NEW ISSUE — BOOK ENTRY-ONLY

RATINGS: Moody's: Aa2
S&P: AAA

OFFICIAL STATEMENT DATED OCTOBER 24, 2023

In the opinion of Greenberg Traurig, LLP, Bond Counsel, assuming compliance with certain tax covenants, interest on the Bonds will be excludable from gross income for federal income tax purposes under existing statutes, regulations, rulings and court decisions. Further, interest on the Bonds will not be an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals. Bond Counsel is further of the opinion that assuming interest on the Bonds is so excludable for federal income tax purposes, the interest on the Bonds will be exempt from income taxation under the laws of the State of Arizona. In the case of the alternative minimum tax imposed by Section 55(b)(2) of the Internal Revenue Code of 1986, as amended (the "Code") on applicable corporations (as defined in Section 59(k) of the Code), interest on the Bonds is not excluded from the determination of adjusted financial statement income. See "TAX EXEMPTION" herein for a description of certain other federal tax consequences of ownership of the Bonds.

$381,620,000

CITY OF PHOENIX CIVIC IMPROVEMENT CORPORATION

Junior Lien Wastewater System Revenue Bonds, Series 2023

Dated: Date of Delivery **Due: July 1, as shown on inside front cover**

The principal of and premium, if any, and interest on the Junior Lien Wastewater System Revenue Bonds, Series 2023 (the *"Bonds"*), will be paid by U.S. Bank Trust Company, National Association, as trustee (the "*Trustee*," also referred to herein as the "*Registrar*," and the "*Paying Agent*"). The Bonds will be issued as fully registered bonds in the denominations of $5,000 each or any integral multiple thereof. The Bonds, when issued, will be registered in the name of The Depository Trust Company (*"DTC"*) or its nominee and will be available to purchasers initially only through the book-entry-only system maintained by DTC. So long as the book-entry-only system is maintained, no physical delivery of the Bonds will be made to the ultimate purchasers thereof and all payments of principal of and premium, if any, and interest on the Bonds will be made to such purchasers through DTC. Interest on the Bonds is payable semiannually on January 1 and July 1 of each year, commencing July 1, 2024. The Bonds are being issued pursuant to a Bond Indenture dated as of November 1, 2023, by and between the City of Phoenix Civic Improvement Corporation (the *"Corporation"*) and the Trustee.

The Bonds are subject to redemption prior to maturity as described herein.

The Bonds are special revenue obligations of the Corporation and are payable solely from payments required to be paid by the City of Phoenix, Arizona (the *"City"*) to the Corporation pursuant to the City Purchase Agreement dated as of November 1, 2023 (the *"City Purchase Agreement"*), by and between the City and the Corporation. The obligations of the City to make the payments and any other obligations of the City under the City Purchase Agreement are payable from a pledge of Designated Revenues (as defined herein) received from the City's wastewater system (the *"System"* or the *"Wastewater System"*) and do not constitute a pledge of the full faith and credit or the ad valorem taxing power of the City. The Bonds are issued on a parity basis with certain other outstanding junior lien wastewater system revenue obligations of the City and the Corporation and are junior in priority to current and any future outstanding senior lien wastewater system revenue obligations of the City and the Corporation. See "SECURITY AND SOURCE OF PAYMENT" herein.

This cover page contains only a brief description of the Bonds and the security therefor, and is designed for quick reference only. The cover page is not a summary of all material information with respect to the Bonds, and investors are advised to read the entire Official Statement in order to obtain information essential to making an informed investment decision.

The Bonds are offered when, as and if issued and received by the Underwriters, and subject to the legal opinion of Greenberg Traurig, LLP, Bond Counsel, as to validity and tax exemption. Certain legal matters will be passed upon for the Underwriters by Squire Patton Boggs (US) LLP, Phoenix, Arizona, counsel to the Underwriters. Certain matters will be passed upon for the Corporation by Greenberg Traurig, LLP, special counsel to the Corporation. It is expected that the Bonds will be available for delivery in book-entry-only form through the facilities of DTC on or about November 15, 2023.

Jefferies

Baird **Siebert Williams Shank & Co., LLC**

Academy Securities **Bancroft Capital, LLC**

MATURITY SCHEDULE

CITY OF PHOENIX CIVIC IMPROVEMENT CORPORATION

$381,620,000
Junior Lien Wastewater System Revenue Bonds, Series 2023

Maturity July 1	Principal Amount	Interest Rate	Yield
2028	$11,530,000	5.00%	3.57%
2029	12,105,000	5.00	3.62
2030	12,710,000	5.00	3.69
2031	13,345,000	5.00	3.73
2032	14,015,000	5.00	3.77
2033	14,715,000	5.00	3.77
2034	15,450,000	5.00	3.83*
2035	16,220,000	5.00	3.92*
2036	17,035,000	5.00	4.06*
2037	17,885,000	5.00	4.17*
2038	18,780,000	5.00	4.27*
2039	19,720,000	5.00	4.38*
2040	20,705,000	5.00	4.45*
2041	21,740,000	5.00	4.54*
2042	22,825,000	5.00	4.59*
2043	23,970,000	5.00	4.63*

$108,870,000 5.25% Term Bonds Due July 1, 2047, Yield 4.76%*

* Yield to July 1, 2033, the first optional redemption date.

CITY OF PHOENIX, ARIZONA

CITY OF PHOENIX CIVIC IMPROVEMENT CORPORATION

Michael R. Davis
President and Director

Bruce Covill
Vice President and Director

James H. Lundy
Secretary-Treasurer and Director

Barbara Barone
Director

Rosellen Papp
Director

Marian Yim
Director

CITY OF PHOENIX, ARIZONA
MAYOR AND CITY COUNCIL

Kate Gallego, *Mayor*

Yassamin Ansari, *Vice Mayor*
District 7

Anne O'Brien, *Member*
District 1

Jim Waring, *Member*
District 2

Debra Stark, *Member*
District 3

Laura Pastor, *Member*
District 4

Betty Guardado, *Member*
District 5

Kevin Robinson, *Member*
District 6

Kesha Hodge Washington, *Member*
District 8

ADMINISTRATIVE OFFICIALS

Jeffrey J. Barton
City Manager

Lori Bays
Assistant City Manager

Ginger Spencer
Deputy City Manager

Kathleen Gitkin
Chief Financial Officer

Julie Kriegh
City Attorney

Troy Hayes
Water Services Director

Denise Archibald
City Clerk

SPECIAL SERVICES

MONTAGUE DEROSE & ASSOCIATES, LLC
Westlake Village, CA
Municipal Advisor

GREENBERG TRAURIG, LLP
Phoenix, Arizona
Bond Counsel

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION
Phoenix, Arizona
Trustee, Bond Registrar and Paying Agent

This Official Statement does not constitute an offering of any security other than the original offering of the Bonds of the Corporation identified on the cover page hereof. No person has been authorized by the Corporation, the City, the Municipal Advisor (as defined herein) or the Underwriters (as defined herein) to give any information or to make any representation other than as contained in this Official Statement, and if given or made, such other information or representation not so authorized should not be relied upon as having been given or authorized by the Corporation, the City, the Municipal Advisor or the Underwriters. This Official Statement does not constitute an offer to sell or the solicitation of any offer to buy, and there shall not be any sale of the Bonds by any person, in any jurisdiction in which it is unlawful to make such offer, solicitation or sale.

The information and expressions of opinion herein are subject to change without notice, and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, give rise to any implication that there has been no change in the affairs of the Corporation or the City since the date hereof. There is no obligation on the part of the City or the Corporation to provide any continuing secondary market disclosure other than as described herein under the heading "CONTINUING DISCLOSURE" and in "APPENDIX I — Form of Continuing Disclosure Undertaking."

Upon issuance, the Bonds will not be registered by the Corporation, the City, or the Underwriters under the Securities Act of 1933, as amended, or any state securities law, and will not be listed on any stock or other securities exchange. Neither the Securities and Exchange Commission nor any other federal, state, or other governmental entity or agency will have passed upon the accuracy or adequacy of this Official Statement or approved the Bonds for sale.

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

The City currently maintains an investor relations website. However, unless specifically incorporated by reference herein, the information presented on the website is not part of this Official Statement and should not be relied upon in making an investment decision with respect to the Bonds.

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OFFICIAL STATEMENT
RELATING TO
$381,620,000
CITY OF PHOENIX CIVIC IMPROVEMENT CORPORATION
Junior Lien Wastewater System Revenue Bonds, Series 2023

INTRODUCTION

The purpose of this Official Statement, which includes the cover page, the inside front cover page and the appendices attached hereto, is to set forth certain information concerning the City of Phoenix Civic Improvement Corporation (the *"Corporation"*), the City of Phoenix, Arizona (the *"City"*), and the captioned bonds (the *"Bonds"*). The offering of the Bonds is made only by way of this Official Statement, which supersedes any other information or materials used in connection with the offer or sale of the Bonds. Accordingly, prospective Bond purchasers should read this entire Official Statement before making their investment decision.

All financial and other information presented in this Official Statement has been provided by the City from its records, except for information expressly attributed to other sources. The Corporation and the City warrant that this Official Statement contains no untrue statements of material fact and does not omit any material fact necessary to make such statements, in light of the circumstances under which such statements were made, not misleading. The presentation of financial and other information, including tables of receipts from taxes and other sources, is intended to show recent historical information and, except as expressly stated otherwise, is not intended to indicate future or continuing trends in the financial position or other affairs of the City. No representation is made that past experience, as is shown by the financial and other information, will necessarily continue or be repeated in the future.

References to provisions of Arizona law, whether codified in the Arizona Revised Statutes (A.R.S.) or uncodified, or to the Arizona Constitution, are references to current provisions. Those provisions may be amended, repealed, or supplemented.

For certain provisions of the City Purchase Agreement dated as of November 1, 2023 (the *"City Purchase Agreement"*), between the Corporation and the City and for the definitions of certain capitalized terms used in this Official Statement and for certain provisions of the Bond Indenture dated as of November 1, 2023 (the "*Indenture"*), between the Corporation and U.S. Bank Trust Company, National Association, as trustee (the *"Trustee"*, also referred herein as the *"Registrar"* and *"Paying Agent"*), pursuant to which the Bonds are being issued, see "APPENDIX G — Summary of Certain Provisions of Legal Documents."

PLAN OF FINANCE

System Improvements

A portion of the net proceeds of the Bonds remaining after deduction of issuance costs related to the Bonds will be deposited to the Project Fund established under the City Purchase Agreement and used to pay costs, or reimburse the City for costs, of various improvements to the Wastewater System (as defined herein).

Payment of Outstanding Amounts under Revolving Credit Agreement

The remaining portion of the net proceeds of the Bonds will be used to prepay and refund $200,000,000 in principal amount of the initial loan (the *"Initial Loan"*) outstanding under a Revolving Credit Agreement dated April 28, 2022 (the *"Revolving Credit Agreement"*) with JPMorgan Chase Bank, National Association (the *"Revolving Credit Provider"*). Such outstanding principal amount was used to finance various Wastewater System improvements. See "SECURITY AND SOURCES OF PAYMENT – Outstanding Junior Subordinate Lien Obligations."

THE BONDS

General Description

The Bonds will be issued as fully registered bonds, without coupons, in book-entry-only form and will be registered to Cede & Co. as described below under "Book-Entry-Only System." AS LONG AS CEDE & CO. IS THE REGISTERED OWNER OF THE BONDS, AS NOMINEE OF THE DEPOSITORY TRUST COMPANY ("*DTC*"), REFERENCES HEREIN TO THE OWNERS OF THE BONDS (OTHER THAN UNDER THE CAPTION "TAX EXEMPTION") WILL MEAN CEDE & CO. AND WILL NOT MEAN THE BENEFICIAL OWNERS OF THE BONDS. PRINCIPAL, PREMIUM, IF ANY, AND INTEREST PAYMENTS ON THE BONDS ARE TO BE MADE TO DTC AND ALL SUCH PAYMENTS WILL BE VALID AND EFFECTIVE TO SATISFY FULLY AND TO DISCHARGE THE OBLIGATIONS OF THE CORPORATION AND THE CITY WITH RESPECT TO, AND TO THE EXTENT OF, THE AMOUNTS SO PAID.

The Bonds will be dated the date of initial authentication and delivery thereof, will bear interest payable semiannually on January 1 and July 1 of each year (each an *"Interest Payment Date"*), commencing July 1, 2024. The Bonds will bear interest at the rates and will mature on the dates and in the amounts set forth on the inside front cover of this Official Statement. The Bonds will be delivered in fully registered form in the denomination of $5,000 each or any whole multiple thereof (but no Bond may represent installments of principal maturing on more than one date).

Subject to the provisions contained under the heading "Book-Entry-Only System" below, the principal of and premium, if any, and interest at maturity or redemption on each Bond will be payable upon presentation and surrender of such Bond at the designated corporate trust office of the Registrar. Interest on each Bond, other than that due at maturity or redemption, will be paid on each Interest Payment Date by check of said Registrar, mailed to the person shown on the bond register of the Corporation maintained by the Registrar as being the registered owner of such Bond (the *"Owner"*) as of the fifteenth day of the month immediately preceding such Interest Payment Date (the *"Regular Record Date"*) at the address appearing on said bond register or at such other address as is furnished to the Trustee in writing by such Owner before the fifteenth day of the month prior to such Interest Payment Date.

The Indenture also provides that, with the approval of the Corporation, the Trustee may enter into an agreement with any Owner of $1,000,000 or more in aggregate principal amount of Bonds providing for making all payments to that Owner of principal of and interest and any premium on that Bond or any part thereof (other than any payment of the entire unpaid principal amount thereof) at a place and in a manner other than as described above, without presentation or surrender of the Bond, upon any conditions which shall be satisfactory to the Trustee and the Corporation; provided that without a special agreement or consent of the Corporation, payment of interest on the Bonds may be made by wire transfer to any Owner of $1,000,000 aggregate principal of Bonds upon two days prior written notice to the Trustee specifying a wire transfer address of a bank or trust company in the United States.

If the Corporation fails to pay the interest due on any Interest Payment Date, that interest shall cease to be payable to the person who was the Owner as of the Regular Record Date. When moneys become available for payment of the interest, the Registrar will establish a special record date (the *"Special Record Date"*) for such payment which will be not more than 15 nor fewer than 10 days prior to the date of the proposed payment and the interest will be payable to the persons who are Owners on the Special Record Date. The Registrar will mail notice of the proposed payment and of the Special Record Date to each Owner.

Book-Entry-Only System

The following information about the book-entry-only system applicable to the Bonds has been supplied by DTC. None of the Corporation, the City, the Trustee, the Underwriters, or the Municipal Advisor makes any representations, warranties, or guarantees with respect to its accuracy or completeness.

DTC, the world's largest depository, is a limited-purpose trust company organized under the New York Banking Law, a "*banking organization*" within the meaning of the New York Banking Law, a member of the

Federal Reserve System, a "*clearing corporation*" within the meaning of the New York Uniform Commercial Code, and a "*clearing agency*" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants *("Direct Participants")* deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly owned subsidiary of The Depository Trust & Clearing Corporation *("DTCC")*. DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly *("Indirect Participants"* and together with Direct Participants, *"Participants")*. DTC has a rating from Standard & Poor's of "AA+". The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

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

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

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

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

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

Redemption proceeds, principal and interest payments on the Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the Corporation or the Trustee, on payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "*street name*," and will be the responsibility of such Participant and not of DTC nor its nominee, the Corporation, or the Trustee, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, principal, and interest payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Corporation or the Trustee, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct Participants and Indirect Participants.

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

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

SO LONG AS CEDE & CO., AS NOMINEE FOR DTC, IS THE SOLE REGISTERED OWNER, THE CORPORATION AND THE TRUSTEE WILL TREAT CEDE & CO. AS THE ONLY OWNER OF THE BONDS FOR ALL PURPOSES UNDER THE INDENTURE, INCLUDING RECEIPT OF ALL PRINCIPAL OF, REDEMPTION PREMIUM, IF ANY, AND INTEREST ON THE BONDS, RECEIPT OF NOTICES, VOTING AND REQUESTING OR DIRECTING THE CORPORATION AND THE TRUSTEE TO TAKE OR NOT TO TAKE, OR CONSENTING TO, CERTAIN ACTIONS UNDER SUCH INDENTURE. THE CORPORATION AND THE TRUSTEE HAVE NO RESPONSIBILITY OR OBLIGATION TO THE PARTICIPANTS OR THE BENEFICIAL OWNERS WITH RESPECT TO (A) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC OR ANY PARTICIPANT; (B) THE PAYMENT BY DTC OR ANY PARTICIPANT OF ANY AMOUNT DUE TO ANY BENEFICIAL OWNER WITH RESPECT TO THE PRINCIPAL OF AND INTEREST ON THE BONDS; (C) THE DELIVERY OR TIMELINESS OF DELIVERY BY DTC OR ANY PARTICIPANT OF ANY NOTICE TO ANY BENEFICIAL OWNER WHICH IS REQUIRED OR PERMITTED UNDER THE TERMS OF THE INDENTURE TO BE GIVEN TO BONDHOLDERS; (D) THE SELECTION BY DTC OR ANY PARTICIPANT OR INDIRECT PARTICIPANT OF ANY BENEFICIAL OWNER TO RECEIVE PAYMENT IN THE EVENT OF A PARTIAL REDEMPTION OF THE BONDS; (E) CONSENTS OR OTHER ACTION TAKEN BY DTC OR CEDE & CO., AS REGISTERED OWNER OR (F) ANY OTHER MATTER.

Redemption Provisions

Optional Redemption. Bonds maturing on or prior to July 1, 2033, are not subject to optional redemption prior to maturity. Bonds maturing on and after July 1, 2034, are subject to redemption at the option of the Corporation, as directed by the City, on July 1, 2033, and thereafter, in whole or in part at any time, in increments of $5,000, in any order of maturity, as directed by the City, and subject to the provisions described under the heading "BOOK-ENTRY-ONLY SYSTEM" above, by lot within a maturity, by payment of the redemption price of each Bond called for redemption (expressed as a percentage of the principal amount thereof) plus accrued interest to the date fixed for redemption, but without premium.

Mandatory Sinking Fund Redemption. The Bonds maturing on July 1, 2047 (the *"Term Bonds"*), are subject to mandatory redemption and shall be redeemed on July 1 in the respective years set forth below, in the amounts set forth below by payment of a redemption price of the principal amount of such Term Bonds called for redemption plus the interest accrued to the date fixed for redemption, but without premium.

Term Bonds Maturing July 1, 2047 bearing interest at 5.25%

Sinking Fund Retirement Date	Sinking Fund Requirements
2044	$25,165,000
2045	26,485,000
2046	27,880,000
2047*	29,340,000

* Maturity

The aggregate of the Purchase Price (as defined in the City Purchase Agreement) payable under the City Purchase Agreement shall include amounts sufficient to redeem the principal amount of Term Bonds set forth opposite the respective dates above (less the amount of any credit as provided below).

The Corporation at the direction of the City shall have the option to deliver to the Trustee for cancellation Term Bonds, in any aggregate principal amount and to receive a credit against the then current applicable mandatory sinking fund requirement and corresponding mandatory redemption obligation (or against any subsequent applicable mandatory sinking fund requirement and corresponding mandatory redemption obligation of the Corporation, as directed by the City) of the Corporation as set forth above for any Term Bonds of the same maturity. That option shall be exercised by the Corporation at the direction of the City, on or before the 60th day preceding the applicable mandatory redemption date, by furnishing the Trustee a certificate signed by the Corporation Representative and the City Representative, setting forth the extent of the credit to be applied with respect to the then current (or subsequent) mandatory sinking fund requirement. If the certificate is not timely furnished to the Trustee, the mandatory sinking fund requirement (and corresponding mandatory redemption obligation) shall not be reduced.

Notice of Redemption. When redemption is authorized or required, the Trustee will give the Owners of the Bonds to be redeemed notice of the redemption of the Bonds. Such notice will specify (a) that the whole or part of the Bonds are to be redeemed and, if in part, the part to be redeemed; (b) the date of redemption; (c) the place or places where the redemption will be made; and (d) the redemption price to be paid. Any redemption of Bonds in part will be from such maturities as directed by the City and by lot within a maturity in any manner the Trustee deems fair. Notwithstanding the foregoing, no notice of redemption shall be sent unless (i) the Trustee has on deposit sufficient funds to affect such redemption or (ii) the redemption notice states that redemption is contingent upon receipt of such funds prior to the redemption date.

Notice of such redemption will be given by mailing a copy of the redemption notice not more than 60 days nor less than 30 days prior to such redemption date, to the Owner of each Bond subject to redemption in whole or in part at the Owner's address shown on the bond register on the fifteenth day preceding that mailing. Neither failure to receive any such notice nor any defect therein will affect the sufficiency of the proceedings for the redemption of the Bonds with respect to which there is no such defect.

Notice having been given in the manner provided above, the Bonds or portions thereof called for redemption will become due and payable on the redemption date and if an amount of money sufficient to redeem all the Bonds and portions thereof called for redemption is held by the Trustee or any paying agent on the redemption date, then the Bonds or portions thereof to be redeemed will not be considered outstanding under the Indenture and will cease to bear interest from and after such redemption date.

SOURCES AND APPLICATIONS OF FUNDS

Sources:	
Par Amount of the Series 2023 Bonds	$381,620,000.00
Original Issue Premium	20,755,365.00
Total	$402,375,365.00
Applications:	
Project Fund for System Improvements	$200,000,000.00
Refunding and Prepayment of Initial Loan	200,000,000.00
Cost of Issuance	864,752.48
Underwriter's Discount	1,510,612.52
Total	$402,375,365.00

CITY OF PHOENIX WASTEWATER SYSTEM

The City has two separate sewer systems – storm drains and sanitary sewers. The City's sanitary sewers, or wastewater system (the "*System"* or the *"Wastewater System"*) is operated as a financially self-supporting municipal utility service. The System serves more than 423,122 accounts within a 543 square mile service area encompassing a service population of approximately 1,648,257. The System consists of more than 5,037 miles of sewers and interceptors and three treatment facilities. The treatment facilities include two major Wastewater Treatment Plants (*"WWTP"*), consisting of the 23rd Avenue WWTP and the 91st Avenue WWTP and one reserve Water Reclamation Plant (*"WRP"*), the Cave Creek WRP. For additional information about the System, see "APPENDIX A – Summary Information of the City of Phoenix Wastewater System."

SECURITY AND SOURCE OF PAYMENT

General

The Bonds are special, limited obligations of the Corporation payable solely from payments received under the City Purchase Agreement. Under the terms of the City Purchase Agreement, the City is to make payments (the *"Purchase Payments"*) to the Trustee in amounts sufficient to pay when due the principal of and interest on the Bonds, fees of the Trustee and all other expenses enumerated in the City Purchase Agreement.

Purchase Payments by the City are to be made solely from designated revenues of the System (the *"Designated Revenues"*), which are described below. During the term of the City Purchase Agreement, Purchase Payments are to be made regardless of damage to the System or commercial frustration of purpose, without right of set-off or counterclaim, regardless of any contingencies and whether or not the City possesses or uses the System. The City's obligation to make Purchase Payments will continue until all Purchase Payments and all other amounts due under the City Purchase Agreement have been paid.

The Purchase Payments required by the City under the City Purchase Agreement are secured by a pledge of the "*Designated Revenues*" of the System, which consist of the "*Operating Revenues*" of the System, after provision for payment of (a) all "*Expenses of Operation and Maintenance*" and (b) all payments required on any senior lien obligations payable from "*Net Operating Revenues*" (the *"Senior Lien Obligations"* or *"Senior Lien Revenue Obligations"*) (the Operating Revenues, net of Expenses of Operation and Maintenance, are referred to as the *"Net Operating Revenues"*). The term Operating Revenues generally includes all income and revenue received by the City from the operation of the System and the term Expenses of Operation and Maintenance generally includes all expenses reasonably incurred in connection with the operation of the System. For a complete description of the definitions of Operating Revenues, Net Operating Revenues and Expenses of

Operation and Maintenance, see "APPENDIX G — Summary of Certain Provisions of Legal Documents — Certain Definitions." The Purchase Payments to be made under the City Purchase Agreement will be on a parity with certain other outstanding obligations of the City and any other parity obligations issued in the future (collectively, *"Junior Lien Obligations"* or *"Junior Lien Revenue Obligations"*), subject to any payments required to be made for the benefit of any outstanding Senior Lien Obligations and any Senior Lien Obligations incurred in the future as described below under "*Issuance of Senior Lien Obligations and Additional Junior Lien Obligations*."

The obligation of the City under the City Purchase Agreement does not constitute a debt or a pledge of the full faith and credit of the City, the State of Arizona, or any other political subdivision thereof. The City has not pledged any form of ad valorem taxes to the payment to the Bonds. The Bonds are special, limited obligations of the Corporation secured only by the Purchase Payments which are to be paid from a pledge of the Designated Revenues of the System. No security interest is held by the Trustee for the benefit of the Owners of the Bonds in any portion of the System. Remedies available to the Trustee upon a failure of the City to make Purchase Payments when due are generally limited to specific performance against the City to payment from Designated Revenues. For a description of events of default and remedies under the City Purchase Agreement, see "APPENDIX G — Summary of Certain Provisions of Legal Documents." The City may, but is not required to, pay amounts due under the City Purchase Agreement from any other monies legally available for such purposes. For a discussion of the System and certain financial information relating to the System, see "APPENDIX A — Summary Information of the City of Phoenix Wastewater System." For a discussion of certain covenants which the City has entered into with respect to the System, see "APPENDIX G — Summary of Certain Provisions of Legal Documents."

Outstanding Senior Lien Obligations

As of July 1, 2023, there was $19,845,000 principal amount of Senior Lien Obligations outstanding, which were issued to refinance improvements to the System. Payments on the Bonds will be subordinate to such Senior Lien Obligations.

The following issues of Senior Lien Obligations are outstanding:

Issue Date	Original Issuance	Purpose	Maturity Dates	Average Interest Rate	Bonds Outstanding As of 07-01-23
06-19-18	$84,295,000	Wastewater System Refunding	7-1-19/24	5.00%	$19,845,000
Total Senior Lien Wastewater System Revenue Bonded Debt					$19,845,000

Outstanding Junior Lien Obligations

As of July 1, 2023, there was $383,271,992 outstanding principal amount of Junior Lien Obligations, which were issued to finance or refinance numerous improvements to the System. Payments on the Bonds will be made on a parity with such Junior Lien Obligations.

The following issues of Junior Lien Obligations are outstanding:

Issue Date	Original Issuance	Purpose	Maturity Dates	Average Interest Rate	Bonds Outstanding As of 07-01-23
08-03-10	$ 6,286,996	Wastewater System Improvements	7-1-18/26	2.97%	$ 1,942,722(1)
06-01-11	3,909,270	Wastewater System Improvements	7-1-26/29	2.97	3,909,270(1)
12-22-11	118,290,000	Wastewater System Refunding	7-1-14/24	4.72	11,230,000
04-15-14	127,810,000	Wastewater System Refunding	7-1-15/29	4.84	64,170,000
11-16-16	225,325,000	Wastewater System Refunding	7-1-17/35	5.00	168,750,000
06-19-18	133,270,000	Wastewater System Improvements	7-1-25/43	4.64	133,270,000
Total Junior Lien Wastewater System Revenue Bonded Debt					$383,271,992(2)

(1) Represents a loan agreement between the City and the Water Infrastructure Finance Authority of Arizona ("*WIFA*") pursuant to the American Recovery and Reinvestment Act of 2009.

(2) Does not include an additional WIFA loan agreement in the principal amount of $10,170,000, which the City is considering. If executed, the loan will be Junior Lien Revenue Obligations. As the loan is still under consideration, the amounts of the proposed loan are not included in the future obligations described in "APPENDIX B — City of Phoenix Wastewater System Financial Forecast — Future Bonds."

Outstanding Junior Subordinate Lien Obligations

The City entered into the Revolving Credit Agreement with the Revolving Credit Provider in order to finance certain improvements to the Wastewater System. The City obtained the Initial Loan described in the table below by a drawing under the Revolving Credit Agreement. The Revolving Credit Agreement provides for a three-year loan period, ending on April 25, 2025 (the "*Credit Commitment Period*"), during which the City may borrow, repay, and re-borrow amounts, but not exceeding $200,000,000 outstanding in the aggregate at any one time (each a "*Loan*"). Loans made under the Revolving Credit Agreement (such loans, together with any obligations on a parity therewith, the "*Junior Subordinate Lien Obligations*") will be payable from Designated Revenues, junior and subordinate to the Junior Lien Obligations ("*Junior Subordinate Lien Revenues*"). Upon application of the proceeds of the Bonds, there will be no amounts outstanding under the Revolving Credit Agreement or any other Junior Subordinate Lien Obligations outstanding. If the City elects to borrow additional amounts under the Revolving Credit Agreement that are outstanding at the end of the Credit Commitment Period, the City can, subject to certain conditions, convert the borrowing to a three-year term loan payable in twelve equal quarterly principal installments ending on April 25, 2028.

City of Phoenix
Junior Subordinate Lien
Wastewater Revolving Credit Facility Loan Outstanding

Issue Date	Original Issuance	Purpose	Loans Outstanding as of 07-01-23
04-28-22	$200,000,000	Wastewater Improvements	$200,000,000(1)

(1) Represents the Initial Loan expected to be refunded and prepaid by the Bonds offered herein.

Upon an event of default under the Revolving Credit Agreement, the Revolving Credit Provider may declare all amounts due (collectively, "*Payment Obligations*") immediately due and payable. Events of default include, but are not limited to, failure to pay amounts to the Revolving Credit Provider by the applicable grace period, failure to perform certain covenants such as issuance of obligations in violation of additional bonds tests, sale of System property in violation of applicable covenants, acceleration of other obligations payable from Designated Revenues on any lien in an amount of at least $5,000,000, certain litigation, bankruptcy and insolvency events related to the System and certain credit rating downgrades of Junior Lien Obligations. If Payment Obligations were to be accelerated, Designated Revenues would continue to be transferred to the extent available to the Bond Fund on each due date prior to payment of Payment Obligations.

Issuance of Additional Senior Lien Obligations and Additional Junior Lien Obligations

General. The City Purchase Agreement sets forth the tests for issuing Senior Lien Obligations and additional Junior Lien Parity Obligations (collectively, "*Revenue Obligations*").

Senior Lien Obligations. In order to issue additional Senior Lien Obligations, payments in support of which would be senior to payments to be made under the City Purchase Agreement, the City Purchase Agreement requires that the City file a statement by an Independent Certified Public Accountant or a Consultant to the effect that Net Operating Revenues of the System for the most recently completed Fiscal Year for which audited financial statements are available or any 12 consecutive calendar months of the immediately preceding 18 calendar months were equal to at least 120% of Senior Lien Parity Test Debt Service for all outstanding Revenue Obligations, including the Senior Lien Obligations proposed to be issued. The City Purchase Agreement and the Senior Lien Obligation Documents permit, certain adjustments to Net Operating Revenues in the report of the Independent Certified Public Accountant or the Consultant as described below under "*Certain Adjustments; Refunding Bonds*."

Additional Junior Lien Revenue Obligations. In order to issue additional Junior Lien Parity Obligations, the City Purchase Agreement and the Senior Lien Obligation Documents set forth the same requirements as for the issuance of Senior Lien Obligations as set forth above. Specifically, the City Purchase Agreement requires that the City file a statement by an Independent Certified Public Accountant or a Consultant to the effect that Net Operating Revenues of the System for the most recently completed Fiscal Year for which audited financial statements are available or any 12 consecutive calendar months of the immediately preceding 18 calendar months were equal to at least 115% of Junior Lien Parity Test Debt Service for all outstanding Revenue Obligations, including the Junior Lien Parity Obligations proposed to be issued. The City Purchase Agreement permits certain adjustments to Net Operating Revenues in the report of the Independent Certified Public Accountant or the Consultant as described below under "*Certain Adjustments; Refunding Bonds*."

Certain Adjustments; Refunding Bonds. For purposes of the tests described above, the City Purchase Agreement and the Senior Lien Obligation Documents permit certain adjustments to Net Operating Revenues in the report of the Independent Certified Public Accountant or the Consultant, including adjustments to Net Operating Revenues attributable to or resulting from revisions in the schedule of rates and charges, new connections, additions, extensions and improvements to the System. In determining debt service on a series of Revenue Obligations to which a Derivative Product with a Qualified Counterparty relates, the net amount owed by the City (exclusive of any termination payment) is to be used for purposes of determining Junior Lien Parity Test Debt Service. See "*Derivative Products*" below. The City Purchase Agreement and the Senior Lien Obligation Documents also permit the issuance of Revenue Obligations for refunding purposes without compliance with the foregoing financial tests if certain other conditions are met. See "APPENDIX G — Summary of Certain Provisions of Legal Documents — City Purchase Agreement."

Derivative Products. The City currently has no Derivative Products outstanding secured by Net Operating Revenues or Designated Revenues. However, the City reserves the right to enter into arrangements involving Derivative Products including swap agreements, forward agreements, interest rate agreements, and other similar agreements, to the extent permitted by law, and make payments on such agreements from Net Operating Revenues or Designated Revenues, provided that payments under such agreements may not be made on a basis which is senior to the payment of any Senior Lien Obligations and do not permit extraordinary payments such as termination payments to be made on a basis other than subordinate to payment of the Principal Requirement and the interest requirement on Revenue Obligations.

To the extent the City enters into such agreements and pledges Net Operating Revenues or Designated Revenues, the City may only do so if the City satisfies the tests for additional Revenue Obligations set forth in the Senior Lien Obligation Documents and the Junior Lien Obligation Documents, as applicable, subject to the provisions set forth below.

In determining whether the additional Revenue Obligations tests are satisfied in connection with any such agreements, the City is permitted to treat the amount or rate of interest on those agreements or on the Revenue Obligations to which the applicable agreement applies as the amount or rate of interest payable after giving effect to the agreements involving Derivative Products. So long as the agreement is with a Qualified Counterparty, (i) the City is permitted to include the net payment due under such agreements in calculating the additional Revenue Obligations test and (ii) the City is permitted to disregard the notional principal amount of any such agreement. See "APPENDIX G — Summary of Certain Provisions of Legal Documents — City Purchase Agreement."

Senior Lien Rate Covenant; Other Covenants

Pursuant to the Senior Lien Obligation Documents, the City has covenanted to continuously control, operate and maintain the System in an efficient and economical manner and on a revenue producing basis and will at all times, establish, fix, maintain and collect rates, fees and other charges for all wastewater services furnished by the System fully sufficient at all times:

(1) To provide for 100% of the Expenses of Operation and Maintenance;

(2) To produce Net Operating Revenues in each Bond Year which will equal at least 120% of the principal and interest requirement for the then-current Bond Year on all Revenue Obligations then outstanding;

(3) To produce Designated Revenues in each Bond Year which will remedy all deficiencies in payments into any of the funds and accounts required from prior Bond Years for the payment of the Purchase Payments as well as the payment of principal and interest on other Revenue Obligations; and

(4) To produce Junior Subordinate Lien Revenues sufficient to meet the principal and interest requirements on any subordinated obligations payable from the Junior Subordinate Lien Revenues.

Junior Lien Rate Covenant; Other Covenants

Pursuant to the City Purchase Agreement, the City has covenanted to continuously control, operate and maintain the System in an efficient and economical manner and on a revenue producing basis and will at all times, establish, fix, maintain and collect rates, fees and other charges for all wastewater services furnished by the System fully sufficient at all times:

(1) To provide for 100% of the Expenses of Operation and Maintenance;

(2) To produce Net Operating Revenues in each bond year which will equal at least 115% of the interest and principal requirement for the then current bond year on the Bonds and all other Revenue Obligations then outstanding;

(3) To produce Designated Revenues sufficient to remedy any deficiencies in payments from prior years for the Bonds and all other Junior Lien Parity Obligations; and

(4) To produce Junior Subordinate Lien Revenues sufficient to meet the principal and interest requirements on any obligations subordinate to the Bonds and other Junior Lien Parity Obligations.

Debt service on a series of Junior Lien Revenue Obligations to which a Derivative Product with a Qualified Counterparty relates, may be determined after giving effect to the netting provisions of Section 4.6 of the City Purchase Agreement, exclusive of any payments which may be owed by the City upon termination prior to maturity of such Derivative Project. See “APPENDIX G – Summary of Certain Provisions of Legal Documents – The City Purchase Agreement.”

Wastewater System Revenues

The revenues and expenses of the System for fiscal years 2017-18 through 2021-22 are set forth in “APPENDIX A — Summary Information of the City of Phoenix Wastewater System.”

Wastewater System Financial Forecast

Included in Appendix B is the City’s forecast of System revenues, expenditures, debt service, debt service coverage and changes in fund balance through the fiscal year ending June 30, 2028.

SCHEDULE OF ANNUALIZED PAYMENTS UNDER THE CITY PURCHASE AGREEMENT WITH RESPECT TO THE BONDS (1)

The City Purchase Agreement requires annual Purchase Payments by the City to the Corporation in an amount equal to the principal of and interest on the Bonds, which payments have been assigned to the Trustee. The Purchase Payments are due in immediately available funds on December 31 and June 30 commencing June 30, 2024, and ending June 30, 2047. The Indenture requires that the Trustee receive and apply Purchase Payments to pay the principal of and interest on the Bonds due on the following day. Set forth below is a schedule of the estimated annual Purchase Payments required under the City Purchase Agreement with respect to the Bonds:

	Total Debt Service on the Bonds		
Fiscal Year	**Principal**	**Interest**	**Total**
2023-24	$ —	$ 12,149,493	$ 12,149,493
2024-25	—	19,353,175	19,353,175
2025-26	—	19,353,175	19,353,175
2026-27	—	19,353,175	19,353,175
2027-28	11,530,000	19,353,175	30,883,175
2028-29	12,105,000	18,776,675	30,881,675
2029-30	12,710,000	18,171,425	30,881,425
2030-31	13,345,000	17,535,925	30,880,925
2031-32	14,015,000	16,868,675	30,883,675
2032-33	14,715,000	16,167,925	30,882,925
2033-34	15,450,000	15,432,175	30,882,175
2034-35	16,220,000	14,659,675	30,879,675
2035-36	17,035,000	13,848,675	30,883,675
2036-37	17,885,000	12,996,925	30,881,925
2037-38	18,780,000	12,102,675	30,882,675
2038-39	19,720,000	11,163,675	30,883,675
2039-40	20,705,000	10,177,675	30,882,675
2040-41	21,740,000	9,142,425	30,882,425
2041-42	22,825,000	8,055,425	30,880,425
2042-43	23,970,000	6,914,175	30,884,175
2043-44	25,165,000	5,715,675	30,880,675
2044-45	26,485,000	4,394,513	30,879,513
2045-46	27,880,000	3,004,050	30,884,050
2046-47	29,340,000	1,540,350	30,880,350
	$381,620,000	$306,230,906	$687,850,906

(1) Represents debt service requirements on the Bonds offered herein.

SCHEDULE OF FORECASTED NET OPERATING REVENUES, AND DESIGNATED REVENUES SENIOR LIEN AND JUNIOR LIEN DEBT SERVICE REQUIREMENTS AND ESTIMATED SENIOR LIEN AND JUNIOR LIEN DEBT SERVICE COVERAGES

					Debt Service on Junior Lien Obligations			
Fiscal Year	**Forecasted Net Operating Revenues Available for Debt Service on Senior Lien Obligations (1)**	**Debt Service on Outstanding Senior Lien Revenue Obligation**	**Estimated Senior Lien Debt Service Coverage**	**Forecasted Designated Revenues Available for Junior Lien Debt Service Obligations**	**Debt Service on Outstanding Junior Lien Revenue Obligations**	**Debt Service on the Bonds (2)(3)**	**Total Debt Service on Junior Lien Revenue Obligations**	**Estimated Junior Lien Debt Service Coverage (3)(4)**
2023-24	$142,076,000	$20,837,250	6.82	$121,238,750	$ 50,533,631	$ 12,149,493	$ 62,683,124	1.93
2024-25	151,914,000	—		151,914,000	43,198,382	19,353,175	62,551,557	2.43
2025-26	172,877,000	—		172,877,000	43,255,631	19,353,175	62,608,806	2.76
2026-27	192,570,000	—		192,570,000	43,312,132	19,353,175	62,665,307	3.07
2027-28	219,718,000	—		219,718,000	43,379,632	30,883,175	74,262,807	2.96
2028-29	—	—		—	43,385,397	30,881,675	74,267,072	
2029-30	—	—		—	29,779,950	30,881,425	60,661,375	
2030-31	—	—		—	29,849,700	30,880,925	60,730,625	
2031-32	—	—		—	29,921,450	30,883,675	60,805,125	
2032-33	—	—		—	30,002,450	30,882,925	60,885,375	
2033-34	—	—		—	30,089,450	30,882,175	60,971,625	
2034-35	—	—		—	30,179,200	30,879,675	61,058,875	
2035-36	—	—		—	10,683,450	30,883,675	41,567,125	
2036-37	—	—		—	10,688,200	30,881,925	41,570,125	
2037-38	—	—		—	10,683,950	30,882,675	41,566,625	
2038-39	—	—		—	10,685,200	30,883,675	41,568,875	
2039-40	—	—		—	10,687,600	30,882,675	41,570,275	
2040-41	—	—		—	10,686,200	30,882,425	41,568,625	
2041-42	—	—		—	10,687,950	30,880,425	41,568,375	
2042-43	—	—		—	10,681,200	30,884,175	41,565,375	
2043-44	—	—		—	—	30,880,675	30,880,675	
2044-45	—	—		—	—	30,879,513	30,879,513	
2045-46	—	—		—	—	30,884,050	30,884,050	
2046-47	—	—		—	—	30,880,350	30,880,350	
		$20,837,250			$532,370,755	$687,850,906	$1,220,221,661	

(1) Forecasted Net Operating Revenues and Designated Revenues are set forth in the Forecast Schedule of Revenues, Expenditures, Debt Service, Debt Service Coverage, and Changes in Fund Balance which appears in "APPENDIX B — City of Phoenix Wastewater System Financial Forecast."

(2) Represents debt service on the Bonds offered herein.

(3) Coverage does not include estimated debt service on $600 million principal amount of Junior Lien Obligations projected to be sold over the forecast period. This projected sale is included in the forecast provided in "APPENDIX B – City of Phoenix Wastewater System Financial Forecast."

(4) Coverage does not include an additional WIFA loan agreement in the principal amount of $10,170,000, which the City is considering. If executed, the loan will be Junior Lien Revenue Obligations. As the loan is still under consideration, the amounts of the proposed loan are not included in the future obligations described in "APPENDIX B — City of Phoenix Wastewater System Financial Forecast — Future Bonds."

THE CITY

The City is a municipal corporation duly organized and validly existing under the laws of the State of Arizona. Pursuant to the City Purchase Agreement, the City will agree to make payments sufficient to pay amounts due on the Bonds. Detailed information on the City and the System is set forth in Appendices A through F.

THE CORPORATION

The Corporation is a nonprofit corporation organized under the laws of the State of Arizona for the purpose of assisting the City in the acquisition and financing of municipal property and equipment.

The Corporation will enter into the City Purchase Agreement and the Indenture to facilitate the funding of the System improvements and the refunding and prepayment of the Initial Loan and the Revolving Credit Agreement. The Corporation is not financially liable for the payment of the principal of or interest on the Bonds and the Owners will have no right to look to the Corporation for payment of the Bonds except to the extent of the Purchase Payments received from the City under the City Purchase Agreement.

TAX EXEMPTION

General

The Code includes requirements which the Corporation and the City must continue to meet after the issuance of the Bonds in order that interest thereon be and remain excludable from gross income of the holders thereof for federal income tax purposes. The Corporation's or the City's failure to meet these requirements may cause the interest on the Bonds to be included in gross income for federal income tax purposes retroactively to the date of issuance of the Bonds. The Corporation and the City have covenanted in the City Purchase Agreement to take the actions required by the Code in order to maintain the excludability from gross income for federal income tax purposes of interest on the Bonds and not to take any actions that would adversely affect that excludability.

In the opinion of Bond Counsel, assuming continuing compliance by the Corporation and the City with the tax covenants referred to above and the accuracy of certain representations of the Corporation and the City, under existing statutes, regulations, rulings and court decisions, interest on the Bonds will be excludable from gross income for federal income tax purposes and further, interest on the Bonds will not be an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals. In the case of the alternative minimum tax imposed by Section 55(b)(2) of the Code on applicable corporations (as defined in Section 59(k) of the Code), interest on the Bonds is not excluded from the determination of adjusted financial statement income. Bond Counsel is further of the opinion that assuming interest on the Bonds is excludable from gross income for federal income tax purposes, interest on the Bonds will be exempt from income taxation under the laws of the State of Arizona.

Except as described above, Bond Counsel will express no opinion regarding the federal income tax consequences resulting from the receipt or accrual of interest on the Bonds or the ownership or disposition of the Bonds. Prospective purchasers of Bonds should be aware that the ownership of Bonds may result in other collateral federal tax consequences, including (i) the denial of a deduction for interest on indebtedness incurred or continued to purchase or carry Bonds or, in the case of a financial institution, that portion of the owner's interest expense allocable to interest on the Bonds, (ii) the reduction of the loss reserve deduction for property and casualty insurance companies by the applicable statutory percentage of certain items, including interest on the Bonds, (iii) the inclusion of interest on the Bonds in the earnings of certain foreign corporations doing business in the United States for purposes of a branch profits tax, (iv) the inclusion of interest on the Bonds in the passive income subject to federal income taxation of certain Subchapter S corporations with Subchapter C earnings and profits at the close of the taxable year, and (v) the inclusion of interest on the Bonds in the determination of the taxability of certain Social Security and Railroad Retirement benefits to certain recipients of such benefits. The nature and extent of the other tax consequences described above will depend on the particular tax status and situation of each owner of the Bonds. Prospective purchasers of the Bonds should consult their own tax advisors as to the impact of these other tax consequences.

Bond Counsel's opinions are based on existing law, which is subject to change. Such opinions are further based on factual representations made to Bond Counsel as of the date thereof. Bond Counsel assumes no duty to update or supplement its opinions to reflect any facts or circumstances that may thereafter come to Bond Counsel's attention, or to reflect any changes in law that may thereafter occur or become effective. Moreover, Bond Counsel's opinions are not a guarantee of a particular result, and are not binding on the IRS or the courts; rather, such opinions represent Bond Counsel's professional judgment based on its review of existing law, and in reliance on the representations and covenants that it deems relevant to such opinion.

From time to time, there are legislative proposals in Congress which, if enacted, could alter or amend one or more of the federal income tax matters referred to herein or adversely affect the market value of the Bonds. It cannot be predicted whether or in what form any such proposal might be enacted or whether, if enacted, it would apply to obligations (such as the Bonds), executed and delivered prior to enactment.

The discussion of tax matters in this Official Statement applies only in the case of purchasers of the Bonds at their original issuance and at the respective prices indicated on the inside front cover page of this Official Statement. It does not address any other tax consequences, such as, among others, the consequence of the existence of any market discount to subsequent purchasers of the Bonds. Purchasers of the Bonds should consult their own tax advisers regarding their particular tax status or other tax considerations resulting from ownership of the Bonds.

Information Reporting and Backup Withholding

Interest paid on tax-exempt obligations such as the Bonds is subject to information reporting to the Internal Revenue Service in a manner similar to interest paid on taxable obligations. This reporting requirement does not affect the excludability of interest on the Bonds from gross income for federal income tax purposes. However, in conjunction with that information reporting requirement, the Code subjects certain non-corporate owners of Bonds, under certain circumstances, to "backup withholding" at the rates set forth in the Code, with respect to payments on the Bonds and proceeds from the sale of Bonds. Any amount so withheld would be refunded or allowed as a credit against the federal income tax of such owner of Bonds. This withholding generally applies if the owner of Bonds (i) fails to furnish the payor such owner's social security number or other taxpayer identification number ("*TIN*"), (ii) furnished the payor an incorrect TIN, (iii) fails to properly report interest, dividends, or other "reportable payments" as defined in the Code, or (iv) under certain circumstances, fails to provide the payor or such owner's securities broker with a certified statement, signed under penalty of perjury, that the TIN provided is correct and that such owner is not subject to backup withholding. Prospective purchasers of the Bonds may also wish to consult with their tax advisors with respect to the need to furnish certain taxpayer information in order to avoid backup withholding.

Original Issue Premium

Certain of the Bonds ("*Premium Bonds*") may be offered and sold to the public at a price in excess of their stated redemption price (the principal amount) at maturity (or earlier for certain Premium Bonds callable prior to maturity). That excess constitutes bond premium. For federal income tax purposes, bond premium is amortized over the period to maturity of a Premium Bond, based on the yield to maturity of that Premium Bond (or, in the case of a Premium Bond callable prior to its stated maturity, the amortization period and yield may be required to be determined on the basis of an earlier call date that results in the lowest yield on that Premium Bond), compounded semiannually (or over a shorter permitted compounding interval selected by the owner). No portion of that bond premium is deductible by the owner of a Premium Bond. For purposes of determining the owner's gain or loss on the sale, redemption (including redemption at maturity) or other disposition of a Premium Bond, the owner's tax basis in the Premium Bond is reduced by the amount of bond premium that accrues during the period of ownership. As a result, an owner may realize taxable gain for federal income tax purposes from the sale or other disposition of a Premium Bond for an amount equal to or less than the amount paid by the owner for that Premium Bond.

Owners of Premium Bonds should consult their own tax advisers as to the determination for federal income tax purposes of the amount of bond premium properly accruable in any period with respect to the Premium Bonds and as to other federal tax consequences, and the treatment of bond premium for purposes of state and local taxes on, or based on, income.

LITIGATION

The City is contingently liable in respect to lawsuits and other claims incidental to the ordinary course of its operations. The City Attorney has advised City Management of the nature and extent of pending and threatened claims against the City. There are no noteworthy claims against the Wastewater System. In the opinion of City Management, such matters will not have a materially adverse effect on the City's ability to comply with the requirements of the City Purchase Agreement.

Department of Justice investigation. The City is under a civil pattern and practice investigation into several areas of the police department. As this is a civil matter, there is not a direct fiscal impact in terms of a settlement or financial judgement. The City budget could be impacted by orders to meet findings in the consent decree. However, the City does not anticipate that any findings would impact the financial obligations of the Wastewater System or its Bond obligations.

To the knowledge of the City Attorney, no pending or threatened litigation or administrative action or proceeding has (i) restrained or enjoined the City from entering into the City Purchase Agreement or approving the issuance and delivery of the Bonds or (ii) contested or questioned the validity of the Bonds or the proceedings and authority under which the Bonds have been authorized and are to be issued, secured, sold, executed, or delivered. Certificates of the City to that effect will be delivered at the time of delivery of the Bonds.

To the knowledge of special counsel to the Corporation, no pending or threatened litigation or administrative action or proceeding has (i) restrained or enjoined the Corporation from entering into the Indenture or the City Purchase Agreement or approving the issuance and delivery of the Bonds or (ii) contested or questioned the validity of the Bonds or the proceedings and authority under which the Bonds have been authorized and are to be issued, secured, sold, executed or delivered. Certificates of the Corporation to that effect will be delivered at the time of delivery of the Bonds.

LEGAL MATTERS

Legal matters incident to the issuance of the Bonds and with regard to the tax-exempt status of the interest on the Bonds (see "TAX EXEMPTION - General") are subject to the legal opinion of Greenberg Traurig, LLP, Phoenix, Arizona, Bond Counsel, who has been retained by, and is acting as Bond Counsel to the Corporation and the City. Signed copies of the opinion, dated and speaking only as of the date of delivery of the Bonds, will be delivered to the Underwriters.

The text of the proposed legal opinion is set forth as Appendix H. The actual legal opinion to be delivered may vary from that text if necessary to reflect facts and law on the date of delivery. The opinion will speak only as of its date, and subsequent distribution of it by recirculation of the Official Statement or otherwise shall create no implication that Bond Counsel has reviewed or expresses any opinion concerning any of the matters referred to in the opinion subsequent to its date.

Certain legal matters will be passed upon for the Underwriters by Squire Patton Boggs (US) LLP, Phoenix, Arizona, as Counsel to the Underwriters.

RATINGS

Moody's Investors Service, Inc. (*"Moody's"*) has assigned a rating of "Aa2" to the Bonds. S&P Global Ratings, a division of Standard & Poor's Financial Services LLC (*"S&P"*) has assigned a rating of "AAA" to the Bonds. No application has been made to any other rating service for the purpose of obtaining ratings on the Bonds. The City furnished these rating agencies with certain information and materials with respect to the Bonds. The ratings will reflect only the views of the rating services. An explanation of the significance of the ratings may be obtained from Moody's at 7 World Trade Center, 250 Greenwich Street, 23rd Floor, New York, New York 10007 and from S&P at 55 Water Street, New York, New York 10041. There is no assurance that such ratings will continue for any given period of time or that the ratings will not be revised downward or withdrawn entirely by Moody's or S&P if, in their judgment, circumstances so warrant. Any such downward revision or withdrawal of such ratings by Moody's or S&P may have an adverse effect on the market price of the Bonds.

MUNICIPAL ADVISOR

Montague DeRose and Associates, LLC is employed as Municipal Advisor to the City in connection with the issuance of the Bonds. The Municipal Advisor's compensation for services rendered with respect to the sale of the Bonds is contingent upon the issuance and delivery of the Bonds. Montague DeRose and Associates, LLC, in its capacity as Municipal Advisor, does not assume any responsibility for the information, covenants and representations contained in any of the legal documents with respect to the federal income tax status of the Bonds, or the possible impact of any present, pending, or future actions taken by any legislative or judicial bodies.

The Municipal Advisor to the City has provided the following sentence for inclusion in this Official Statement. The Municipal Advisor has reviewed the information in this Official Statement in accordance with, and as part of, its responsibilities to the City and, as applicable, to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Municipal Advisor does not guarantee the accuracy or completeness of such information.

UNDERWRITING

The Bonds are being purchased for reoffering by Jefferies LLC and the other underwriters shown on the cover (the *"Underwriters"*). The Underwriters have agreed to purchase the Bonds, subject to certain conditions, at a price of $400,864,752.48. If the Bonds are sold to produce the yields shown on the inside front cover hereof, the underwriters' compensation will be $1,510,612.52.

The Underwriters are committed to purchase all of the Bonds if any are purchased. The Bonds are offered for sale initially at the approximate yields set forth on the inside front cover of this Official Statement, which yields may be changed, from time to time, by the Underwriters. The Bonds may be sold to certain dealers (including underwriters and dealers depositing the Bonds into investment trusts) at prices lower than the public offering price.

CONTINUING DISCLOSURE

The City will enter into a Continuing Disclosure Undertaking (the *"Undertaking"*) with respect to the Bonds for the benefit of the beneficial owners of such Bonds to send certain information annually and to provide notice of certain events to the Municipal Securities Rulemaking Board through the Electronic Municipal Market Access ("*EMMA*") system pursuant to the requirements of Section (b)(5) of Rule 15c2-12 (the *"Rule"*) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934. The specific nature of the information to be provided on an annual basis, the events which will be noticed on an occurrence basis and other terms of the Undertaking, are set forth in "APPENDIX I — Form of Continuing Disclosure Undertaking."

The City has represented that except as set forth below, it has complied with each and every undertaking previously entered into by it pursuant to the Rule. A failure by the City to comply with the Undertaking will not constitute a default under the City Purchase Agreement or the Indenture and Beneficial Owners of the Bonds are limited to the remedies described in the Undertaking. See "APPENDIX I — Form of Continuing Disclosure Undertaking." A failure by the City to comply with the Undertaking must be reported in accordance with the Rule and must be considered by any broker, dealer or municipal securities dealer before recommending the purchase or sale of the Bonds in the secondary market. Consequently, such a failure may adversely affect the transferability and liquidity of the Bonds and their market price.

The filing on January 28, 2020, of certain operating data for fiscal year ending June 30, 2019, was not associated with all the related CUSIP numbers until February 24, 2020.

INDEPENDENT AUDITORS AND INCORPORATION BY REFERENCE OF CITY'S ANNUAL COMPREHENSIVE FINANCIAL REPORT

The financial statements of the City as of June 30, 2022, for its fiscal year then ended have been audited by Forvis, LLP, independent auditors, as stated in their report. The financial statements and auditor's report are part of the City's annual comprehensive financial report (the *"ACFR"*), which may be obtained from EMMA, free of charge at http://emma.msrb.org or from the City, free of charge, at the following location: 251 West Washington Street, 9th Floor, Phoenix, Arizona 85003, Attention: Finance Department, Telephone: (602) 262-7166. The ACFR may also be downloaded from the City's website at *www.phoenix.gov* under Departments-Finance-Annual Comprehensive Financial Report. The ACFR so filed with EMMA as part of the City's continuing disclosure undertakings pursuant to the Rule is hereby incorporated by reference.

MISCELLANEOUS

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

This Official Statement has been approved, executed, and delivered by the Corporation and the City.

CITY OF PHOENIX CIVIC IMPROVEMENT CORPORATION

By */s/* MICHAEL R. DAVIS

President

CITY OF PHOENIX, ARIZONA

By */s/* KATHLEEN GITKIN

Chief Financial Officer

APPENDIX A

Summary Information of the City of Phoenix
Wastewater System

ORGANIZATION AND ADMINISTRATION

The City of Phoenix, Arizona (the "*City*") has two separate sewer systems — storm drains and sanitary sewers. The City's sanitary sewers, or Wastewater System (the *"System")* has been operated as a financially self-supporting municipal utility service since July 1, 1980. It is organized as a functional division of the City's Water Services Department (the "*Department*"). The Department also contains Water Operations as a separate functional division that also acts as a completely self-supporting utility service. The Department's authority and responsibility is derived from the Phoenix City Charter and City Council adopted ordinances and resolutions. The Department is required to prepare and submit an annual budget for the Water and Wastewater Systems to the City Council prior to the beginning of each fiscal year. The City Council is required to hold a public hearing on the proposed budget and a specified notice of this hearing must be given to any bondholder who requests such notice in writing. If for any reason a budget is not adopted, the budget of the preceding fiscal year shall apply. The City Council adopts both the water and wastewater budgets, establishes water and wastewater rate structures, and sets overall policy for the Department.

The Water Services Director currently reports to a Deputy City Manager. The four Assistant Water Services Directors for the Administration, Water, Wastewater, and Technical Services Divisions report to the Water Services Director.

Ginger Spencer, Deputy City Manager, was named Deputy City Manager for the City in May 2021. Previously, Ms. Spencer served as Director of the City's Public Works Department since 2017. During her 23 years of service with the City, Ms. Spencer has served in various leadership positions including Assistant Public Works Director, Deputy Public Works Director, Family Advocacy Center Director, Arts and Culture Administrator, and Special Assistant to the City Manager. Ms. Spencer serves on the board of directors for Phoenix Community Development & Investment Corporation, Arizona Science Center, and the Arizona City/County Management Association. A native of Phoenix, Ms. Spencer holds a master of science in Public Policy and Management from Carnegie Mellon University, and a bachelor of arts in Spanish from Arizona State University. In 2022, Ms. Spencer was recognized as Who's Who in American Infrastructure and in 2021, Ms. Spencer was recognized by the American Public Works Association as one of the Top 10 Public Works Leaders in the nation.

Troy Hayes, Water Services Director — Water, has over 25 years of civil engineering and management experience in the water and wastewater industry. In this role prior to becoming the Water Services Director, he served as Assistant Water Services Director and Deputy Water Services Director for the Water Production Division. He holds a bachelor's degree in Chemical Engineering from the University of Arizona, a master's degree in Business Administration from the University of Phoenix and is a licensed professional civil engineer in the states of Arizona and Colorado. He also holds Arizona Department of Environmental Quality Grade 4 Operator License in all disciplines of water and wastewater.

Brandy Kelso, Assistant Water Services Director — Water, has over 25 years of civil engineering and management experience in the water and wastewater industry. In her current role, Ms. Kelso oversees the Water Utility which includes the Water Production Division, Water Distribution Division, Water Meter Division, and Water Engineering and Construction Division. These divisions manage the treatment and delivery of safe, reliable drinking water to the City's 1.7 million customers. Prior to becoming the Assistant Water Services Director, she served as Deputy Water Services Director for Water Resources and Development Planning Division. She holds a bachelor's and master's degree in Civil Engineering from Arizona State University and is a licensed professional civil engineer in the State of Arizona.

Nazario Prieto, Assistant Water Services Director — Wastewater, has over 20 years of civil engineering and management experience in the water and wastewater industry. In his current role, Mr. Prieto oversees the Wastewater Engineering, Wastewater Collection, and Wastewater Treatment Divisions. Prior to becoming an Assistant Water Services Director, he served as a Deputy Water Services Director for the Assets and Development Planning Division. He holds a bachelor's degree in Civil Engineering from the University of Texas at El Paso and is a licensed professional civil engineer in the State of Arizona.

Holly Rosenthal, Assistant Water Services Director — Finance & Administration, has over 25 years of private and public sector executive management experience in the construction and water industries. She currently oversees business planning and improvement; economic forecasting and rate setting; operating and capital program budget and finance; supply chain; and customer services. Previously, she served as Executive Director of the Onondaga County Metropolitan Water Board, and Treasurer and Deputy Executive Director of the Onondaga County Water Authority, successfully consolidating these two regional water utilities. Ms. Rosenthal holds a bachelor's degree in Landscape Architecture/Environmental Studies and is completing a master's in Public Administration from Syracuse University. She is a certified mediator and an accredited professional in Leadership in Energy and Environmental Design. Ms. Rosenthal serves on the Board of the Association of Metropolitan Water Agencies.

Jim Swanson, Assistant Water Services Director — Technical Services, has over 30 years of water/wastewater operations, regulatory, water resources, and management experience across the water and wastewater industry. In his current role, Mr. Swanson oversees Technical Services which includes the following divisions: Environmental Services, Assets and Development Planning, Infrastructure Records, and Process Control. These divisions manage various aspects of the Departments water quality compliance, regulatory compliance, water resources and conservation, development planning, master planning, safety and training, security, GIS records, and process control across the City's water and wastewater systems. Prior to becoming the Assistant Water Services Director, he served as Deputy Water Services Director over the Water Distribution Division and the Water Meter Division. Mr. Swanson holds a bachelor of science degree in Geology from Arizona State University, a grade 4 certified Water Distribution System Operator license, and a Water Treatment System Operator license from the State of Arizona.

FINANCIAL PLANNING AND RATES DEVELOPMENT

Financial planning and wastewater rates development are provided by the Finance Department in coordination with the Department. In addition, the Finance Department reviews the timeliness and accuracy of the billing services, provides all financial reporting and financial information, establishes financial policies, and recommends rates and fees. Wastewater rates are set to recover the direct and indirect costs of service.

In addition, the Water/Wastewater Rate Advisory Committee acts in an advisory capacity to the City Manager and City Council on water rate and fee structure. The committee is charged with annually reviewing the Department's Capital Improvement Program, revenue requirements and operations and maintenance budget as they impact future water and wastewater rates.

BILLING AND COLLECTION RESPONSIBILITY

The Department is responsible for a combined municipal services bill for water, sanitary sewer, and solid waste services along with a jail tax, storm water management program tax and other general applicable taxes. Water meters are read, and all accounts are billed monthly. Payment of a regular bill is due 21 days after the bill issuance date. If payment is not received within three days after the due date, a late payment charge is assessed to the outstanding account balance. All customers receive one notice of nonpayment indicating a pending turnoff if not paid. If the total amount due is not received within ten days from the date of notice of nonpayment, the process to suspend water service to the premises begins and a turn-off fee of $55.00 plus tax is charged to the customer's account. The total amount of the bill, including all fees, is collected before water service is restored.

The Department bills more than 423,122 accounts in an approximately 543 square mile service area for a service population of approximately 1,648,257. Approximately 383,839 (90.7%) of the accounts are single family residential, 16,980 (4.0%) multi-family residential, and 22,656 (5.3%) non-residential. For fiscal year 2022-23, the Department billed 63,871,946 hundred cubic feet ("*ccf*") of wastewater flow of which 34,917,419 ccf (54.7%) was from single family residential accounts, 13,543,787.69 ccf (21.2%) from multi-family accounts, and 15,410,739.31 ccf (24.1%) from non-residential accounts. The largest single wastewater customer is Shamrock Foods, which accounted for 1.15% of wastewater rate revenue. The top fifteen wastewater customers accounted for $10,175,402.09 (5.07%) of total wastewater rate revenue.

WASTEWATER RATE STRUCTURE

Wastewater rate schedules are adopted by the Mayor and City Council by ordinance, subject to certain statutory restrictions on rates charged to non-residents. Since July 1, 1980, wastewater rates have been reviewed annually, in accordance with the Council's adopted policy. The City's principal consideration in adjusting wastewater rates is to maintain the System's operations as a completely self-supporting enterprise. Within the last twenty-one years, the City has approved thirteen rate revenue adjustments, with the most recent approved in June 2023 of 6.5% effective October 2023, 6.5% effective March 2024, and 7.0% effective March 2025.

The following table summarizes the effective dates of these adjustments and the corresponding annualized percentage change in wastewater rate revenue:

Effective Date	Annualized % Change in Wastewater Rate Revenues (1) (2)
March 4, 2002	3.5
March 3, 2003	8.0
March 3, 2004	7.0
March 2, 2005	9.0
March 2, 2006	9.0
March 2, 2007	9.5
March 3, 2008	7.0
March 3, 2009	5.0
March 1, 2010	4.5
July 1, 2012	-7.5
March 1, 2016	2.0
March 1, 2017	2.0
October 1, 2023	6.5

(1) There were no rate revenue adjustments in 2011, from 2013 through 2015 or from 2018 through 2022.
(2) On June 28, 2023, Phoenix City Council approved Wastewater rate revenue increases of 6.5% effective October 2023, 6.5% effective March 2024, and 7.0% effective March 2025.

SEWER SERVICE CHARGES

Sewer Volume and Monthly Charges

The City's current wastewater (sewer) rate structure includes several customer classes with rates for each customer class based on the relative strength of the sewage discharge. The higher the customer's sewage strength, the higher the rate will be. The strength-based volume charges recover most costs except for costs associated with billing and collection and environmental compliance. The costs of billing and collection are recovered through a fixed monthly charge of $1.00 per account. There is a minimum charge of $4.50 per billing per month for all customers.

For sewer system customers, except industrial customers and self-service laundries, a percentage of winter (January through March) water usage is used to estimate sewage flows and calculate monthly bills. Estimated sewage flows for each customer are updated annually in July based on the current year's winter usage. The annual estimated sewage flows for all customers, except industrial, are adjusted as necessary based on a sewer flow stabilization factor in order to ensure that the overall base level of revenue is achieved.

Environmental Charge

An environmental charge, which is assessed to recover the annual cost of complying with new environmental standards, was implemented on December 1, 1992. The current rate of $0.5511 per ccf became effective on July 1, 2017. The charge is indicated as a separate line item on the customer's bill. Revenues from this charge are used to cover all operation, maintenance, replacement, administrative and capital expenses necessary for water treatment processes and facilities to meet federal, state and county environmental regulations.

Industrial Wastewater Charges

In addition to the sewer service charges, industrial customers pay fees to recover the annual cost of the Industrial Pretreatment Program. Cost recovery for this program is through a pretreatment monitoring charge of $0.2918 per ccf of sewage discharged to all industrial users and an annual pretreatment permitting fee of $1,009 per location to the significant industrial users.

Commercial Inspection Fee

A commercial inspection fee of $19.53 per month is applied to commercial and self-service laundries, car washes, bakeries, restaurants, service stations/auto repair shops, and all commercial customers with dining facilities. The fee recovers costs incurred by the Environmental Services Division to inspect and monitor the facilities.

DEVELOPMENT OCCUPATIONAL FEE

The Development Occupational Fee was established in May 1982 to be applied to new and existing water and wastewater service connections when the water meter size is increased, or additional meters are installed. The fee is currently $600 for each single-family service connection and varies by meter size for other types of connections. The use of revenues from this fee is restricted to the funding of projects listed in the approved infrastructure financing plan adopted by City Council related to water and wastewater growth capital improvement projects or debt service on outstanding water and wastewater obligations issued for growth related purposes.

DEVELOPMENT IMPACT FEE

Development Impact Fees were established at various times in growth areas beginning in the late 1980s and are applied to new and existing water service customers when the water meter size is increased, or additional meters are purchased. The fee is charged in the northern and southern growth areas where the majority of new development in the City is now occurring. There are separate charges for the northern area and the southern area. Fees for other meters vary according to size and maximum capacity. The fee is collected at the time the developer pays for building permits. Developers may be given Development Impact Fee credits or pay reduced fees if capital projects are constructed and contributed by the developer that typically are the responsibility of the City. The use of revenues from this fee is restricted to the funding of projects listed in the approved infrastructure financing plan adopted by City Council related to water and wastewater growth capital improvement projects or debt service on outstanding water and wastewater obligations issued for growth related purposes.

CONNECTIONS TO PUBLIC SEWERS, SEWER EXTENSIONS

All users of the System must obtain a permit prior to connecting to the System. Industrial users must satisfy more stringent permit requirements than residential and other users. Plans of the design and specifications, quantity, location, method of connection and size of all sewer connections are submitted for review and approval before a permit is issued.

For new subdivisions and developments within the City, public sewers are authorized by the Development Services Department Director. For new subdivisions and developments outside the City, public sewers are authorized by the Water Services Director. Such public sewers are to be constructed at the developer's expense in accordance with the City building codes and approved by the respective Director. The costs for the preparation and review of plans and specifications, the staking of the location of the new public sewers, the cost of inspecting the construction, the cost of acquiring rights-of-way and easements and preparation of as-built plans are the responsibility of the developer. The ownership of all public sewer lines, lift stations, treatment facilities, equipment and other appurtenances to the System, which are maintained or accepted for maintenance by the Department, is vested in the City.

The main sewer extension policy for areas beyond present City trunk lines requires the developer to pay all costs for engineering, design and construction of main sewers. The main sewers must be of such size as to afford adequate capacity and service for their specific service areas to be served by City trunk sewers. The design and engineering are required to be in accordance with the specifications of the City and approved by the Water Services Director prior to construction. Upon completion, the main sewer line becomes the property of the City, and the City has exclusive control of connections to the proposed main sewer line.

PRIVATE SEWERAGE SYSTEMS

Except as provided in the Phoenix City Code, it is unlawful to construct or maintain within the City or an area of the City jurisdiction a private sewer system, including any privy, privy vault, septic tank, cesspool, onsite wastewater treatment system, or other facility intended or used for the disposal of sewage. However, where a public sanitary sewer is not available, a building may be connected to a private sewage disposal system. The private sewer system must be designed, installed, maintained, and operated or used at all times in strict conformance with State and County private sewer system requirements. When a public sewer becomes available for connection, the home or building must discontinue its use of the private sewer disposal system and connect to the public sewer.

INDUSTRIAL USERS, INDUSTRIAL PRETREATMENT PROGRAM

As part of its coordinated efforts to meet federal and state standards, the City requires industrial users of the System to meet certain requirements, obtain special permits and to participate in the City's Industrial Pretreatment Program ("*IPP*"). There are 166 permitted industrial users of which 93 are designated as a Significant Industrial User ("*SIU*") and are required to obtain a Class A permit prior to discharging industrial waste into the System. Significant industrial users must assist the Water Services Director in determining the exact concentration and volume of any pollutant intended for discharge to the System, and upon request, must allow the examination and copying of all relevant records or documents available to the user and the inspection of the user's business locations. Additionally, the user must provide the Water Services Director with self-monitoring reports relating to the user's industrial discharge and must allow the Department to take and remove samples of wastewater discharged to the System. The Water Services Director has authority to carry out a sampling program and perform the necessary analyses. If the testing shows that a variation exists between the user's certified data regarding discharge and the data monitored by the Department, the City may adjust charges to that user. Users found not to be in compliance with required standards are issued notices to conform to the proper standards. In some cases, civil monetary penalties have been assessed and collected when conformance has not been reached within the prescribed time frame.

WASTEWATER SYSTEM — FACILITIES

The System currently consists of two Wastewater Treatment Plants ("*WWTP*") — the 23rd Avenue WWTP, and the 91st Avenue WWTP, and one Water Reclamation Plant ("*WRP*") — the Cave Creek WRP. The 23rd Avenue WWTP has the capacity to treat 63.00 million gallons per day ("*mgd*") of City of Phoenix-only flows, and the 91st Avenue WWTP has the capacity to treat 230.00 mgd of combined flow from five participating cities. After the allocation of the increased capacity from the Unified Plant Expansion 2005, the City of Phoenix share of total capacity is 112.80 mgd.

To meet future anticipated wastewater flows in the northern areas, the City has the Cave Creek WRP. The facility can serve areas of new development north of State Route 101 and outside the service areas of the 91st Avenue and 23rd Avenue WWTPs. The first 8.00 mgd of capacity for the Cave Creek WRP became operational in December 2001, but the plant was shut down in October 2009 until flows return to higher levels. Opening and expansion of the Cave Creek WRP is currently under design to increase treatment requirements needed to service new development in the north. The Cave Creek WRP can be expanded to a capacity of 32.00 mgd.

Collection System

The wastewater collection system, which does not include the storm water system, contains more than 5,037 miles of sewers. These sewers range in size from 4 inches to 90 inches in diameter. There are 100,820 manholes and 8,287 cleanouts available for access to the main sewer system.

23rd Avenue Wastewater Treatment Plant

The 23rd Avenue WWTP provides wastewater treatment for central Phoenix and is located on a 55-acre site between Durango Street and Lower Buckeye Road at the extended alignment of 23rd Avenue. The plant is surrounded by various government maintenance and operation facilities. In general, the boundaries of the service area can be described as follows: the south boundary is Buckeye Road and Sky Harbor International Airport, the north boundary is Cactus Road, the east boundary is 56th Street, and the west boundary is the Black Canyon ("*I-17*") Freeway. The plant's service area includes the downtown sections of Phoenix and various residential neighborhoods near the central business district. The area is extensively developed with growth coming from redevelopment, including the conversion of older neighborhoods to commercial business or high density residential.

The original 23rd Avenue WWTP was built in 1931; however, most of the original facilities have been replaced. The current plant consists of facilities constructed in 1960 that have been doubled in size and were significantly modified and upgraded in 1994. The plant presently operates as an advanced wastewater treatment process. The plant is designed to treat a capacity of 63.00 mgd. The plant consists of a series of unit processes that remove pollutants from wastewater. Removed pollutants fall into two main categories, total suspended solids ("*TSS*") and organics as measured by a chemical oxygen demand ("*COD*") test. The treated water is disinfected to destroy disease-causing organisms. The treatment unit processes at the plant consist of preliminary screening and grit removal; primary sedimentation; secondary treatment consisting of biological activated sludge with nitrification and denitrification followed by secondary sedimentation; tertiary treatment consisting of chemical addition, flocculation and filtration; and chlorination/dechlorination (disinfection). A large portion of the treated water is utilized by the Roosevelt Irrigation District ("*RID"*) to irrigate crops and the remainder is discharged to the Salt River. The residual solids, which are by-products of the aforementioned primary and secondary unit processes, are treated on site in anaerobic digesters. The digested solids are dewatered by centrifuges on site and then are trucked off site to be applied as a soil amendment to agricultural land, processed into a compost product, or landfilled.

91st Avenue Wastewater Treatment Plant

The 91st Avenue WWTP is located on a 560-acre site just east of 91st Avenue, south of Broadway Road and on the north side of the Salt River. Within a two-mile radius, the plant is surrounded by rural-agricultural development. Within a two-to-four- mile radius, scattered new residential developments are occurring mainly in the area to the north. The Gila River Indian Community is located on the south bank of the Salt River channel, approximately one mile south of the existing plant location. The 91st Avenue WWTP provides regional wastewater treatment for the multi-city Subregional Operating Group ("*SROG*"), including the City except for the central area served by the 23rd Avenue WWTP. The City participates with the cities of Glendale, Mesa, Scottsdale, and Tempe in the joint exercise powers agreement ("*JEPA"*) for the construction, operation, and maintenance of jointly used facilities, including the 91st Avenue WWTP, the Salt River Outfall Sewer ("*SRO"*), the Southern Avenue Interceptor ("*SAI*"), 99th Avenue Interceptor, and other related transportation facilities. As lead agency, the City is responsible for the planning, budgeting, construction, operation and maintenance of the plant. The City provides all management personnel and accepts federal grants on behalf of the participants. The other cities pay for costs of operation and maintenance based on sewage flows and strengths, and for purchased capacity in plant and related transportation facilities based on approved engineering billing schedules.

The original 91st Avenue WWTP was built in 1958; however, most of the original facilities have been replaced. The portions of the plant as they are used today have been modified and upgraded since the original construction. The present day plant operates as an advanced wastewater treatment process consisting of a nitrification/denitrification activated sludge treatment process. The treatment unit processes at the plant consist of preliminary screening and grit removal; primary sedimentation; secondary treatment consisting of biological activated sludge with nitrification and denitrification followed by secondary sedimentation; and chlorination/dechlorination (disinfection). A large portion of the effluent is used by the Palo Verde Nuclear Generating Station for cooling reactors. A minimal amount is discharged into the Salt River for the Buckeye Irrigation District ("*BID*") to withdraw downstream for crop irrigation. The remaining effluent is discharged to the Tres Rios wetlands for additional treatment, ground recharging and effluent reuse. The wetlands also provide flood control, ecosystem restoration, wildlife habitat and education components. The residual solids, which are by-products of the aforementioned primary and secondary unit processes, are treated on site in anaerobic digesters. Centrifuges on site dewater approximately 99% of the digested solids, and the remaining 1% is dewatered in solar drying beds. The dewatered solids are trucked off site to be applied as a soil amendment to agricultural land, processed into a compost product, or landfilled. In 2019, the City, in partnership with Ameresco, began commercial operations to convert biogas into renewable natural gas ("*RNG*"). The biogas is cleaned and compressed and then injected into a high pressure natural gas pipeline and used as a renewable energy commodity. The biogas-to-RNG facility is capable of processing 3,250 standard cubic feet per minute ("*scfm*") of the digester gas produced at the plant.

The 91st Avenue WWTP Unified Plant Expansion project series, which creates a unified plant rather than a series of individual plants, adds operational flexibility and dependability, and increases the total plant capacity. The first project, Unified Plant Expansion 2001 ("*UP01*") was completed at the end of 2008 and increased capacity from 179.25 mgd to 204.50 mgd. The second project, Unified Plant Expansion 2005 ("*UP05*") increased capacity to 230.00 mgd (the City's capacity share is 112.80 mgd) and improved overall plant operational performance. Design and construction on UP05 were divided into two phases. Phase A was completed in 2010 and connects the effluent stream to the Tres Rios Wetlands. Construction of Phase B was completed in 2012 and improves the digestion and thickening processes.

Cave Creek Wastewater Reclamation Plant

The Cave Creek WRP provides wastewater treatment in the northeast area of Phoenix. The plant is located on a 116-acre plant site at the northeast corner of Deer Valley Road and Cave Creek Road. The plant began operations in December 2001 with an initial design capacity of 8.00 mgd. The plant can be expanded to a capacity of 32.00 mgd.

The Cave Creek WRP is a conventional activated sludge wastewater treatment plant with advanced treatment using nitrification/denitrification processes, and filtration. The plant consists of screening, primary clarification, nitrification/denitrification, secondary clarification, filtration, ultra-violet disinfection, and reclaimed water storage facilities. Sludge from the treatment plant is transferred through existing sewer pipelines to the 91st Avenue WWTP for further treatment and disposal. All process basins are covered and ventilated to control and scrub odors.

Due to lower wastewater flows resulting from prior economic conditions, the plant was shut down in October 2009, until flows return to higher levels. Currently, the lower flows are bypassed to the 91st Avenue WWTP where sufficient capacity exists to process the additional load. This temporary change results in more efficient operation of the System. Although currently shut down, the plant could provide additional water resources by treating wastewater and producing reclaimed water for irrigation of turf facilities larger than five acres in the service area and retractable groundwater recharge in the northeast area of Phoenix. The reclaimed water could then be delivered to turf facilities through a separate reclaimed water distribution system. During the shutdown of the plant, turf facilities previously using reclaimed water from the Cave Creek WRP are delivered raw CAP water. Long-term analysis of the System has determined a need to expand treatment capacity and return the plant to service. Before Cave Creek WRP is operational, the physical treatment process for the plant requires modification to meet advanced treatment requirements to use effluent discharge for recharge and reuse. The current plan is to rehabilitate and expand the plant treatment capacity to 16 mgd and return the plant to service in Fiscal Year 2025-26. However, in the event that additional flows are identified in the service area, an accelerated schedule to return the plant to service will be initiated.

HISTORICAL ANNUAL SEWAGE FLOW

The average annual City of Phoenix-only flows collected by the sewers and treated at the two WWTPs and the Cave Creek WRP for the past ten years in million gallons per day are as follows:

Fiscal Year	23rd Avenue	91st Avenue	Cave Creek(1)	Total
2013-14	33.06	84.11(1)	—	117.17
2014-15	32.00	83.50(1)	—	115.50
2015-16	32.15	80.75(1)	—	112.90
2016-17	33.61	80.33(1)	—	113.94
2017-18	32.13	83.76(1)	—	115.89
2018-19	31.48	81.87(1)	—	113.35
2019-20	32.69	83.52(1)	—	116.21
2020-21	32.17	87.05(1)	—	119.22
2021-22	32.38	96.49(1)	—	128.97
2022-23	34.38	99.61(1)	—	133.99

(1) The Cave Creek WRP was shut down in October 2009, until flows return to higher levels. Flows are bypassed to the 91st Avenue WWTP.

ENVIRONMENTAL COMPLIANCE

The System must meet federal, state, and county regulations which are implemented through the permit programs administered by the responsible agencies. The Department has obtained or has applied for the required System permits. The System currently satisfies applicable water quality parameters.

OUTSTANDING WASTEWATER SYSTEM OBLIGATIONS

City of Phoenix Civic Improvement Corporation Senior Lien Wastewater System Revenue Debt

The City has previously entered into City Purchase Agreements with the City of Phoenix Civic Improvement Corporation for the purpose of refinancing the acquisition and construction of additional wastewater treatment facilities at the 23rd Avenue WWTP and System improvements at various locations in the City. The City of Phoenix Civic Improvement Corporation issued bonds for refinancing the acquisition and construction of additional facilities and various other improvements, and the City made a senior lien pledge of net operating revenues of the System for the payment of principal and interest on the bonds. Amounts due on the bonds and pursuant to the City Purchase Agreements are as follows:

City of Phoenix Civic Improvement Corporation
Senior Lien Wastewater System Revenue Bonded Debt Outstanding

Issue Date	Original Issuance	Purpose	Maturity Dates	Average Interest Rate	Bonds Outstanding As of 11-15-23
06-19-18	$84,295,000	Wastewater System Refunding	7-1-19/24	5.00%	$19,845,000
Total Senior Lien Wastewater System Revenue Bonded Debt					$19,845,000

City of Phoenix Civic Improvement Corporation
Schedule of Annual Debt Service Requirements
Senior Lien Wastewater System Revenue Bonded Debt Outstanding

Fiscal Year	Principal	Interest	Total
2023-24	$19,845,000	$992,250	$20,837,250
	$19,845,000	$992,250	$20,837,250

City of Phoenix Civic Improvement Corporation Junior Lien Wastewater System Revenue Debt

The City entered into City Purchase Agreements with the City of Phoenix Civic Improvement Corporation for improvements to the System. The City of Phoenix Civic Improvement Corporation has previously issued bonds for the financing and refinancing of odor control facilities, process improvements and capacity expansions of the 91st Avenue WWTP, laboratory building improvements at the 23rd Avenue WWTP, purchase of land and construction of water reclamation facilities in the northern service area, new sewers and lift stations in growth areas and rehabilitation and replacement of sewers throughout the System. The City made a junior lien pledge of net operating revenues of the System ("*Designated Revenues*") for the payment of principal of and interest on the bonds. Amounts due on the bonds and pursuant to the City Purchase Agreements are as follows:

City of Phoenix Civic Improvement Corporation
Junior Lien Wastewater System Revenue Bonded Debt Outstanding

Issue Date	Original Issuance	Purpose	Maturity Dates	Average Interest Rate	Bonds Outstanding As of 11-15-23
12-22-11	$118,290,000	Wastewater System Refunding	7-1-14/24	4.72%	$ 11,230,000
04-15-14	127,810,000	Wastewater System Refunding	7-1-15/29	4.84	64,170,000
11-16-16	225,325,000	Wastewater System Refunding	7-1-17/35	5.00	168,750,000
06-19-18	133,270,000	Wastewater System Improvements	7-1-25/43	4.68	133,270,000
11-15-23	381,620,000	Wastewater System Improvements	7-1-28/47	5.10	381,620,000(1)
Total Junior Lien Wastewater System Revenue Bonded Debt Outstanding					$759,040,000

City of Phoenix Civic Improvement Corporation
Schedule of Annual Debt Service Requirements
Junior Lien Wastewater System Revenue Bonded Debt Outstanding(1)

Fiscal Year	Principal	Interest	Total
2023-24	$ 30,955,000	$ 30,640,693	$ 61,595,693
2024-25	25,155,000	36,309,125	61,464,125
2025-26	26,470,000	35,051,375	61,521,375
2026-27	27,850,000	33,727,875	61,577,875
2027-28	40,840,000	32,335,375	73,175,375
2028-29	42,940,000	30,293,375	73,233,375
2029-30	32,515,000	28,146,375	60,661,375
2030-31	34,210,000	26,520,625	60,730,625
2031-32	35,995,000	24,810,125	60,805,125
2032-33	37,875,000	23,010,375	60,885,375
2033-34	39,855,000	21,116,625	60,971,625
2034-35	41,935,000	19,123,875	61,058,875
2035-36	24,540,000	17,027,125	41,567,125
2036-37	25,770,000	15,800,125	41,570,125
2037-38	27,055,000	14,511,625	41,566,625
2038-39	28,410,000	13,158,875	41,568,875
2039-40	29,745,000	11,825,275	41,570,275
2040-41	31,105,000	10,463,625	41,568,625
2041-42	32,660,000	8,908,375	41,568,375
2042-43	34,290,000	7,275,375	41,565,375
2043-44	25,165,000	5,715,675	30,880,675
2044-45	26,485,000	4,394,513	30,879,513
2045-45	27,880,000	3,004,050	30,884,050
2046-47	29,340,000	1,540,350	30,880,350
	$759,040,000	$454,710,806	$1,213,750,806

(1) Includes the Bonds offered herein.

City of Phoenix Junior Lien Wastewater System Revenue Debt

The City has previously entered into loan agreements with the Water Infrastructure Finance Authority of Arizona ("*WIFA*") to finance the replacement of the Broadway Road Interceptor, rehabilitate approximately 41,000 linear feet of small diameter sewer and construct relief sewers in the southwest portion of the City. WIFA loaned funds derived in whole or in part from the United States Environmental Protection Agency pursuant to the federal American Recovery and Reinvestment Act of 2009. The City made a junior lien pledge of Designated Revenues of the System for the payment of principal and interest on the loans. Amounts due on the loans pursuant to the loan agreements are as follows:

City of Phoenix
Junior Lien Wastewater System Revenue Debt Outstanding

Issue Date	Original Issuance	Purpose	Maturity Dates	Average Interest Rate	Bonds Outstanding As of 07-01-23
08-03-10	$6,286,996	Wastewater System Improvements	7-1-18/26	2.97%	$1,942,722
06-01-11	3,909,270	Wastewater System Improvements	7-1-26/29	2.97	3,909,270
Total Junior Lien Wastewater System Revenue Bonded Debt					$5,851,992

City of Phoenix
Schedule of Annual Debt Service Requirements
Junior Lien Wastewater System Revenue Debt Outstanding

Fiscal Year	Principal	Interest	Total
2023-24	$ 913,744	$173,687	$1,087,431
2024-25	940,864	146,567	1,087,431
2025-26	968,790	118,642	1,087,432
2026-27	997,543	89,889	1,087,432
2027-28	1,027,150	60,282	1,087,432
2028-29	1,003,901	29,796	1,033,697
	$5,851,992	$618,863	$6,470,855

City of Phoenix Outstanding Junior Subordinate Lien Obligations

The City entered into the Revolving Credit Agreement with the Revolving Credit Provider in order to finance certain improvements to the Wastewater System. The City obtained the Initial Loan described in the table below by a drawing under the Revolving Credit Agreement. The Revolving Credit Agreement provides for a three-year loan period, ending on April 25, 2025 (the "*Credit Commitment Period*"), during which the City may borrow, repay, and re-borrow amounts, but not exceeding $200,000,000 outstanding in the aggregate at any one time (each a "*Loan*"). Loans made under the Revolving Credit Agreement (such loans, together with any obligations on a parity therewith, the "*Junior Subordinate Lien Obligations*") will be payable from Designated Revenues, junior and subordinate to the Junior Lien Obligations ("*Junior Subordinate Lien Revenues*"). Upon application of the proceeds of the Bonds, there will be no amounts outstanding under the Revolving Credit Agreement or any other Junior Subordinate Lien Obligations outstanding. If the City elects to borrow additional amounts under the Revolving Credit Agreement that are outstanding at the end of the Credit Commitment Period, the City can, subject to certain conditions, convert the borrowing to a three-year term loan payable in twelve equal quarterly principal installments ending on April 25, 2028.

City of Phoenix
Junior Subordinate Lien
Wastewater Revolving Loan Outstanding

Issue Date	Original Issuance	Purpose	Prepayment Date	Notes Outstanding As of 07-01-23
04-28-22	$200,000,000	Wastewater System Improvements	4-25-25	$200,000,000

Upon an event of default under the Wastewater Revolving Credit Agreement, the Wastewater Credit Agreement Provider may declare all amounts due (collectively, "*Payment Obligations*") immediately due and payable. Events of default include, but are not limited to, failure to pay amounts to the Wastewater Credit Agreement Provider by the applicable grace period, failure to perform certain covenants such as issuance of obligations in violation of additional bonds tests, sale of the City Wastewater System property in violation of applicable covenants, acceleration of other obligations payable from Designated Revenues on any lien in an amount of at least $5,000,000, certain litigation, bankruptcy and insolvency events related to the Wastewater System and certain credit rating downgrades of Junior Lien Obligations. If Payment Obligations were to be accelerated, Designated Revenues would continue to be transferred to the extent available to the Bond Fund on a monthly basis prior to payment of Payment Obligations.

WASTEWATER FINANCIAL PLANNING PROCESS AND CAPITAL IMPROVEMENT PROGRAM

The City has a long-standing practice of updating the six-year Wastewater Capital Improvement Program (the "*Wastewater CIP*") and financial forecast each year for review by the City Council as part of the financial planning process. The Wastewater CIP, financial forecast and associated proposed wastewater rates are updated through a coordinated process between the Water Services Department and the Finance Department. The two departments recommend rates necessary to maintain wastewater revenue bond debt service coverage of 2.0 times or greater, a minimum available fund balance equal to annual total revenue bond debt service and long-term sustainability of the System. The most recent CIP was approved by the City Council per the adopted budget in June 2023, and approved Wastewater rate revenue increases of 6.5% effective October 2023, 6.5% effective March 2024, and 7.0% effective March 2025.

The Wastewater CIP programmed for fiscal years 2023-24 through 2027-28 totals $1.559 billion. For fiscal year 2023-24, $390.9 million was programmed. In general, the Wastewater CIP includes projects for system studies; modifications at the 91st Avenue and 23rd Avenue WWTPs; improvements to odor control facilities and transmission mains; and rehabilitation and replacement of sewer mains throughout the system. The total Wastewater CIP Summary for fiscal years 2023-24 through 2027-28 is shown on the following page.

City of Phoenix Wastewater System
Capital Improvement Program Summary

	2023-24	2024-25	2025-26	2026-27	2027-28	5-year Total
Uses of Funds						
Treatment:						
91st Avenue WWTP (1)	$ 74,773,798	$ 76,773,309	$ 50,896,420	$ 83,642,380	$ 54,966,000	$ 341,051,907
23rd Avenue WWTP	9,170,000	13,330,000	11,410,000	12,095,000	12,410,000	58,415,000
Tres Rios Wetlands	550,000	550,000	550,000	600,000	600,000	2,850,000
Subtotal Treatment	84,493,798	90,653,309	62,856,420	96,337,380	67,976,000	402,316,907
Collections:						
Lift Stations	39,621,000	31,090,000	14,115,000	34,255,000	9,281,000	128,362,000
North Phoenix Sewers	13,218,287	260,000	—	2,020,000	—	15,498,287
South Phoenix Sewers	6,131,704	—	—	—	—	6,131,704
Main Replacements	173,083,459	90,413,000	58,145,000	85,458,320	112,926,000	520,025,779
Multi-City Main Replacements	6,465,000	13,610,000	19,060,000	87,405,000	23,830,000	150,370,000
Sewer Other	50,135,000	101,165,000	60,650,000	60,650,000	1,965,000	274,565,000
Subtotal Collections	288,654,450	236,538,000	151,970,000	269,788,320	148,002,000	1,094,952,770
Other:						
Buildings	1,000,000	3,419,000	3,010,000	2,920,000	2,920,000	13,269,000
Automation	15,731,577	4,590,565	5,167,240	6,343,765	7,968,565	39,801,712
System Studies	5,000	1,010,000	5,000	5,000	5,000	1,030,000
Percent for Arts	965,000	1,970,827	2,620,000	525,000	2,000,000	8,080,827
Subtotal Other	17,701,577	10,990,392	10,802,240	9,793,765	12,893,565	62,181,539
Total Uses	$390,849,825	$338,181,701	$225,628,660	$375,919,465	$228,871,565	$1,559,451,216
Sources of Funds						
Operating Funds:						
Development Occupation Fees	$ 480,000	$ —	$ —	$ —	$ —	$ 480,000
Wastewater Revenue	137,982,957	86,525,458	93,721,115	81,589,716	85,177,789	484,997,035
Subtotal Operating Funds	138,462,957	86,525,458	93,721,115	81,589,716	85,177,789	485,477,035
Other Financing:						
CIC - Wastewater Future Bonds (2)	115,600,106	208,729,847	94,898,286	215,960,485	115,714,542	750,903,266
Other Cities (3)	37,242,312	42,926,396	37,009,259	78,369,264	27,979,234	223,526,465
Development Impact Fee (4)	33,544,450	—	—	—	—	33,544,450
Grants / Other (5)	66,000,000	—	—	—	—	66,000,000
Subtotal Other Financing	252,386,868	251,656,243	131,907,545	294,329,749	143,693,776	1,073,974,181
Total Sources	$390,849,825	$338,181,701	$225,628,660	$375,919,465	$228,871,565	$1,559,451,216

(1) Represents total costs for all SROG cities for the 91st Avenue WWTP.
(2) Consists of existing and future City Council bond authorizations.
(3) Represents contributions from the other SROG cities for the 91st Avenue WWTP and other cities for non-SROG CIP.
(4) Development Impact Fees are used as a source only when accumulated funds are available.
(5) Federal & State Grants (other funding).

City of Phoenix Wastewater System
Comparative Statement of Revenues, Expenditures, Encumbrances, Debt Service, Debt Service Coverage and Changes in Fund Balance (Non-GAAP Budgetary Basis)

	2018-19	2019-20	2020-21	2021-22	2022-23 (1)
Revenues:					
Sewer Service Charges	$167,747,962	$170,072,070	$170,683,821	$175,296,803	$169,305,862
Environmental Charges	35,031,558	35,291,695	35,775,034	36,863,929	35,794,907
Development Occupational Fees	4,048,020	5,151,900	5,722,710	6,086,070	6,612,390
Interest	3,984,140	6,047,194	2,673,964	2,042,585	9,091,832
Industrial Pretreatment Fee	937,985	965,829	1,040,341	1,303,879	1,000,055
Other (2)	7,448,324	9,187,975	11,974,499	21,243,838	20,062,124
Total Revenues	219,197,989	226,716,663	227,870,370	242,837,104	241,867,170
Operation & Maintenance Expenditures and Encumbrances:					
Administration	19,388,459	20,295,668	19,622,120	20,928,226	21,190,960
23rd Avenue WWTP	11,913,414	10,677,545	13,894,891	13,745,532	14,626,586
Reclamation Plants	981,082	817,619	805,496	777,244	864,026
Transfer to SROG Fund	23,689,468	23,320,624	23,143,503	23,829,474	24,940,842
Pollution Control	5,413,508	4,201,530	4,953,992	5,487,577	6,028,009
Sewer Maintenance and Collection	19,445,162	19,439,701	18,814,190	20,849,743	23,709,400
Total O&M Expenditures and Encumbrances	80,831,093	78,752,687	81,234,193	85,617,796	91,359,823
Net Operating Revenues Available for Senior Lien Revenue Bond Debt Service (Net Operating Revenues)	138,366,896	147,963,976	146,636,177	157,219,308	150,507,347
Senior Lien Revenue Bond Debt Service	14,870,242	14,834,000	14,786,750	14,739,000	20,884,500
Senior Lien Revenue Bond Debt Service Coverage	9.30	9.97	9.92	10.67	7.21
Net Operating Revenues Available for Junior Lien Bond Debt Service (Designated Revenues)	123,496,655	133,129,976	131,849,427	142,480,308	129,622,847
Junior Lien Revenue Bond Debt Service	58,879,005	56,540,581	56,586,581	56,630,231	50,490,381
Junior Lien Revenue Bond Debt Service Coverage	2.10	2.35	2.33	2.52	2.57
Revenues Available After Junior Lien Revenue Bond Debt Service	64,617,650	76,589,395	75,262,845	85,850,077	79,132,465
Other Expenditures, Encumbrances and Transfers:					
Bond Anticipation Note Interest (Revolver Loan)	—	—	—	—	5,370,278
G.O. Bond Debt Service	1,266,750	1,412,150	390,000	—	—
Capital Outlay	2,435,554	2,161,329	2,263,884	1,877,135	3,038,464
Plant Additions and Improvements	1,160,932	20,635,790	27,773,423	61,004,464	39,451,446
Transfer from Other Funds:					
Wastewater Capital Project Funds	(68,595)	(5,710,019)	—	(46,000,000)	(15,332,680)
Transfer to Other Funds:					
Staff and Administrative Charges	4,059,513	3,901,195	4,586,579	4,936,178	5,783,220
In-Lieu Property Tax Payments	9,193,575	9,579,045	9,833,881	9,916,320	10,267,538
Other	—	—	59,500	70,000	141,400
Total Other Expenditures, Encumbrances and Transfers	18,047,729	31,979,490	44,907,267	31,804,097	48,719,667
Net Increase (Decrease) in Fund Balance	46,569,920	44,609,905	30,355,579	54,045,980	30,412,799
Fund Balance, Beginning of Year (3)	33,430,747	80,000,668	124,610,573	154,966,151	209,012,131
Fund Balance, End of Year	80,000,668	124,610,573	154,966,151	209,012,131	239,424,930
Reserved for:					
Development Occupational Fees	39,644,867	32,596,041	38,685,384	16,959,306	23,970,317
Reserved Fund Balance, End of Year	39,644,867	32,596,041	38,685,384	16,959,306	23,970,317
Unreserved Fund Balance, End of Year	40,355,801	92,014,532	116,280,768	192,052,826	215,454,613
Wastewater Reserve Fund	53,000,000	53,000,000	53,000,000	53,000,000	53,000,000
Available Fund Balance, End of Year	$ 93,355,801	$145,014,532	$169,280,768	$245,052,826	$268,454,613

(1) Fiscal Year 2022-23 data is preliminary and unaudited.

(2) Other includes revenue from sources such as sales of by-products, penalties, test fees, recoveries and other miscellaneous revenues.

(3) Beginning fund balance includes wastewater operating grants.

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APPENDIX B

City of Phoenix
Wastewater System Financial Forecast

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RAFTELIS

September 6, 2023

REPORT OF INDEPENDENT CONSULTANTS

The Honorable Mayor, Members of the City Council, and City Manager City of Phoenix, Arizona

We have examined the accompanying "Forecasted Schedule of Revenues, Expenditures, Debt Service, Debt Service Coverage and Changes in Fund Balance" of the City of Phoenix Wastewater System for the five years ending June 30, 2028. This schedule presents the City of Phoenix management's estimates of the most probable results of operations and debt service coverage for the forecast period. Thus, based on present circumstances, the forecast reflects management's judgment on the most likely set of conditions and management's most likely course of action.

The accompanying "Forecasted Schedule of Revenues, Expenditures, Debt Service, Debt Service Coverage and Changes in Fund Balance" indicates that, based upon the assumptions presented herein, sufficient revenues would be generated to meet the operations and maintenance, debt service, and anticipated capital cost requirements. Based upon our examination, our professional opinion is that the underlying assumptions provide a reasonable basis for the City of Phoenix management's forecast. However, there will usually be differences between the forecast and actual results because events and circumstances frequently do not occur as expected, and those differences may be material. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

Sincerely,
RAFTELIS

Harold Smith
Vice President

383 Corona Street, Suite 206, Denver, CO 80218
303 305 1135 www.raftelis.com

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City of Phoenix Wastewater System
Forecast Schedule of Revenues, Expenditures, Debt Service, Debt Service Coverage and Changes in Fund Balance
(in thousands)

	2023-24 Forecast	2024-25 Forecast	2025-26 Forecast	2026-27 Forecast	2027-28 Forecast
Sources of Financial Resources					
Rate Revenues:					
Sewer Service Charges	$174,716	$176,463	$178,228	$180,010	$181,810
Environmental Charges	36,257	36,619	36,985	37,355	37,729
Total Rate Revenues	210,973	213,082	215,213	217,365	219,539
Forecast Revenue Adjustments:					
Annual Impact of 2024 Adjustment	15,999	27,701	27,978	28,257	28,540
Annual Impact of 2025 Adjustment	—	5,618	17,023	17,194	17,366
Annual Impact of 2026 Adjustment	—	—	7,806	23,653	23,890
Annual Impact of 2027 Adjustment	—	—	—	8,594	26,040
Annual Impact of 2028 Adjustment	—	—	—	—	9,461
Total Forecast Revenue Adjustments	15,999	33,319	52,807	77,698	105,297
Total Sewer Service and Environmental Charges	**226,972**	**246,401**	**268,020**	**295,063**	**324,836**
Development Occupational Fees	6,200	6,200	6,200	6,200	6,200
Interest Income	9,194	2,780	3,835	2,816	4,745
Industrial Pretreatment Fee	1,047	1,052	1,057	1,063	1,068
Other	8,905	8,820	9,539	6,883	6,115
Total Sources of Financial Resources	**252,318**	**265,253**	**288,651**	**312,025**	**342,964**
Uses of Financial Resources					
Operation and Maintenance:					
Administration and Engineering	26,793	28,083	28,642	29,217	29,810
23rd Avenue WWTP	18,889	19,605	20,342	21,101	21,883
Reclamation Plants	1,263	1,301	1,340	1,381	1,422
Transfer to SROG Fund	31,258	31,215	31,187	32,330	33,508
Pollution Control	6,749	6,952	7,160	7,375	7,596
Sewer Maintenance and Collection	25,290	26,183	27,103	28,051	29,027
Subtotal	110,242	113,339	115,774	119,455	123,246
Total Operation and Maintenance Expenditures	**110,242**	**113,339**	**115,774**	**119,455**	**123,246**
Net Operating Revenues Available for Senior Lien Revenue Bond Debt Service (Net Operating Rev)	**142,076**	**151,914**	**172,877**	**192,570**	**219,718**
Senior Lien Revenue Bond Debt Service	20,837	—	—	—	—
Senior Lien Revenue Bond Debt Service Coverage	6.82 x	—	—	—	—
Net Operating Revenues Available for Junior Lien Revenue Bond Debt Service (Designated Rev)	**121,239**	**151,914**	**172,877**	**192,570**	**219,718**
Junior Lien Revenue Bond Debt Service:					
Existing Bonds	50,534	43,198	43,256	43,312	43,380
Series 2023 Bonds (1)	12,149	19,353	19,353	19,353	30,883
Future Bonds (2)	—	—	15,000	15,000	30,000
Total Junior Lien Revenue Bond Debt Service	**62,683**	**62,551**	**77,609**	**77,665**	**104,263**
Junior Lien Revenue Bond Debt Service Coverage	1.93 x	2.43 x	2.23 x	2.48 x	2.11 x
Revenues Available after Revenue Bond Debt Service	58,556	89,363	95,268	114,905	115,455
Other Expenditures:					
Plant Additions and Improvements	102,373	87,248	94,554	83,137	86,643
Commercial Paper/Revolver Loan	4,000	—	—	—	—
Staff and Administrative Charges	5,919	6,061	6,207	6,356	6,509
In-Lieu Property Tax Payments	11,067	11,574	12,121	11,951	12,310
Transfer (to) from Operating Fund	151	151	—	—	—
Total Other Expenditures	123,510	105,034	112,882	101,444	105,462
Total Uses of Financial Resources	**317,272**	**280,924**	**306,265**	**298,564**	**332,971**
Net Increase (Decrease) in Fund Balance	(64,954)	(15,671)	(17,614)	13,461	9,993
Fund Balance, Beginning of Year	239,418	174,464	158,792	141,178	154,639
Fund Balance, End of Year	174,464	158,793	141,178	154,639	164,632
Reserved Fund Balance, End of Year	30,764	37,284	43,866	50,509	57,215
Unreserved Fund Balance, End of Year	143,700	121,509	97,312	104,130	107,417
Wastewater Reserve	53,000	53,000	53,000	53,000	53,000
Available Fund Balance, End of Year	**$196,700**	**$174,509**	**$150,312**	**$157,130**	**$160,417**
Forecast Annual (Fiscal) Adjustment in Rate Revenue	13.00%	7.00%	9.00%	9.00%	9.00%
Month of Adjustment	Oct/Mar	Mar	Mar	Mar	Mar
Available Fund Balance to Total Debt Service	2.4	2.8	1.9	2.0	1.5

(1) Represents the Bonds offered herein.
(2) Represents estimated debt service on $600M of future bonds.

1. Basis of Presentation

The City of Phoenix (the "*City*") Wastewater System (the "*System*"), a division of the City's Water Services Department (the "*Department*"), is operated as a financially self-supporting municipal utility. The Department derives its authority and responsibility from the Phoenix City Charter, ordinances and resolutions adopted by the City Council.

The accompanying financial forecast presents, to the best of the City's knowledge and belief based upon available information, the expected revenues, expenditures, debt service, debt service coverage and changes in fund balance of the System. Accordingly, the forecast schedule reflects the City's judgment as of the date of this Official Statement. The forecast is for the period ending June 30, 2028. The financial information provided herein is in conformity with the terms of the City Purchase Agreement dated as of November 1, 2023 (the "*City Purchase Agreement*") between the City and the City of Phoenix Civic Improvement Corporation (the "*Corporation*"). Pursuant to the City Purchase Agreement, the City agrees to make purchase payments from "*Designated Revenues*" of the System (consisting of operating revenues of the System net of operation and maintenance expenditures and all payments required on any senior lien revenue obligations) corresponding to payments of principal of and interest on the Bonds. Operating Revenues of the System net of operation and maintenance expenditures are referred to herein as "*Net Revenues*". The forecast schedule is prepared on the modified accrual basis to correspond to the City's budget practices and is not intended to present results of operations in accordance with generally accepted accounting principles. The assumptions disclosed herein are those that the City believes are significant to the forecast. There will usually be differences between forecast and actual results because events and circumstances frequently do not occur as expected, and those differences may be material.

2. City of Phoenix Civic Improvement Corporation Financings and Agreements

The City may enter into one or more additional agreements similar to the City Purchase Agreement (together with the City Purchase Agreement, (the "*City Purchase Agreements*")) corresponding to additional Corporation bond issues for System improvements payable from Net Revenues or Designated Revenues, as applicable (such additional bond issues, together with the Bonds, are referred to herein as ("*Wastewater Revenue Bonds*")). The Revenue Bond Debt Service amounts presented in the forecast represent the payments to be made under the City Purchase Agreements to pay principal of and interest on Wastewater Revenue Bonds.

The Wastewater Revenue Bonds of the Corporation are and will be special revenue obligations payable solely from payments received under the City Purchase Agreements. Payments by the City are to be made solely from either Net Revenues or Designated Revenues, as applicable. During the term of the City Purchase Agreements, payments are to be made regardless of damage to the System or commercial frustration of purpose, without right of set-off or counterclaim, regardless of any contingencies and whether the City possesses or uses the System. The City's obligation to make payments will continue until all payments under the City Purchase Agreements have been paid.

The obligation of the City under the City Purchase Agreements does not and will not constitute a debt or a pledge of the full faith and credit of the City, the State of Arizona, or any other political subdivision thereof. The City has not pledged and will not pledge any form of ad valorem taxes to the payments. The Wastewater Revenue Bonds are and will be special revenue obligations of the Corporation secured only by the pledge of payments from Designated Revenues of the System. The City may, but is not required to, pay amounts due under the City Purchase Agreements from any other money legally available for such purposes.

3. Water Infrastructure Finance Authority of Arizona

The City entered into loan agreements with the Water Infrastructure Finance Authority of Arizona ("*WIFA*") to finance the replacement of the Broadway Road Interceptor, rehabilitate approximately 41,000 linear feet of small diameter sewer and construct relief sewers in the southwest portion of the City. WIFA loaned funds are derived in whole or in part from the United States Environmental Protection Agency pursuant to the federal American Recovery and Reinvestment Act of 2009 (the "*Recovery Act*"). The City made a junior lien pledge of the Designated Revenues of the System for the payment of principal and interest on the loans.

4. Scope of Operations

The System provides wastewater collection and treatment services for more than 423,122 accounts within a 543 square mile service area. The System consists of 5,037 miles of sewers and interceptors and three treatment facilities. The treatment facilities are the 23rd Avenue WWTP, 91st Avenue WWTP and the Cave Creek WRP.

The 91st Avenue WWTP provides wastewater treatment for the multi-city Subregional Operating Group (the "*SROG*"), that includes the City and the cities of Glendale, Scottsdale, Mesa, and Tempe. The City is responsible for the planning, budgeting, construction, operation, and maintenance of the 91st Avenue WWTP. SROG participants pay for the costs of plant operation, maintenance and replacement based on sewage flows and strengths, and for purchased capacity in plant and related transportation facilities based on approved engineering billing schedules. The City's proportion of total flows to the 91st Avenue WWTP averages about 60%.

5. Capital Improvements and Related Funding

As summarized in Appendix A of the Official Statement, the City has developed a capital improvement program ("*CIP*") which is an integral part of its plans to meet its commitment of providing reliable wastewater service to its customers. It is assumed that the CIP will not be significantly altered, and the program will be implemented substantially as scheduled. The planned capital improvements are to be funded using a combination of System revenues, development occupational fees, federal funds, and bond proceeds. The payments made to the Corporation for estimated debt service payments on bonds issued to pay for the identified capital improvements are included in the accompanying forecast. See APPENDIX A — Summary Information of the City of Phoenix Wastewater System for the most recent CIP.

6. Operating Revenues

Sewer Service Charges and Environmental Charge

Sewer service charges include a base and volume charge that recovers non-environmental operating costs. The environmental charge recovers costs related to federal and state environmental mandates. Total sewer service charges and environmental charge revenues for fiscal year ended June 30, 2023 were $205,100,770. Account growth is estimated at 1.0% for fiscal year ending June 30, 2024, and is forecasted to increase at 1.0% for the remainder of the forecast period.

For System customers, except industrial customers and self-service laundries, a percentage of winter (January through March) water usage is used to estimate sewage flows and calculate monthly bills. Estimated sewage flows for each customer are updated annually in July based on the current year's winter usage. The annual estimated sewage flows for all customers, except industrial, are adjusted as necessary based on a sewer flow stabilization factor, to ensure that the overall base level of revenue is achieved. The use of the sewer flow stabilization factor protects the City against revenue shortfalls caused by variations in winter weather conditions.

It is assumed that the City Council will continue to have full control over the establishment of rates for wastewater service. The most recent approved increase was 6.5% and becomes effective October 1, 2023. There are also approved increases of 6.5% that becomes effective March 1, 2024, and 7.0% that becomes effective March 1, 2025.

Bad debt expense for fiscal year ending June 30, 2023 was 0.46% of revenue. The bad debt expense reflects the uncollected sewer service charges and delinquent accounts. Bad debt expense is projected to be a long-term average of 0.46% through the remainder of the forecast period.

Development Occupational Fees

The development occupational fee is assessed on new wastewater connections to recover a portion of the City's investment in its wastewater collection and treatment systems. The fee is currently $600 for a single-family home. Fees are charged for other types of connections based on water meter size. Development occupational fee revenues are restricted to the funding of growth-related wastewater capital improvement projects or the associated debt service on outstanding wastewater obligations issued for growth related purposes. Development occupational fees for the fiscal year ended June 30, 2023 were $6,612,390. The projected revenues decrease to $6,200,000 for fiscal year ending June 30, 2024, and $6,200,000 for fiscal year ending June 30, 2025, reflecting a stable economy.

Interest Income — Operating & Bond Proceeds

Interest income on available operating funds is estimated at a rate of 2% through fiscal year ending June 30, 2024, and 2.0% throughout the remainder of the forecast. The yield on the temporary investment of existing and future bond proceeds is forecasted at a rate of 2%.

Industrial Pretreatment Fee

Industrial pretreatment fees are charged to industrial customers to recover the annual costs of the industrial pretreatment program. The City requires industrial customers to obtain a permit from the City prior to discharging industrial waste into the System and to participate in the on-going industrial pretreatment program. Fees for industrial customers are currently $0.5511 per hundred cubic feet of sewage discharged and $1,009 assessed annually per location.

Revenues from industrial pretreatment fees for the fiscal year ended June 30, 2023 were $1,000,055. The projected revenues increase to $1,046,864 for fiscal years ending June 30, 2024, and $1,052,098 for June 30, 2025, and increase slightly through the remainder of the forecast period.

Other

Other income includes revenues from sources such as sales of by-products, biogas loan repayment with interest, pretreatment penalties, industrial waste test fees, late payment fees, recoveries of prior year unrealized expenses and miscellaneous charges. The revenue received from these various sources was $20,062,124 for fiscal year ended June 30, 2023. The forecast decreases to $6,115,344 by the end of the forecast period as the revenue received from the biogas loan and interest is reduced because of loan maturity and recoveries are not forecasted.

7. Operation and Maintenance Expenditures

The forecast of operation and maintenance (the "*O&M*") expenditures are based on a combination of historical expenditure patterns and expected changes in operations. Total O&M expenditures were $91,359,823 for the fiscal year ended June 30, 2023. O&M expenditures are forecasted to increase to $110,241,499 for fiscal year ending June 30, 2024, and increase to $113,338,794 for fiscal year ending June 30, 2025, because of the continued assumed increase in inflation costs.

Administration and Engineering costs are forecast to increase from $21,190,960 in fiscal year ended June 30, 2023, to $26,792,906 for fiscal year ending June 30, 2024. It continues to increase to $28,082,858 for fiscal year ending June 30, 2025, due to an increase in personnel costs in relation to inflation.

The Transfer to SROG Fund covers the City's portion of operation, maintenance, and replacement costs for the 91st Avenue WWTP. The City's share of the plant's operation, maintenance, and replacement costs is based on the City's proportion of total plant flows and strengths. The City's share of the 91st Avenue WWTP costs are based on an analysis conducted by Wilson Engineers, an engineering firm based in Tempe, AZ and will vary from year to year. The forecast operation, maintenance, and replacement costs for the 91st Avenue WWTP also include inflationary increases as well as changes in operations. In fiscal year ended June 30, 2023, total operation, maintenance, and replacement costs at the 91st Avenue WWTP were $54,776,000 and the City's Transfer to SROG Fund was $24,941,000. The forecasted transfer for fiscal year ending June 30, 2024 is projected at $31,257,000. Forecasted transfers stay consistent each year from fiscal year ending June 30, 2025 through the remainder of the forecast period.

Sewer Maintenance and Collection costs are forecast to increase from $23,709,400 for fiscal year ended June 30, 2023, to $25,289,831 for fiscal year ending June 30, 2024, and increasing to $26,183,239 for fiscal year ending June 30, 2025. Through the remainder of the forecast, expenditures are forecast to grow at compounded annual rates of 3%, reflecting increases due to inflation and System rehab.

8. Revenue Bond Debt Service

Existing Senior Lien Wastewater Obligations

As of July 1, 2023, there were outstanding Senior Lien Wastewater Revenue Bonds as follows:

Issue Date	Original Issuance	Purpose	Maturity Dates	Average Interest Rate	Bonds Outstanding As of 07-01-23
06-19-18	$84,295,000	Wastewater System Refunding	7-1-19/24	5.00%	$19,845,000
Total Senior Lien Wastewater Obligations					$19,845,000

Debt service on outstanding Senior Lien Wastewater Revenue Bonds during the forecast period are as follows:

Fiscal Year	Principal	Interest	Total
2023-24	$19,845,000	$992,250	$20,837,250
2024-25	—	—	—
2025-26	—	—	—
2026-27	—	—	—
2027-28	—	—	—
Total	$19,845,000	$992,250	$20,837,250

The proceeds of the Senior Lien Wastewater System Revenue Bonds provided refinancing for acquiring and constructing additional wastewater treatment facilities at the 23rd Avenue WWTP and System improvements at various locations in the City.

Existing Junior Lien Wastewater Obligations

There are presently $383,271,992 of Junior Lien Wastewater System Revenue Bonds outstanding as described below:

Issue Date	Original Issuance	Purpose	Maturity Dates	Average Interest Rate	Bonds Outstanding as of 07-01-23
08-03-10	$ 6,286,996 (1)	Wastewater System Refunding	7-1-18/26	2.97%	$ 1,942,722
06-01-11	3,909,270 (1)	Wastewater System Refunding	7-1-26/29	2.97	3,909,270
12-22-11	118,290,000	Wastewater System Refunding	7-1-14/24	4.72	11,230,000
04-15-14	127,810,000	Wastewater System Refunding	7-1-15/29	4.84	64,170,000
11-16-16	225,325,000	Wastewater System Refunding	7-1-17/35	5.00	168,750,000
06-19-18	133,720,000	Wastewater System Revenue	7-1-25/43	4.64	133,270,000
Total Junior Lien Wastewater Obligations					$383,271,992

(1) Represents loans agreements between the City and the WIFA pursuant to the Recovery Act.

The obligation of the Corporation to make payments on the outstanding Junior Lien Wastewater Revenue Bonds is secured solely by payments to be made by the City pursuant to the City Purchase Agreements and are secured by a pledge of the Designated Revenues of the System. Under the City Purchase Agreements, the payment amounts to be made by the City to the Corporation from Designated Revenues of the System during the forecast period are summarized below:

Fiscal Year	Principal	Interest	Total
2023-24	$ 31,868,744	$18,664,887	$ 50,533,631
2024-25	26,095,864	17,102,517	43,198,381
2025-26	27,438,789	15,816,842	43,255,631
2026-27	28,847,543	14,464,589	43,312,131
2027-28	30,337,150	13,042,482	43,379,631
Total	$144,588,090	$79,091,317	$233,679,405(1)

(1) Schedule does not include debt service on the Bonds offered herein.

Junior Lien Wastewater System Revenue Bonds — Series 2023

The $381,620,000 principal amount of Junior Lien Wastewater System Revenue Bonds, Series 2023 (the *"Bonds*") offered herein will be used to finance System improvements and to prepay $200,000,000 in principal amount of the Initial Loan (as discussed below). The obligation of the Corporation to make payments on Bonds are secured solely by payments to be made by the City pursuant to a City Purchase Agreement and are secured by a lien on Designated Revenues of the System. Interest on the Bonds is payable semiannually on January 1 and July 1 of each year, commencing July 1, 2024. Interest-only is scheduled for the four years with principal amortization beginning in the fiscal year ending June 30, 2028 and concluding in the fiscal year ending June 30, 2047. Debt service on the Bonds during the forecast period are as follows:

Fiscal Year	Principal	Interest	Total
2023-24	$ —	$12,149,493	$ 12,149,493
2024-25	—	19,353,175	19,353,175
2025-26	—	19,353,175	19,353,175
2026-27	—	19,353,175	19,353,175
2027-28	11,530,000	19,353,175	30,883,175
Total	$11,530,000	$89,562,193	$101,092,193

Future Bonds

The forecast assumes $600,0000,000 principal amount of Junior Lien Wastewater System Revenue Bonds. The first bond sale is assumed for fiscal year 2026 with $300,000,000 principal, and a second bond sale of $300,000,000 principal is assumed for fiscal year 2028. The obligations of the Corporation to make payments on future bonds will be secured solely by payments to be made by the City pursuant to a City Purchase Agreement and will be secured by a lien on Designated Revenues of the System. Interest on the future bonds will be payable semiannually on January 1 and July 1 of each year, commencing January 1, 2026 and January 1, 2028, respectively. Interest-only is scheduled for the first four years for each bond sale with principal amortization beginning in the fiscal year ending June 30, 2030, and June 30, 2031, respectively, and concluding in the fiscal year ending June 30, 2050, and June 30, 2051, respectively. The average interest rate on the future bonds is projected to be 5.0%. Under the City Purchase Agreement, the payment amounts forecasted to be made the City to the Corporation from Designated Revenues during the forecast period are summarized below:

Fiscal Year	Principal	Interest	Total
2023-24	$—	$ —	$ —
2024-25	—	—	—
2025-26	—	15,000,000	15,000,000
2026-27	—	15,000,000	15,000,000
2027-28	—	30,000,000	30,000,000
Total	$—	$60,000,000	$60,000,000

Junior Lien Debt Service Coverage

The Junior Lien Debt Service Coverage calculated in the forecast is Designated Revenues divided by the Total Junior Lien Debt Service. The rate covenant pursuant to the City Purchase Agreement requires Net Operating Revenues to equal at least 115% of the current year's senior lien and junior lien debt service. As part of the financial planning and rate setting process, the City targets long term Junior Lien Debt Service Coverage at 2.0 times or greater throughout the forecast period but is not legally obligated to do so. This is part of the long-range financial planning process, which includes the setting of water rates and determining the capacity of the Wastewater CIP. Fiscal year 2023-24 assumes a temporary drop in coverage below the targeted 2.0x mainly due to the cost of additional debt.

9. Other Expenditures

*Existing Junior Subordinate Lien Obligations — Revolving Loan**

The City entered into the Revolving Credit Agreement with the Revolving Credit Provider in order to finance certain improvements to the Wastewater System. The City obtained the Initial Loan described in the table below by a drawing under the Revolving Credit Agreement. The Revolving Credit Agreement provides for a three-year loan period, ending on April 25, 2025 (the "*Credit Commitment Period*"), during which the City may borrow, repay, and re-borrow amounts, but not exceeding $200,000,000 outstanding in the aggregate at any one time (each a "*Loan*"). Loans made under the Revolving Credit Agreement (such loans, together with any obligations on a parity therewith, the "*Junior Subordinate Lien Obligations*") will be payable from Designated Revenues, junior and subordinate to the Junior Lien Obligations ("*Junior Subordinate Lien Revenues*"). Upon application of the proceeds of the Bonds, there will be no amounts outstanding under the Revolving Credit Agreement or any other Junior Subordinate Lien Obligations outstanding. If the City elects to borrow additional amounts under the Revolving Credit Agreement that are outstanding at the end of the Credit Commitment Period, the City can, subject to certain conditions, convert the borrowing to a three-year term loan payable in twelve equal quarterly principal installments ending on April 25, 2028.

Forecasted debt service amounts during the forecast period are summarized below.

Fiscal Year	Principal*	Interest*	Total*
2023-24	$—	$4,000,000	$4,000,000
2024-25	—	—	—
2025-26	—	—	—
2026-27	—	—	—
2027-28	—	—	—
Total	$—	$4,000,000	$4,000,000

Upon an event of default under the Wastewater Revolving Credit Agreement, JPMorgan Chase Bank, National Association, may declare all amounts due (collectively, "*Payment Obligations*") immediately due and payable. Events of default include, but are not limited to, failure to pay amounts due by the applicable grace period, failure to perform certain covenants such as issuance of obligations in violation of additional bonds test, sale of the City Wastewater System property in violation of applicable covenants, acceleration of other obligations payable from Wastewater System revenues on any lien in an amount of at least $5,000,000, certain litigation, bankruptcy and insolvency events related to the Wastewater System and certain downgrades of Junior Lien Obligations. If Payment Obligations were to be accelerated, Wastewater System Revenues would continue to be transferred to the extent available from the Revenue Fund to the Junior Lien Bond Fund monthly prior to payment of Payment Obligations.

Plant Additions, Improvements and Capital Outlay

Plant additions, improvements and capital outlay for the fiscal year ended June 30, 2023, were $42,489,911. The level of the plant additions and improvements varies from year to year. Future additions and improvements include the capitalized costs of service connections for new customers, a portion of the costs of renewal and replacement of existing wastewater infrastructure, repair contracts, projects related to energy conservation, and certain improvements to the City's wastewater collection and treatment facilities. Plant additions and improvements are funded on an annual basis from recurring revenues and from development occupational fee reserves to fund growth related capital projects and are in addition to those funded from bond proceeds.

* Subject to change.

Staff and Administrative Charges

Staff and administrative charges are the allocated costs for central services provided by various City departments or offices such as the City Clerk, City Manager, City Attorney, Human Resources, Information Technology, and others. These intergovernmental charges are allocated to departments based upon various allocation methods. The staff and administrative charges were $5,783,220 for fiscal year ended June 30, 2023. Staff and administrative charges are forecasted to be $5,919,000 for fiscal year ending June 30, 2024. These costs are forecasted to increase at a compounded annual rate of 2.4% through the remainder of the forecast period.

In-Lieu Property Tax Payments

In-lieu property tax payments are the annual assessments paid to the City's General Fund for the value of the fixed assets owned by the System. In-lieu property tax payments were $10,267,538 for the fiscal year ended June 30, 2023. These payments are expected to increase to $11,067,480 by fiscal year ending June 30, 2024, based upon net changes in the value of the System's property, plant, and equipment.

Transfer (to) from Operating Fund

Transfers either to or from the operating fund for the forecast period reflect the transfer for the purpose of using funds for capital purposes or for maintaining sufficient fund balances as additional bonds or commercial paper are sold in the future. For fiscal year ended June 30, 2023, $15,332,680 was transferred to the Wastewater operating fund from the City capital fund related to reimbursements received from the State of Arizona for construction expenses related to Taiwan Semiconductor Manufacturing Company. For fiscal year ended June 30, 2023, $325,826 was transferred from the Wastewater operating fund to the special revenue fund related to badging system expenses. For fiscal years ending June 30, 2024, and 2025, the forecast is assuming a transfer of up to $151,000 from the Wastewater operating fund related to badging system expenses.

10. Fund Balances

The fund balance consists of a restricted portion (reserve fund balance) and an unrestricted portion (unreserved fund balance). The reserve fund balance represents development occupational fees. Development occupation fees are designated for future growth-related CIP projects and outstanding wastewater obligations issued for growth related purposes. The unreserved fund balance is calculated by subtracting the reserve fund balance from the fund balance end of year. The wastewater reserve is used to meet the available fund balance requirement discussed below and is added to the unreserved fund balance to produce the available fund balance end of year.

As a matter of policy, the System maintains the available fund balance at a minimum of 10% of annual total expenditures. During the forecast period, the available fund balance is not less than 10% of annual total expenditures. A primary consideration in setting the forecasted rate increases in each year is so the available fund balance does not fall below the total debt service requirements for any fiscal year. For the fiscal year ended June 30, 2023, the available fund balance was $268,454,613, which includes $53,000,000 in the wastewater reserve. The available fund balance is projected to decrease to $196,821,150 for fiscal year ending June 30, 2024.

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APPENDIX C

City of Phoenix, Arizona — Description

OVERVIEW

Phoenix is the fifth largest city in the United States, the state capital of Arizona and the center of the metropolitan area encompassed by Maricopa County (the "*County*"). This metropolitan area also includes the cities of Avondale, Buckeye, Chandler, El Mirage, Glendale, Goodyear, Mesa, Peoria, Scottsdale, Surprise, Tempe; the towns of Gilbert, Fountain Hills, Paradise Valley, and Queen Creek as well as several smaller cities and towns and all unincorporated areas of the County. It is situated 1,117 feet above sea level in the semi-arid Salt River Valley. The area is well known for its mild, sunny winters and hot summers and receives average rainfall of 7.22 inches annually.

Phoenix was founded in 1870 as an agricultural community. In 1881, it was incorporated as a city (the *"City"*). The City Charter under which it is presently governed was adopted in 1913 and has been amended from time to time. The City has grown steadily since its inception and has shown especially strong growth since 1950. The 1900 census recorded Phoenix's population at 5,544. In 1950, the City occupied 17 square miles with a population of almost 107,000 ranking it 99th among American cities. The U.S. Census Bureau estimated Phoenix population at 1,644,409 as of July 1, 2022. As of July 5, 2023, the City encompasses 519.29 square miles.

Population Statistics(1)
Phoenix, Maricopa County and Arizona

							Percent Change	
Area	**1950**	**1970**	**1990**	**2000**	**2020**	**2022**	**1950-22**	**1990-22**
Phoenix	106,818	584,303	983,403	1,321,045	1,608,139	1,657,035	1,451.3%	68.5%
Maricopa County	331,770	971,228	2,122,101	3,072,149	4,420,568	4,586,431	1,282.4	116.1
State of Arizona	749,587	1,775,399	3,665,228	5,130,632	7,151,502	7,409,189	888.4	102.1

(1) Population figures for the State of Arizona, City of Phoenix, and Maricopa County are as of July 1, 2022. The 2022 population figures for Maricopa County and the State of Arizona are from the Arizona Office of Economic Opportunity. The 2022 population figure for the City of Phoenix is from the City of Phoenix Planning & Development Department.

Phoenix is served by main lines of the Union Pacific and Burlington Northern Santa Fe Railroads, a busline (Greyhound Trailways), and 10 transcontinental, 34 interstate and 39 intrastate truck lines. Phoenix Sky Harbor International Airport, located approximately 4 miles from downtown Phoenix, is served by the following scheduled airlines: Advanced Air, Air Canada, Alaska, Allegiant, American, Breeze Airways, British Airways, Boutique Air, Condor, Contour, Delta, Denver Air Connection, Envoy Air (operating as American Eagle), Frontier, Hawaiian, Horizon (operating as Alaska Horizon), Jazz Aviation (operating as Air Canada Express), JetBlue, Mesa (operating as American Eagle), SkyWest (operating as American Eagle, Delta Connection and United Express), Southern Airways Express, Southwest, Spirit, Sun Country, United, Volaris and WestJet. Interstate 10, Interstate 17, U.S. Highway 60, State Routes 51, 74, 85, 87, 88, 143 and Loops 101, 202, and 303 all traverse the metropolitan area.

The metropolitan area is presently served by 35 elementary school districts, 6 high school districts, 15 unified school districts and 2 technical institutes, operating over 800 schools. Education is also provided by public charter schools and private and parochial schools located throughout the metropolitan area. Maricopa County Community College District serves the educational needs of the Phoenix area through 10 institutions. Arizona State University (*"ASU"*) houses 17 colleges and schools and has a total equivalent enrollment of more than 142,600 undergraduate, graduate and professional students. There are 4 campuses in Metro Phoenix and online. ASU's main campus is located just east of Phoenix in the city of Tempe, and has enrollment of nearly 57,590 students. The Arizona State University West campus opened in 1991, is located in northwest Phoenix, and has an enrollment of nearly 4,970 students. The Arizona State University Polytechnic campus opened in 1996, is located in southeast Metro Phoenix in the city of Mesa, and has an enrollment of more than 5,800 students. The Arizona State University Downtown Phoenix campus opened in 2006 and has an enrollment of more than 11,100 students. ASU Online has nearly 62,550 students. Grand Canyon University, a private university offering undergraduate and postsecondary degree programs, has a main campus located northwest of downtown Phoenix. In fall 2022, enrollment at Grand Canyon University was approximately 110,900 including both on-campus and online students. The City also contains a number of private universities, colleges, and technical institutions. The U.S. Census Bureau's 2021 American Community Survey, the most recently available, estimated that more than 67.6% of the adult residents of the Maricopa County attended college, compared to 63.1% nationally.

CYBERSECURITY INITIATIVES

Computer networks and data transmission and collection are vital to the efficient operation of the City. The City collects and stores sensitive data, including intellectual property, proprietary business information, information regarding customers, suppliers and business partners, and personally identifiable information of customers and employees. The secure processing, maintenance and transmission of this information is critical to the operation of each City department. The City is using the Department of Homeland Security best practices as well as cybersecurity initiatives to prevent or mitigate any disruption in service or risk to sensitive data.

The City has an insurance policy with AIG Specialty Insurance Company, Crum & Foster, Lloyds, and Tokio Marine, which insures against cyber extortion and network interruption. The Information Technology Services Department has dedicated staff specifically targeting cybersecurity initiatives such as security awareness programs, advanced email security, Endpoint Detection and Response, as well as event monitoring.

SIGNIFICANT DEVELOPMENTS

Downtown Development

In 1979, the City adopted the Downtown Redevelopment Area plan for a 1.5 square mile area of downtown to revitalize the urban center of the City. Redevelopment efforts to date have resulted in the construction of residential units as well as numerous public and private redevelopment projects that have produced several amenities and services for employers, residents and visitors.

In 1984, a group of downtown business leaders founded the Phoenix Community Alliance. The group's express purpose is to work with government and other development interests to accomplish the highest quality downtown revitalization possible. They have been involved in a program of cooperative planning between government and private interests and have been focusing their attention on bringing increased housing, especially ownership housing, to downtown. The Phoenix Community Alliance's 2011-2016 Action Plan provided three goals: facilitating quality land development in downtown Phoenix, attracting investment to downtown Phoenix, and sharpening downtown Phoenix's competitive advantage.

Downtown Phoenix Inc. ("*DPI*"), a nonprofit entity formed in 2013, was created for the purpose of enhancing the economic and cultural vitality of downtown Phoenix. It serves as an umbrella organization to "broaden the tent" of the downtown community and improve coordination amongst downtown focused organizations, resulting in greater efficiency and effectiveness among nonprofits, such as Downtown Phoenix Partnership, Phoenix Community Alliance and the Downtown Phoenix Community Development Corporation. DPI serves as a City liaison to downtown stakeholders, including neighborhood and business organizations, assisting the City in communicating with the community by providing guidance and advice as needed. DPI also collaborates with the City to expand and enhance special events downtown, in addition to working on assignments, such as studying the potential expansion of the Enhanced Municipal Services District boundaries.

General Plan

In 1985, the City Council adopted the General Plan, a long-range plan based on the Urban Village Concept. The overall goal of the Urban Village Concept (now referred to as the Urban Village Model) is to offer Phoenix residents a choice of lifestyles in which residents may live, work and enjoy leisure time activities within the same urban village. The Urban Village Model also gives residents the opportunity to play a major role in shaping these choices. It is a unique concept that has provided a high degree of citizen participation in local land use planning processes.

The General Plan guides future development in Phoenix through the establishment of fifteen urban villages, each with an approximate population of 125,000. Each village has its own village planning committee. The committees, guided by and responsible to the City Council, are comprised of 15-21 citizens, most of whom live in their respective villages. Planning activities include identifying the attitudes, problems, and issues impacting their village; formulating goals and policies that reflect the unique needs of their planning area; developing land use plans that will guide future growth in their village, and reviewing rezoning applications and development proposals.

In 1998, the State of Arizona passed the Growing Smarter legislation and in 2000 passed the Growing Smarter Plus legislation. The legislation required that the City update its General Plan, and amend or readopt the General Plan every ten years. It also requires that any changes to the General Plan be presented by public hearing to the citizens, be approved by at least two-thirds of the City Council and then be voted upon by the citizens. The City's General Plan was adopted by the City Council on December 5, 2001 and was approved by voters on March 12, 2002. In the opinion of management, the Growing Smarter and Growing Smarter Plus legislation provides processes and tools that can contribute to better planned, coordinated and balanced development. While the original legislation set a ten year deadline to readopt or amend the General Plan, in 2010 the State legislature extended the deadline to July 1, 2015.

On July 1, 2009, the City Council approved plans to implement a public participation process in developing the Phoenix General Plan Update. In August 2012, the Planning and Development Department, in partnership with the Mayor and City Council, launched PlanPHX in an effort to enhance community outreach. In order to facilitate public participation, the PlanPHX project included the debut of www.myplanphx.com. The website served as an interactive and innovative way for Phoenix residents to be involved in the Phoenix General Plan Update. In addition to the website, the Planning and Development Department conducted meetings throughout the community to obtain input and ideas from residents. The Phoenix General Plan Update focuses on five Core Values — Connecting People and Places, Building the Sustainable Desert City, Creating an Even More Vibrant Downtown, Celebrating our Diverse Communities and Neighborhoods, and Strengthening Our Local Economy. The General Plan Update was unanimously approved by the Phoenix Planning Commission on January 13, 2015. The General Plan Update was approved by the City Council on March 4, 2015 and was approved by voters in the August 25, 2015 Citywide election. Planning and Development Department is in the process of updating the General Plan which will be on the ballot in 2024.

Phoenix Convention Center

Redevelopment of the downtown Phoenix area has accompanied the construction and expansion of the Phoenix Convention Center (previously Phoenix Civic Plaza). Opened in 1972, the original convention and cultural center facility encompassed eight city-blocks in downtown Phoenix, having a capacity of 10,000 persons and containing a variety of meeting and exhibition halls in addition to Symphony Hall.

On June 22, 2001, the Arizona Legislature appointed the Ad Hoc Study Committee on Phoenix Civic Plaza/ Convention Facility Expansion (the "*Committee*") to make recommendations on several issues regarding Phoenix Convention Center expansion, including potential funding sources and State involvement. The membership included four State Senators, four State Representatives and nine public members. The Committee recognized the significant statewide benefit of convention business and unanimously recommended that the State develop a program to provide matching funds for major convention center improvements.

On November 6, 2001, City of Phoenix voters approved a ballot proposition authorizing the City to incur debt and expend public funds in an amount up to $300 million from City funding sources and in an amount up to $300 million in State or other non-City funding sources for the construction, expansion, modification and improvement of the Phoenix Convention Center. In June 2003, the Arizona Legislature approved spending up to $300 million in State money to match the City's contribution. Combined, the $600 million expansion project effectively tripled the size of the facility by adding approximately 600,000 square feet of meeting and exhibition space.

In 2001, City of Phoenix voters approved an additional $18.5 million in general obligation bonds for the renovation of the adjacent Symphony Hall. In order to minimize disruption to event activity, the construction schedule for Symphony Hall was aligned with the first phase of the Phoenix Convention Center expansion. In June 2003, the City Council approved the final development concept and selected the design team and the construction management team for the Phoenix Convention Center expansion and Symphony Hall renovation.

Construction of phase one of the Phoenix Convention Center expansion and the Symphony Hall renovation began in June 2004. Symphony Hall re-opened September 3, 2005 after renovations were completed during phase one. Significant improvements to Symphony Hall included a new entrance, plaza facing, wall paneling, carpeting, seating, roofing and an upgraded lobby. Phase one of the Phoenix Convention Center expansion, known as the West Building, was completed in July 2006. The four-level West Building includes a 45,000 square feet ballroom, an Executive Conference Center, 64,000 square feet of exhibition hall space and 27,000 square feet of meeting space.

Phase two construction on the new Phoenix Convention Center North Building was completed in December 2008. The four-level North Building features amenities such as a 46,000 square feet street-level ballroom, 56 meeting rooms, over 300,000 square feet of exhibition hall space on the lower level, 190,000 square feet of exhibition hall space on the upper level and a food court with six themed eateries. The North Building is connected to the West Building via a pedestrian bridge on the third level and below ground through the lower level exhibition hall. The fully expanded Phoenix Convention Center, which welcomed its first convention in January 2009, now offers approximately 900,000 square feet of rentable convention space and is one of the top 25 facilities in the country in terms of size.

The Phoenix Convention Center expansion had a significant impact on Arizona during the five-year construction period. From December 18, 2003 through November 30, 2008, 95 percent of the work was performed by Arizona residents, 11,684 people were employed on the project, $89.0 million was paid in wages and $26.9 million was paid in state construction taxes.

The expanded Phoenix Convention Center surpassed its projected goals for 2009, hosting 68 conventions with approximately 309,379 delegates, which equated to an economic impact of approximately $449 million in direct spending. Since its expansion in 2009, the Phoenix Convention Center has hosted 814 conventions, or an average of 62 conventions per year, with an estimated 3,000,000 delegates through 2022. The Phoenix Convention Center is projected to host over 65 conventions in 2023 with an estimated economic impact of over $400 million.

Business Development

The City of Phoenix Community and Economic Development Department (*"CEDD"*) strategically positions Phoenix as a globally competitive and sustainable city. Developing a modern economy is rooted in aligning economic development initiatives around Phoenix's core strengths: focusing on targeted industry sectors with the highest impact and opportunity for sustained growth, expanding the pipeline of job-creating businesses, enhancing the Phoenix business climate and improving Phoenix's competitive position in the new economic environment.

CEDD works to attract and grow quality businesses that strengthen and diversify Phoenix's economy through job growth, private investment and creating a sense of place for our community. The Arizona Commerce Authority, Greater Phoenix Economic Council and the Greater Phoenix Chamber of Commerce are strong allies in these endeavors. With these partners, the City continues several initiatives aimed at workforce development, creating and maintaining high quality jobs and industry diversification. These partnerships also establish sound economic development programs that enhance regional and statewide competitiveness.

In fiscal year 2022-23, the CEDD attracted 30 new employers across various industries, offering an average salary of $68,000. This influx added 4,470 new jobs, complementing CEDD's expansion and retention efforts which totaled 8,503 new jobs in the last fiscal year. Additionally, CEDD conducted 892 business visits and attracted $3.05 billion in capital investment. The workforce team also hosted 88 recruitment events drawing over 19,000 visitors to the city's job centers.

Phoenix continues to see strong growth in its labor force population. According to the Bureau of Labor Statistics ("*BLS*"), between 2021 and 2022, the City's labor force grew 2% and has grown over 10% since the start of the pandemic. According to the Bureau of Labor Statistics Industry Employment, as pre-pandemic routines rebound, the Phoenix metro area has seen the largest industry growth focused on accommodations, food services, arts, entertainment, recreation, and management of companies and enterprises. Phoenix continues demonstrating resilience in its economy and workforce, with a 1.6% drop in the annual average unemployment rate between 2021 and 2022. Furthermore, 2023 has started off strongly, with an average 2.9% unemployment rate in the first quarter, according to the ("*BLS*").

Arts, Cultural and Sports Facilities

The Orpheum Theatre was built in 1929 in downtown Phoenix for vaudeville performances and movie exhibitions. The City purchased the theatre in 1984 and it was listed on the National Register of Historic Places the following year. In 1988, citizens approved funding $7 million towards a renovation of the theatre, with the Orpheum Theatre Foundation providing additional funding of $7 million. The theatre, built in the Spanish Baroque Revival architectural style, reopened in early 1997 and is the last remaining example of theatre palace architecture in Phoenix. The 1,364-seat Orpheum Theatre is now an internationally recognized showcase for arts and entertainment and hosts a variety of productions which draw thousands of people to the vibrant downtown venue annually.

The Herberger Theater Center, a performing arts facility, opened in October 1989 adjacent to the Phoenix Convention Center. Located on a one-block site immediately north of the original Phoenix Convention Center, the Herberger Theater Center was financed with $18 million in public and private funds. Renovations to the Herberger Theater were performed during the summer of 2010 and included refurbishment of seating, platforms, lighting, carpet and paint on the 801-seat Center Stage and 343-seat Stage West. The renovations included the addition of exterior public space, upgraded outdoor signage and a new private second floor lounge and balcony for theater VIPs. The renovations were completed in October 2010 at a cost of approximately $16 million.

The Phoenix Art Museum, located at Central Avenue and McDowell Street began an expansion in December 2004. The $50 million project added nearly 30,000 square feet to the museum complex, most of which is utilized for exhibition space to benefit the museum's 290,000 annual visitors. $18.2 million of the total project cost was financed with bond funds approved by Phoenix voters in 2001. The remaining funds were raised from individuals and philanthropic organizations. The expansion was completed in November 2006.

The Arizona Science Center is located in Heritage and Science Park, a multi-block downtown cultural center, and received City funding from general obligation bonds approved by the voters in 1988. The Arizona Science Center, which cost $47 million, encompasses nearly 127,000 square feet including a 200-seat planetarium and a 285-seat IMAX Theater. The City contributed land and $20 million to the project, with the balance funded by private contributions. The Arizona Science Center opened in April 1997. In addition, an 800-space parking garage was developed. The parking garage was completed in November 1995.

In 2000, an agreement between the City and a private company was reached for development of a 4,800-seat entertainment facility on a City owned site at the northwest corner of Washington Street and Fourth Avenue. The Comerica Theatre (currently Arizona Financial Theatre) totals 165,000 square feet and cost approximately $39 million. Construction began in September 2000 and was completed in April 2002.

In 1988, the City entered into negotiations with the Phoenix Suns Limited Partnership (the "*Suns*") for the development and operation of a 20,000-seat downtown sports arena to be located immediately south of the Phoenix Convention Center. Final agreements between the City and the Suns were approved by the City Council in July 1989. The construction cost of the arena and adjacent garage was $100 million. The City acquired and cleared the land for the project at a cost of $12.8 million and contributed $35 million toward construction. The Suns contributed an additional $515,000 for land acquisition and were responsible for the balance of the construction costs (approximately $52 million). Construction began in November 1990 and America West Arena (currently Footprint Center) opened in June 1992.

A multi-phased renovation of City-owned multipurpose arena began in the spring of 2001 and was completed in early 2005. Exterior renovations included the addition of a 15,000 square feet climate controlled pavilion on the main entrance plaza, expansion of the north façade to accommodate street level restaurants along Jefferson Street and the construction of a pedestrian passageway from Jefferson Street to Jackson Street. The interior renovations consisted of concourse improvements, seating enhancements and additional restrooms. The second phase of renovations brought significant technology improvements including a new scoreboard and wraparound LED boards, as well as expansion of the Platinum Club, and other core building improvements, all of which ensure the Center's continued state of the art status. The renovations were completed at a total cost of approximately $57 million funded jointly by the City and the Suns.

In 2019, the Phoenix City Council authorized the City to amend its agreement with the Suns to facilitate the renovation of City-owned multipurpose arena. The arena renovation was funded by the City and the Suns, with the City contributing $150 million and the Suns contributing $80 million plus any cost overruns. Major building systems including electrical, mechanical, plumbing and technology infrastructure are being updated or replaced. Additional upgrades underway include improvements to social spaces, suite renovations, retail space improvements, and modernization of locker rooms. The renovations commenced in 2019 and completed in 2021. The new agreement commits the Suns to stay in the arena until at least 2037.

Major League Baseball owners awarded a Phoenix-based ownership group a major league baseball franchise in March 1995. The team, the Arizona Diamondbacks, began play in March 1998. A $354 million, 48,500-seat, natural grass baseball stadium was constructed at the southwest corner of Jefferson Street and Seventh Street in downtown Phoenix through a public/private partnership. Public participation was authorized in early 1994, when the Maricopa County Stadium District approved the expenditure of $238 million for the development of the stadium. The balance of the construction costs were financed by the team ownership group.

In 2009, the City completed construction on the Civic Space Park. The 2.77-acre park in the heart of downtown Phoenix, bounded by First and Central Avenues and Van Buren and Fillmore Streets, offers residents, workers, students and visitors a unique urban design. The park contains sustainable features such as solar panel shade structures, which generate power for the park's lighting and electrical needs and pervious concrete and pavers to reduce heat reflection and allow rainfall to seep through to the ground. The park also includes interactive water and light features, green spaces and a 100-foot aerial art sculpture. The historic 1926 A.E. England Building is located inside Civic Space Park and hosts an auditorium as well as office, meeting and retail space.

In 2011, the Community and Economic Development and Phoenix Convention Center Department entered into a 20 year public private partnership with the Legends Entertainment District. The district, which utilizes digital signage to stimulate activity within downtown, is generally bounded on the north and south sides of Jefferson Street from First Avenue to Seventh Street and includes sites such as Chase Field, City-owned multipurpose arena, the Phoenix Convention Center South Building and the Phoenix Convention Center East Garage.

In 2011, the City's Community and Economic Development Department acquired a site on Central Avenue across from the Phoenix Art Museum for the construction of the Arizona Opera Center. In March 2013, the 28,000 square-foot performing arts facility opened that includes performance and rehearsal space, administrative offices, and educational and public meeting facilities. The City contributed $3.2 million of general obligation bonds towards the $5.2 million facility. The Arizona Opera Center building is owned by the City and operated by Arizona Opera.

In 2015, the City facilitated the creation of an entertainment district in downtown Phoenix (the "*Entertainment District*"). The Entertainment District encompasses about one-square mile of downtown Phoenix and is intended to foster economic development by bringing more businesses to the area. Previously, potential businesses were prohibited from applying for a liquor license if they were within 300 feet of a church or school, per Arizona State law. The Phoenix City Council now has the option to consider an exemption for liquor licenses within the Entertainment District. The creation of the Entertainment District serves as a development tool that supports the growth of a vibrant downtown with a mix of businesses and nightlife.

In 2023, the City along with the Arizona Super Bowl Host Committee, dedicated a new public art installation at the Phoenix Convention Center in downtown Phoenix. The sprawling installation, titled Flowing Alchemy by renowned local artist Katharine Leigh Simpson, was prominently displayed during the 2023 NFL Super Bowl Experience, and helped to raise awareness about the importance of the City's recycling and resource management efforts. The suspended sculpture, which is made entirely of upcycled plastic waste, highlights the need to ensure harmony between modern society and the natural environment and is inspired by the symbiotic relationship between Arizona's native birds and the Rio Salado that allowed the ancestors of the O'odham people to make our valley inhabitable.

Commercial Development

In the 1970s, Arizona's three major commercial banks (at that time The Valley National Bank of Arizona, First Interstate Bank, and The Arizona Bank) located their high-rise headquarters buildings in the downtown area. In addition, the Citibank building (now a City owned building for the Public Transit Department and other tenants), consisting of 113,000 square feet of space situated on the northwest corner of Van Buren Street and First Avenue, was opened on August 1, 1989.

The 1970s also saw the development of two downtown high-rise hotels. The Hyatt and Renaissance (formerly the Wyndham) properties combine to provide 1,242 hotel rooms in downtown Phoenix. As an outgrowth of the many downtown development and redevelopment projects during the 1990s and 2000s, there was a rapid increase in hotel room demand from business, leisure and convention travelers visiting the area. To meet this demand, the City constructed a new 1,000-room hotel on the northwest corner of Third Street and Van Buren Street. Adjacent to the Arizona Center and several office and entertainment venues, the hotel contains approximately 10,000 square feet of retail space, including a coffee shop, lounge, restaurant, and fitness facilities; a 30,000 square-foot ballroom; and additional meeting space. Starwood Hotels and Resorts was selected as the hotel's operator under the company's Sheraton flag. Design of the hotel began in early 2005 and construction began in March 2006. The Sheraton Grand Phoenix Hotel opened September 2008 and supports the additional hotel demand generated by the expansion of the Phoenix Convention Center. The City sold the hotel to Marriott in 2018.

The Barron Collier Company and Opus West initiated a mixed-use downtown development project in 1998. The plans for Collier Center included three high-rise towers with 1.5 million square feet of office space, 200,000 square feet of retail shops and restaurants, and parking for 2,400 vehicles. The project is located on a 7.2-acre site bounded by Washington, Jefferson, First and Third Streets. Collier Center's Phase I, a $500 million, 23-story office tower, was completed in September 2000 and is the Arizona headquarters for Bank of America. The tower contains over 500,000 square feet of office space, 85,000 square feet of retail space and a 1,500-space underground parking garage.

In 2007, RED Development commenced construction on an approximately 5-acre, mixed-use development that blends urban living with work, shopping and entertainment and includes restaurants, a hotel, offices and outdoor event space. The CityScape project encompasses two blocks in downtown Phoenix and is one block from the City-owned multipurpose arena and within two blocks of Chase Field. The first phase of CityScape opened in March 2010 and includes 660,000 square feet of Class A office space, 200,000 square feet of retail, 1,300 parking spaces and redevelopment of Patriot's Square Park. Construction of the second phase commenced in February 2011 and included construction of the 242 room Hotel Palomar which was completed in June 2012. The final phase of the project, The Residences at CityScape, is comprised of 224 high-rise apartment units, constructed above the Hotel Palomar. The Residences at CityScape opened in the spring of 2014.

In 2010, the City entered into a development agreement with Hansji Hotels to develop the Luhrs City Center Marriott at the Northwest corner of Central Avenue and Madison Street. Construction on the hotel, which houses two brands, Residence Inn by Marriott and Courtyard by Marriott, began in late 2014. The two hotels share a lobby and other amenities, such as the fourth-floor pool. The 19-story Luhrs City Center Marriott offers 320 guest rooms and ground-floor retail space, while retaining the existing historic buildings on the same city block. The project incorporated the 10-story Luhrs Building, built in 1924, the 14-story Luhrs Tower, built in 1929, along with the one-story Luhrs Post Office Station & Arcade that connects the two high-rises. Construction was completed in April 2017 and resulted in $85 million in capital investment.

In 2017, RED Development in partnership with Streetlights commenced construction of a dense, vibrant, urban development in the heart of downtown, with a capital investment of nearly $160 million. Full build-out of the project includes approximately 300 multi-family, for rent, high-rise residential units in one tower with 150,000 square feet of creative, open, office space attractive to technology and innovative tenants and 50,000 square feet of commercial space including an urban Fry's grocery store in the other tower, plus 1,000 above and below grade structured parking stalls and streetscape improvements. The Fry's Grocery store, downtown Phoenix's first new grocery store in decades opened in October 2019, and the remainder of the project was completed in late 2020.

In 2018, a 210-room, 11-story Hampton Inn hotel opened in downtown Phoenix. This $44 million hotel is well positioned to serve both the Phoenix Convention Center and the Arizona State University downtown campus.

In 2018, True North Holdings entered into a development agreement to construct the $151 million Ro2 development featuring 305,000 square-foot of office space and 77,000 square-foot of commercial retail space on City-owned land on 2nd Street north of Roosevelt. In the fall of 2018, True North closed escrow on the first phase of the development, acquiring the historic Knipe House. The historic house has been renovated and opened with a restaurant use in late 2021. In the fall of 2019, True North closed escrow on the second phase of the development, acquiring the Knipe House grounds. Completion of the full project is anticipated in 2023.

In 2019, the 147-room, 7-story Cambria Hotel opened in the Roosevelt Row Arts District. The $26 million hotel brings a new hotel and dining option to the area.

In 2019, Downtown Phoenix's Arizona Center underwent a $25 million renovation that led to several improvements such as modern shade structures, upgraded landscaping and water features, valet parking, bike racks, entertainment stage and a 60-foot LED jumbotron. With new developments coming, such as the AC Hotel and the residential Palmcourt Tower, these investments will help improve AZ Center's downtown experience.

In 2020, LaPour Partners opened the new 199-room hotel AC Marriott at the Arizona Center. The 13-story hotel is walking distance from many downtown venues including the Phoenix Convention Center, Footprint Center, Chase Field, Symphony Hall and the Herberger Theater.

In 2021, Mortenson Construction completed the 238-room, eight story Hyatt Place hotel in downtown Phoenix. The development located adjacent to Phoenix City Hall, represents a $60 million investment in downtown and is an easy walk to venues such as the Orpheum Theatre and the Arizona Federal Theatre.

The historic, art-deco themed Ellis Building, located at 2nd Ave and Monroe, was built in 1922 and is currently undergoing a $10 million renovation. The building's owner, Equus Corp., plans to create a mixed-use concept with office, residential, restaurants, a basement speakeasy, coworking space and more. The residential portion will occupy the 3rd through 5th floors of the building with 81 co-living style units.

The extended stay, dual-branded hotel project named Home2 Suites/Tru by Hilton Hotels is estimated to be completed in 2023 in Phoenix's historic Warehouse District. This project will consist of a 5-story, 105,000 square-foot, 207-room dual branded hotel that will preserve the historic Fuller Paint Company warehouse, built in 1929. The historic warehouse will become the hotel's lobby.

Set to open in 2023, the Moxy Phoenix Downtown Hotel is a 164-room hotel concept by Marriot Bonvoy located inside Phoenix's historic, century old Luhrs building. Moxy is just a short walk from some of Downtown Phoenix's most popular attractions such as the Phoenix Convention Center, Footprint Stadium, Chase Field, City Scape, and many more.

Phoenix's Central Station is a landmark development coming to Central Ave and Van Buren Street in Phoenix's booming Downtown area and is set to open in 2024. Not only will this project bring 70,000 square-feet of office space, and 30,000 square-feet of retail space, but it will also be built with public transit in mind by providing connections to bus stops, light rail, and 400 underground parking spaces. This will be one of Arizona's tallest structures measuring 424 feet in height and consisting of two towers. Total investment for this project is $275 million.

Biotechnology

In 2002, the City and the State of Arizona, in partnership with the County's three State universities, various foundations and the private sector, formalized two proposals to the International Genomics Consortium (*"IGC"*) and the Translational Genomics Research Institute (*"TGen"*) to locate their new headquarters in downtown Phoenix. The City agreed to construct a six-story, 170,000 square-foot research facility for IGC and TGen located at Fifth and Van Buren Streets. Construction began in late July 2003 with occupancy occurring in December 2004. In September 2017 TGen, now an affiliate of City of Hope, agreed to a 20-year Lease-to-Purchase transaction for the building that is home to its headquarters and several other long-term tenants.

In 2004, the Arizona Board of Regents, the University of Arizona ("*U of A*") and ASU (collectively, the *"Arizona Biomedical Collaborative"*) entered into a memorandum of understanding outlining a combined vision to expand the U of A's colleges of medicine and pharmacy in downtown Phoenix, perform complementary research and develop facilities at the Phoenix Biomedical Campus (*"PBC"*) located on Van Buren Street between Fifth and Seventh Streets. The U of A College of Medicine has renovated three historic former Phoenix Union High School buildings located on the PBC for the first phase of the medical school. The $27 million renovation project began in March 2005 and was completed in September 2006. The first Arizona Biomedical Collaborative building (*"ABC I"*) is a four-story, 85,000 square-foot building located just north of the historic Phoenix Union High School buildings along Fifth Street. Research within ABC I focuses on several areas including cancer, diabetes, neurological and cardiovascular diseases. The $30 million facility includes academic space for the ASU Department of Biomedical Informatics on floors one and two and wet lab space for the U of A College of Medicine on floors three and four. Construction began in September 2005 and was completed July 2007.

In 2012, the U of A Health Sciences Education Building (*"HSEB"*) opened and now houses the U of A College of Pharmacy and Northern Arizona University's Allied Healthcare Programs. This approximately $140 million, 260,000 square-foot six-story academic facility has provided space for the expansion of the U of A

College of Medicine in downtown Phoenix. The U of A was also the recipient of a $15 million American Recovery and Reinvestment Act stimulus grant for the development of a below-grade research core. At build-out, the 30-acre PBC is expected to include more than six million square feet of research, academic and clinical development.

To help serve the growing PBC, construction began in the fall of 2014 on a 1,200-car parking structure at 5th and Fillmore Streets. The eight-level privately developed project will provide parking for the neighboring institutions in the Phoenix Biomedical Campus, as well as paid public parking. The $19.0 million facility opened in November 2015.

In 2015, the University of Arizona Cancer Center at Dignity Health St. Joseph's opened. The 220,000 square-foot, five-story, $100 million facility offers comprehensive cancer services, including infusion, radiation oncology, diagnostic imaging, endoscopic/interventional radiology, a women's center, specialized cancer clinics, patient wellness and support services, a prevention/executive health clinic, clinical lab space and other related support areas. The center is the only National Cancer Institute-designated Comprehensive Cancer Center located in Phoenix. This outpatient clinical facility hosts approximately 60,000 patient visits and 500,000 annual visitors.

In 2017, the U of A Biosciences Partnership Building (*"BSPB"*) opened. The 10-story, 245,000 square-foot building is connected to HSEB through a walkway. Research in BSPB will focus on flow cytometry, physics, materials science, nanotechnology, cancer drug therapies, molecular medicine, pediatric vaccines, building platforms for DNA and Biomarker Testing. At full occupancy, the facility will employ an estimated 360 healthcare professionals.

In 2019, construction began on the first phase of ASU's planned Health Solutions Campus at the PBC. ASU aims to develop its campus under a long-term agreement with the City for development rights for seven acres of land on the campus. The first phase of this development is the PBC Innovation Center, a $77 million, 225,000-square-foot building which was constructed by Wexford Science and Technology. The PBC Innovation center celebrated its ribbon cutting on March 30, 2021. The building ultimately opened in the fall of 2020 as a 7-story, 227,000 square-foot, lab-enabled building by Wexford Science+Technology renamed as 850 PBC. The building is designed to integrate research, entrepreneurial activity, and corporate engagement, the building offers opportunities for meaningful collaboration with the building tenants and community. In Fall 2021, discussions began about the second phase of ASU's Health Solutions Campus.

In order to meet the additional business needs of the growing biomedical sector, the City is looking beyond the 30-acre downtown PBC. The City is collaborating with the Arizona State Land Department, ASU and the Mayo Clinic to develop the 600-acre Arizona Biomedical Corridor in north Phoenix. The City is assisting ASU with infrastructure on their 24-acre Health Solutions Campus. Groundbreaking for the first building occurred in April 2019.

In January 2021, ASU's Health Futures Center opened and houses four ASU programs - the College of Health Solutions, Edson College of Nursing and Health Innovation, Ira A. Fulton Schools of Engineering and the J. Orin Edson Entrepreneurship and Innovation Institute, along with researchers from various ASU schools and colleges. The 150,000 square-foot three-story facility represents a $80+ million investment in the Arizona Biomedical Corridor.

In February 2021, the Mayo Clinic approved the construction of a $131 million 150,000 square-foot facility as part of its larger expansion plans. In 2018, Mayo launched its $748 million plan to add 1.6 million square feet of space, essentially doubling its capacity in the Arizona Biomedical Corridor. The expansion plan will result in almost 100 additional beds by 2023 and an additional 2,000 new jobs by 2029, including nearly 200 additional physicians.

In March 2022, the Phoenix Biomedical Campus was renamed to the Phoenix Bioscience Core, retaining its acronym, the PBC.

In July 2022, the U of A announced its plans for the new Center for Advanced Molecular and Immunological Therapies ("*CAMI*") on the Phoenix Bioscience Core. CAMI is planned to be a 10-story 293,000 square-foot building located on the north side of the Biomedical Sciences Partnership Building. An immediate adjacent innovation building for public-private research and enterprises is planned to be located on the site. The estimated cost is $300 million. While planning and construction is occurring, CAMI programming will be launched on the fourth floor of the U of A's Biomedical Sciences Partnership Building.

In January 2023, Connect Labs by Wexford opened on the fifth floor of the 850 PBC building, formerly known as the PBC Innovation Center, on the Phoenix Bioscience Core. It is the first 'co-working' space dedicated to life science companies on the PBC. It consists of 35,000 square feet with a variety of sizes of private labs and offices for early-stage companies or research and development teams to locate and scale in place to advance their research with access to shared equipment.

Education

In 2004, ASU and the City entered into a partnership to develop the ASU Downtown Phoenix campus. Phoenix voters committed $223 million to the ASU Downtown Phoenix campus in the 2006 bond election. The campus is located in downtown Phoenix between Van Buren and Fillmore Streets on the north and south and First Avenue and Seventh Street on the west and east, respectively. Over 11,700 students were enrolled in degree programs at the ASU Downtown Phoenix campus during the fall 2021 semester. The anticipated economic impact of the ASU Downtown Phoenix campus is estimated to be $570 million, including the creation of 7,700 jobs. The City and ASU are working together to develop the State's workforce through education, generating academic and intellectual capital.

As part of the first phase of the ASU Downtown Phoenix campus, which opened in August 2006, ASU began to offer a wide range of undergraduate and graduate programs from the College of Public Programs and the University College. The second phase brought programs from the state-of-the-art Walter Cronkite School of Journalism and Mass Communications, KAET/Channel 8 and the College of Nursing & Healthcare Innovation to the ASU Downtown Phoenix campus.

As part of the second phase of the ASU Downtown Phoenix campus expansion, construction was completed on the 82,000 square-foot ASU College of Nursing and Healthcare Innovation II facility. The innovative design creates a sense of arrival for the northeast corner of the campus and downtown. With over a third of the materials utilized for this project containing recycled content, the new facility achieved the Leadership in Energy and Environmental Design (*"LEED"*) certified Gold status and has received 14 awards including Best Education Facility in America and the LEED Building of the Year. ASU invested $1.5 million in tenant improvements to finish the remaining fifth floor space of the ASU Nursing and Health Innovation II facility for executive offices, meeting space and staff workstations, which were completed in July 2013.

The second phase was completed with the addition of a student union and a student residence hall. The U.S. Post Office building at Central Avenue and Fillmore Street houses the student union for the ASU Downtown Phoenix campus. Retail postal services remain in the building, and a veranda was added along the south side of the building to be used for concerts, outdoor films and other activities. The conversion of the U.S. Post Office building was completed in March 2010. Taylor Place, a new student residence hall was constructed on the campus between First and Second Streets on Taylor Street. Taylor Place was completed in August 2009 and accommodates 1,294 beds. In early 2012, ASU began construction on the 18,870 square-foot Student Center at the Post Office located on the lower and first floors of the historic post office. Construction was completed in time for the 2013 spring semester.

In 2012, construction of the new ASU student recreation center began. The Sun Devil Fitness Complex is a five-story, 64,000 square-foot facility with state-of-the-art weight and fitness areas, three multi-purpose studios for group fitness and mind/body classes, a two-court gymnasium, a rooftop outdoor leisure pool and a multipurpose area for student clubs to utilize. The $25 million facility is located on First Avenue north of Van Buren Street, next to the YMCA. With classroom space for the Exercise and Wellness academic program on the second floor, the new facility adds to the existing YMCA services and serves both ASU students and YMCA members. The Sun Devil Fitness Complex opened to students and members in August 2013.

The ASU Sandra Day O'Connor College of Law relocated to downtown Phoenix from the Tempe main campus with the completion of the Beus Center for Law and Society building. The City of Phoenix invested $12 million in the project, located on a square block bounded by First, Second, Taylor and Polk Streets. Construction on the $129 million, 280,000 square-foot facility began in June 2014 and completed in August 2016.

In 2018, ASU committed to relocate the ASU Thunderbird School of Global Management (*"Thunderbird"*) from Glendale, Arizona to a new building on the square block also containing the ASU Sandra Day O'Connor College of Law. Thunderbird was moved to a temporary space at the Arizona Center before moving the graduate school to a newly constructed $60 million, 100,000 square-foot, four-story building at the corner of Second and Polk Streets and opened April 8, 2022.

In 2019, Creighton University, based in Omaha, Nebraska, began construction on a new health sciences campus at Park Central in midtown Phoenix. Creighton has estimated the total development cost to be $99 million. Opened in June 2021, the 180,000 square-foot Phoenix campus serves nearly 900 students. It will include a four-year medical school and schools for nursing, occupational and physical therapy, pharmacy, physician assistants and an emergency medical services program. In conjunction with the new Creighton campus and other development at Park Central, a $30 million parking garage was constructed by the Park Central Community Facilities District, formed for this purpose. The new ten-story parking garage has a capacity of 2,001 spaces and has opened to the public in September 2020.

In 2019, ASU began construction of a 16-story student housing building designed for upper classmen and graduate students. The building features three-stories of classroom space and exhibition space on the ground-floor. In August 2021 the building, renamed Fusion on First, opened and welcomed over 500 students. The first three floors of the building feature classrooms and workspaces intended to create a hub that caters to design and art students, while the remaining thirteen floors provide apartment-style housing.

Neighborhood Revitalization and Downtown Housing

The City's downtown redevelopment efforts are complemented by Neighborhood Services Department (*"NSD"*) programs through which NSD works to preserve and improve the physical, social and economic health of Phoenix neighborhoods. NSD has created programs to assist neighborhoods citywide and works to revitalize targeted neighborhoods. City projects are complemented by neighborhood-based programs such as clean-ups, blight elimination and graffiti prevention that are often led by neighborhood stakeholders, including businesses, residents and schools.

Targeted neighborhood strategies are more focused in approach, involving redevelopment of blighted or under-used properties, proactive code enforcement, housing rehabilitation, rental rehabilitation infill housing development, infrastructure improvements, neighborhood capacity building and economic development, as appropriate. Targeted neighborhoods include Neighborhood Initiative Areas, Redevelopment Areas, and other City designated revitalization areas.

In order to make a meaningful impact towards the revitalization of distressed neighborhoods, NSD uses a strategic approach to address citywide needs and revitalization activities to enhance the physical environment and to improve neighborhoods. Federal programs that address blight elimination and neighborhood revitalization priorities including owner occupied housing rehabilitation and homeownership opportunities support the NSD strategies while enhancing the quality of life of Phoenix residents.

Beginning in the late 1990s, downtown Phoenix saw the development of several market rate projects for the first time in nearly a decade. From 1997 through 2003, nearly 1,300 housing units were built and available for occupancy in downtown. The units included apartments, lofts, condominiums and multi-family housing. Since 2004, residential housing projects have been developed in downtown Phoenix with several additional projects currently under construction. Over the past ten years, downtown Phoenix has gained over 3,300 market rate units and 1,200 affordable units. These new units have been developed as urban infill and adaptive reuse as well as low, mid and high-rise development projects.

In 2003, Artisan Homes, Inc. began building 105 ownership housing units on a 5.5 acre site bounded by Fifth and Seventh Streets and Roosevelt and Portland Streets. Artisan Village is an urban, mixed-use row house and townhouse residential project featuring ownership and unique live/work units with 3,000 square feet of street level retail opportunities, streetscapes, green belts, open spaces and 1,200 square feet dedicated for cultural use. The total project cost approximately $18 million and was completed in March 2006.

In 2004, the City entered into an agreement with Portland Place Partners to develop vacant land on Portland Street between Third Avenue and Central Avenue. Portland Place is an urban residential development that consists of 54 units in a six-story condominium tower and brownstones. Construction of Portland Place was completed in July 2007. The next phase of development, Portland on the Park, began construction in the spring of 2015 and was completed in the spring of 2017. This luxury condominium project sits adjacent to the City's Hance Park on Portland Ave, between 1st and 2nd Ave. The $54 million Portland on the Park project has added 170 condos to the historic Roosevelt neighborhood.

Art HAUS is a market rate residential project that completed construction in July 2016. The project includes twenty-five urban dwellings located in Midtown Phoenix consisting of simple yet bold forms organized around inter-connected semi-private resident courtyards. Dwellings consist of seven three-level townhomes, fifteen two-level lofts and three single-level flats ranging from 560 to 1,800 square feet. The project was constructed on the remnant parcel behind the Arizona Opera Center at Central Avenue and McDowell Road. The $5.5 million project is within walking distance of the Midtown Arts District.

Cloquet Metrowest, LLC completed a $17 million, five-story mixed-use development, named Union, in the summer of 2017. The Union includes 8,000 square feet of street-level restaurant/retail space, structured parking and 80 market-rate, multifamily residential units on a 0.9 acre site in the Historic Roosevelt neighborhood, at the southwest corner of Roosevelt Street and First Avenue.

In 2017, Alliance Residential completed the Broadstone Arts District project, a $49 million four-story, multi-family, rental residential infill project with 280 apartments. The project subsequently renamed Greenleaf Arts District is located at the northeast corner of McDowell Road and Alvarado Street. Since the completion of the Arts District project, Alliance Residential has completed construction on the 316 unit Broadstone Roosevelt complex at the northeast corner of 3rd and Roosevelt streets in 2019 and the 162 unit Portland Broadstone complex at the northeast corner of 3rd and Portland streets in 2021.

In 2019, CA Ventures completed construction on phase one of The Link PHX. The Link PHX is a 30-story high-rise residential rental project with ground floor commercial space. This is the first phase of a three-phase project that will ultimately generate $175 million of new investment in downtown Phoenix. Phase I contained 257 rental units at a capital cost of $67.6 million and was completed in late-2019. Phase II was completed in fall 2022 and contains 234 rental units at a capital cost of $59.4 million. Currently, The Link Phase III is preparing to start construction and will feature a 32-story tower with 277 units, and 8,300 square-feet of commercial space.

In 2019, JMA Ventures, LLC started construction of the 278 Battery Apartments in the Warehouse District on the south end of downtown. The development represents a $43 million investment in downtown Phoenix and includes the adaptive reuse of two historic buildings. Construction was completed in September 2021.

In 2019, PMG Properties Group began construction of Phase I of X Phoenix, a $92 million, 20 story high rise residential project featuring 320 rental units with 39,000 square feet of ground floor commercial and retail space. The total investment of this two-phase project is expected to total a $192 million capital investment. Phase I was completed in early 2022, and Phase II is currently under construction.

In 2019, Trammel Crow broke ground on the first phase of High Street Fillmore, a $70 million, seven-story mid-rise residential project featuring 329 residential units and 10,000 square feet of ground floor commercial space. This is the first phase of a two-phase project that represents a total capital investment of $140 million. Phase I was completed in 2022. Phase II is expected to commence construction in early 2024 and will include a multifamily residential component with ground floor retail, attainable residential multifamily for rent, and for-sale townhome condominiums.

In 2020, Ascentris broke ground on Derby Roosevelt Row, a $36 million, 21-story high rise residential project featuring 222 residential units and 4,500 square feet of commercial space. The project was completed in spring 2022.

In 2020, Aspirant Development began construction on Aspire Fillmore, a $58 million, 17-story high rise residential project featuring 249 residential units with 1,600 square feet of commercial space. The project was completed in spring 2022.

In 2020, Hines Development began construction on The Adeline, a $135 million, 25-story high-rise residential project featuring 379 residential units and 4,500 square feet of ground floor commercial space. Construction was completed in fall 2021.

In 2021, Hubbard Street Development began construction on Skye on 6th, a $87 million, 26 story multi-family development. The building will include 309 rental units and approximately 7,000 square feet of commercial space. Construction is anticipated to be complete in 2023.

In late 2021, The North American Development Group begin construction on the 28-story, multifamily residential Palm Court Tower. The development, which will include approximately 354 units represents a $107 million investment in downtown. Construction is anticipated to be complete in 2024.

Opened in 2021, the Ryan is in one of the most popular areas in Downtown Phoenix at the corner of Jefferson and 2nd Street. This 17-story, 332-unit residential high-rise project is situated right next to Phoenix's Footprint Center, light rail, CityScape and just down the street from the Phoenix Convention Center and Chase Field.

Akara Partners completed construction on their $45 million project named Kenect in 2022. Kenect is an innovative 20-story residential high-rise project located at Central Ave and Polk Street right next door to ASU's downtown Campus and Central Station. With 299 units, Kenect also offers residents a rooftop pool, social and networking events, a state-of-the-art fitness center, concierge, 17,000 square-feet of ground floor retail and coworking spaces.

Skye on 6th by Hubbard Development Group is a 26-story residential tower under construction just south of the Roosevelt Row Arts District. Skye on 6th will contain 309 apartment units with 6,500 square-feet of ground level retail space. It is scheduled to be completed in the summer of 2023.

Moon Tower by Lincoln Ventures is a 24-story apartment building under construction in the Roosevelt Row Arts District with 326 total units, rooftop pool deck, fitness studio, coworking and conference spaces, and more. This project is set to open in 2023.

EcoPhx plans to be one of Arizona's most sustainability friendly developments. Currently under construction at the Southwest corner of Roosevelt and 3rd Ave, EcoPhx will be a 5-story project with 70 apartment units and 3,300 square-feet of retail space on the ground floor. The developer plans incorporating energy and water saving features to all units.

Saiya is a development under construction at McKinley Street and 1st Ave in Downtown Phoenix. This will be a mixed-use project with 23-story residential high-rise tower with 389 units. There will also be 12,550 of street level retail/restaurant space. Expected to be completed in 2024, residents will also be just a few minutes' walk away to the light rail or to Roosevelt row.

Phoenix's Central Station is a landmark development coming to Central Ave and Van Buren Street in Phoenix's booming Downtown area and is set to open in 2024. This project will feature two residential towers of 22 and 33 stories. The 22-story tower will be used for student housing with 655 beds while the 33-story residential tower will hold 362 residential units. The project is also bringing 70,000 square-feet of office space and 30,000 square-feet of retail space. The project is being built between two light rail stations and is designed with public transit in mind by providing connections to bus stops, light rail, and 400 underground parking spaces. This will be one of Arizona's tallest structures measuring 424 feet in height and total investment for this project is $275 million.

In 2023, construction began at 601 N Central by LG Group. When completed, the project will include a 29-story multi-family building with 747 residential units and a total of 29,000 square-feet of ground level retail space. This project will also feature many amenities such as outdoor lounges, basketball court, dog park, the largest multifamily pool in Phoenix, and more.

Government Facilities and Street Transportation

A 601,000 square-foot Phoenix City Hall was built on Washington Street between Second and Third Avenues, immediately north of the existing Calvin C. Goode Municipal Building. The project, completed in 1994, includes a 1,500-space parking structure that contains 43,000 square feet of office and retail space and is located between Washington and Jefferson Streets and Third and Fourth Avenues.

The Burton Barr Central Library celebrated its grand opening in May 1995. The five-story, 284,000 square-foot library accommodates more than 1 million volumes and has seating for up to 800 patrons. The facility was designed to meet the needs of library patrons well into the 21st century.

Construction of the Phoenix Municipal Court Valdemar A. Cordova Building, a nine-story, 375,000 square-foot City criminal justice facility, was completed in the fall of 1999. The building is located on the northwest corner of Washington Street and Third Avenue, directly west of Phoenix City Hall. The project cost $79 million. It is estimated that between 3,000 and 4,000 customers per day visit this facility, making it the largest volume court in the State.

The Federal government completed construction of a 550,000 square-foot federal courthouse in September 2000. The Sandra Day O'Connor U.S. Courthouse is located on two blocks bounded by Jefferson and Washington Streets and Fourth and Sixth Avenues in downtown Phoenix. The project cost approximately $110 million and includes courtrooms and related office space.

The County constructed a new courthouse in downtown Phoenix at First Avenue and Madison Street. The new 16-story courthouse provides 683,000 square feet of space, including 32 criminal courtrooms. Construction of the $340 million courthouse was completed in February 2012.

Maricopa County began construction of a new Maricopa County Sheriff's Office ("*MCSO*") Headquarters in June 2012. Completed in 2014, the five-story, $92.5 million facility is located on Fifth Avenue and Jefferson Street and houses MCSO administrative staff, and the 911 call center operations. The building contains approximately 128,000 square feet of space with 75 parking spaces below ground.

In 2017, Maricopa County began a $65-million remodel of the former Madison Street Jail located east of 3rd Avenue between Madison and Jackson Streets. The space will be the future home of the Maricopa County Attorney's Office, consolidating offices from around the county in downtown Phoenix. The construction was completed in December 2019.

In 2018, the Phoenix City Council authorized advancing $200 million to accelerate pavement maintenance projects. Between January 2019 and June 2023, the Street Transportation Department will undertake its largest and most comprehensive pavement maintenance program which entails accelerating pavement maintenance work on many of the City's major streets. During this period, more than 250 major-street miles will be repaved as part of the accelerated pavement maintenance program. This represents a 300 percent increase compared to the number of major-street miles the City traditionally paves each year. The accelerated program will be accomplished in conjunction with the City's pavement preservation program for local and collector streets. The acceleration of the City's pavement maintenance program will significantly improve the condition of City streets.

In 2021, the Phoenix City Council authorized the purchase of the Wells Fargo office tower, along with two associated parking garages for $46.5 million. The 27-story office building will allow several City departments to consolidate into a more centralized campus, offering efficiencies to staff and the public. The purchase adds 525,814 square-feet of office space to house City employees and is anticipated to have its first wave of staff move in in 2024.

Downtown Streetscape

Construction on an $8.9 million streetscape project in downtown Phoenix was completed in February 1995. The project added pedestrian lighting, landscaping and street furniture to pedestrian-oriented streets in the downtown area. The improvements are concentrated along Adams Street between Second Avenue and Second Street, Monroe Street between Third Avenue and Seventh Street, Second Street from Van Buren to Jefferson Streets, and Third Street between Van Buren and Monroe Streets. Project boundaries were chosen to create a pedestrian link between Phoenix City Hall, the Orpheum Theater, City-owned multipurpose arena, the Arizona Center and the Heritage and Science Park.

In 2000, the City and the County reached an agreement wherein the County would be responsible for funding the streetscape build out of Jackson Street from First Avenue to Ninth Avenue and the City would be responsible for its maintenance. The $3.2 million project included a three-month community input process to identify the parameters of the street layout, landscape, sidewalk, lighting and design elements. Construction began March 2004 and was completed in November 2004.

In 2006, the City began construction of two streetscape projects on the ASU Downtown Phoenix campus. The projects, which included Taylor Mall and First Street, were completed in January 2009. Taylor Mall is a tree-lined, pedestrian-friendly sidewalk and street between the Civic Space Park and Arizona Center that contains public art, inviting benches, and sustainable water features. A traffic signal and crosswalk allows pedestrians to cross Central Avenue and light rail tracks to enter the Civic Space Park safely from Taylor Mall. In addition, the west side of First Street from Polk Street to McKinley Street has been improved with lighting, shade and landscaping.

In 2012, the City completed construction of a 2006 voter approved bond project which improved downtown streetscapes on First Street from Fillmore to McKinley Streets. The City received an award from the Arizona Community Tree Council for the First Street streetscape project for the beautification of the urban environment through the use of trees.

In 2015, the City completed construction on a streetscape project improvement on Roosevelt Street between Central Avenue and Fourth Street. The project was funded through a $750,000 Federal Transportation Enhancement Grant. The improvements include new sidewalks, bike lanes, street lights, shade trees, benches, public art and other amenities. A second phase of this project on Roosevelt Street, from Fourth Street to Seventh Street was completed in August 2016. Roosevelt Street was repaved from 1st Avenue to 7th Avenue, a project which included the addition of bike lanes.

In 2017, the Renaissance Hotel, which fronts Adams Street from Central Ave to 1st Street, began a $9.5 million capital improvement program that took recommendations from the Adams Street Activation Study. The improvements included relocating the valet area from Adams Street to 1st Street, structured shade elements along the south façade, drought tolerant landscaping and decorative street pavers. This investment transformed Adams Street into a more pedestrian friendly space and set a high standard for future development along Adams Street.

In 2019, the Hyatt Hotel, which fronts Adams Street from 1st Street to 2nd Street, began a $40 million capital improvement project to renovate the hotel and enhance the streetscape consistent with recommendations from a study done for Adams Street. Work was completed in early 2020.

In 2022, the Community and Economic Development department, in collaboration with several downtown community associations, identified twenty-five locations for new trash receptacle installation. CEDD partnered with the community associations and the Office of Arts and Culture to solicit a local 'Call for Artists' which will allow each unique community to work with a local artist for an art design that will ultimately be installed via vinyl wrap on the trash receptacles in their respective areas.

In 2023, Valley Metro began the installation of public art along the new South-Central Extension/ Downtown Hub expected to open for operation in 2024. There are 18 artists in total and 13 are Arizona local artists. The five-mile extension will connect Baseline Road to Downtown Phoenix and to the regional light rail system. The Public art projects will reflect and celebrate the local area and beautify the transit spaces.

Transit/Light Rail

Central Station, the City's downtown transit center located on the northwest corner of Central Avenue and Van Buren Street was constructed in 1997. The 2.7-acre site includes a 4,000 square-foot passenger services building for ticket sales, security, and restrooms; a 16,000 square-foot passenger plaza that includes passenger information, seating and shade; and bus loading and circulation areas for 6 bus routes, Dial-a-Ride and DASH (Downtown Area Shuttle), as well as east and westbound light rail services. The total cost of the project was approximately $9.3 million, with the Federal Transit Administration funding 80% and the City funding 20% of the project. Central Station received a $3.7 million renovation, completed in July 2011, to modernize the facility, improve security, and incorporate sustainable elements. The transit center improvements were one of five major transit capital projects funded by the American Recovery and Reinvestment Act. The other four projects include a $1.4 million expansion of the 40th Street and Pecos Road park-and-ride that was completed in June 2010, the construction of a new $3.4 million park-and-ride at the southwest corner of Interstate 17 and Happy Valley Road that was completed in January 2011, the construction of a new $2.7 million park-and-ride at the southwest corner of 27th Avenue and Baseline Road that was completed in February 2012 and a $4.0 million project to make Americans with Disabilities Act related improvements to 400 bus stops in Phoenix that was completed in October 2012.

In October 2020, the Public Transit Department closed Central Station Transit Center and relocated the Customer Service functions to 302 N. 1st Avenue. In June 2021, the City entered into a City Council-approved development agreement with Electric Red Ventures, LLC for the Central Station Transit Center site. The Central Station project represents a capital investment of $340 million and is projected to be completed by 2025.

On March 14, 2000, City of Phoenix voters approved a 0.4% sales tax increase to be levied for a period of twenty years to provide funding for a light rail system as well as mass transit, including expanded bus service and other transportation improvements (the "*Transit Sales Tax*"). Construction of an approximately $1.4 billion, 20-mile light rail system connecting north central Phoenix (19th Avenue and Bethany Home Road) with Sky Harbor International Airport (via the PHX Sky Train®), Tempe and Mesa (Main Street and Sycamore Road) began in the fall of 2004 and opened for operations in December 2008. The total cost of the project was funded with Federal grant funds, Transit Sales Taxes and other local funding sources.

The City has also made major renovations to two of its bus transit centers. Renovations to the Sunnyslope Transit Center and the Paradise Valley Mall Transit Center were completed in June 2007 and June 2009, respectively. The renovations provided much needed improvements to the facilities, including security upgrades.

The City developed a new park-and-ride facility along the Baseline Road corridor at 24th Street, which opened in April 2015. In addition, the City upgraded and expanded the Desert Sky Mall Transit Center to serve residents in West Phoenix. This much needed facility, which provides shade, security, covered parking and public art opened to the public in December 2015. The new Desert Sky Transit Center cost $8.2 million for land, design and construction.

The City has also made substantial improvements to its bus operating and maintenance facilities. These facilities are the backbone of the transit system, as they provide fueling, cleaning, and maintenance for the City's bus fleet, as well as administrative space for the bus operations contract service providers. In November 2007, a new $50 million West Transit Facility was completed and opened for operations. This facility provides additional capacity to operate and maintain buses for the Phoenix transit system. The facility was designed to accommodate 250 buses and replace a rented facility, which could only accommodate 75 buses. The additional capacity will help address future expansion of the Phoenix bus system with the passage of Prop 104.

In May 2012, the City Council approved the Capitol / I-10 West Locally Preferred Alignment (*"LPA"*). Following the passage of Transportation 2050, City Council approved phasing the Capitol / I-10 West project. In conjunction with analysis for the South Central Light Rail Transit ("*LRT*") Extension, a reconfiguration of the merging of the existing light rail system, the future Capitol / I-10 West LRT Extension, and South Central LRT Extension was recommended by staff to create a downtown transit hub to enhance the connectivity for transit passengers along with other multimodal improvements. These recommendations were approved by the City Council on September 26, 2017. The approval of the downtown LRT transit hub prompted a re-examination of the original Capitol / I-10 West Phase I LPA, resulting in the separation of the projects into two extensions. In 2021, the projects were renamed the Capitol Extension and I-10 West Extension to clearly identify each project's unique character, development schedule and goals/objectives. Based on community input and technical analysis, the 2012 LPA was revised, and a new Locally Preferred Alternative for the Capitol Extension was approved by City Council in November 2021. The 1.4-mile Capitol Extension will provide an important connection between the downtown core and the Arizona State Capitol. Integrating with the existing rail system at 3rd Avenue, the route extends west on Washington Street, turns south on 19th Avenue, and then loops back to downtown along Jefferson Street. The project will include three new light rail stations. In May 2022, Preliminary Engineering work to develop initial construction plans and technical specifications for the Capitol extension reached 15% completion. Preliminary engineering work will produce a cost estimate, identify any technical issues that may occur during construction and provide a basis for the final design phase. The project team will continue drafting initial designs focusing on the location of the guideway and configuration of the street along the project corridor. Additional details, such as station locations and streetscape components, will be developed after the configuration of the street is determined. The project team began the preparation of documents to support the drafting of the Environmental Assessment in Spring 2023. The total cost of the project will be funded with Federal grant funds, Transit Sales Taxes, and other local funding sources.

The I-10 West Extension will connect the greater West Valley to the existing Valley Metro Rail system. The I-10 West Extension is 9.4 miles and will include eight stations and three park and rides. This project is unique and will see light rail trains traveling in the median of Interstate 10, before ultimately crossing to the north side of the freeway to a terminus at the existing Desert Sky Transit Center. The project team completed several planning activities, including updating the conceptual design, cost estimates and traffic analysis. The project team will also continue engagement with key stakeholders, including West Valley communities. Preliminary Engineering work will continue to develop initial construction plans and technical specifications for the extension. The total cost of the project will be funded with Federal grant funds, Transit Sales Taxes, and other local funding sources.

Improvement plans for the bus operating and maintenance facilities also includes renovations to the two existing facilities, the North Transit Facility and the South Transit Facility. Upgrades to these facilities include improvements to life safety, security, building code upgrades, roofing replacements, HVAC equipment replacement, and fueling system upgrades. The North Transit Facility renovation was completed in November 2013, while work at the South Transit Facility began in the summer of 2015 and was completed in the fall of 2019, with a total cost of $28 million for design and construction.

In August 2014, a 34-person group, the Citizens Committee on the Future of Phoenix Transportation, was created to address the 2020 expiration of the Transit Sales Tax and to review the public transit and street transportation needs of the City. After six months of meetings and over 100 public engagement events, the committee forwarded their recommendations to the City Council, whom approved the plan in March 2015 and placed Prop 104 on the ballot. On August 25, 2015, voters approved a new comprehensive transportation plan and funding tax proposal that increased the existing Transit Sales Tax rate dedicated for transportation. The dedicated Transit Sales Tax rate was increased from the previous 0.4% to 0.7% and became effective January 1, 2016, with a sunset date of December 31, 2050. The increased Transit Sales Tax will continue to fund expanded local bus and Dial-A-Ride service, bus rapid transit service, neighborhood circulators and the operation of the light rail system. The increased Transit Sales Tax funding will also provide for expanded bus and light rail service hours and routes, high capacity transit corridors, and infrastructure improvements to bus stops, maintenance facilities and transit centers. In addition, the increased Transit Sales Tax will provide for street improvements including pavement maintenance, new bicycle lanes, sidewalk installation and traffic signal enhancements.

In 2019, City Council authorized an agreement for the Northwest Light Rail Extension Phase II project with Valley Metro Rail (*"VMR"*). The Northwest Light Rail Extension Phase II is a 1.6-mile light rail project extending from the current end-of-line at 19th Avenue and Dunlap, west to 25th Avenue, then northward to Mountain View Road, to a terminus west of Interstate 17 adjacent to the Metrocenter Mall. The project will include three new stations, two park-and-ride lots (one end-of-line, one co-located with Rose Mofford Park), and a relocated and expanded Metrocenter transit center. The $173 million (City's share) project, scheduled to open in 2024, will include an elevated structure over Interstate 17 and will terminate just west of the freeway. July 28, 2020, marked the official start of construction of the Northwest Extension Phase II project, with the first order of construction being the relocation of underground utilities. In August 2020, the Federal Transit Administration ("*FTA*") signed and executed a full funding grant agreement in the amount of $158 million to secure their share of funding committed through the Capital Investment Grant program. The grant was distributed in three allocations: $50.6 million in August 2020, $49.4 million in December 2020, and $58.1 million in May 2021. The total cost of the project will be funded with Federal grant funds, Transit Sales Taxes, and other local funding sources. In March 2022, the project completed the "Bridging East to West" milestone which completed the bridge girder installation crossing the Interstate 17. In May 2022, the FTA allocated $58.1 million funding from the FTA's Capital Investment Grant program. May 2022 also saw the commencement of construction for the Metro Center Parkway elevated station platform, the first elevated platform in the State of Arizona. In January 2023, the project achieved 70% completion, with new utilities upgraded throughout most of the project area, over 8000 total feet of embedded track poured and over 2600 total feet of direct fixation track poured.

In 2019, City Council authorized an agreement for the South Central Extension/Downtown Hub project with VMR. The South Central Extension/Downtown Hub is a 5.5-mile light rail project extending south from Jefferson Street to Baseline Road along Central Avenue and includes the creation of a rail transfer hub in downtown Phoenix. The project will include nine new light rail stations and two park-and-rides — one located at the existing Ed Pastor Transit Center at Central Avenue and Broadway Road, and an end-of-line facility at the northwest corner of Central Avenue and Baseline Road. On April 15, 2019, the Federal Transit Administration FTA granted the project approval to enter the engineering phase of the Capital Investment Grant New Starts program. October 14, 2019, marked the official start of construction in the Downtown Hub of the project. The first order of construction being the relocation of underground utilities. In September 2020, the notice to proceed was issued for non-utility work to commence in the Downtown Hub, as utility relocations continued to progress along the South Central Extension alignment. The U.S. Department of Transportation awarded $638 million to help fund the South Central/ Downtown Hub Light Rail expansion in January 2021. The Full Funding Grant Agreement from the FTA represents the federal government's role in funding and helping manage the project. The extension project received $530 million from the FTA's Capitol Investment Grants Program and $108 million from the Federal Highway Administration. On January 6, 2021, the FTA signed and executed a full funding grant agreement in the amount of $530 million to secure their share of funding committed through the Capital Investment Grant program. The $428 million (City's share) of the project will be funded with Federal grant funds, Transit Sales Taxes, and other local funding sources. In March 2022, the South Central Extension/

Downtown Hub project received $81.3 million from the American Rescue Plan Act ("*ARPA*"). In May 2022, the FTA allocated $232.1 million funding from the FTA's Capital Investment Grant program. In September 2022, the project achieved 50% completion, with new utilities upgraded throughout most of the project area, track installation, and station construction through the corridor. More than 13 miles of new waterline has been installed on the project and nearly 5,000 feet of track has been installed, including 13 pieces of special trackwork in the Downtown Hub. In December 2022, the South Central Extension/ Downtown Hub project received an additional $21.1 million funding from the FTA's Capital Investment Grant program.

Phoenix Sky Harbor Center

The creation of Phoenix Sky Harbor Center was approved by the City Council in 1984, and in 1985, $19,150,000 in City bonds were issued for the development of 550 City-owned acres into a high quality business office, technological and industrial center. Located immediately west of Phoenix Sky Harbor International Airport, Phoenix Sky Harbor Center is generally bordered by I-17 to the south, 16th Street to the west, the Southern Pacific Railroad to the north and 24th Street to the east. Phoenix Sky Harbor Center is bisected by I-10, which provides convenient transportation access to the site and to Phoenix Sky Harbor International Airport.

The initial acquisition and infrastructure development phase of Phoenix Sky Harbor Center was completed in 1993. Among the earliest occupants were Honeywell, Sky Chefs Inc., Miller Brands of Phoenix and Arrow Electronics. These initial tenants built distribution space, office buildings, warehouses and manufacturing facilities totaling over 1.16 million square feet. The office park has since added Bank of America's credit card operations center, and Bank One (now JPMorgan Chase) regional processing center. Other sizeable tenants at Phoenix Sky Harbor Center include First Group America dba Greyhound Lines, Charlie Case dba Community Tire, Century Link, Grand Stable & Carriage Co. LLC, LTJ Skyline, the City of Phoenix, Horseheads Industrial Capital II, LLC, 801 S. 16th Industrial, LLC, Honeywell International Inc., and Watson Properties.

In 1993, the City received approval for the relocation and expansion of Foreign Trade Zone ("*FTZ*") No. 75 to a 375-acre site at Sky Harbor Center. The FTZ was established to allow companies who import large amounts of foreign products to defer paying duties on these products until they are shipped to retail outlets. The FTZ boundaries were modified to include air cargo operations at Sky Harbor.

In 2001, the City Council approved the concept of a consolidated rental car center ("*RCC*") for Phoenix Sky Harbor International Airport. On June 1, 2002, the City initiated a daily Customer Facility Charge ("*CFC*") collected by the rental car companies on all rentals to be used to fund the construction, operation and maintenance of the RCC. The RCC is located on approximately 141 acres within Sky Harbor Center and opened on January 19, 2006. The development includes a customer service building, car service facility, a 5,651 space parking garage, bus fleet, bus maintenance facility, and associated site improvements, infrastructure, roadways, landscaping and signage. The project was funded with CFC revenues and bond funds, and cost approximately $285 million. The RCC is now connected directly with all terminals and parking facilities via the PHX Sky Train® extension which was completed in December 2022.

Phoenix Sky Harbor International Airport

In 1990, construction was completed on Terminal 4 at Phoenix Sky Harbor International Airport at a cost of $276 million. The original facility included 4 domestic concourses housing 44 gates, one international concourse with 4 gates, and a 3,400-space parking facility. In July 1994, the City Council approved expansion of Terminal 4 to add ten domestic gates to the international concourse. Construction of the new facilities was completed in February 1996. In September 1995, America West Airlines (subsequently US Airways and now American Airlines) announced plans to expand its Phoenix operations over the next several years. In March 1998, the City Council approved an airport capital expansion program funded primarily by passenger facility charges and airport revenue bonds. Approved and completed projects included rebuilding runways in concrete, construction of two new airport fire stations, a new Terminal 4 concourse to provide more capacity for American Airlines and additional parking facilities at Terminal 4. The additional Terminal 4 concourse was completed in May of 2022 and all 8 additional gates are currently utilized by Southwest Airlines.

Terminal 3, which opened in 1979, originally contained approximately 639,000 square feet and ten gates. The Terminal 3 Modernization Project, which began construction in 2014, with the purpose of removing Terminal 2 from service, providing for passenger growth in Terminal 3, increasing passenger flow efficiencies and increasing concession revenue. The $580 million modernization project was executed in three independent phases that allowed the project to be completed as demand required and finances allowed. Airlines in Terminal 2 were moved into the expanded Terminal 3 facilities. The Airport completed the final phase of the project in the spring of 2020. Terminal 3 now contains approximately 710,000 square feet and 25 gates.

PHX Sky Train® is an automated people mover designed to carry over 35 million riders annually through seven stations at Sky Harbor along an elevated guideway spanning approximately five miles. The PHX Sky Train® provides a new front door to the Airport, offering a seamless connection with the light rail transit station at 44th Street and Washington. Stage 1 of the PHX Sky Train® connects Phoenix's light rail system, Sky Harbor's east economy parking garages and Terminal 4 and began service on April 8, 2013. Stage 1a (the Terminal 3 Line Extension) began service on December 8, 2014 and runs from Terminal 4 to Terminal 3. The two stages were completed more than $45 million under the combined budget of $884 million. Phase 2, the final extension of the PHX Sky Train®, extended service from Terminal 3 to the Rental Car Center, commenced construction in February 2018, and was completed under budget and opened for service in December 2022.

On June 11, 2019, the Phoenix City Council approved the Airport's Comprehensive Asset Management Plan (the *"CAMP"*), which is a 20-year blueprint for Airport investments. The CAMP is projected to cost $5.7 billion during the 20-year period. Early in calendar year 2020, commercial airports across the United States, including Phoenix Sky Harbor International Airport, saw passenger traffic numbers reduced dramatically as the global economy began to face impacts of the COVID-19 pandemic. The Airport responded to the pandemic-driven reduction in revenue by deferring certain CAMP projects until the projects became justified again by demand and financially feasible. With new federal funding becoming available for capital development through the Bipartisan Infrastructure Law ("*BIL*"), the Airport is obtaining environmental approvals and developing designs on a new crossfield taxiway ("*Taxiway U*") and an additional concourse on the north side of Terminal 3. These, and other smaller airfield projects are expected to be competitive for grants under the BIL program.

Property Tax Supported Bond Program

General Obligation (GO) Bond programs provide a mechanism to fund construction and rehabilitation of City facilities and infrastructure such as parks, libraries, fire stations, streets, and storm drains. GO Bond programs require voter approval. Since 1957, the City's approved GO Bond programs have totaled $4.6 billion. The most recent voter-approved GO Bond program for $878.5 million was approved by voters in 2006.

In January 2022, the Mayor appointed a Fiscal Capacity Committee consisting of five private citizens to identify the financial parameters for a bond program and the capacity for operations and maintenance, and to report its findings to the City Council. The Fiscal Capacity Committee recommended the City Council develop a $500 million bond program for a November 2023 election.

In June 2022, the Mayor and City Council appointed the 2023 GO Bond Committee and eight subcommittees consisting of approximately 79 private citizens to review the City's capital requirements and recommend a GO Bond program to the voters. This is the traditional approach used by the City for bond elections since 1950. The program culminated on June 14, 2023, with the Mayor and City Council voting to propose four GO Bond questions to voters during a Special Election in November 7, 2023. These questions total $500 million as follows:

- Question 1 seeks voter authorization to sell up to $214,000,000 general obligation bonds to enhance community safety through fire, police, roadway, and pedestrian infrastructure projects.
- Question 2 seeks voter authorization to sell up to $108,615,000 general obligation bonds to improve the quality of life in phoenix neighborhoods for library, parks and historic preservation projects.

- Question 3 seeks voter authorization to sell up to $114,385,000 general obligation bonds for education, economic development, reducing waste, resource management, arts, and culture projects.
- Question 4 seeks voter authorization to sell up to $63,000,000 general obligation bonds for affordable housing and senior center projects.

PHOENIX CITY GOVERNMENT

Phoenix operates under a Council-Manager form of government as provided by its Charter, which was adopted in 1913. The City Council consists of a Mayor and eight Council members, elected by the people on a non-partisan ballot. At a special election held on October 3, 1989, Phoenix voters passed Proposition 105 which amended the City Charter to provide for four year staggered terms and a limit of two such terms for the Mayor and Council members. On November 6, 2001, Phoenix voters passed Proposition 101 which amended the City Charter to allow Council members to serve up to three consecutive four-year terms, with no limit on the number of terms that could be served over a lifetime. On August 28, 2018, Phoenix voters passed Proposition 411 which amended the City Charter by changing City Council elections from the fall of odd-numbered years to November of even-numbered years to coincide with county and statewide elections. The Mayor is elected at-large, while Council members are elected by voters in each of eight separate districts they represent. The Mayor and each Council member have equal voting power.

The Council is responsible for policy making. It appoints advisory boards, commissions and committees and also appoints Municipal Court Judges and the City Manager.

The City Manager is responsible for executing Council policies and administering City operations. Reporting to the City Manager is an Assistant City Manager, a Special Assistant, the Budget and Research Director, the Chief Financial Officer, the City Auditor and the City Attorney.

The City government is responsible for furnishing basic municipal services. Primary services delivered by the City's 41 departments/functions, 18 initiatives/projects and 15,646 employees include police, Municipal Court, fire protection, parks, recreation, libraries, sanitation, water, sewer, transportation (including streets and public transit), airports, building safety, public works, neighborhood improvement and housing, community and economic development and convention and cultural services. These services were provided in fiscal year 2022-23 through an adopted operating budget of $5,977.8 million. Of this, the general purpose funds budget totaled $1,779.4 million, which was for general municipal services and excluded enterprise activities such as water, sewer, refuse and airports and special revenue funds such as grants, secondary property taxes, Arizona Highway User Revenues, impact fees and voter-approved dedicated sales taxes.

Elected Officials

KATE GALLEGO, MAYOR

Mayor Gallego began her first term as Mayor in March 2019. Prior to being elected Mayor, Ms. Gallego served on the City Council representing District 8 for nearly five years before resigning in August 2018 to run for Mayor. Ms. Gallego has been an active member of the community and held several volunteer positions including Chair of the Environmental Quality Commission, Chair of the Solar Energy Subcommittee, Vice Chair of MyPlanPHX.com, and as a member of the Central City Village Planning Commission. Additionally, Ms. Gallego is a member of the Board of Directors of the Arizona Latino Arts and Culture Center and serves on the Arizona Commission on Service and Volunteerism. Ms. Gallego has a Master of Business Administration in Entrepreneurial Management from The Wharton School of Business at the University of Pennsylvania and a bachelor's degree in Environmental Studies from Harvard University.

YASSAMIN ANSARI, VICE MAYOR, DISTRICT 7

An Arizona native, Councilmember Ansari began her first term on the City Council in April 2021. Prior to being elected to the Phoenix City Council, Ms. Ansari served as a senior climate advisor to former United Nations Secretary and helped to deliver the historic Paris Climate Agreement. She has also worked on Mission 2020, a global climate campaign, and served as the Deputy Director of Policy for the Global Climate Action Summit. Ms. Ansari holds a Master degree from the University of Cambridge and bachelor's degree from Stanford University.

ANN O'BRIEN, COUNCILMEMBER, DISTRICT 1

Councilmember Ann O'Brien began her first term in April 2021. Prior to being elected to the Phoenix City Council, Ms. O'Brien worked in project management for the Arizona Department of Child Support Enforcement and as a business broker for a local company. Ms. O'Brien is an Arizona native who has done extensive volunteer service work within the community. She currently serves as the President of the Deer Valley Unified School District Governing Board, President of the Arizona School Board Association and is the appointed chairperson of the 2020 Legislative Committee. Ms. O'Brien holds a bachelor's degree from Arizona State University.

JIM WARING, COUNCILMEMBER, DISTRICT 2

Councilmember Waring began his second consecutive full term on the City Council in January 2018. Mr. Waring has been an active member of the community for many years and has volunteered on many City and charitable organizations, including the Paradise Valley Village Planning Committee, Phoenix Planning Commission and Neighborhood Block Watch Committee. For his contributions, he has earned awards from the Arizona Federation of Taxpayers (Champion of the Taxpayer), National Federation of Independent Business (Guardian of Small Business), and the Arizona Chamber of Commerce (Senator of the Year). In addition, he was recognized for his work fighting domestic violence by the Arizona Coalition Against Domestic Violence (Legislator of the Year twice) and the Men's Anti Violence Network (Man of the Year). Councilmember Waring was awarded the Arizona Veterans Hall of Fame Copper Shield Award and the National Guard Association of the United States Medal of Merit. Mr. Waring was an Arizona State Senator for seven years and has served on the staffs at Arizona State University, the Arizona Board of Regents and Northern Arizona University. Mr. Waring received his PhD in Public Administration from Arizona State University's School of Public Affairs and his undergraduate degree from Northern Illinois University.

DEBRA STARK, COUNCILMEMBER, DISTRICT 3

Councilmember Stark began her first term on the City Council in March 2017 and was reelected in 2021. Ms. Stark has spent her entire career in local government working for the City of Phoenix, the County, and the City of Peoria. At the City of Phoenix, Ms. Stark was the Planning and Development Director from 2005 to 2012. She was the President of the Arizona Chapter of the American Planning Association and served as a Board Member for the Arizona Council of the Urban Land Institute and Southwest Center for HIV/AIDS. Ms. Starks holds a Master Degree in Planning from Arizona State University and a bachelor's degree in Sociology from Western Kentucky University.

LAURA PASTOR, COUNCILMEMBER, DISTRICT 4

Councilmember Pastor was first elected in 2013. She began her second consecutive term on the City Council in January 2018. Currently she is the Community Liaison at Phoenix College. Ms. Pastor was Director of Achieving a College Education Program at South Mountain Community College and was a classroom elementary teacher for four years. Previously, Ms. Pastor was with the Department of Employment and Rehabilitation Services at the Arizona Department of Economic Security and was Special Assistant to the Arizona Director of Insurance. Ms. Pastor is a member of the Phoenix Union High School District Board and serves on the O'Connor House Speak Out Against Domestic Violence and Mi Familia Vota advisory boards. She is a former member of the Hispanic Advisory Board of Maricopa Community Colleges, Maricopa Transportation Advisory Board, the Homeless Task Force, and Phoenix Day. Ms. Pastor has a Master of Public Administration from City University of New York and bachelor's degree in Education from Arizona State University.

BETTY GUARDADO, COUNCILMEMBER, DISTRICT 5

Councilmember Betty Guardado began her first term on the City Council in June 2019. Ms. Guardado has been an active member of the community and has served as the director of union organizing in Phoenix for UNITE HERE Local 11, where she has conducted campaigns and negotiated contracts for thousands of hotel and food-service workers around Maricopa County. Currently, she is a vice president of Local 11. Ms. Guardado has been instrumental in leading successful independent voter turnout campaigns to elect several Phoenix City Council members to develop young leaders, and to empower working-class families.

KEVIN ROBINSON, COUNCILMEMBER, DISTRICT 6

Councilmember Kevin Robinson began his first term on the City Council in April 2023. Mr. Robinson began his career with the City of Phoenix as a patrol officer in 1980 and became Assistant Police Chief in 2000. Mr. Robinson has been active in Arizona's nonprofit community for more than 20 years, and for more than a decade served on the board of Ronald McDonald House Charities of Central and Northern Arizona, including two terms as president of the board. Mr. Robinson also served on several other community boards including the Arizona Supreme Court Judicial Council, Arizona Police Officers Standards and Training Board, and the Maricopa County Attorney's Office Community Advisory Board. Mr. Robinson earned a Master of Public Administration and bachelor's degree of arts in management from Arizona State University.

KESHA HODGE WASHINGTON, COUNCILMEMBER, DISTRICT 8

Councilmember Kesha Hodge Washington began her first term on the City Council in April 2023. Ms. Washington moved to Arizona from the U.S. Virgin Islands in 1999 and has been active in Phoenix ever since for over twenty years. Ms. Washington is a former Assistant Attorney General who practiced law in Phoenix and served as Special Deputy Attorney General. Ms. Washington has and continues to volunteer and serve in many areas, from voter registration and civic engagement to providing food and necessities to individuals in need. Ms. Washington maintains active membership participation in community organizations such as Cottonfields Homeowners Association, and the American Bar Association. Ms. Washington earned her law degree from Arizona State University College of Law and her bachelor's degree from the University of the Virgin Islands.

Administrative Staff

JEFF BARTON
City Manager

Jeff Barton was appointed City Manager in October 2021 after serving as Assistant City Manager since February 2021. Mr. Barton's career with the City of Phoenix started in 1999 as an Internal Auditor in the City Auditor Department. Over the years he held a variety of roles that focused on the City's sound financial stewardship, including multiple auditing positions, Management Assistant, Deputy Budget and Research Director, Budget and Research Director, and most recently as Deputy City Manager. Mr. Barton holds a Master of Public Administration from Shippensburg University of Pennsylvania and a bachelor's degree in Political Science from Morehouse College.

LORI BAYS
Assistant City Manager

Lori Bays was appointed Assistant City Manager in October 2021. Ms. Bays joined the City in 2017 as a Chief Human Resources Officer where she has managed human resources strategy and operations for the City's workforce of 14,000 employees. In this role, Ms. Bays has led efforts to develop a Total Compensation and Rewards Strategy for the City, designed and implemented the PHXRespect initiative, as well as served on the leadership team for the Racial Equity Dialogue Series. Prior to working for the City, she was the Chief Administrative Officer for Salt Lake County, which has a population of more than one million residents. Ms. Bays holds a Master's degree in Clinical Psychology and a bachelor's degree in Psychology.

JULIE KRIEGH
City Attorney

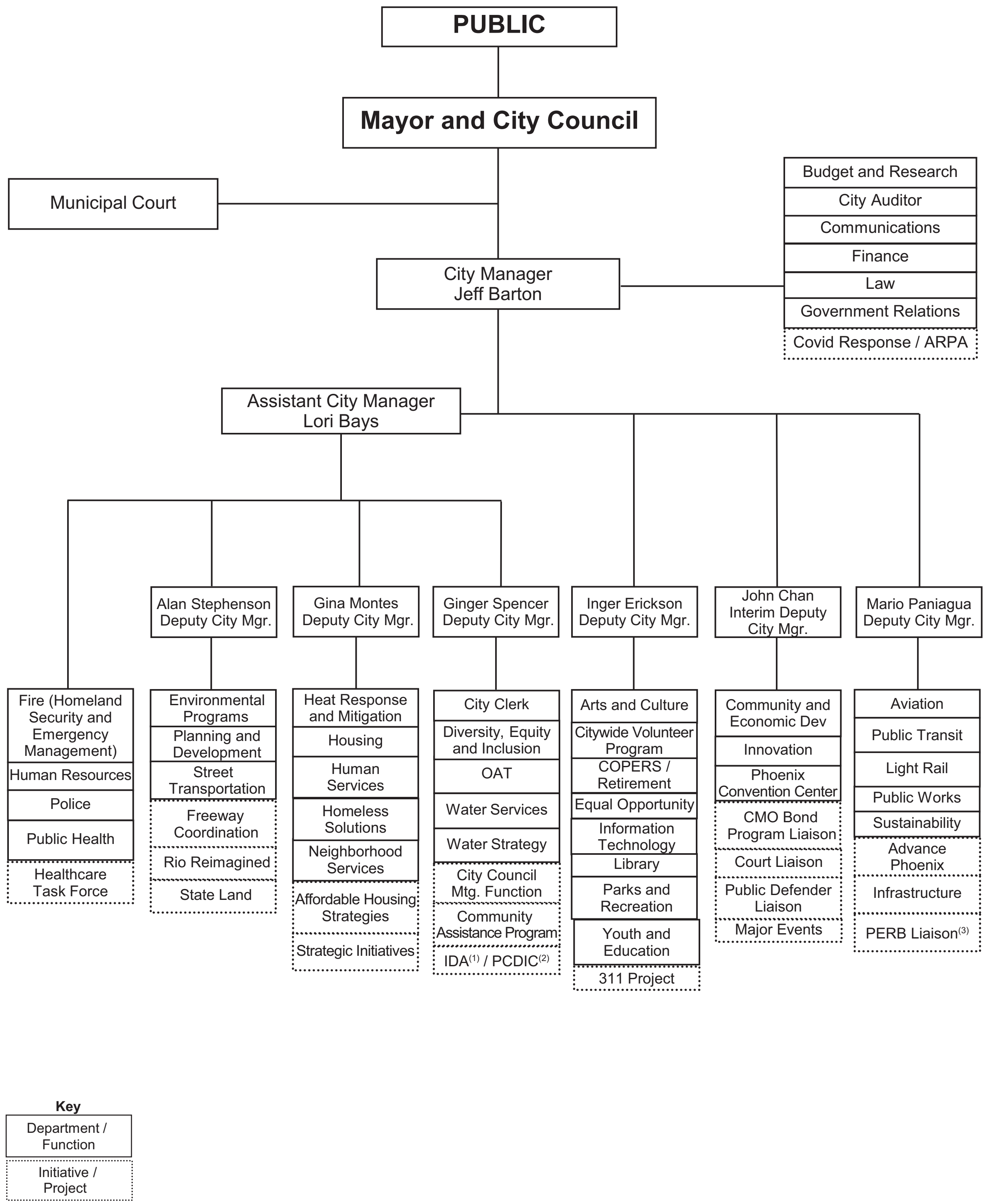
Julie Kriegh was named City Attorney in November 2022 after serving as Chief Assistant City Attorney since 2020. Ms. Kriegh has more than 20 years of experience representing municipal governments in Arizona in a wide range of areas. She joined the City of Phoenix Law Department in 2016, where she has served and supervised attorneys in several City departments. Prior to joining the City, Ms. Kriegh served as Deputy City Attorney in Surprise, Arizona, as an Assistant City Attorney in Mesa, Arizona, and was the Town Attorney for Camp Verde, Arizona. Ms. Kriegh is a member of the State Bar of Arizona and the State Bar of Colorado. She received her law degree from the University of Denver and her undergraduate degree in Public Administration from Northern Arizona University.

KATHLEEN GITKIN
Chief Financial Officer

Ms. Gitkin was appointed Chief Financial Officer in July 2021. She began her career with the City in 2004 with the Finance Department, working as an Accountant II in the Utilities Accounting Division and an Accountant III, Accountant IV and Investment and Debt Manager in the Treasury and Debt Management Division. She became Deputy Finance Director/City Treasurer in November 2014 and was promoted to Assistant Finance Director in July 2020. Throughout her career she has managed financial planning, city controller functions, real estate, risk management, banking and cashiering, investments and debt issuances to fund capital expenditures. Ms. Gitkin has a Master of Business Administration from the University of Phoenix and a bachelor’s degree in Accountancy from New Mexico State University.

TROY HAYES
Water Services Director — Water

Mr. Hayes has over 25 years of civil engineering and management experience in the water and wastewater industry. Prior to becoming the Water Services Director, he served as Assistant Water Services Director and Deputy Water Services Director for the Water Production Division. He holds a bachelor’s degree in chemical engineering from the University of Arizona, a master’s degree in business administration from the University of Phoenix and is a licensed professional civil engineer in the states of Arizona and Colorado. He also holds Arizona Department of Environmental Quality Grade 4 Operator License in all disciplines of water and wastewater.



1 - Phoenix Industrial Development Authority.
2 - Phoenix Community Development and Investment Corporation.
3 - Phoenix Employee Relations Board.

Effective: September 18, 2023

Awards

The City of Phoenix and its employees have been recognized professionally for numerous awards including the following accomplishments:

- **Certificate of Achievement for Excellence in Financial Reporting**

This award (formerly the *"Certificate of Conformance in Financial Reporting"*) recognizes the completeness, accuracy and understandability of the City's Annual Comprehensive Financial Reports. Awarded to the City of Phoenix by the Government Finance Officers Association each year since 1976, and to the City of Phoenix Aviation Department each year since 2016, the first year of the Aviation Annual Comprehensive Financial Report.

- **Employees' Retirement Plan Certificate of Achievement for Excellence in Financial Reporting**

Awarded to the City of Phoenix by the Government Finance Officers Association for its component unit financial report each year since 1985. The Certificate of Achievement is the highest form of recognition in the area of public employee retirement system accounting and financial reporting.

- **Distinguished Budget Presentation Award**

Awarded to the City of Phoenix Budget and Research Department each year since 1990 by the Government Finance Officers Association for the completeness and understandability of its budget document.

- **2018 Illuminating Engineering Society Award of Excellence Winner**

The Illuminating Engineering Society (*"IES"*) and Smith Group recognized Phoenix Sky Harbor International Airport for its Terminal 3 Modernization Project. The 2018 Illuminating Engineering Society Awards celebrates design excellence worldwide and selected Phoenix Sky Harbor as an Award of Excellence Winner. This award was provided to the airport due to an exceptional contribution to the art and science of light.

- **2017 Arizona Forward — Governor's Award for Arizona's Future**

Arizona Forward awarded its prestigious Governor's Award for Arizona's Future to the City of Phoenix for its landmark 2017 agreement with the Gila River Indian Community to preserve endangered Colorado River water in Lake Mead. In all, Phoenix received nine awards at Arizona Forward's 37th Annual Environmental Excellence Awards, including four Crescordia Awards, the highest honor in each category. Mayor Greg Stanton and the Phoenix City Council unanimously approved the Colorado River Conservation Agreement in June 2017 in partnership with the Gila River Indian Community, the U.S. Bureau of Reclamation and the Walton Family Foundation. Under the agreement, Phoenix works with the Tribe to preserve 13 billion gallons of its annual portion of Colorado River water in Lake Mead, which helps preserve water levels in the dangerously over-allocated reservoir.

- **2017 Nation's Highest Performing City**

The City of Phoenix has been named the nation's highest performing city by Governing Magazine and Living Cities through the first-ever national "Equipt to Innovate" survey. Equipt to Innovate is a new initiative launched by Governing and Living Cities. It is an integrated, collaborative framework of seven essential elements that define high-performance government and empower innovation. It is also an invitation for cities to work together, learn from each other and help drive better outcomes for their communities. The seven Equipt elements are: Dynamically Planned; Broadly Partnered; Resident-Involved; Race-Informed; Smartly Resourced; Employee-Engaged; and Data-Driven. Cities from across the country participated in the inaugural 2016 Equipt survey, assessing their capacity and competence in these seven key areas.

- **ICMA Program Excellence Awards**

  – **2019 ICMA Certificate of Distinction in Performance Management**

The International City/County Management Association (*"ICMA"*) has recognized the City of Phoenix for its data-driven management and reporting efforts with a Certificate of Distinction for 2019. Certificates of Distinction are awarded to those who provide comparative and benchmarking information to the public, use performance data in strategic planning and operational decision-making, and share their knowledge with other local governments through presentations, site visits, and other networking activities. Phoenix is among 19 jurisdictions receiving the Certificate of Distinction and one of 63 recognized overall. This is the 18th year the City's performance management efforts have been recognized by ICMA.

– **2017 Community Partnership Award**

The City of Phoenix was awarded the Community Partnership Award for the Phoenix/Tucson water exchange program. This award recognizes innovative programs or processes between and/or among a local government and other governmental entities, private sector businesses, individuals, or nonprofit agencies to improve the quality of life for residents or provide more efficient and effective services. The exchange agreement between Phoenix and Tucson takes advantage of the unique infrastructure of each city's water system. Tucson's system relies on wells, Phoenix relies on surface water, and a canal connects the two cities.

- **2017 Water Resource Utility of the Future Today Award**

The City of Phoenix Water Services Department was honored as a 'Utility of the Future Today' for the department's forward-thinking initiatives. The recognition program is administered by four water sector organizations — the National Association of Clean Water Agencies *("NACWA")*, the Water Environment Federation *("WEF")*, the Water Environment & Reuse Foundation *("WE&RF")* and WateReuse — with input from the U.S. Environmental Protection Agency *("EPA")*. The Phoenix Water Department was one of just 25 water utilities in the country to receive this recognition. The Utility of the Future Today recognition celebrates the achievements of forward-thinking, innovative water utilities that are providing resilient value-added service to communities. The recognition focuses specifically on community engagement, watershed stewardship and recovery of resources such as water, energy and nutrients.

- **Outstanding Achievement in Innovation**

– **2017 Outstanding Achievement in Innovation**

The Alliance for Innovation awarded the City of Phoenix an Outstanding Achievement in Innovation Award for PHXteens Program. Developed to help teenagers better connect with the community and to realize their full potential, the PHXteens program launched in September 2016 and is facilitated out of eight community and recreation centers located throughout the city. During its inaugural year, 233 teens registered for the program. Additionally, teens participated in 31 cultural and 24 recreational field trips, 70 teen council meetings, 28 workshops, and 2,439 volunteer hours.

– **2016 Outstanding Achievement in Innovation**

FitPHX is the recipient of the Alliance for Innovation's Outstanding Achievement in Local Government Innovation Award. FitPHX is a citywide initiative with the goal of improving health and wellness in the region and making Phoenix area one of the healthiest in the nation. The initiative has created innovative collaboration between government, private sector, non-profits and universities to develop programming that gives citizens tools and education to be healthier. In 2015, FitPHX provided services to nearly 14,000 participants and raise $350,000 to support its programming.

– **2013 Outstanding Achievement in Innovation**

The Alliance for Innovation awarded the City of Phoenix an Outstanding Achievement in Innovation Award for its organizational review, which resulted in a leaner work force and more efficient delivery of services. The goals of the organizational review were to eliminate layers of supervision, broaden the span of control, streamline services, identify efficiencies and reduce the size of government. Through these goals, the City was able to improve services to residents by providing for faster decision making and enhanced organizational flexibility and communications, leading to the smallest City government in 40 years, as measured by employees per capita.

– **2012 Outstanding Achievement in Innovation**

The Alliance for Innovation awarded the City of Phoenix an Outstanding Achievement in Innovation Award for the Innovation and Efficiency Task Force. Created in January 2010, the task force is comprised of City staff and public members who explore, develop and implement innovative processes that result in a more efficient delivery of City services and maximize the use of limited taxpayer dollars.

- **2016 President's "E" Award for Export Service**

The City of Phoenix was a 2016 winner of the President's (*"E"*) Award for Export Service. The President's "E" Award was initiated in 1962 by President John F. Kennedy to recognize excellence by companies and municipalities for contributions to U.S. exporting. Phoenix is only the fifth city to earn the honor in 54 years. It is typically reserved for companies and private sector entities. The City earned the award by demonstrating a sustained commitment to export expansion with significant and broad-based support to grow exports from Phoenix, which is responsible for more than half of the exports from the State of Arizona. The support included the launch of the City's export boot camp initiative, which teaches local small- and medium-sized businesses how to trade abroad.

- **American Water Works Association, Arizona Section (AZ Water)**

– **2023 AZ Water – Award of Merit**

The City of Phoenix, 23rd Avenue Wastewater Treatment Plant, and 91st Avenue Multi-Cities Wastewater Treatment Plants were presented the Award of Merit. This award recognized outstanding safety records in the year 2022. AZ Water is an independent organization, which also manages the Arizona section of the American Water Works Association (*"AWWA"*) and the Arizona member association of the Water Environment Federation (*"WEF"*). These organizations advocate for Arizona's water through engaging leadership, connecting professionals, providing education, and inspiring environmental stewardship.

– **2022 AZ Water – Award of Merit**

The City of Phoenix, Val Vista Water Treatment Plant were presented the Award of Merit. This award recognized outstanding safety records in the year 2021. AZ Water is an independent organization, which also manages the Arizona section of the AWWA and the Arizona member association of the WEF. These organizations advocate for Arizona's water through engaging leadership, connecting professionals, providing education, and inspiring environmental stewardship.

– **2020 AZ Water – System of the Year, Large System -City of Phoenix Distribution System**

The City of Phoenix, Water Distribution system was presented with the Large System - System of the Year award. This award recognized the City's efforts for the safe delivery of more than 250 acre-feet of water per year. AZ Water is an independent organization, which also manages the Arizona section of the AWWA and the Arizona member association of the WEF. These organizations advocate for Arizona's water through engaging leadership, connecting professionals, providing education, and inspiring environmental stewardship.

- **2022 Arizona Forward – Art in Public Places**

Arizona Forward presented the City of Phoenix, Water Services Department an award to recognize creative works of art visually accessible to the public that contribute to aesthetic appreciation, add to a sustainable-based culture, and encourage sustainability. The City received the award for the installation of "Neighborhood Vista", a project which upgraded an inactive well site to enhance the neighboring community. The Water Services Department in collaboration with the Phoenix Office of Arts and Culture hired local artists and landscape architects who worked with community leaders, nearby schools, volunteer groups, neighbors, and the Phoenix Police Department on the design. One requirement was to incorporate art elements and low water use landscape into the design. Another requirement was for the design to incorporate passive recreation, as well as a place to walk through and enjoy.

- **2019 Sustainable Water Utility Management**

Phoenix Water was one of the fifteen systems that received the Sustainable Water Utility Management Award for achieving a balance of innovative and successful efforts in areas of economic, social and environmental endeavors. Some of the successes that separated Phoenix Water from other municipal utilities include the acquisition of water resources to meet demand 100 years into the future; reduced energy consumption through the adoption of electronic processes such as automated meter reading; and 140 million gallons of wastewater recycled, daily. In all, 19 utilities received awards for demonstrating excellence in various areas of utility management.

- **2016 Platinum Award for Utility Excellence**

The City of Phoenix Water Services Department was honored for utility excellence by the Association of Metropolitan Water Agencies *("AMWA")* at its 2016 Executive Management Conference. The City's Water Department was one of ten water utilities in the country to receive the Platinum Award for Utility Excellence. The Platinum Award recognizes outstanding achievement in implementing the nationally recognized Attributes of Effective Utility Management.

- **2015 Mayors' Climate Protection Awards**

Awarded to the City by the U.S. Conference of Mayors, the annual Mayors' Climate Protection award recognizes mayors for innovative programs that increase energy efficiency and reduce greenhouse gas emissions. The City earned the award for the Energize Phoenix Program, a large-scale, three-year building energy efficiency program, which catalyzed $56 million in energy upgrades along a ten-square-mile urban corridor of Phoenix surrounding the newly-constructed Metro light rail. Phoenix partnered with Arizona State University and APS, Arizona's largest electricity provider, to leverage $25 million in program funding from the U.S. Department of Energy and $31 million in utility funding to transform the downtown core into a green corridor. It focused on a diverse mix of single- and multi-family residential buildings and small commercial buildings offering significant rebates and financing for energy efficient upgrades.

- **2015 Sister Cities Best Overall Sister City Program Award**

In July 2015, the Phoenix Sister Cities Commission received the Sister Cities International Best Overall Sister City Program in the U.S. for cities with a population of 500,000 or more award, its highest honor. This is the eight time in the past 21 years that Phoenix has won this award. Phoenix Sister Cities highlights include a new and improved Youth Ambassador Exchange Program; a significant increase in arts and culture projects including the second annual WorldFEST celebration promoting its 10 sister cities; the Vincenzo Bellini Opera project with Catania, Italy; a police training program for Hermosillo, Mexico; and economic development projects with Chengdu, China; Catania, Italy; and Calgary, Canada as well as trade missions with Calgary and Catania.

- **National Association of Clean Water Agencies (*"NACWA"*) Awards**

  – **2021 NACWA Platinum and Gold Peak Performance Awards**

The NACWA recognized the City of Phoenix Water Services Department for continued environmental and operational excellence. The Peak Performance Award is presented to utilities for continuously providing outstanding clean water. Phoenix Water received both Platinum, and Gold Awards. Platinum Awards recognize 100% compliance with permits over a consecutive five-year period. Gold Awards are presented to facilities with no permit violations for the entire calendar year.

  – **2020 NACWA Platinum and Silver Peak Performance Awards**

The NACWA recognized the City of Phoenix Water Services Department for continued environmental and operational excellence. The Peak Performance Award is presented to utilities for continuously providing outstanding clean water. Phoenix Water received both Platinum Award and Silver Awards. Platinum Awards recognize 100% compliance with permits over a consecutive five-year period. Silver Award are presented to facilities with less than 5 permit violations for the entire calendar year.

- **2015 NACWA Platinum Peak Performance Award**

The National Association of Clean Water Agencies *("NACWA")* honored the City of Phoenix Water Services Department with the Platinum Award for seven consecutive years of perfect National Pollutant Discharge Elimination System permit compliance. NACWA is a nationally recognized leader in water quality, environmental policy and ecosystem protection issues. The City treats wastewater from 2.5 million people in Phoenix, Glendale, Mesa, Scottsdale and Tempe.

- **2012 NACWA Gold Peak Performance Award**

The NACWA honored the City of Phoenix Water Services Department with the Gold Award for consistently meeting all National Pollutant Discharge Elimination System permit limits during the calendar year. The City's 23rd Avenue Wastewater Treatment Plant and 91st Avenue Multi-Cities Wastewater Treatment Plant were presented the award to recognize 100 percent compliance with regulatory discharge limits.

- **2014 World Airport Award (WAA)**

SkyTrax World Airport Awards *("WAA")* recognized Phoenix Sky Harbor International Airport as the 7th best airport in the world serving 40-50 million passengers. WAA is the leading global award for the world's best airports, as voted by travelers from over 160 countries and 410 airports worldwide, in the largest airport customer satisfaction survey. The ranking was determined by airline customers and evaluates traveler experiences across key performance indicators: check-in, arrivals, transfers, shopping, security, immigration processing and departure.

- **2014 Top Ten Digital Cities Award**

In November 2014, the City of Phoenix was named a Top Ten City in the Center for Digital Government's 2014 Digital Cities Survey. The award honors cities with best practices in public sector information and communications technology.

- **National Association of Housing and Redevelopment Officials (NAHRO) Award**

  - **2014 NAHRO Award**

In August 2014, the City's Neighborhood Services Department *("NSD")* received the Award of Merit for designing the Neighborhood Stabilization Program as an innovative, multi-faceted delivery approach to revitalize communities affected by the foreclosure crisis. With funding from the U.S. Department of Housing and Urban Development, accomplishments of the program include 395 homes rehabilitated to energy efficiency building standards, 191 homebuyers receiving down-payment assistance, 102 demolition projects completed using green methods and strategies, and a rescued subdivision featuring 14 newly constructed, solar-powered, single-family homes Gold certified to the National Green Building Standard.

- **2014 NBC-LEO City Cultural Diversity Award**

In March 2014, the City of Phoenix was recognized by the National Black Caucus of Local Elected Officials *("NBC-LEO")* of the National League of Cities for its "Phoenix Against Domestic Violence - A Roadmap to Excellence" Program. The Roadmap to Excellence Program is a five-year strategic plan to end domestic violence in the City. More than 50 community partners, including private and nonprofit organizations, collaborated to create a plan that includes a community and media campaign focusing on five strategies: community awareness, coordinated service delivery, systems reform, "Phoenix as a Model," and community partnerships.

- **2013 Sunny Award**

Awarded to the City of Phoenix by Sunshine Review, a national nonprofit organization dedicated to government transparency. The award honors the most transparent government websites in the nation. This is the fourth time the City has won the award.

- **2013 NGWA Outstanding Groundwater Protection Award**

The National Ground Water Association *("NGWA")* annually awards the Groundwater Protection Award to the organization that exhibits outstanding science, engineering, or innovation in the area of protecting groundwater. The City of Phoenix Water Services Department received the award for incorporating innovative technologies in the aquifer restoration program. Phoenix was the first city in the country to use the technology, which has reduced annual operations and maintenance costs by over $110,000.

- **2013 Technology "Best of the Web" Award**

The City of Phoenix Information Technology Services Department received a (*"Best of the Web"*) award from the Multi-State Information Sharing and Analysis Center for the City's Information Security and Privacy website.

- **2013 National Institute of Senior Centers (*"NISC"*)**

A Program of Excellence Award was received by the City of Phoenix Human Services Department for its FitPHX Senior Champions Passport Program in the Nutrition, Fitness and Health Promotion category. The program is offered at the City's fifteen senior centers.

- **2012 NBC-LEO City Cultural Diversity Award**

In March 2012, the City of Phoenix was recognized by the National Black Caucus of Local Elected Officials *("NBC-LEO")* of the National League of Cities for the City Manager's Community Engagement and Outreach Task Force. The task force was established in 2010 as a community-based, long-term effort to enhance the relationship between the Phoenix Police Department and the community.

ECONOMY & DEMOGRAPHICS[1]

Overview

Arizona is the sixth largest state in terms of area, and the 14th largest in terms of population in 2022, with approximately 7.4 million residents. Over 5.0 million of these 7.4 million residents live within the Phoenix-Mesa-Scottsdale Metropolitan Statistical Area (the "*Phoenix MSA*"), equivalent to 68.2% of the total population.

In terms of land area, the Phoenix MSA is often described as a sprawling metropolitan area with a low-density population. The City of Phoenix, both the state capital and largest city in the Phoenix MSA, is generally flat and surrounded by scattered, low mountain ranges. The subtropical desert climate is conducive to a variety of outdoor recreation activities during all twelve months. Both the topography and climate attract many visitors and out-of-state tourists, further bolstering the economy.

At the beginning of the 20th century, the Arizona economy relied heavily on copper, cattle, cotton, climate, and citrus. Today, the local economy is far more diversified. It includes many significant value-added sectors such as aerospace and defense, financial services, and the semi-conductor industry.

In 2022, a total of 2,492,701 people in the civilian labor force in the Phoenix MSA were employed, equivalent to 96.62% of the total labor force. There was a 4.0% increase in total employment in the Phoenix MSA in 2022 compared to 2021. Phoenix MSA also accounted for 71.7% of the state's total employment in 2022.

Professional and business services was the largest source of nonfarm employment in the MSA (16.9%). Other major sources included education and health care (15.6%), retail and wholesale trade (14.6%), government (10.3%), leisure and hospitality (10.2%), and financial activities (9.4%).

In 2021 the Phoenix MSA was the 27th largest U.S. exporter by merchandise export value based on origin of movement zip code data. In total, the Phoenix MSA exported more than $14.1 billion in goods that year, with Mexico, China, and Canada the top export partners. The top export sectors by value of goods were computer and electronic products ($5.2 billion), transportation equipment ($2.8 billion), machinery ($0.9 billion), and chemicals ($0.8 billion).

Local economists forecast the Greater Phoenix population will increase by 1.7% year-on-year in 2023, and 1.6% in 2024. They also forecast a 3.3% increase in wage and salary employment in 2023, followed by a 2.5% increase in 2024. For personal income, the forecasts are 5.2% and 4.9% respectively.[2]

Key Phoenix MSA Statistics:

- 10^{th} most populous MSA in the nation in 2022 with a population of 5,015,678.
- Civilian labor force of almost 2.6 million in 2022.
- Unemployment rate of 3.4% in 2022.
- High compound annual growth rates in multiple industries including 5.1% in transportation, warehousing, and utilities, 4.9% in construction, 3.4% in financial activities, 3.2% in education and health services, and 3.2% in information, 2010 through 2022.
- Accounted for 75.3% of annual statewide Gross Domestic Product ("*GDP*") in 2021, and real GDP per capita of $52,911 (in 2012 chained dollars).

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(1) Economic information contained herein has been prepared for the City of Phoenix by the L. William Seidman Research Institute, W.P. Carey School of Business, Arizona State University, in August 2023.

(2) Greater Phoenix Blue Chip Economic Forecast, https://seidmaninstitute.com/wp-content/uploads/2023/07/GPBC-2023-Qtr-2.pdf

- 27th largest U.S. exporter by merchandise export value ($14.1 billion) in 2021.
- Mexico ($2.8 billion), China ($1.1 billion) and Canada ($1.1 billion) were the top foreign markets for exports goods in 2021.
- 60,994 new single family housing permits in 2022.
- Approximately 61.2% of housing permits in 2022 were for single residential units.
- A top 3 market for retail developments over the next two years.(1)
- Record year-end net absorption for industrial real estate in 2022 for the fourth consecutive year.

Key City of Phoenix Statistics:

- Population of 1,644,409 in 2022 – the fifth most populous city in the nation.
- Accounts for 22.3% of the state's population and 32.8% of the population of the Phoenix MSA in 2022.
- Census Bureau classifies 50.3% of Phoenix residents as male and 49.7% as female.
- Most residents identify as either White alone (41.4%) or Hispanic/Latino (42.7%).
- 806,532 residents ages 16 and older were employed in the civilian labor force in 2021.
- 83.6% of people ages 25 or older have at a minimum graduated from high school in 2021.
- 33.0% of people ages 25 or older have a Bachelor's degree, Graduate or Professional degree in 2021.
- 40.7% of working residents held jobs in management, business, science and the arts in 2021.
- An additional 37.9% of jobs held in service, sales and office occupations in 2021.
- Median household income of $64,927 (2017-2021) expressed in 2021 dollars.
- 93.4% of housing units occupied in 2021.
- On average, 2.76 people per unit in owner occupied hosing, and 2.52 people average household size in renter occupied housing.

Population

The Phoenix MSA encompasses 14,565 square miles, containing both Maricopa County (9,199 square miles) and Pinal County (5,365 square miles). The U.S. Census Bureau estimates that the Phoenix MSA had 5.0 million residents in 2022. Phoenix is the principal city of the Phoenix MSA, measuring 517.7 square miles. It accounts for 32.8% of the Phoenix MSA population in 2022. Other cities within Phoenix MSA with populations of at least 150,000 are Mesa, Chandler, Gilbert, Glendale, Scottsdale, Peoria, and Tempe.

In recent years, the Phoenix MSA has also been home to the majority of the Arizona population. Furthermore, population growth for the Phoenix MSA outpaces population growth for the state as a whole. In 1990, the Phoenix MSA accounted for 61.1% of the State of Arizona's total population. In 2000, it accounted for 63.4% of the State of Arizona's total population. In 2010, the Phoenix MSA accounted for 65.4% of the State of Arizona's total population. In 2022, it accounted for 68.2% of the State of Arizona's total population. The Tucson MSA (Pima County) was home to 14.4% of the state's residents in 2022. Prescott MSA was home to 3.3% of the state's population, Lake Havasu MSA 3.0%, Yuma MSA 2.8%, Flagstaff MSA 2.0%, and Sierra Vista MSA 1.7%.

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(1) CBRE Phoenix Retail Market Report, Phoenix Office, Q4 2022

The following table compares the population of the Phoenix MSA with 21 peer MSAs. The peer MSAs consist of every western MSA of more than one million people, plus other Sun Belt MSAs of more than 2 million people. The population numbers for 2010 and 2020 are based on actual counts from the 2010 and 2020 decennial censuses respectively. The estimates for 2011-2019 are based on the 2010 decennial census. The estimate for 2021 is based on the 2020 decennial census. Once decennial census results are available, the estimates for the preceding decade are revised. This has not happened yet since the Census Bureau still has not produced detailed results from the 2020 census. As a result, any attempt to calculate percentage changes in population growth are estimates. The Phoenix MSA ranked 6th in total population in 2022 among the 22 MSAs listed in the table. Nationwide, it is ranked 10th in total population among all 384 MSAs.

It is important to note that in 1994, the U.S. Office of Management and Budget ("*OMB*") redefined the Phoenix MSA to include both Maricopa and Pinal counties. The rate of population growth in the Phoenix MSA has continued to outpace the rate of population growth in the State of Arizona. There have been no further geographic changes to the Phoenix MSA although the name has been subject to change, as different growth rates across cities have changed the rank of the cities within an MSA by population size.

Population
Metropolitan Statistical Areas (1)
(in thousands)

	As of July 1					
	2012	**2014**	**2016**	**2018**	**2020**	**2022**
Phoenix-Mesa-Scottsdale, AZ	4,293.10	4,417.50	4,564.20	4,700.10	4,869.70	5,015.70
Atlanta-Sandy Springs-Roswell, GA	5,448.50	5,600.80	5,800.30	5,962.70	6,103.30	6,222.10
Austin-Round Rock, TX	1,835.60	1,944.40	2,064.90	2,169.70	2,300.00	2,421.10
Charlotte-Concord-Gastonia, NC-SC	2,316.90	2,396.70	2,493.70	2,584.60	2,668.90	2,756.10
Dallas-Fort Worth-Arlington, TX	6,638.30	6,877.40	7,176.60	7,432.10	7,665.90	7,943.70
Denver-Aurora-Lakewood, CO	2,646.40	2,746.40	2,845.10	2,915.90	2,969.90	2,985.90
Houston-The Woodlands-Sugar Land, TX	6,180.50	6,493.80	6,797.30	6,962.20	7,140.70	7,340.10
Las Vegas-Henderson-Paradise, NV	1,981.40	2,038.00	2,116.00	2,195.70	2,274.70	2,323.00
Los Angeles-Long Beach-Anaheim, CA	13,023.00	13,184.70	13,295.90	13,285.80	13,177.80	12,872.30
Miami-Fort Lauderdale-West Palm Beach, FL	5,737.10	5,876.80	6,028.60	6,105.00	6,132.90	6,139.30
Orlando-Kissimmee-Sanford, FL	2,233.10	2,339.20	2,479.40	2,606.90	2,680.30	2,764.20
Portland-Vancouver-Hillsboro, OR-WA	2,290.30	2,347.50	2,431.90	2,479.90	2,518.00	2,509.50
Riverside-San Bernardino-Ontario, CA	4,318.80	4,384.70	4,465.50	4,550.20	4,606.10	4,667.60
Sacramento-Roseville-Arden-Arcade, CA	2,195.10	2,244.90	2,306.10	2,362.20	2,399.90	2,416.70
Salt Lake City, UT	1,128.00	1,159.60	1,197.10	1,234.70	1,260.30	1,266.20
San Antonio-New Braunfels, TX	2,232.60	2,320.20	2,412.50	2,493.80	2,568.40	2,655.30
San Diego-Carlsbad, CA	3,167.60	3,234.70	3,283.60	3,303.50	3,296.00	3,276.20
San Francisco-Oakland-Hayward, CA	4,464.50	4,601.90	4,713.10	4,759.10	4,740.60	4,579.60
San Jose-Sunnyvale-Santa Clara, CA	1,899.20	1,958.70	2,001.80	2,012.50	1,995.50	1,938.50
Seattle-Tacoma-Bellevue, WA	3,561.20	3,679.50	3,824.00	3,943.40	4,027.50	4,034.20
Tampa-St. Petersburg-Clearwater, FL	2,832.70	2,906.10	3,017.20	3,111.80	3,187.40	3,290.70
Tucson, AZ	989.80	997.90	1,007.30	1,024.70	1,045.20	1,057.60

Source: U.S. Census Bureau

(1) Estimates for 2020 and 2022 are tied to the 2020 census. Estimates for 2010 through 2019 are tied to the 2010 census and therefore are not comparable.

Based on July 1, 2022 estimates, the U.S. Census Bureau ranks the City of Phoenix as the 5th most populous city in the United States at 1,644,409 residents. This is an increase in population of 1.2% (or 19,840 people) compared to the 2021 estimate. City of Phoenix has held the same ranking since 2016. City of Phoenix estimates for 2021-22 are tied to the 2020 decennial census. In 2022, the City of Phoenix accounted for 32.8% of the population of the Phoenix MSA, and 22.3% of the total population of the State of Arizona.

Ten Most Populous U.S. Cities, July 1, 2022

Rank	City	State	Population
1	New York	New York	8,335,897
2	Los Angeles	California	3,822,238
3	Chicago	Illinois	2,665,039
4	Houston	Texas	2,302,878
5	Phoenix	Arizona	1,644,409
6	Philadelphia	Pennsylvania	1,567,258
7	San Antonio	Texas	1,472,909
8	San Diego	California	1,381,162
9	Dallas	Texas	1,299,544
10	Austin	Texas	974,447

Source: U.S. Census Bureau

City of Phoenix Population
As a Percent of The Phoenix MSA and The State (1)

Year	City of Phoenix	Maricopa and Pinal Population (Combined)	Percentage of State of Arizona Population
2022	1,644,409	32.8%	22.3%
2021	1,624,569	32.8	22.4
2020 (2)	1,608,139	33.2	22.5
2019	1,680,992	34.0	23.1
2018	1,654,675	34.1	23.1
2017	1,633,560	34.3	23.2
2016	1,612,199	34.5	23.2
2015	1,583,690	34.6	23.2
2014	1,555,445	34.7	23.1
2013	1,526,491	34.7	23.0

(1) The 2013-2019 estimates are based on the 2010 Census and reflect changes to the April 1, 2010 population due to the Count Question Resolution program and geographic program revisions.
(2) The 2020 estimate is based on the 2020 decennial census and is not directly comparable with 2010-2019 estimates.

Source: U.S. Census Bureau

Employment

Rapid population growth post World War II has helped to diversify the Arizona economy from extraction-based operations such as copper, cattle, cotton, climate, and citrus to higher value-added sectors such as advanced manufacturing, aerospace and defense, bioscience, and financial services.

Between 1990 and 2008, Arizona's civilian labor force saw growth of more than 80%. On average, approximately 95.7% of Arizona's civilian labor force was employed each year between 1990 and 2008. Civilian labor force employment in the Phoenix MSA increased from 2011 through 2022. In 2022, a total of 2,492,701 people in the civilian labor force in the Phoenix MSA were employed, equivalent to 96.62% of the total labor force. There was a 4.0% increase in total employment in the Phoenix MSA in 2022 compared to 2021. Phoenix MSA also accounted for 71.7% of the state's total employment in 2022.

Civilian Labor Force Employment:
Phoenix MSA, State of Arizona, and The U.S.
(Not seasonally adjusted)

Year	Phoenix MSA Employment (1)	State of Arizona Employment (2) (3)	U.S. Employment
2022	2,492,701	3,477,033	158,291,000
2021	2,397,273	3,352,198	152,581,000
2020	2,275,303	3,199,851	147,795,000
2019	2,311,539	3,265,708	157,538,000
2018	2,231,366	3,166,013	155,761,000
2017	2,158,514	3,079,700	153,337,000
2016	2,146,700	3,075,851	151,436,000
2015	2,076,931	2,990,545	148,834,000
2014	2,002,699	2,906,193	146,305,000
2013	1,939,092	2,825,341	143,929,000

(1) MSA data for 2022 is a preliminary estimate.
(2) The 2013-2017 data reflects revised population controls and model re-estimation.
(3) The 2017-2021 data was revised in March 2022.

Source: U.S. Bureau of Labor Statistics

The following table compares the labor force of the Phoenix MSA with 21 peer MSAs. The peer MSAs consist of every western metro of more than one million people, plus other Sun Belt MSAs of more than 2 million people. Five of the peer MSAs had a total labor force higher than the Phoenix MSA in 2021. These are Los Angeles-Long Beach-Anaheim (CA); Dallas-Fort Worth-Arlington (TX); Houston-The Woodlands-Sugar Land (TX); Atlanta-Sandy Springs-Roswell (GA); and Miami-Fort Lauderdale-W. Palm Beach (FL). In 2022, the Phoenix MSA ranked 6th in terms of total labor force among the 22 MSAs examined.

Comparison of the Phoenix MSA'S Total Labor Force Status with 21 Peer MSAs (Not seasonally adjusted) Total Labor Force (Thousands)

MSA	2012	2014	2016	2018	2020	2022
Phoenix-Mesa Scottsdale, AZ	2,061.50	2,128.40	2,253.20	2,329.10	2,455.00	2,579.90
Atlanta-Sandy Springs-Roswell, GA	2,781.40	2,804.40	2,941.70	3,084.70	3,070.30	3,184.60
Austin-Round Rock, TX	985.30	1,046.10	1,119.10	1,191.30	1,243.40	1,395.00
Charlotte-Concord-Gastonia, NC-SC	1,182.60	1,205.40	1,274.40	1,313.00	1,329.20	1,426.00
Dallas-Fort Worth-Arlington, TX	3,411.90	3,530.20	3,703.10	3,859.20	3,977.70	4,255.20
Denver-Aurora-Lakewood, CO	1,444.00	1,486.80	1,541.90	1,625.10	1,651.10	1,725.70
Houston-The Woodlands-Sugar Land, TX	3,104.60	3,235.00	3,300.50	3,356.50	3,404.80	3,509.60
Las Vegas-Henderson-Paradise, NV	992.00	1,010.10	1,040.30	1,095.30	1,106.80	1,143.90
Los Angeles-Long Beach-Anaheim, CA	6,463.40	6,547.90	6,616.40	6,736.00	6,527.20	6,575.70
Miami-Fort Lauderdale-W. Palm Beach, FL	2,901.00	2,967.60	3,024.10	3,102.00	3,018.60	3,199.10
Orlando-Kissimmee-Sanford, FL	1,155.10	1,201.70	1,263.00	1,324.20	1,327.10	1,424.60
Portland-Vancouver-Hillsboro, OR-WA	1,203.50	1,206.00	1,270.50	1,303.10	1,328.00	1,367.90
Riverside-San Bernardino-Ontario, CA	1,875.80	1,912.80	1,981.90	2,045.20	2,095.80	2,160.60
Sacramento-Roseville-Arden-Arcade, CA	1,045.70	1,042.60	1,068.50	1,088.50	1,095.60	1,124.50
Salt Lake City, UT	573.90	599.50	630.20	658.70	682.50	716.40
San Antonio-New Braunfels, TX	1,050.70	1,087.40	1,143.00	1,179.30	1,190.50	1,251.50
San Diego-Carlsbad, CA	1,536.90	1,537.50	1,563.20	1,579.80	1,547.30	1,589.60
San Francisco-Oakland-Hayward, CA	2,386.40	2,436.40	2,521.80	2,559.30	2,497.50	2,534.70
San Jose-Sunnyvale-Santa Clara, CA	984.60	1,016.70	1,058.40	1,073.70	1,058.20	1,073.30
Seattle-Tacoma-Bellevue, WA	1,899.90	1,947.40	2,033.40	2,121.00	2,180.80	2,223.30
Tampa-St. Petersburg-Clearwater, FL	1,401.30	1,431.50	1,480.70	1,515.90	1,545.30	1,649.80
Tucson, AZ	466.80	465.90	471.50	470.40	481.30	489.80

Source: U.S. Bureau of Labor Statistics

The table below compares wage and salary employment in the Phoenix MSA, the State of Arizona, and the nation. In 2022, the top source of total nonfarm employment, expressed as a percentage of total employment in the Phoenix MSA, was professional and business services (16.9%). Professional and business services include professional, scientific and technical services, the management of companies and enterprises, administrative, and waste management services. Other notable sources of employment were education and health services (15.6%), retail and wholesale trade (14.6%), government (10.3%), leisure and hospitality (10.2%), and financial activities (9.4%). The industries listed in the following table are referred to as "supersectors" by the U.S. Bureau of Labor Statistics.

2022 Wage & Salary Employment:
Phoenix MSA, Arizona, and U.S.

	Total Employed (in thousands)			Percent of Employed		
Industry	Phoenix MSA	State of Arizona	U.S.	Phoenix MSA	State of Arizona	U.S.
Mining & Logging	3.0	12.8	605.0	0.1%	0.4%	0.4%
Construction	151.9	193.5	7,748.0	6.5	6.3	5.1
Manufacturing	147.3	192.5	12,825.0	6.4	6.2	8.4
Total Goods Producing	302.2	398.8	21,178.0	13.0	12.9	13.9
Retail & Wholesale Trade	337.8	453.5	21,437.9	14.6	14.6	14.0
Transportation, Warehousing, Utilities	115.9	149.2	7,205.0	5.0	4.8	4.7
Information	43.1	51.3	3,074.0	1.9	1.7	2.0
Financial Activities	218.2	249.4	9,045.0	9.4	8.1	5.9
Professional & Business Services	392.4	469.0	22,572.0	16.9	15.2	14.8
Education & Health Services	362.9	482.5	24,350.0	15.6	15.6	16.0
Leisure and Hospitality	235.5	334.4	15,835.0	10.2	10.8	10.4
Other Services	72.4	96.9	5,708.0	3.1	3.1	3.7
Government	238.7	410.5	22,171.0	10.3	13.2	14.6
Total Services Providing	2,016.9	2,696.7	131,397.9	87.0	87.1	86.1
Total Non-farm	2,319.1	3,095.5	152,575.9	100.0%	100.0%	100.0%

Source: U.S. Bureau of Labor Statistics

Comparing industries, the Phoenix MSA's employment within goods-producing sectors (i.e., mining, manufacturing, and construction) were 0.1% higher as a share of total employment than the State of Arizona, but 0.9% lower than the nation in 2022. Approximately 87.0% of the employment within the Phoenix MSA in 2022 was in service providing industries. Government accounted for 238,700 of the 2,017,000 services employment in the Phoenix MSA.

The following table presents the number of annual employees by industry in the Phoenix MSA, 2012 through 2022. Also included is a table comparing the Phoenix MSA compound annual growth rate by industry to the State of Arizona and the U.S. The highest compound annual growth rates in the Phoenix MSA occurred in construction (5.8%), transportation, warehousing, and utilities (5.6%), and financial activities (3.8%). There were also compound annual growth rates of 3.0% or more in education and health services (3.5%), information (3.5%), and professional and business services (3.2%).

Non-Farm Wage and Salary Employment
Phoenix MSA
(Annual employees in thousands)

	2012	2014	2016	2018	2020	2022
Mining & Logging	3.5	3.4	3.2	3.5	2.9	3.0
Construction	88.0	95.4	105.3	123.0	135.6	151.9
Manufacturing	117.5	119.6	121.6	128.8	134.3	147.3
Retail & Wholesale Trade	285.0	293.2	305.2	315.7	312.5	337.8
Transportation,Warehousing, Utilities	66.2	69.3	79.4	87.1	101.6	115.9
Information	32.2	36.1	37.2	39.0	37.9	43.1
Financial Activities	150.3	161.6	177.8	192.0	206.7	218.2
Professional & Business Services	284.7	308.2	336.8	358.5	359.0	392.4
Education & Health Services	257.6	271.0	296.6	324.3	336.2	362.9
Leisure and Hospitality	183.3	199.1	215.6	228.1	193.4	235.5
Other Services	62.3	63.5	65.6	69.1	62.7	72.4
Government	229.9	232.6	235.4	239.4	240.6	238.7
Total Non-Farm	1,760.5	1,853.0	1,979.7	2,108.5	2,123.4	2,319.1

Source: U.S. Bureau of Labor Statistics

Non-Farm Wage and Salary Employment
Phoenix MSA
(2010 to 2022 compound annual growth rate)

	Phoenix MSA	State of Arizona	U.S.
Mining & Logging	0.0%	1.2%	-1.2%
Construction	4.9	4.4	2.6
Manufacturing	2.2	2.0	0.8
Retail & Wholesale Trade	1.4	1.3	0.6
Transportation, Warehousing, Utilities	5.1	4.8	3.3
Information	3.2	2.4	1.0
Financial Activities	3.4	3.1	1.3
Professional & Business Services	2.9	2.5	8.9
Education & Health Services	3.2	2.6	1.5
Leisure and Hospitality	2.4	2.1	1.5
Other Services	1.0	0.7	0.5
Government	0.1	-0.1	-0.1
Total Non-Farm	2.5%	2.0%	1.2%

Source: U.S. Bureau of Labor Statistics

The compound annual growth for total nonfarm industries in the Phoenix MSA from 2011 to 2022 was higher than both the state's and the nation's compound annual growth for total nonfarm industries. In fact, compound annual growth in the Phoenix MSA was higher than the state's compound annual growth in all categories examined except mining and logging. Compound annual growth in the Phoenix MSA was also higher than the nation's compound annual growth in all categories except professional and business services. Between 2011 and 2022, the compound annual growth rate for employment in goods producing industries was 3.9% in the Phoenix MSA, a higher growth rate than the state's 3.5% and the nation's 1.5%. For service providing industries, the compound annual growth rate in the Phoenix MSA was 2.6%—a higher growth rate than the state's 2.1%, and the nation's 1.3%.

The table below shows that the Phoenix MSA's total nonfarm job growth in percent terms was higher than the growth rates for the State of Arizona and the nation from 2013 through 2019, and for 2021 through 2022. The table also shows that the Phoenix MSA's total nonfarm negative growth rate in percent terms in 2020 was lower than the equivalent losses for the State of Arizona and the nation.

Comparison of Total Annual
Job Growth Rates

Year	Phoenix MSA	State of Arizona	U.S.
2022	4.4%	4.2%	4.3%
2021	4.6	4.1	2.9
2020	-2.6	-3.0	-5.8
2019	3.4	3.0	1.3
2018	3.4	2.9	1.6
2017	3.0	2.5	1.6
2016	3.4	2.7	1.8
2015	3.4	2.6	2.1
2014	2.3	2.0	1.9
2013	2.9	2.3	1.6

Source: U.S. Bureau of Labor Statistics

Unemployment

The following table summarizes the proportion of the civilian labor force unemployed each year in the Phoenix MSA since 2013. The unemployment rate in the Phoenix MSA decreased steadily between 2013 and 2018 but increased slightly in 2019. In 2020, the Phoenix MSA unemployment rate increased significantly due to the global pandemic. In 2021, the unemployment rate in the Phoenix MSA decreased by 2.7 percentage points to 4.6%. In 2022, it decreased further to 3.4%.

Civilian Labor Force Unemployment:
Phoenix MSA, State of Arizona, and The U.S.
(Not seasonally adjusted)

Year	Phoenix MSA Unemployment Number (1)	Phoenix MSA Unemployment Rate (1)	State of Arizona Unemployment Rate	U.S. Unemployment Rate
2022	87,210	3.4%	3.8%	3.6%
2021	116,596	4.6	5.1	5.3
2020	179,658	7.3	7.8	8.1
2019	101,428	4.2	4.8	3.7
2018	97,706	4.2	4.8	3.9
2017	97,315	4.3	5.0	4.4
2016	106,455	4.7	5.5	4.9
2015	114,606	5.2	6.1	5.3
2014	125,660	5.9	6.8	6.2
2013	140,008	6.7	7.8	7.4

(1) Seidman estimate based on an average of 12 BLS monthly estimates, including December's preliminary figure.

Source: U.S. Bureau of Labor Statistics

The following table compares the unemployment rate in the Phoenix MSA with 21 peer MSAs. The peer MSAs consist of every western MSA of more than one million people, plus other Sun Belt MSAs of more than 2 million people. There are 9 MSAs with higher unemployment rates than Phoenix MSA in 2022 among the 22 examined.

Comparison of the Phoenix MSA'S Labor Force
And Unemployment Status with 21 peer MSAs
(Not seasonally adjusted)

	Unemployment Rate (percent of labor force)					
MSA	**2012**	**2014**	**2016**	**2018**	**2020**	**2022**
Phoenix-Mesa, Scottsdale, AZ	7.4%	5.9%	4.7%	4.2%	7.3%	3.4%
Atlanta-Sandy Springs-Roswell, GA	8.7	6.8	5.2	3.9	6.8	2.9
Austin-Round Rock, TX	5.7	4.3	3.3	3.0	6.2	2.9
Charlotte-Concord-Gastonia, NC-SC	9.4	6.0	4.8	3.7	7.1	3.4
Dallas-Fort Worth-Arlington, TX	6.5	5.1	3.9	3.6	7.1	3.5
Denver-Aurora-Lakewood, CO	7.8	4.8	3.0	2.9	7.0	3.0
Houston-The Woodlands-Sugar Land, TX	6.6	5.0	5.3	4.4	8.7	4.2
Las Vegas-Henderson-Paradise, NV	11.7	8.2	5.9	4.6	15.5	6.0
Los Angeles-Long Beach-Anaheim, CA	10.3	7.6	5.0	4.2	11.5	4.5
Miami-Fort Lauderdale-West Palm Beach, FL	8.2	6.4	5.0	3.6	8.6	2.8
Orlando-Kissimmee-Sanford, FL	8.7	6.2	4.5	3.4	10.7	2.9
Portland-Vancouver-Hillsboro, OR-WA	7.8	6.0	4.5	3.8	7.7	4.0
Riverside-San Bernardino-Ontario, CA	11.7	8.2	6.0	4.3	9.9	4.1
Sacramento-Roseville-Arden-Arcade, CA	10.5	7.2	5.3	3.8	8.9	3.7
Salt Lake City, UT	4.7	3.6	3.1	2.8	5.2	2.3
San Antonio-New Braunfels, TX	6.2	4.7	3.8	3.3	7.3	3.6
San Diego-Carlsbad, CA	9.3	6.5	4.7	3.4	9.4	3.4
San Francisco-Oakland-Hayward, CA	7.9	5.3	3.8	2.8	8.3	3.0
San Jose-Sunnyvale-Santa Clara, CA	8.2	5.3	3.9	2.7	7.2	2.7
Seattle-Tacoma-Bellevue, WA	7.0	5.1	4.3	3.7	8.3	3.4
Tampa-St. Petersburg-Clearwater, FL	8.5	6.2	4.6	3.6	7.6	2.8
Tucson, AZ	7.4	6.1	5.0	4.4	7.6	3.8

Source: U.S. Bureau of Labor Statistics

The following table estimates the top 50 major employers in the Phoenix MSA in 2021.

Phoenix MSA Top 50 Employers, 2021

Employer	Employees	Sector
Banner Health	29,502	Health
State of Arizona	27,703	Government
Walmart	22,089	Retail
Amazon	18,783	Retail
Fry's Food Stores	16,296	Retail
Wells Fargo	14,088	Finance & Insurance
Maricopa County	12,737	Government
Intel Corporation	11,811	Manufacturing
Arizona State University	11,358	Education
City of Phoenix	10,430	Government
Home Depot	9,204	Retail
Bank of America	8,839	Finance & Insurance
JPMorgan Chase Bank National Association	8,802	Finance & Insurance
Dignity Health	8,743	Health
Honor Health	8,670	Health
Mesa Unified School District 4	8,229	Education
American Express	7,786	Finance & Insurance
Honeywell	7,777	Manufacturing
Maricopa County Community College District	7,756	Education
State Farm Insurance	7,719	Finance & Insurance
United States Postal Service	7,536	Government
McDonalds	7,344	Accommodation & Food Services
United States Department of the Air Force	7,328	Government
Safeway	6,868	Retail
Mayo Clinic	6,125	Health
SRP	5,418	Utilities
CVS Pharmacy	5,411	Retail
Walgreens Co	5,308	Retail
Pinnacle West Capital Corporation	5,141	Utilities
U Haul	5,109	Management of Companies & Enterprises
Phoenix Children's Hospital	5,080	Health
Chandler Unified School District 80	5,034	Education
Target	4,942	Retail
Costco Wholesale	4,906	Retail
Unitedhealth Group	4,644	Health
United Parcel Service	4,585	Transportation & Warehousing
Paradise Valley Unified School District 69	4,183	Education
Peoria Unified School District 11	4,146	Education
Valleywise Health	4,086	Health
Abrazo Healthcare	4,067	Health
Kyrene School District 28	4,036	Education
USAA	3,963	Finance & Insurance
The Boeing Company	3,945	Aerospace & Defense
Grand Canyon University	3,932	Education
Deer Valley Unified School District 97	3,919	Education
Starbucks	3,710	Accommodation & Food Services
City of Mesa	3,600	Government
Circle K	3,587	Retail
Sprouts Farmers Market	3,563	Retail
Gilbert Unified School District 41	3,557	Education

Source: Maricopa Association of Governments, (2023). 2021 Employer Database

Gross Domestic Product

Gross Domestic Product, or GDP, is the monetary value of all finished goods and services produced in the U.S. on an annual basis. GDP includes all public and private sector purchases, government expenditures, investments, and the difference between exports and imports. This metric is often used by economists to describe the health of the U.S. economy. Between 2001 and 2008, the Phoenix MSA was a major contributor to the state's GDP, accounting for more than 75% of the value. In 2009 and 2010, the Phoenix MSA's annual contribution to state GDP fell to approximately 74%. Since 2011, the annual GDP of the Phoenix MSA (in current dollars) has increased steadily (apart from in 2017). In 2021, the GDP of the Phoenix MSA was 75.3% of the State of Arizona's GDP. This share was 0.3 percentage points greater than the percentage share in 2020.

Phoenix MSA's
Annual Contributions to GDP
In the State of Arizona (1)

	GDP (millions of current dollars)		Phoenix MSA Percent Contribution to State
Year	**Phoenix MSA**	**State of Arizona**	
2021	$316,091	$420,027	75.3%
2020	286,399	382,072	75.0
2019	278,657	327,394	85.1
2018	260,831	351,880	74.1
2017	244,310	332,002	73.6
2016	230,743	313,081	73.7
2015	219,957	299,393	73.5
2014	209,291	287,667	72.8
2013	201,281	278,952	72.2
2012	195,823	271,440	72.1
2011	185,789	260,916	71.2

Source: U.S. Bureau of Economic Analysis

Between 2001 and 2007, private industries were the top contributor to total GDP. Private Industries contributed on average 90.3% of the Phoenix MSA's total GDP, while the average annual government contribution was 9.7%. When the recession began in 2008, the GDP contribution of the Phoenix MSA's private industries fell, hitting 88.5% in 2010. The following table estimates the percent contribution (in current or nominal dollars) of different Phoenix MSA industry sectors to GDP in the State of Arizona. In 2021, private industries in total contributed 91.1% of GDP in the Phoenix MSA, 0.55% higher than in 2020. Finance, insurance, real estate, rental, and leasing accounted for 24.3% of the Phoenix MSA's total GDP in 2021. Professional and business services accounted for 13.1% of total GDP that same year. Education and health care accounted for 9.5% of total GDP in 2021—the third highest contribution in the Phoenix MSA.

(1) Data for 2022 is currently not available.

Phoenix MSA
GDP Contribution by Industry Sector

Industry Sector	GDP Contribution (in millions of dollars) 2011	2013	2015	2017	2019	2021
Private Industries-						
Agriculture, Forestry, Fishing, and Hunting	$713.0	$870.5	$783.1	$878.2	$827.7	$743.4
Mining, Quarrying, and Extraction	2,480.8	1,766.0	1,192.1	1,411.2	1,246.2	2,035.3
Utilities	3,436.1	3,561.4	3,879.6	4,234.0	4,682.0	5,793.0
Construction	6,993.0	8,054.9	9,113.3	11,782.6	15,236.6	17,619.4
Manufacturing	17,905.5	16,578.2	19,345.9	21,012.0	24,632.7	27,848.6
Wholesale Trade	13,304.0	14,417.2	14,949.6	16,142.5	17,367.5	20,474.9
Retail Trade	14,645.3	15,244.0	16,700.2	17,070.9	18,792.9	23,559.0
Transportation and Warehousing	5,619.9	5,984.0	7,131.9	7,884.1	9,686.3	9,809.3
Information	5,729.4	6,769.3	8,209.5	9,406.4	11,208.2	13,257.0
Finance, Insurance, Rental, Real Estate & Leasing	41,606.9	48,371.1	52,591.2	57,746.0	67,659.4	76,731.2
Professional & Business Services	22,921.0	25,233.5	28,057.7	31,719.1	35,897.0	41,278.0
Education & Health Care	18,215.9	19,283.5	21,075.6	24,175.4	27,486.1	30,170.9
Arts, Entertainment & Recreation, and Accommodation & Food Services	8,100.4	9,564.8	10,098.2	11,693.0	12,461.3	12,859.4
Other Services (Excluding Government)	3,628.2	3,945.0	4,422.0	4,781.8	5,358.0	5,736.5
Total Private Industries	$165,299.4	$179,643.4	$197,549.9	$219,937.2	$252,541.9	$287,915.9
Government	20,489.7	21,637.4	22,406.8	24,372.7	26,115.7	28,172.7
Total All Industries	$185,789.1	$201,280.8	$219,956.7	$244,309.9	$278,657.6	$316,088.6

Source: U.S. Bureau of Economic Analysis

The following table compares the Phoenix MSA's real GDP with 21 peer MSAs, expressed in chained 2012 dollars.[1] The table suggests that the Phoenix MSA's average annual real GDP from 2011 through 2021 was \$219.1 billion in chained 2012 dollars. In 2021, the Phoenix MSA ranked 9th among the 22 MSAs examined in this report, while the neighboring Tucson, AZ MSA ranked last in the group. However, the primary measure of economic performance internationally is per capita GDP. The second GDP table therefore compares the real GDP per capita contributions of the Phoenix MSA with the 21 peer MSAs.

The average annual real GDP per capita contribution in the Phoenix MSA in 2010 was \$43,939. For the most recent year available (2021), real GDP per capita in the Phoenix MSA was \$52,911, expressed in chained 2012 dollars. The Phoenix MSA ranks 16th among the 22 MSAs examined when considering real GDP per capita in 2021. The 2010 and 2020 per capita rates use the decennial census population figures for their respective years. A compound annual growth rate for real GDP per capita in the Phoenix MSA from 2011 through 2020 is not available as the Census Bureau has not updated the 2011-2019 population estimates.

Real GDP
Phoenix MSA and 21 Peer MSA's

	Real GDP (millions of chained 2012 dollars) (1)					
	2011	**2013**	**2015**	**2017**	**2019**	**2021**
Phoenix-Mesa-Scottsdale, AZ	\$189,684	\$197,408	\$207,171	\$222,961	\$242,939	\$261,707
Atlanta-Sandy Springs-Roswell, GA	287,933	299,097	327,440	356,812	385,448	399,130
Austin-Round Rock, TX	97,421	105,495	120,013	131,820	146,516	165,604
Charlotte-Concord-Gastonia, NC-SC	123,247	129,316	138,394	149,263	154,912	167,253
Dallas-Fort Worth-Arlington, TX	365,601	388,536	422,048	450,467	486,572	513,979
Denver-Aurora-Lakewood, CO	150,563	161,007	176,211	185,671	202,973	214,521
Houston-The Woodlands-Sugar Land, TX	392,977	424,880	455,910	455,494	465,337	463,233
Las Vegas-Henderson-Paradise, NV	91,092	91,080	97,006	102,088	112,654	111,289
Los Angeles-Long Beach-Anaheim, CA	759,139	784,821	835,964	880,169	930,863	950,158
Miami-Fort Lauderdale-West Palm Beach, FL	260,331	268,003	288,628	309,184	324,371	341,292
Orlando-Kissimmee-Sanford, FL	97,781	102,766	112,244	121,842	130,109	138,271
Portland-Vancouver-Hillsboro, OR-WA	117,932	120,207	130,843	142,294	153,194	159,208
Riverside-San Bernardino-Ontario, CA	131,676	135,932	145,728	153,123	163,952	171,399
Sacramento-Roseville-Arden-Arcade, CA	102,507	106,019	112,728	117,889	126,455	130,674
Salt Lake City, UT	67,537	70,185	74,487	80,877	89,433	96,833
San Antonio-New Braunfels, TX	90,113	96,611	107,313	109,386	117,689	122,836
San Diego-Carlsbad, CA	176,547	184,863	195,600	204,289	213,886	224,954
San Francisco-Oakland-Hayward, CA	337,525	377,150	422,319	482,611	534,564	577,348
San Jose-Sunnyvale-Santa Clara, CA	186,416	211,714	248,011	285,712	324,595	384,702
Seattle-Tacoma-Bellevue, WA	256,700	279,660	303,614	335,074	375,997	413,817
Tampa-St. Petersburg-Clearwater, FL	119,579	123,613	130,999	138,121	146,965	158,130
Tucson, AZ	35,862	36,231	36,113	38,683	40,384	41,618

Source: U.S. Bureau of Economic Analysis

(1) These are chained dollars, which is a method of adjusting real dollar amounts for inflation over time, to enable comparisons from different years. The U.S. Department of Commerce introduced the chained-dollar measure in 1996. The chained dollars in this table reflect dollar figures computed with 2012 as the base year.

Real GDP Per Capita
The Phoenix MSA and 21 Peer MSAs

	Real GDP per Capita (Chained 2012 dollars) (1)					
	2011	2013	2015	2017	2019	2021
Phoenix-Mesa-Scottsdale, AZ	$ 43,939	$ 45,614	$ 45,562	$ 46,892	$ 49,556	$ 52,911
Atlanta-Sandy Springs-Roswell, GA	53,135	53,653	55,771	59,203	62,088	64,962
Austin-Round Rock, TX	54,080	54,712	57,178	61,135	64,348	70,397
Charlotte-Concord-Gastonia, NC-SC	51,825	56,134	55,502	57,070	58,436	61,921
Dallas-Fort Worth-Arlington, TX	55,208	56,919	58,567	60,683	63,204	66,238
Denver-Aurora-Lakewood, CO	57,924	58,532	61,086	63,280	66,455	72,167
Houston-The Woodlands-Sugar Land, TX	64,509	65,848	66,273	66,184	67,558	64,277
Las Vegas-Henderson-Paradise, NV	46,091	45,367	45,518	47,019	49,074	48,545
Los Angeles-Long Beach-Anaheim, CA	58,423	59,173	60,977	64,020	68,399	73,104
Miami-Fort Lauderdale-West Palm Beach, FL	46,580	45,535	47,094	49,372	52,379	56,025
Orlando-Kissimmee-Sanford, FL	45,688	44,760	455,523	47,003	48,325	51,365
Portland-Vancouver-Hillsboro, OR-WA	50,950	52,268	52,784	56,215	60,444	63,389
Riverside-San Bernardino-Ontario, CA	30,508	30,497	31,920	33,344	34,858	36,836
Sacramento-Roseville-Arden-Arcade, CA	46,823	47,039	48,319	49,774	51,952	54,189
Salt Lake City, UT	59,087	61,320	62,079	65,142	69,761	76,665
San Antonio-New Braunfels, TX	40,119	41,465	43,771	45,176	45,965	47,212
San Diego-Carlsbad, CA	55,937	56,271	58,729	60,044	63,472	68,457
San Francisco-Oakland-Hayward, CA	77,284	81,532	86,816	94,854	107,606	124,789
San Jose-Sunnyvale-Santa Clara, CA	93,899	101,970	116,040	131,871	153,884	197,062
Seattle-Tacoma-Bellevue, WA	72,067	75,666	79,238	82,488	91,677	103,156
Tampa-St. Petersburg-Clearwater, FL	43,007	42,823	43,365	44,807	45,747	49,116
Tucson, AZ	36,721	37,113	36,427	36,952	38,659	39,559

Source: U.S. Bureau of Economic Analysis

(1) These are chained dollars, which is a method of adjusting real dollar amounts for inflation over time, to enable comparisons from different years. The chained dollars in this table reflect dollar figures computed with 2012 as the base year.

Regional price parities measure the differences in price levels across states and metropolitan areas for a given year and are expressed as a percentage of the overall national price level. They allow for comparisons of buying power across the 50 states and the District of Columbia, or from one MSA area to another, for a given year. If an additional adjustment is made for regional price parity, the Phoenix MSA ranks 14th among the MSAs examined at $64,437 for nominal GDP per capita in 2021. The table below shows nominal GDP per capita among the 22 MSAs examined, adjusted for regional price parity.

Adjusted Nominal GDP Per Capita:
The Phoenix MSA and 21 Peer MSAs

	2021	2021 Rank
Phoenix-Mesa-Scottsdale, AZ	$ 64,437	14
Atlanta-Sandy Springs-Roswell, GA	77,808	8
Austin-Round Rock, TX	82,336	5
Charlotte-Concord-Gastonia, NC-SC	79,666	6
Dallas-Fort Worth-Arlington, TX	74,249	11
Denver-Aurora-Lakewood, CO	78,095	7
Houston-The Woodlands-Sugar Land, TX	74,717	10
Las Vegas-Henderson-Paradise, NV	62,182	18
Los Angeles-Long Beach-Anaheim, CA	76,024	9
Miami-Fort Lauderdale-West Palm Beach, FL	62,297	16
Orlando-Kissimmee-Sanford, FL	62,257	17
Portland-Vancouver-Hillsboro, OR-WA	70,496	13
Riverside-San Bernardino-Ontario, CA	43,414	22
Sacramento-Roseville-Arden-Arcade, CA	62,635	15
Salt Lake City, UT	97,489	4
San Antonio-New Braunfels, TX	57,581	20
San Diego-Carlsbad, CA	70,820	12
San Francisco-Oakland-Hayward, CA	120,697	2
San Jose-Sunnyvale-Santa Clara, CA	188,309	1
Seattle-Tacoma-Bellevue, WA	104,432	3
Tampa-St. Petersburg-Clearwater, FL	59,854	19
Tucson, AZ	51,384	21

Source: U.S. Bureau of Economic Analysis

Income

Exclusively focused on money, per capita income is derived by dividing the total aggregate income by the total population. In the table below, per capita income in the Phoenix MSA was $38,713 (expressed in 2021 dollars). The Phoenix MSA ranked 13th out of the 22 peer MSAs on this measure. This is $2,418 more than per capita income in the State of Arizona in 2021 ($36,295). Data for 2022 is currently unavailable.

Income Peer Metropolitan Statistical Areas

	Per Capita Income (2021 dollars)
Phoenix-Mesa-Scottsdale, AZ	$38,713
Atlanta-Sandy Springs-Roswell, GA	39,904
Austin-Round Rock, TX	47,161
Charlotte-Concord-Gastonia, NC-SC	39,375
Dallas-Fort Worth-Arlington, TX	39,141
Denver-Aurora-Lakewood, CO	48,530
Houston-The Woodlands-Sugar Land, TX	36,472
Las Vegas-Henderson-Paradise, NV	33,387
Los Angeles-Long Beach-Anaheim, CA	40,569
Miami-Fort Lauderdale-West Palm Beach, FL	36,965
Orlando-Kissimmee-Sanford, FL	33,928
Portland-Vancouver-Hillsboro, OR-WA	44,343
Riverside-San Bernardino-Ontario, CA	31,532
Sacramento-Roseville-Arden-Arcade, CA	40,890
Salt Lake City, UT	37,405
San Antonio-New Braunfels, TX	33,179
San Diego-Carlsbad, CA	44,377
San Francisco-Oakland-Hayward, CA	63,934
San Jose-Sunnyvale-Santa Clara, CA	68,421
Seattle-Tacoma-Bellevue, WA	55,152
Tampa-St. Petersburg-Clearwater, FL	37,361
Tucson, AZ	34,323

Source: American Community Survey (One-Year Estimate)

The next table shows total personal income and per capita personal income in current dollars for the Phoenix MSA for 2012 through 2021. The Bureau of Economic Analysis defines personal income as "…the income received by, or on behalf of, all persons from all sources: from participation as laborers in production, from owning a home or unincorporated business, from the ownership of financial assets, and from government and business in the form of transfer receipts".[1]

(1) Bureau of Economic Analysis. Local Area Personal Income: 2017 news release, November 15, 2018. Available at: https://www.bea.gov/newsreleases/regional/lapi/lapi_newsrelease.htm

By including income from global, as well as domestic sources, personal income is a measurement far wider in scope than the American Community Survey's concept of per capita income shown in the previous table. Per capita personal income is derived by calculating the total personal income divided by total population. The 2021 per capita personal income estimate in the Phoenix MSA is $58,308.

Total Personal and Per Capita Personal Income
The Phoenix MSA

Year	Total Personal Income (in millions of dollars)	Per Capita Personal Income (in current dollars)
2021	$288,401	$58,308
2020	267,282	54,907
2019	242,642	50,757
2018	224,585	47,783
2017	210,756	45,523
2016	198,804	43,557
2015	190,026	42,335
2014	179,475	40,628
2013	169,064	38,871
2012	164,668	38,357

Source: U.S. Bureau of Economic Analysis

Exports

In 2021 the Phoenix MSA was the 27th largest U.S. exporter by merchandise export value based on origin of movement zip code data collected by the International Trade Administration. In total, the Phoenix MSA exported more than $14.1 billion in goods that year. This was a 27.9% increase over 2020, when exports had fallen sharply due to the global pandemic.

The top export sectors by value of goods were computer and electronic products ($5.2 billion), transportation equipment ($2.8 billion), machinery ($0.9 billion), and chemicals ($0.8 billion). Mexico was the top export partner, accounting for $2.9 billion of the Phoenix MSA's total goods exports in 2021. China was second, accounting for $1.1 billion of the Phoenix MSA's total goods exports, marginally ahead of Canada who also received $1.1 billion of the Phoenix MSA's total good exported. Ireland ranked fourth ($752 million) and Taiwan fifth ($574 million).

Phoenix MSA
Annual Exports

Year	Value (dollars)	Annual Growth Rate
2021	$14,165,085,400	27.9%
2020	11,073,932,794	-26.8
2019	15,136,633,149	11.2
2018	13,614,869,197	3.0
2017	13,223,063,245	3.0
2016	12,838,188,632	-7.1
2015	13,821,528,121	8.3
2014	12,764,439,477	11.3
2013	11,473,532,187	5.9
2012	10,834,262,990	-0.7

Source: International Trade Administration

Real Estate Market

The Phoenix real estate market has significantly improved since the 2008-2009 recession, when an over-abundance of single-family residential buildings followed by a high foreclosure rate and a decline in population growth up to 2011 significantly wounded the Phoenix MSA. At the height of the recession the region had over 60,000 properties that were in some stage of foreclosure. In December 2022, there were 2,209 distressed residential properties, 1,314 bank or government owned properties, and 895 pending foreclosures in Maricopa County.(1)

The number of new privately owned housing units authorized in 2022 was 47,267 - down 6.5% from the previous year. Approximately 56.8% of the authorized permits in 2022 were for single units in Phoenix MSA. In 2023 second quarter, the total number of authorized private housing units in the Phoenix MSA was 14,637, compared to the state's 25,796. The City of Phoenix accounts for 30.2% of the authorized permits to date in the Phoenix MSA in 2023. Permitting always occurs before housing starts. However, a stronger indicator of economic conditions is housing completions.

There was an increase of 8,789 housing units in the City of Phoenix in 2022, compared to 2021. There were also 13,995 housing starts in 2022 in the City. As of 2023 second quarter, there have been 6,056 housing starts in the City of Phoenix.

New Privately Owned Housing Units Authorized Phoenix MSA and Arizona

	1 Unit		2 Units		3 or 4 Units		5+ Units		Total	
Year	MSA	AZ	MSA	AZ	MSA	AZ	MSA	AZ	MSA	AZ
2023 (Q2)	11,046	15,411	892	1,098	128	243	2,571	9,044	14,637	25,796
2022	26,857	37,348	1,532	1,868	239	320	18,639	21,458	47,267	60,994
2021	34,347	46,561	1,066	1,322	284	336	14,884	17,105	50,581	65,324
2020	31,658	42,277	680	1,040	208	311	15,673	16,714	48,219	60,342
2019	25,026	33,981	664	876	174	202	10,009	11,521	35,873	46,580
2018	23,526	32,127	466	646	203	264	7,148	8,627	31,343	41,664
2017	20,471	28,072	302	432	212	273	8,327	10,695	29,312	39,472
2016	18,433	24,853	410	484	161	168	9,579	10,073	28,583	35,578
2015	16,621	22,311	168	222	186	225	5,427	6,152	22,402	28,910
2014	11,557	16,841	156	230	125	137	8,503	9,789	20,341	26,997
2013	12,959	18,386	128	214	201	213	5,449	6,396	18,737	25,209

Source: U.S. Census Bureau

Source: Maricopa Association of Governments

(1) https://azmag.gov/Programs/Maps-and-Data/Land-Use-and-Housing/Housing-Data-Explorer

Population and Housing Units (1)
City of Phoenix

Year	Population (2)	Change in Population	Housing	Change in Housing Units (3)
2022	1,657,035	26,840	648,383	8,789
2021	1,630,195	16,717	639,594	8,842
2020	1,608,139	-9,205	630,752	5,347
2019	1,617,344	19,606	625,407	6,355
2018	1,597,738	18,485	619,052	5,589
2017	1,579,253	19,233	613,463	4,060
2016	1,560,020	24,005	609,403	6,070
2015	1,536,015	29,576	603,333	2,744
2014	1,506,439	20,688	600,589	3,913
2013	1,485,751	19,528	596,676	2,486

(1) The population and housing unit figures reflect the change to the 2010 decennial census that resulted from the census count question resolution program, which added 463 housing units and 1,496 residents to the previously published figures. Estimates for years between the 2010 and 2020 censuses are not revised to match the 2020 results.

(2) Maricopa Association of Governments uses a different methodology and different data to estimate population.

(3) The change in the number of housing units is equal to the number of housing completions plus the number of units annexed less the number of units demolished.

Source: Maricopa Association of Governments.

Value of Building Permits
City of Phoenix
($ in thousands)

Year	Residential	Commercial	Industrial	Other	Total
2022	$ 802,660	$2,926,484	$1,974,967	$3,111,992	$8,816,103
2021	1,496,932	1,256,911	527,677	4,658,188	7,939,708
2020	1,379,302	1,481,012	234,211	3,169,478	6,264,003
2019	1,217,854	1,583,252	207,162	2,049,625	5,057,893
2018	1,125,341	1,158,984	334,010	1,818,854	4,437,189
2017	945,802	1,081,797	211,361	1,747,075	3,986,035
2016	862,071	1,062,657	225,377	1,588,603	3,738,708
2015	824,633	1,130,212	133,785	1,464,853	3,553,483
2014	635,000	1,040,100	206,052	1,270,957	3,152,109
2013	578,547	374,888	208,293	1,348,127	2,509,855

Source: Raw data provided by City of Phoenix Planning and Development Department.

New Housing Starts[1]

Year	City of Phoenix
2023 (Q2)	6,056
2022	13,995
2021	11,492
2020	11,647
2019	9,898
2018	7,262
2017	6,832
2016	6,972
2015	4,611
2014	5,138
2013	3,131

(1) Reflects housing permits authorized, by units, including single-family, multi-family and mobile homes.

Source: U.S. Census Bureau

According to CB Richard Ellis, the metro Phoenix retail market positively trended through 2022, with the vacancy rate declining for the seventh consecutive quarter at 4.9% at the end of fourth quarter 2022 – 180 basis points lower than 2021. Total retail space under construction rose to 2,158,147 square feet. At year end, the net rentable area was 150,383,641 square feet.

At the end of 2023 first quarter, there is a 4.3% retail real estate vacancy rate and 1,192,639 square feet year-to-date net absorption. The average direct-asking Triple Net Lease ("*NNN*") retail was $17.40 in 2023 first quarter – that is, $0.15 lower than the previous quarter, but still higher than pre-pandemic rates in 2019 first quarter. The West/Southwest Phoenix submarket was one of the best performers, recording nearly 200,000 square feet of leasing activity. [1]

Retail Real Estate Market
Phoenix MSA

Year	Vacancy Rate	Year to Date Net Absorption (Square feet)
2023 (Q1)	4.30%	1,192,639
2022	4.90	1,881,861
2021	6.70	997,019
2020	8.00	-13,286
2019	8.00	1,200,000
2018	8.40	1,181,675
2017	8.10	1,601,498
2016	8.90	1,321,833
2015	9.10	1,150,192
2014	9.60	1,487,313
2013	10.20	1,579,202

Source: CB Richard Ellis

(1) CBRE Phoenix Retail Market Report, Phoenix Office, Q1 2023

The metro Phoenix office market has experienced steady tenant demand in 2023 to date, despite the negative net absorption since the start of 2022. After nearly flat net absorption in the first quarter, there was 935,789 square foot of negative net absorption to close out 2023 second quarter. The average full-service gross asking lease rate at the end of second quarter was $30.94 per square feet. Year-over-year lease rates are up $1.94 per square foot across the Valley. The 3-year average growth rate for metro Phoenix was 3.6% at the end of 2023 second quarter.

CBRE suggest that there are currently 63 active tenants in the market for office space, suggesting that demand is still relatively stable. [(1)]

Office Real Estate Market
Phoenix MSA

Year	Vacancy Rate	Year to Date Net Absorption (Square feet)
2023 (Q1)	24.60%	996,271
2022	23.90	-3,973,725
2021	19.80	-1,148,892
2020	17.45	-1,051,047
2019	14.11	3,210,676
2018	15.20	2,473,034
2017	16.40	2,839,559
2016	17.40	3,219,853
2015	19.30	3,779,039
2014	21.10	1,969,716
2013	22.40	1,712,366

Source: CB Richard Ellis

Industrial/Commercial Real Estate Market
Phoenix MSA

Year	Vacancy Rate	Year to Date Net Absorption (Square feet)
2023	3.40%	5,532,186
2022	3.00	26,526,290
2021	3.70	21,363,840
2020	6.00	13,143,535
2019	6.30	10,677,269
2018	6.50	9,781,257
2017	6.84	9,898,893
2016	8.00	9,497,677
2015	10.10	7,046,663
2014	11.00	6,214,680
2013	11.40	8,783,982

Source: CB Richard Ellis

(1) CBRE Phoenix Office Market Report, Phoenix Office, Q2, 2023

2022 was an active year in the Phoenix industrial market. Year-end net absorption of 26,526,290 square feet was a new record high for the fourth consecutive year. The average direct asking lease rate increased by 25% throughout 2022 to finish the year at $1.02 per square foot.(1)

At the end of 2023 second quarter, net absorption hit 1.5 million square foot, while the average asking NNN lease rate stood at $1.11 per square foot – down 3 cents on the previous quarter but 9 cents more than the average for 2022.(2)

Outlook/Summary

The Greater Phoenix Blue Chip, managed by Seidman Research Institute, ASU, offers forecasts by a panel of experts who track construction and general economic trends for the Phoenix metro area. (3)

The panel consensus is for a 1.7% growth in population in 2023, accompanied by a 5.2% growth in personal income. Wage and salary employment is forecast to rise by 3.3%. Manufacturing employment is expected to increase by 4.0%, and construction employment by 3.5%. Retail sales are also predicted to rise 5.8%.

During 2024, the panel consensus forecast is a 1.6% growth in population, accompanied by a 4.9% growth in personal income. Wage and salary employment is forecast to rise by 2.5%. Manufacturing employment is expected to increase by 3.0%, and construction employment by 2.0%. Retail sales are also predicted to rise 5.0%.

The panel also expects the Greater Phoenix residential construction market to show signs of improvement. They forecast 19,300 new single unit permits in 2023, and 22,200 in 2024. However, multi-family permits are expected to be down significantly this year due to slower population flows and difficulty in obtaining reasonable financing for projects. This decline in apartment permits is projected to continue into 2024 based on current economic conditions.(4)

CBRE forecasts robust growth for retail real estate in the Phoenix MSA. This is due to low vacancy, high net absorption, and active construction. With plans afoot to convert old malls to mixed uses, they suggest that retail will strengthen and expand. This includes a forecast 3.7% annual increase in Phoenix MSA retail rents over the next two years, compared to a national average of 2.2%.

The outlook for industrial real estate is also promising, thanks in part to growing demand from distribution and e-commerce firms, the attractiveness of nationally low vacancy rates to landlords and developers, and a growing population feeding into the labor force. There are currently 213 active tenants in the market looking for a total of 45.5 million square foot of space.

CBRE suggest that interest in the Phoenix office market will remain strong, despite negative absorption rates, demonstrated by the increasing rents. The key will be to offer prospective tenants unique workplaces with rich amenities. Size requirements have reduced, but optimism remains high for the remainder of 2023.

The latest available population projections from the Arizona Office of Economic Opportunity ("*OEO*") suggest continued strong gains in 2023 and 2024, despite the uncertainty around the national business cycle. If the OEO projections are realized, population for the metro area will increase by 2.0% in 2023, the fastest rate of increase since the mid-2000s. Net migration to the metro area is estimated at 86,350 in 2023.

(1) CBRE Phoenix Industrial Market Report, Phoenix Office, Q4 2022
(2) CBRE Phoenix Industrial Market Report, Phoenix Office, Q2, 2023
(3) Greater Phoenix Blue Chip Economic Forecast, https://seidmaninstitute.com/wp-content/uploads/2023/07/GPBC-2023-Qtr-2.pdf
(4) Greater Phoenix Blue Chip Construction Forecast, https://seidmaninstitute.com/about-us/construction/

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APPENDIX D
State Expenditure Limitation

Since fiscal year 1982-83, the City has been subject to an annual expenditure limitation imposed by the Arizona Constitution. This limitation is based upon the City's actual 1979-80 expenditures adjusted annually for subsequent growth in population and inflation. The 2023-24 expenditure limit supplied by the Economic Estimates Commission was $1,883,740,785. The City increased this limit to $11,623,359,000 to adjust for additional voter-approved modifications, as described below.

The Constitution exempts certain expenditures from the limitation. The principal exemptions for the City of Phoenix are payments for debt service and other long-term obligations, as well as expenditures of federal funds and certain state-shared revenues. Exemptions associated with revenues not expended in the year of receipt may be carried forward and used in later years. The 1979-80 expenditure base may also be adjusted for the transfer of functions between governmental jurisdictions.

The Constitution provides four processes, all requiring voter approval, to modify the expenditure limitation:

1. A four-year home rule option.
2. A permanent adjustment to the 1979-80 base.
3. A one-time override for the following fiscal year.
4. An accumulation for pay-as-you-go capital expenditures.

Phoenix voters have approved four-year home rule options on a regular basis since the implementation of the expenditure limitation. The home rule option which was approved in 2015 allows the City Council, after hearings are held for each council district, to establish the annual budget as the limit. This four-year home rule option was in effect through 2019-20. In 2018, voters approved a proposition that moved regular City candidate elections from the fall of odd-numbered years to November of even-numbered years. State legislation allows the four-year home rule option to be extended in conjunction with the change of election dates. An additional home rule option was approved on November 3, 2020 that sets the City's annual budget after public meetings and hearings. The limit will be in effect for four fiscal years from 2021-22 through 2024-25 and will allow Phoenix residents to continue to control local expenditures.

On November 3, 1981, Phoenix voters approved four propositions that allow the City to accumulate and expend local revenues for "pay-as-you-go" capital improvements without being subject to the State spending limit. These capital improvement exclusions include annual amounts of up to $5,000,000 for Aviation, $6,000,000 for Sanitary Sewers, $2,000,000 for Streets and $6,000,000 for Water. These exclusions were approved on a permanent basis and do not require voter reapproval except to raise or lower the annual amounts.

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APPENDIX E

Retirement and Pension Plans

Substantially all full-time employees and elected officials of the City are covered by one of three contributory pension plans: the City of Phoenix Employees' Retirement System, the State of Arizona Public Safety Personnel Retirement System or the Elected Officials' Retirement Plan.

City of Phoenix Employees' Retirement System

The City of Phoenix Employees' Retirement System ("*COPERS*") is a single-employer defined benefit pension plan established by the Phoenix City Charter. COPERS covers all eligible full-time employees of the City, with the exception of elected officials and sworn City police and fire personnel. COPERS provides retirement, disability retirement and survivor benefits to its members. The plan can be amended or repealed by a vote of the people.

The general administration, management and operation of COPERS is vested in a nine-member Retirement Board consisting of three elected employee members, four statutory members, a citizen member and a retiree member. The Retirement Board appoints the Retirement Program Administrator and contracts investment counsel and other services necessary to properly administer the plan. Additional information regarding the City's financial statements, including reporting of the City's net position and the net pension liability, is available in the City's Annual Comprehensive Financial Report ("*ACFR*"). The ACFR is available at http://emma.msrb.org or www.phoenix.gov under Departments-Finance-Financial Information & Reports or by calling the City at (602) 262-7166. The most recent report of the Actuary and the plan's annual financial reports are available online at https://phoenix.gov/copers/pension-plan-reports.

Employees participate in the plan upon beginning employment with the City. COPERS' membership data is as follows:

	June 30	
	2022	**2021**
Active Members		
Tier 1	4,110	4,522
Tier 2	541	587
Tier 3	3,287	2,860
Total	7,938	7,969
Deferred Vested Members	1,109	1,053
In Pay Members		
Service Retirees	6,363	6,183
Beneficiaries	1,195	1,171
Disabled Retirees	222	233
Total	7,780	7,587
Total Members	16,827	16,609

The City contributes an actuarially determined percentage of payroll to COPERS, as required by City Charter, to fully fund benefits for active members and to amortize any unfunded actuarial liability as a level percent of projected member payroll over a closed 16-year period. For the fiscal year ended June 30, 2022, the total contribution rate was 37.6% of compensation. Tier 1 employees contributed 5% of their compensation, Tier 2 and Tier 3 employees contributed 11.0% and the City contributed the remainder, which amounted to $178.3 million for the fiscal year.

The City's actuarially determined contribution, actual contribution and covered payroll for the last three fiscal years follows:

Schedule of Employer Contributions
(in thousands)

Fiscal Year Ended June 30,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Percentage Contributed	Covered Payroll	Actual Contribution as a percentage of Covered Payroll
2022	$167,843	$178,319	($10,476)	107%	$595,304	29.95%
2021	178,090	357,382	(179,292)	200	580,451	61.57
2020	175,947	175,947	—	100	568,089	30.97

The actuarially determined recommended pension contribution rate is 26.66% for fiscal year 2022-23 and 27.49% for fiscal year 2023-24.

The following schedule shows the funding progress of the plan for the last three fiscal years. The total pension liability increased $127,685,000 from 2020 to 2021 and $181,492,000 from 2021 to 2022.

Schedule of Changes in Net Pension Liability and Related Ratios
(in thousands)

	Fiscal Year End 2022	Fiscal Year End 2021	Fiscal Year End 2020
Total Pension Liability			
Service cost	$ 79,869	$ 78,643	$ 81,119
Interest on the total pension liability	311,636	303,102	313,397
Differences between expected and actual experience of the total pension liability	52,647	(4,347)	(77,698)
Changes of assumptions	—	—	(62,386)
Benefit payments, including refunds of employee contributions	(262,660)	(249,713)	(242,143)
Net change in total pension liability	181,492	127,685	12,289
Total pension liability—beginning	4,541,799	4,414,114	4,401,825
Total pension liability—ending	$4,723,291	$4,541,799	$4,414,114
Plan Fiduciary Net Position			
Employer contributions	$ 178,319	$ 357,382	$ 175,947
Employee contributions	53,350	40,561	39,356
Pension plan net investment income (loss)	(161,785)	610,554	50,389
Benefit payments, including refunds of employee contributions	(262,660)	(249,713)	(242,143)
Pension plan administrative expense	(2,564)	(1,930)	(2,509)
Net change in plan fiduciary net position	(195,340)	756,854	21,040
Plan fiduciary net position—beginning	3,438,027	2,681,173	2,660,133
Plan fiduciary net position—ending	$3,242,687	$3,438,027	$2,681,173
Net pension liability	$1,480,604	$1,103,772	$1,732,941
Plan fiduciary net position as a percentage of the total pension liability	68.65%	75.70%	60.74%
Covered payroll	$ 595,304	$ 580,451	$ 568,089
Net pension liability as a percentage of covered payroll	248.71%	190.16%	305.05%

Actuarial assumptions used to determine the total pension liability in the June 30, 2022 valuation were based on the results of the actuarial experience study covering the period from July 1, 2014 through June 30, 2020. Those assumption, applied to all periods included in the measurement, are as follows:

Investment Rate of Return	7.00%
Inflation	2.30%
Salary Increase Rate	2.80% plus merit component based on service ranging from 4.20% at 1 year of service to 0.0% for members with 15 or more years of service.
Cost of Living Adjustment	0.50% through 2024, 1.00% from 2025-2029 and then 1.25% thereafter.
Administrative Expenses	Assumed to be equal to the prior year's amount, increased by 2.50%.

Based on the assumption that employee and City contributions to COPERS will continue to follow the established contribution policy and the sufficiency of the Fiduciary Net Position, the long-term expected rate of return on the plan's investments, 7.00%, was applied as the single rate to all periods of projected benefit payments to determine the total pension liability.

City of Phoenix Pension Reform

In January 2011, the Mayor and City Council appointed members of a Pension Reform Task Force (the "*Task Force*") to work with management, outside consultants and other stakeholders to review and possibly recommend changes to COPERS. On September 25, 2012, after several revisions, the Task Force presented a final report to the Mayor and City Council, including recommended amendments to the City Charter. At the September 25, 2012 meeting, the Mayor and City Council directed staff to draft proposed revisions to City Charter language for referral to the March 2013 ballot based on the Task Force's recommendations.

At a special election held on March 12, 2013, voters approved changes to COPERS. The changes affected new employees hired on and after July 1, 2013 and are expected to save the City approximately $829 million over 25 years. The changes exclude public safety employees and elected officials, each covered under separate pension plans. The following is a summary of the voter-approved changes:

- The retirement eligibility age will increase an average of approximately 3.5 years
- The employer and employee contribution rates will be based on a 50/50 split of the actuarially determined rate necessary to fully fund the annual required contribution ("*ARC*")
- The benefit formula components will be changed to a graduated multiplier based on years of service, matching the State of Arizona retirement plan
- Prior to these changes, the City Charter required full funding of the ARC, but prohibited the City from contributing an amount greater than the ARC. The voter-approved changes allow the City to contribute an amount greater than the ARC
- The Investment Policy for COPERS will be updated to allow for investments that meet the Prudent Investor Rule

On July 1, 2013 as a result of the voter approved changes, a two-tier system was created for COPERS. A Tier 1 employee is any employee hired by the City before July 1, 2013, or any employee hired by the City on or after July 1, 2013 who participated in the Arizona State Retirement System prior to July 1, 2011. A Tier 2 employee is any employee hired by the City on or after July 1, 2013 who is not a Tier 1 employee. Effective July 1, 2013, Tier 1 employees continued to contribute 5.0% of their compensation to the plan, and Tier 2 employees contributed one-half of the total required actuarial percentage. The contribution rate for the City is the total projected percentage less the member contribution rates for each tier.

In November 2014, the Mayor created the Civilian Retirement Security Ad Hoc Committee (the "*Committee*") to address further pension reform. The Committee, which included members of the City Council along with community and business leaders, met over three months to consider several options for reform. In February 2015, the Committee unanimously recommended a stacked hybrid plan ("*Prop 103*") that was expected to save the City over $38 million over 20 years starting January 1, 2016. The most significant changes under this plan are for employees hired after January 1, 2016 to be classified as Tier 3 employees. Tier 3 employees would be subject to the following benefit changes:

- Final Average Salary calculation changed to a five-year average
- Pension multiplier reduced to 1.85% of salary per year of service through the first 10 years of employment, gradually increasing to 2.0% at 20 years of service
- Elimination of the sick leave service credit
- Eliminates the ability for employees previously employed by the state or other cities in Arizona to join the City of Phoenix as Tier 1 employees
- Makes compensation above $125,000 per year non-pensionable; the cap would increase each year to match inflation

Prop 103 continues the 50/50 split in the contribution rate for new hires, but created a ceiling in the employee rate of 11.0% of their compensation. The ceiling applies to both Tier 2 and Tier 3 employees to help improve the recruitment and retention of employees. The City Council approved the plan on March 4, 2015, and on August 25, 2015 voters also approved Prop 103, which became effective on January 1, 2016.

Accrued Vacation or Sick-Leave on City of Phoenix's Pension Benefits

The benefit amount under COPERS depends, in part, on a retiring employee's highest average annual compensation paid over a multi-year period. As part of pension reform, the City restricted "pension spiking" by no longer allowing unused sick leave accrued after July 1, 2012, and unused vacation leave accrued after June 30, 2014, to be included when calculating a member's "final average compensation." This practice was upheld by the Arizona Supreme Court on July 10, 2020, in Piccioli v. City of Phoenix, CV-19-0116 and AFSCME v. Phoenix CV-19-0143.

On July 10, 2020 the Arizona Supreme Court issued rulings on "pension spiking" in Piccioli v. City of Phoenix, CV-19-0116 and AFSCME v. Phoenix CV-19-0143, where the former addressed the implication of sick leave and the latter vacation leave. The City of Phoenix pays pension benefits to eligible employees upon retirement. The amount of that benefit depends, in part, on a retiring employee's highest average annual compensation paid over a multi-year period. The primary issue in the cases was whether a one-time payout for accrued sick or vacation leave upon retirement was "compensation" under the COPERS' Plan that must be included when calculating a member's "final average compensation," which is used in determining the pension benefit amount. The Court held that the City did not need to include the one-time payments for unused sick or vacation leave at retirement as part of final average compensation. Thus, the City did not violate the Arizona Constitution by prospectively eliminating the payouts made at the time of retirement for sick leave accrued after July 1, 2012, and vacation leave accrued after June 30, 2014, from the calculation of final average compensation.

In 2012, when Piccioli v. City of Phoenix, CV2012-010330 was filed, the Board of Trustees of COPERS took action, upon advice from their consulting actuary, to not recognize any savings from the leave changes until after the court cases were adjudicated. At that time, the savings of the changes were estimated to equal about 9% of the total fund value. This 9% load has been built in to valuations since 2012. Following the opinions from the Arizona Supreme Court in July 2020, COPERS' consulting actuary had prepared a recommendation to remove 7.5% of that load, holding back 1.5% to account for future negative experience related to certain assumptions. On August 6, 2020, the COPERS Board approved the actuaries recommendation. Based on the June 30, 2019 valuation, this would result in a $63.7 million decrease to the unfunded actuarial accrued liability and a -3.7% ($7.7 million) reduction in the actuarially determined contribution for fiscal year 2021-2022. It is estimated that continuing the practices upheld by the Court will result in savings of $156.9 million over a 20-year period.

Citizen Pension Reform Initiative

On November 4, 2014, Phoenix voters considered and rejected an initiative known as Proposition 487 — The Phoenix Pension Reform Act of 2014 that if approved, would have amended the Phoenix City Charter and changed City retirement benefits for both current and future employees. The City is unable to predict whether and in what form, future initiatives may be proposed regarding COPERS and what the impact of such initiatives might be.

State of Arizona Public Safety Personnel Retirement System

The City of Phoenix also contributes to an agent multiple-employer defined benefit pension and health insurance premium subsidy plan, the Arizona Public Safety Personnel Retirement System ("*APSPRS*"), for sworn police officers and firefighters. The APSPRS functions as an investment and administrative agent for the City of Phoenix with respect to the plans for police officers and firefighters.

Periodic employer contributions to the pension and health insurance premium subsidy plans are determined on an actuarial basis using the entry age normal cost method. Normal cost is funded on a current basis. The City's unfunded actuarial accrued liability is funded over a closed period, and as of June 30, 2016, the City had 20 years remaining in the amortization period. Senate Bill 1442, passed by the State Legislature on April 17, 2017, authorized the governing body of an employer to make a one-time request to increase the amortization to a closed period not exceeding 30 years. On June 21, 2017, the City Council voted to submit a request to the APSPRS Board of Trustees to increase the City's amortization period from 20 years to 30 years. The change was reflected in the employer contribution rate beginning with the July 1, 2018 contribution, and represents the minimum required contribution percentage. Periodic contributions for both normal cost and the amortization of the unfunded actuarial accrued liability are based on the entry age normal cost method. The funding strategy for normal cost and the unfunded actuarial accrued liability should provide sufficient resources to pay employee pension benefits on a timely basis.

The System, for both police and fire personnel, is funded via member contributions of 7.65% of compensation for employees whose membership date was prior to July 20, 2011, and 11.65% of compensation for employees whose membership date began on or after July 20, 2011. Employees whose membership date was on or after January 1, 2012 have the option of participating in the hybrid plan for non-social security positions with contributions of 14.65%, of which 3.0% goes toward a defined contribution plan and is matched by the employer. Employer rates are set by an actuarial valuation and expressed as a percent of compensation. For fiscal year ended June 30, 2022, the required employer contribution rates were as follows:

	Police	Fire
Tier 1	67.32%	63.29%
Tier 2	67.32%	63.29%
Tier 3	10.39%	10.36%
Tier 3 Legacy	53.43%	48.08%

For Fiscal year ended June 30, 2022, the City chose to contribute $184.5 million and $106.4 million for Police and Fire, respectively and were based on the following contribution rates:

	Police	Fire
Tier 1	75.10%	70.29%
Tier 2	75.10%	70.29%
Tier 3	10.39%	10.36%
Tier 3 Legacy	61.21%	55.08%

The City's APSPRS membership data is as follows:

	June 30, 2021	
	Police	**Fire**
Retirees and Beneficiaries	2,702	1,223
Inactive and Non-Retired Members	918	256
Active Members	2,438	1,451
Total	6,058	2,930

Schedule of Changes in Net Pension Liability and Related Ratios
for Reporting Date ended June 30,
(thousands)

	POLICE		
	Fiscal Year 2022	Fiscal Year 2021	Fiscal Year 2020
Total Pension Liability			
Service cost	$ 51,687	$ 51,069	$ 52,681
Interest on the total pension liability	265,180	251,285	241,526
Difference between expected and actual experience of the total pension liability	23,801	91,331	21,415
Changes of assumptions	—	—	58,976
Benefit payments, including refunds of employee contributions	(204,565)	(203,329)	(185,901)
Net change in total pension liability	136,103	190,356	188,697
Total pension liability—beginning	3,683,190	3,492,834	3,304,137
Total pension liability—ending	$3,819,293	$3,683,190	$3,492,834
Plan Fiduciary Net Position			
Employer contributions	$ 172,800	$ 167,099	$ 149,442
Employee contributions	23,096	22,896	18,525
Pension plan net investment income	379,441	17,437	71,707
Benefit payments, including refunds of employee contributions	(204,565)	(203,329)	(185,901)
Pension plan administrative expense	(1,780)	(1,422)	(1,247)
Other(1)	4	(91)	88
Net change in plan fiduciary net position	368,996	2,590	52,614
Plan fiduciary net position—beginning	1,370,878	1,368,288	1,315,679
Adjustment to Beginning of Year	—	—	(5)
Plan fiduciary net position—ending	$1,739,874	$1,370,878	$1,368,288
Net pension liability	$2,079,419	$2,312,312	$2,124,546
Plan fiduciary net position as a percentage of the total pension liability	45.55%	37.22%	39.17%
Covered payroll	$ 229,875	$ 233,472	$ 228,846
Net pension liability as a percentage of covered valuation payroll	904.59%	990.40%	928.37%

(1) Other changes include adjustments for prior year GASB 68 and reserve transfer to/from employer and employee reserves.

Schedule of Changes in Net Pension Liability and Related Ratios
for Reporting Date ended June 30,
(in thousands)

	FIRE		
	Fiscal Year End 2022	**Fiscal Year End 2021**	**Fiscal Year End 2020**
Total Pension Liability			
Service cost	$ 32,998	$ 31,668	$ 32,749
Interest on the total pension liability	143,726	134,204	130,378
Difference between expected and actual experience of the total pension liability	2,186	74,975	(7,563)
Changes of assumptions	—	—	31,021
Benefit payments, including refunds of employee contributions	(102,431)	(121,050)	(96,862)
Net change in total pension liability	76,479	119,797	89,723
Total pension liability–beginning	1,987,068	1,867,271	1,777,548
Total pension liability–ending	$2,063,547	$1,987,068	$1,867,271
Plan Fiduciary Net Position			
Employer contributions	$ 106,126	$ 90,148	$ 77,142
Employee contributions	13,566	12,598	11,592
Pension plan net investment income	212,684	9,715	39,879
Benefit payments, including refunds of employee contributions	(102,431)	(121,050)	(96,862)
Pension plan administrative expense	(994)	(793)	(695)
Other(1)	12	12	—
Net change in plan fiduciary net position	228,963	(9,370)	31,056
Plan fiduciary net position–beginning	756,000	765,370	734,315
Adjustment to Beginning of Year	—	—	(1)
Plan fiduciary net position–ending	$ 984,963	$ 756,000	$ 765,370
Net pension liability	$1,078,584	$1,231,068	$1,101,901
Plan fiduciary net position as a percentage of the total pension liability	47.73%	38.05%	40.99%
Covered payroll	$ 148,348	$ 139,641	$ 135,273
Net pension liability as a percentage of covered valuation payroll	727.06%	881.60%	814.58%

(1) Other changes include adjustments for prior year GASB 68 and reserve transfer to/from employer and employee reserves.

Actuarial assumptions used to determine the total pension liability in the June 30, 2021 actuarial valuation were based on the results of the actuarial experience study covering the period from July 1, 2011 through June 30, 2016. Those assumptions, applied to all periods included in the measurement, are as follows:

Actuarial Cost Method	Entry Age Normal
Asset Valuation Method	Fair Value of Assets
Price Inflation	2.50%
Salary Increases	3.50% to 7.50% including inflation
Tier 1 and 2 Investment Rate of Return	7.30%, net of investment and administrative expense
Tier 3 Investment Rate of Return	7.00%, net of investment and administrative expense
Tier 3 Compensation Limit	$115,868 for 2021. Assumed increases of 2.00% per year.
Retirement Age	Experience-based table of rates that is specific to the type of eligibility condition. Last updated for the 2017 valuation pursuant to an experience study of the period July 1, 2011 – June 30, 2016.
Mortality	RP-2014 mortality tables projected backwards 1 year to 2013 with MP-2014 (110% of female healthy annuitant mortality table.) Future mortality improvements are assumed each year using 75.0% of scale MP-2020.

The cost-of-living adjustment will be based on the average annual percentage change in the Metropolitan Phoenix-Mesa Consumer Price Index published by the United States Department of Labor, Bureau of Statistics. The assumed future permanent benefit increase used for this valuation is 1.75%.

Schedule of Contributions for Measurement Date ended June 30,
(in thousands)

	Year Ended June 30,	Actuarially Determined Contribution	Actual Contribution(1)	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Valuation Payroll
Police	2022	$ —	$184,494	$ —	$ —	—%
	2021	153,644	172,800	(19,156)	229,875	75.17
	2020	167,099	167,099	—	233,472	71.57
	2019	149,442	149,442	—	228,846	65.30
	2018	124,618	124,618	—	221,105	56.36
	2017	113,645	113,645	—	231,023	49.19
Fire	2022	$ —	$106,386	$ —	$ —	—%
	2021	89,913	106,126	(16,213)	148,048	71.54
	2020	90,148	90,148	—	139,641	64.56
	2019	77,142	77,142	—	135,273	57.03
	2018	73,288	73,288	—	132,503	55.31
	2017	56,671	56,671	—	127,530	44.44

(1) Actual contributions are based on covered payroll at the time of contribution. It is the actuary's understanding that the City's practice is to contribute the percent-of-payroll employer contribution rate (or flat dollar amount if there are no active employees) shown in the actuarial valuation report. Because of this

understanding, the Actuarially Determined Contributions shown in the Schedule of Contributions are the actual contributions made by the City in the fiscal year. Fiscal year 2022 actual contributions represent contributions made subsequent to the measurement date.

The actuarially determined recommended pension contribution rates for Police was 64.64% for fiscal year 2019-20, 65.70% for fiscal year 2020-21 and is 67.32% for fiscal year 2021-22. The actuarially determined recommended pension contribution rates for Fire was 58.95% for fiscal year 2019-20, 60.61% for fiscal year 2020-21 and is 63.29% for fiscal year 2021-22.

APSPRS Pension Reform

On April 29, 2011, the Governor signed into law Senate Bill 1609 ("*SB 1609*"), which created significant pension reform to the APSPRS.

The following is a summary of changes to the APSPRS required by SB 1609:

- Revise the formula used to calculate cost of living adjustments ("*COLA*")
- Increase member contribution rate from 7.65% to 11.65% by fiscal year 2015-16
- Eliminate the Deferred Retirement Option Plan ("*DROP*") for employees hired after January 1, 2012
- Increase the number of years of service required to become retirement eligible from 20 to 25
- Increase the number of consecutive years of salary used to compute pension from three to five
- Calculated pension cannot exceed 80.0% of the five consecutive years' average

On February 20, 2014, the Arizona Supreme Court upheld a lower court ruling that provisions of SB 1609 revising the formula used to calculate cost of living adjustments of members of the Arizona Elected Officials Retirement Plan violated the Arizona Constitution to the extent those provisions applied to elected officials hired prior to January 1, 2012. Because that Supreme Court ruling applies to invalidate the same language in similar provisions of SB 1609 which relate to APSPRS, COLA increases for members hired prior to January 1, 2012 and affected by SB 1609 will be restored retroactively, which required rate increases from employers, including the City. The APSPRS Board allowed employers to phase-in the pension contribution rate increase over 3 years beginning with the 2015-16 fiscal year. The City's contribution rate for fiscal year 2015-16 increased 7.96% for fire and 9.31% for police due the phase-in. In fiscal year 2016-17, the City's contribution rate increased 4.93% for fire and 6.05% for police. The City is unable to determine the rate increase for the last year of the phase-in or any potential savings due to other provisions of SB 1609.

On November 10, 2016, the Arizona Supreme Court upheld another lower court ruling that provisions of SB 1609 which increased employee contribution rates and curtailed certain benefit increases were also unconstitutional. The decision means that many current employees will receive refunds, while some retirees will receive retroactive benefit increases. The issuance of refunds by the City will have minimal effect on contribution rates. Neither of the Supreme Court decisions will impact the ability of the City to fulfill its obligations on its bonds. The City is not aware of any other pending lawsuits regarding SB 1609.

In February 2016, the Governor signed Senate Bills 1428 and 1429 to further reform the APSPRS. Most of the changes only affect new hires who start after June 30, 2017. Those changes include requiring new public safety employees to serve until age 55 before being eligible for full pension benefits, splitting the annual pension cost 50/50 between employers and new employees, and providing new hires the option of choosing a 100% defined contribution plan in place of a defined benefit (or pension) plan. The one change that could affect current retirees and those hired both before and after June 30, 2017, is a 2.0% annual cap on cost-of-living adjustments, which would be tied to the metropolitan Phoenix-Mesa Consumer Price Index. For the cost-of-living cap to apply to current members of APSPRS, it needed to be approved by voters. Proposition 124, which capped the cost of living adjustments for current and new members, was approved by voters on May 17, 2016.

Elected Officials' Retirement Plan

The Elected Officials' Retirement Plan ("*EORP*") is a cost sharing multiple-employer defined benefit pension plan of which the City of Phoenix is a contributing employer and covers the Mayor and City Council, effective January 4, 1988. As a condition of coverage, members are required to contribute a percentage of their compensation.

The City contributed an actuarially determined rate of 32.99% for fiscal year 2012 and 36.44% for fiscal year 2013, to fully fund benefits for active members. For the first six months of fiscal year 2014, the City contribution rate was 39.62%. Effective January 1, 2014, the State Legislature closed the EORP to new members and changed the contribution rate to 23.50% for both the EORP and for the newly created Elected Officials' Defined Contribution Retirement System ("*EODCRS*"). All elected officials, appointed or elected on or after January 1, 2014 and not previously a member of the EORP, become members of the EODCRS, a defined contribution plan.

In 2017, a trial court ruled that the 23.50% level percent employer contribution rate for the defined benefit plan was unconstitutional without supplemental funding because it was insufficient to cover the actuarial computed unfunded liabilities.

In March 2018, the Arizona State Legislature introduced Senate Bill 1478 ("*SB 1478*"), which proposed to eliminate the 23.50% employer contribution rate and replace it with an actuarially determined employer contribution rate. SB 1478 requires the contribution rate to be sufficient to meet both the normal cost and the unfunded accrued liability amortized over a closed period of at least 20 years, but not more than 30 years, beginning July 1, 2018. The Governor signed SB 1478 into law on May 16, 2018. Effective July 1, 2018, the EORP employer contribution rate was 61.5% and 61.625% for EODCRS. Effective July 1, 2019, the EORP employer contribution rate was 61.43% and 61.555% for EODCRS.

Pension reform for EORP was approved by voters in November 2018. The reform requires a replacement of the permanent benefit increase, or PBI, with a cost-of-living-adjustment based on annual changes recognized by the U.S. Department of Labor, Bureau of Labor Statistics' Consumer Price Index for the Phoenix-Mesa-Scottsdale CBSA. The PBI could increase as much as 4.0% per year, while the new cost-of-living adjustment increase has a cap of 2.0% per year.

No additional disclosures regarding EORP are provided due to the immateriality to the City's finances as a whole. EORP financial statements are available online at www.psprs.com.

Additional Information

Additional information regarding the City's Retirement and Pension Plans, including trend information and detailed assumptions, is available in the City's ACFR under the headings "Pension Plans" and "Required Supplementary Information". The ACFR is available at http://emma.msrb.org or www.phoenix.gov under Departments-Finance-Financial Information & Reports or by calling the City at (602) 262-7166.

Additional information regarding the APSPRS and the EORP, including annual financial reports, actuary reports, trend information and detailed assumptions is available at www.psprs.com/investments--financials/annual-reports.

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APPENDIX F

Health Care Benefits for Retired Employees

The City provides certain postemployment health care benefits for its retirees. City retirees meeting certain qualifications are eligible to participate in the City's health insurance program along with the City's active employees. As of August 1, 2007, separate unblended rates have been established for active and retiree health insurance.

In June 2004, the Governmental Accounting Standards Board ("*GASB*") issued Statement 45 ("*GASB 45*") which addresses how state and local governments should account for and report costs and obligations related to post-employment health care and other post-employment non-pension benefits ("*OPEB*"). GASB 45 generally requires that the annual cost of OPEB and the outstanding obligations and commitments related to OPEB be accounted for and reported in essentially the same manner as pensions. The City implemented GASB Statement 45, Accounting and Financial Reporting by Employers for Post-employment Benefits Other Than Pensions, effective July 1, 2007.

GASB 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, replaces GASB 45 and establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense/expenditures. The new GASB statement requires the presentation of liability for OPEB obligations in the employer's financial statements. The Statement identifies the methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Note disclosure and required supplementary information requirements about defined benefit OPEB also are addressed. The City implemented GASB 75 effective July 1, 2017.

Medical Expense Reimbursement Plan

Employees eligible to retire in 15 years or less from August 1, 2007, will receive a monthly subsidy from the City's Medical Expense Reimbursement Plan ("*MERP*") when they retire. The MERP is a single-employer, defined benefit OPEB plan.

The subsidy provides an offset to out of pocket healthcare expenses such as premiums, deductibles and co-pays, whether the retiree or survivor elects to purchase coverage through city sponsored retiree plans or other sources. City sponsored health plans are provided to eligible non-Medicare retirees and dependents. The subsidy varies with length of service or bargaining unit, from $117 to $202 per month. Retirees may be eligible for additional subsidies depending on their bargaining unit, retirement date, or enrollment in the City's medical insurance program. Current and future eligible retirees who purchase health insurance through the City's plan will receive an additional subsidy to minimize the impact of unblending health insurance rates for active and retired employees.

In December 2007, the City established the City of Phoenix MERP Trust to fund all or a portion of the City's share of liabilities incurred in providing the benefits as reflected in Administrative Regulation 2.42 — Medical Expense Reimbursement Plan for Retirees and Eligible Surviving Spouses or Qualified Domestic Partners. A five-member Board of Trustees was delegated fiduciary responsibility for the MERP Trust, subject to oversight of the City Council.

The employees covered by MERP at June 30, 2021 are:

	2021
Plan Members Currently Receiving Benefits	9,772
Active Plan Members	2,690
Total Plan Members	12,462

Contributions by the City (plus earnings thereon) are the sole source of funding for the MERP. The City's Board of Trustees, subject to oversight by the City Council has the authority to establish and amend the contribution requirements of the City and active employees. The Board of Trustees establishes the rates based on an actuarially determined rate recommended by an independent actuary. The actuarial determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. For the year ended June 30, 2022, the City contributed $27.7 million. Employees are not required to contribute to the MERP.

The MERP actuarially determined contribution, actual contribution and covered payroll for the last two fiscal years follows:

MERP
Schedule of Employer Contributions
(in thousands)

Fiscal Year Ended June 30,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a percentage of Covered Payroll
2022	$15,912	$27,704	$(11,792)	$222,257	12.46%
2021	22,753	31,004	(8,251)	214,741	14.44

The City's net OPEB liability for MERP was measured as of June 30, 2021, and the total MERP OPEB liability used to calculate the net OPEB liability for MERP was determined by an actuarial valuation as of June 30, 2021. The net OPEB liability for MERP is measured as the total MERP OPEB liability, less the amount of the plan's fiduciary net position. In actuarial terms, this is analogous to the accrued liability less the market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations based on the Board's adopted assumptions and methods).

A single discount rate of 6.5% was used to measure the total MERP OPEB liability as of June 30, 2022. This single discount rate was based on an expected rate of return on MERP OPEB plan investments of 6.5%. Based on the stated assumptions and the projection of cash flows, the MERP OPEB fiduciary net position and future contributions were projected to be sufficient to finance all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on MERP OPEB plan investments was applied to all periods of projected benefit payments to determine the total MERP OPEB liability.

The following schedule shows the funding progress of the plan for the last two fiscal years. The total MERP OPEB liability increased 8,047 from 2021 to 2022.

Schedule of Changes in Net OPEB Liability and Related Ratios
(in thousands)

	MERP	
	Fiscal Year End 2022	**Fiscal Year End 2021**
Total OPEB Liability		
Service cost	$ 3,495	$ 3,629
Interest on the total OPEB liability	24,114	25,249
Differences between expected and actual experience	—	(6,128)
Changes of assumptions	8,185	(12,042)
Benefit payments, including refunds of employee contributions	(27,747)	(27,186)
Net change in total OPEB liability	8,047	(16,478)
Total OPEB liability–beginning	369,367	385,845
Total OPEB liability–ending	$377,414	$369,367
Plan Fiduciary Net Position		
Employer contributions	$ 27,704	$ 31,004
OPEB plan net investment income	(32,988)	50,174
Benefit payments, including refunds of employee contributions	(27,747)	(27,186)
Other	(640)	(605)
Net change in plan fiduciary net position	(33,671)	53,387
Plan fiduciary net position–beginning	232,924	179,537
Plan fiduciary net position–ending	$199,253	$232,924
Net OPEB liability–ending	$178,161	$136,443
Plan fiduciary net position as a percentage of total OPEB liability	52.79%	63.06%
Covered payroll	$222,257	$214,741
Net OPEB liability as a percentage of covered payroll	80.16%	63.54%

Post Employment Health Plan

Benefit eligible employees with more than 15 years until retirement eligibility, as of August 1, 2007, receive $150 per month while employed by the City as a defined contribution to the Post Employment Health Plan ("*PEHP*"). This is a 100% employer-paid benefit. The program provides employees who have a payroll deduction for City medical insurance coverage (single or family) with a PEHP account. This account is to be used by the employee when he/she retires or separates employment with the City for qualified medical expenses (including health insurance premiums).

Long-Term Disability Program

In November 2008, the City established the City of Phoenix Long-Term Disability ("*LTD*") Trust to fund all or a portion of the City's liabilities incurred in providing the benefits as reflected in Administrative Regulation 2.323 — City of Phoenix Long-Term Disability Program. The LTD Trust is a single-employer, defined benefit plan. A five-member Board of Trustees was delegated fiduciary responsibility for the LTD Trust, subject to oversight by the City Council. The LTD Trust issues a separate report that can be obtained through the City of Phoenix, Finance Department, Financial Accounting and Reporting Division, 251 W. Washington Street, 9th Floor, Phoenix, Arizona, 85003.

Long-term disability benefits are available to regular, full-time, benefit-eligible employees who have been employed by the City for at least 12 consecutive months. The program provides income protection of 2/3 of an employee's monthly base salary following a continuous three-month waiting period from the last day worked and the use of all leave accruals. The benefit continues to age 80 for those disabled prior to July 1, 2013 and age 75 for those disabled on or after July 1, 2013. The City pays 100% of the cost of this benefit.

The number of participants as of June 30, 2021, the effective date of the biennial OPEB valuation, follows:

	Police	Fire	General City	Total
Active Employees	2,908	1,663	7,914	12,485
Disabled Employees	17	10	271	298
Total Covered Participants	2,925	1,673	8,185	12,783

Contributions by the City (plus earnings thereon) are the sole source of funding for the LTD program. The LTD Trust's Board of Trustees, subject to oversight by the City Council has the authority to establish and amend the contribution requirements of the City and active employees. The Board of Trustees establishes the rates based on an actuarially determined rate recommended by an independent actuary. The actuarial determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. For the year ended June 30, 2022, the City elected to contribute $1.4 million to the LTD program, even though it is fully funded. For the year ended June 30, 2021, the City did not contribute. Employees are not required to contribute to the LTD program.

The LTD actuarially determined contribution, actual contribution and covered payroll for the last two fiscal years follows:

LTD
Schedule of Employer Contributions
(in thousands)

Fiscal Year Ended June 30,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a percentage of Covered Payroll
2022	$1,343	$1,401	$ (58)	$898,304	0.16%
2021	1,540	—	1,540	848,384	—

The City's net OPEB liability for LTD was measured as of June 30, 2021, and the total LTD OPEB liability used to calculate the net LTD OPEB liability was determined by an actuarial valuation as of June 30, 2019. The net LTD OPEB liability is measured as the total OPEB liability, less the amount of the plan's fiduciary net position. In actuarial terms, this is analogous to the accrued liability less the market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations based on the LTD Trust's Board of Trustees adopted assumptions and methods).

A single discount rate of 6.5% was used to measure the total OPEB liability for LTD as of June 30, 2022. This single discount rate was based on an expected rate of return on LTD OPEB plan investments of 6.5%. Based on the stated assumptions and the projection of cash flows, the LTD OPEB plan's fiduciary net position and future contributions were projected to be available to finance all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on LTD OPEB plan investments was applied to all periods of projected benefit payments to determine the total LTD OPEB liability.

The following schedule shows the funding progress of the plan for the last two fiscal years. The total LTD OPEB liability increased $2,984,000 from 2021 to 2022.

Schedule of Changes in Net OPEB Liability and Related Ratios
(in thousands)

	LTD	
	Fiscal Year End 2022	**Fiscal Year End 2021**
Total OPEB liability/(asset)		
Service cost	$ 3,867	$ 3,606
Interest on the total OPEB liability/(asset)	3,163	3,193
Differences between expected and actual experience	—	(2,650)
Changes of assumptions	787	(116)
Benefit payments, including refunds of employee contributions	(4,833)	(4,381)
Net change in total OPEB liability/(asset)	2,984	(348)
Total OPEB liability/(asset)–beginning	47,337	47,685
Total OPEB liability/(asset)–ending	$ 50,321	$ 47,337
Plan Fiduciary Net Position		
Employer contributions	$ 1,401	$ —
OPEB plan net investment income	(13,083)	21,612
Benefit payments, including refunds of employee contributions	(4,833)	(4,381)
OPEB plan administrative expense	(556)	(456)
Other	(13)	29
Net change in plan fiduciary net position	(17,084)	16,804
Plan fiduciary net position–beginning	94,561	77,757
Plan fiduciary net position–ending	$ 77,477	$ 94,561
Net OPEB liability/(asset)–ending	$ (27,156)	$ (47,224)
Plan fiduciary net position as a percentage of total OPEB liability/(asset)	153.97%	199.76%
Covered payroll	$898,304	$872,987
Net OPEB liability/(asset) as a percentage of covered payroll	(3.02)%	(5.41)%

APSPRS—OPEB

The Arizona Public Safety Personnel Retirement System (*"APSPRS"*) administers an agent multiple-employer defined benefit retirement system established by Title 38, Chapter 5, Article 4 of the Arizona Revised Statutes that provides retirement benefits, as well as death and disability benefits to public safety employees of certain state and local governments. Authority to make amendments to the plan rests with the Arizona State Legislature. The APSPRS acts as a common investment and administrative agent that is jointly administered by a Board of Trustees and participating local boards.

The City's APSPRS membership data is a follows:

	June 30, 2021	
	Police	**Fire**
Retirees and Beneficiaries	2,702	1,223
Inactive, Non-Retired Members	446	221
Active Members	2,438	1,451
Total	5,586	2,895

APSPRS has the authority to establish and amend the contribution requirements of the City and active employees. APSPRS establishes rates based on an actuarially determined rate recommended by an independent actuary. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance an unfunded accrued liability.

For the year ended June 30, 2022, there were no employer contributions. Employees are not required to contribute to the APSPRS OPEB Plan.

APSPRS
Schedule of Employer Contributions
(in thousands)

	Fiscal Year Ended June 30,	Actuarially Determined Contribution	Contribution in Relation to the Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a percentage of Covered Payroll
Police	2021	$79	$79	$—	$229,875	0.03%
Fire	2021	$24	$24	$—	$148,348	0.02%

The following schedule shows the funding progress of the APSPRS OPEB plan for the last two fiscal years. The City's net OPEB liability for APSPRS was measured as of June 30, 2020, and the total APSPRS OPEB liability used to calculate the net OPEB liability for APSPRS was determined by an actuarial valuation as of the same date.

Schedule of Changes in Net OPEB Liability and Related Ratios for Reporting Date Ended June 30,
(in thousands)

	APSPRS	
	Police 2022	**Fire 2022**
Total OPEB Liability		
Service cost	$ 1,074	$ 553
Interest on the total OPEB liability	3,530	1,830
Differences between expected and actual experience of the Total OPEB Liability	(2,216)	(54)
Benefit payments, including refunds of employee contributions	(3,485)	(1,943)
Net change in total OPEB liability	(1,097)	386
Total OPEB liability–beginning	49,026	25,488
Total OPEB liability–ending	$ 47,929	$ 25,874
Plan Fiduciary Net Position		
Contributions–employer	$ 79	$ 24
Contributions–employee	79	24
Net Investment Income	17,507	9,904
Benefit payments, including refunds of employee contributions	(3,485)	(1,943)
OPEB Plan administrative expense	(72)	(42)
Other	—	—
Net change in Plan fiduciary net position	14,108	7,967
Plan fiduciary net position–beginning	64,567	36,524
Plan fiduciary net position–ending	$ 78,675	$ 44,491
Net OPEB liability/(asset)	$ (30,746)	$ (18,617)
Plan fiduciary net position as a percentage of total OPEB liability	164.15%	171.95%
Covered payroll	$229,875	$148,348
Net OPEB liability as a percentage of covered payroll	(13.38)%	(12.55)%

Actuarial Valuations

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the City are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the City and plan members) and include the types of benefits provided at the time of each valuation. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

Additional Information

Additional information regarding the City's Health Care Benefits for Retired Employees, including the actuarial methods and detailed assumptions used to calculate the ARC, is available in the City's ACFR under the heading "Other Postemployment Benefits (*OPEB*)". The ACFR is available at http://emma.msrb.org or www.phoenix.gov under Departments-Finance-Financial Information & Reports or by calling the City at (602) 262-7166.

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APPENDIX G

Summary of Certain Provisions of Legal Documents

The following information summarizes or paraphrases certain provisions of the City Purchase Agreement and the Indenture. Such information is not a full statement of the terms of such documents and, accordingly, is qualified by reference to the full text thereof.

Certain Definitions

The following are definitions in summary form of certain terms used in the City Purchase Agreement and the Indenture:

"*Bond Counsel*" shall mean a firm of attorneys of national reputation experienced in the field of municipal bonds whose opinions are generally accepted by purchasers of municipal bonds and acceptable to the City and to the extent the Corporation is to act or refrain from acting in reliance thereon, acceptable to the Corporation.

"Bond Fund" means the fund of that name created pursuant to the Indenture.

"Bond Payment Date" means each date on which interest or both principal and interest shall be payable on any of the Bonds.

"Bond Trustee" or *"Trustee"* means U.S. Bank Trust Company, National Association in its capacity as trustee under the Indenture or any successor thereto.

"Bond Year" means a twelve-month period beginning July 2 of the calendar year and ending on the next succeeding July 1.

"Bonds" means the City of Phoenix Civic Improvement Corporation Junior Lien Wastewater System Revenue Bonds, Series 2023.

"Chief Financial Officer" means the actual, acting or interim Chief Financial Officer of the City.

"City" means the City of Phoenix, Arizona.

"*City Purchase Agreement"* or "*Agreement*" means, the City Purchase Agreement dated as of November 1, 2023, between the City and the Corporation, as it may be supplemented or amended from time to time.

"Commercial Paper" means Revenue Obligations with a maturity of not more than 270 days from the date of issuance and which are issued and reissued from time to time.

"Consultant" means when used in the City Purchase Agreement, a firm of utility consultants experienced in the financing and operation of wastewater systems and having a nationally recognized reputation for such work.

"Credit Facility" means a bank, financial institution, insurance company or indemnity company which is employed by or on behalf of the City to perform one or more of the following tasks: (a) the enhancement of the City's credit by assuring owners of any Revenue Obligations that principal of and interest on said Revenue Obligations will be paid promptly when due (including the issuance of an insurance policy, surety bond or other

form of security for a bond reserve), or (b) providing liquidity for the holders of Revenue Obligations through undertaking to cause Revenue Obligations to be bought from the holders thereof when submitted pursuant to an arrangement prescribed by Junior Lien Revenue Obligation Documents or Senior Lien Revenue Obligation Documents.

"Defeasance Obligations" shall mean money and, any of the following:

(1) U.S. Treasury Certificates, Notes and Bonds (including State and Local Government Series- "SLGS").

(2) Direct obligations of the Treasury which have been stripped by the Treasury itself, CATS, TIGRS and similar securities.

(3) Resolution Funding Corp. (REFCORP). Only the interest component of REFCORP strips which have been stripped by request to the Federal Reserve Bank of New York in book entry form are acceptable.

(4) Pre-refunded municipal bonds rated at least as high as the lowest applicable rating of U.S. Treasury Bonds by Moody's and S&P. If however, the pre-refunded municipal bonds are only rated by S&P (i.e., there is no Moody's rating), then the pre-refunded bonds must have been pre-refunded with cash, direct U.S. or U.S. guaranteed obligations, or AAA rated pre-refunded municipals to satisfy this condition.

(5) Obligations issued by the following agencies which are backed by the full faith and credit of the U.S.

(a) U.S. Export-Import Bank (Eximbank)
Direct obligations or fully guaranteed certificates of beneficial ownership;

(b) Farmers Home Administration (FmHA)
Certificates of beneficial ownership;

(c) Federal Financing Bank;

(d) General Services Administration
Participation certificates;

(e) U.S. Maritime Administration
Guaranteed Title XI financing; and

(f) U.S. Department of Housing and Urban Development (HUD)
Project Notes
Local Authority Bonds
New Communities Debentures — U.S. government guaranteed debentures
U.S. Public Housing Notes and Bonds — U.S. government guaranteed public housing notes and bonds.

"Derivative Product" means a swap, forward or other interest rate agreement of the City entered into in accordance with Section 4.6 of the City Purchase Agreement.

"Designated Revenues" means Net Operating Revenues of the System after provision for payment of all Expenses of Operation and Maintenance and after making all payments required by the Senior Lien Revenue Obligation Documents for the benefit of the Senior Lien Revenue Obligations.

"Event of Default" means one of the events defined as such in the City Purchase Agreement or the Indenture, as the case may be.

"Expenses of Operation and Maintenance" means (i) all expenses reasonably incurred in connection with the operation and maintenance of the System, including salaries, wages, the cost of materials and supplies, rentals of leased property, if any, payments to others for the collection or treatment of sewage, if any (but excluding

payments to others for the construction of facilities to provide additional capacity for the System and excluding "pay-as-you-go" capital projects and further excluding in-lieu property tax payments and staff and administrative charges attributable to Citywide cost allocations of central service costs other than allocations attributable to regional systems); (ii) *"Expenses of Operation and Maintenance"* further includes the costs of audit, paying agent's and registrar's fees and payment of premiums for insurance which the City deems prudent to carry on the System and its operations and personnel, and generally, all expenses, which under accounting principles generally accepted for municipal utility purposes are properly allocable to operation and maintenance, exclusive of depreciation and interest on any wastewater system revenue bonds of the Corporation or the City that may be outstanding from time to time and on all other obligations (including, but not limited to general obligation bonds and repayment agreements) issued to improve or extend the System or to refund obligations issued for such purposes or such refunding purposes; and (iii) *"Expenses of Operation and Maintenance"* also includes the City's obligations under any contract with any other political subdivision or agency of one or more political subdivisions including, but not limited to the JEPA, pursuant to which the City makes payments measured by the expenses of operating and maintaining any facility, which relates to the System owned or operated in part by the City and in part by others or wholly by others.

"Financed Property" means the property actually funded with the proceeds of the Bonds.

"Fiscal Year" means the 12-month period used by the City for its general accounting purposes as the same may be changed from time to time, said fiscal year currently extending from July 1 to June 30.

"Indenture" means the Bond Indenture dated as of November 1, 2023, between the Corporation and the Trustee, as the same may be amended from time to time.

"Independent Certified Public Accountant" means a firm of certified public accountants which is not in the regular employ of the City on a salary basis.

"Initial Loan" means the initial loan extended pursuant to the Revolving Credit Agreement in the principal amount of $200,000,000.

"Interest Account" means the account of the Bond Fund by that name created under the Indenture.

"Investment Earnings" means all interest received on and profits derived from investments made with any money in the Bond Fund under the Indenture.

"JEPA" means the joint exercise of powers agreement entitled "Construction, Operation and Maintenance of the Jointly Used Sewerage Treatment and Transportation Facilities" entered into as of September 25, 1979, as amended from time to time, by and among the SROG Members, as further described in the City Purchase Agreements.

"Junior Lien Revenue Obligation Documents" means any ordinance, indenture, contract, or agreement of the City constituting Junior Lien Parity Obligations.

"Junior Lien Revenue Obligations" means obligations issued or the payment of which is on a parity with the Bonds.

"Junior Lien Parity Test Debt Service" or *"Parity Test Debt Service"* means with respect to the Bonds and Revenue Obligations, an amount of money equal to the highest aggregate Principal Requirement and interest requirement of all outstanding Bonds and other Revenue Obligations to fall due and payable in the current or any future Bond Year, as adjusted pursuant to any Derivative Product with a Qualified Counterparty in accordance with the City Purchase Agreements. For purposes of determining Junior Lien Parity Test Debt Service for any Bond Year, the interest requirement on the Bonds and Revenue Obligations shall be determined based on interest

on all outstanding Revenue Obligations to their stated maturity dates unless the City shall have given the Corporation irrevocable instructions to redeem some or all outstanding Revenue Obligations pursuant to the Indenture, in which case the interest requirement on the Bonds or applicable Revenue Obligations shall be determined based on interest on all outstanding Revenue Obligations to their stated maturity or, with respect to Revenue Obligations for which such irrevocable redemption instructions have been given, the dates selected for redemption prior to maturity. In case any Revenue Obligations outstanding or proposed to be issued shall bear interest at a variable rate, the interest requirement for such Revenue Obligations in each Bond Year during which such variable rate applies shall be computed at the lesser of (i) the maximum rate which such Revenue Obligations may bear under the terms of their issuance; or (ii) the rate of interest established for long-term bonds by the 20-year bond index most recently published by THE BOND BUYER of New York, New York, prior to the date of computation (or in the absence of such published index, some other index selected in good faith by the Chief Financial Officer of the City after consultation with one or more reputable, experienced investment bankers as being equivalent thereto) ((i) and (ii) together, the *"Variable Rate Assumption").* With respect to any Commercial Paper issued or proposed to be issued, the Principal Requirement shall be calculated as if the entire amount of Commercial Paper authorized to be issued were to be amortized over a term of 30 years commencing in the year in which such Commercial Paper is issued or proposed to be issued and with substantially level annual debt service payments and the interest requirement shall be computed using the Variable Rate Assumption.

"Junior Subordinate Lien Revenues" means Designated Revenues, after making all payments required by the Junior Lien Revenue Obligation Documents for the benefit of the Junior Lien Revenue Obligations.

"Net Operating Revenues" means Operating Revenues of the System, after provision for payment of all Expenses of Operation and Maintenance.

"Operating Revenues" means all income and revenue of any nature derived from the ownership, use or operation of the System including monthly billings, service charges, connection fees, (including development occupational fees), other charges for service and the availability thereof, hydrant rentals and Investment Earnings, but excluding proceeds of special assessments, local, state or federal grants, capital improvement contract payments or other money received for capital improvements to the System.

"Other Moneys" means moneys of the City other than Designated Revenues which, at the time any payment is required under the City Purchase Agreement, are legally available to make such payment, and which the City has elected to make available for such purpose.

"*Permitted Investments*" shall mean and include:

(1) Direct obligations of the United States of America (including obligations issued or held in book entry form on the books of the Department of the Treasury, and CATS and TIGRS) or obligations the principal of and interest on which are unconditionally guaranteed by the United States of America;

(2) Bonds, debentures, notes or other evidence of indebtedness issued or guaranteed by any of the following federal agencies and provided such obligations are backed by the full faith and credit of the United States of America (stripped securities are only permitted if they have been stripped by the agency itself):

(a) U.S. Export-Import Bank (Eximbank)
Direct obligations or fully guaranteed certificates of beneficial ownership;

(b) Farmers Home Administration (FmHA)
Certificates of beneficial ownership;

(c) Federal Financing Bank;

(d) Federal Housing Administration Debentures (FHA);

(e) General Services Administration
Participation certificates;

(f) Government National Mortgage Association (GNMA or "Ginnie Mae")
GNMA — guaranteed mortgage-backed bonds
GNMA — guaranteed pass-through obligations (participation certificates)
(not acceptable for certain cash-flow sensitive issues);

(g) U.S. Maritime Administration
Guaranteed Title XI financing; and

(h) U.S. Department of Housing and Urban Development (HUD)
Project Notes
Local Authority Bonds
New Communities Debentures — U.S. government guaranteed debentures,
U.S. Public Housing Notes and Bonds — U.S. government guaranteed public housing notes and bonds;

(3) Bonds, debentures, notes or other evidence of indebtedness issued or guaranteed by any of the following non-full faith and credit U.S. government agencies (stripped securities are only permitted if they have been stripped by the agency itself):

(a) Federal Home Loan Bank System
Senior debt obligations;

(b) Federal Home Loan Mortgage Corporation (FHLMC or "Freddie Mac")
Participation Certificates (Mortgage-backed securities)
Senior debt obligations;

(c) Federal National Mortgage Association (FNMA or "Fannie Mae")
Mortgage-backed securities
Senior debt obligations;

(d) Student Loan Marketing Association (SLMA or "Sallie Mae")
Senior debt obligations;

(e) Resolution Funding Corp. (REFCORP) obligations; and

(f) Farm Credit System
Consolidated systemwide bonds and notes;

(4) Money market funds registered under the Federal Investment Company Act of 1940, whose shares are registered under the Federal Securities Act of 1933, and having a rating at the time of purchase by S&P of "AAAm-G"; "AAA-m"; or "AA-m" or a rating by Moody's of "Aaa," "Aa1" or "Aa2";

(5) Certificates of deposit secured at all times by collateral described in (1) and/or (2) above. Such certificates must be issued by commercial banks, savings and loan associations or mutual savings banks. The collateral must be held by a third party and the bondholders must have a perfected first security interest in the collateral;

(6) Certificates of deposit, savings accounts, deposit accounts or money market deposits which are fully insured by FDIC, including BIF and SAIF;

(7) Investment Agreements, including guaranteed investment contracts, Forward Purchase Agreements and Reserve Fund Put Agreements;

(8) Commercial paper rated, at the time of purchase, "Prime-1" by Moody's and "A-1" or better by S&P;

(9) Bonds or notes issued by any state or municipality which are rated by Moody's and S&P in one of the two highest rating categories assigned by such agencies;

(10) Federal funds or bankers acceptances with a maximum term of one year of any bank which has an unsecured, uninsured and unguaranteed obligation rating of "Prime-1" or "A3" or better by Moody's and "A-1" or "A" or better by S&P;

(11) Repurchase agreements that provide for the transfer of securities from a dealer bank or securities firm (seller/borrower) to a municipal entity (buyer/lender), and the transfer of cash from a municipal entity to the dealer bank or securities firm with an agreement that the dealer bank or securities firm will repay the cash plus a yield to the municipal entity in exchange for the securities at a specified date, and which satisfy the following criteria:

(a) Repurchase agreements must be between the municipal entity and a dealer bank or securities firm:

(i) Primary dealers on the Federal Reserve reporting dealer list which are rated "A" or better by S&P and Moody's; or

(ii) Banks rated "A" or above by S&P and Moody's;

(b) The written repurchase agreement must include the following:

(i) Securities which are acceptable for transfer are:

(A) Direct U.S. governments; or

(B) Federal agencies backed by the full faith and credit of the U.S. government (and FHLB, FNMA & FHLMC);

(ii) The term of the repurchase agreement may be up to 180 days;

(iii) The collateral must be delivered to the municipal entity, trustee (if trustee is not supplying the collateral) or third party acting as agent for the trustee (if the trustee is supplying the collateral) before/simultaneous with payment (perfection by possession of certificated securities);

(iv) The trustee has a perfected first priority security interest in the collateral;

(v) Collateral is free and clear of third-party liens and in the case of SIPC broker was not acquired pursuant to a repurchase agreement or reverse repurchase agreement;

(vi) Failure to maintain the requisite collateral percentage, after a two-day restoration period, will require the trustee to liquidate collateral; and

(vii) Valuation of Collateral;

(A) The securities must be valued at least weekly, marked-to-market at current market price plus accrued interest; and

(B) The value of collateral must be equal to 102% of the amount of cash transferred by the municipal entity to the dealer bank or security firm under the repurchase agreement plus accrued interest; if the value of securities held as collateral slips below 102% of the value of the cash transferred by the municipality, then additional cash and/or acceptable securities must be transferred; and

(12) Pre-refunded municipal bonds rated at least as high as the lowest applicable rating of U.S. Treasury Bonds by Moody's and S&P. If however, the issue is only rated by S&P (i.e., there is no Moody's rating), then the pre-refunded bonds must have been pre-refunded with cash, direct U.S. or U.S. guaranteed obligations, or "AAA" rated pre-refunded municipals to satisfy this condition; provided that any investment or deposit described above is not prohibited by applicable law.

"Principal Account" means the account of the Bond Fund by that name created under the Indenture.

"Principal Requirement" means (a) with respect to the Bonds, as of any date of calculation, the principal amount of the Bonds maturing or subject to mandatory sinking fund redemption pursuant to the Indenture during the then current Bond Year, and (b) with respect to other Revenue Obligations, as of any date of calculation, the principal amount required to be paid by the City during the then current Bond Year with respect to principal of Revenue Obligations. In computing the Principal Requirement for Revenue Obligations, an amount of Revenue Obligations required to be redeemed pursuant to mandatory redemption in each year shall be deemed to fall due in that year and (except in case of default in observing a mandatory redemption requirement) shall be deducted from the amount of Revenue Obligations maturing on the scheduled maturity date. In the case of any Revenue Obligations supported by a Credit Facility, the Principal Requirements for such Revenue Obligations shall be determined in accordance with the principal retirement schedule specified in the Parity Obligation Documents or Senior Lien Revenue Obligation Documents authorizing the issuance of such Revenue Obligations, rather than any amortization schedule set forth in such Credit Facility unless payments under such Revenue Obligations shall be in default at the time of the determination, in which case the Principal Requirements for such Revenue Obligations shall be determined in accordance with the amortization schedule set forth in such Credit Facility.

"Property" means, collectively, the Financed Property and the Refinanced Property, as described on Exhibit A to the City Purchase Agreement.

"Purchase Price" means the sum of the payments required by the City Purchase Agreement to be paid by the City to the Corporation.

"Qualified Counterparty" means a counterparty to a Derivative Product which at the time such agreement is executed, (i) is a bank, insurance company, indemnity company, financial institution or any similar or related company with a credit rating in one of the two highest Rating Categories of each Rating Agency, (ii) the obligations of such counterparty are guaranteed by an entity described in clause (i), or (iii) the obligations of which are fully secured by obligations described in items (a) or (b) of the definition of Permitted Investments which are (A) valued not less frequently than monthly and have a fair market value, exclusive of accrued interest, at all times at least equal to 105% of the principal amount of the investment, together with the interest accrued and unpaid thereon, (B) held by the Trustee (who shall not be the provider of the collateral), or by any Federal Reserve Bank or a depository acceptable to the Trustee, (C) subject to a perfected first lien on behalf of a Trustee, and (D) free and clear from all third-party liens.

"Refinanced Property" means the property actually funded or refinanced with the proceeds of the Initial Loan.

"Revenue Obligations" means, collectively, Junior Lien Revenue Obligations and the Senior Lien Revenue Obligations.

"Revolving Credit Agreement" means the Revolving Credit Agreement dated April 28, 2022, between the City and the Revolving Credit Provider.

"Revolving Credit Provider" means JPMorgan Chase Bank, National Association.

"Senior Lien Revenue Obligation Documents" or "Senior Lien Obligation Documents" means any ordinance, indenture, contract or agreement of the City constituting or authorizing Senior Lien Revenue Obligations.

"Senior Lien Revenue Obligations" means any obligations of the City which are issued under Senior Lien Obligation Documents, which are payable from Net Operating Revenues.

"SROG" means the Multicity Sub-Regional Operating Group, comprised of the SROG Members.

"SROG Members" means, collectively, the City, the City of Glendale, the City of Mesa, the City of Scottsdale, the City of Tempe, and any other entity which may enter into the JEPA to contract for purchased capacity.

"System" or *"Wastewater System"* means the complete sewage treatment plants and collection system of the City, including such system as it now exists and as it may be improved and extended, consisting of the Property and all treatment, interceptor, collection facilities, and all real and personal property of every nature owned or operated by the City and used or useful in the operation thereof, including, but not limited to, the property whether within or without the boundaries of the City and including all licenses, franchises, easements, leases, rights-of-way, choses in action and other tangible and intangible property and rights therein, including portions thereof which may be owned jointly with other public bodies pursuant to the JEPA or other agreements.

"Tax Exemption Certificate" means the Tax Exemption Certificate of the Corporation and the City executed in connection with the issuance and delivery of the Bonds.

THE CITY PURCHASE AGREEMENT

Section 2.1 Agreement to Issue Bonds; Application of Bond Proceeds. In order to provide funds for (i) the refunding and prepayment of the Initial Loan, (ii) the acquisition of the Financed Property and (iii) payment of the costs of issuance of the Bonds, the Corporation will cause to be issued under the Indenture $381,620,000 aggregate principal amount of Bonds, maturing and bearing interest as provided in the Indenture, as executed and delivered on the date of issuance of the Bonds.

The City will pay the reasonable expenses of the Corporation and the Trustee, if any, including, but not limited to, out-of-pocket expenses and charges, fees and disbursements of counsel, including Bond Counsel, if any, all printing expenses, and all other expenses reasonably incurred by the Corporation and the Trustee, if any, by reason of the execution of the City Purchase Agreement.

* * *

Section 2.3 Project Fund. The City, or the Corporation on behalf of the City, shall establish and maintain a separate fund known as the "Series 2023 Junior Lien Wastewater System Project Fund" (the "Project Fund"). A portion of the net proceeds of the Bonds shall be deposited in the Project Fund pursuant to Section 5.2(b) of the Indenture. In addition, the City may, but shall not be required to deposit additional funds in the Project Fund. Moneys in the Project Fund shall be disbursed by the City, for the following purposes and for no other purposes:

(i) costs and expenses relating to the issuance, sale and delivery of the Bonds;

(ii) payment for labor, services and materials used or furnished in the improvement and construction of the Financed Property, and all real and personal property deemed necessary in connection with the Financed Property and for the miscellaneous expenses incidental to any of the foregoing including the premium on each performance and payment bond;

(iii) reimbursement of capital expenditures relating to the Financed Property, advanced prior to the issuance of the Bonds; and

(iv) payment of the portion of the Purchase Price representing interest on the Bonds during the construction and acquisition of the Financed Property.

The City covenants and agrees that, to the extent no other funds are available, it will apply amounts on deposit in the Project Fund to payment of the interest portion of the Purchase Payments related to the Bonds and the principal portion of the Purchase Payments relating to the Bonds as they come due.

Before any of the foregoing payments may be made, the City shall maintain a record with respect to each such payment to the effect that: (i) none of the items for which the payment is proposed to be made has formed the basis for any payment previously made from the Project Fund, (ii) each item for which payment is proposed to be made is or was necessary in connection with the Financed Property and (iii) each item for which payment is proposed is for a purpose permitted by this Section 2.3. Notwithstanding the foregoing, withdrawals from the Project Fund for transfers to the Rebate Fund may be made by the City provided that all withdrawals and payments shall be in compliance with applicable law.

In the case of any contract providing for the retention of a portion of the contract price, there shall be paid from the Project Fund only the net amount remaining after deduction of any such portion.

Any moneys held in the Project Fund upon completion of the improvements to be financed which are not needed to pay costs of the Financed Property shall be transferred by the City for deposit to the Interest Account under the Indenture and applied to payment of interest of the Bonds.

Amounts on deposit in the Project Fund shall be invested by the City or the Corporation, at the direction of the City in Permitted Investments. In the absence of such direction, such amounts shall be invested in an investment described in Paragraph (4) of such definition (a money market fund rated in one of the two highest rating categories) and may be a fund maintained by the Trustee or an affiliate. Interest income and gain received, or loss realized, from investments or moneys in the Project Fund shall be credited or charged, as the case may be, to the Project Fund. The City and the Corporation shall not knowingly make any investment at a "yield" in excess of the maximum yield, if any, stated with respect to the source of moneys therefor in the Tax Exemption Certificate or any other similar certificate executed and delivered pursuant to Section 148 of the Code or any successor section of the Code, issued by the Corporation in connection with the issuance of the Bonds except during any "temporary period" stated in the Tax Exemption Certificate or any other certificate, and the City shall make and keep appropriate records of such investments, yields and temporary periods as required by Section 148 of the Code or any successor section thereof. Notwithstanding the foregoing, investments may be made at a higher "yield" or for a different "temporary period" or both in accordance with written instructions of Bond Counsel filed with and addressed to the City.

* * *

Section 3.1. Agreement of Sale. The Corporation has sold the Property to the City. In consideration for the acquisition of the Financed Property and the reduction in debt service resulting from the refunding and prepayment of the Initial Loan, the City will pay to the Corporation at the designated office of the Trustee the Purchase Price of the Property, but only from Designated Revenues as prescribed in Section 3.3 of the City Purchase Agreement.

Section 3.3. Amounts of Purchase Price Payable Upon Issuance of Bonds. The City agrees that it will pay as the Purchase Price of the Property, the aggregate of the amounts for which provision is made in the City Purchase Agreement. The payments under the City Purchase Agreement shall be payable solely from Designated Revenues and Other Moneys the City chooses to make available. The payments under the City Purchase Agreement include the following amounts:

(a) A sum equal to the interest on the Bonds falling due on the next succeeding interest payment date.

(b) A sum equal to the principal payments due or subject to mandatory sinking fund redemption for the then current Bond Year.

(c) A sum equal to the Trustee's fees and expenses under the Indenture.

* * *

Section 3.5 Limitation on Source of City Payments. Except to the extent the City determines to make payments from other moneys other than Designated Revenues which are legally available, all amounts to be paid by the City under any section of the City Purchase Agreement shall be payable solely from the Designated Revenues as provided in Article IV thereof. Under no circumstances shall amounts paid under the City Purchase Agreement from Other Moneys constitute a pledge of such Other Moneys and amounts payable by the City hereunder shall never constitute a general obligation of the City or a pledge of ad valorem taxes by the City.

Section 3.6. Obligations of City Unconditional. The obligations of the City to make the payments required in Section 3.3 and to perform and observe the other agreements on its part contained in the City Purchase Agreement shall be absolute and unconditional, regardless of the continued existence of the Property in physical condition satisfactory to the City.

* * *

Section 4.2. Rate Covenant. The City shall continuously control, operate and maintain the System in an efficient and economical manner and on a revenue producing basis and shall at all times establish, fix, maintain and collect rates, fees and other charges for all services furnished by the System fully sufficient at all times:

(a) To provide for 100% of the Expenses of Operation and Maintenance;

(b) To produce Net Operating Revenues in each Bond Year which will equal at least 115% of the interest and Principal Requirement for the then current Bond Year on all Revenue Obligations then outstanding; and

(c) To produce Designated Revenues in each Bond Year which will remedy all deficiencies in payments into any of the funds and accounts required from prior Bond Years for the payment of principal of and interest on the Bonds and Junior Lien Revenue Obligations.

(d) To produce Junior Subordinate Lien Revenues sufficient to meet all requirements on any subordinated obligations payable from the Junior Subordinate Lien Revenues.

For purposes of this Section, the Principal Requirement and interest requirement for a series of Revenue Obligations to which a Derivative Product with a Qualified Counterparty applies may be determined after giving effect to the netting provisions of the City Purchase Agreement, exclusive of any payment which may be owed by the City upon termination prior to maturity of such Derivative Product.

The City shall cause an amount of Operating Revenues to be included in the annual budget and appropriation for every Fiscal Year commencing with the Fiscal Year immediately following the issuance of the Bonds sufficient to meet all requirements of the City Purchase Agreement.

Section 4.3. Prior Lien Obligations; Junior Lien Revenue Obligations for Refunding Purposes. The City shall not incur any obligations payable from the Designated Revenues ranking prior to the obligations of the City under the City Purchase Agreement except for (a) additional Senior Lien Revenue Obligations issued for the purpose of refunding other Senior Lien Revenue Obligations upon meeting the conditions specified in the Senior Lien Revenue Obligation Documents and (b) additional Senior Lien Revenue Obligations issued for other than refunding purposes upon meeting the conditions specified in the Senior Lien Revenue Obligation Documents and upon meeting the conditions specified in Section 4.5 of the City Purchase Agreement.

The City shall not incur Junior Lien Revenue Obligations payable from the Designated Revenues except for (i) additional Junior Lien Revenue Obligations issued for the purpose of refunding the Bonds or Junior Lien Revenue Obligations if the conditions specified in Section 4.4 of the City Purchase Agreement are met, or (ii) additional Junior Lien Revenue Obligations issued for purposes other than refunding the Bonds or other Junior Lien Revenue Obligations if the conditions specified in Section 4.5 of the City Purchase Agreement are met.

Section 4.4. Junior Lien Parity Obligations for Refunding Purposes. Any or all of the Bonds or other Revenue Obligations may be refunded at maturity, upon redemption in accordance with their terms or with the consent of the holders thereof, and the refunding Junior Lien Revenue Obligations so entered into or issued shall constitute Junior Lien Revenue Obligations; provided, however, that all outstanding Bonds and other Revenue Obligations to be refunded are being refunded under arrangements which immediately result in making provision for the payment of the refunded Bonds and other Revenue Obligations.

Section 4.5. Additional Senior Lien Obligations and Junior Lien Revenue Obligations Generally. Additional Revenue Obligations may also be issued for other than refunding purposes as described above in Sections 4.3 and 4.4 if, prior to the issuance thereof, there shall have been procured and filed with the Chief Financial Officer and the Trustee a statement by an Independent Certified Public Accountant or a report of a Consultant to the effect that the Net Operating Revenues of the System for the most recently completed Fiscal Year for which audited financial statements are available or any 12 consecutive calendar months of the immediately preceding 18 calendar month period ("Selected Fiscal Year") were equal to at least (a) if the proposed Revenue Obligations are Senior Lien Revenue Obligations, 120% or (b) if the proposed Revenue Obligations are Junior Lien Revenue Obligations, 115% of Junior Lien Parity Test Debt Service for all outstanding Bonds and other Revenue Obligations, including the obligations proposed to be issued.

Any statement of an Independent Certified Public Accountant or Consultant's report required pursuant to this Section 4.5 may contain the following adjustments to Net Operating Revenues for such most recently completed Selected Fiscal Year:

(a) An adjustment equal to 100% of the increased annual amount attributable to any revision in the schedule of rates and charges imposed not less than 3 months prior to the date of delivery of such additional Revenue Obligations and not fully reflected in the audited Net Operating Revenues actually received during said Fiscal Year. Such adjustment shall be based upon certification by the Independent Certificate Public Accountant or Consultant as to the amount of Net Operating Revenues which would have been received during said Selected Fiscal Year had the new rates been in effect throughout said Selected Fiscal Year.

(b) An adjustment equal to 100% of additional new Net Operating Revenues estimated to be received from new connections to the System in the first Fiscal Year after delivery of said additional Revenue Obligations estimated in writing by the Independent Certificate Public Accountant or Consultant to the extent that such new Net Operating Revenues are not taken into account under subsection (a) above.

(c) If (i) the additional Revenue Obligations are issued for the purpose of paying the cost of acquiring other existing wastewater utilities or (ii) additional Revenue Obligations payable from the Net Operating Revenues or Designated Revenues are being assumed by the City in connection with the acquisition of other existing wastewater utilities, said statement or report may also contain an adjustment of said Net Operating Revenues or Designated Revenues to reflect 80% of the additional estimated Net Operating Revenues which in the written opinion of the Independent Certified Public Accountant or Consultant will be derived from the acquired utility during the first complete Fiscal Year after the issuance of such additional Revenue Obligations or the assumption of such obligations payable from Net Operating Revenues or Designated Revenues of the acquired utility for a Selected Fiscal Year adjusted to reflect the City's ownership and the City's rate structure in effect with respect to the System at the time of the issuance of the additional Revenue Obligations or the assumption of such Revenue Obligations payable from Net Operating Revenues or Designated Revenues.

(d) If the additional Revenue Obligations are issued for the purpose of paying the cost of construction of additions, extensions or improvements to the System, and if money to pay interest on said additional Revenue Obligations has been provided from proceeds of Revenue Obligations or funds on hand in an amount sufficient to pay interest falling due on such Revenue Obligations for the period from the date of issuance thereof until the anticipated completion of the construction of such extensions and improvements, said statement may also contain an adjustment of said Net Operating Revenues or Designated Revenues to reflect 80% of the additional estimated annual Net Operating Revenues which in the written opinion of the

Independent Certified Public Accountant or Consultant will be derived during the first complete Fiscal Year after the completion of such construction from connections to the proposed additions, extensions or improvements.

For purposes of determining Junior Lien Parity Test Debt Service for this Section, the Principal Requirement and interest requirement for a series of Revenue Obligations to which a Derivative Product with a Qualified Counterparty applies may be determined after giving effect to the netting provisions of the City Purchase Agreement, exclusive of any payment which may be owed by the City upon termination prior to maturity of such Derivative Product.

Section 4.6. Derivative Products. The City reserves the right to enter into arrangements involving Derivative Products including swap agreements, forward agreements, interest rate agreements, and other similar agreements, to the extent permitted by law, and make payments on such agreements from Net Operating Revenues or Designated Revenues, provided that payments under such agreements may not be made on a basis which is senior to the payment of any Senior Lien Revenue Obligations and do not permit extraordinary payments such as termination payments to be made on a basis other than subordinate to payment of the Principal Requirement and the interest requirement on Revenue Obligations. To the extent the City enters into such agreements and pledges Designated Revenues to the payment of such agreements, such agreements may only be incurred if the City satisfies the tests for additional Revenue Obligations set forth in the Senior Lien Revenue Obligation Documents and the Junior Lien Revenue Obligation Documents, as applicable, subject to the provisions set forth below. In determining whether the additional Revenue Obligations tests are satisfied in connection with any such agreements, the City is permitted to treat the amount or rate of interest on those agreements or on the Revenue Obligations to which the applicable agreement applies as the amount or rate of interest payable after giving effect to the agreements, provided that any agreement is with a Qualified Counterparty, thus the City is permitted to include the net payment due under such agreements in calculating the additional Revenue Obligations test. Further, the City is permitted to disregard the notional principal amount of any such agreement provided that such agreement is with a Qualified Counterparty. The City agrees to give written notice to each Rating Agency not less than thirty (30) days prior to entering into a Derivative Product payable from Net Operating Revenues or Designated Revenues.

* * *

Section 5.2 Maintenance of the System in Good Condition. The City shall (a) maintain the System in good condition, (b) operate the same in a proper and economical manner and at reasonable cost, and (c) faithfully and punctually perform all duties with reference to the System required by the Constitution and laws of the State of Arizona.

Section 5.3 Insurance. The City shall maintain insurance on the System (which may take the form of or include an adequately-funded program of self-insurance), for the benefit of the holder or holders of obligations payable wholly or in part from the Revenues of the System, for the full insurable value of all buildings and combustible property against loss or damage by fire or lightning, and other coverages and amounts of insurance (including public liability and damage to property of others to the extent deemed prudent by the City), normally carried by others on similar operations. The cost of such insurance may be paid as an Expense of Operation and Maintenance. All money received for losses under any such insurance policies, except public liability policies, is hereby pledged by the City as security for the payment of the Purchase Price until and unless such proceeds are paid out in making good the loss or damage in respect of which such proceeds are received. Self-insurance may be maintained for the System either separately or in connection with any general self-insurance retention program or other insurance program maintained by the City; provided, that (a) any such program has been adopted by the City and (b) an independent insurance or actuarial consultant appointed by the City annually reviews and certifies to the City in writing that any such program is adequate and actuarially sound.

Section 5.4 No Sale, Lease or Encumbrance, Exceptions. Subject to the JEPA and except as hereinafter expressly permitted, the City irrevocably covenants, binds and obligates itself not to sell, lease, encumber or in any manner dispose of the System as a whole until all of the Bonds and all interest thereon shall have been paid in full or provision for payment has been made in accordance with the Indenture.

The City shall have and hereby reserves the right to sell, lease or otherwise dispose of any of the property comprising a part of the System in the following manner, if any one of the following conditions exists: (a) such property is not necessary for the operation of the System, (b) such property is not useful in the operation of the System, (c) such property is not profitable in the operation of the System, (d) a lease of such property is permitted pursuant to Section 4.3 hereof or (e) the disposition of such property will be advantageous to the System and will not adversely affect the security for the holders of the Bonds. In addition the City may sell to Maricopa County or any other political subdivision of the State of Arizona or any agency of any one or more of them, any portion of the System if there is filed with the Chief Financial Officer a certificate executed by the Consultant showing that, in his opinion, the proposed sale will not reduce the Designated Revenues to be received by the System in the full Bond Year next succeeding such sale to an amount less than 115% of Junior Lien Parity Test Debt Service. In making such computation, the Consultant shall consider such matters as the Consultant deems appropriate including: (i) anticipated diminution of Revenues; (ii) anticipated increase or decrease in Expenses of Operation and Maintenance attributable to the sale; and (iii) reduction, if any, in annual Principal Requirements and interest requirements attributable to the application of the sale proceeds for payment of Bonds and other Revenue Obligations theretofore Outstanding. Such sale may include a partial interest in a wastewater facility owned or to be owned in whole or in part by the City, subject to, if applicable, the terms of the JEPA.

All proceeds of any such sale shall be deposited in the applicable Sewerage Replacement Fund, as defined in the System Ordinance.

The City reserves the right to sell or otherwise transfer the System as a whole to any political subdivision or agency of one or more political subdivisions of the State of Arizona to which may be delegated the legal authority to own and operate the System on behalf of the public, and which undertakes in writing, filed with the Chief Financial Officer, the City's obligations hereunder; provided that there shall be first filed with the Chief Financial Officer:

(l) an opinion of nationally recognized bond counsel to the effect that (A) such sale will not cause interest on any Bonds or other Revenue Obligations, if applicable, to become subject to federal income taxation, (B) such sale will not materially diminish the security of the holders of the Bonds (which opinion may be based on the Consultant's report described in clause (2), below) and (C) the obligations of the City hereunder have been validly assumed by such transferee and are the valid and legally binding obligations of such transferee and

(2) an opinion of a Consultant expressing the view that such transfer in and of itself will not result in any diminution of Net Operating Revenues to the extent that in the full Bond Year next succeeding such transfer the Net Operating Revenues will be less than 115% of Junior Lien Parity Test Debt Service. In reaching this conclusion, the Consultant shall take into consideration such factors as he may deem significant including any rate schedule to be imposed by said political subdivision or agency.

Section 5.5 Books, Records and Accounts. The City shall cause to be kept proper books, records and accounts of the System in accordance with standard accounting practices and procedures customarily used for systems of similar nature.

Section 5.6 No Free Service. No wastewater service shall be furnished by the System to the City or any department thereof or to any person, firm or corporation, public or private, or to any public agency or instrumentality, except as provided herein. The reasonable cost and value of all service rendered to the City and its various departments by the System shall be charged against the City and will be paid for as the service occurs from the City's current funds. All payments so made shall be considered Operating Revenues and shall be applied in the manner herein provided for the application of the Revenues of the System.

Section 5.7 Satisfaction of Liens. The City will from time to time duly pay and discharge or cause to be paid and discharged all taxes, assessments and other governmental charges, if any, lawfully imposed upon the System or any part thereof or upon the Designated Revenues, as well as any lawful claims for labor, materials or supplies which if unpaid might by law become a lien or charge upon the System or the Revenues or any part thereof or which might impair the security of the Bonds, except when the City in good faith contests its liability to pay the same.

Section 5.8 Disconnection of Service for Non-Payment. The City shall reasonably and diligently enforce payment of all bills for wastewater services supplied by the System. If a bill becomes delinquent and remains so for a period to be determined in accordance with City policy from time to time, the City will discontinue wastewater service in accordance with the System Ordinance and Arizona law to any premises the owner or occupant of which shall be so delinquent, and will not recommence such service to such premises until all delinquent charges with penalties shall have been paid in full or provisions for such payment satisfactory to the City shall have been made. The City will do all things and exercise all remedies reasonably available to assure the prompt payment of charges for all services supplied by the System.

Section 5.9 No Competing System. The City will not, to the extent permitted by law and except as otherwise permitted pursuant to the System Ordinance, grant a franchise or permit for the operation of any competing wastewater system in the City.

Section 5.10 Maintenance and Utilities. All maintenance and repair of the Property and utilities therefor shall be the responsibility of the City. In exchange for the payment of the Purchase Price hereunder, the Corporation agrees to provide nothing more than the Property.

* * *

Section 5.12 Taxes. It is understood and agreed that all taxes of any type or nature charged to the Corporation or affecting the Property or affecting the amount available to the Corporation from payments received hereunder for the retirement of the Bonds (including charges assessed or levied by any governmental agency, district or corporation having power to levy taxes) shall upon receipt of invoices therefor be paid by the City under Section 3.3 hereof as additional installments of Purchase Price. Upon Written Request of the City, the Corporation agrees to take whatever steps are necessary to contest the amount of tax, or to recover any tax paid if the City believes such tax or assessment to be improper or invalid. The City agrees to reimburse the Corporation for any and all costs, including reasonable attorneys' fees, thus incurred by the Corporation.

* * *

Section 7.1. Events of Default. Any one or more of the following events shall constitute a default under the City Purchase Agreement:

(a) The City shall fail to make any payment of the Purchase Price sufficient to pay amounts due on the Bonds when due; or

(b) The City shall fail to make any other payment of the Purchase Price for a period of 30 days after notice of such failure shall have been given in writing to the City by the Corporation or by the Trustee; or

(c) The City shall fail to perform any other covenant in the City Purchase Agreement for a period of 30 days after written notice specifying such default, provided that if such failure cannot be remedied within such 30 day period, it shall not be deemed an Event of Default so long as the City diligently tries to remedy the same; or

(d) The filing by the City of a voluntary petition in bankruptcy, or failure by the City promptly to lift any execution, garnishment or attachment, or assignment by the City for the benefit of creditors, or the entry by the City into an agreement of composition with creditors, or the approval by a court of competent jurisdiction of a petition applicable to the City in any proceedings instituted under the provisions of the Federal Bankruptcy statutes, as amended, or under any similar acts which may hereafter be enacted.

Section 7.2. *Remedies on Default by City.* Upon the occurrence of an Event of Default as above defined, the Corporation shall, but only if requested to do so by the Trustee, without further demand or notice, exercise any of the available remedies at law or in equity, including, but not limited to, specific performance. The obligations of the City under the City Purchase Agreement may not be accelerated. The Corporation may assign any or all of its rights and privileges under this section to the Trustee, and upon furnishing evidence of such assignment to the City, the Trustee may exercise any or all of such rights or privileges as it may deem advisable.

* * *

Section 9.3. Amendments. The City Purchase Agreement may only be amended with the express written consent of the Trustee and in accordance with the provisions of the Indenture.

INDENTURE

The information set forth below summarizes or paraphrases certain substantially similar provisions of the Indenture.

Section 1.3. Bonds Not General Obligations of the Corporation. The Bonds authorized and the payments to be made by the Corporation thereon and into the various funds established under the Indenture are not general obligations of the Corporation but are limited obligations payable solely from payments under the City Purchase Agreement.

* * *

Section 5.3. Flow of Funds. So long as any Bonds are Outstanding, in each Bond Year, payments received by the Trustee shall be applied in the following manner and order of priority:

(a) *Interest Account.* The Trustee shall deposit to the Interest Account, on or before the last Business Day of each December and June an amount equal to the amount of interest to be paid on Outstanding Bonds on the next Bond Payment Date. Moneys in the Interest Account shall be used to pay interest on the Bonds as it becomes due.

(b) *Principal Account.* The Trustee shall deposit to the Principal Account on or before the last Business Day of each June (in each Bond Year ending on a date on which Bonds mature), an amount equal to the principal amount at maturity plus an amount equal to any mandatory sinking fund redemption requirement of Section 3.2(b) of the Indenture of Bonds Outstanding which will mature or be subject to mandatory redemption on the last day of such Bond Year or any principal amounts coming due which have been called for optional redemption. Moneys in the Principal Account shall be used to retire Bonds by payment at their scheduled maturity, their mandatory sinking fund retirement date or optional redemption date.

* * *

Section 7.1. Events of Default. Each of the following is hereby declared an "Event of Default" under the Indenture:

(a) If payment of any installment of interest on any Bond shall not be made in full when the same becomes due and payable;

(b) If payment of the principal or redemption premium, if any, on any Bond shall not be made in full when the same becomes due and payable;

(c) If, under the provisions of any law for the relief or aid of debtors, any court of competent jurisdiction shall assume custody or control of all or any part of the interests pledged hereunder and such custody or control shall continue for more than 60 days;

(d) If the Corporation shall default in the due and punctual performance of any other of the covenants, conditions, agreements and provisions on its part to be performed as provided herein or in the Bonds and such default shall continue for 30 days after written notice specifying such default and requiring the same to be remedied shall have been given to the Corporation and the City by the Trustee, unless within such 30 days the Corporation shall have commenced and be diligently pursuing in good faith appropriate corrective action to the satisfaction of the Trustee; the Trustee may give such notice in its discretion and shall give such notice at the written request of the Holders of not less than 25% in principal amount of the Bonds then Outstanding;

(e) Any "Event of Default" under the City Purchase Agreement; or

(f) The City fails to comply with any applicable provision of the Tax Exemption Certificate with the result that interest on any of the Bonds becomes includible in gross income for purposes of federal income taxes.

Section 7.2. *Remedies and Enforcement of Remedies.*

(a) Upon the occurrence and continuance of any Event of Default and in accordance with Article VII of the Indenture and Article VII of the City Purchase Agreement, the Trustee may, and upon the written request of the Holders of not less than a majority in principal amount of the Bonds Outstanding, together with indemnification of the Trustee to their satisfaction therefor, shall, proceed forthwith to protect and enforce its rights and the rights of the Bondholders hereunder and the Bonds by such suits, actions or proceedings as the Trustee, being advised by counsel, shall deem expedient, including but not limited to, an action for the recovery of any amounts due hereunder or for damages for the breach of the Indenture, and the Trustee may pursue any other remedy which the law affords, including the remedy of specific performance. The Trustee shall also have those remedies which the Corporation is provided pursuant to Article VII of the City Purchase Agreement, subject to any limitations on such remedies set forth therein.

(b) Regardless of the happening of an Event of Default and subject to Section 7.7 of the Indenture, the Trustee, if requested in writing by the Holders of not less than a majority in principal amount of the Bonds then Outstanding shall, upon being indemnified to its satisfaction therefor, institute and maintain such suits and proceedings as it may be advised shall be necessary or expedient (i) to prevent any impairment of the security hereunder by any acts which may be unlawful or in violation hereof, or (ii) to preserve or protect the interests of the Holders, provided that such request is in accordance with law and the provisions hereof and, in the sole judgment of the Trustee, is not unduly prejudicial to the interest of the Holders of Bonds not making such request.

Section 7.3. No Acceleration. In no event shall the Trustee have the right to accelerate or cause to become immediately due and payable or payable in advance of their scheduled maturity dates, other than an optional redemption pursuant to the Indenture and then only to the extent of the amount to be so redeemed and only pursuant to Article III of the Indenture, amounts due hereunder.

Section 7.4. Application of Revenues and Other Moneys After Default. During the continuance of an Event of Default all moneys received by the Trustee pursuant to any right given or action taken under the provisions of this Article, shall, after payment of the costs and expenses of the proceedings resulting in the collection of such moneys and of the fees, expenses and advances incurred or made by the Trustee with respect thereto, and the creation of a reasonable reserve for anticipated costs, fees and expenses be deposited in the Bond Fund, and all amounts held by the Trustee hereunder shall be applied as follows:

First: To the payment of amounts, if any, payable pursuant to the Tax Exemption Certificate;

Second: To the payment to the Persons entitled thereto of all installments of interest (including interest on amounts unpaid when due on the Bonds) then due, and, if the amount available shall not be sufficient to pay in full any installment or installments then due, then to the payment thereof ratably in a manner consistent with the second sentence of Section 5.3(a) of the Indenture, according to the amounts due thereon to the Persons entitled thereto, without any discrimination or preference; and

Third: To the payment to the Persons entitled thereto of the unpaid Principal Installments or redemption price of any Bonds which shall have become due, whether at maturity or by call for redemption, in the order of their due dates, and of the amounts available shall not be sufficient to pay in full all the Bonds due on any date, then to the payment thereof ratably in a manner consistent with the second sentence of Section 5.3(b) of the Indenture, according to the amounts of Principal Installments or redemption price due on such date, to the Persons entitled thereto, without any discrimination or preference.

Whenever moneys are to be applied by the Trustee pursuant to the provisions of this Section, such moneys shall be applied by it at such times, and from time to time, as the Trustee shall determine, having due regard for the amount of such moneys available for application and the likelihood of additional moneys becoming available for such application in the future. Whenever the Trustee shall apply such moneys, it shall fix the date upon which such application is to be made and upon such date interest on the amounts of principal of the Bonds to be paid on such dates shall cease to accrue. The Trustee shall give such notice as it may deem appropriate of the deposit with it of any such moneys and of the fixing of any such date, and shall not be required to make payment to the Holder of any unpaid Bond until such Bond shall be presented to the Trustee for appropriate endorsement of any partial payment or for cancellation if fully paid.

Whenever all principal of and interest on the Bonds which has become due has been paid under the provisions of this Section and all expenses and charges of the Trustee have been paid and the Bond Fund contains the amounts then required to be credited thereto, any balance remaining shall be paid to the City.

* * *

Section 7.7. *Individual Bondholder Action Restricted.*

(a) No Holder of any Bond shall have any right to institute any suit, action or proceeding in equity or at law for the enforcement hereof or for the execution of any trust hereunder or for any remedy hereunder except for the right to institute any suit, action or proceeding in equity or at law for the enforcement of the Trustee's duties and powers hereunder upon the occurrence of all of the following events:

(i) The Holders of at least a majority in principal amount Bonds Outstanding, shall have made written request to the Trustee to proceed to exercise the powers granted herein; and

(ii) Such Bondholders shall have offered the Trustee indemnity as provided in Section 8.2(e) of the Indenture; and

(iii) The Trustee shall have failed or refused to exercise the duties or powers herein granted for a period of 60 days after receipt by it of such request and offer of indemnity; and

(iv) During such 60 day period no direction inconsistent with such written request has been delivered to the Trustee by the Holders of a greater majority in principal amount of Bonds then Outstanding.

(b) No one or more Holders of Bonds shall have any right in any manner whatsoever to affect, disturb or prejudice the security hereof or to enforce any right hereunder except in the manner herein provided and for the equal benefit of the Holders of all Bonds Outstanding.

(c) Nothing contained herein shall affect or impair, or be construed to affect or impair, the right of the Holder of any Bond (i) to receive payment of the principal of or interest on such Bond, as the case may be, on or after the due date thereof or (ii) to institute suit for. the enforcement of any such payment on or after such due date; provided, however, no Holder of any Bond may institute or prosecute any such suit or enter judgment therein if, and to the extent that, the institution or prosecution of such suit or the entry of judgment therein would, under applicable law, result in the surrender, impairment, waiver or loss of the lien hereof on the moneys, funds and properties pledged hereunder for the equal and ratable benefit of all Holders of Bonds.

* * *

Section 7.9. Waiver of Event of Default.

(a) No delay or omission of the Trustee or of any Holder of the Bonds to exercise any right or power accruing upon any Event of Default shall impair any such rights or power or shall be construed to be a waiver of any such Event of Default or an acquiescence therein. Every power and remedy given by this Article may be exercised from time to time and as often as may be deemed expedient.

(b) The Trustee may waive any Event of Default which in its opinion shall have been remedied before the entry of final judgment or decree in any suit, action or proceeding instituted by it under, the provisions hereof, or before the completion of the enforcement of any other remedy hereunder.

(c) In case of any waiver by the Trustee of an Event of Default hereunder, the Corporation, the Trustee and the Bondholders shall be restored to their former positions and rights hereunder, respectively, but no such waiver shall extend to any subsequent or other Event of Default or impair any right consequent thereon. The Trustee shall not be responsible to anyone for waiving or refraining from waiving any Event of Default in accordance with this Section.

* * *

Section 9.1. Supplements not Requiring Consent of Bondholders. The Corporation acting through the Corporation Representative and the Trustee may, but without the consent of or notice to any of the Holders, enter into one or more supplements to the Indenture for one or more of the following purposes:

(a) To cure any ambiguity or formal defect or omission herein or to correct or supplement any provision herein which may be inconsistent with any other provision herein, or, to make any other provisions with respect to matters or questions arising hereunder provided such action shall, in the opinion of the Trustee, not materially adversely affect the interests of the Holders;

(b) To grant or confer upon the Holders any additional rights, remedies, powers or authority that may lawfully be granted or conferred upon them;

(c) To secure additional revenues or provide additional security or reserves for payment of the Bonds;

(d) To comply with the requirements of any state or federal securities laws or the Trust Indenture Act of 1939, as from time to time amended, if required by law or regulation lawfully issued thereunder;

(e) To provide for the appointment of a successor trustee or co-trustee pursuant to the terms of Section 8.6 and Section 8.11 of the Indenture;

(f) To permit Bonds in bearer form if, in the opinion of Bond Counsel received by the Corporation and the Trustee, applicable such action will not cause the interest on any Bonds to become includible in gross income for purposes of federal income taxes;

(g) To preserve the exclusion of the interest on the Bonds from gross income for purposes of federal or State income taxes and to preserve the power of the Corporation to continue to issue bonds or other obligations (specifically not limited to the Bonds authorized hereby) the interest on which is likewise exempt from federal and State income taxes; and

(h) To adopt procedures for the disclosure of information to Bondholders and to others in accordance with any guidelines for such purpose promulgated by the American Bankers Association or some other similar national organization, as such guidelines may be made applicable to the Indenture by agreement of the Trustee, the Corporation and the City.

Section 9.2. Supplements Requiring Consent of Bondholders.

(a) Other than supplements to the Indenture referred to in Section 9.1 of the Indenture and subject to the terms and provisions and limitations contained in this Article and not otherwise, the Holders of not less than a majority in principal amount of the Bonds then Outstanding, shall have the right, from time to time, anything contained herein to the contrary notwithstanding, to consent to and approve the execution by the Corporation acting through the Corporation Representative and the Trustee of such Supplement as shall be deemed necessary and desirable by the Corporation and the Trustee for the purpose of modifying, altering, amending, adding to or rescinding, in any particular, any of the terms or provisions contained herein; provided, however, nothing in this Section or Section 9.1 of the Indenture shall permit or be construed as permitting a supplement to the Indenture which would:

(i) extend the stated maturity of or time for paying interest on any Bond or reduce the principal amount of or the redemption premium or rate of interest payable on any Bond without the consent of the Holder of such Bond;

(ii) prefer or give a priority to any Bond over any other Bond without the consent of the Holder of each Bond then Outstanding not receiving such preference or priority;

(iii) reduce the principal amount of Bonds then Outstanding the consent of the Holders of which is required to authorize such Supplement without the consent of the Holders of all Bonds then Outstanding;

(iv) increase the principal amount of Bonds then Outstanding, the request of the Holders of which is required by Section 7.1(d) of the Indenture, without the consent of the Holders of all Bonds then Outstanding; or

(v) reduce the redemption price of any Bond upon optional redemption or reduce any period of time prior to commencement of any optional redemption period set forth in Section 3.2 without the consent of the Holder of such Bond.

(b) If at any time the Corporation shall request the Trustee to enter into a Supplement pursuant to this Section, the Trustee shall, upon being satisfactorily and specifically indemnified by the City with respect to expenses with respect to such Supplement, cause notice of the proposed execution of such Supplement to be mailed by first class mail, postage pre-paid, to all registered Holders of Bonds then Outstanding at their addresses as they appear on the registration books herein provided for. The Trustee shall not, however, be subject to any liability to any Bondholder by reason of its failure to mail, or the failure of such Bondholder to receive, the notice required by this Section, and any such failure shall not affect the validity of such Supplement when consented to and approved as provided in this Section. Such notice shall briefly set forth the nature of the proposed Supplement and shall state that copies thereof are on file at the office of the Trustee for inspection by all Bondholders.

* * *

Section 9.4. Amendments to City Purchase Agreement Not Requiring Consent of Bondholders. The Corporation and the Trustee may, without the consent of or notice to any of the holders consent to and join with the City in the execution and delivery of any amendment, change or modification of the City Purchase Agreement as may be required (i) by the provisions thereof; (ii) to cure any ambiguity or formal defect or omission therein or to correct or supplement any provision therein which may be inconsistent with any other provision therein, or to make any other provisions with respect to matters or questions arising thereunder provided such action shall, in the opinion of the Trustee, not materially adversely affect the interests of the holders; (iii) to preserve the exclusion of the interest on the Bonds from gross income for purposes of federal or State income taxes and to preserve the power of the Corporation to continue to issue bonds or other obligations (specifically not limited to the Bonds authorized hereby) the interest on which is likewise exempt from federal and State income taxes in connection with any other change therein which in the opinion of the Trustee will not materially adversely affect the interests of the holders or the Trustee.

Section 9.5. Amendments to City Purchase Agreement Requiring Consent of Bondholders.

(a) Except for amendments, changes or modification to the City Purchase Agreement referred to in Section 9.4 above and subject to the terms and provisions and limitations contained in Article IX of the

Indenture and not otherwise, the Trustee may consent to and join with the City in the execution and delivery of any amendment, change or modification to the City Purchase Agreement only upon the consent of not less than a majority in principal amount of Bonds then outstanding, given as provided in this Section, provided, however, no such amendment, change or modification may affect the obligation of the City to make payments under the City Purchase Agreement or reduce the amount of or extend the time for making such payments without the consent of the Holders of all Bonds then outstanding.

(b) If at any time the Corporation and the City shall request the consent of the Trustee to any such amendment, change or modification to the City Purchase Agreement the Trustee shall, upon being satisfactorily indemnified by the City with respect to expenses, cause notice of the proposed amendment, change or modification to be given in the same manner as provided in Section 9.2 hereof with respect to Supplements hereto. Such notice shall briefly set forth the nature of the proposed amendment, change or modification and shall state that copies thereof are on file at the office of the Trustee for inspection by all Bondholders.

(c) If the consent to and approval of the execution of such amendment, change or modification is given by the Holders of not less than the aggregate principal amount or number of Bonds specified in subsection (a) within the time and in the manner provided by Section 9.2 of the Indenture with respect to Supplements hereto, but not otherwise, such amendment, change or modification may be consented to, executed and delivered upon the terms and conditions and with like binding effect upon the Holders as provided in Sections 9.2 and 9.3 of the Indenture with respect to Supplements to the Indenture.

Section 10.1. Discharge. If payment of all principal of, premium, if any, and interest on all of the Bonds in accordance with their terms and as provided herein is made, or is provided for in accordance with this Article, and if all other sums, if any, payable by the Corporation shall be paid, then the liens, estates and security interests granted by the Indenture shall cease. Thereupon, upon the request of the Corporation, and upon receipt by the Trustee of an opinion of counsel addressed to the Corporation and Trustee stating that all conditions precedent to the satisfaction and discharge of the lien hereof have been satisfied, the Trustee shall execute and deliver proper instruments acknowledging such satisfaction and discharging the lien hereof and the Trustee shall transfer all property held by it hereunder, other than moneys or obligations held by the Trustee for payment of amounts due or to become due on the Bonds, to the Corporation, the City or such other Person as may be entitled thereto as their respective interests may appear. Such satisfaction and discharge shall be without prejudice to the rights of the Trustee thereafter to charge and be compensated or reimbursed for services rendered and expenditures incurred in connection herewith.

The Corporation or the City may at any time surrender to the Trustee for cancellation any Bonds previously authenticated and delivered which the Corporation or the City may have acquired in any manner whatsoever and such Bonds upon such surrender and cancellation shall be deemed to be paid and retired.

Section 10.2. Providing for Payment of Bonds. Payment of all or any part of the Bonds in authorized denominations may be provided for by the deposit with the Trustee or any financial institution meeting the requirements as a successor Trustee under Section 8.6 of the indenture which may be designated by the City and acceptable to the Trustee to serve as its agent (the *"Depository Trustee")* of moneys or Defeasance Obligations which are not redeemable in advance of their maturity dates. The moneys and the maturing principal and interest income on such Defeasance Obligations, if any, shall be sufficient, as evidenced by a certificate of an independent nationally recognized certified public accountant or firm of such accountants or public finance consulting firm of national reputation acceptable to the City, to pay when due the principal of and interest on such Bonds (a *"Verification Report").* The moneys and Defeasance Obligations shall be held by the Trustee or the Depository Trustee irrevocably in trust for the Holders of such Bonds solely for the purpose of paying the principal and interest on such Bonds as the same shall mature or come due.

If payment of Bonds is so provided for, the Trustee or the Depository Trustee shall mail a notice so stating to each Holder of a Bond so provided for.

Bonds, the payment of which has been provided for in accordance with this Section, shall no longer be deemed Outstanding under the applicable Indenture. The obligation of the Corporation in respect of such Bonds shall nevertheless continue but the Holders thereof shall thereafter be entitled to payment only from the moneys or Defeasance Obligations deposited with the Bond Trustee or the Depository Trustee to provide for the payment of such Bonds.

* * *

THE JOINT EXERCISE POWERS AGREEMENT (JEPA)

General

The JEPA is an agreement among the SROG Members for the construction, operation and maintenance of the Jointly Used Facilities. As lead agency under the JEPA, the City is responsible for the planning, budgeting, personnel and accepts federal grants on behalf of the SROG Members.

Construction of Jointly Used Facilities

All construction of Jointly Used Facilities is required to be done under plans and specifications prepared by and under engineering supervision furnished by engineers engaged by the City. Prior to the start of construction of any Jointly Used Facilities, the City is required to submit the plans and specifications to the SROG Committee for its concurrence.

Pursuant to the JEPA, the SROG Members agree to pay their proportionate share of the construction cost of Jointly Used Facilities on the basis of their agreed upon participation in the facility. The proportionate allocation of construction cost is calculated by the City and submitted to the SROG Committee for approval. Each SROG Member is required to advance funds to the City in accordance with cash flow estimates for improvements and contingencies prepared by the City each May 1 and November 1. The City bills each SROG Member monthly, thirty days in advance for one-sixth of such SROG Member's share of the City's total six-month cash flow estimate.

Payment of Operations, Maintenance and Replacement Costs

Each SROG Member agrees to pay to the City its proportionate share of the actual costs of operation, maintenance and replacement of the Jointly Used Facilities. Each SROG Member's proportionate share of the actual cost is based upon each SROG Member's actual sewage flow and the cost of treating such actual sewage flow including, but not limited to the cost of treating its biochemical oxygen demand and suspended solids. Any SROG Member which exceeds its Purchased Capacity is required to pay the proportionate cost attributed to their total flows for operation, maintenance and replacement, and a rental charge until such time that the SROG Member purchases additional capacity at least equal to their excessive flow.

The City is required to transfer its own funds to the Operating Fund representing its proportionate share of operation and maintenance costs. Operation, maintenance and replacement costs include the City's cost for applicable salaries and benefits, parts, materials and services, applicable equipment replacement and appropriate indirect services, in each case relating to the Jointly Used Facilities.

Funds Established Under the JEPA

Pursuant to the JEPA, the City establishes an Operating Fund, a Capital Fund, an Equipment Replacement Fund and a Facility Rental Distribution Fund.

Events of Default and Remedies

In the event of default by any of the SROG Members in any of the terms or conditions of the JEPA, then, within thirty (30) days' following the giving of written notice of such default, the defaulting SROG Member is required to remedy such default either by advancing the necessary funds and/or rendering the necessary performance. Any SROG Member is entitled to dispute an asserted default upon payment or performance under protest by submission of the dispute to the SROG Committee.

In the event a default shall continue for a period of two months or more without having been cured or without the defaulting SROG Member having commenced or continued action in good faith to cure such default, or in the event the question of whether an act of default exists is the subject of litigation and such default continues for a period of two months following a final determination by a court of competent jurisdiction that an act of default exists, the nondefaulting SROG Members may, in addition to any remedy provided for by law for breach of a contractual obligation, including specific performance, declare a forfeiture of the unused Purchased Capacity, if any, of the defaulting SROG Member. Such forfeited unused Purchased Capacity will be distributed to the remaining SROG Members as may be agreed upon by the SROG Members.

APPENDIX H

[LETTERHEAD OF GREENBERG TRAURIG, LLP]

[Closing Date]

Proposed Form of Legal Opinion of Bond Counsel

We hereby certify that we have examined a certified copy of the proceedings of the City of Phoenix Civic Improvement Corporation (the *"Corporation"*) passed preliminary to the issue of its $381,620,000 Junior Lien Wastewater System Revenue Bonds, Series 2023 (the *"Bonds"*) in fully registered form, dated the date of initial authentication and delivery thereof. The Bonds are being issued to finance improvements to the wastewater system (the *"System"*) of the City of Phoenix, Arizona (the *"City"*) and to refund certain obligations (the *"Prior Obligations"*) previously issued to finance improvements to the System.

We have examined the law and such documents and matters as we have deemed necessary to render this opinion, including, without limitation, the original or a copy identified to our satisfaction as being a true copy of the Indenture (as defined herein).

As to questions of fact material to the opinions expressed herein, we have relied upon, and have assumed due compliance with the provisions of, the proceedings and other documents, and have relied upon certifications and representations furnished to us without undertaking to verify the same by independent investigation, including, without limitation, the use to be made of the proceeds of the Bonds. Reference is made to certifications of and opinions of counsel to parties other than the Corporation with respect to the existence and powers of such parties to enter into and perform the instruments referred to, the authorization, execution and delivery of such instruments by such parties and such instruments being binding upon and enforceable against such parties; we express no opinion as to such matters.

The Bonds are being issued pursuant to a Bond Indenture, dated as of November 1, 2023 (the *"Indenture"*) between the Corporation and U.S. Bank Trust Company, National Association, as trustee (the *"Trustee"*). The Bonds are payable solely, as to both principal and interest, from payments made by the City under the City Purchase Agreement, dated as of November 1, 2023 (the *"City Purchase Agreement"*) between the Corporation and the City.

Based upon the foregoing, we are of the opinion as of this date, which is the date of initial delivery of the Bonds against payment therefor, that:

1. The Indenture, the City Purchase Agreement and the Bonds have been duly authorized, executed and delivered by the Corporation and are valid and binding upon and enforceable against the Corporation.

2. The Bonds constitute special obligations of the Corporation, and the principal of and interest and any premium on the Bonds (collectively, *"debt service"*), unless paid from other sources, are payable solely from the revenues and other moneys pledged and assigned by the Indenture to secure that payment. Those revenues and other moneys include payments required to be made by the City under the City Purchase Agreement, and the City's obligation to make those payments is secured by a pledge of Designated Revenues (as defined in the City Purchase Agreement) received from the System. The Indenture creates the pledge which it purports to create in the pledged revenues and of other moneys in the funds and accounts created by the Indenture (other than the Rebate Fund), which pledge will be perfected only as to the revenue and other moneys on deposit in the funds and accounts created by the Indenture and held by the Trustee. The Bonds and the payment of debt service are not secured by an obligation or pledge of any moneys raised by taxation; the Bonds do not represent or constitute a debt or pledge of the general credit of the Corporation, the City or the State of Arizona; and the City Purchase Agreement, including the City's obligation to make the payments required thereunder, does not represent or constitute a debt or pledge of the general credit of the City.

3. The Internal Revenue Code of 1986, as amended (the *"Code"*), includes requirements which the City and the Corporation must continue to meet after the issuance of the Bonds in order that interest on the Bonds be excludable from gross income for federal income tax purposes. The failure of the City and the Corporation to meet these requirements may cause interest on the Bonds to be included in gross income for federal income tax purposes retroactive to their date of issuance. The City and the Corporation have covenanted to take the actions required by the Code in order to maintain the excludability from gross income for federal income tax purposes of interest on the Bonds. (Subject to the limitations in the next to last paragraph hereof, the City and the Corporation have full legal power and authority to comply with such covenants.) Under existing statutes, regulations, rulings and court decisions, subject to the assumption stated in the last sentence of this paragraph, interest on the Bonds is excludable from the gross income of the owners thereof for federal income tax purposes, and, if the foregoing is the case, the interest on the Bonds is exempt from income taxation under the laws of the State of Arizona. Furthermore, interest on the Bonds is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals. In the case of the alternative minimum tax imposed by Section 55(b)(2) of the Code on applicable corporations (as defined in Section 59(k) of the Code), interest on the Bonds is not excluded from the determination of adjusted financial income. We express no opinion regarding other federal tax consequences resulting from the ownership, receipt or accrual of interest on, or disposition of, the Bonds. In rendering the opinion expressed above, we have assumed continuing compliance with the tax covenants referred to above that must be met after the issuance of the Bonds in order that interest on the Bonds not be included in gross income for federal tax purposes.

In rendering the foregoing opinions, we have assumed and relied upon compliance with the City's and the Corporation's covenants and the accuracy, including with respect to the application of the proceeds of the Prior Obligations and the Bonds, respectively, which we have not independently verified, of the City's and the Corporation's representations and certifications contained in the transcript. The accuracy of those representations and certifications, and the City's and the Corporation's compliance with those covenants, may be necessary for the interest on the Bonds to be and remain excluded from gross income for federal and State income tax purposes and for certain of the other tax effects stated above. Failure to comply with certain requirements subsequent to issuance of the Bonds could cause interest on the Bonds to be included in gross income for federal and State income tax purposes retroactively to the date of issuance of the Bonds. We have also relied upon the report of Raftelis Financial Consultants, Inc. as to the ratio of net operating revenues of the System for the fiscal year ended June 30, 2022, to maximum annual debt service on the Bonds and outstanding obligations on a parity therewith.

The rights of the owners of the Bonds and the enforceability of those rights under the Bonds and the documents referred to above may be subject to bankruptcy, insolvency, reorganization, moratorium, and similar laws affecting creditors' rights and the enforcement of those rights may be subject to the exercise of judicial discretion in accordance with general principles of equity.

Our opinion represents our legal judgment based upon our review of the law and the facts we deem relevant to render such opinion and is not a guarantee of a result. This opinion is given as of the date hereof and we assume no obligation to review or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.

Respectfully submitted,

APPENDIX I

Form of Continuing Disclosure Undertaking

This Continuing Disclosure Undertaking, dated November 1, 2023 (the *"Undertaking"* or the *"Agreement"*), is executed and delivered by the City of Phoenix, Arizona (the *"City"*), in connection with the issuance of its $381,620,000 Junior Lien Wastewater System Revenue Bonds, Series 2023 (the *"Bonds"*). The Bonds are being issued pursuant to a Bond Indenture, dated as of November 1, 2023 (the "*Indenture*"), between the City of Phoenix Civic Improvement Corporation (the "*Corporation*") and U.S. Bank Trust Company, National Association, as trustee (the "*Trustee*"). The City covenants and agrees as follows:

1. *Purpose of this Undertaking.* This Undertaking is executed and delivered by the City as of the date set forth above, for the benefit of the beneficial owners of the Bonds and in order to assist the Participating Underwriters in complying with the requirements of the Rule (as defined below). The City represents that it will be the only obligated person with respect to the Bonds at the time the Bonds are delivered to the Participating Underwriters and that no other person is expected to become so committed at any time after issuance of the Bonds.

2. *Definitions.* The terms set forth below shall have the following meanings in this Undertaking, unless the context clearly otherwise requires.

"*Annual Financial Information"* means the financial information and operating data set forth in *Exhibit I.*

"*Annual Financial Information Disclosure"* means the dissemination of disclosure concerning Annual Financial Information and the dissemination of the Audited Financial Statements as set forth in Section 4.

"*Audited Financial Statements"* means the audited financial statements of the City prepared pursuant to the standards and as described in *Exhibit I.*

"*City Purchase Agreement"* means the City Purchase Agreement dated as of November 1, 2023, between the City and the Corporation.

"*Commission"* means the Securities and Exchange Commission.

"*Dissemination Agent"* means any agent designated as such in writing by the City and which has filed with the City a written acceptance of such designation, and such agent's successors and assigns.

"*EMMA"* means the Electronic Municipal Market Access system of the MSRB. As of the date of this Disclosure Undertaking, information regarding submissions to EMMA is available at http://emma.msrb.org.

"*Event"* means the occurrence of any of the events set forth in *Exhibit II.*

"*Exchange Act"* means the Securities Exchange Act of 1934, as amended.

"*Financial Obligations*" means a debt obligation, a derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation, or a guarantee of a debt obligation or a derivative. The term Financial Obligation shall not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.

"*Listed Event*" means the occurrence of events set forth in *Exhibit II*, provided that with respect to any Event qualified by the phrase "if material," materially shall be interpreted under the Exchange Act. If an Event is not qualified by the phrase "if material," such Event shall in all cases be material.

"*Listed Events Disclosure*" means dissemination of disclosure concerning a Listed Event as set forth in Section 5.

"*MSRB*" means the Municipal Securities Rulemaking Board.

"*Participating Underwriter*" means each broker, dealer or municipal securities dealer acting as an underwriter in the primary offering of the Bonds.

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

"*State*" means the State of Arizona.

"*Undertaking*" means the obligations of the City pursuant to Sections 4 and 5 hereof.

3. *CUSIP Number/Final Official Statement.* The CUSIP Numbers of the Bonds are as follows:

Series 2023 Bonds

Maturity Date	CUSIP No.*	Coupon	Maturity Date	CUSIP No.*	Coupon
07/01/2028	71883PLW5	5.00%	07/01/2037	71883PMF1	5.00%
07/01/2029	71883PLX3	5.00	07/01/2038	71883PMG9	5.00
07/01/2030	71883PLY1	5.00	07/01/2039	71883PMH7	5.00
07/01/2031	71883PLZ8	5.00	07/01/2040	71883PMJ3	5.00
07/01/2032	71883PMA2	5.00	07/01/2041	71883PMK0	5.00
07/01/2033	71883PMB0	5.00	07/01/2042	71883PML8	5.00
07/01/2034	71883PMC8	5.00	07/01/2043	71883PMM6	5.00
07/01/2035	71883PMD6	5.00	07/01/2047	71883PMN4	5.25
07/01/2036	71883PME4	5.00			

The Final Official Statement relating to the Bonds is dated October 24, 2023 (the *"Final Official Statement"*).

4. *Annual Financial Information Disclosure.* Subject to Section 9 of this Undertaking, the City shall disseminate its Annual Financial Information and its Audited Financial Statements, if any, (in the form and by the dates set forth in *Exhibit I*) to the MSRB through EMMA in an electronic format as prescribed by the MSRB. The City is required to deliver such information in such manner and by such time so that such entities receive the information by the dates specified.

If any part of the Annual Financial Information can no longer be generated because the operations to which it is related have been materially changed or discontinued, the City will disseminate a statement to such effect as part of its Annual Financial Information for the year in which such event first occurs.

If any amendment is made to this Agreement, the Annual Financial Information for the year in which such amendment is made shall contain a narrative description of the reasons for such amendment and its impact on the type of information being provided.

* CUSIP® is a registered trademark of the American Bankers Association. CUSIP Global Services ("*CGS*") is managed on behalf of the American Bankers Association by FactSet Research System Inc. Copyright© 2023 CUSIP Global Services. All rights reserved. CUSIP® numbers are provided for convenience of reference only. None of the City, the Municipal Advisor of the City, the Participating Underwriters or their respective counsel or agents takes responsibility for the accuracy of such numbers.

5. *Listed Events Disclosure.* Subject to Section 9 of this Undertaking, the City hereby covenants that it will disseminate in a timely manner not in excess of ten business days after the occurrence of the event, Listed Events Disclosure to the MSRB through EMMA in an electronic format as prescribed by the MSRB. Notwithstanding the foregoing, notice of optional or unscheduled redemption of any of the Bonds or defeasance of any Bonds need not be given under this Agreement any earlier than the notice (if any) of such redemption or defeasance is given to the Bondholders pursuant to the applicable Indenture.

6. *Duty to Update.* The City shall determine, in the manner it deems appropriate, the address of EMMA or such alternate repository specified by the MSRB each time it is required to file information with such entities.

7. *Consequences of Failure of the City to Provide Information.* The City shall give notice in a timely manner and within ten business days after the occurrence of such failure, to the MSRB through EMMA, of any failure to provide Annual Financial Information Disclosure in the manner and at the time required.

In the event of a failure of the City to comply with any provision of this Undertaking, the beneficial owner of any Bond may seek mandamus or specific performance by court order, to cause the City to comply with its obligations under this Undertaking. A default under this Undertaking shall not be deemed an event of default under the City Purchase Agreements or the Indentures, and the sole remedy available to Bondholders under this Undertaking in the event of any failure of the City to comply with this Undertaking shall be an action to compel performance.

8. *Amendments; Waiver.* Notwithstanding any other provision of this Agreement, the City by certified resolution or ordinance authorizing such amendment or waiver, may amend this Undertaking, and any provision of this Undertaking may be waived only if:

(a) The amendment or waiver is made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature, or status of the City, or type of business conducted;

(b) This Undertaking, as amended or affected by such waiver, would have complied with the requirements of the Rule at the time of the primary offering, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(c) The amendment or waiver does not materially impair the interests of the beneficial owners of the Bonds, as determined by parties unaffiliated with the City (such as the Trustee) or by approving vote of the Bondholders pursuant to the applicable Indenture at the time of the amendment.

The Annual Financial Information containing amended operating data or financial information resulting from such amendment or waiver, if any, shall explain, in narrative form, the reasons for the amendment or waiver and the impact of the change in the type of operating data or financial information being provided. If an amendment or waiver is made specifying the generally accepted accounting principles (*"GAAP"*) to be followed in preparing financial statements and such changes are material, the Annual Financial Information for the year in which the change is made shall present a comparison between the financial statements or information prepared on the basis of the new accounting principles. Such comparison shall include a qualitative discussion of the differences in the accounting principles and the impact of the change in the accounting principles in the presentation of the financial information in order to provide information to investors to enable them to evaluate the ability of the City to meet its obligations. To the extent reasonably feasible, such comparison also shall be quantitative. If the accounting principles of the City change or the Fiscal Year of the City changes, the City shall file a notice of such change in the same manner as for a notice of Listed Event.

9. *Termination of Undertaking.* The Undertaking of the City shall be terminated hereunder if the City shall no longer have liability for any obligation on or relating to repayment of the Bonds under the City Purchase Agreements. The City shall give notice in a timely manner if such event occurs to the MSRB and through EMMA in an electronic format as prescribed by the MSRB.

10. *Dissemination Agent.* The City may, from time to time, appoint or engage a Dissemination Agent to assist it in carrying out its obligations under this Undertaking, and may discharge any such Agent, with or without appointing a successor Dissemination Agent.

11. *Additional Information.* Nothing in this Undertaking shall be deemed to prevent the City from disseminating any other information, using the means of dissemination set forth in this Undertaking or any other means of communication, or including any other information in any Annual Financial Information Disclosure or Listed Events Disclosure, in addition to that which is required by this Undertaking. If the City chooses to include any information from any document or Listed Events Disclosure in addition to that which is specifically required by this Undertaking, the City shall have no obligation under this Undertaking to update such information or include it in any future Annual Financial Information Disclosure or Listed Events Disclosure.

12. *Beneficiaries*. This Undertaking has been executed in order to assist the Participating Underwriters in complying with the Rule; however, this Undertaking shall inure solely to the benefit of the City, the Dissemination Agent, if any, and the beneficial owners of the Bonds, and shall create no rights in any other person or entity.

13. *Recordkeeping*. The City shall maintain records of all Annual Financial Information Disclosure and Listed Events Disclosure including the content of such disclosure, the names of the entities with whom such disclosure was filed and the date of filing such disclosure.

14. *Assignment*. The City shall not transfer obligations under either City Purchase Agreement unless the transferee agrees to assume all obligations of the City under this Agreement or to execute an Undertaking meeting the requirements of the Rule.

15. *Governing Law.* This Undertaking shall be governed by the laws of the State.

CITY OF PHOENIX, ARIZONA

By: Jeffrey J. Barton
Its: City Manager

By: ______________________________
Kathleen Gitkin
Chief Financial Officer

ATTEST:

By: ______________________________
City Clerk

APPROVED AS TO FORM:

By: ______________________________
City Attorney

EXHIBIT I

ANNUAL FINANCIAL INFORMATION AND AUDITED FINANCIAL STATEMENTS

"Annual Financial Information" means financial information and operating data of the type contained in the Final Official Statement under the following captions: "SCHEDULE OF FORECASTED NET OPERATING REVENUES, AND DESIGNATED REVENUES SENIOR LIEN AND JUNIOR LIEN DEBT SERVICE REQUIREMENTS AND ESTIMATED SENIOR LIEN AND JUNIOR LIEN DEBT SERVICE COVERAGES" (actual results for most recently completed fiscal year only), and "APPENDIX A — Summary Information of the City of Phoenix Wastewater System."

All or a portion of the Annual Financial Information and the Audited Financial Statements as set forth below may be included by reference to other documents which have been submitted to the MSRB through EMMA or filed with the Commission. If the information included by reference is contained in a Final Official Statement, the Final Official Statement must be available from the MSRB through EMMA or the Commission. The City shall clearly identify each such item of information included by reference.

Annual Financial Information exclusive of Audited Financial Statements will be provided to the MSRB through EMMA, by February 1 of each year, commencing February 1, 2024. Audited Financial Statements as described below should be filed at the same time as the Annual Financial Information. If Audited Financial Statements are not available when the Annual Financial Information is filed, unaudited financial statements shall be included, to be followed up by Audited Financial Statements when available.

Audited Financial Statements will be prepared according to GAAP, as applied to governmental units as modified by State law.

If any change is made to the Annual Financial Information as permitted by Section 4 of the Agreement, the City will disseminate a notice of such change as required by Section 4, including changes in Fiscal Year or GAAP.

EXHIBIT II

EVENTS FOR WHICH LISTED EVENTS DISCLOSURE IS REQUIRED

1. Principal and interest payment delinquencies;
2. Non-payment related defaults, if material;
3. Unscheduled draws on debt service reserves reflecting financial difficulties;
4. Unscheduled draws on credit enhancements reflecting financial difficulties;
5. Substitution of credit or liquidity providers, or their failure to perform;
6. Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds;
7. Modifications to the rights of Bondholders, if material;
8. Bond calls, if material, and tender offers;
9. Defeasances;
10. Release, substitution or sale of property securing repayment of the Bonds, if material;
11. Rating changes;
12. Bankruptcy, insolvency, receivership or similar event of the City;*
13. The consummation of a merger, consolidation, or acquisition involving the City or the sale of all or substantially all of the assets of the City, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;
14. Appointment of a successor or additional trustee or the change of name of a trustee, if material;
15. Incurrence of a Financial Obligation of the City, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the City, any of which affect security holders, if material; and
16. Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of the Financial Obligation of the City, any of which reflect financial difficulties.

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* The event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for the City in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the City, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the City.