



Five-Year General Fund Forecast

This report transmits the preliminary status for the General Fund (GF) fiscal year (FY) 2019-20 budget and a five-year GF forecast through FY 2023-24 ([Attachments A and B](#)). The five-year forecast is being presented to the Mayor and City Council for the eighth consecutive year and provides an essential tool in long-term budget discussions and decision making. The forecast currently shows a projected surplus of approximately \$55 million for FY 2019-20. The surplus includes \$35 million in ongoing funding and \$20 million in one-time funding. The forecast shows a structurally balanced budget, where ongoing revenues are available for existing programs. However, we are always mindful of employee and pension costs and the potential for a recession, which for the first time is modeled in the attached Budget and Research reports ([Attachments C through E](#)).

THIS ITEM IS FOR INFORMATION ONLY.

Summary

The February 2018 Five-Year Forecast projected that without any action, the City of Phoenix would have a GF budget status between (\$13 million) to \$10 million for 2019-20. In addition to strong revenue collections, with sustained effort, several steps have led to a potential surplus of \$55 million for FY 2019-20 (this assumes no actions by the State to change revenue from existing projections and no economic downturn in the next 12-15 months). These include accumulating one-time savings of \$19.5 million in FY 2017-18 and proactive steps in FY 2018-19 to reduce ongoing costs and to defer and reduce spending wherever possible.

Over the last few years the City Council has taken necessary actions to protect City services while facing very challenging financial conditions. The City Council has led important fiscal reform measures, including:

- \$134 million in innovation and efficiency savings to date, since 2010.
- Elimination of approximately 2,700 positions since FY 2007-08, resulting in the smallest government per capita since 1970-71.
- Consistently raising the contingency fund to its highest level in our history.
- Balancing the deficit in the Public Safety funds without sworn layoffs and the

planned hiring of more than 442 Police Officers and 110 Firefighters between now and the end of FY 2019-20.

- Establishing a \$25 million Pension Reserve Fund to stabilize annual Public Safety Pension payments; and transferring an additional \$10 million into the fund using FY 2017-18 year-end savings.

Through deliberate fiscal planning early action and a strong economy, the projected funding gap for FY 2019-20 has been eliminated. Over the next few weeks, staff will continue to refine both revenue and expenditure estimates until we have a final status in March for the City Manager's Trial Budget.

FY 2019-20

The preliminary expenditure estimates may change as cost estimates are further refined in the coming weeks; however at this time the preliminary FY 2019-20 GF expenditures to continue existing levels of service are projected to be \$1.342 billion. This compares to the adopted GF expenditure budget of \$1.310 billion for FY 2018-19. The increase accounts for Council priorities and previous commitments including:

- An increase in public safety and general vehicle replacement to more normal levels (approximately \$7 million);
- Increased civilian (\$4 million) and sworn (\$11 million) pension costs;
- Increased contingency to maintain a four percent reserve (approximately \$3 million); and
- Implementation of the Police Body Worn Camera Program (approximately \$2 million).

Combined GF civilian (COPERS) and sworn (PSPRS) pension costs are expected to increase by approximately \$15 million as compared to the FY 2018-19 budget. These increases are largely driven by reduced plan earnings and unrealized projected payroll growth. COPERS costs account for approximately \$4 million or 27 percent of the increase, however this increase is less than last year's Five Year Forecast projection due to the continued impact of pension reform. PSPRS pension costs account for approximately \$11 million or 73 percent of the total increase. If a 20-year amortization period were used for PSPRS (instead of the adopted 25-year period), the projected GF public safety pension costs would increase by approximately \$25 million this year and \$29 million next year. This would have not only eliminated our projected \$55 million surplus, but would have also increased the likelihood for projected deficits throughout the forecast period.

As the five-year forecast shows, pension costs, particularly PSPRS, will continue to

add significant pressure to the GF budget going forward. However, the pension reform measures for COPERS and PSPRS adopted by the State Legislature, City Council and Phoenix voters mean these short-term increases are anticipated to slow over time and are expected to result in significant savings over the next two decades.

There are also other cost increases not within our control including:

- State charges for the implementation of Transaction Privilege Tax (TPT) reform are expected to increase from approximately \$3.9 million this year to \$4.4 million in FY 2019-20.
- The jail per diem rates charged by the Maricopa County Sheriff's Office (MCSO) for the incarceration of Phoenix prisoners will result in an increase of approximately \$1.0 million in FY 2019-20. Next year's booking rate is \$366.51 per inmate, an increase of 7.3 percent, and the housing rate is \$105.15 per day, an increase of 5.1 percent. Staff from Police, Law and the Municipal Court are working to identify creative solutions to reduce city jail costs. Staff also plan to engage Maricopa County and the Sheriff's Office in similar discussions later this year.

Overall, non-pension operating expenditures (not including Pay-As-You-Go and vehicles) have been stable and manageable, increasing only \$6 million (or 0.6 percent) between this year and next.

FY 2020-21 and Beyond

This year's forecast shows considerable improvement over last year's forecast. The baseline (midpoint) forecast for each year from FY 2020-21 through the end of the forecast period reflects a balanced budget. As we look ahead the areas of concern for the GF budget are service costs, service levels, capital needs, and revenue. Service costs include employee compensation levels, use of technology and other ways to do our existing work more efficiently, and capital needs. Service levels involve the amount of services, hours and the number of facilities we keep open to serve the public. Revenues consider taxes, fees, economic growth, and the impact that the 2020 Census may have on the City's relative population share. The current forecast assumes no changes to existing labor contracts or service levels. It does, however, assume any surplus is incorporated into the subsequent years' expenditures, whether in labor costs, added services, set-asides, or other uses of the funds. The current labor contracts expire at the end of the current fiscal year and contract negotiations are currently underway. Any changes to these contracts will impact FY 2019-20 and beyond.

The Phoenix City Charter requires a balanced budget each year. On March 19, a balanced City Manager's Trial Budget will be presented for Council and Community

discussion along with the Preliminary Five-Year Capital Improvement Program (CIP). The CIP budget will present options for debt service payments and one-time capital requests. Community Budget Hearings will begin in April ([Attachment F](#)).

Responsible Department

This item is submitted by City Manager Ed Zuercher and the Budget and Research Department.



City of Phoenix

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| RESEARCH REPORT BUDGET AND RESEARCH DEPARTMENT | B.R. REPORT NUMBER 2019-06 |
| | DATE ISSUED March 5, 2019 |

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| TO: ED ZUERCHER CITY MANAGER | FOR THE BUDGET AND RESEARCH DIRECTOR BY: JEFF BARTON BUDGET AND RESEARCH DIRECTOR |
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SUBJECT
FIVE-YEAR FORECAST AND PRELIMINARY GENERAL FUND STATUS FOR FY 2019-20

BACKGROUND

Development and presentation of the five-year forecast is an important step in the City’s budget process. Evaluating projected available resources and identifying potential ongoing budget surpluses or funding gaps will allow City Management and Council to develop strategic plans to ensure the continuation of city operations and optimize services to the community.

The Five-Year Forecast estimates future revenues and expenditures of the General Fund for the current fiscal year through fiscal year 2023-24. The purpose of this forecast is to identify key trends in revenues and expenditures and to provide information about the financial landscape anticipated over the next few years. The information contained in this forecast is based on data available through January 2019.

The General Fund five-year forecast ([Attachment A](#)) is provided to the City Council and the community for consideration and provides city policy-makers:

- A strategic financial management best practice
- A framework for strategic decision-making
- The opportunity to make policy changes to maximize city resources and service delivery
- A roadmap to continued fiscal health and award-winning budgetary and financial reporting

The forecast is not an official policy or legal budget document and does not enact any budgetary allocations. The forecast is also not intended to set or precisely predict future revenues or expenditures. Rather, the forecast presents current estimates based on several economic and financial assumptions of the future direction and ranges of growth rates for both resources and expenditures. The economic, revenue, and expenditures assumptions are provided in ([Attachment B](#)).

The forecast is built on several assumptions outlined in [Attachment B](#) regarding:

- The national, state and local economy
- Population and job growth
- Revenue growth
- Impacts of anticipated increasing pension liabilities
- Cost management practices
- Future year expenses

All of these factors are subject to change and are detailed further in this report.

Projecting future available resources and expenses over multiple years is complex and involves several assumptions concerning how revenue and expenditures will grow over time. In order to model potential future budgetary scenarios under varying economic conditions, a range is provided for resources and expenditures. The differences between the upper and lower ends of the ranges increase in the later years of the forecast reflecting additional economic uncertainty. The top of each range represents the “optimistic” forecast, while the bottom of the range represents the “pessimistic” forecast. All of the ranges are based upon the assumptions described in this report.

It is important to note, if any of these assumptions as described were to change or modeled differently, the ranges of amounts presented in the forecast would need to be revised. Unexpected economic shocks, recessions, legislative mandates or other risks to the forecast can also adversely affect projections.

Additionally, even slight variances in the revenue and expenditure growth rates in the initial years of the forecast result in substantial changes to the later years due to the compounding effect of the changes. For example, a variance in revenue growth in FY 2019-20 of only 1%, can result in a variance of \$12.7 million to the ending balance, which would impact the ending fund balances in the subsequent forecast years. Long term forecasts become less reliable the further they are from development because of the many underlying assumptions subject to frequent fluctuations.

Projections are formulated in the first six months of the fiscal year and are based on a current projection of where staff believes resources and expenditures will be for the current fiscal year and the subsequent five years. In order to create the most reliable revenue and expenditure projections, staff relies on several economic sources, months of actual collections and extensive technical reviews before recommending estimates to City management and ultimately the City Council for final consideration.

It has been more than nine years since the end of the last recession. It will break the record for the longest economic U.S. expansion in July 2019, and many are beginning to look ahead to the next economic downturn. “Stress testing” scenarios for moderate and severe recessions are included in this year’s report to better prepare the City for future challenges ([Attachment C](#), [D](#) and [E](#)).

OTHER INFORMATION

It is important to note that the preliminary FY 2019-20 budget is based on existing state-shared revenue models and statutory obligations. Any changes to state shared revenue formulas or other revenue sources proposed in the Governor's budget or in legislative bills that would impact the GF budget are not reflected and would need to be addressed, if adopted by the State.

Preliminary Status of FY 2019-20 General Fund Budget

FY 2019-20 Resources- The chart below shows the preliminary resources projection:

| GF Resource Category | FY 2019-20 Preliminary Estimate (in millions) | FY 2019-20 Preliminary Projected Annual Growth Rate % |
|-----------------------------------|--|--|
| Local Sales & Excise Taxes | \$505 | 4.8% |
| State-Shared Revenue ¹ | \$464 | 7.3% |
| Primary Property Tax ² | \$169 | 4.7% |
| User Fees and Other | \$133 | 1.0% |
| Beginning Balance ³ | \$114 | N/A |
| Transfers/Recoveries ³ | \$12 | N/A |
| Total GF Resources | \$1,397 | 3.9% |

¹ This does not reflect any impact to State-Shared Revenue resulting from the FY 2019-20 State budget, nor legislative changes that have recently been proposed or discussed during the current legislative session.

² Assumes the continuation of City Council's adopted policy to maximize the primary levy in order to preserve GF services. Any deviation from this policy would require an ongoing reduction to GF programs.

³ Estimates for beginning balance and transfers/recoveries are not derived from annual growth rate projections or broader economic factors.

Revenue Forecasting Model- In the fall of 2014, Budget and Research consulted with the University of Arizona's Eller College of Management, Economic and Business Research Center (EBRC) to enhance the City's sales tax revenue forecasting process. Dr. George Hammond, EBRC Director, and Dr. Alberta Charney, Senior Research Economist, spent several months working with City staff to develop an enhanced econometric sales tax forecasting model for all categories of City sales tax. In the Summer of 2017, staff worked with EBRC to update the tax forecasting model. The EBRC leads the State of Arizona Forecasting Project, which provides in-depth economic forecast analysis and databases on a subscription basis to businesses, organizations, and government via membership. The additional consulting with Drs. Hammond and Charney has provided the City with solid, independent economic and statistical expertise used to develop a statistically valid forecasting model specifically for the City of Phoenix. The projected growth rates in each category of sales tax for the FY 2019-20 estimate and five-year forecast are based on projections developed with the enhanced econometric forecasting model.

2019-20 Expenditures- The preliminary expenditure estimates may change as cost estimates are further refined in the coming weeks. At this time, the preliminary FY 2019-20 General Fund expenditures are projected to be \$1.342 billion. Comparing to the adopted GF expenditure budget of \$1.310 billion for FY 2018-19, the increase is primarily due to additional expenditures for pension, capital projects and vehicle replacements.

Total Compensation- The total compensation costs are based on projections under the current Council-adopted pay plan ordinance and existing employee contracts. No assumptions have been made concerning the ongoing labor negotiations process. The table below illustrates the cost of a 1% change in total compensation or wage only for general and sworn positions.

COST OF A 1% CHANGE – GENERAL AND SWORN POSITIONS

| Unit | 1% Total Compensation Change | | 1% Wage Change Only |
|--|------------------------------|---------------------|---------------------|
| | All Funds | General Fund | All Funds |
| Unit 1 – Local 777 | \$ 756,710 | \$ 242,130 | \$ 636,760 |
| Unit 2 – Local 2384 | 1,608,770 | 336,580 | 1,353,020 |
| Unit 3 – Local 2960 | 2,078,880 | 1,136,430 | 1,791,790 |
| Unit 4 – PLEA | 4,182,680 | 3,240,120 | 3,419,960 |
| Unit 5 – PFFA | 2,762,660 | 2,333,780 | 2,481,710 |
| Unit 6 – PPSLA | 928,940 | 893,300 | 822,830 |
| Unit 7 – ASPTEA | 4,237,070 | 2,005,290 | 3,762,660 |
| Unit 8 – Confidential | 73,690 | 57,000 | 64,020 |
| Unit 8 – Mid Mgrs & Executives (general) | 577,980 | 387,750 | 529,860 |
| Unit 8 – Mid Mgrs & Executives (sworn) | <u>206,800</u> | <u>188,400</u> | <u>173,540</u> |
| Total – General and Sworn | <u>\$17,414,180</u> | <u>\$10,820,780</u> | <u>\$15,036,150</u> |

Pension Costs - Expected changes in COPERS and PSPRS pension costs are as follows:

- **COPERS**: GF pension costs in COPERS are expected to increase by about \$4 million as compared to the current year budget. The overall trend in COPERS pension cost has been driven by recent actuarial changes, plan earnings and payroll growth.
- **PSPRS**: The GF costs for sworn Police and Fire are expected to increase by about \$11 million compared to the current year budget. The primary factors contributing to the growth over the current year budget are plan earnings and changes to the payroll base. The overall trend in sworn Police and Fire pension cost has also been impacted by repealed pension reform measures from the Fields and Hall State Supreme Court decisions, and to some extent pension reform. As the five-year forecast shows, rising pension costs will add significant pressure to the GF budget going forward. However, the pension reform measures enacted by the City Council and approved by Phoenix voters mean these short-term increases are anticipated to slow over time and are expected to result in significant savings over the next two decades.

Contingency – The contingency fund is assumed to increase from \$52 million to \$55 million in FY 2019-20, remaining on track to grow to recommended levels. The growth in the contingency fund reflects an increase of approximately \$4 million per year from FY 2020-21 to FY 2023-24. FY 2019-20 also reflects a one-time set-aside of \$1.8 million for Fire SAFER grant match.

Detailed preliminary estimates with multiple year-to-year comparisons are included in the Zero-Based Budget Inventory of Programs document, which was presented to the Council on February 6, 2019 and is available online at phoenix.gov/budget. Revenue and expense estimates continue to be developed, and more definitive estimates will be presented along with the City Manager’s Trial Budget in March.

RECOMMENDATION

The General Fund preliminary FY 2019-20 budget status and Five-Year Forecast are provided for information and discussion.

ATTACHMENTS

[Attachment A- Five-Year General Fund Forecast](#)

[Attachment B- Forecast Assumptions](#)

[Attachment C- Background, Methodology and Assumptions for Stress Testing](#)

[Attachment D- Stress Testing for Moderate Recession Scenario](#)

[Attachment E- Stress Testing for Severe Recession Scenario](#)

[Attachment F- Locations for FY 2019-20 Community Budget Hearings](#)

ATTACHMENT A
5-Year General Fund Forecast (\$Millions)

| | 2018-19 | 2019-20 | 2020-21 | For Planning Purposes Only | | |
|--|----------------|-----------------|--------------------------|----------------------------|--------------------------|--------------------------|
| | Adopted | Preliminary | | 2021-22 | 2022-23 | 2023-24 |
| | Budget | Budget Estimate | Forecast | Forecast | Forecast | Forecast |
| Resources | | | | | | |
| Local Taxes | \$465 | \$505 | \$527 - \$534 | \$545 - \$561 | \$562 - \$588 | \$579 - \$615 |
| State Shared Revenues | 428 | 464 | 490 - 497 | 509 - 524 | 526 - 550 | 546 - 581 |
| Primary Property Tax | 162 | 169 | 175 - 178 | 182 - 188 | 189 - 198 | 196 - 208 |
| User Fees and Other | 129 | 133 | 135 - 137 | 137 - 141 | 139 - 146 | 141 - 150 |
| Other (Carryover Balance, Transfers, Recoveries) | 78 | 74 | 17 | 22 | 25 | 28 |
| Unused Contingency from Prior Year | 48 | 52 | 57 | 59 | 63 | 67 |
| Total Resources | \$1,310 | \$1,397 | \$1,401 - \$1,420 | \$1,454 - \$1,495 | \$1,504 - \$1,570 | \$1,557 - \$1,649 |
| Expenditures | | | | | | |
| Operating Expenditures | \$943 | \$949 | \$1,008 - \$1,003 | \$1,035 - \$1,028 | \$1,091 - \$1,083 | \$1,141 - \$1,132 |
| Civilian Pension | 80 | 84 | 86 | 88 | 89 | 91 |
| Sworn Public Safety Pension | 200 | 211 | 215 | 223 | 231 | 239 |
| Contingency | 52 | 55 | 59 | 63 | 67 | 71 |
| Police Body Camera | - | 2 | 2 | 2 | 2 | 2 |
| Set-Asides | 9 | 2 | - | - | - | - |
| Pay-As-You-Go Capital (Includes Technology Plan) | 13 | 19 | 21 | 19 | 19 | 19 |
| Minimum Vehicles | 13 | 20 | 20 | 20 | 20 | 20 |
| Total Expenditures | \$1,310 | \$1,342 | \$1,411 - \$1,406 | \$1,450 - \$1,443 | \$1,519 - \$1,511 | \$1,583 - \$1,574 |
| PROJECTED (DEFICIT)/SURPLUS: | \$ - | \$55 | \$(10) - \$14 | \$4 - \$52 | \$(15) - \$59 | \$(26) - \$75 |

Key Resource Forecast Assumptions:

* The forecast assumes modest revenue growth with no recession, no fee increases or decreases and no new revenue sources.

* No changes to current revenue base as provided in state and city laws or to state shared revenue formulas.

* Relative population share used in calculating state shared revenues in 2019-20 was based on the 2017 Census Bureau Population Estimate. It was projected to remain flat throughout the forecast period. The actual share will change annually based on Census Bureau Population Estimates and the 2021-22 share will be impacted by the 2020 Decennial Census.

Other Forecast Notes:

* Ranges provided for revenues and operating expenditures. Upper & lower ends of ranges increase slightly in later years of forecast reflecting additional economic uncertainty in the later years.

* Ranges include pessimistic and optimistic scenario within assumptions provided by the primary sources of economic information mentioned in this report.

* When a baseline deficit or surplus is projected, the next year's operating expenses are assumed to be decreased or increased by the baseline deficit/surplus amount prior to applying the assumed annual projected growth rate, as the City is required by Charter to balance the budget each year.

Key Expenditure Forecast Assumptions:

* The contingency fund increases \$3M in 2019-20 and \$4M through the rest of the forecast period.

* Includes no additional future funding for program enhancements, unfunded mandates, expiring grants, etc.

* 2019-20 employee costs based on projections under the current Council-adopted pay plan ordinance and employee contracts. No assumptions have been made concerning future labor contract negotiations. Pension costs based on required and projected contribution rates provided by the respective pension system actuaries.

* Non-personnel related expenditures for 2020-21 and beyond assumes expenditure growth is in line with recent historical averages.

ATTACHMENT B

Forecast Assumptions

Economic Sources - Budget and Research staff relies on several different sources for economic data and forecasts to assist with developing revenue and expenditure projections.

The list below includes the primary sources of information:

- State Finance Advisory Committee (FAC) which includes several economists and finance professionals from the private and public sectors
- State Joint Legislative Budget Committee (JLBC)
- University of Arizona (U of A), Economic Business Research Center
- Global Insight, IHS
- Arizona State University (ASU) – WP Carey School of Business, and Western Blue Chip
- Arizona Department of Administration (ADOA) - Employment and Population Statistics Office
- JP Morgan Chase Economic Outlook Center
- Blue Chip Economic Indicators – National Level
- U.S. Bureau of Labor Statistics
- U.S. Census Bureau
- Phoenix Business Journal
- University of Arizona (U of A) Forecasting Project – A community-sponsored research program within the Economic and Business Research Center providing project members with economic forecasts for Arizona, the Phoenix-Mesa metro area, and the Tucson metro area. City staff attends the Forecasting Project quarterly meetings and receives quarterly reports and data/projections used to assist in developing our forecasts. Forecasting Project data relies on Global Insight, IHS which is a well-known economics organization that provides comprehensive economic and financial information. The data from this project is incorporated into an econometric software program used to forecast sales tax.

Economic Outlook

The overall consensus from these trusted sources is Arizona and the Phoenix Metro area are set to carry significant momentum in 2019. They predict the state will continue to grind out solid gains assuming the national economy avoids recession. However, it is worth noting that since 1945, the average length of a U.S. economic expansion has been approximately 5 years and the longest has been 10 years. The current expansion has lasted over 9 years, and it will break the record for the longest economic U.S. expansion in July 2019. Two-thirds of 60+ U.S. business economists in a recent Wall Street Journal survey expect a recession by the end of 2020. The Moody's Analytics baseline forecast puts the highest odds of the next recession in mid-2020. If their prediction is accurate, the U.S. economic expansion will end at some point within the forecast range.

At the national level, the National Blue Chip of Economic Indicators forecast GDP growth of 2.6 % in 2019, which indicates a steady growth path through the end of next year. A variety of factors account for the optimism in the 2019 economy: continued low unemployment, continued increases in personal consumption expenditures, and expanded business fixed investment driven by corporate tax cuts. However, volatility in the stock market, uncertainty in trade policy issues, weakening growth abroad, an ambivalent “data dependent” stance for monetary policy and most recently the partial closure of the federal government could pose threats to continued U.S. economic growth in 2019 (Blue Chip Economic Indicators, Vol. 44, No. 1 January 2019).

Arizona is firing on all cylinders and the solid growth is expected to continue in 2019. State job growth hit 3.0% over-the-year in the third quarter of 2018, which was well above the national rate of 1.7%

and was the fastest pace in two years. Construction activity led growth, with strong increases in jobs, permits, and prices (Economic Outlook, 2018 4th Quarter Report). Arizona is a leader in diverse industrials ranging from construction to manufacturing to health care and professional services, although there still might be a threat to the economy from an unexpected national downturn (Economic Forecasting Luncheon, November 2018).

The State's FAC indicated in January 2019 that Arizona ranks 4th in economic momentum among the nation, which is up from 14th last year. The rankings for major economic factors are listed below:

| | AZ Rate | AZ Rank |
|---------------------------|---------|---------|
| Change in Personal Income | 4.7% | 14 |
| Change in Population | 1.7% | 4 |
| Change in Employment | 3.6% | 2 |

Other significant economic assumptions from trusted sources built into this forecast include the following:

- Personal income for the Phoenix Metro area is projected to grow an average of 6.1% for the forecast and range from 5.7% to 6.6% (UA/Global Insight).
- Growth in population is expected to continue, but at lower rates than historical growth. Phoenix Metro population is projected to grow 1.8% in 2019, flat from 1.8% in 2018 (U of A Economic Research Center).
- Non-farm employment in metro Phoenix is estimated to grow 3.1% in 2019, a slight decrease from 3.4% in 2018 (U of A Economic Research Center).
- Arizona unemployment is estimated to fall to 3.8% in 2019, compared to 4.6% in 2018 (U of A Economic Research Center).
- The near term outlook for real estate in Greater Phoenix remains bullish. Single-family residential permits are projected to increase by 12% in 2019 and double the recorded permits in 2013. Multi-family permits are projected to decrease slightly and Greater Phoenix industrial construction is forecast to see the most speculative building activity in 2019 (ASU W.P. Carey School of Business- Greater Phoenix Blue Chip Forecast/ Economic Forecasting Luncheon, November 2018).
- Inflation is expected to increase during the forecast period with the Consumer Price Index-All Urban Consumers (CPI-U) rising by 2.6% in FY 2019-20. (U of A Economic Research Center). In the past 50 years, CPI-U has ranged from negative 0.4% in 2009, to a high of 13.5% in 1980 (U.S. Department of Labor Bureau of Labor Statistics).

Resource Assumptions- Revenue growth rates are determined using information from our above mentioned trusted sources, analyzing actual revenue trends and averages, and factoring in any known policy or legislative changes.

Revenue assumptions beyond the broader economic considerations are described below:

- No further period of recession with modest revenue growth for the forecast horizon.
- Annual revenue growth rates range from 4.0% to 5.3% during the forecast period.
- No impact to current revenue tax base, as provided in applicable state statutes and City ordinances.

- No future impact to state shared revenue formulas or legislation or action that could impact city revenue sources.
- Phoenix's relative population share, which impacts state shared revenue collections, was projected to remain flat throughout the forecast period. The actual share will change annually based on Census Bureau Population Estimates and the 2021-22 share will be impacted by the 2020 Decennial Census.
- No future fee increases or decreases and no new sources of revenue.
- Potential increases to revenue resulting from economic development efforts are not included in the forecast.
- Ranges provided for revenues: upper and lower ends of ranges increase slightly in later years of the forecast reflecting additional economic uncertainty.

Expenditure Assumptions- Assumptions regarding forecasted expenditures are described below:

- Annual operating expenditure growth rates, except for pension, are based on the historical growth rate and the estimated average of CPIs through the forecast period.
- Pension costs are based on historical actuals and information provided by the COPERS and PSPRS actuaries. The forecast does not attempt to predict future pension liabilities, assets or other plan assumptions, but rather to account for the currently anticipated costs of both pension systems.
- The forecast does not include the impact of additional potential reform measures for COPERS or PSPRS or the impact of pending litigation or proposed legislation.
- The forecast includes no additional future funding for program enhancements, unfunded mandates, expiring grants, etc.
- Pay-as-you-go capital costs are based on the preliminary estimates in the five-year Capital Improvement Program.
- The forecast includes projected debt service for the mandated Regional Wireless Cooperative radio replacements and the replacement of the city phone system and associated technology infrastructure.
- The contingency fund increases \$3M in 2019-20 and \$4M through the rest of the forecast period.
- The 2019-20 total compensation costs are based on projections under the current Council-adopted pay plan ordinance and existing employee contracts.
- No other financial impact from changes to labor unit contracts resulting from current or future negotiations is assumed.
- In forecast years with a projected baseline deficit or surplus, the next year's operating expenses are assumed to decrease or increase by the baseline deficit/surplus amount prior to applying the assumed annual projected growth rate, as the City is required by Charter to balance the budget each year.
- Ranges provided for operating expenditures: upper and lower ends of ranges increase slightly in later years of the forecast reflecting additional economic uncertainty.

Other Items that Could Impact the Base Budget or the Five-Year Forecast- The costs below are items and needs that do not currently have a funding source or will likely require additional funding and therefore could have an adverse impact on the five-year forecast as it's currently presented. These costs may need to be ultimately borne, in part or in whole, by the General Fund if no other funding source is identified by the time these costs are imminent. Under the direction of the Mayor and City Council, staff has been exploring the potential for a bond program that could address critical public safety systems and other city infrastructure. Staff plans to discuss a potential bond election timeline at a future City Council meeting.

- The forecast reflects the continued funding of approximately \$7 million per year that is earmarked to address aging City infrastructure, critical equipment, and other technology needs. Examples of these projects include replacing fire life safety systems in City facilities and water intrusion and electrical projects at police headquarters. Also under the direction of the City Manager, staff is busy working to identify critical needs in all City facilities. This will require the work of several external firms that specialize in facility assessments. Staff has also taken active steps to enhance facility maintenance oversight by centralizing general fund facility maintenance funding and creating a facilities review committee. It is expected that this change will significantly enhance the prioritization of GF facility projects.
- General Fund vehicle funding has been increased from \$13 million to \$20 million throughout the forecast period of which \$15 million or 75% is earmarked for public safety. While the forecast shows increased funding for vehicle replacements, the citywide need is much greater than the funding that is available. In the Fire Department additional funding is needed to replace apparatus equipment including pumpers, ambulances and ladders, which were originally purchased with voter approved General Obligation Bond funds. Of the 88 fire pumper trucks in the fleet, over half will be due for replacement in the next five years. With limited funding available, a lease/purchase program was approved by Council to authorize the purchase of 15 fire pumper trucks at a cost of \$1.2 million per year starting in FY 2014-15, and these costs have been included in the forecast. Additionally, over 1,500 other GF city vehicles will come due for replacement throughout the forecast period. We are currently working with Public Works and Finance to develop a funding strategy that could address this need.
- The Police Department has an aerial fleet that consist of six helicopters and several fixed wing aircraft. Five of the helicopters are used to support daily patrol operations and one is used for mountain rescue. All of the helicopters and fixed wing aircraft are over ten years old and require a significant amount of annual maintenance to keep them operational and safe according to FAA standards. Given the age, maintenance and number of hours the aerial fleet is used annually it is likely that the entire fleet will need to be replaced in the near future. The cost to replace the entire aerial fleet is currently estimated between \$42 - \$48 million.

ATTACHMENT C

Stress Testing for General Fund

Background - "It has been almost a decade since the Great Recession, and many are rightfully beginning to look ahead to the next economic downturn. Recessions and their place in the business cycle are an accepted fact of life in any organization, especially government. Therefore, preparing for recessions is an equally inescapable concept, with potentially devastating consequences for those who treat it as an afterthought" (Moody's Analytics, 2018). Stress testing was done for the General Fund to help the City better prepare for the next recession.

Methodology/Assumptions- "Stress test" in financial terminology, is an analysis or simulation designed to determine the ability of a given entity to deal with an economic crisis. Instead of doing a financial projection on a "best estimate" basis, a company or its regulators may do stress testing to estimate how robust an entity performs in certain negative circumstances, a form of scenario analysis (North Dakota Legislative Council, 2018). There are two scenarios for this stress testing: moderate and severe recession scenarios.

Attachment D shows a hypothetical moderate recession that is estimated to start in 2020-21. This scenario assumes that General Fund revenue, except state-shared income tax, will decline by 1% for two consecutive years. Two-thirds of 60+ economists in a recent Wall Street Journal survey said by the end of 2020, there might be a recession. According to Moody's Analytics, a recession typically affects budgets for at least two years. Although a moderate recession may impact revenue by more than 1%, the model is simulated with a 1% decrease. State-shared income tax distributed to cities and towns is based on the collections from 2 years prior, so the state-shared income tax decrease due to a moderate recession will not affect the revenue until 2022-23.

Attachment E shows a hypothetical severe recession that is estimated to start in 2020-21. This scenario assumes that General Fund revenue, except state-shared income tax, will decline by 3% for three consecutive years. The Great Recession lasted for about three years, so the severe scenario is estimated to affect the revenue for three consecutive years. Although a severe recession may hit the revenue by more than 3%, for simulation purposes, this stress test used a 3% decrease. Similar to the moderate scenario, the state-shared income tax decrease caused by the economic recession will not affect the revenue until 2022-23.

Assumptions for recoveries, fund transfers and expenditures remain the same as the model shown in **Attachment A**. However, the expenditures for the forecast period will be different due to the methodology applied in the model. When a deficit or surplus is projected, the next year's operating expenses are assumed to be decreased or increased by the deficit/surplus amount prior to applying the assumed annual projected growth rate, as the City is required by Charter to balance the budget each year.

ATTACHMENT D
5-Year General Fund Forecast – Moderate Recession Scenario (\$Millions)

| | 2018-19 | 2019-20 | For Planning Purposes Only | | | |
|--|-------------------|--------------------------------|----------------------------|--------------------------|--------------------------|--------------------------|
| | Adopted Budget | Preliminary Budget Estimate | 2020-21 Forecast | 2021-22 Forecast | 2022-23 Forecast | 2023-24 Forecast |
| Resources | | | | | | |
| Local Taxes | \$465 | \$502 | \$493 - \$501 | \$486 - \$502 | \$502 - \$526 | \$516 - \$550 |
| State Shared Revenues | 428 | 464 | 473 - 480 | 478 - 492 | 483 - 506 | 490 - 522 |
| Primary Property Tax | 162 | 169 | 166 - 169 | 164 - 169 | 169 - 177 | 176 - 187 |
| User Fees and Other | 129 | 133 | 131 - 133 | 128 - 132 | 130 - 136 | 132 - 140 |
| Other (Carryover Balance, Transfers, Recoveries) | 78 | 74 | 17 | 22 | 25 | 28 |
| Unused Contingency from Prior Year | 48 | 52 | 57 | 59 | 63 | 67 |
| Total Resources | \$1,310 | \$1,394 | \$1,337 - \$1,357 | \$1,337 - \$1,376 | \$1,372 - \$1,433 | \$1,409 - \$1,494 |
| Expenditures | | | | | | |
| Operating Expenditures | \$943 | \$949 | \$1,005 - \$1,001 | \$969 - \$963 | \$969 - \$962 | \$1,003 - \$995 |
| Civilian Pension | 80 | 84 | 86 | 88 | 89 | 91 |
| Sworn Public Safety Pension | 200 | 211 | 215 | 223 | 231 | 239 |
| Contingency | 52 | 55 | 59 | 63 | 67 | 71 |
| Police Body Camera | - | 2 | 2 | 2 | 2 | 2 |
| Set-Asides | 9 | 2 | - | - | - | - |
| Pay-As-You-Go Capital (Includes Technology Plan) | 13 | 19 | 21 | 19 | 19 | 19 |
| Minimum Vehicles | 13 | 20 | 20 | 20 | 20 | 20 |
| Total Expenditures | \$1,310 | \$1,342 | \$1,408 - \$1,404 | \$1,384 - \$1,378 | \$1,397 - \$1,390 | \$1,445 - \$1,437 |
| PROJECTED (DEFICIT)/SURPLUS: | \$ - | \$52 | \$(71) - \$(47) | \$(47) - \$(2) | \$(25) - \$43 | \$(36) - \$57 |

Key Resource Forecast Assumptions:

* The forecast assumes moderate recession in 2020-21 and 2021-22, no fee increases or decreases and no new revenue sources.

* No changes to current revenue base as provided in state and city laws or to state shared revenue formulas.

* Relative population share used in calculating state shared revenues in 2019-20 was based on the 2017 Census Bureau Population Estimate. It was projected to remain flat throughout the forecast period. The actual share will change annually based on Census Bureau Population Estimates and the 2021-22 share will be impacted by the 2020 Decennial Census.

Other Forecast Notes:

* Ranges provided for revenues and operating expenditures. Upper & lower ends of ranges increase slightly in later years of forecast reflecting additional economic uncertainty in the later years.

* Ranges include pessimistic and optimistic scenario within assumptions provided by the primary sources of economic information mentioned in this report.

* When a baseline deficit or surplus is projected, the next year's operating expenses are assumed to be decreased or increased by the baseline deficit/surplus amount prior to applying the assumed annual projected growth rate, as the City is required by Charter to balance the budget each year.

Key Expenditure Forecast Assumptions:

* The contingency fund increases \$3M in 2019-20 and \$4M through the rest of the forecast period.

* Includes no additional future funding for program enhancements, unfunded mandates, expiring grants, etc.

* 2019-20 employee costs based on projections under the current Council-adopted pay plan ordinance and employee contracts. No assumptions have been made concerning future labor contract negotiations. Pension costs based on required and projected contribution rates provided by the respective pension system actuaries.

* Non-personnel related expenditures for 2020-21 and beyond assumes expenditure growth is in line with recent historical averages.

ATTACHMENT E
5-Year General Fund Forecast – Severe Recession Scenario (\$Millions)

| | 2018-19 | 2019-20 | For Planning Purposes Only | | | |
|--|----------------|-----------------------------|----------------------------|--------------------------|--------------------------|--------------------------|
| | Adopted Budget | Preliminary Budget Estimate | 2020-21 Forecast | 2021-22 Forecast | 2022-23 Forecast | 2023-24 Forecast |
| Resources | | | | | | |
| Local Taxes | \$465 | \$502 | \$482 - \$490 | \$464 - \$479 | \$451 - \$473 | \$464 - \$494 |
| State Shared Revenues | 428 | 464 | 468 - 475 | 467 - 482 | 450 - 472 | 451 - 481 |
| Primary Property Tax | 162 | 169 | 163 - 166 | 157 - 162 | 151 - 158 | 156 - 167 |
| User Fees and Other | 129 | 133 | 128 - 130 | 123 - 127 | 118 - 124 | 120 - 128 |
| Other (Carryover Balance, Transfers, Recoveries) | 78 | 74 | 17 | 22 | 25 | 28 |
| Unused Contingency from Prior Year | 48 | 52 | 57 | 59 | 63 | 67 |
| Total Resources | \$1,310 | \$1,394 | \$1,315 - \$1,335 | \$1,292 - \$1,331 | \$1,258 - \$1,315 | \$1,286 - \$1,365 |
| Expenditures | | | | | | |
| Operating Expenditures | \$943 | \$949 | \$1,005 - \$1,000 | \$946 - \$941 | \$923 - \$916 | \$883 - \$876 |
| Civilian Pension | 80 | 84 | 86 | 88 | 89 | 91 |
| Sworn Public Safety Pension | 200 | 211 | 215 | 223 | 231 | 239 |
| Contingency | 52 | 55 | 59 | 63 | 67 | 71 |
| Police Body Camera | - | 2 | 2 | 2 | 2 | 2 |
| Set-Asides | 9 | 2 | - | - | - | - |
| Pay-As-You-Go Capital (Includes Technology Plan) | 13 | 19 | 21 | 19 | 19 | 19 |
| Minimum Vehicles | 13 | 20 | 20 | 20 | 20 | 20 |
| Total Expenditures | \$1,310 | \$1,342 | \$1,408 - \$1,403 | \$1,361 - \$1,356 | \$1,351 - \$1,344 | \$1,325 - \$1,318 |
| PROJECTED (DEFICIT)/SURPLUS: | \$ - | \$52 | \$(93) - \$(68) | \$(69) - \$(25) | \$(93) - \$(29) | \$(39) - \$47 |

Key Resource Forecast Assumptions:

- * The forecast assumes severe recession from 2020-21 to 2022-23, no fee increases or decreases and no new revenue sources.
- * No changes to current revenue base as provided in state and city laws or to state shared revenue formulas.
- * Relative population share used in calculating state shared revenues in 2019-20 was based on the 2017 Census Bureau Population Estimate. It was projected to remain flat throughout the forecast period. The actual share will change annually based on Census Bureau Population Estimates and the 2021-22 share will be impacted by the 2020 Decennial Census.
- Other Forecast Notes:**
- * Ranges provided for revenues and operating expenditures. Upper & lower ends of ranges increase slightly in later years of forecast reflecting additional economic uncertainty in the later years.
- * Ranges include pessimistic and optimistic scenario within assumptions provided by the primary sources of economic information mentioned in this report.

* When a baseline deficit or surplus is projected, the next year's operating expenses are assumed to be decreased or increased by the baseline deficit/surplus amount prior to applying the assumed annual projected growth rate, as the City is required by Charter to balance the budget each year.

Key Expenditure Forecast Assumptions:

- * The contingency fund increases \$3M in 2019-20 and \$4M through the rest of the forecast period.
- * Includes no additional future funding for program enhancements, unfunded mandates, expiring grants, etc.
- * 2019-20 employee costs based on projections under the current Council-adopted pay plan ordinance and employee contracts. No assumptions have been made concerning future labor contract negotiations. Pension costs based on required and projected contribution rates provided by the respective pension system actuaries.
- * Non-personnel related expenditures for 2020-21 and beyond assumes expenditure growth is in line with recent historical averages.

Attachment F
City of Phoenix
Locations for 2019-20 Community Budget Hearings

| Date/Time | Council District(s) | Location Information |
|--|---------------------------------|--|
| Tuesday, April 2, 2019 8:00 am | D6 | Pecos Community Center 17010 S. 48th Street |
| Tuesday, April 2, 2019 10:30 am | D6 | Devonshire Community Center Auditorium 2802 E. Devonshire Avenue |
| Tuesday, April 2, 2019 6:00 pm | D4 | Steele Indian School Park Memorial Hall 300 E. Indian School Road |
| Tuesday, April 2, 2019 6:00 pm | D3/D5 | Sunnyslope Community Center Multipurpose Room 802 E. Vogel Avenue |
| Thursday, April 4, 2019 8:00 am | D7/D8 | South Mountain Community Center Saguaro Room 212 E. Alta Vista Road |
| Thursday, April 4, 2019 6:00 pm | D7 | Burton Barr Central Library College Depot, 2 nd Floor 1221 N. Central Avenue |
| Monday, April 8, 2019 6:00 pm | D7 | Country Place Leadership Academy Cafeteria 10207 W. Country Place Blvd |
| Monday, April 8, 2019 6:00 pm | D3 | North Mountain Visitor Center 12950 N. 7th Street |
| Monday, April 8, 2019 6:00 pm | D5 | Pendergast Community Center Multipurpose Room 10550 W. Mariposa Street |
| Tuesday, April 9, 2019 8:30 am | D1/D5 | Helen Drake Senior Center 7600 N. 27th Avenue |
| Tuesday, April 9, 2019 6:00 pm | D7/D8 | Cesar Chavez High School Cafeteria 3921 W. Baseline Road |
| Tuesday, April 9, 2019 6:00 pm | D4 | Phoenix Children's Hospital Rosenburg Bldg, Melvin L. Cohen Conf. Rm 1919 E. Thomas Rd |
| Thursday, April 11, 2019 6:00 pm | Citywide Spanish/ English | Maryvale Community Center Multipurpose Room 4420 N. 51st Avenue |
| Thursday, April 11, 2019 6:00 pm | D2/D3 | Paradise Valley Community Center Multipurpose Room 17402 N. 40th Street |
| Monday, April 15, 2019 6:00 pm | D8 | Neighborhood Resource Center Large Conference Room 2405 E. Broadway |
| Tuesday, April 16, 2019 6:00 pm | D1/D2 | Goelet A. C. Beuf Community Center Multipurpose Room 3435 W. Pinnacle Peak Road |
| Tuesday, April 16, 2019 6:00 pm | Citywide Youth | Metro Tech High School Banquet Hall 1900 W. Thomas Road |
| Thursday, April 18, 2019 8:00 am | D3 | Shadow Mountain Senior Center 3546 E. Sweetwater Avenue |
| Thursday, April 18, 2019 6:00 pm | D4/D7 | Encanto Park Clubhouse Ballroom 1220 S. 7th Avenue |