funds is insufficient to pay the amounts due therefrom. The Trustee shall not be liable for any loss resulting from its compliance with the written directions of the City or as a result of liquidating investments to provide funds for any required payment, transfer, withdrawal or disbursement from any fund or account in which such investments are held. The Trustee or any Paying Agent may buy or sell any Permitted Investment through its own (or any of its affiliates') investment department.

Other Covenants of the City

<u>Payment of Principal and Interest</u>. The City covenants and agrees that it will duly and punctually pay or cause to be paid from Revenues and to the extent thereof the principal of, premium, if any, and interest on every Bond at the place and on the dates and in the manner specified in the Master Trust Agreement, the applicable Supplemental Trust Agreements and in the Bonds, according to the true intent and meaning thereof, and that it will faithfully do and perform all covenants and agreements in the Master Trust Agreement and in the Bonds contained,

provided that the City's obligation to make payment of the principal of, premium, if any, and interest on the Bonds shall be limited to payment from Revenues, the funds and accounts pledged therefor in the Granting Clause of the Master Trust Agreement and any other source which the City may specifically provide for such purpose, and no Bondholder shall have any right to enforce payment from any other funds of the City.

<u>Performance of Covenants by City; Authority; Due Execution</u>. The City covenants that it will faithfully perform at all times any and all covenants and agreements contained in the Master Trust Agreement, in any and every Outstanding Bond executed, authenticated and delivered thereunder and in all of its proceedings pertaining thereto. The City represents that it is duly authorized under the Constitution and laws of the State and the Charter to issue the Bonds and pledge and grant a security interest in Revenues and other security pledged thereto or in which a security interest is granted and, except for the Outstanding Parity Bonds, that the City has not previously pledged such revenues or other assets to secure other obligations.

Against Encumbrances. The City will not make any pledge of or place any lien on Revenues or the moneys in the Solid Waste Resources Revenue Fund except as provided herein. In addition to the issuance of any Additional Bonds pursuant to the terms and conditions of the Master Trust Agreement, the City may at any time, or from time to time, issue evidences of indebtedness or incur other obligations for any lawful purpose which are payable from and secured by a pledge of and lien on Revenues or any moneys in the Solid Waste Resources Revenue Fund as may from time to time be deposited therein, provided that such pledge and lien shall be subordinate in all respects to the pledge of and lien thereon provided herein.

<u>Subordinated Obligations</u>. The City may, from time to time, incur Subordinated Obligations at such times and upon such terms as the City shall determine. In connection with such indebtedness, the City covenants that:

- (1) The trust agreement or other documents pursuant to which any Subordinated Obligations are incurred shall specifically state that the lien on or security interest granted thereby in the Revenues is junior and subordinate to the lien on and security interest in such Revenues and other assets granted to secure the Bonds; and
- (2) Payment of principal of, premium, if any, and interest on such Subordinated Obligations shall not be made unless all deposits required to be made to the Trustee or a Paying Agent to be used to pay Debt Service on the Bonds or to replenish the Reserve Fund are then current in accordance with the Master Trust Agreement (described under "–Alternative Receipt and Deposit of Revenues; Withdrawals" above).

Solid Waste Resources Fee. If at any time during a Fiscal Year the City shall determine that the Solid Waste Resources Fee is not being maintained at a level sufficient to provide for payment of all Debt Service within the Fiscal Year, together with any amount required to replenish the Reserve Fund in accordance with the Master Trust Agreement (described under "-Alternative Receipt and Deposit of Revenues; Withdrawals" above) and to pay all fees, costs and expenses required to be paid thereunder and under the Master Trust Agreement, the City shall take action at that time to maintain the Solid Waste Resources Fee at a level sufficient to provide for payment of all Debt Service within the Fiscal Year, together with any amount required to replenish the Reserve Fund in accordance with the Master Trust Agreement (described under "-Alternative Receipt and Deposit of Revenues; Withdrawals" above) and to pay all fees, costs and expenses required to be paid thereunder and under the Master Trust Agreement; provided, however, that to the extent the City designates other legally available funds for such payment, it need not increase the Solid Waste Resources Fee.

<u>Collection of Solid Waste Resources Fee</u>. The City will not take any action, which would materially adversely affect its ability to collect the Solid Waste Resources Fee in accordance with the procedures set forth in Sections 66.43 and 66.45 of the Municipal Code of the City.

No Inconsistent Contract Provisions. The City covenants that it will not take any action which, in the City's judgment at the time of such action, will substantially impair or materially adversely affect Revenues, or will substantially impair or materially adversely affect in any manner the pledge of, lien on or security interest granted in Revenues herein or the rights of the holders of the Bonds. The City shall be unconditionally and irrevocably obligated, so long as any of the Bonds are Outstanding and unpaid, to take all lawful action necessary or required to pay from Revenues the principal of and interest on the Bonds and to make the other payments provided for herein.

<u>Maintenance of Powers</u>. The City covenants that it will at all times use its best efforts to maintain the powers, functions, duties and obligations now reposed in it pursuant to the Charter and all other laws applicable to it.

<u>Tax Covenants</u>. The City will not take any action, or fail to take any action, if such action or failure to take such action would adversely affect the exclusion from gross income of interest on the Series 2018-A Bonds under Section 103 of the Code. Without limiting the generality of the foregoing, the City will comply with the requirements of the Series 2018-A Tax Certificate, which is incorporated in the Master Trust Agreement as if fully set forth therein. This covenant will survive payment in full or defeasance of the Series 2018-A Bonds.

In the event that at any time the City is of the opinion that for purposes of this Section it is necessary or helpful to restrict or limit the yield on the investment of any moneys held by the Trustee in any of the funds or accounts established under the Master Trust Agreement, the City shall so instruct the Trustee in writing, and the Trustee shall take such action as may be necessary in accordance with such instructions.

Notwithstanding any provisions of this Section, if the City shall provide to the Trustee an opinion of Bond Counsel to the effect that any specified action required under this Section is no longer required or that some further or different action is required to maintain the exclusion from federal income tax of interest on the Series 2018-A Bonds, the Trustee may conclusively rely on such opinion in complying with the requirements of this Section and of the Series 2018-A Tax Certificate, and the covenants under the Master Trust Agreement shall be deemed to be modified to that extent.

Continuing Disclosure. The City shall comply with and carry out all of the provisions of the Series 2018-A Continuing Disclosure Certificate. Notwithstanding any other provision of the Master Trust Agreement, failure of the City to comply with the Series 2018-A Continuing Disclosure Certificate shall not constitute an Event of Default under the Master Trust Agreement; provided however, that the Trustee may (and, at the written direction of the Series 2018-A participating underwriter or the holders of at least 25% of the aggregate principal amount of Outstanding Series 2018-A Bonds, and upon receipt of indemnification reasonably satisfactory to the Trustee, shall) or any holder of the Series 2018-A Bonds may, take such actions as may be necessary and appropriate to compel performance, including seeking mandate or specific performance by court order.

Accounts. The City covenants that it will keep and provide accurate books and records of account showing all Revenues received and all expenditures of the City and that it will keep or cause to be kept accurate books and records of account showing all moneys, Revenues, accounts and funds (including the Solid Waste Resources Revenue Fund, and all other accounts provided for in or pursuant to the Trust Agreement) and that all such books and records shall be open upon reasonable notice during business hours to the Trustee and to the Owners of not less than ten percent (10%) of the principal amount of Bonds then Outstanding, or their representatives duly authorized in writing. So long as any of the Bonds remain Outstanding, the City will prepare and file with the Trustee audited financial statements including a statement of the income and expenses for such Fiscal Year and a balance sheet prepared as of the close of such Fiscal Year for the City all accompanied by a certificate or opinion in writing of an independent certified public accountant of recognized standing, selected by the City, which opinion shall include a statement that said financial statements present fairly in all material respects the financial position of the City and are prepared in accordance with generally accepted accounting principles; provided, however, the Trustee shall hold

such financial statements solely as an accommodation to the holders of the Bonds and shall have no duty or obligation to review such financial statements.

Defeasance

Bonds or portions thereof (such portions to be in integral multiples of an authorized denomination) which have been paid in full or which are deemed to have been paid in full shall no longer be secured by or entitled to the benefits of the Master Trust Agreement, except for the purposes of payment from moneys or Government Obligations held by the Trustee or a Paying Agent for such purpose. When all Bonds which have been issued under the Master Trust Agreement have been paid in full or are deemed to have been paid in full, and all other sums payable thereunder by the City, including all necessary and proper fees, compensation and expenses of the Trustee, each Registrar and each Paying Agent, have been paid or are duly provided for, then the right, title and interest of the Trustee in and to the Revenues and the other assets pledged to secure the Bonds thereunder shall thereupon cease, terminate and become void, and thereupon the Trustee shall cancel, discharge and release the Master Trust Agreement, shall execute, acknowledge and deliver to the City such instruments as shall be requisite to evidence such cancellation, discharge and release and shall assign and deliver to the City any property and revenues at the time subject to the Master Trust Agreement which may then be in the Trustee's possession, except funds or securities in which such funds are invested and are held by the Trustee or a Paying Agent for the payment of the principal of, premium, if any, and interest on the Bonds.

A Bond shall be deemed to be paid within the meaning of the Master Trust Agreement and for all purposes of the Master Trust Agreement when payment of the principal, interest and premium, if any, either (a) shall have been made or caused to be made in accordance with the terms of the Bonds and the Master Trust Agreement or (b) shall have been provided for by irrevocably depositing with the Trustee in trust and setting aside exclusively for such payment, (i) moneys sufficient to make such payments and/or (ii) noncallable Government Obligations, maturing as to principal and interest in such amounts and at such times as in the opinion of an independent certified public accountant will insure the availability of sufficient moneys to make such payments. At such times as Bonds shall be deemed to be paid under the Master Trust Agreement, such Bonds shall no longer be secured by or entitled to the benefits of the Master Trust Agreement, except for the purposes of payment from such moneys or Government Obligations.

Any deposit under clause (b) of the foregoing paragraph shall be deemed a payment of such Bonds. Once such deposit shall have been made, the Trustee shall notify all holders of the affected Bonds that the deposit required by (b) above has been made with the Trustee and that such Bonds are deemed to have been paid in accordance with the Master Trust Agreement. No notice of redemption shall be required at the time of such defeasance or prior to such date as may be required by the Supplemental Trust Agreement under which such Bonds were issued. The City may at any time, prior to issuing such notice of redemption as may be required by the Supplemental Trust Agreement under which such Bonds were issued, modify or otherwise change the scheduled date for the redemption or payment of any Bond deemed to be paid under the terms of the foregoing paragraph in accordance with the terms of the Bonds or the Master Trust Agreement subject to (a) receipt of an approving opinion of Bond Counsel that such action will not adversely affect the tax-exempt status with respect to the interest on any Bond then Outstanding and (b) receipt of an approving opinion of a nationally recognized accounting firm that there are sufficient moneys and/or Government Obligations to provide for the payment of such Bonds. Notwithstanding anything in the Master Trust Agreement to the contrary, moneys from any trust or escrow established for the defeasance of Bonds may be withdrawn and delivered to the City so long as the requirements of subparagraphs (a) and (b) above are met prior to or concurrently with any such withdrawal.

Defaults and Remedies

<u>Events of Default</u>. Each of the following events shall constitute and is referred to in the Master Trust Agreement as an "Event of Default":

- (a) a failure to pay the principal of or premium, if any, on any of the Bonds, when the same shall become due and payable at maturity or upon redemption;
- (b) a failure to pay any installment of interest on any of the Bonds when such interest shall become due and payable;
- (c) a failure to pay the purchase price of any Bond when such purchase price shall be due and payable upon an optional or mandatory tender date as provided in a Supplemental Trust Agreement;
- (d) a failure by the City to observe and perform any covenant, condition, agreement or provision (other than as specified in paragraphs (a), (b) and (c) above) that are to be observed or performed by the City and which are contained in the Master Trust Agreement or a Supplemental Trust Agreement, which failure shall continue for a period of sixty (60) days after written notice specifying such failure and requesting that it be remedied, shall have been given to the City by the Trustee, which notice may be given at the discretion of the Trustee and shall be given at the written request of holders of 25% or more of the principal amount of the Series of Bonds then Outstanding whose Bonds are in default under (a), (b) or (c) above, unless the Trustee, or the Trustee and holders of Bonds in a principal amount not less than the principal amount of such Series of Bonds the holders of which requested such notice, shall agree in writing to an extension of such period prior to its expiration; provided, however, that the Trustee or the Trustee and the holders of such principal amount of Bonds shall be deemed to have agreed to an extension of such period if corrective action is initiated by the City within such period and is being diligently pursued until such failure is corrected;
- (e) bankruptcy, reorganization, arrangement, insolvency or liquidation proceedings, including without limitation proceedings under Chapter 9 of 11 United States Code (as the same may from time to time be hereafter amended), or other proceedings for relief under any federal or state bankruptcy law or similar law for the relief of debtors are instituted by or against the City and, if instituted against the City, said proceedings are consented to or are not dismissed within 60 days after such institution; or
- (f) with respect to any Series of Bonds, the occurrence of any other Event of Default as is provided in a Supplemental Trust Agreement authorizing the issuance of such Series.

Remedies.

- (a) Upon the occurrence and continuance of any Event of Default, the Trustee in its discretion may, and upon the written direction of the holders of 25% or more of the principal amount of the Bonds then Outstanding whose Bonds are in default under (a), (b) or (c) above, and receipt of indemnity to its satisfaction, shall, in its own name and as the Trustee of an express trust:
 - (i) by mandamus, or other suit, action or proceeding at law or in equity, enforce all rights of the applicable Series of Bondholders, and require the City to carry out any agreements with or for the benefit of the Bondholders and to perform its or their duties under the Charter or any other law to which it is subject and the Master Trust Agreement, provided that any such remedy may be taken only to the extent permitted under the applicable provisions of the Master Trust Agreement;
 - (ii) bring suit upon the applicable Series of Bonds;
 - (iii) commence an action or suit in equity to require the City to account as if it were the trustee of an express trust for the Bondholders; or
 - (iv) by action or suit in equity enjoin any acts or things which may be unlawful or in violation of the rights of the Bondholders.

(b) The Trustee shall be under no obligation to take any action with respect to any Event of Default unless the Trustee has actual knowledge of the occurrence of such Event of Default.

Restoration to Former Position. If any proceeding taken by the Trustee to enforce any right under the Master Trust Agreement shall have been discontinued or abandoned for any reason, or shall have been determined adversely to the Trustee, then the City, the Trustee, and the Bondholders shall be restored to their former positions and rights under the Master Trust Agreement, respectively, and all rights, remedies and powers of the Trustee shall continue as though no such proceeding had been taken.

Bondholders' Right To Direct Proceedings. Anything in the Master Trust Agreement to the contrary notwithstanding, holders of a majority in principal amount of the Bonds then Outstanding shall have the right, at any time, by an instrument in writing executed and delivered to the Trustee, to direct the time, method and place of conducting all remedial proceedings available to the Trustee under the Master Trust Agreement to be taken in connection with the enforcement of the terms of the Master Trust Agreement or exercising any trust or power conferred on the Trustee by the Master Trust Agreement; provided that such direction shall not be otherwise than in accordance with the provisions of the law and the Master Trust Agreement and that there shall have been provided to the Trustee security and indemnity satisfactory to the Trustee against the costs, expenses and liabilities to be incurred as a result thereof by the Trustee.

Limitation on Right To Institute Proceedings. No Bondholder shall have any right to institute any suit, action or proceeding in equity or at law for the execution of any trust or power under the Master Trust Agreement, or any other remedy under the Master Trust Agreement or on such Bonds, unless such Bondholder or Bondholders previously shall have given to the Trustee written notice of an Event of Default as hereinabove provided and unless also holders of 25% or more of the principal amount of the Series of Bonds then Outstanding that are in default (which could include such Bondholders) shall have made written request of the Trustee to do so, after the right to institute such suit, action or proceeding under the Master Trust Agreement shall have accrued, and shall have afforded the Trustee a reasonable opportunity to proceed to institute the same in either its or their name, and unless there also shall have been offered to the Trustee security and indemnity satisfactory to it against the costs, expenses and liabilities to be incurred therein or thereby, and the Trustee shall not have complied with such request within a reasonable time; and such notification, request and offer of indemnity are hereby declared in every such case, at the option of the Trustee, to be conditions precedent to the institution of such suit, action or proceeding; it being understood and intended that no one or more of the Bondholders shall have any right in any manner whatever by his or their action to affect, disturb or prejudice the security of the Master Trust Agreement, or to enforce any right thereunder or under the Bonds, except in the manner herein provided, and that all suits, actions and proceedings at law or in equity shall be instituted, had and maintained in the manner herein provided and for the equal benefit of all Bondholders.

No Impairment of Right to Enforce Payment. Notwithstanding any other provision in the Master Trust Agreement, the right of any Bondholder to receive payment of the principal of and interest on such Bond or the purchase price thereof, on or after the respective due dates expressed therein and to the extent of the Revenues and other security provided for the Bonds, or to institute suit for the enforcement of any such payment on or after such respective date, shall not be impaired or affected without the consent of such Bondholder.

No Remedy Exclusive. No remedy conferred upon or reserved to the Trustee or to Bondholders is intended to be exclusive of any other remedy or remedies, and each and every such remedy shall be cumulative, and shall be in addition to every other remedy given under the Master Trust Agreement, or now or hereafter existing at law or in equity or by statute; provided, however, that any conditions set forth in the Master Indenture to the taking of any remedy to enforce the provisions of the Master Trust Agreement or the Bonds shall also be conditions to seeking any remedies under any of the foregoing pursuant to this subsection.

No Waiver of Remedies. No delay or omission of the Trustee or of any Bondholder to exercise any right or power accruing upon any default shall impair any such right or power or shall be construed to be a waiver of any such default, or an acquiescence therein; and every power and remedy given by the Master Trust Agreement to the Trustee and to the Bondholders, respectively, may be exercised from time to time and as often as may be deemed expedient.

Application of Moneys. If an Event of Default shall occur and be continuing, all amounts then held or any moneys received by the Trustee, by any receiver or by any Bondholder pursuant to any right given or action taken under the relevant provisions of the Master Trust Agreement (which shall not include moneys provided through a Credit Facility, which moneys shall be restricted to the specific use for which such moneys were provided), after payment of the costs and expenses of the proceedings resulting in the collection of such moneys and of the expenses, liabilities and advances incurred or made by the Trustee (including attorneys' fees and disbursements), shall be applied as follows:

- (a) Unless the principal of all the Bonds subject to acceleration shall have been declared due and payable, all such moneys shall be applied (i) first, to the payment to the persons entitled thereto of all installments of interest then due on the Bonds, with interest on overdue installments, if lawful, at the rate per annum as provided in any Supplemental Trust Agreement, as the case may be, in the order of maturity of the installments of such interest and, if the amount available shall not be sufficient to pay in full any particular installment of interest, then to the payment ratably, according to the amounts due on such installment, and (ii) second, to the payment to the persons entitled thereto of the unpaid principal amount of any of the Bonds which shall have become due with interest on such Bonds at such rate as provided in a Supplemental Trust Agreement from the respective dates upon which they became due and, if the amount available shall not be sufficient to pay in full Bonds on any particular date determined to be the payment date, together with such interest, then to the payment ratably, according to the amount of principal and interest due on such date, in each case to the persons entitled thereto, without any discrimination or privilege.
- (b) If the principal of all the Bonds subject to acceleration shall have been declared due and payable, all such moneys shall be applied to the payment of the principal and interest then due and unpaid upon the Bonds, with interest on overdue interest and principal, as aforesaid, without preference or priority of principal over interest or interest over principal, or of any installment of interest over any other installment of interest, or of any Bond over any other Bond, ratably, according to the amounts due respectively for principal and interest, to the persons entitled thereto without any discrimination or privilege.
- (c) If the principal of all the Bonds subject to acceleration shall have been declared due and payable, and if such declaration shall thereafter have been rescinded and annulled under the provisions of the Master Trust Agreement, then, subject to the provisions of clause (b) of this Section which shall be applicable in the event that the principal of all the Bonds shall later become due and payable, the moneys shall be applied in accordance with the provisions of clause (a) of this Section.

Whenever moneys are to be applied pursuant to the provisions of this Section, such moneys shall be applied at such times, and from time to time, as the Trustee shall determine, having due regard to the amount of such moneys available for application and the likelihood of additional moneys becoming available for such application in the future. Whenever the Trustee shall apply such funds, it shall fix the date (which shall be an interest payment date unless it shall deem another date more suitable) upon which such application is to be made and upon such date interest on the amounts of principal and interest to be paid on such date shall cease to accrue. The Trustee shall give notice of the deposit with it of any such moneys and of the fixing of any such date by first-class United States mail, postage prepaid, to all Bondholders and shall not be required to make payment to any Bondholder until such Bonds shall be presented to the Trustee for appropriate endorsement or for cancellation if fully paid.

Notwithstanding the provisions of this subcaption ("—Application of Moneys"), if an Event of Default shall occur and be continuing, amounts then held by the Trustee in the Reserve Fund shall not be applied to the payment of the Series 2018-A Bonds as provided in (a), (b) and (c) above; provided, however, that the provisions of this section shall not affect the application, if an Event of Default shall occur and be continuing, to the payment of the Series 2018-A Bonds from other amounts then held or any moneys received by the Trustee, by any receiver or by any Bondholder pursuant to any right given or action taken under the defaults and remedies provisions of the Master Trust Agreement as provided in (a), (b) and (c) above.

Trustee, Paying Agents; Registrar

Duties of Trustee.

- (a) If an Event of Default has occurred and is continuing, the Trustee shall exercise its rights and powers and use the same degree of care and skill in their exercise as a prudent person would exercise or use under the circumstances in the conduct of such person's own affairs.
- (b) The Trustee shall perform the duties set forth in the Master Trust Agreement and no implied duties or obligations shall be read into the Master Trust Agreement against the Trustee.
- (c) Except during the continuation of an Event of Default, in the absence of any negligence on its part or any knowledge to the contrary, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed, upon certificates or opinions furnished to the Trustee and conforming to the requirements of the Master Trust Agreement. However, the Trustee shall examine the certificates and opinions to determine whether they conform to the requirements of the Master Trust Agreement.
- (d) The Trustee may not be relieved from liability for its own negligent action, its own negligent failure to act or its own willful misconduct, except that:
 - (i) the Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer unless the Trustee was negligent in ascertaining the pertinent facts; and
 - (ii) the Trustee shall not be liable with respect to any action it takes or omits to take in good faith in accordance with a direction received by it from Bondholders or the City in the manner provided in the Master Trust Agreement.
- (e) The Trustee shall not, by any provision of the Master Trust Agreement, be required to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties thereunder, or in the exercise of any of its rights or powers, if repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it. The Trustee shall be under no obligation to exercise any of the rights or powers vested in it by the Master Trust Agreement at the request or direction of any of the holders of the Bonds, unless such holders shall have offered to the Trustee reasonable security or indemnity against the costs, expenses and liabilities which might be incurred by it in compliance with such request or direction.

Rights of Trustee. Subject to the foregoing Section, the Trustee shall be protected and shall incur no liability in acting or proceeding in good faith upon any resolution, notice, telegram, request, consent, waiver, certificate, direction, statement, affidavit, voucher, bond, requisition or other paper or document which it shall in good faith believe to be genuine and to have been passed or signed by the proper board or person or to have been prepared and furnished pursuant to any of the provisions of the Master Trust Agreement, and the Trustee shall be under no duty to make investigation or inquiry as to any statements contained or matters referred to in any such instrument, but may accept and rely upon the same as conclusive evidence of the truth and accuracy of such statements.

The Trustee may consult with counsel with regard to legal questions, and the opinion of such counsel shall be full and complete authorization and protection in respect of any action taken or suffered by the Trustee under the Master Trust Agreement in good faith in accordance therewith.

Whenever in the administration of the trusts or duties imposed upon it by the Master Trust Agreement the Trustee shall deem it necessary that a matter be proved or established prior to taking or not taking any action thereunder, such matter may be deemed to be conclusively proved and established by a certificate of the City, and such certificate shall be full warrant to the Trustee for any action taken or not taken by it in good faith under the provisions of the Master Trust Agreement in reliance on such certificate.

Notice of Defaults. If (i) an Event of Default has occurred or (ii) an event has occurred which with the giving of notice and/or the lapse of time would be an Event of Default and, with respect to such events for which notice to the City is required before such events will become Events of Default, such notice has been given, then the Trustee shall promptly, after obtaining actual notice of such Event of Default or event described in (ii) of the first sentence of this Section, give notice thereof to each Bondholder. Except in the case of a default in payment or purchase on any Bonds, the Trustee may withhold the notice if and so long as a committee of its Responsible Officers in good faith determines that withholding the notice is in the interests of the Bondholders.

Eligibility of Trustee. The Master Trust Agreement shall always have a Trustee that is a trust company, banking association or a bank having the powers of a trust company and is organized and doing business under the laws of the United States or any state or the District of Columbia, is authorized to conduct trust business under the laws of the State, is subject to supervision or examination by United States, a state or District of Columbia authority and has (together with its corporate parent) a combined capital and surplus of at least \$50,000,000 as set forth in its most recent published annual report of condition.

Replacement of Trustee. The Trustee may resign by notifying the City in writing prior to the proposed effective date of the resignation. The holders of a majority in principal amount of the Bonds may remove the Trustee by notifying the removed Trustee and may appoint a successor Trustee with the City's consent. The City may remove the Trustee, by notice in writing delivered to the Trustee at least sixty (60) days prior to the proposed removal date; provided, however, that the City shall have no right to remove the Trustee during any time when an Event of Default has occurred and is continuing or when an event has occurred and is continuing or condition exists which with the giving of notice or the passage of time or both would be an Event of Default.

No resignation or removal of the Trustee under this Section shall be effective until a new Trustee has taken office and delivered a written acceptance of its appointment to the retiring Trustee and to the City. Immediately thereafter, the retiring Trustee shall transfer all property held by it as Trustee to the successor Trustee, the resignation or removal of the retiring Trustee shall then (but only then) become effective and the successor Trustee shall have all the rights, powers and duties of the Trustee under the Master Trust Agreement.

If the Trustee resigns or is removed or for any reason is unable or unwilling to perform its duties under the Master Trust Agreement, the City shall promptly appoint a successor Trustee.

If a Trustee is not performing its duties under the Master Trust Agreement and a successor Trustee does not take office within sixty (60) days after the retiring Trustee delivers notice of resignation or the City delivers notice of removal, the retiring Trustee, the City or the holders of a majority in principal amount of the Bonds may petition any court of competent jurisdiction for the appointment of a successor Trustee.

<u>Paying Agent</u>. The City may upon notice to the Trustee at any time or from time to time appoint a Paying Agent or Paying Agents for the Bonds or for any Series of Bonds, and each Paying Agent, if other than the Trustee, shall designate to the City and the Trustee its principal office and signify its acceptance of the duties and obligations imposed upon it under the Master Trust Agreement or under a Supplemental Trust Agreement by a written

instrument of acceptance delivered to the City and the Trustee under which each such Paying Agent will agree, particularly:

- (a) to hold all sums held by it for the payment of the principal of, premium or interest on Bonds in trust for the benefit of the Bondholders until such sums shall be paid to such Bondholders or otherwise disposed of as herein provided;
- (b) to keep such books and records as shall be consistent with prudent industry practice, to make such books and records available for inspection by the City and the Trustee on each Business Day during reasonable business hours; and
- (c) upon the request of the Trustee, to forthwith deliver to the Trustee all sums so held in trust by such Paying Agent.

Registrar. The City shall appoint the Registrar for the Bonds or a Registrar or Registrars for any Series of Bonds and may from time to time remove a Registrar and name a replacement. Each Registrar, if other than the Trustee, shall designate to the Trustee, the Paying Agent for the Bonds for which it is Registrar, and signify its acceptance of the duties imposed upon it under the Master Trust Agreement or under a Supplemental Trust Agreement by a written instrument of acceptance delivered to the City and the Trustee under which such Registrar will agree, particularly, to keep such books and records as shall be consistent with prudent industry practice and to make such books and records available for inspection by the City, the Trustee, and the Paying Agent for the Bonds for which it is Registrar on each Business Day during reasonable business hours.

Other Agents. The City, or the Trustee with the consent of the City, may from time to time appoint other agents as may be appropriate at the time to perform duties and obligations under the Master Trust Agreement or under a Supplemental Trust Agreement all as provided by Supplemental Trust Agreement or resolution of the City.

Several Capacities. Anything in the Master Trust Agreement to the contrary notwithstanding, with the consent of the City, the same entity may serve under the Master Trust Agreement as the Trustee or a Paying Agent, Registrar and any other agent as appointed to perform duties or obligations under the Master Trust Agreement, under a Supplemental Trust Agreement or an escrow agreement, or in any combination of such capacities, to the extent permitted by law. A Paying Agent and the Registrar shall be entitled to the same protections, limitations from liability and indemnities afforded to the Trustee under the Master Trust Agreement.

<u>Co-Trustees</u>. It is recognized that in the case of the Reserve Fund, which will secure pro rata each Series of Bonds and all Outstanding Parity Bonds, it may be more convenient for another fiduciary to hold such Reserve Fund, or a portion thereof. Consequently, it may be necessary that the City appoint an additional individual or institution as a separate or co-trustee. In the case of the Reserve Fund, the City shall appoint a co-trustee.

Accounting Records and Reports of the Trustee. The Trustee shall at all times keep, or cause to be kept, proper records in which complete and accurate entries shall be made of all transactions made by it relating to the proceeds of the Bonds and all funds and accounts established by it pursuant to the Master Trust Agreement. Such records shall be available for inspection with reasonable prior notice by the City on each Business Day during reasonable business hours and by any Bondholder, or his agent or representative duly authorized in writing, at reasonable hours and under reasonable circumstances.

The Trustee shall provide to the City each month, and at any other time requested by the City, a report of any Bond proceeds received during that month, if any, and the amounts deposited into each fund and account held by it under the Master Trust Agreement and the amount disbursed from such funds and accounts, the earnings thereon, the ending balance in each of such funds and accounts and the investments of each such fund and account.

The Trustee shall annually, within thirty (30) days after the end of the Fiscal Year, furnish to the City and to each Bondholder who shall have filed his name and address with the Trustee for such purpose (at such Bondholder's cost) a statement (which need not be audited) covering receipts, interest, disbursements, allocation and application of Bond proceeds, Revenues and any other moneys in any of the funds and accounts established by it pursuant to the Master Trust Agreement or any Supplemental Trust Agreement for the preceding year.

Modification of the Master Trust Agreement

<u>Supplemental Trust Agreements Not Requiring Consent of Bondholders.</u> The City may, from time to time and at any time, without the consent of or notice to the Bondholders, execute and deliver Supplemental Trust Agreements supplementing and/or amending the Master Trust Agreement or any Supplemental Trust Agreement as follows:

- (a) to provide for the issuance of a Series or multiple Series of Bonds pursuant to the terms and conditions of the Master Trust Agreement and to set forth the terms of such Bonds and the special provisions which shall apply to such Bonds;
- (b) to cure any formal defect, omission, inconsistency or ambiguity in, or answer any questions arising under, the Master Trust Agreement or any Supplemental Trust Agreement, provided such supplement or amendment is not materially adverse to the Bondholders;
- (c) to add to the covenants and agreements of the City in the Master Trust Agreement or any Supplemental Trust Agreement other covenants and agreements, or to surrender any right or power reserved or conferred upon the City, provided such supplement or amendment shall not adversely affect the interests of the Bondholders;
- (d) to confirm, as further assurance, any interest of the Trustee in and to the Revenues or in and to the funds and accounts held by the Trustee or any other agent or in and to any other moneys, securities or funds of the City provided pursuant to the Master Trust Agreement or to otherwise add additional security for the Bondholders;
- (e) to evidence any change made in the terms of any Series of Bonds if such changes are authorized by the Supplemental Trust Agreement at the time the Series of Bonds is issued and such change is made in accordance with the terms of such Supplemental Trust Agreement;
 - (f) to comply with the requirements of the Trust Indenture Act of 1939, as from time to time amended;
- (g) to modify, alter, amend or supplement the Master Trust Agreement or any Supplemental Trust Agreement in any other respect, which is not materially adverse to the Bondholders;
- (h) to provide for uncertificated Bonds or for the issuance of coupons and bearer Bonds or Bonds registered only as to principal;
- (i) to qualify the Bonds or a Series of Bonds for a rating or ratings by a nationally recognized rating agency;
- (j) to accommodate the technical, operational and structural features of Bonds which are issued or are proposed to be issued, including, but not limited to, changes needed to accommodate commercial paper, auction bonds, variable rate or adjustable rate bonds, discounted or compound interest bonds or other forms of indebtedness which the City from time to time deems appropriate to incur;

- (k) to accommodate the use of a Credit Facility or Liquidity Facility for specific Bonds or a specific Series of Bonds; or
- (l) to comply with the requirements of the Code as are necessary, in the opinion of Bond Counsel, to prevent the federal income taxation of the interest on any Bonds, including, without limitation, the segregation of Solid Waste Resources Fees into different funds.

Before the City shall, pursuant to the provisions described above, execute any Supplemental Trust Agreement, there shall have been delivered to the City and Trustee an opinion of Bond Counsel to the effect that such Supplemental Trust Agreement is authorized or permitted by the Master Trust Agreement and will, upon the execution and delivery thereof, be valid and binding upon the City in accordance with its terms.

Supplemental Trust Agreement Requiring Consent of Bondholders.

- Except for any Supplemental Trust Agreement entered into pursuant to the preceding Section (authorizing change without the consent of Bondholders) and any Supplemental Trust Agreement entered into pursuant to subsection (b) below, subject to the terms and provisions contained in this Section and not otherwise, the holders of not less than 51% in aggregate principal amount of the Bonds then Outstanding shall have the right from time to time to consent to and approve the execution by the City of any Supplemental Trust Agreement deemed necessary or desirable by the City for the purposes of modifying, altering, amending, supplementing or rescinding, in any particular, any of the terms or provisions contained in the Master Trust Agreement or in a Supplemental Trust Agreement; provided, however, that, unless approved in writing by the holders of all the Bonds then Outstanding or unless such change affects less than all Series of Bonds and the following subsection (b) is applicable, nothing herein contained shall permit, or be construed as permitting, (i) a change in the scheduled times, amounts or currency of payment of the principal of or interest on any Outstanding Bonds or (ii) a reduction in the principal amount or redemption price of any Outstanding Bonds or the rate of interest thereon; and provided that nothing herein contained, including the provisions of subsection (b) below, shall, unless approved in writing by the holders of all the Bonds then Outstanding, permit or be construed as permitting (iii) the creation of a lien (except as expressly permitted by the Master Trust Agreement) upon or pledge of Revenues created by the Master Trust Agreement, ranking prior to or on a parity with the claim created by the Master Trust Agreement, (iv) except with respect to additional security which may be provided for a particular Series of Bonds, a preference or priority of any Bond or Bonds or Outstanding Parity Bonds over any other Bond or Bonds or Outstanding Parity Bonds with respect to the security granted therefor under the Granting Clause hereof, or (v) a reduction in the aggregate principal amount of Bonds the consent of the Bondholders of which is required for any such Supplemental Trust Agreement. Nothing herein contained, however, shall be construed as making necessary the approval by Bondholders of the execution of any Supplemental Trust Agreement as authorized in the preceding Section (authorizing change without the consent of Bondholders), including the granting, for the benefit of particular Series of Bonds, security in addition to the pledge of Revenues.
- (b) The City may, from time to time and at any time, execute a Supplemental Trust Agreement which amends the provisions of an earlier Supplemental Trust Agreement under which a Series or multiple Series of Bonds were issued, If such Supplemental Trust Agreement is executed for one of the purposes set forth in the preceding Section (authorizing change without the consent of Bondholders), no notice to or consent of the Bondholders shall be required. If such Supplemental Trust Agreement contains provisions which affect the rights and interests of less than all Series of Bonds Outstanding and the preceding Section (authorizing change without the consent of Bondholders) is not applicable, then this subsection (b) rather than subsection (a) above shall control and, subject to the terms and provisions contained in this subsection (b) and not otherwise, the holders of not less than 51% in aggregate principal amount of the Outstanding Bonds of all Series which are affected by such changes shall have the right from time to time to consent to any Supplemental Trust Agreement deemed necessary or desirable by the City for the purposes of modifying, altering, amending, supplementing or rescinding, in any particular, any of the terms or provisions contained in such Supplemental Trust Agreement and affecting only the Bonds of such Series;

provided, however, that, unless approved in writing by the holders of all the Bonds of all the affected Series then Outstanding, nothing herein contained shall permit, or be construed as permitting, (i) a change in the scheduled times, amounts or currency of payment of the principal of or interest on any Outstanding Bonds of such Series or (ii) a reduction in the principal amount or redemption price of any Outstanding Bonds of such Series or the rate of interest thereon. Nothing contained in the Master Trust Agreement however, shall be construed as making necessary the approval by Bondholders of the adoption of any Supplemental Trust Agreement as authorized in in the Master Trust Agreement, including the granting, for the benefit of particular Series of Bonds, security in addition to the pledge of Revenues.

- (c) If at any time the City shall desire to enter into any Supplemental Trust Agreement for any of the purposes requiring a vote of the Bondholders, the City shall cause notice of the proposed execution of the Supplemental Trust Agreement to be given by first-class United States mail, postage prepaid, to all Bondholders or, under subsection (b), all Bondholders of the affected Series. Such notice shall briefly set forth the nature of the proposed Supplemental Trust Agreement and shall state that a copy thereof is on file at the office of the City for inspection by all Bondholders and it shall not be required that the Bondholders approve the final form of such Supplemental Trust Agreement but it shall be sufficient if such Bondholders approve the substance thereof.
- (d) The City may execute and deliver such Supplemental Trust Agreement in substantially the form described in such notice, but only if there shall have first been delivered to the City (i) the required consents, in writing, of Bondholders and (ii) the opinion of Bond Counsel required by the last paragraph of the preceding Section (authorizing change without the consent of Bondholders).
- (e) If Bondholders of not less than the percentage of Bonds required shall have consented to and approved the execution and delivery thereof as herein provided, no Bondholders shall have any right to object to the adoption of such Supplemental Trust Agreement, or to object to any of the terms and provisions contained therein or the operation thereof, or in any manner to question the propriety of the execution and delivery thereof, or to enjoin or restrain the City from executing the same or from taking any action pursuant to the provisions thereof.

Credit Providers

If a Credit Facility is provided for a Series of Bonds or for specific Bonds, the City may in the Supplemental Trust Agreement under which such Bonds are issued, provide any or all of the following rights to the Credit Provider as the City shall deem to be appropriate:

- (1) the right to make requests of, direct or consent to the actions of the Trustee or to otherwise direct proceedings all as provided in the provisions of the Master Trust Agreement summarized above under the caption "DEFAULTS AND REMEDIES" to the same extent and in place of the owners of the Bonds which are secured by the Credit Facility and for such purposes the Credit Provider shall be deemed to be the Bondholder of such Bonds; and
- (2) the right to act in place of the owners of the Bonds which are secured by the Credit Facility for purposes of removing a Trustee or appointing a Trustee under the Master Trust Agreement.

The rights granted to any such Credit Provider, with respect to the provisions of the Master Trust Agreement summarized above under the captions "DEFAULTS AND REMEDIES" and "DEFEASANCE" shall be disregarded and be of no effect if the Credit Provider is in default of its payment obligations under its Credit Facility.

Miscellaneous Provisions

<u>Severability</u>. In case anyone or more of the provisions of the Master Trust Agreement, or of any Bonds issued thereunder shall, for any reason, be held to be illegal or invalid, such illegality or invalidity shall not affect

any other provisions of the Master Trust Agreement or any other Bonds, and the Master Trust Agreement and any Bonds issued thereunder shall be construed and enforced as if such illegal or invalid provisions had not been contained therein.

No Personal Liability of City Officials; Limited Liability of City to Bondholders. No covenant or agreement contained in the Bonds or in the Master Trust Agreement shall be deemed to be the covenant or agreement of any present or future official, officer, agent or employee of the City, in his individual capacity, and no person executing the Bonds shall be liable personally on the Bonds or be subject to any personal liability or accountability by reason of the issuance thereof.

Governing Law. The laws of the State shall govern the construction and enforcement of the Master Trust Agreement and of all Bonds issued thereunder; provided, however, that the administration of the trusts imposed upon the Trustee by the Master Trust Agreement and the rights and duties of the Trustee thereunder shall be governed by, and construed in accordance with, the laws of the jurisdiction in which the Trustee has its principal corporate trust office.

APPENDIX C

PROPOSED FORM OF BOND COUNSEL OPINION

Upon delivery of the Bonds, Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the City, proposes to render its final approving opinion with respect to the Bonds in substantially the following form:

[Date of Delivery]

City of Los Angeles Los Angeles, California

City of Los Angeles
Solid Waste Resources Revenue Bonds, Series 2018-A
(Final Opinion)

Ladies and Gentlemen:

We have acted as bond counsel to the City of Los Angeles (the "City") in connection with the issuance of \$______ aggregate principal amount of its City of Los Angeles Solid Waste Resources Revenue Bonds, Series 2018-A (the "Series 2018-A Bonds"), pursuant to the Master Trust Agreement, dated as of September 1, 2001, by and between the City and State Street Bank and Trust Company of California, N.A. as trustee, as amended and supplemented by various supplemental trust agreements entered into from time to time (as so amended and supplemented, the "Master Trust Agreement"). Such supplemental trust agreements include the Twelfth Supplemental Trust Agreement, dated as of July 1, 2018 (the "Twelfth Supplemental Trust Agreement"), by and between the City and U.S. Bank National Association, as trustee (the "Trustee") and the Thirteenth Supplemental Trust Agreement, dated as of July 1, 2018 (the "Thirteenth Supplemental Trust Agreement, dated as of July 1, 2018 (the "Thirteenth Supplemental Trust Agreement"), by and between the City and the Trustee. Capitalized undefined terms used herein have the meanings ascribed thereto in the Master Trust Agreement.

In such connection, we have reviewed the Master Trust Agreement, the Series 2018-A Tax Certificate, opinions of counsel to the City and the Trustee, certificates of the City and the Trustee and others, and such other documents, opinions and matters to the extent we deemed necessary to render the opinions set forth herein.

The opinions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. Such opinions may be affected by actions taken or omitted or events occurring after the date hereof. We have not undertaken to determine, or to inform any person, whether any such actions are taken or omitted or events do occur or any other matters come to our attention after the date hereof. Accordingly, this letter speaks only as of its date and is not intended to, and may not, be relied upon or otherwise used in connection with any such actions, events or matters. Our engagement with respect to the Series 2018-A Bonds has concluded with their issuance, and we disclaim any obligation to update this letter. We have assumed the genuineness of all documents and signatures presented to us (whether as originals or as copies) and the due and legal execution and delivery

thereof by, and validity against, any parties other than the City. We have assumed, without undertaking to verify, the accuracy of the factual matters represented, warranted or certified in the documents referred to in the second paragraph hereof. Furthermore, we have assumed compliance with all covenants and agreements contained in the Master Trust Agreement and the Series 2018-A Tax Certificate, including, without limitation, covenants and agreements compliance with which is necessary to assure that future actions, omissions or events will not cause interest on the Series 2018-A Bonds to be included in gross income for federal income tax purposes. In addition, we call attention to the fact that the rights and obligations under the Series 2018-A Bonds, the Master Trust Agreement and the Series 2018-A Tax Certificate and their enforceability may be subject to bankruptcy, insolvency, receivership, reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors' rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases, and to the limitations on legal remedies against cities in the State of California. We express no opinion with respect to any indemnification, contribution, liquidated damages, penalty (including any remedy deemed to constitute a penalty), right of set-off, arbitration, judicial reference, choice of law, choice of forum, choice of venue, non-exclusivity of remedies, waiver or severability provisions contained in the foregoing documents, nor do we express any opinion with respect to the state or quality of title to or interest in any of the assets described in or as subject to the lien of the Master Trust Agreement or the accuracy or sufficiency of the description contained therein of, or the remedies available to enforce liens on, any such assets. Our services did not include financial or other non-legal advice. Finally, we undertake no responsibility for the accuracy, completeness or fairness of the Official Statement or other offering material relating to the Series 2018-A Bonds and express no opinion with respect thereto.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions:

- 1. The Series 2018-A Bonds constitute the valid and binding special, limited obligations of the City secured solely by and payable from, as provided in the Master Trust Agreement, a pledge of the Revenues and the other assets pledged therefor under the Master Trust Agreement.
- 2. The Twelfth Supplemental Trust Agreement has been duly executed and delivered by, and constitutes the valid and binding obligation of, the City.
- 3. The Thirteenth Supplemental Trust Agreement has been duly executed and delivered by, and constitutes the valid and binding obligation of, the City.
- 4. Interest on the Series 2018-A Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and is exempt from State of California personal income taxes. Interest on the Series 2018-A Bonds is not a specific preference item for purposes of the federal alternative minimum tax. We express no opinion regarding other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the Series 2018-A Bonds.

Faithfully yours,

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APPENDIX D

FORM OF CONTINUING DISCLOSURE CERTIFICATE

This Continuing Disclosure Certificate (the "Disclosure Certificate") is executed and delivered by City of Los Angeles (the "City") in connection with the issuance by the City of \$______ aggregate principal amount of Solid Waste Resources Revenue Bonds, Series 2018-A (the "Bonds"). The Bonds are being issued pursuant to a Master Trust Agreement, dated as of September 1, 2001, as amended and supplemented, including by the Twelfth Supplemental Trust Agreement, dated as of July 1, 2018 (collectively, the "Trust Agreement"), each between the City and U.S. Bank National Association acting as successor trustee thereunder (the "Trustee"). The City covenants and agrees as follows.

Section 1. Purpose of the Disclosure Certificate. This Disclosure Certificate is being executed and delivered by the City for the benefit of the Holders and Beneficial Owners of the Bonds and in order to assist the Participating Underwriters in complying with Securities and Exchange Commission Rule 15c-12.

Section 2. Definitions. In addition to the definitions set forth in the Trust Agreement, which apply to any capitalized term used in this Disclosure Certificate unless otherwise defined in this Disclosure Certificate, the following capitalized terms shall have the following meanings:

"Annual Report" shall mean any Annual Report provided by the City pursuant to, and as described in, Sections 3 and 4 of this Disclosure Certificate.

"Beneficial Owner" shall mean any person which (a) has or shares the power, directly, or indirectly, to vote or consent with respect to, or to dispose of ownership of, any Bonds (including persons holding Bonds through nominees, depositories or other intermediaries), or (b) is treated as the owner of any Bonds for federal income tax purposes.

"DAC" shall mean Digital Assurance Certificate L.L.C.

"Dissemination Agent" shall mean each of the City Administrative Officer of the City or any other person authorized to act on his behalf, acting in the capacity of Dissemination Agent, or any successor Dissemination Agent designated in writing by the City and which has filed with the City a written acceptance of such designation. The initial Dissemination Agent hereunder shall be DAC.

"Holder" shall mean the person in whose name any Bond shall be registered.

"Listed Events" shall mean any of the events listed in Section 5(a) of this Disclosure Certificate as Listed Events.

"MSRB" means the Municipal Securities Rulemaking Board, or any other entity designated or authorized by the Securities and Exchange Commission to receive reports pursuant to the Rule. Until otherwise designated by the MSRB or the Securities and Exchange Commission, filings with the MSRB are to be made through the Electronic Municipal Market Access (EMMA) website of the MSRB, currently located at http://emma.msrb.org.

"Official Statement" shall mean the Official Statement dated ______, 2018, issued by the City in connection with the sale of the Bonds.

"Participating Underwriter" shall mean any of the original underwriters of the Bonds required to comply with the Rule in connection with the offering of the Bonds.

"Rule" shall mean Rule 15c2-12 adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

"State" shall mean the State of California.

Section 3. Provision of Annual Reports.

- (a) The City shall cause the Dissemination Agent to, not later than June 30 of each year, commencing June 30, 2019, for the report for the 2017-18 fiscal year, or if the fiscal year end changes from June 30, not later than 365 days after the end of the City's fiscal year, provide to the MSRB an Annual Report which is consistent with the requirements of Section 4 of this Disclosure Certificate. If the Dissemination Agent is other than the City or the City Administrative Officer, not later than fifteen (15) days prior to said date, the City shall provide the Annual Report to the Dissemination Agent (if other than the City). The Annual Report must be submitted in electronic format, accompanied by such identifying information as is prescribed by the MSRB, may be submitted as a single document or as separate documents comprising a package, and may cross-reference other information as provided in Section 4 of this Disclosure Certificate; provided, that the City's audited financial statements may be submitted separately from the balance of the Annual Report if they are not available by that date. If the City's fiscal year changes, it shall give notice of such change in the same manner as for a Listed Event under Section 5(c).
- (b) If the City is unable to provide to the MSRB an Annual Report by the date required in subsection (a), the City shall send a notice to the MSRB in substantially the form attached as <u>Exhibit A</u> hereto.
 - (c) The Dissemination Agent shall:
- (i) determine each year prior to the date for providing the Annual Report for the then-current procedures for submitting Annual Reports to the MSRB; and
- (ii) if the Dissemination Agent is other than the City, file a report with the City certifying that the Annual Report has been provided pursuant to this Disclosure Certificate, stating the date it was provided.
- **Section 4. Content of Annual Reports.** The City's Annual Report shall contain or incorporate by reference the following:
- (1) The audited financial statements of the City for the prior fiscal year, prepared in accordance with generally accepted accounting principles applicable to governmental entities from time to time. If the City's audited financial statements are not available by the time the Annual Report is required to be filed pursuant to Section 3(a) hereof, the Annual Report shall contain unaudited financial statements in a format similar to the financial statements contained in the Official Statement, and the audited financial statements shall be filed in the same manner as the Annual Report when they become available.
- (2) An update to the tables set forth in the Official Statement under the caption "SOLID WASTE RESOURCES FEE" entitled "Table No. 2 Solid Waste Resources Fee Rate History," "Table No. 3 Solid Waste Program Changes in Operating Cash," "Table No. 4 Department of Water and Power

Billings and Collections Solid Waste Resources Fee," "Table No. 5 – Historical Debt Service Coverage" and "Table No. 6 – Pro-Forma Statement of Debt Service Coverages" and an update to the following Sections set forth in APPENDIX A to the Official Statement: "BUDGET AND REVENUES," "MAJOR GENERAL FUND REVENUE SOURCES," "FINANCIAL OPERATIONS," "BONDED AND OTHER INDEBTEDNESS" and "LITIGATION." The City need not update any particular table or chart included in such sections so long as (i) the City provides updated information generally of the type previously included in such table or chart, or (ii) such table or chart constitutes information not deemed to be operating data under the Rule.

Any or all of the items listed above may be incorporated by reference from other documents, including official statements of debt issues of the City or related public entities, available to the public on the MSRB's Internet website or filed with the Securities and Exchange Commission. The City shall clearly identify each such other documents so incorporated by reference.

Section 5. Reporting of Significant Events.

- (a) To the extent applicable and pursuant to provisions of this Section 5, the City shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the Bonds (each of which is a "Listed Event"):
 - (1) principal and interest payment delinquencies;
 - (2) non-payment related defaults, if material;
 - (3) modifications to rights to Bondholders, if material;
 - (4) bond calls other than scheduled sinking fund redemptions, if material, and tender offers;
 - (5) defeasances;
 - (6) rating changes;
- (7) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 570 1-TEB) or other material notices of determinations with respect to the tax status of the Bonds, or other material events affecting the tax-exempt status of the Bonds;
 - (8) unscheduled draws on the debt service reserves reflecting financial difficulties;
 - (9) unscheduled draws on credit enhancements reflecting financial difficulties;
 - (10) substitution of any credit or liquidity providers, or their failure to perform;
 - (11) release, substitution or sale of property securing repayment of the Bonds, if material;
- (12) bankruptcy, insolvency, receivership or similar event of the City; provided that for the purposes of the event identified in this clause (12), the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for the City in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or government authority has assumed jurisdiction over substantially all of the assets or business of the City, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in

possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the City;

- (13) the consummation of a merger, consolidation, or acquisition involving the City or the sale of all or substantially all of the assets of the City, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; and
- (14) appointment of a successor or additional trustee or the change of name of a trustee, if material.
- (b) If the Dissemination Agent is other than the City, the Dissemination Agent shall, as soon as reasonably practicable after obtaining actual knowledge of the occurrence of any of the Listed Events contact the City and request that the City promptly notify the Dissemination Agent in writing whether or not to report the event pursuant to Subsections (a) and promptly direct the Dissemination Agent whether or not to report such event to the owners of the Bonds. In the absence of such direction, the Dissemination Agent shall not report such event unless required to be reported by the Dissemination Agent to the owners of the Bonds under the Indenture. The Dissemination Agent may conclusively rely upon such direction or lack thereof. For purposes of this Disclosure Certificate, actual knowledge of the occurrence of such Listed Events shall mean actual knowledge by the Dissemination Agent. The Dissemination Agent shall have no responsibility to determine the materiality of any of the Listed Events. Notwithstanding the foregoing, notice of any Listed Event shall be filed with the Repository through its EMMA system, in an electronic format as prescribed by the Repository, in a timely manner but not in excess of 10 business days after the occurrence of such Listed Event.
- (c) Whenever the City obtains knowledge of the occurrence of a Listed Event, but, in the case of a Listed Event described in Subsection (2), (3), (4) (but only with respect to bond calls), (11), (13) and (14) of Section 5(a), only in the event the City determines that knowledge of occurrence of a Listed Event would be material under applicable federal securities laws, the City shall file or cause to be filed a notice of such occurrence with the Repository through its EMMA system, in an electronic format as prescribed by the Repository, in a timely manner but not in excess of 10 business days after the occurrence of such Listed Event.
- **Section 6. Termination of Reporting Obligations.** The City's obligations under the Disclosure Certificate with respect to any Series shall terminate upon the legal defeasance, prior redemption or payment in full of all the Bonds of such Series. If such termination occurs prior to the final maturity of the Bonds of such Series, the City shall give notice of such termination in the same manner as for a Listed Event under Section 5(c).
- **Section 7. Dissemination Agent.** The City may, from time to time, appoint or engage a Dissemination Agent other than the original Dissemination Agent to assist it in carrying out its obligations under the Disclosure Certificate, and may discharge any such Dissemination Agent, with or without appointing a successor Dissemination Agent. The Dissemination Agent (other than the City or the City Administrative Officer) shall not be responsible in any manner for the content of any notice or report prepared by the City pursuant to the Disclosure Certificate.
- **Section 8. Amendment; Waiver.** Notwithstanding any other provision of the Disclosure Certificate, the City may amend the Disclosure Certificate, and any provision of the Disclosure Certificate may be waived, provided that the following conditions are satisfied:

- (a) If the amendment or waiver relates to the provisions relating to the filing of an Annual Report or the giving of notice of a Listed Event as set forth in Sections 3(a), 4 or 5(a) hereof, it may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of an obligated person with respect to the Bonds, or the type of business conducted;
- (b) The undertaking, as amended or taking into account such waiver, would, in the opinion of nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the original issuance of the Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and
- (c) The amendment or waiver either (i) is approved by the Holders of the Bonds in the same manner as provided in the Resolution for amendments to the Resolution with the consent of Holders, or (ii) does not, in the opinion of nationally recognized bond counsel, materially impair the interests of the Holders or Beneficial Owners of the Bonds.

In the event of any amendment or waiver of a provision of this Disclosure Certificate, the City shall describe such amendment in the next Annual Report, and shall include, as applicable, a narrative explanation of the reason for the amendment or waiver and its impact on the type (or, in the case of a change of accounting principles, on the presentation) of financial information or operating data being presented by the City. In addition, if the amendment relates to the accounting principles to be followed in preparing financial statements, (i) notice of such change shall be given in the same manner as for a Listed Event under Section 5(c) hereof, and (ii) the Annual Report for the year in which the change is made should present a comparison (in narrative form and also, if feasible, in quantitative form) between the financial statements as prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles.

Section 9. Additional Information. Nothing in the Disclosure Certificate shall be deemed to prevent the City from disseminating any other information, using the means of dissemination set forth in this Disclosure Certificate or any other means of communication, or including any other information in any Annual Report or notice of occurrence of a Listed Event, in addition to that which is required by or notice of occurrence of a Listed Event in addition to that which is specifically required by this Disclosure Certificate, the City shall have no obligation under this Disclosure Certificate to update such information or include it in any future Annual Report or notice of occurrence of a Listed Event.

Section 10. Default. In the event of a failure of the City to comply with any provision of this Disclosure Certificate, the Trustee may (and, at the request of any Participating Underwriter or the Holders of at least 25% aggregate principal amount of Outstanding Bonds, shall), or any Holder or Beneficial Owner of the Bonds or any Participating Underwriter may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the City to comply with its obligations under this Disclosure Certificate; provided, that any such action may be instituted only in the Superior Court of the State in and for the County of Los Angeles or in U.S. District Court in or nearest to the County of Los Angeles. A default under this Disclosure Certificate shall not be deemed an Event of Default under the Trust Agreement, and the sole remedy under this Disclosure Certificate in the event of any failure of the City to comply with this Disclosure Certificate shall be an action to compel performance.

Section 11. Duties, Immunities and Liabilities of Dissemination Agent. The Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Certificate, the Trustee and the City agrees to indemnify and save the Dissemination Agent, its officers, directors, employees and agents, harmless against any loss, expense and liabilities which they may incur arising out of or in the

exercise or performance of its powers and duties hereunder, including the costs and expenses (including attorneys' fees) of defending against any claim of liability, but excluding liabilities due to the Dissemination Agent's negligence or willful misconduct. The obligations of the City under this Section 11 shall survive resignation or removal of the Dissemination Agent and payment of the Bonds.

Section 12. Beneficiaries. This Disclosure Certificate shall inure solely to the benefit of the City,

the Trustee, the Dissemination Agent, the Participatin Owners from time to time of the Bonds, and shall create	· ·
Dated:, 20	
	CITY OF LOS ANGELES
	By: Assistant City Administrative Officer

EXHIBIT A

NOTICE TO MUNICIPAL SECURITIES RULEMAKING BOARD OF FAILURE TO FILE ANNUAL REPORT

Name of City:	City of Los Angeles	
Name of Bond Issue:	\$ City of Los Angele Series 2018-A	es Solid Waste Resources Revenue Bonds,
Date of Issuance:	, 2018	
the above-named Bon	ds as required by the Continuing Di at the Annual Report will be filed by	ot provided an Annual Report with respect to isclosure Certificate dated
	CIT	TY OF LOS ANGELES, CALIFORNIA
	By: Titl	e:



APPENDIX E

BOOK ENTRY-ONLY SYSTEM

The information in this Appendix E concerning The Depository Trust Company, New York, New York ("DTC") and DTC's book-entry system has been obtained from DTC and the City takes no responsibility for the completeness or accuracy thereof. The City cannot and does not give any assurances that DTC, DTC Participants or Indirect Participants will distribute to the Beneficial Owners (a) payments of interest or principal with respect to the Bonds, (b) certificates representing ownership interest in or other confirmation or ownership interest in the Bonds, or (c) redemption or other notices sent to DTC or Cede & Co., its nominee, as the registered owner of the Bonds, or that they will so do on a timely basis, or that DTC, DTC Participants or DTC Indirect Participants will act in the manner described in this Appendix. The current "Rules" applicable to DTC are on file with the Securities and Exchange Commission and the current "Procedures" of DTC to be followed in dealing with DTC Participants are on file with DTC.

The Depository Trust Company ("DTC"), New York, NY, will act as securities depository for the Bonds. The Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered security certificate will be issued for the maturity and CUSIP number of the Bonds and will be deposited with DTC.

DTC, the world's largest depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTTC is owned by users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has an S&P Global Ratings rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com. The information on such website is not incorporated herein by reference.

Purchases of the Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Bonds on DTC's records. The ownership interest of each actual purchaser of each Bond ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the

Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the Bonds, except in the event that use of the book-entry system for the Bonds is discontinued.

To facilitate subsequent transfers, all Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of the Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of the Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Bonds, such as redemptions, tenders, defaults, and proposed amendments to the Indenture. For example, Beneficial Owners of the Bonds may wish to ascertain that the nominee holding the Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the Bonds within a maturity are being redeemed. DTC's practice is to determine by lot the amount of the interest of each Direct Participant in each issue to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the issuer as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Redemption proceeds, distributions, and dividend payments on the Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the City or the Trustee, on payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Trustee or the City, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions and dividend payments (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the City or the Trustee, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

A Beneficial Owner shall give notice to elect to have its Securities purchased or tendered, through its Participant, to Remarketing Agent, and shall effect delivery of such Securities by causing the Direct Participant to transfer the Participant's interest in the Securities, on DTC's records, to Remarketing Agent. The requirement for physical delivery of Securities in connection with an optional tender or a mandatory purchase will be deemed satisfied when the ownership rights in the Securities are transferred by Direct Participants on DTC's records and followed by a book-entry credit of tendered Securities to Remarketing Agent's DTC account.

DTC may discontinue providing its services as depository with respect to the Bonds at any time by giving reasonable notice to the City or the Trustee. Under such circumstances, in the event that a successor depository is not obtained, Bond certificates are required to be printed and delivered.

The City may decide to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository). In that event, Bond certificates will be printed and delivered.

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that City believes to be reliable, but City takes no responsibility for the accuracy thereof.









