

APPENDIX A

**CITY OF PASADENA FINANCIAL AND DEMOGRAPHIC
INFORMATION**

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APPENDIX A

THE CITY OF PASADENA

General

The City of Pasadena, California (the "City") was incorporated in 1886 and became a freeholder charter city in 1901. The City adopted its city manager form of government by amendments to the City Charter in 1921. The City Council is responsible for the administration of the City.

The City covers nearly 23 square miles and is located in Los Angeles County in the northwestern portion of the San Gabriel Valley. The City is bounded on the west by the cities of Los Angeles, La Cañada and Glendale, on the south by South Pasadena and San Marino, on the east by Arcadia and Sierra Madre, and on the north by the unincorporated community of Altadena and the San Gabriel Mountains.

In addition to general governmental services such as fire and safety, the City provides its approximately 144,000 residents with power, water and refuse services. The Southern California Gas Company supplies natural gas, and the County of Los Angeles provides sewage services.

The City consistently receives international recognition for the Rose Parade and Rose Bowl events and has achieved significant success in blending urban amenities with suburban neighborhoods. Engineering, finance and health care comprise the primary industry sectors. In addition, the academic and research pursuits of the California Institute of Technology, the Jet Propulsion Laboratory and the Art Center College of Design bring a unique combination of resources to the City. The City's downtown continues to serve as the corporate and entertainment center for the San Gabriel Valley's approximately 1.8 million residents.

City Council

All powers of the City are vested in the City Council which is empowered to carry out the provisions of the City Charter and perform all duties and obligations of the City as imposed by State law. The City has an eight-member City Council comprised of members elected in seven City Council districts and a citywide elected mayor. Each Council Member and the Mayor are elected for four-year staggered terms. The Council Members elect the Vice-Mayor from their membership, who traditionally serves two consecutive one-year terms. The names, occupations and term expirations of the current members of the City Council are as follows:

Name	Occupation	Term Expiration
Terry Tornek, Mayor	Real Estate Investor	May 2019
Tyron A.L. Hampton (District 1)	Business Owner	May 2019
Margaret McAustin (District 2)	Asset Manager - Real Estate	May 2019
John J. Kennedy (District 3)	Executive Consultant	May 2021
Gene Masuda, Vice Mayor (District 4)	Business Owner	May 2019
Victor Gordo (District 5)	Attorney	May 2021
Steve Madison (District 6)	Attorney	May 2019
Andy Wilson (District 7)	Business Owner	May 2021

City Staff

Steve Mermell, City Manager, was appointed Pasadena City Manager in July 2016, after having served as the City's Interim City Manager for the previous five months, and as Assistant City Manager since 2009. Since joining the organization in 1989 as an analyst for the Water and Power Department, Mr. Mermell has spent his entire professional government service career at Pasadena, in a variety of positions, and is well-acquainted with all aspects and operations of the City. In addition to the top

management positions, he has held numerous key positions, including, among others, Acting Finance Director, 2008-2009; Deputy Finance Director, 2006-2007; Budget Administrator, 2001-2006, and Purchasing Administrator, 1995-2001. Mr. Mermell also fulfilled temporary assignments as the director for both the Planning and Public Health departments.

As Pasadena's City Manager, Mr. Mermell is responsible for implementing the policies and ordinances enacted by the Pasadena City Council and ensuring that the City's Charter and Municipal Code are properly utilized by the City's 16 departments and 2,000-plus employees. He is responsible for development of the annual operating and capital improvement budgets of the City, which is \$816 million for Fiscal Year 2018-19, beginning July 1, 2018, and also include funding for the City's three Operating Companies—the Rose Bowl (Stadium) Operating Company; the Pasadena (Convention) Center Operating Company and the Pasadena Community Access Corporation, which oversees the public, education and government (PEG) cable channels for Pasadena.

During his time at Pasadena, Mr. Mermell has helped ensure stability for several city departments and has guided the City's economic development strategies during the recent Great Recession, including moving forward with a successor plan for redevelopment agency issues. He had a lead role in transforming the City Public Health Department's clinical programs from City to non-profit health providers; led a task force to successfully address funding issues associated with the City's closed Fire and Police Retirement System and its \$150 million unfunded liability; developed working agreements to strengthen ties between the City and the Pasadena Unified School District to better use City and PUSD resources to benefit Pasadena children; and negotiated a new long-term lease for the historic Pasadena Playhouse, California's official State Theater, in wake of the theater organization's bankruptcy.

As City Manager, Mr. Mermell also now leads the City's Executive Leadership Team, comprised of 13 Department Directors, the City Attorney, City Clerk, Assistant City Managers and Public Information Officer; and is the City's chief executive liaison for the Tournament of Roses Association; the Chamber of Commerce and the numerous business improvement and management districts throughout town. Mr. Mermell has a master's degree in Public Administration and a bachelor's degree in Political Science, both from the California State University, Northridge.

Matthew E. Hawkesworth, Director of Finance, joined the City in October 2015. His responsibilities include management of the financial affairs of the City and the Successor Agency to the Pasadena Community Development Commission, which include: preparation of the annual operating budget; preparation of the Comprehensive Annual Financial Report (CAFR); purchasing; collections; payroll; investments; debt management and financing of major City capital improvements. Prior to his current position, he served as Assistant City Manager for the City of Rosemead for eight years overseeing Finance, Human Resources, Public Works, Technology and Risk Management; Finance Director/Treasurer for the City of Claremont for three years; and a variety of positions in the Finance Department for the City of El Monte over nine years. Mr. Hawkesworth received his Bachelor of Arts degree in Social Science (economics and political science) from the University of La Verne (California) in 1995. He has completed numerous advanced courses in finance and accounting through the Government Finance Officers Association and is a graduate of the Claremont Leadership Academy, sponsored by the Claremont McKenna College Kravis Leadership Institute. During his career, Mr. Hawkesworth has been an active participant of the Government Finance Officers Association and California Society of Municipal Finance Officers, serving as a budget and CAFR reviewer for the annual awards program; served on the League of California Cities Revenue and Taxation Committee and Other Post-Employment Benefits (OPEB) Taskforce. Mr. Hawkesworth also founded a non-profit organization in 2011 dedicated to providing refurbished bicycles and new helmets to low-income and at-risk youth.

Michele Beal Bagneris, City Attorney, was named the Pasadena City Attorney in May 1997. At that time, she was a shareholder in the law firm of Richards, Watson & Gershon, where she specialized in public law since joining the firm in 1983. Initially, while serving as City Attorney, she continued to practice law as a member of the law firm, advising public clients in a wide range of areas, including land use, general

advisory matters, litigation, labor and employment, code enforcement and nuisance abatement matters. She also served as the City Attorney for the City of Monrovia from 1992 through September 1999, when she became the in-house City Attorney for the City of Pasadena. She currently serves in that position and is also the City Prosecutor. As the City Attorney/City Prosecutor, she is responsible for managing all legal matters for the City, including supervision of in-house lawyers and any outside counsel engaged to advise the City. Ms. Bagneris received her bachelor's degree in International Relations from Stanford University in 1980 and her Juris Doctorate Degree in 1983 from Boalt Hall School of Law, University of California, Berkeley. She is active in professional and community organizations including serving as member of the Board of Directors of the League of California Cities, Vice-President of the Board of Directors of the Institute for Local Government, past President of the Los Angeles County Prosecutor's Association; past President of the League of California Cities City Attorney's Department; past President of the City Attorney's Association of Los Angeles County; and member of other legal and community organizations. She is admitted to practice law in the State of California, United States District Court and the U.S. Court of Appeals, Ninth Circuit.

Population

The following table presents a ten-year history of the population of the City since 2009.

**TABLE A-1
POPULATION
For Years 2008 through 2018**

Year (as of January 1)	Population
2009	136,502
2010	136,912
2011	138,768
2012	139,222
2013	140,102
2014	140,879
2015	139,781
2016	141,023
2017	143,379
2018	144,388

Source: State of California, Department of Finance. Revised based upon revision to the US Census information with 2010 benchmark. Updates to estimates for years 2008 and 2009 incorporating the 2010 census counts are not available.

Education

Total enrollment within the Pasadena Unified School District is shown below for the last ten fiscal years.

TABLE A-2
PASADENA UNIFIED SCHOOL DISTRICT
TOTAL ENROLLMENT
Fiscal Years 2008-09 through 2017-18

Fiscal Year Ended	
June 30	Total Enrollment
2009	20,526
2010	20,084
2011	19,803
2012	19,805
2013	19,540
2014	19,102
2015	18,586
2016	18,492
2017	18,410
2018	18,164

Source: California Department of Education.

Employment

Although no annual calendar year information is regularly compiled on employment and unemployment in the City alone, fiscal year unemployment rates can be found in Table 18 of the City's financial statements. See APPENDIX B – "CITY OF PASADENA CALIFORNIA AUDITED FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED JUNE 30, 2017"

The following table shows employment, unemployment and labor force information for Los Angeles County for calendar years 2013 through 2017 (as of December 31) and as of July 2018.

TABLE A-3
LOS ANGELES COUNTY
EMPLOYMENT, UNEMPLOYMENT AND LABOR FORCE
AVERAGES FOR CALENDAR YEARS 2013 THROUGH 2018⁽¹⁾
(in thousands)

	2013	2014	2015	2016	2017	2018⁽¹⁾
County Employment	4,471	4,659	4,707	4,777	4,884	4,912
County Unemployment	490	376	284	213	240	262
County Civilian Labor Force	4,960	5,035	4,992	4,990	5,124	5,174
County Unemployment Rate	9.9%	7.5%	5.7%	4.3%	4.7%	5.1%
State Unemployment Rate	8.9%	7.0%	6.2%	5.7%	4.8%	4.4%

Source: State of California Employment Development Department. Current Labor Force and Industry Employment. Los Angeles-Long Beach Metropolitan Statistical Area.

⁽¹⁾ As of July 2018.

Major Employers

Industry in the City is diversified. Some of the leading industries include higher education, research and development, health care, financial services and communications. The major employers within the City as of June 2017 are listed below.

**TABLE A-4
MAJOR EMPLOYERS
2017**

Company	Approximate Number of Employees	Business Line
California Institute of Technology-Jet Propulsion Laboratory	5,500	Aerospace Research
Kaiser Permanente	3,900	Health Care
California Institute of Technology-Campus	3,900	Education
Huntington Memorial Hospital	3,009	Hospital
Pasadena Unified School District	2,561	Education
The City of Pasadena	2,052	Government
Bank of America	1,603	Financial
Pasadena City College	831	Education
Art Center College of Design	752	Education
Hathaway-Sycamores	741	Social Services
The Langham Huntington Hotel (Ritz-Carlton)	585	Hotel
East West Bank	569	Financial
Western Asset	558	Financial
Citi/One West Bank	554	Financial
Parsons Corporation	500	Engineering/Construction
Open X	300	Software
Green Dot	300	Financial
Rusnak Pasadena	296	Automotive Retail
Pacific Clinics Administration	263	Healthcare
Bluebeam	250	Software
Alexandria RE	200	Financial
ADP	180	Financial
Avon Products	165	Consumer Products

Source: City of Pasadena, Comprehensive Annual Financial Report for Fiscal Year ended June 30, 2017.

Housing

The following table presents a ten-year history of total housing units within the City, for years 2009 through 2018.

TABLE A-5
HOUSING UNITS⁽¹⁾
For Years 2009 through 2018

<u>January 1,</u>	<u>Housing Units</u>
2009	58,800
2010	59,331
2011	60,178
2012	60,263
2013	60,314
2014	60,369
2015	60,361
2016	60,703
2017	61,766
2018	62,170

⁽¹⁾ As of January 1 for the years shown. Includes single family dwellings and multifamily units, including rental units and condominiums. Incorporates 2000 and 2010 census counts.

Source: State of California, Department of Finance; Years 2007-2010- E-8 Historical Population and Housing Estimates for Cities, Counties, and the State; Years 2011-2017- E-5 Population and Housing Estimates for Cities, Counties and the State.

Building Permit Activity

The City's General Plan targets development in the City, providing for growth in employment and housing. Since 1992 (the year the General Plan was approved), there have been seven specific plan areas established and approved by the City Council for the following areas: North Lake, West Gateway, South Fair Oaks, East Pasadena, East Colorado, Fair Oaks/Orange Grove and the Central District. The Land Use and Mobility Elements of the General Plan were updated in 2004 at the same time the City's Zoning Code was updated.

The following table shows the value of building permits issued in the City for fiscal years 2013-14 through 2017-18.

TABLE A-6
CITY OF PASADENA
BUILDING PERMIT VALUATION AND PERMIT ACTIVITY
for Fiscal Years 2013-14 through 2017-18
(Valuation in Millions)

	Fiscal Year Ended June 30,				
	2014	2015	2016	2017	2018
Building Permit Valuations					
Nonresidential	\$97.5	\$103.3	\$72.8	\$61.3	\$18.8
Residential	37.4	48.6	47.4	22.2	64.7
Residential New Construction	81.1	124.7	118.8	112.4	101.4
Total	\$216.1	\$276.6	\$239.1	\$195.9	\$184.9
Number of Permits Issued					
Non Residential	606	663	570	580	585
Residential	2,234	2,188	2,867	2,377	2,517
Residential New Construction	27	40	38	52	39
Total	2,867	2,891	3,475	3,009	3,141

Source: City of Pasadena, Planning and Permitting Department.

Taxable Sales

The following table indicates taxable transactions in the City by type of business for the twelve-month periods ending September 30, 2013 through September 30, 2017.

TABLE A-7
CITY OF PASADENA
TAXABLE TRANSACTIONS BY TYPE OF BUSINESS
(\$ in Millions)

Type of Business	Twelve Month Periods Ended September 30,				
	2013	2014	2015	2016	2017
Apparel Stores	\$ 191.4	\$191.3	\$ 189.2	\$188.1	\$178.9
Auto Dealers & Supplies	464.8	502.2	569.6	569.8	611.1
Building Materials	127.1	139.9	149.5	154.4	162.2
Drug Stores	32.0	32.3	32.4	32.3	34.7
Eating & Drinking Places	458.3	483.9	522.3	555.1	582.8
Food Stores	120.9	123.3	125.5	129.1	118.0
Furnishing & Appliances	274.6	273.0	295.4	289.1	276.4
General Merchandise	236.3	227.2	222.4	219.1	216.2
Other Retail Stores	267.7	278.3	266.6	265.6	268.2
Packaged Liquor	29.3	29.5	30.5	30.0	32.6
Service Stations	180.4	175.1	153.5	132.8	141.7
Total Retail	2,382.8	2,456.0	2,556.9	2,565.4	2622.8
Non-Store & Part time Retailers	5.3	5.5	4.8	5.4	5.3
Business, Serv & Repair Group	188.5	202.8	212.5	223.1	229.3
Manufacturer & Wholesaler Group	291.3	251.0	228.1	185.2	223.3
Total Point of Sales	\$2,867.9	\$2,915.3	\$3,002.3	\$2,979.1	\$3,080.7

Source: State Board of Equalization, City of Pasadena: HDL Companies.

Community Facilities

The City has a central library and nine branch libraries, four community centers, 20 parks and 30 playgrounds. Other entertainment and cultural facilities include the Rose Bowl, the Norton Simon Museum, the Pacific Asia Museum, the Gamble House, the Wrigley Estate, California Institute of Technology, Beckman Auditorium, the Pasadena Civic Auditorium and the Pasadena Playhouse. The City has long enjoyed a reputation as a community rich in culture, traditions and quality of life. The City is also home to the Tournament of Roses, sponsors of the well-known New Year's Day Parade and Rose Bowl football game held in the City each January.

Transportation

The City is served by an extensive surface and air transportation network. Several major freeways make the City accessible to the entire Los Angeles Basin. The City is served by three commercial airports: Bob Hope Airport, located in nearby Burbank, is within 15 miles, Los Angeles International Airport is within 27 miles and Ontario International Airport is within 45 miles. Continental Trailways and Greyhound bus lines have local depots in the City. The City supplements the local Metropolitan Transit Authority and the Foothill Transit Authority bus routes with the Pasadena Area Rapid Transit Services ("ARTS") bus services to expand the covered area. The ARTS buses provide convenient and nominal-fare transportation between many of the City's residential neighborhoods, retail, business and entertainment centers within the City. There are currently two ARTS routes that offer service seven days per week. In addition, the City provides Dial-A-Ride bus services for the elderly and disabled which is available for a nominal usage fee.

The nearest port facilities are located in the Los Angeles and Long Beach harbors which are approximately 30 and 35 miles away, respectively. The \$1 billion Alameda Corridor East project, being undertaken by the Alameda Corridor East Construction Authority, consists of safety upgrades, traffic signal control measures, road widening and grade separation projects to improve traffic conditions along the railroad facilities connecting the Ports of Los Angeles and Long Beach with the transcontinental rail network through the San Gabriel Valley, creating a faster more efficient method of distributing trade.

In addition, the Gold Line of the Metro Line light rail system runs from Union Station in the City of Los Angeles, through the City and terminates in the City of Sierra Madre. The Gold Line began operations in 2003.

Employee Relations

City employees are represented by various unions and labor relations have been generally amicable. The City has experienced no major strikes, work stoppages or other incidents. Currently, most City employees are represented by unions. Set forth below is a table indicating the various unions representing employees within the City. The number of employees represented by these unions as of June 30, 2018, and the dates on which the current labor agreements expire (there are no provisions for the reopening of wage or benefit levels prior to expiration) are set forth in the following table.

**TABLE A-8
CITY OF PASADENA
EMPLOYEE UNION REPRESENTATION**

Name of Union	Number of Employees Represented As of June 30, 2018	Expiration of Contract
American Federation of State, County and Municipal Employees	284	June 30, 2018 ⁽¹⁾
International Brotherhood of Electrical Workers	104	June 30, 2019
International Union of Operating Engineers	19	June 30, 2020
Service Employee International Union	24	June 30, 2018 ⁽¹⁾
Laborers International Union of North America	312	June 30, 2019
Pasadena Fire Fighters Association	135	June 30, 2020
Pasadena Police Officers Association	203	June 30, 2021
Pasadena Fire Fighters Management Association	5	June 30, 2020
Pasadena Management Association	449	June 30, 2020

⁽¹⁾ Negotiations with American Federation of State, County and Municipal Employees and Service Employee International Union are ongoing; employees currently operating under the expired contracts.

Source: City of Pasadena, Human Resources Department.

In contract negotiations between 2014-16, employees represented by the various unions and employee organizations agreed that employees will assume full or partial responsibility for their respective obligation owed by the employees to the California Public Employees' Retirement System ("CalPERS"). Prior to these negotiations, the City had agreed with the Police Officers Association ("POA"), Fire Fighters Association ("FFA"), American Federation of State, County and Municipal Employees ("AFSCME"), and Pasadena Management Association ("PMA") to pay (or "pick-up") all or a portion of the employees' required contribution to CalPERS. These employee contributions range from 6.25% to 11.75% in total compensation. As of July 1, 2015 the POA and FFA members began paying their full 9% obligation, and as of July 1, 2017 FFA members began paying an additional 3% for a total of 12% in total compensation. As of July 9, 2018, the City picks-up 2% for PMA members (PMA members offset this amount by paying 2.5% of the City's employer rate), but the rate reduces by 2% each January 1. The City continues to pick-up the full 8% for AFSCME members (AFSCME members offset this amount by paying the City's 8% employer rate). These payment arrangements, for their duration, results in an increase in the income used to calculate pension benefits to employees under the CalPERS formula.

Retirement Systems

Pasadena Fire and Police Retirement System.

General.

Police and Fire personnel hired prior to July 1, 1977 were covered by the City's Fire & Police Retirement System ("FPRS"). FPRS was originally established by the City Charter in 1919. FPRS was closed on June 30, 1977 but continues to pay out benefits to retirees and their beneficiaries. FPRS covers all sworn fire and police personnel who were employed by the City prior to July 1, 1977, except those who elected to transfer to CalPERS either when FPRS closed to new members or in June 2004. FPRS is managed by a five-member retirement board. As of June 30, 2017, FPRS had an unfunded actuarial accrued liability of \$16.9 million and had a funded ratio of 88.1%, based (among other assumptions) on a discount rate of 6.5% and an inflation rate of 3%. For fiscal year 2017-18, the City's annual pension cost was \$6,927,000 for FPRS. The actuarial value of FPRS' assets was determined using techniques that smooth the effects of short-term volatility in the market value of investments over a five-year period (smoothed market value). Copies of FPRS' annual financial report may be obtained from the City's Department of Finance, 100 North Garfield Avenue, 3rd Floor, Pasadena, California 91109. This annual financial report includes the required

three-year trend information. Additional information concerning the FPRS is also contained in Note 18 to the City's Audited Financial Statements attached as Appendix B to this Official Statement.

Funding History.

In 1960, the City Charter was amended to provide an unlimited cost of living adjustment ("COLA") for the FPRS members that was fully adjustable based on changes in the consumer price index. With inflation in the broader economy during the subsequent years, the FPRS saw dramatic increases in the COLA and, therefore, in its expenses. In 1977, the FPRS was modified to increase contribution rates for the City and for active FPRS members. Additionally, active FPRS members were given the option of transferring to the CalPERS plan. However, few existing participants elected to join CalPERS and the modifications proved inadequate to address the continuing rise in the COLA benefit.

The City attempted to roll back the COLA benefit and successfully obtained voter approval in 1981 for a City Charter amendment that limited the COLA to 2%. However, the Pasadena Police Officers Association sued successfully, claiming that the amendments impaired the vested rights of its members. An appellate court upheld the ruling and the uncapped COLA was reinstated.

In 1987, the City sponsored and secured the passage of Senate Bill No. 481 ("SB 481"), which established a funding mechanism for the FPRS. SB 481 authorized the City to utilize payments made by the Pasadena Community Development Commission (the "Commission") under a reimbursement agreement entered into in 1987 (the "Reimbursement Agreement"), after required deductions, for the purpose of funding the City's liabilities to FPRS. The Commission's payments consist of property tax increments from the City's Downtown Project Area (hereinafter defined as the "SB 481 Receipts"). Under SB 481, the right to receive SB 481 Receipts terminated on December 31, 2014. As described below under "SB 481 Litigation", the State challenged the enforceability of the Reimbursement Agreement in 2012. Ultimately the State was successful in its challenge and all SB 481 Receipts received by the City after 2011 were required to be returned to the local taxing entities (which included the City) following such challenge pending disposition of the lawsuit.

In 1999, after the FPRS-funded status dropped to approximately 30%, the City and the FPRS negotiated a Contribution Agreement (the "Prior Contribution Agreement") whereby the City agreed to issue approximately \$100 million of pension obligation bonds (*i.e.*, the Series 1999 Bonds) and transfer the proceeds to the FPRS in order to increase the actuarial funding level to 70%. See "BONDED AND OTHER INDEBTEDNESS" in this Appendix A." Further, the City agreed to make supplemental contributions to the FPRS to ensure that the funding level increased by ½% each year for 20 years, in order to reach a funding level of 80% by 2020. FPRS, in turn, assigned to the City its rights to receive the SB 481 Receipts under a prior agreement, but required such revenues to be applied to the payment of the City's funding obligations to FPRS, including payments on the City's pension obligation bonds.

In 2004 the City issued approximately \$40 million of additional pension obligation bonds (*i.e.*, the Series 2004 Bonds) in order to maintain the contribution levels agreed upon in the Prior Contribution Agreement. This occurred after a dispute between the City and the FPRS regarding the accounting methodology for treating the investment losses of the early 2000s. The FPRS agreed to allow the actuarial valuation to be conducted without the requirement that the actuarial value of assets remain within a 20% "corridor" around the actual market value of assets, in exchange for the City providing additional funds through the issuance of the 2004 Bonds.

In November 2011, the City and FPRS agreed to amend the Prior Contribution Agreement (such amendment herein referred to as the "Amended Contribution Agreement") for the purpose of revising the methodology used to calculate the unfunded liability of the City and the City's required payments to the FPRS. To fulfill its commitment under the Amended Contribution Agreement, the City issued a third series of pension bonds (*i.e.*, the Series 2012 Bonds) in the principal amount of \$47,440,000 and deposited the proceeds with FPRS. Prior to the Amended Contribution Agreement, FPRS was required to use, in its

actuarial calculations, the average assumed investment return and cost of living adjustment used by counties with pension systems established under 1937 Act ("1937 Act Counties").

Under the Amended Contribution Agreement, the City must pay to FPRS, in addition to the net proceeds of the Series 2012 Bonds, supplemental payments ("Supplemental Payments") if FPRS falls below the required minimum funding percentage in any fiscal year, to fund the unfunded accrued actuarial liability (the "UAAL") of FPRS. The Amended Contribution Agreement requires FPRS to be at least 75.5% funded for the fiscal year in which the City paid the net proceeds of such bonds to FPRS (the "Minimum Funding Percentage"). For each succeeding year, the Minimum Funding Percentage increases by 0.5% per year over a nine-year period (through 2021), up to 80%. To protect the City against large swings in asset values from one year to the next, the annual amount of any Supplemental Payments is subject to a cap, which is the lesser of certain benefit payments paid by FPRS in the prior fiscal year, or \$3 million, plus a varying percentage of any funding deficit in the Minimum Funding Percentage over \$3 million, beginning with 20% of the remaining deficit in the base year up to 100% of any deficit remaining for the fifth and any subsequent consecutive fiscal year following the base year.

The principal change implemented by the Amended Contribution Agreement was to alter the assumed rate of investment and cost of living adjustments used to calculate the Minimum Funding Percentage and UAAL. The Amended Contribution Agreement allows FPRS to use rates of investment and cost of living increases recommended by FPRS's actuary and approved by FPRS after consultation with the City and the City's consultants. When the Amended Contribution Agreement was executed in November 2012, the average investment rate used by 1937 Act Counties was approximately 8%; following execution, the actuarial rate as recommended by the system's actuary was reduced to 6.5%. The actuarial valuation for the year ended June 30, 2017 assumed, among other assumptions, a discount rate of 6.5% and an inflation rate of 3%.

The City had structured \$121,490,000 principal amount of the Series 1999 Bonds, the Series 2004 Bonds and the Series 2012 Bonds to mature, or to be subject to mandatory tender, on May 15, 2015, with the expectation that the SB 481 Receipts would be sufficient to pay approximately \$40 million of the maturing principal amount or purchase price of such bonds, as applicable. However, as the SB 481 Litigation was not resolved by May 2015, the City refinanced all of its pension obligation bonds in 2015.

As of June 30, 2017, the FPRS was funded at 82.5%, satisfying the 78.5% minimum funding requirement as calculated in accordance with the procedures of the Amended Contribution Agreement. The funding history for the FPRS is shown in Table A-14 below. The FPRS actuary has projected, based on existing economic and demographic assumptions, that the FPRS funded ratio will remain at or above [80]% and no Supplemental Payment will need to be made until fiscal year 2021.

SB 481 Litigation

Through 2011, SB 481 Receipts received by the City under the Reimbursement Agreement were sufficient to cover the debt service on the City's pension obligation bonds, to provide funds for the City to make required supplemental payments to the FPRS under the prior contribution agreement, as amended and superseded (as described above), and to generate a reserve fund to be used for future obligations of the FPRS.

Following passage of State legislation ABx1 26 in 2011, which required the dissolution of California redevelopment agencies ("CRAs"), including the Commission, and the disposition and winding-up of the operations of CRAs, the State challenged the enforceability of the Reimbursement Agreement. In January 2017, following years of litigation, a California Appellate Court determined that the Reimbursement Agreement was not an "enforceable obligation" under ABx1 26 and required that SB 481 Receipts, which had been temporarily escrowed pending the outcome of the litigation, must be returned to the local taxing entities. As a result, in fiscal year 2017-18, the \$39.7 million in escrow was distributed to the local taxing entities, with the City receiving approximately \$8.4 million.

Investment Status.

As of June 30, 2017, FPRS' investment assets were allocated as follows:

**TABLE A-9
CITY OF PASADENA
FIRE AND POLICE RETIREMENT SYSTEM
PORTFOLIO INFORMATION
as of June 30, 2017 (audited)**

Description of Assets	Market Value	Percentage of Portfolio
Cash and cash equivalents	\$4,202,165	3.23%
Interest	122,475	0.09
Government and agencies	15,872,832	12.20
Fixed income mutual funds	16,593,296	12.75
Domestic corporate obligations	27,783,556	21.35
International corporate obligations	382,944	.29
Real estate	15,952,321	12.26
Domestic corporate stocks	24,143,681	18.55
International corporate stocks	25,083,175	19.27
TOTAL	\$130,136,445	100.00%

Source: City of Pasadena, Department of Finance.

FPRS has a number of investment objectives. The primary goals are to provide participants with scheduled retirement benefits and meet or exceed the rate of inflation in its investments, as measured against the consumer price index. In addition, its objective is to achieve a higher rate of return over a three- to five-year period with less than average volatility, with enhanced return over a longer period, such as five years, being more important than the preservation of capital during a one-year period of time.

Under its investment guidelines, FPRS must maintain sufficient liquidity to meet FPRS' cash needs. It may invest in equity securities, U.S. government bonds, corporate bonds and dollar denominated foreign bonds, certain kinds of mortgage backed securities, money market funds, and American Depository Receipts of foreign securities. Fixed income securities must be rated Baa/BBB or better by nationally recognized rating agencies. The assets of FPRS may not be invested in options, commodities or futures, nor may securities be sold short or purchased on margin.

The City is responsible for paying benefits to FPRS, as described above. A variety of factors will affect the extent of the City's liability to FPRS, including actual investment performance of FPRS' assets, actual changes in the consumer price index, and FPRS' actual mortality and benefit payment experience, all as compared with the assumptions, and changes in actuarial assumptions and methods, including the assumed rate of investment return. Further continued market volatility and the possibility of a "double dip" recession may require substantial additional contributions to FPRS over time.

California Public Employees' Retirement System.

General.

Almost all permanent City employees, except police and fire CalPERS personnel employed prior to July 1, 1977, are members of CalPERS for purposes of pension benefits. CalPERS is an agent multiple-employer public employee retirement system which acts as a common investment and administrative agent for participating public employers within the State of California. The plan provides retirement and disability benefits, annual cost-of-living adjustments and death benefits to plan members and their beneficiaries.

CalPERS issues a separate publicly available financial report that includes financial statements and required supplemental information of participating public entities within the State of California. The most recent annual report issued by CalPERS to the City was in July 2018 (the "July 2018 CalPERS Report"). The July 2018 CalPERS Report includes information based on the June 30, 2017 actuarial valuation of assets included therein (the "2017 Actuarial Valuation"). Copies of the CalPERS' annual financial report may be obtained from the CalPERS Executive Office, Lincoln Plaza Complex, 400 Q Street, Sacramento, CA 95811 or at www.calPERS.ca.gov. The July 2018 CalPERS Report to the City can also be found on the City's website at <http://cityofpasadena.net/Finance/PERS-Actuarial-Reports>. Additional information about the CalPERS Plans can also be found in Note 18 to the City's Audited Financial Statements attached as Appendix B to this Official Statement.

CalPERS is a contributory plan deriving funds from employer and employee contributions as well as earnings from investments. Participants are required to contribute a percentage of their annual covered salary. As of June 30, 2016, the contribution rates were 8% for miscellaneous employees and 9% for safety employees. In some cases, the City makes the contributions required of City employees on their behalf and for their account, but is wholly or partially reimbursed by employees. Different employee bargaining groups have different reimbursement rates ranging from the 8% to 12%. The City is also required to contribute at an actuarially determined rate. Benefit provisions and all other requirements are established by state statute or collective bargaining agreements with employee bargaining groups. See "Employee Relations" above.

Recent Actuarial Changes and Related Developments.

In recent years, the CalPERS Board of Administration (the "CalPERS Board") has taken several steps, as described below, intended to reduce the amount of the unfunded accrued actuarial liability of its managed plans. Many of the assumptions and policies implemented by the CalPERS Board have increased and are likely to continue to increase both the required contributions and the unfunded liabilities of its member employers, including the City.

On March 14, 2012, the CalPERS Board voted to lower the CalPERS' rate of expected price inflation and its investment rate of return (net of administrative expenses) (the "CalPERS Discount Rate") from 7.75% to 7.5%. On February 18, 2014, the CalPERS Board voted to keep the CalPERS Discount Rate unchanged at 7.5%. On November 17, 2015, the CalPERS Board approved a new funding risk mitigation policy to incrementally lower the CalPERS Discount Rate by establishing a mechanism whereby such rate is reduced by a minimum of 0.05% to a maximum of 0.25% in years when investment returns outperform the existing CalPERS Discount Rate by at least four percentage points. On December 21, 2016, the CalPERS Board voted to lower the CalPERS Discount Rate to 7.0% over a three year phase-in period in accordance with the following schedule: 7.375% in fiscal year 2017-18, 7.25% in fiscal year 2018-19 and 7.00% in fiscal year 2019-20. The new discount rate went into effect July 1, 2018 for the City and other member employers. Lowering the CalPERS Discount Rate means member employers like the City will see increases in their normal costs and unfunded actuarial liabilities. Active members hired after January 1, 2013, under the PEPRA (defined below) will also see their contribution rates rise.

On January 1, 2013, the Public Employees' Pension Reform Act of 2013 ("PEPRA") took effect. The impact of PEPRA is described below.

In April 2013, the CalPERS Board approved revised actuarial policies that aimed at returning the CalPERS system to fully-funded status within 30 years. These policies include a rate-smoothing method with a 30-year fixed amortization period for gains and losses (rather than the current 30-year rolling amortization method). CalPERS delayed the implementation of the new policy until fiscal year 2015-16, and as described below further revised these policies in subsequent years.

Also, on February 20, 2014, the CalPERS Board approved new demographic assumptions reflecting (i) expected longer life spans of public agency employees and related increases in costs for the CalPERS system and (ii) trends of higher rates of retirement for certain public agency employee classes,

including police officers and firefighters. The increase in liability due to the new assumptions will be amortized over 20 years with increases phased in over five years, beginning with the contribution requirement for fiscal year 2016-17.

The CalPERS Board is required to undertake an experience study every four years under its Actuarial Assumptions Policy and State law. As a result of the most recent experience study, on December 20, 2017, the CalPERS Board approved new actuarial assumptions, including (i) lowering the inflation rate to 2.625% for the June 30, 2017 actuarial valuation and to 2.50% for the June 30, 2018 actuarial valuation, [(ii) lowering the payroll growth rate to 2.875% for the June 30, 2017 actuarial valuation and 2.75% for the June 30, 2018 actuarial valuation], and (iii) certain changes to demographic assumptions relating to the salary scale for most constituent groups, and modifications to the morality, retirement, and disability retirement rates.

On February 14, 2018, the CalPERS Board approved a new actuarial amortization policy with an effective date for actuarial valuations beginning on or after June 30, 2019, which includes (i) shortening the period over which actuarial gains and losses are amortized from 30 years to 20 years, (ii) requiring that amortization payments for all unfunded accrued liability bases established after the effective date be computed to remain a level dollar amount throughout the amortization period, (iii) removing the 5-year ramp-up and ramp-down on unfunded accrued liability bases attributable to assumptions changes and non-investment gains/losses established on or after the effective date and (iv) removing the 5-year ramp-down on investment gains/losses established after the effective date. While CalPERS expects that reducing the amortization period for certain sources of unfunded liability will increase future average funding ratios, provide faster recovery of funded status following market downturns, decrease expected cumulative contributions, and mitigate concerns over intergenerational equity, such changes may result in increases in future employer contribution rates.

There can be no assurances that CalPERS will not make additional changes to its actuarial assumptions and policies in the future impacting upon the City's required funding contributions and its unfunded accrued liability.

California Public Employees' Pension Reform Act (PEPRA).

On September 12, 2012, the Governor signed Assembly Bills 340 and 197, which enacted the California Public Employees' Pension Reform Act or PEPRA. Among other things, PEPRA created a new benefit tier for public employees hired on or after January 1, 2013, who are defined as "new members." PEPRA plans adopted by the City were 2% at 62 for the general member benefit formula and 2.7% at 57 benefit formula for safety and probation members. PEPRA requires all new members to have an initial contribution rate of at least 50% of the normal cost rate or the current contribution rate of similarly situated employees, whichever is greater. The normal contribution rate, as calculated by the CalPERS' actuary covers the cost of a current year of service. PEPRA prohibits employers from paying any of PEPRA members' contribution on the employees' behalf, with certain exceptions. PEPRA also limits the types of compensation that can be used and caps the total amount of compensation that can be used to calculate a pension. The City believes that the provisions of PEPRA will help control its pension benefit liabilities in the future.

GASB Statement Nos. 67 and 68.

On June 25, 2012, GASB approved Statements Nos. 67 and 68 ("Statements") with respect to pension accounting and financial reporting standards for state and local governments and pension plans. The new Statements, No. 67 and No. 68, replace GASB Statement No. 27 and most of Statements No. 25 and No. 50. The changes impact the accounting treatment of pension plans in which state and local governments participate. Major changes include: (1) the inclusion of unfunded pension liabilities on the government's balance sheet (previously, such unfunded liabilities were typically included as notes to the government's financial statements); (2) more components of full pension costs being shown as expenses regardless of actual contribution levels; (3) lower actuarial discount rates being required to be used for underfunded plans in certain cases for purposes of the financial statements; (4) closed amortization periods for unfunded liabilities being required to be used for certain purposes of the financial statements; and (5) the difference between expected and actual investment returns being recognized over a closed five-year smoothing period. The reporting requirements for government employers, including the City, took effect for the fiscal year beginning July 1, 2014, and affect reporting by the City for both the CalPERS plans and FPRS.

Annual Payments and Contribution Rates

Under GASB 27, an employer reported an annual pension cost ("APC") equal to the annual required contribution ("ARC") plus an adjustment for the cumulative difference between the APC and the employer's actual plan contributions for the year. The cumulative difference was called the net pension obligation. In order to calculate the dollar value of the ARC for inclusion in the financial statements, the applicable contribution rate was multiplied by the payroll of the covered employees that were paid during the relevant period.

Effective for financial statements beginning after July 1, 2014, GASB 68 replaces GASB 27. Hence, the annual reports issued by CalPERS for 2015 and thereafter reflect GASB 68. GASB 68 requires additional reporting that CalPERS is intending to provide upon request by its members.

Set forth below is a history and projection of the City's contributions and projected payments to CalPERS, from fiscal year 2007-08 through fiscal year 2024-25. The City contributed 100% of its APC in each completed year shown. The City estimates that approximately 56% of the payments to these plans is made from the City's General Fund. The City's contributions shown below do not include the employee pick up in prior years. See "Employee Relations."

Also set forth below are the historic and projected contribution rates to the CalPERS plans. The projected contribution rates for fiscal year 2019-20 through 2024-25 are provided by CalPERS in its July 2018 report. The CalPERS projections assumed that all actuarial assumptions (including among other

assumptions, a 7.25% return in fiscal year 2019-20 and a 7% return for the remaining year projection period) will be realized and that no future changes to assumptions, contributions, benefits or funding will occur during the projection period. The July 2018 CalPERS Report states that due to the adopted changes in the CalPERS Discount Rate effective for the next valuation in combination with the five year phase-in ramp (as discussed above), the increase in the required contributions are expected to continue for six years from fiscal year 2019-20 through fiscal year 2024-25. A complete explanation of the CalPERS assumptions can be found in the 2017 Actuarial Valuation.

In July 2018, CalPERS reported a preliminary 8.6% net return on investments for the fiscal year ended June 30, 2018. In the two prior fiscal years ended June 30, 2017 and 2016, the reported return was 11.2% and 0.6%, respectively. CalPERS weighted average investment returns for the past five, ten and twenty years ending June 30, 2017 are 8.8%, 4.4% and 6.6%, respectively. As discussed above, the CalPERS Board voted in December 2016 to phase in an assumed 7% rate of return by fiscal year 2019-20. CalPERS has publicly indicated that it expects actual investment returns in the next ten years to be less than the 7% assumed rate of return. Actual investment returns lower than the actuarially assumed level (in and of itself) will result in decreased funding status and increased required contribution by the City.

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TABLE A-10
ANNUAL PAYMENTS TO RETIREMENT PLANS BY CITY
(\$ in thousands)

Fiscal Year Ended June 30	CalPERS— Misc. Employees Total Contribution	CalPERS- General Fund Contribution Misc. Employees⁽²⁾	CalPERS— Safety Employees Total Contribution	CalPERS- General Fund Contribution Safety Employees⁽²⁾
2008	\$12,228	\$3,435	\$9,283	\$9,097
2009	12,580	3,768	9,916	9,718
2010	12,566	3,765	10,459	10,250
2011	12,518	4,381	10,346	10,139
2012	16,744	5,860	11,370	11,143
2013	17,439	5,929	10,993	10,773
2014	17,909	6,089	11,176	10,952
2015	18,552	6,308	10,533	10,322
2016	20,751	7,055	11,641	11,409
2017	25,894	8,804	15,724	15,410
2018	27,999	9,520	16,783	16,446
2019 ⁽¹⁾	31,777	10,486	19,125	18,551
2020 ⁽¹⁾	36,040	11,893	21,856	21,200
2021 ⁽¹⁾	39,370	12,992	24,193	23,467
2022 ⁽¹⁾	42,468	14,014	26,306	25,517
2023 ⁽¹⁾	45,238	14,969	27,779	26,946
2024 ⁽¹⁾	47,019	15,516	29,086	28,213
2025 ⁽¹⁾	49,044	16,184	25,904	25,128

⁽¹⁾ Projected annual payment to retirement plan based on projected contribution rates on CalPERS plus unfunded Accrual Liability in July 2018 CalPERS Report.

⁽²⁾ Historic payments are net of City "pick-up." See "Employee Relations" herein.

Source: City of Pasadena, Department of Finance.

TABLE A-11
ANNUAL CONTRIBUTION RATES
TO CALPERS RETIREMENT PLANS BY CITY

Fiscal Year Ended June 30	CalPERS Misc. Employees	CalPERS Misc. UAL\$	CalPERS Safety Employees	CalPERS Safety UAL\$
2011	11.4%	--	23.6%	--
2012	15.5	--	26.6	--
2013	16.2	--	25.6	--
2014	17.4	--	27.2	--
2015	19.2	--	29.3	--
2016	21.1	--	31.8	--
2017	22.8	--	35.1	--
2018 ⁽¹⁾	7.9 ⁽³⁾	\$18,895,540 ⁽⁴⁾	17.1 ⁽⁵⁾	\$9,230,863 ⁽⁶⁾
2019 ⁽²⁾	8.3 ⁽³⁾	21,920,840 ⁽⁴⁾	17.9 ⁽⁵⁾	10,953,259 ⁽⁶⁾
2020 ⁽²⁾	9.2 ⁽³⁾	25,084,564 ⁽⁴⁾	18.9 ⁽⁵⁾	12,900,362 ⁽⁶⁾
2021 ⁽²⁾	10.0 ⁽³⁾	27,224,000 ⁽⁴⁾	20.2 ⁽⁵⁾	14,386,000 ⁽⁶⁾
2022 ⁽²⁾	10.0 ⁽³⁾	29,988,000 ⁽⁴⁾	20.2 ⁽⁵⁾	16,229,000 ⁽⁶⁾
2023 ⁽²⁾	10.0 ⁽³⁾	32,415,000 ⁽⁴⁾	20.2 ⁽⁵⁾	17,425,000 ⁽⁶⁾

(1) Projected annual payment to retirement plan based on projected contribution rates on CalPERS actuarial report dated July 2017. Does not include City "pick-up." See "Employee Relations" herein.

(2) Projected annual payment to retirement plan based on projected contribution rates on CalPERS plus Unfunded Accrued Liability (UAL) in CalPERS July 2018 Report.

(3) Projected Normal Contribution Rate for Miscellaneous

(4) Amount of the Amortized Unfunded Actuarial Liability for Miscellaneous

(5) Project Normal Contribution Rate for Safety

(6) Amount of the Amortized Unfunded Actuarial Liability for Safety

Source: City of Pasadena, Department of Finance.

Funding Status of Plans. Based on the 2017 Actuarial Valuation (which is the most recent actuarial valuation available), CalPERS reported an unfunded liability, as of June 30, 2017, of \$294.4 million for the City's miscellaneous employees as compared to an underfunding of \$306.9 million the previous year and an unfunded liability of \$165.7 million for safety employees as compared to \$163.4 million the previous year. Based upon this report, the City reported that its CalPERS obligation had a funded ratio of 72.6% based upon the market value of plan assets with respect to the City's miscellaneous employees and a funded ratio of 72.6% based upon the market value of plan assets for safety employees. As noted above, CalPERS has changed its discount rate assumptions. The funding status as of June 30, 2017 was calculated using an CalPERS Discount Rate of 7.25%. Also, as noted above CalPERS has changed its amortization and smoothing policies in 2013. Beginning with the June 30, 2015 Actuarial Valuations (that set fiscal year 2015-16 CalPERS contribution rates), CalPERS no longer uses an actuarial value of assets and instead employs an amortization and rate smoothing policy that will account for all gains and losses over a fixed 30-year period with the increases and decreases in the rate phased over a 5-year period. Also as noted above, CalPERS has changed smoothing policies (shortening the period from 30 to 20-years) for valuations on and after June 30, 2019.

The City provides pension benefits for employees not covered by CalPERS or FPRS through the Public Agency Retirement System ("PARS"), a defined contribution plan. In a defined contribution plan, benefits depend solely on amounts contributed to the plan plus investment earnings. Employees are eligible to participate from the date of employment. As of December 31, 2012, the covered employees are required to contribute the full 7.5% of their earnings. Prior to such date, the City contributed an amount equal to 4.0% of the employee's earnings and the covered employee contributed 3.5%. The City's payroll for employees covered by PARS for fiscal year 2017-18 was \$4,413,374. The covered employees made the total required 7.5% contributions of \$331,003.

The tables below summarize the funded status of the City's retirement plans as of the most recent actuarial valuation dates (June 30, 2017). Additional information regarding the City's employee retirement plans, annual pension costs, the funding status thereof and significant accounting policies related thereto is set forth in Note 18 to the City's comprehensive annual financial report, attached hereto as APPENDIX B – "CITY OF PASADENA CALIFORNIA AUDITED FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED JUNE 30, 2017", and in the CalPERS reports to the City, which can be accessed at www.cityofpasadena.net/Finance/Annual_Finance_Reports.

TABLE A-12
CITY OF PASADENA
RETIREMENT PLAN TREND INFORMATION
(\$ in thousands)

CALPERS - MISCELLANEOUS EMPLOYEES

Valuation Date (June 30)	Actuarial Accrued Liability (AAL) – Entry Age	Actuarial Asset Value*	(Overfunded) Unfunded AAL	Funded Ratio*		Annual Covered Payroll	(Overfunded) Unfunded AAL as a % of Covered Payroll
				AVA	Market Value		
2007	\$585,908	\$539,717	\$46,191	92.1%	106.8%	\$102,135	45.2%
2008	638,095	579,068	59,027	90.7	92.6	111,186	53.1
2009	732,713	607,710	125,003	82.9	60.6	116,952	106.9
2010	773,303	635,455	137,847	82.2	64.4	115,289	119.6
2011	819,327	666,290	153,037	81.3	72.3	110,571	138.4
2012	852,217	695,108	157,109	81.6	68.0	105,201	149.3
2013	882,572	641,333	241,239	72.7*	72.7*	104,378	231.1
2014	956,142	737,836	218,306	77.2	77.2	103,617	210.7
2015	982,774	734,946	247,827	74.8	74.8	104,325	237.5
2016	1,026,335	719,444	306,892	70.1	70.1	107,587	285.3
2017	1,074,696	780,285	294,410	72.6	72.6	108,837	270.5

(*) Beginning with the June 30, 2013 actuarial valuation, the actuarial value of assets equals the market value of assets pursuant to CalPERS' Direct Rate Smoothing Policy.

Source: CalPERS actuarial valuation for June 30, 2012 and June 30, 2013 data is taken from annual valuation report dated October 2014. CalPERS actuarial valuations through June 30, 2014 data is taken from annual valuation report dated October 2015. CalPERS actuarial valuations through June 30, 2015 data is taken from annual valuation report dated August 2016. CalPERS actuarial valuations through June 30, 2016 data is taken from annual valuation report dated July 2017. CalPERS actuarial valuation through June 30, 2017 data is taken from annual valuation report dated July 2018.

TABLE A-13
CalPERS – SAFETY EMPLOYEES
(In thousands)

Valuation Date (June 30)	Actuarial Accrued Liability (AAL) – Entry Age	Actuarial Asset Value*	(Overfunded) Unfunded AAL	Funded Ratio*		Annual Covered Payroll	(Overfunded) Unfunded AAL as a % of Covered Payroll
				AVA	Market Value		
2007	\$285,822	\$238,041	\$47,781	83.3%	95.4%	40,138	119.0%
2008	317,140	262,817	54,323	82.9	83.5	42,996	126.3
2009	352,610	283,880	68,730	80.5	58.7	45,516	151.0
2010	373,670	307,056	66,614	82.2	64.7	45,643	145.9
2011	403,626	331,603	72,023	82.2	73.6	44,058	163.5
2012	429,718	355,015	74,703	82.6	69.5	42,612	175.3
2013	457,271	338,082	119,189	73.9*	73.9*	41,383	288.0
2014	501,785	395,729	106,056	78.9	78.9	41,014	258.5
2015	530,414	400,797	129,617	75.6	75.6	40,318	321.5
2016	561,743	398,312	163,432	70.9	70.9	41,688	392.0
2017	604,467	438,683	165,784	72.6	72.6	43,504	381.1

(*) Beginning with the June 30, 2013 actuarial valuation, the actuarial value of assets equals the market value of assets pursuant to CalPERS' Direct Rate Smoothing Policy.

Source: CalPERS actuarial valuation for June 30, 2012 and June 30, 2013 data is taken from annual valuation report dated October 2014. CalPERS actuarial valuations through June 30, 2014 data is taken from annual valuation report dated October 2015. CalPERS actuarial valuations through June 30, 2015 data is taken from annual valuation report dated August 2016. CalPERS actuarial valuations through June 30, 2016 data is taken from annual valuation report dated July 2017. CalPERS actuarial valuation through June 30, 2017 data is taken from annual valuation report dated July 2018

TABLE A-14
FPRS
(In thousands)

Valuation Date (June 30)	Actuarial Accrued Liability (AAL) – Entry Age	Actuarial Asset Value	(Overfunded) Unfunded AAL	Funded Ratio	Annual Covered Payroll	(Overfunded) Unfunded AAL as a % of Covered Payroll
2007	\$183,046	\$131,137	\$51,909	71.6%	146	35.6%
2008	178,748	131,321	47,427	73.5	179	26.5
2009	177,803	119,551	58,252	67.2	-	N/A
2010	166,096	109,740	56,356	66.1	-	N/A
2011	179,284	105,811	73,473	59.0	-	N/A
2012	174,249	136,272	39,977	78.2	-	N/A
2013	168,781	127,985	40,796	75.8	-	N/A
2014	159,516	130,183	29,333	81.6	-	N/A
2015	162,154	129,984	32,170	80.2	-	N/A
2016	155,824	125,479	30,345	80.5	-	N/A
2017	148,454	122,433	26,021	82.5	-	N/A

Source: FPRS actuarial valuations through June 30, 2017.

Post-Retirement Medical Benefits (OPEB)

The City provides a subsidy to retirees of the City who are members of CalPERS or FPRS. Two different levels of subsidy toward the purchase of medical insurance from CalPERS under the Public Employees' Medical and Hospital Care Act (PEMHCA) are offered. Benefit provisions are established and amended through negotiations between the City and the respective unions.

The City's current contribution requirements have been established at the individual retiree levels of \$133.00 or \$79.80 per month depending on bargaining unit membership and policy enacted by CalPERS pursuant to State law. These minimum requirements are established by CalPERS and adjusted annually. The prior contribution requirements were \$128.00 or \$70.40 per month depending on the bargaining unit or the unrepresented group of which the employee was a member. The City has historically funded these post-retirement health care benefits on a "pay-as-you-go" basis. For fiscal year 2016-17, the City's actual contributions totaled \$1,783,035 (representing 31.75% of the annual other post-employment benefit ("OPEB") cost (expense)). The City's annual OPEB cost (expense) is calculated based on the ARC of the employer, an amount actuarially determined in accordance with the parameters of GASB Statement 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and to amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years. From June 30, 2015 through June 30, 2017, the City's unfunded actuarial accrued OPEB liability has grown from \$28,619,000 to \$57,018,667. See Note 19 to the City's comprehensive annual financial report, attached hereto as APPENDIX B – "CITY OF PASADENA CALIFORNIA AUDITED FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED JUNE 30, 2017."

Other than the pension benefits from the applicable retirement system and as described in this section, the City does not provide medical or other post-retirement benefits to its employees.

Insurance

The City funds a self-insured and self-administered program for workers' compensation claims exposures and general liability claims. Liability claims, losses and expenses paid averaged about \$1,488,281 per year for the past 10 years and, when existing "reserves" are added, averaged around \$1,789,991 in liability exposure per year over the past 10 years. The City anticipates these expenses annually and includes funding for them in its operating budget. The City carries excess liability coverage, with limits of \$25 million, with a self-insured retention of \$3 million dollars. The amount of self-insured liability claim expenditures and remaining reserves with respect to claims made in each of fiscal years 2008-09 through 2017-18 are reflected in the following table:

TABLE A-15
CITY OF PASADENA
LIABILITY CLAIM EXPENDITURES AND REMAINING RESERVES
Fiscal Years 2008-09 through 2017-18

Fiscal Year⁽¹⁾ Ended June 30,	Loss Paid	Expense Paid	Total Paid	Remaining Reserves for Unpaid Claims⁽¹⁾
2009	\$3,097,196.51	\$471,126.06	\$3,568,322.57	\$1,025,000.00
2010	639,875.83	24,824.15	664,699.98	2,565,000.00
2011	897,720.69	10,282.83	908,003.52	2,111,700.00
2012	2,003,021.32	366,982.82	2,370,004.14	5,295,579.50
2013	166,779.05	---	166,779.05	968,501.00
2014	338,386.96	40,795.50	379,182.46	3,922,731.91
2015	32,609.68	---	32,609.68	1,184,613.16
2016	97,036.00	---	97,036.00	281,494.00
2017	56,606.00	55,435	111,041	264,281
2018				

(1) Reserves reflect fiscal year in which claim occurred. Payments reflect money spent on all claims during a fiscal year.
Source: City of Pasadena, Department of Finance.

The City maintains commercial property insurance on all City-owned buildings of an insurable nature (unless lease agreements require the occupant to carry such insurance) with current basic limits of \$250,000,000, subject to various application sub-limits and deductible. Policy coverage excludes earth movement, including earthquake, nuclear hazard and military action. The City does not currently maintain separate earthquake coverage under another insurance policy. The City maintains boiler & machinery, and equipment breakdown insurance, on specified types of equipment/property, with limits of \$100,000,000 for each policy, subject to variety of applicable sub-limits and deductibles. In addition, the City purchases Property Terrorism/Nuclear, Biological, Chemical, or Radiological Terrorism & Sabotage coverage, along with pollution, storage tank, and cyber liability coverage, with limits of \$1,000,000 for the pollution, storage tank and cyber liability policies, subject to variety of applicable sub-limits and deductibles.

No assurances can be given that the City's security and operational control measures will ensure against any and all cybersecurity threats and attacks. A cybersecurity incident or breach could damage the City's Information Technology systems and cause disruption to City services and operations. The cost of any such disruption or remedying damage caused by future attacks could be substantial. The City will continue to assess cyber threats and protect its data and systems."

Stormwater Improvements

The Clean Water Act ("CWA") regulates the discharges of pollutants into the waters of the United States by establishing quality standards. The CWA requires states to identify "impaired" water bodies and to develop a Total Maximum Daily Load ("TMDL") for each pollutant contributing to impairment. The CWA makes it unlawful to discharge any pollutant into waters protected by the CWA, unless a permit is first obtained. The U.S. Environmental Protection Agency's ("EPA's") National Pollutant Discharge Elimination System ("NPDES") permit program controls these discharges. With respect to the City, the EPA has delegated permitting and direct enforcement under its NPDES program to the Los Angeles Regional Water Quality Control Board ("LARWQCB").

On November 8, 2012, the LARWQCB adopted the National Pollutant Discharge Elimination System Municipal Separate Storm Sewer System Permit ("MS4 permit") Order No. R4-2012-0175, which became effective on December 28, 2012. The MS4 permit establishes the TMDL of pollutants that can be

discharged into water while still meeting water quality standards and objectives. The MS4 covers 84 of the 88 public agencies in the Los Angeles County area, including the City, the Los Angeles County Flood Control District and the County, that are responsible for compliance with the MS4 permit. The City is currently subject to four TMDLs in the Los Angeles River and Los Angeles/Long Beach Harbors. The City is likely to receive more TMDLs in the coming years. The TMDL compliance deadlines spread out through 2037.

The MS4 permit allows for the option to work together to develop and implement an Enhanced Watershed Management Program ("EWMP") to address permit and TMDL requirements. The MS4 permit has safe harbor provisions, whereby the City was deemed in compliance with the TMDLs during the development of the EWMP, provided that all requirements and deadlines related to the EWMP development were met. As the EWMP crosses multiple local jurisdictions, the City collaborated with other participating agencies on the development of the EWMP. In June 2015, the EWMP was submitted in accordance with the required schedule, and it was approved by the LARWQCB on April 20, 2016.

Non-compliance with the MS4 permit and applicable TMDLs could result in enforcement action by the LARWQCB, civil penalties and fines, and potentially third-party lawsuits. For example, the LARWQCB may levy administrative fines of up to \$10,000 per pollutant per day of violation. In addition, the State can impose mandatory minimum penalties of \$3,000 per pollutant per day of violation and seek civil liabilities of up to \$25,000 per pollutant per day. Additionally, private citizens or EPA can pursue penalties if the LARWQCB does not enforce on a violation. The City is responsible for its own fines, penalties and costs incurred as a result of non-compliance.

[The City is currently in substantial compliance with the MS4 permit, but requires significant funding for capital, and operation and maintenance costs to implement the EWMPs to meet the TMDL compliance deadlines contained in the MS4 permit. The City has partially funded the monitoring and reporting programs required by the MS4 permit. The City's share of the costs of the approved EWMP projects required to meet the TMDLs over the next 20 years is preliminarily estimated by the LARWQCB to be approximately \$485 million. Estimating project costs over such a long time period is inherently difficult, and no assurance can be provided by the City that LARWQCB's approved projections are accurate. Without other revenue sources, these costs would be obligations of the City's General Fund and could have a material adverse impact on the General Fund.] **[To be confirmed/Updated]**

[The Fiscal Year 2018-19 Adopted Budget contains \$750,000 for stormwater expenditures. However, at the time of budget preparation some implementation costs were unavailable. Therefore, if a mid-year adjustment to funding were needed, it would be addressed through the City's clean-up report process.]

CITY FINANCIAL INFORMATION

Certain statements included or incorporated by reference in the discussion below, as well as in the statements under the City's pension systems disclosure above, constitute "forward-looking statements." Such statements are generally identifiable by the terminology used such as "plan," "expect," "estimate," "budget," "project," "projection" 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 described to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. 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.

Budget Preparation and Approval Process

No later than January of each year, the Mayor must present a thematic budget message for the upcoming fiscal year to the City Council and the community. The City Council must establish procedures whereby public suggestions and comments on the Mayor's budget proposals may be received and considered prior to the preparation and submission of budget requests by the City Departments to the City Manager.

On or before the third Monday in May of each year, the City Manager must submit to the City Council the recommended balanced budget for the following fiscal year, as required by the City Charter. Also at this time, a public hearing is opened for residents and businesses to make any comments or suggestions regarding the recommended budget. Copies of the recommended budget are available for inspection by the public in the office of the City Clerk and at the City's libraries at least ten days prior to the hearing. The recommended budget can also be found on the City's website at <http://www.cityofpasadena.net/Finance/Budget/>. Such website is not incorporated herein by reference.

At the conclusion of the public hearing, the City Council further considers the recommended budget and makes any revisions. On or before June 30, the City Council adopts a balanced budget with revisions, if any, by the affirmative vote of at least five members of the City Council.

From the effective date of the budget, funds become appropriated to City Departments for the objects and purposes named. At any subsequent City Council meeting following the adoption of the budget, the City Council may amend or supplement the budget by motion adopted by the affirmative vote of a minimum of five members of the City Council.

The Director of Finance prepares the City's financial statements and submits them to the City Council within four months after the close of each fiscal year. The City Council employs an independent certified public accounting firm to review the City's financial statements for conformity with generally accepted accounting principles for municipal governments and issues an opinion letter regarding the accuracy and fairness of the financial information presented in the City's Comprehensive Annual Financial Report.

Budgetary Principles and Developments

Budgetary Principles and Policies. In preparing the City's budget, City staff is guided by certain principles and goals set by the City Council. Among them, staff is directed to match revenues with expenditures when developing a balanced operating budget, and minimize reliance on "carry-forward" fund balances from previous years to fund expenditures in future years.

General Fund Five Year Financial Plan. The City's five-year financial plan is an ongoing plan and is continually reviewed based on an analysis of current trends. The City's fiscal situation has improved since the recession and the City has shown signs of economic growth, including increases in retail sales activity, more tourism and business travel activity, lower unemployment rates, and improvement in residential and commercial real estate markets. A summary of the most recent five-year plan is provided in the table below.

In preparing its financial forecasts for the five-year plan, City staff made a variety of assumptions, including, among others:

1. Continued modest revenue growth, including average growth in property tax revenues, sales tax revenues, utility user tax revenue and transit and occupancy revenues of approximately 3.7%, 2.1%, 0% and 3.2%, respectively. In July 2018 the City Council voted to place a three-quarters cent sales tax increase on the November 2018 ballot. The

projections do not include the impact of the potential passage of the measure. See "Tax Revenues Sources" below.

2. Transfers from the Power Fund to the General Fund of 10% of the prior year's gross income for fiscal year [2018-19] and then 10% through fiscal year 2023-24.
3. The continuance of "pay-as-you-go" cost contributions for OPEB in fiscal years [2018-19, 2019-20 and 2020-21].
4. CalPERS contributions as shown on the most recent CalPERS actuarial valuation report and based on CalPERS' projections. (See "THE CITY OF PASADENA - Retirement Systems—California Public Employees' Retirement System" above).

The table below shows estimated operating projections for the five-year forecast period based upon actions previously taken and those adopted in the 2018-19 Adopted Budget. The five-year financial forecast presentation differs from the City's presentation of its financial results; among other differences, it is calculated on a cash basis and line items will not correspond to audited financial or budget presentations. The City's financial forecast is reviewed monthly and updated no less often than quarterly. It was last updated as of [July 2018].

There can be no assurance that assumptions described above not yet realized will be realized. Accordingly, there can be no assurance that the City's financial forecasts as shown in the table below will correspond with its actual financial results.

General Fund Five-Year Financial Plan

	FY 2019 Revised Budget	FY 2020 Forecast	FY 2021 Forecast	FY 2022 Forecast	FY 2023 Forecast	FY 2024 Forecast
Beginning Amount Available for Appropriations	\$5,023,462	\$5,154,066	\$2,743,195	\$(5,111,278)	\$(14,679,326)	\$(25,661,926)
REVENUES						
Property Taxes	82,528,000	85,598,042	88,756,609	92,013,977	95,372,487	98,233,662
Sales Tax	34,976,400	35,780,857	36,496,474	37,226,404	37,970,932	38,730,351
Utility User Tax	27,845,500	27,845,500	27,845,500	27,845,500	27,845,500	27,845,500
Transient Occupancy Tax	17,544,200	18,605,614	19,200,994	19,815,426	20,449,519	21,103,904
Franchise Taxes	2,792,000	2,819,920	2,848,119	2,876,600	2,905,366	2,934,420
Other Taxes	17,050,000	17,680,850	18,335,041	19,013,438	19,716,935	20,446,462
Total Taxes	182,736,100	188,330,783	193,482,738	198,791,345	204,260,740	209,294,298
Licenses & Permits	4,501,927	4,636,985	4,776,094	4,919,377	5,066,959	5,218,967
Intergovernmental Revenues	2,378,137	2,203,667	2,225,704	2,247,961	2,270,441	2,293,145
Charges for Services	24,778,652	25,398,119	26,033,072	26,683,898	27,350,996	28,034,771
Fines & Forfeitures	7,645,486	7,867,205	8,095,354	8,330,119	8,571,693	8,820,272
Investment/Interest Earnings	1,471,145	1,484,385	1,497,745	1,511,224	1,524,825	1,538,549
Rental Income	645,015	671,355	672,698	674,043	675,391	676,742
Miscellaneous	1,817,325	1,822,795	1,853,782	1,885,296	1,917,346	1,949,941
TOTAL REVENUES	225,973,787	232,415,294	238,637,187	245,043,265	251,638,391	257,826,686
EXPENDITURES						
Personnel	159,149,773	168,529,942	179,059,086	186,408,736	193,158,150	199,551,811
Services & Supplies	38,254,907	38,995,525	39,775,436	40,570,944	41,382,363	42,210,011
Equipment	98,000	99,960	101,959	103,998	106,078	108,200
Internal Services	21,399,101	22,332,025	23,225,306	24,154,319	25,120,491	26,125,311
TOTAL EXPENDITURES	218,901,781	229,957,453	242,161,788	251,237,997	259,767,083	267,995,333
EXCESS REVENUES OVER (EXPENSES)	7,072,006	2,457,841	(3,524,600)	(6,194,732)	(8,128,692)	(10,168,647)
OPERATING TRANSFER (IN / (OUT))						
Debt Service	(13,598,271)	(11,746,265)	(11,740,819)	(11,474,167)	(11,724,283)	(11,723,798)
Contributions to Other Funds/Misc	(15,171,653)	(13,779,686)	(14,055,280)	(14,336,385)	(14,623,113)	(14,915,575)
Abatements for Svcs to Other Funds	639,401	639,401	639,401	639,401	639,401	639,401
Enterprise Contributions	19,569,121	20,017,838	20,826,825	21,797,836	22,854,087	22,854,087
NET OPERATING TRANSFER (IN / (OUT))	(8,561,402)	(4,868,712)	(4,329,873)	(3,373,315)	(2,853,908)	(3,145,885)
OPERATING INCOME/(LOSS)	(1,489,396)	(2,410,871)	(7,854,473)	(9,568,048)	(10,982,600)	(13,314,532)
Ending Amount Available for Appropriations	3,534,066	2,743,195	(5,111,278)	(14,679,326)	(25,661,926)	(38,976,459)
Allocation to Assigned Fund Balance	400,000					
Allocation to Policy Reserve		(1,961,365)	(2,494,896)	(1,818,133)	(1,813,186)	(1,704,045)
NET INCOME/(LOSS)	(1,089,396)	(4,372,236)	(10,349,370)	(11,386,180)	(12,795,786)	(15,018,578)

Source: City of Pasadena, Department of Finance.

General Fund Reserve Policy. Beginning in fiscal year 2010-11, the City instituted a policy to maintain an operating reserve within its General Fund which is targeted at 10% of the current year's appropriations. On August 15, 2011, the City Council approved an increase in the operating reserve commitment to a target of 20% of the General Fund annual appropriations. The policy permits the City to take steps annually, starting in fiscal year 2014-15, to reach this goal by increasing the commitment by up to 2% per year over the course of five years, based on each year's budget resolution, and also permits the City to commit to an increase of less than 2% by formal action. On June 12, 2017 the City Council

approved an amendment bifurcating the 20% reserve in to two-parts: General Fund Emergency Contingency of 15% and General Fund Operating Reserve of 5%. The split would allow the City Council to allocate some or all of the General Fund Operating Reserve without having to declare a fiscal emergency for one-time needs. The General Fund Operating Reserve of June 30, 2018 was approximately \$84.8 million, representing approximately 34.5% of budgeted General Fund appropriations for fiscal year 2018-19. Under current City policy, only under emergency conditions does the City use either of these operating reserves. Cash reserves may be in the form of cash or other legal investments and do not refer to any other form of current or long-term assets, such as receivables, inventory, equipment, etc.

Set forth below is a summary of the condition of the City's General Fund reserve for the past five years.

**TABLE A-17
GENERAL FUND RESERVES
FOR FISCAL YEARS 2013-14 THROUGH 2017-18**

	2014	2015	2016	2017	2018 (unaudited)
Nonspendable	\$ 8,351,508	\$ 8,620,189	\$ 1,107,611	\$ 11,107,972	\$ 4,510,352
Committed	34,868,425	30,951,483	33,451,483	47,563,000	46,949,000
Restricted	--	400,000	400,000	400,000	400,000
Assigned	5,042,986	11,086,848	17,227,006	26,824,736	20,000,000
Unassigned	15,014,593	12,140,043	26,266,804	3,832,608	13,037,297
Total Fund Balance ⁽¹⁾	\$ 63,277,512	\$ 63,198,563	\$ 78,452,904	\$89,728,315	\$84,897,049

⁽¹⁾ Excludes balance in SB481 Fund. See "THE CITY OF PASADENA – Retirement Systems."

Source: City of Pasadena, Department of Finance

Capital Budgeting. The City prepares a 5-year capital improvement program ("CIP") budget, which is adopted yearly as part of the budget process. The CIP includes projects that have no funding sources. The most current 5-year CIP budget includes approximately \$1.295 billion, including all enterprise funds (Water & Power, Rose Bowl, and Pasadena Conference Operational Center), in total estimated project cost for 205 active projects. In fiscal year 2018-19, \$83.4 million was appropriated to 97 projects. Implementation of the CIP is discretionary and will depend upon City resources. The City does not intend to issue general fund indebtedness in the near future to fund the CIP.

Adopted General Fund Budgets for Fiscal Years 2017-18 and 2018-19

The budget preparation process for fiscal year 2018-19 began in November 2017. In March and April 2018, the City Manager and the Department of Finance met with each department and operating company to review their estimated revenues, expenditures and budgetary requests for the upcoming fiscal year. Projected expenditures and revenues, managed savings, vacant positions, reorganizations, performance measures, performance targets, results statements, mission statements and new program requests were discussed at these meetings. Upon completion of the City Manager's review, the City Manager submitted the recommended operating budget to the City Council and a public hearing was opened from which to obtain comments from the City's residents and other stakeholders.

The City Council adopted the budget for fiscal year 2018-19 on June 18, 2018. The General Fund portion of the appropriation budget for fiscal year 2018-19 is \$246.1 million.

Set forth below is the City's General Fund budget for fiscal year 2017-18, including the budget as final, the actual budget results (based upon unaudited results) and the variance for said fiscal year.

TABLE A-18
GENERAL FUND
SCHEDULE OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCE
BUDGET AND UNAUDITED ACTUALS FOR FISCAL YEAR 2017-18

	Fiscal Year 2017-18		
	Budget	Unaudited Actual (To be updated)	Variance
Revenues			
Taxes	\$ 162,002,709	\$ 158,951,338	\$ 9,374,138
Licenses and permits	3,958,207	4,735,235	1,095,701
Intergovernmental revenues	19,228,729	17,416,007	(2,117,177)
Charges for services	29,405,222	37,640,927	5,041,479
Fines and forfeits	7,011,994	7,802,159	661,459
Investment earnings	1,644,960	943,002	(1,536,214)
Rental income	730,395	1,042,795	(146,705)
Miscellaneous revenues	2,884,239	6,964,213	97,189
Contributions	27,620	27,620	-
Total Revenues	\$ 226,894,075	\$ 235,523,296	\$ 12,469,870
Expenditures			
General Government	\$ 38,245,242	\$ 36,311,747	\$ 1,208,511
Public safety	122,953,138	118,018,925	196,540
Transportation	31,939,434	28,012,372	2,357,082
Culture and leisure	21,006,746	19,990,400	200,406
Community development: Planning and Permitting	8,651,660	8,051,483	516,838
Total Expenditures	\$ 222,796,220	\$ 210,384,927	\$ 4,479,377
Excess of revenues over expenditures	\$ 4,097,855	\$ 25,138,369	\$ 16,949,247
Other financing sources (uses)			
Transfer in	\$ 34,995,080	\$ 19,666,230	\$ (564,899)
Transfer out	(49,077,431)	(33,529,188)	(540,214)
Total other financing sources (uses)	\$ (14,082,351)	\$ (13,862,958)	\$ (1,105,113)
Extraordinary gain(loss)			
Change in fund balances	\$ (9,984,496)	\$ 11,275,411	\$ 15,844,134
Fund balance at beginning of year	\$ 89,728,315	\$ 78,452,904	-
Fund balance at end of year	\$ 79,743,819	\$ 89,728,315	\$ 15,844,134

Source: City of Pasadena Comprehensive Annual Financial Report for Year Ended June 30, 2018.

Set forth below are the City's final General Fund budget for fiscal year 2017-18 and the adopted General Fund budget for fiscal year 2018-19.

TABLE A-19
GENERAL FUND
SCHEDULE OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCE
ADOPTED BUDGET FOR FISCAL YEARS 2017-18 AND 2018-19

	Fiscal Year 2017-18 Adopted	Fiscal Year 2018-19 Adopted
Revenues		
Taxes	\$ 162,002,709	\$ 165,076,100
Building Licenses & Permits	628,943	850,000
Non-building Licenses & Permits	3,279,264	3,651,927
Federal Grants Direct	0	0
Federal Grants Indirect-State	0	0
State Non-Grant Direct	16,933,646	18,239,246
State Grant Direct	416,576	1,228,336
Intergovernmental-Local	350,000	374,267
Charges for Services	11,715,757	12,294,572
Charges for Services Quasi-External	12,150,304	12,484,080
Fines & Forfeitures	7,011,944	7,645,486
Investment Earnings	897,300	1,271,145
Rental Income	705,395	645,015
Miscellaneous Revenues	1,469,296	1,817,325
Total Revenues	\$ 217,561,184	\$ 225,577,499
Expenditures		
General Government	\$ 31,210,515	\$ 32,864,072
Public Safety	116,308,564	125,168,639
Transportation	41,560,315	42,180,179
Culture & Leisure	10,951,599	10,966,401
Community Development	7,684,167	7,705,559
Total Expenditures	\$ 207,715,160	\$ 218,884,850
Excess of Revenues over Expenditures	\$ 9,846,024	\$ 6,692,649
Other Financing Sources (uses)		
Transfer In	\$ 19,261,216	\$ 20,208,522
Transfer Out	(29,032,023)	(27,175,567)
Total Other Financing Sources (uses)	\$ (9,770,807)	\$ (6,967,045)
Change in Fund Balance	\$ 75,217	\$ (274,396)

Source: City of Pasadena Adopted Budgets for fiscal years 2017-18 and 2018-19.

General Fund Comparative Operating Budget

The following table shows a three-year history of the City's Comparative Operating Budget.

TABLE A-20
CITY OF PASADENA
ADOPTED GENERAL FUND
COMPARATIVE OPERATING BUDGET
FOR FISCAL YEARS 2016-17 THROUGH 2018-19

REQUIREMENTS	2016-17	2017-18	2018-19
Operating Expenditures	\$ 209,021,396	\$ 207,705,067	\$ 218,875,493
Capital Expenditures			
Debt Service	13,807,988	14,492,861	13,598,271
Transfers Out	14,985,889	14,549,254	13,586,653
TOTAL REQUIREMENTS	\$ 237,815,273	\$ 236,747,182	\$ 246,060,417
 AVAILABLE FUNDS			
Revenues	\$ 217,626,281	\$ 217,561,184	\$ 225,683,840
Transfers In	533,060	533,060	533,060
Reserves	-	-	-
Utility Contributions	19,678,604	18,728,156	19,569,121
TOTAL AVAILABLE FUNDS	\$ 237,837,945	\$ 236,822,400	\$ 245,786,021

Source: City of Pasadena, Department of Finance.

Water and Power Enterprise Fund Transfers to General Fund

Pursuant to City Charter Sections 1407 and 1408, the City makes annual transfers from the City's Water Fund (the "Water Fund") and from the City's Light and Power Fund (the "Light and Power Fund") to the General Fund. The amount transferred from the Water Fund is not to exceed 6% of gross income received during the preceding fiscal year and shall not exceed net income. This transfer may be used for any municipal purpose. The amount transferred from the Light and Power Fund is not to exceed 16% of gross income received during the preceding fiscal year and shall not exceed net income. Of the total 16% which may be transferred, up to 8% may be used for any municipal purpose and the remaining 8% is restricted for municipal improvements and bond redemption.

Set forth below is a table indicating the amount transferred from the Light and Power Fund and the Water Fund to the City's General Fund during each of the last five fiscal years and the amount budgeted for the current fiscal year, expressed in dollars and as a percentage of the prior year's gross income.

TABLE A-21
CITY OF PASADENA
TRANSFERS FROM THE LIGHT AND POWER FUND AND WATER FUND
TO GENERAL FUND
FISCAL YEARS 2013-14 THROUGH 2018-19
(DOLLAR AMOUNTS IN THOUSANDS)

	Fiscal Year Ended June 30,					
	2014	2015	2016	2017	2018	2019 ⁽²⁾
Light and Power Fund						
Amount Transferred	\$14,544	\$15,975	\$17,185	17,371	16,847	17,827
Amount as Percentage of Prior Year's Gross Income ⁽¹⁾	9.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Water Fund						
Amount Transferred	\$3,403	\$1,544 ⁽³⁾	\$1,544	\$1,544	\$1,574	\$1,544
As a Percentage of Prior Year's Gross Income ⁽¹⁾	6.0%	NA	NA	NA	NA	NA

(1) Reflects percentage of prior fiscal year's gross revenue of the Water Fund and the Light and Power Fund, respectively.

(2) Budget.

(3) Decrease in fiscal year 2014-15 is due to new methodology outlined under the terms of the *Rooney* case discussed below.

Source: City of Pasadena, Department of Finance.

In *Rooney v. City of Pasadena*, Los Angeles Superior Court case no. BS145352, the City was sued in a Proposition 218 lawsuit challenging its annual, Charter-authorized transfer from its Water Fund to the General Fund, which lawsuit claimed the transfer violated Proposition 218 by exceeding the cost-of-service. In fiscal year 2013-14, the transfer amounted to approximately \$3.4 million (see Table A-21 above). During 2014, the City obtained a cost-of-service study that found that approximately \$1.5 million of General Fund costs were incurred for the benefit of the Water Fund. Later in 2014, the City settled the *Rooney* lawsuit on three general terms. First, the City agreed to transfer from the General Fund to the Water Fund a total of \$7.2 million (inclusive of attorney's fees) as follows: \$1 million for each of the first five years, commencing in fiscal year 2014-15, and \$1.1 million for each of the last two years, commencing in fiscal year 2019-20, to account for transfers allegedly exceeding the cost-of-service made during fiscal years 2010-11 through 2013-14. Second, the City agreed to limit its annual transfer from the Water Fund to the General Fund to only that amount justified by the cost-of-service. Finally, the plaintiffs agreed not to file suit to challenge future transfers the City makes from the Water Fund to the General Fund, so long as the transfers are consistent with the methodology outlined in the 2014 cost-of-service study.

Proposition 26, adopted by voters in November 2010, added additional State constitutional restrictions to the City's ability to charge fees. For a discussion of Proposition 26's potential impact on the transfers from the Light and Power Fund and the Water Fund to the City's General Fund, see "CONSTITUTIONAL AND STATUTORY LIMITATIONS AFFECTING CITY REVENUES AND APPROPRIATIONS – Articles XIII C and XIII D of the State Constitution – Proposition 218 and Proposition 26 – Lawsuit Challenging Annual Charter-Authorized Light & Power Fund Transfer."

Tax Revenue Sources

The City relies on a number of revenue sources that could be reduced or eliminated by State legislation, including, among others, sales and use taxes, property taxes and motor vehicle license fees.

The State has in prior years experienced budgetary difficulties and has balanced its budget by requiring local political subdivisions, including the City, to fund certain costs previously borne by the State. For example, on March 2, 2004, California voters approved Proposition 57, a bond act authorizing

the issuance of up to \$15.0 billion of economic recovery bonds to fund the accumulated State budget deficit. These bonds, which were fully repaid in fiscal year 2015-16, were secured by a pledge of revenues from an increase in the State's share of the sales and use tax of one-quarter cent. The share of the tax allocated to local governments was reduced by the same amount and, in exchange, local governments received an increased share of the local property tax (and K-12 school districts and community colleges receive a reduced share) until the economic recovery bonds were repaid. All education agency property tax reductions were offset by increased State aid. This shift in revenues between the State and local governments was known as the "Triple Flip." The Triple Flip was terminated following the repayment of the economic recovery bonds in 2016. As a result of a separate action, the State now supplements the City's property tax by an amount intended to backfill a portion of motor vehicle license fees ("VLF") lost as a result of the State's reduction in the fee's rate. These various reallocations have affected the timing of the receipt of the impacted revenues.

Constitutional amendment Proposition 1A, passed by statewide voters in 2004, and Proposition 22 passed by voters in 2010, limit the State's future ability to divert or borrow these revenues in the future. See "CONSTITUTIONAL AND STATUTORY LIMITATIONS AFFECTING CITY REVENUES AND APPROPRIATIONS."

[In July 2018 the City Council voted to place a three-quarters cent sales tax increase on the November 2018 ballot. If the measure passes, the City's sales tax would increase from 9.50% to 10.25%. It is estimated that the measure could generate \$21 million in additional annual revenue to fund City services. The measure would be accompanied by an "advisory" ballot measure that would pass along one-third of the revenues from the sales tax increase to the Pasadena Unified School District. The City's projections do not include the impact of the potential passage of the measure.]

Listed below is a historical summary of the City's five largest revenue sources resulting from taxes.

TABLE A-22
CITY OF PASADENA
GENERAL TAX REVENUES
Fiscal Years 2013-14 through 2017-18
(in Thousands)

<u>Tax</u>	Fiscal Year Ended June 30,				2018
	2014	2015	2016	2017	(Unaudited)
Property ⁽¹⁾	\$ 44,066	\$ 56,446	\$59,141	\$68,752	\$64,392
Sales	33,198	33,706	36,855	35,708	35,076
Utility Users	28,893	29,316	28,099	28,251	27,775
Street Light & Traffic Signal	6,610	7,184	5,679	6,854	7,044
Transient Occupancy	12,043	13,165	14,864	15,229	15,814
Total	<u>\$124,810</u>	<u>\$139,817</u>	<u>\$144,638</u>	<u>\$154,794</u>	<u>\$150,101</u>

⁽¹⁾ Includes assessments.

Source: City of Pasadena, Department of Finance.

Property taxes are levied for each fiscal year on taxable real and personal property which is situated in the City as of the preceding March 1. For assessment and collection purposes, property is classified either as "secured" or "unsecured" and is listed accordingly on separate parts of the assessment roll. The "secured roll" is that part of the assessment roll containing State-assessed public utilities property and

property a lien on which is sufficient, in the opinion of the County Assessor, to secure payment of the taxes. Other property is assessed on the "unsecured roll."

Property taxes on the secured roll are due in two installments, on November 1 and February 1 of the fiscal year. If unpaid, such taxes become delinquent on December 10 and April 10, respectively, and a 10% penalty attaches to any delinquent payment. If such taxes remain unpaid as of June 30 of the fiscal year in which the tax is levied, the property securing the taxes may only be redeemed by payment of the delinquent payment, plus a redemption penalty of 1½% per month from the original June 30 date to the time of redemption. If taxes are unpaid for a period of five years or more, the property is then subject to sale by the County Treasurer and Tax Collector, as provided by law.

Property taxes on the unsecured roll are due as of the March 1 lien date and become delinquent, if unpaid, on August 31. A 10% penalty attaches to delinquent taxes on property of the unsecured roll, and an additional penalty of 1½% per month begins to accrue commencing on November 11 of the fiscal year. Collection of delinquent unsecured taxes is the responsibility of the County of Los Angeles which may utilize any of several means legally available to it.

The tax roll for fiscal year 2017-18 reflected a total assessed valuation of approximately \$29 billion for the City. Assessed net valuation for revenue purposes increased by approximately 8% for fiscal year 2017-18 over the assessed net valuation for fiscal year 2016-17, and the compounded average annual increase between assessed valuation for fiscal year 2008-09 and fiscal year 2017-18 was approximately 6%.

In 2011, the State of California enacted legislation commonly referred to as "ABx1 26," which required the dissolution of California redevelopment agencies and the dissolution and winding up of the operations of those agencies. The original effective date of ABx1 26 was stayed pending a challenge to its constitutionality brought before the California Supreme Court. In upholding ABx1 26 as constitutional on December 29, 2011, the California Supreme Court set February 1, 2012 as the effective date for and the date on which California redevelopment agencies were dissolved pursuant to ABx1 26. ABx1 26 provided a framework for the dissolution and winding up of California redevelopment agencies and the management of the remaining obligations of the dissolved redevelopment agencies by their respective successor agencies and oversight boards to oversee those successor agencies. Pursuant to ABx1 26, tax increment will continue to flow to the payment of "enforceable obligations" (such as tax allocation bonds) of the dissolved redevelopment agencies. See "THE CITY OF PASADENA—Retirement Systems—Pasadena Fire and Police Retirement System—SB 481 Litigation."

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TABLE A-23
CITY OF PASADENA
ASSESSED VALUATION OF TAXABLE PROPERTY
Fiscal Years 2009-10 through 2018-19
(\$ in thousands)

Fiscal Year Ended June 30	Secured Valuations	Homeowner Exemption	Net Secured Valuations	Unsecured Valuations	Total Assessed Valuation	Less PCDC⁽¹⁾ Increment	Net Valuation
2010	20,204,880	(138,630)	20,066,250	644,888	20,711,138	(2,828,387)	17,882,751
2011	20,481,388	(138,275)	20,343,113	605,404	20,948,517	(2,829,885)	18,118,632
2012	20,969,532	(137,842)	20,831,690	567,527	21,399,217	(2,988,477)	18,410,740
2013	21,368,295	(136,241)	21,232,054	571,615	21,803,669	-	21,803,699
2014	22,534,203	(134,257)	22,399,945	575,006	22,974,952	-	22,974,951
2015	23,756,525	(131,812)	23,624,713	608,539	24,233,252	-	24,233,252
2016	25,354,224	(130,237)	25,223,987	602,659	25,826,644	-	25,826,646
2017	26,599,121	(128,241)	26,430,880	625,032	27,055,912	-	27,055,912
2018	28,631,957	(126,543)	28,504,414	638,858	29,143,272	-	29,143,272
2019	30,388,232	(124,908)	30,263,324	662,995	30,926,319	-	30,926,319

⁽¹⁾ Pasadena Community Development Commission, the former redevelopment agency for the City.
Source: California Municipal Statistics, Inc.

The City believes that assessed valuation levels will continue growing at a modest rate over the near term given the continued positive employment growth in the area and the number and scope of development projects within the City, including several new hotels, 1,700 residential units, a large-scale mixed use project, and several new commercial and retail developments.

The following two tables reflect the typical property tax rate per \$100 of assessed value in various jurisdictions and the ten largest secured taxpayers in the City.

TABLE A-24
CITY OF PASADENA
PROPERTY TAX RATES
DIRECT AND OVERLAPPING GOVERNMENTS
For Fiscal Years 2008-09 through 2017-18

Fiscal Year ended June 30	General City	City Debt Service*	Los Angeles County General	Pasadena School District	Pasadena Comm. College District	Flood Control District	Metropolitan Water District	Total
2009	0.332800	0.000000	0.363500	0.276500	0.010180	0.000000	0.004300	1.078900
2010	1.000000	0.000000	0.000000	0.108364	0.023002	0.000000	0.004300	1.135666
2011	1.000000	0.000000	0.000000	0.101949	0.019864	0.000000	0.003700	1.125513
2012	1.000000	0.000000	0.000000	0.111200	0.019556	0.000000	0.003700	1.134456
2013	1.000000	0.000000	0.000000	0.114033	0.020556	0.000000	0.003500	1.138089
2014	1.000000	0.000000	0.000000	0.103507	0.018993	0.000000	0.003500	1.126000
2015	1.000000	0.000000	0.000000	0.106010	0.010315	0.000000	0.003500	1.119825
2016	1.000000	0.000000	0.000000	0.111679	0.008722	0.000000	0.003500	1.123901
2017	1.000000	0.000000	0.000000	0.106730	0.008850	0.000000	0.003500	1.119080
2018	1.000000	0.000000	0.000000	0.105469	0.008186	0.000000	0.003500	1.117155

* In 2004, the City paid off its outstanding general obligation debt.
Source: California Municipal Statistics, Inc.

TABLE A-25
CITY OF PASADENA
TOP TEN PROPERTY TAXPAYERS
As of June 30, 2018

Property Owner	Primary Land Use	June 30, 2019 Assessed Valuation	% of Total ⁽¹⁾
CPUS Pasadena LP	Office Building	\$ 266,342,400	0.88%
Kaiser Foundation Health Plan	Medical Buildings	248,118,326	0.82
BPP East Union LLC	Shopping Center	209,120,397	0.69
PPF OFF 100 West Walnut Street LP	Office Building	187,995,319	0.62
PPF OFF 74 North Pasadena Avenue and 75	Office Building	165,144,448	0.54
Pacific Huntington Hotel	Hotel	163,926,247	0.54
Trio Pasadena LLC	Apartments	157,080,000	0.52
Western Asset Plaza LLC	Office Building	156,386,784	0.51
CAPREF Paseo LLC, Lessor	Shopping Center	151,710,138	0.50
Tishman Speyer Archstone Smith	Apartments	150,816,784	0.50
Total principal property taxpayers gross assessed value		<u>\$1,856,640,843</u>	<u>6.12</u>
Total city assessed value		<u>\$30,388,047,431</u>	<u>100.00%</u>

⁽¹⁾ 2018-19 Local Secured Assessed Valuation: \$30,388,047,431.

Source: California Municipal Statistics, Inc.

Accounting Policies, Reports, and Audits

The underlying accounting system of the City is organized and operated on the basis of separate funds, each of which is considered to be a separate accounting entity. The operations of each fund are accounted for with a separate set of self-balancing accounts that comprise its assets, liabilities, fund equity, revenues and expenditures or expenses, as appropriate. Fund accounting segregates funds according to their intended purpose and is used to aid management in demonstrating compliance with finance-related legal and contractual requirements. The minimum number of funds is maintained consistent with legal and contractual requirements.

Capital assets (including infrastructure greater than \$10,000) are capitalized and recorded at cost or at the estimated fair value of the assets at the time of acquisition where complete historical records have not been maintained. Contributed capital assets are valued at their estimated fair market value at the date of the contribution. The costs of normal maintenance and repairs that do not add to the value of the asset or materially extend the asset's life are not capitalized.

Capital assets include public domain (infrastructure) general fixed assets consisting of certain improvements including roads, streets, sidewalks, medians and sewer and storm drains.

The City's funds and capital assets are classified for reporting purpose as follows:

Government Funds

General Fund
Special Revenue Funds
Debt Services Funds
Capital Projects Funds

Fiduciary Funds

Trust and Agency Funds

Proprietary Funds

Enterprise Funds
Internal Service Funds

Capital Assets

Capital Assets used in the Operation
of Governmental Funds

The City follows the modified accrual method of accounting for governmental, expendable trusts and agency funds. Under the modified accrual method of accounting, revenues are susceptible to accrual when they become both measurable and available. Expenditures are recorded when a current liability is incurred. Liabilities are considered current when they are normally expected to be liquidated with expendable available financial resources. The proprietary, nonexpendable trust and pension trust funds are accounted for using the accrual method of accounting.

The City's Director of Finance maintains the accounting system and records of accounts for all City funds. The City Charter requires an independent audit of the financial statements of all accounts of the City by an independent certified public accountant. All audits are reviewed by the Finance Committee of the City Council, which is comprised of four members of the City Council.

In 2015, the City completed an investigation, following an internal audit in November of 2014, which revealed the misappropriation of public funds in excess of \$6.4 million dollars over the course of eleven years.

Based upon the recommendations of KPMG, which was hired to assist the City of Pasadena in an internal investigation into the suspected misappropriation and misuse of City funds, the City instituted all of the 103 corrective actions recommended by KPMG.

General Fund Comparative Financial Statements

The following two tables describe the financial condition of the City's General Fund by showing a five-year history of the City's Comparative Balance Sheet and the City's Statement of Revenues, Expenditures and Changes in Fund Balances.

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TABLE A-26
CITY OF PASADENA
GENERAL FUND
COMPARATIVE BALANCE SHEETS
Fiscal Years 2012-13 through 2016-17

Assets	As of June 30,				
	2013	2014	2015	2016	2017
Cash and investments	\$ 35,468,139	\$ 38,804,030	\$50,988,932	\$54,897,130	\$70,416,142
Accounts receivable	16,036,315	14,500,506	15,474,511	21,219,623	19,080,736
Notes receivable	51,508	51,508	51,508	51,508	-
Due from other funds	4,214,228	5,042,986	5,347,965	5,406,941	4,711,579
Prepays and other assets	25,000	184,923	-	-	109,272
Restricted cash and investment	-	25,000	25,000	25,000	25,000
Advances to other funds	45,919,450	45,919,450	7,136,545 ⁽¹⁾	7,136,545	5,496,011
Advances to component units	1,841,417	1,618,824	1,432,136	1,150,351	903,859
Allowance uncollectible for long term receivables	-	-	-	(51,508)	-
Property held for resale	8,300,000	8,300,000	-	-	-
Total assets	\$111,856,057	\$114,447,227	\$80,456,597	\$93,784,464	\$105,341,429
Liabilities and Fund Balances					
Liabilities:					
Accounts payable and accrued liabilities	\$ 6,811,667	\$ 8,754,174	\$12,423,192	\$9,768,025	\$10,524,012
Deposits	2,279,530	1,756,560	3,902,706	4,401,983	3,886,345
Due to other governments	-	709,314	3,969	3,969	1,964
Advances from other funds	1,100,000	990,000	880,000	770,000	660,000
Total liabilities	\$ 10,191,197	\$ 12,210,048	\$17,209,867	\$14,943,977	\$15,180,264
 Deferred inflow of resources	 \$ 39,718,600	 \$ 38,959,667	 \$ 48,167 ⁽¹⁾	 \$ 387,583	 \$ 432,850
Fund Balances:					
Nonspendable	\$8,351,508	\$ 8,351,508	\$ 8,620,189	\$ 1,107,611	\$ 11,107,972
Restricted	-	-	400,000	400,000	400,000
Committed	37,380,218	34,868,425	30,951,483	33,451,483	47,563,000
Assigned	4,249,148	5,042,986	11,086,848	17,227,006	26,824,736
Unassigned	11,965,386	15,014,593	12,140,043	26,266,804	3,832,607
Total Fund balances	\$ 61,946,260	\$ 63,277,512	\$ 63,198,563	\$ 78,452,904	\$ 89,728,315
 Total liabilities and fund balances	 \$111,856,057	 \$114,447,227	 \$80,456,597	 \$93,784,464	 \$105,341,429

⁽¹⁾ Per City's Auditors recommendation, the City has written off \$39 Million advance related to SB481. See "THE CITY OF PASADENA - Retirement Systems- Pasadena Fire and Police Retirement System- SB 481 Litigation."

Source: City of Pasadena, Department of Finance.

TABLE A-27
CITY OF PASADENA
GENERAL FUND
COMPARATIVE STATEMENT OF REVENUES, EXPENDITURES
AND CHANGES IN FUND BALANCES
Fiscal Years 2012-13 through 2016-17

	Fiscal Year Ended June 30,				
	2013	2014	2015	2016	2017
Revenues:					
Taxes	\$122,014,755	\$128,501,059	\$144,340,761	\$150,707,823	\$158,951,338
Licenses and permits	3,046,516	4,107,361	3,893,689	4,317,626	4,735,235
Intergovernmental revenues	14,709,095	15,248,230	16,655,508	17,981,082	17,416,007
Charges for services	32,475,987	32,642,104	35,750,911	34,699,807	37,640,297
Fines and forfeits	7,452,899	6,768,360	7,328,696	7,377,968	7,802,159
Investment earnings	9,874,106	3,301,390	2,732,825	2,938,186	943,002
Rental income	1,602,381	1,384,077	1,164,906	1,200,454	1,042,795
Miscellaneous revenue	2,644,508	2,721,496	2,913,798	3,662,805	6,964,213
Total revenues	\$193,820,247	\$194,674,077	\$214,781,094	\$222,885,751	\$235,523,296
Expenditures:					
Current:					
General government	\$ 30,945,835	\$ 34,581,118	\$ 43,849,726	\$ 47,923,747	\$ 42,030,280
Public Safety	96,012,393	97,690,524	104,423,027	106,355,091	114,204,909
Transportation	22,804,610	24,783,817	25,354,951	24,682,710	27,249,208
Culture and leisure	14,470,287	16,675,755	17,761,268	18,723,894	19,545,090
Community development	6,808,301	6,686,614	6,605,206	6,607,544	7,355,440
Total expenditures	\$171,041,426	\$180,417,828	\$197,994,178	\$204,292,986	\$210,384,927
Excess (deficiency) of revenues over (under) expenditures	\$ 22,778,821	\$ 14,256,249	\$ 16,786,916	\$ 18,592,765	\$ 25,138,369
Other financing sources (uses):					
Issuance of long-term debt					
Transfers in	\$ 21,783,098	\$ 20,195,112	\$ 18,452,797	\$ 19,576,357	\$ 19,666,230
Transfers out	(42,141,527)	(33,120,109)	(24,412,739)	(34,042,940)	(33,529,188)
Total other financing sources (uses)	\$ (20,358,429)	\$ (12,924,997)	\$ (5,959,942)	\$ (3,338,424)	\$ (13,862,958)
Extraordinary gain (loss)	—	—	—	—	—
Change in fund balances	2,420,392	1,331,252	10,826,974	15,254,341	11,275,411
Fund balances at beginning of year, as restated	59,525,868	61,946,260	52,371,589 ⁽¹⁾	63,198,563	78,452,904
Fund balances at end of year	\$ 61,946,260	\$ 63,277,512	\$ 63,198,563	\$ 78,452,904	\$ 89,728,315

⁽¹⁾ Fund balance at beginning of Fiscal Year 2015 adjusted to account for fixed asset reclassification adjustment of Notes Receivable, sundry projects deposit and a successor agency participation income adjustment.

Source: City of Pasadena, Department of Finance, and City of Pasadena California Comprehensive Annual Financial Report Year Ended June 30, 2017.

Investment Practices

General. The City Treasurer is responsible for investing City funds pursuant to an Investment Policy (the "Investment Policy") established by the City Council.

The Treasurer invests temporarily idle cash for the City as part of a pooled investment program which combines general receipts with special funds for investment purposes. The City's accounting division then allocates interest earnings on a pro rata basis when the interest is earned and distributes interest receipts based on the previously established allocations. All funds of the City, other than bond proceeds, the investment assets of the Commission, the City's Capital Endowment Fund and the Stranded Investment Reserve Fund, are invested pursuant to this pooled investment program. Funds of the Commission are invested pursuant to the Investment Policy, but are kept separate from other City funds. The Treasurer does not invest funds of any other governmental entities as part of its pooled investment program. All bond proceeds are invested in accordance with the permitted investments described in the applicable trust indenture.

Pooled Investment Portfolio. As of June 30, 2018, the funds invested pursuant to the pooled investment program had a market value of \$528,341,165. The City Treasurer prices the pooled portfolio and all other funds and investments under management on a monthly basis. The market values are obtained from Interactive Data Corporation ("IDC") and Bloomberg Financial Systems. The modified duration of the City's Pooled Investment Portfolio as of June 30, 2018 was 1.72 years. Of the investments on that date, approximately 11.77% had maturities of thirty days or less.

The assets of the portfolio as of June 30, 2018 are shown in the following table:

TABLE A-28
CITY OF PASADENA
POOLED INVESTMENT PORTFOLIO
as of June 30, 2018

	Market Value	Percentage of Total ⁽¹⁾
Money Market – Collateralized	\$ 18,641,148	3.54%
Certificates of Deposit	1,000,000	.19
Municipal Bonds	30,424,449	5.78
Corporate Bonds	81,438,202	15.47
Federal Agencies	317,721,104	60.37
US Treasury Securities	17,158,515	3.26
Supranationals	23,626,022	4.49
LAIF	34,046,735	6.47
Cash in Bank	2,255,100	0.43
Total	526,311,275	100.00
Accrued Interest Receivable	2,029,890	
Grand Total	\$528,341,165	

⁽¹⁾ At market value. The Weighted Average Maturity of the above portfolio is 1.42 years.

Source: City of Pasadena, Department of Finance.

The Investment Policy. The City's treasury operations are managed according to the Investment Policy which sets forth permitted investment vehicles, liquidity parameters and maximum maturities. The Investment Policy is reviewed and authorized by the City Council on an annual basis. The City Council

approved the Investment Policy for fiscal year 2018-19 on June 11, 2018. See APPENDIX C – “CITY OF PASADENA STATEMENT OF INVESTMENT POLICY.”

The Investment Policy establishes three primary objectives, in the following order of priority, for the City’s investment activities.

1. *Safety of Principal*. The City will seek to preserve principal by mitigating credit risk and market risk (by structuring the portfolio so that securities mature at the same time as major cash outflows occur and by prohibiting the taking of short positions).

2. *Liquidity*. The City will maintain sufficient liquidity in the investment portfolio to enable the City to meet all operating requirements which might be reasonably anticipated and investments will be authorized only in securities that are actively traded in the secondary market. The City operates its own electric and water utility and bills monthly for these services. The utility billing program generates significant cash flow on a daily basis. Historical cash flow trends are compared to current cash flow requirements on an ongoing basis in an effort to ensure that the City’s investment portfolio will remain sufficiently liquid to enable the City to meet all reasonably anticipated operating requirements.

3. *Return on Investment*. The City will design its investment portfolio to attain a “market average rate of return” through economic cycles and, whenever possible, consistent with risk limitations and prudent investment principles, to augment returns above the market average rate of return.

The City’s cash management system is designed to accurately monitor and forecast expenditures and revenues, thus enabling the City to invest funds to the fullest extent possible. The City attempts to earn the highest yield obtainable while keeping within the investment criteria established by the Investment Policy for the safety and liquidity of public funds.

To meet its short-term cash flow needs, the City typically maintains an average investment balance of about \$40 million in securities with a maturity of 30 days or less.

Authorized Investments. Funds are invested only in those securities authorized by the various sections of the California Government Code and the City’s Investment Policy, which include obligations of the United States Treasury, agencies of the United States Government, local and State bond issues, bankers acceptances, commercial paper of prime quality, certificates of deposit (both collateralized and negotiable), repurchase and reverse repurchase agreements, medium-term corporate bonds, shares of beneficial interest in diversified management companies (mutual funds), and asset-backed (including mortgage-related) and pass-through securities.

The City does not invest funds in any security that could result in a zero interest accrual if held to maturity, and has no investments in derivative products such as interest rate swaps, futures, options or reverse purchase agreements in connection with its investments. The City has entered into interest rate swap agreements in connection with certain of its obligations. The City does not have any investments which are reverse repurchase agreements. A reverse repurchase agreement is a transaction in which a holder of securities, such as the City, sells the same to a third party and agrees to repurchase them at a later date. The proceeds received by the seller can in turn be invested in additional securities, thus producing “leverage.”

The Government Code stipulates that no investments may be made in securities with maturities in excess of five years without express authority from the City’s legislative body. The Government Code and the City’s Investment Policy place various other restrictions on investment in and allocation of funds to various investment categories, including the following:

- The value of bankers acceptances, bills of exchange or time drafts drawn on and accepted by commercial banks may not exceed 40% of the City's portfolio book value as measured on the date of purchase and the days to maturity of such investments may not exceed 180 days.
- Commercial paper must be rated P-1 and issued by U.S. corporations with assets greater than \$500 million and a long-term debenture rating of A or better. The City is not permitted to purchase commercial paper that exceeds 270 days to maturity nor hold more than 10% of a corporation's outstanding commercial paper. The value of the City's holdings of commercial paper may not exceed 15% of the book value of the City's portfolio as measured on the date of purchase.
- The value of the City's holdings of negotiable certificates of deposits may not exceed 30% of the book value of the City's portfolio as measured on the date of purchase.
- The market value of the securities used as collateral for repurchase agreements may not be permitted to fall below 102% of the value of the repurchase agreement. Execution of a PSA Master Repurchase Agreement is required for all repurchase agreements transacted and the maturity of repurchase agreements may not exceed one year.
- The value of the City's reverse repurchase agreement holdings may not exceed 20% of the book value of the City's portfolio as measured on the day of purchase. Reverse repurchase agreements may not exceed 92 days to maturity unless the agreement includes a written guarantee of minimum earnings for the entire period. Term reverse repurchase transactions in excess of 92 days are only permitted if the securities underlying the reverse are matched to the maturities of the reinvestments.
- No more than 25% of the City's investment portfolio may be invested in time deposits.
- Medium-term corporate bonds must be rated in a rating category of "A" or its equivalent or better by a nationally recognized rating service. The value of the City's holdings of medium-term corporate bonds is limited to 30% of the City's portfolio book value as measured on the date of purchase and no more than 5% of the cost value may be invested in bonds held by one corporation.
- The value of the City's mutual fund holdings may not exceed 20% of the City's portfolio book value as measured on the date of purchase.
- Any eligible mortgage pass-through security, collateralized mortgage obligation, mortgage-backed or other pay-through bond, equipment lease-backed certificate, consumer receivable pass-through certificate or consumer receivable-backed bond must be issued by an issuer having an "A" or higher rating for the issuer's debt as provided by a nationally recognized rating service and rated in a rating category of "AA" or its equivalent or better by a nationally recognized rating service. In addition, purchases of such securities may not exceed 20% of all of the City's surplus funds that may be invested in accordance with the foregoing investment guidelines and restrictions.

None of the moneys on deposit in the City's investment portfolio is currently invested in leveraged products or inverse floating rate bonds. The City has no investments in outside investment pools except for the State's Local Agency Investment Fund (LAIF). The City does not have a practice of lending its portfolio's securities to others in return for a fee, although it is not prohibited from doing so.

STATE OF CALIFORNIA BUDGET INFORMATION

A number of the City's revenues are collected and subvented by the State (such as sales tax and motor-vehicle license fees) or allocated in accordance with State law (most importantly, property taxes). Therefore, State budget decisions can have an impact on City finances. During prior State fiscal crises, the State has often chosen to reallocate a portion of such revenues to assist in its own budget balancing, although Constitutional initiatives passed in 2004 and 2010 limit the State's ability to divert revenues from localities (including the City) in the future.

The State's fiscal year begins on July 1 and ends on June 30. The State Constitution requires the Governor to submit a budget for each fiscal year to the Legislature by the preceding January 10 (the "Governor's Budget"). The Constitution requires the Legislature to pass a budget bill by June 15, after which the Governor has 12 calendar days to either sign or veto the enrolled budget. The Legislature has adopted timely the past four State budgets, although the Legislature has failed to meet the June 15 deadline in prior years. Because more than half of the State's General Fund income is derived generally from the April 15 personal income tax, the Governor submits a "May Revision" to his proposed budget. The Legislature typically waits for the May Revision before making final budget decisions. Once the budget bill has been approved by a majority vote of each house of the Legislature, it is sent to the Governor for signature. Increases in taxes require approval of a two-thirds majority of each house.

The following information concerning the State's budget has been obtained from publicly available information which the City believes to be reliable; however, the City takes no responsibility as to the accuracy or completeness thereof and has not independently verified such information. Information about the State budget is regularly available at various State-maintained websites. Text of the State budget may be found at the State Department of Finance website, www.ebudget.ca.gov. An impartial analysis of the budget is posted by the Office of the Legislative Analyst at www.lao.ca.gov. In addition, various State of California official statements, many of which contain a summary of the current and past State budgets, may be found at the website of the State Treasurer, www.treasurer.ca.gov. The information referred to is prepared by the respective State agency maintaining each website and not by the City, and the City takes no responsibility for the continued accuracy of the Internet addresses or for the accuracy or timeliness of information posted there, and such information is not incorporated herein by these references.

Final 2018-19 State Budget. On June 27, 2018, Governor Brown approved the final 2018-19 State Budget (the "2018-19 Budget"), a \$201.4 billion plan which includes funding of \$97.2 billion (\$56.1 billion General Fund and \$41.1 billion other funds) for K-12 education programs and a \$6.16 billion increase in one-time and ongoing appropriations for K-12 school districts in Fiscal Year 2018-19. The 2018-19 Budget also includes \$500 million in grants for cities to use to address homelessness and anticipates placing the \$2 billion 'No Place Like Home' bond on the November 2018 ballot to accelerate the delivery of housing projects to serve individuals with mental illness. Altogether, the 2018-19 Budget includes \$5 billion related to affordable housing and homelessness, across multiple State departments and programs and increases the value of welfare grants through the CalWORKS program by approximately \$360 million. The 2018-19 Budget also includes \$79 million for programs to help those in the U.S. illegally by funding legal services programs and assistance for young adults who signed up with the Deferred Action for Childhood Arrivals program.

While the State's general fiscal condition has improved since the recession, there can be no assurances that the State will not experience future budget challenges. The City cannot anticipate how any future State budget challenges might impact the revenues or expenditures of the City.

BONDED AND OTHER INDEBTEDNESS

Introduction

The City has issued or caused the issuance of a variety of bonded and other debt obligations as provided for under the State Constitution, judicial interpretation of the State Constitution, State statutes, and its own Charter powers. The following summarizes that indebtedness. The City has never failed to pay principal of or interest on any debt or lease obligation when due.

The Director of Finance serves as the City's debt coordinator. The City Treasurer serves on each financing team, along with other finance staff members. All debt issuance must be approved by the City's Finance Committee and the City Council.

Debt Management Policy

The City has adopted debt management policies to standardize and rationalize the issuance and management of debt by the City. One of the principal objectives of the debt management policies is to maintain the highest possible credit ratings for all categories of short and long term debt that can be achieved without compromising the delivery of basic services by the City.

The City's debt management policy requires the City to develop a multi-year capital improvement program to be considered by the City Council as part of the yearly budget process. The City does not anticipate issuing General Fund indebtedness in the near future.

General Obligation Debt

Under the City Charter, the City may not incur indebtedness by general obligation bonds which would in the aggregate exceed 15% of the total assessed valuation of all the real and personal property within the City subject to assessment for taxation for municipal purposes. In addition, no bonded indebtedness which will constitute a general obligation of the City may be created unless authorized by the affirmative vote of two-thirds of the electorate voting on such proposition at any election at which the question is submitted. Such bonds are secured by an *ad valorem* property tax assessed against the property owners of the City. The City currently has no general obligation debt outstanding.

Long-Term Debt Obligations Payable from the General Fund

As of June 30, 2018, the City had total long-term debt obligations payable from the City's General Fund of approximately \$567 million. Of this total, obligations for general government purposes represented approximately 11%, pension obligation bonds approximately 21% and "self-supporting" obligations related to particular activities (such as parking, conference center and the Rose Bowl) approximately 68%. For the past ten years, the City has made no contribution from its General Fund towards the payment of "self supporting" obligations (which include Authority lease revenue bonds for the Rose Bowl). Further, the City does not expect to make any contribution to the payment of such "self supporting" obligations in the near future.

Fiscal Year ended June 30	Total General Fund Obligations Debt Service (including Self Supporting Obligations)	General Fund Obligations Debt Service (excluding Self Supporting Obligations)
2014	\$35,138,825	\$14,563,071
2015	30,337,777	9,950,419
2016	37,322,592	12,893,713
2017	29,730,339	14,379,150
2018	30,170,087	14,404,105
2019	32,908,869	13,561,914
2020	24,725,887	10,734,662

Source: City of Pasadena, Department of Finance.

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Set forth below is a summary of the City's long-term debt obligations payable from the City's General Fund.

TABLE A-29
LONG TERM OBLIGATIONS PAYABLE FROM CITY GENERAL FUND
AS OF JUNE 30, 2018
(\$ in Thousands)

City Issues	Original Par	Outstanding	Final Maturity	Variable/Fixed Synthetic Fixed (SWAP)	Letter of Credit Expiration Date	Letter of Credit Bank
<u>Pension Obligation Bonds</u>						
2015 AB Taxable Pension Obligation Bonds	\$119,460	\$119,460	2045	Fixed	-	-
Sub-Total Pension Obligation Bonds	\$119,460	\$119,460				
<u>City Leases</u>						
2000 Lease Financing	4,000	381	2020	Fixed	-	-
2008 B Refunding COPs	26,759	3,179	2019	Fixed	-	-
2011 Equip Lease Financing – ARTS Buses	2,073	919	2022	Fixed	-	-
2012 Equip Lease Financing – Helicopter	1,584	128	2018	Fixed	-	-
2012 Equip Lease Financing – 911 System	3,947	319	2018	Fixed	-	-
2013 Equip Lease Financing – Meter Equip	351	36	2018	Fixed	-	-
2015 Equip Lease Financing – Meter Equip	113	58	2020	Fixed	-	-
2015A Certificates of Participation	55,350	54,555	2038	Fixed	-	-
Sub-Total City Leases	\$176,247	\$ 59,575				
<u>Self-Supporting Obligations</u>						
1999 Marriott Garage Lease Financing	2,600	296	2019	Fixed	-	-
2006 A CAB COPs (Conference Center)	27,140	22,228	2023	Fixed	-	-
2008 A COPs (Conference Center)	134,720	134,720	2035	Variable/SWAP(Synthetic Fixed)	[4/16/2018]	[Bank of America]
2008 B Refunding COPs	891	106	2019	Fixed	-	-
2008 Paseo Colorado Taxable Revenue Bonds	28,800	23,400	2038	Variable	9/1/2019	Bank of the West
2010 A PPA Lease Revenue Bonds (Rose Bowl Renovation Project) Tax-BABS	36,808	20,947	2043	Fixed	-	-
2010 B PPA Lease Revenue Bonds (Rose Bowl Renovation Project) Tax-BABS	106,660	106,660	2043	Fixed	-	-
2010 C PPA Lease Revenue Bonds (Rose Bowl Renovation Project) Taxable	5,005	2,440	2020	Fixed	-	-
2010 D PPA Lease Revenue Bonds (Rose Bowl Renovation Project) Tax-RZEDBS	7,400	7,400	2043	Fixed	-	-
2013 A Rose Bowl VRD Lease Revenue Bonds (Tax-Exempt) ⁽¹⁾	11,035	11,035	2042	Variable	-	-
2013 A Rose Bowl VRD Lease Revenue Bonds (Tax-Exempt) – Refunding Portion ⁽¹⁾	23,965	23,865	2042	Variable/SWAP(Synthetic Fixed)	-	-
2013 B Rose Bowl VRD Lease Revenue Bonds (Taxable) ⁽¹⁾	19,065	13,525	2027	Variable	-	-
2016 A Rose Bowl VRD Lease Revenue Bonds (Tax-Exempt)	21,865	21,865	2027	Variable	-	-
Sub-Total Self-Supporting	\$432,139	\$388,518				
Total General Fund Obligations	\$727,846	\$567,553				

⁽¹⁾ To be refunded with the 2018 Lease Revenue Refunding Bonds.
Source: City of Pasadena, Department of Finance.

Revenue Bonds and Certificates of Participation

The City Charter and State law provide for the issuance of revenue bonds, and the execution of installment purchase contracts that support revenue certificates of participation, which are secured by and payable from the revenues generated by various enterprise and special fund operations. Revenue bonds do not represent obligations of the General Fund of the City, nor are they secured by taxes. Revenue bonds and certificates of participation have been issued that are secured by electric and water revenue enterprises. See Note 9 to the City's comprehensive annual financial report, attached hereto as APPENDIX B – "CITY OF PASADENA CALIFORNIA AUDITED FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED JUNE 30, 2017."

Cash-flow Borrowings

In the past ten years, the City has not issued tax and revenue anticipation notes to alleviate short-term cash flow needs that occur early in the fiscal year when taxes and revenues have not yet been received.

Estimated Direct and Overlapping Bonded Debt

The estimated direct and overlapping bonded debt of the City as of August 23, 2018 is shown on the following page.

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TABLE A-30
CITY OF PASADENA
COMPUTATION OF DIRECT AND OVERLAPPING DEBT
As of August 23, 2018

2018-19 Assessed Valuation: \$31,051,227,886

<u>OVERLAPPING TAX AND ASSESSMENT DEBT:</u>	<u>% Applicable ⁽¹⁾</u>	<u>Debt 9/1/18</u>
Metropolitan Water District	1.068%	\$ 647,208
Pasadena Area Community College District	34.778	25,537,485
La Canada Unified School District	0.217	105,642
Pasadena Unified School District	73.592	255,952,976
Los Angeles County Improvement District No. 2658-M	0.987	11,104
Los Angeles County Regional Park and Open Space Assessment District	2.054	545,851
TOTAL OVERLAPPING TAX AND ASSESSMENT DEBT		\$282,800,266

<u>DIRECT AND OVERLAPPING GENERAL FUND DEBT:</u>		
Los Angeles County General Fund Obligations	2.054%	\$ 45,039,277
Los Angeles County Superintendent of Schools Certificates of Participation	2.054	119,704
Los Angeles County Sanitation District Nos. 15, 16 & 17 Certificates of Participation	0.460-58.850	4,387,021
Pasadena Unified School District Certificates of Participation	73.592	613,264
City of Pasadena General Fund Obligations	100	433,172,722
City of Pasadena Pension Obligation Bonds	100	119,460,000
TOTAL GROSS DIRECT AND OVERLAPPING GENERAL FUND DEBT		\$602,791,988
Less: City of Pasadena General Fund Obligations supported by other revenue sources		371,498,499
TOTAL NET DIRECT AND OVERLAPPING GENERAL FUND DEBT		\$231,293,489

<u>OVERLAPPING TAX INCREMENT DEBT (Successor Agency):</u>	100%	\$635,000
GROSS COMBINED TOTAL DEBT		\$886,227,254 ⁽²⁾
NET COMBINED TOTAL DEBT		\$514,728,755

⁽¹⁾ 2017-18 ratios

⁽²⁾ Excludes tax and revenue anticipation notes, enterprise revenue, mortgage revenue and non-bonded capital lease obligations.

Ratios to 2018-19 Assessed Valuation:

Total Overlapping Tax and Assessment Debt	0.91%
Total Gross Direct Debt (\$552,632,722).....	1.78%
Total Net Direct Debt (\$181,134,223).....	0.58%
Gross Combined Total Debt.....	2.85%
Net Combined Total Debt	1.66%

Ratios to Redevelopment Successor Agency Incremental Valuation (\$4,670,123,072):

Total Overlapping Tax Increment Debt	0.01%
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LITIGATION

At all times, including the date of this Official Statement, there are certain other actions, claims, disputes, inquiries and investigations, including those currently in litigation, that arise in the normal course of the City's activities. Such actions could, if determined adversely to the City, affect expenditures by the City, and in some cases, its revenues. Management of the City and the Office of the City Attorney are of the opinion that no pending actions are likely to have a material adverse effect on the City's ability to pay the Base Rental Payments as they become due and payable under the Sublease. See "LITIGATION".
[Update]

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