

MARICOPA COUNTY TRANSPORTATION EXCISE TAX
Forecasting Process & Results
FY 2020-2026



Financial Management Services
September 2019

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MARICOPA COUNTY TRANSPORTATION EXCISE TAX OFFICIAL FORECAST UPDATE RISK ANALYSIS OF EXPECTED VALUES

Introduction

In 1985, the voters of Maricopa County approved Proposition 300 to establish a ½ cent transportation excise (sales) tax for construction of a regional freeway system within the county. The ½ cent sales tax was approved for a period of 20 years and ended on December 31, 2005.

On November 2, 2004, Maricopa County’s voters approved Proposition 400 which extended the ½ cent sales tax for another 20 years through December 31, 2025. The sales tax extension is used for construction of new freeways, widening of existing freeways and highways, improvements to the arterial street system, regional bus service and other special transportation services, and high capacity transit services such as light rail, bus rapid transit and express buses.

This document contains the official forecast of expected values for the Maricopa County Transportation Excise Tax for the period FY 2020–2026 as developed by the Arizona Department of Transportation (the Department) in cooperation with the Maricopa Association of Governments and Valley Metro.

Background

Since 1986, the Arizona Department of Transportation (the Department) has used a comprehensive regression-based econometric model to estimate Transportation Excise Tax revenues for Maricopa County. These revenues, which flow into the Regional Area Road Fund (RARF), are the major funding source for the Maricopa County Freeway Program.

The revenue forecast is highly dependent on estimates of independent variables. In order to deal with variability between estimated and actual values, the Department introduced the Risk Analysis Process (RAP) in 1992. The RAP relies on probability analysis and the independent evaluation of the model’s variables by an expert panel of economists. The process results in a series of forecasts, with specified probabilities of occurrence, rather than a single or “best guess” estimate.

Enhanced forecasting accuracy was achieved in July 1996, when Hickling Lewis Brod Inc. (HLB) working in conjunction with Dr. Dennis Hoffman of Arizona State University, incorporated economic data and independent variables which were not included in the 1986 model.

In September 2005, the Department had HDR Decision Economics re-examine the structure of the RARF model and re-evaluate the set of explanatory variables used in the production of the RARF revenue forecasts. Three new variables (U. S. Housing Starts, Sky Harbor Passenger Traffic and Maricopa County Total Non-Farm Employment Growth) were added to the existing list of variables used in the RARF regression equations. The September 2010 panel members requested the Maricopa County per capita personal income variable to be in nominal dollars instead of real dollars. In September 2011, the prime interest rate variable was replaced by the 30 year mortgage rate variable and the U.S. housing starts variable was removed from the model. In September 2014, Phoenix-Mesa Gateway Passenger Traffic was combined with Phoenix Sky Harbor Passenger Traffic to form a Phoenix Sky Harbor/Gateway airports passenger traffic variable.

The independent variables contained in the current model are:

1. Maricopa County nominal personal income growth
2. Maricopa County population growth
3. Maricopa County construction employment growth
4. Phoenix consumer price index (CPI)
5. Phoenix Sky Harbor/Gateway airports passenger traffic growth
6. Maricopa County total non-farm employment growth
7. 30 year mortgage rate

Risk Analysis Panel

The Risk Analysis Process (RAP) relies heavily on the judgments of an expert panel of economists to provide information critical to the forecasting process. In August 2019, a panel of ten economic and financial experts representing public, private, and academic sectors submitted their individual estimates of the model’s independent variables and comments on the future economic outlook. The information gathered from the panelists was input into the forecasting model to produce a series of forecasts with associated probabilities of occurrence. The panelists’ inputs are reflected in the attached tables in this report.

Model Results

This year’s panel inputs produced a mean forecast of \$3,849.0 million for the period FY 2020-2026 with a compound growth rate (CGR) of 5.4 percent. The Department’s Official Forecast for FY 2020-2026 totals \$3,809.5 million with a compound growth rate of 5.2 percent. This year’s official forecast is \$60.4 million higher than last year’s official forecast.

The Official Forecast result incorporates the 50 percent confidence interval growth rates for each year of the forecast except for FY 2020. The FY 2020 forecast of \$497.7 million was developed by ADOT staff independently of the econometric model using time series techniques, historical growth rates, projected growth rates and recent legislative changes.

| FY 2020 Official Forecast Results (Dollars in Millions) | | | |
|--|--------------------------|------------------------------|-----------------------------|
| Fiscal Year | Mean Forecast | Official Forecast | Confidence Level |
| 2020 | \$499.1 | \$497.7 | 50% |
| 2021 | 529.9 | 527.3 | 50% |
| 2022 | 559.8 | 554.9 | 50% |
| 2023 | 588.7 | 582.3 | 50% |
| 2024 | 619.7 | 612.0 | 50% |
| 2025 | 652.1 | 642.1 | 50% |
| 2026/1 | <u>399.7</u> | <u>393.2</u> | 50% |
| Total | \$3,849.0 | \$3,809.5 | |
| Average CGR | 5.4% | 5.2% | |

Note: /1 FY 2026 forecast reflects the expiration of the transportation excise tax extension on December 31, 2025

For comparison purposes, the September 2018 and September 2019 Official Forecasts are shown below:

| FY 2020-2026 Comparative Forecast | | | |
|--|------------------|------------------|-------------------|
| (Dollars in Millions) | | | |
| Fiscal | Sep. 18 | Sep. 19 | |
| Year | Official | Official | |
| | Forecast | Forecast | Difference |
| 2020 | \$492.1 | \$497.7 | \$5.6 |
| 2021 | 519.4 | 527.3 | 7.9 |
| 2022 | 545.9 | 554.9 | 9.0 |
| 2023 | 574.5 | 582.3 | 7.8 |
| 2024 | 601.7 | 612.0 | 10.3 |
| 2025 | 631.1 | 642.1 | 11.0 |
| 2026/1 | <u>384.4</u> | <u>393.2</u> | <u>8.8</u> |
| Total | \$3,749.1 | \$3,809.5 | \$60.4 |
| Average CGR | 5.0% | 5.2% | |

Note: /1 FY 2026 forecast reflects the expiration of the transportation excise tax extension on December 31, 2025

Summary

The Department's September 2019 Official Forecast for FY 2020-2026 totals \$3,809.5 million, which is \$60.4 million higher than the September 2018 Official Forecast. The RAP panel expects modest growth in Maricopa County's personal income, population and employment. Compared to last year, the panel inputs for personal income, population, 30 year mortgage rate and Phoenix CPI were moderately lower, while construction employment and non-farm employment were moderately higher. The RAP panel expected higher growth in Sky Harbor/Gateway Airports traffic in the short term and little change in the long term compared to last year's estimates.

Supplementary Information

The remainder of this report presents supplementary information on the detailed results of the RAP model and Risk Analysis Process.

**RARF Official Revenue Forecast
With Category Detail and Confidence Interval by Fiscal Year
(Current Dollars in Millions)**

| Fiscal Year Percentile | 2019 Actual | 2020 N/A /1 | 2021 50% | 2022 50% | 2023 50% | 2024 50% | 2025 50% | 2026/2 50% |
|------------------------------------|------------------------|------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------------------|
| Retail Sales | \$251.5 | \$264.3 | \$282.2 | \$296.9 | \$311.7 | \$327.9 | \$344.7 | \$210.6 |
| Contracting | 47.6 | 55.6 | 58.0 | 62.3 | 66.6 | 71.4 | 75.8 | 47.8 |
| Utilities | 32.7 | 33.4 | 34.8 | 35.9 | 36.9 | 38.0 | 39.1 | 23.5 |
| Restaurant and Bar | 53.7 | 57.0 | 60.4 | 63.8 | 66.9 | 70.6 | 74.2 | 45.5 |
| Rental of Real Property | 49.7 | 52.5 | 55.6 | 58.4 | 61.3 | 63.9 | 66.9 | 40.9 |
| Rental of Personal Property | 17.5 | 19.1 | 20.4 | 21.7 | 23.0 | 24.3 | 25.5 | 15.6 |
| Other | 15.9 | 15.8 | 15.9 | 15.9 | 15.9 | 15.9 | 15.9 | 9.3 |
| Total | \$468.6 | \$497.7 | \$527.3 | \$554.9 | \$582.3 | \$612.0 | \$642.1 | \$393.2 |

Notes:

/1 FY 2020 forecast was developed by ADOT staff independently and varies slightly from the Risk Analysis results.

/2 FY 2026 forecast reflects the expiration of the transportation excise tax extension on December 31, 2025

RARF TOTAL TAX REVENUE RISK ANALYSIS RESULTS
 (Current Dollars in Millions)

| Fiscal Year | Mean | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% |
|--------------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 2020 /1 | \$499.1 | \$532.9 | \$520.3 | \$511.6 | \$504.4 | \$498.1 | \$491.9 | \$484.6 | \$476.4 | \$466.6 |
| 2021 | 529.9 | 592.7 | 569.2 | 553.6 | 540.4 | 527.3 | 515.0 | 502.4 | 488.1 | 469.4 |
| 2022 | 559.8 | 650.7 | 616.2 | 593.4 | 573.9 | 554.9 | 538.7 | 519.0 | 498.8 | 474.3 |
| 2023 | 588.7 | 705.1 | 661.4 | 630.1 | 604.9 | 582.3 | 560.1 | 537.3 | 511.4 | 480.5 |
| 2024 | 619.7 | 756.9 | 706.1 | 668.6 | 638.1 | 612.0 | 585.2 | 557.7 | 527.9 | 490.6 |
| 2025 | 652.1 | 812.6 | 750.1 | 707.5 | 672.6 | 642.1 | 611.8 | 580.8 | 548.9 | 505.2 |
| 2026 /2 | 399.7 | 504.3 | 463.5 | 436.3 | 413.0 | 393.2 | 373.3 | 352.5 | 330.5 | 303.0 |
| Total | \$3,849.0 | \$4,555.2 | \$4,286.8 | \$4,101.1 | \$3,947.3 | \$3,809.9 | \$3,676.0 | \$3,534.3 | \$3,382.0 | \$3,189.6 |

Notes:

/1 FY 2020 forecast was developed by ADOT staff independently and varies slightly from the Risk Analysis results.

/2 FY 2026 forecast reflects the expiration of the transportation excise tax extension on December 31, 2025

RARF OFFICIAL REVENUE FORECAST DISTRIBUTION
(Current Dollars in Millions)

| Fiscal Year | Regional Area Road Fund (RARF) | | Public Transportation Fund | Total |
|---------------|--------------------------------|------------------------------|----------------------------|------------------|
| | Freeways /1 (56.2%) | Arterial Streets (10.5 %) | (33.3%) | |
| 2020 | \$279.7 | \$52.3 | \$165.7 | \$497.7 |
| 2021 | 296.3 | 55.4 | 175.6 | 527.3 |
| 2022 | 311.8 | 58.3 | 184.8 | 554.9 |
| 2023 | 327.3 | 61.1 | 193.9 | 582.3 |
| 2024 | 343.9 | 64.3 | 203.8 | 612.0 |
| 2025 | 360.9 | 67.4 | 213.8 | 642.1 |
| 2026 /2 | 221.0 | 41.3 | 130.9 | 393.2 |
| TOTALS | \$2,140.9 | \$400.1 | \$1,268.5 | \$3,809.5 |

Note: 1/ Per Arizona Revised Statutes 28-6305 B and C, a portion of the transportation excise tax funds for Freeways is transferred and divided equally between Maricopa Association of Governments and the Public Transportation Fund for planning and administering the regional transportation plan. This transfer is adjusted annually by the GDP price deflator. This table does not provide an estimate for the annual transfer.

2/ FY 2026 forecast reflects the expiration of the transportation excise tax extension on December 31, 2025.

Distribution

Per Arizona Revised Statutes 42-6105,D, the transportation excise tax will be distributed as follows:

1. 56.2 percent to the Regional Area Road (RARF) fund for freeways and other routes in the state highway systems, including capital expenses.
2. 10.5 percent to the RARF fund for major arterial streets and intersection improvements, including capital expenses and implementation studies.
3. 33.3 percent to the Public Transportation Fund for:
 - (a) Capital costs, maintenance and operation of public transportation classifications.
 - (b) Capital costs and utility relocation costs associated with a light rail public transit system.

PANELIST DATA VALUES

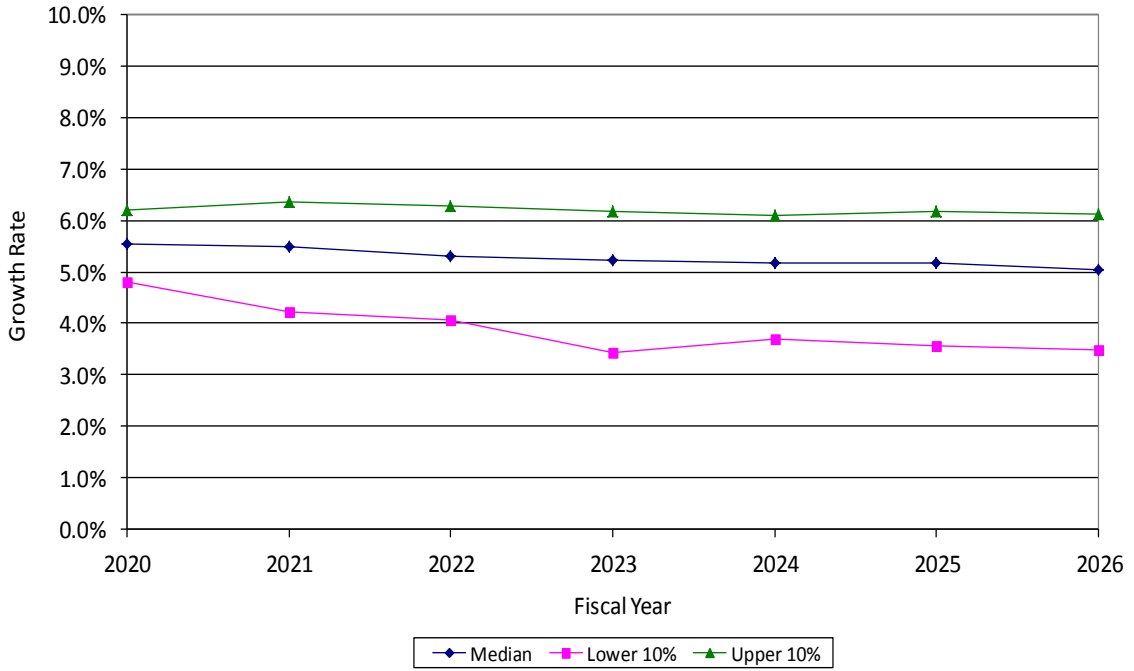
| | Nominal Pers. Inc. Growth /1 | Population Growth /1 | Construction Employment Growth /1 | 30 Year Mortgage Rate | Phoenix CPI Growth/1 | Sky Harbor/Gateway Passenger Traffic Growth | Total Non-Farm Employment Growth /1 |
|----------------|------------------------------------|-------------------------|---|-----------------------------|-------------------------|---|---|
| FY 2020 | | | | | | | |
| Median | 5.55% | 1.80% | 6.60% | 4.07% | 2.34% | 2.58% | 3.03% |
| Lower 10% | 4.81% | 1.52% | 4.92% | 3.64% | 1.81% | 1.70% | 2.69% |
| Upper 10% | 6.20% | 2.05% | 8.41% | 4.77% | 2.83% | 3.31% | 3.41% |
| FY 2021 | | | | | | | |
| Median | 5.50% | 1.77% | 5.28% | 4.13% | 2.15% | 2.17% | 2.77% |
| Lower 10% | 4.22% | 1.50% | 2.68% | 3.68% | 1.52% | 1.29% | 2.27% |
| Upper 10% | 6.37% | 2.04% | 7.48% | 4.87% | 2.74% | 3.00% | 3.19% |
| FY 2022 | | | | | | | |
| Median | 5.31% | 1.70% | 4.61% | 4.24% | 2.12% | 1.89% | 2.46% |
| Lower 10% | 4.07% | 1.40% | 0.48% | 3.68% | 1.52% | 0.72% | 2.01% |
| Upper 10% | 6.28% | 1.98% | 7.35% | 5.00% | 2.79% | 2.73% | 2.94% |
| FY 2023 | | | | | | | |
| Median | 5.22% | 1.63% | 4.24% | 4.44% | 2.07% | 1.74% | 2.33% |
| Lower 10% | 3.44% | 1.33% | -0.37% | 3.78% | 1.44% | 0.84% | 1.81% |
| Upper 10% | 6.17% | 1.93% | 7.21% | 5.12% | 2.79% | 2.87% | 2.96% |
| FY 2024 | | | | | | | |
| Median | 5.17% | 1.61% | 3.78% | 4.52% | 2.05% | 1.67% | 2.30% |
| Lower 10% | 3.68% | 1.20% | 0.01% | 3.82% | 1.36% | 0.77% | 1.77% |
| Upper 10% | 6.11% | 1.89% | 7.69% | 5.25% | 2.82% | 2.79% | 2.94% |
| FY 2025 | | | | | | | |
| Median | 5.18% | 1.57% | 3.53% | 4.54% | 2.04% | 1.69% | 2.17% |
| Lower 10% | 3.56% | 1.13% | -0.07% | 3.85% | 1.28% | 0.71% | 1.40% |
| Upper 10% | 6.19% | 1.85% | 7.62% | 5.30% | 2.92% | 2.72% | 3.01% |
| FY 2026 | | | | | | | |
| Median | 5.03% | 1.47% | 3.58% | 4.54% | 2.03% | 1.71% | 2.16% |
| Lower 10% | 3.49% | 1.03% | -0.17% | 3.79% | 1.18% | 0.54% | 1.26% |
| Upper 10% | 6.12% | 1.78% | 7.67% | 5.43% | 2.92% | 2.81% | 3.06% |

All data in the above table are percentage growth rates except 30 year mortgage rate.

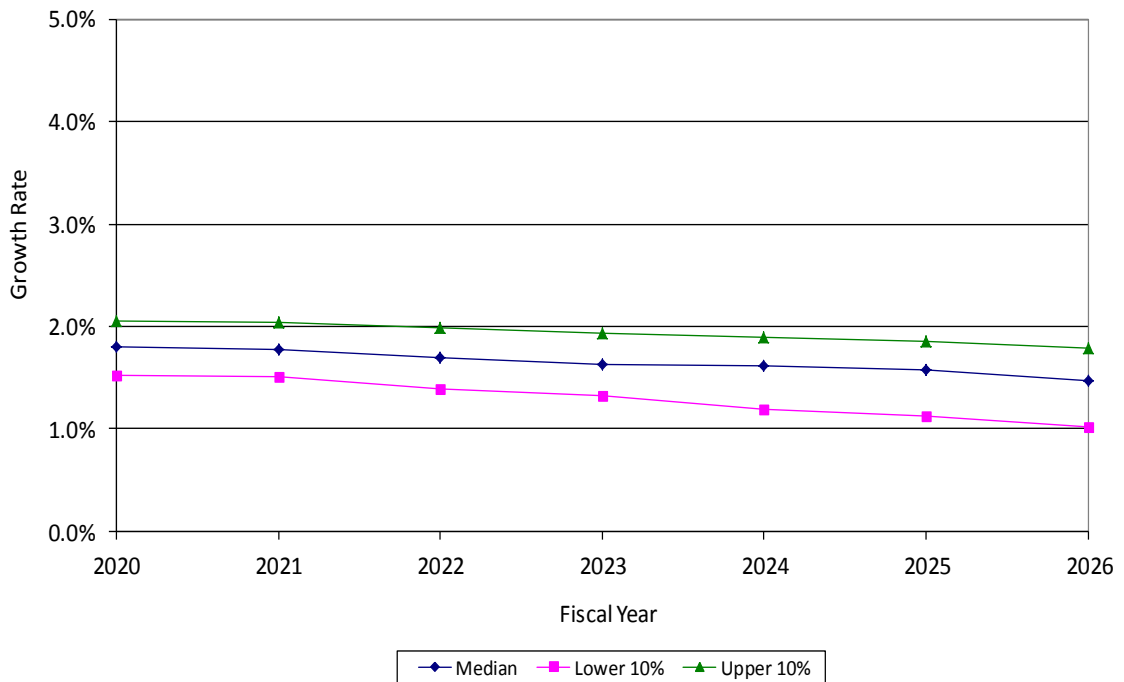
Personal income and 30 year mortgage rate are nominal rates.

/1 Data for Maricopa County/Phoenix Area.

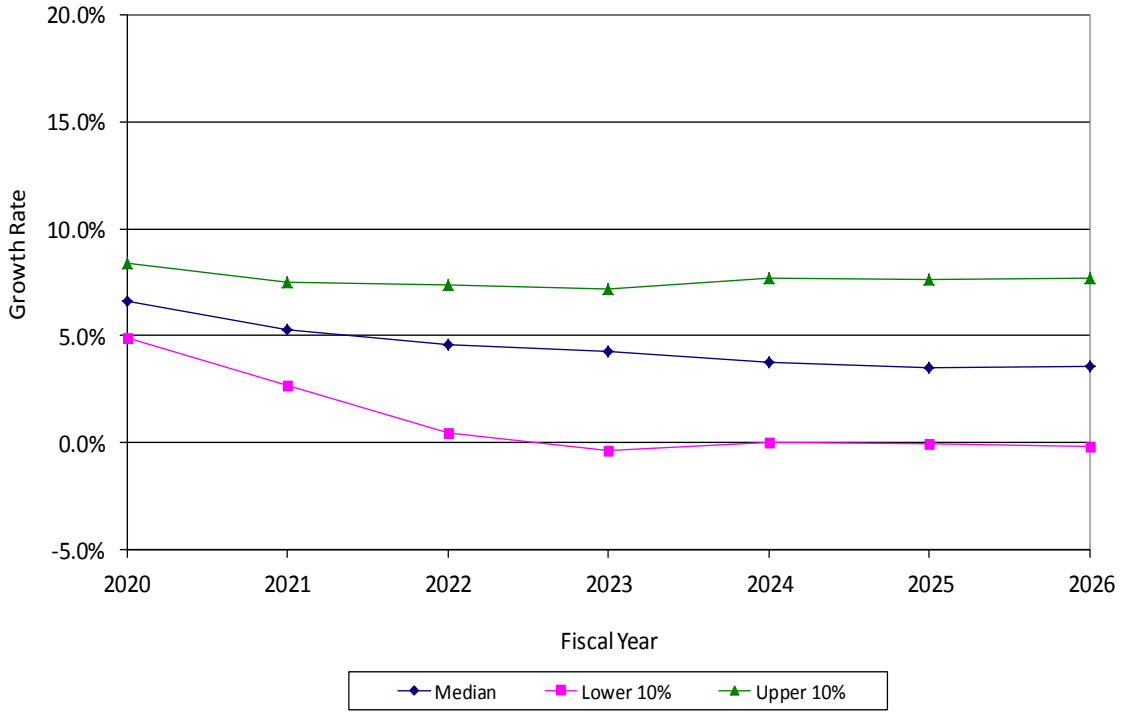
Maricopa County Nominal Personal Income Growth



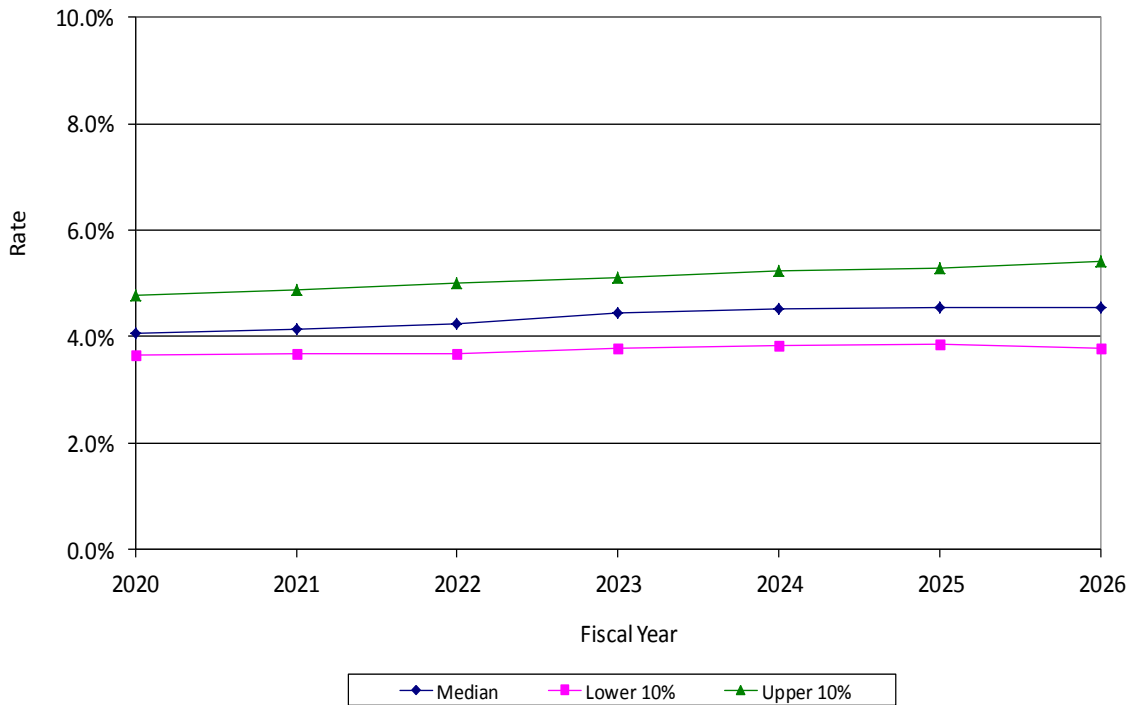
Maricopa County Population Growth



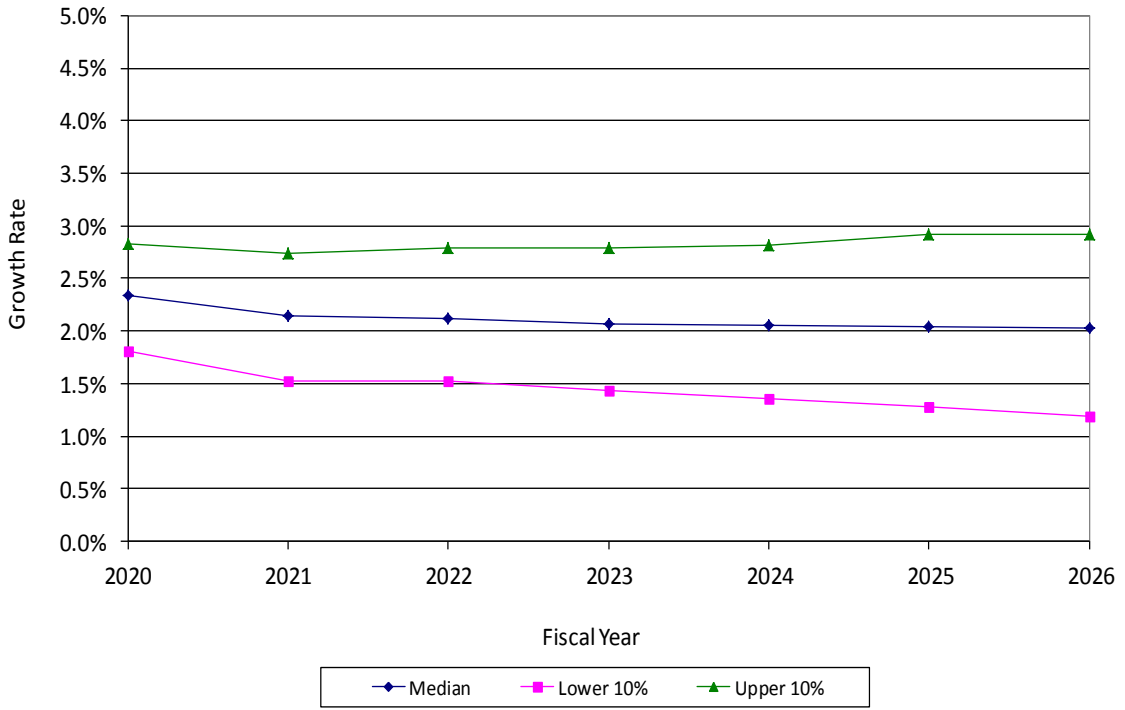
Maricopa County Construction Employment Growth



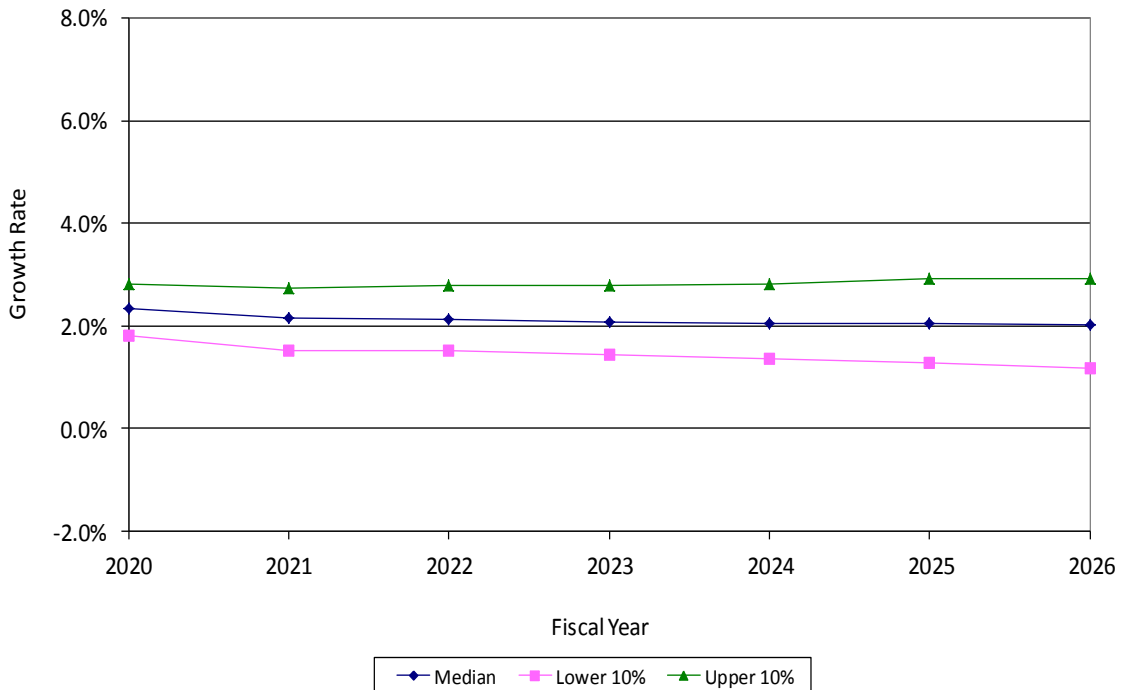
30 Year Mortgage Rate



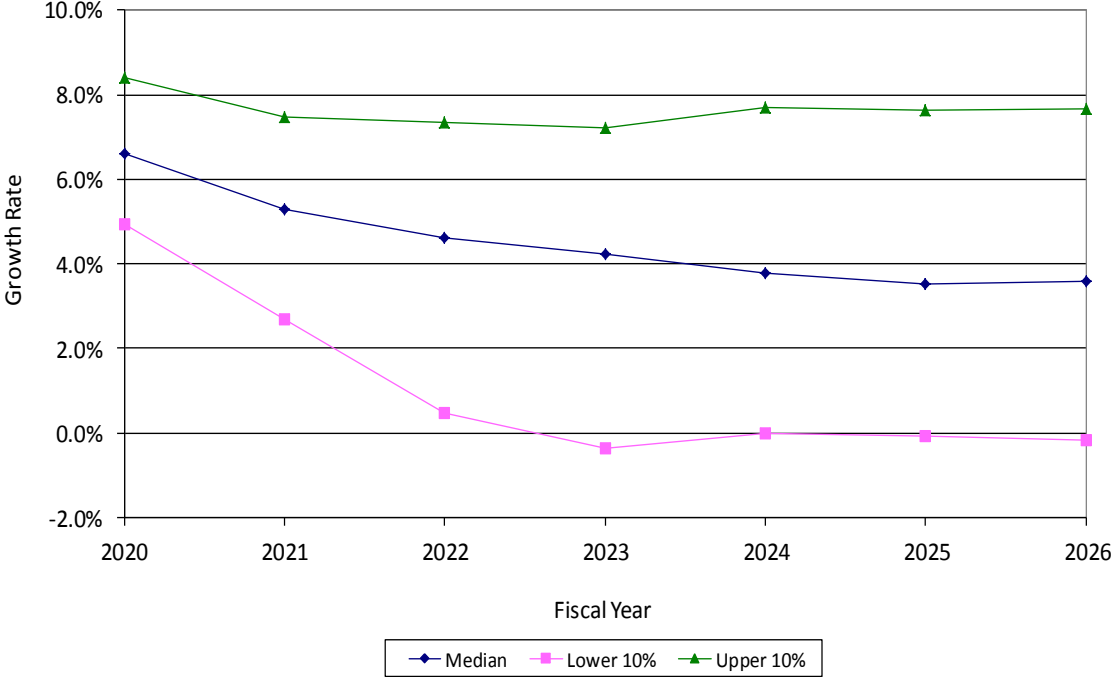
Phoenix CPI Growth



Phoenix Sky Harbor/Gateway Airports Passenger Traffic Growth



Maricopa County Total Non-Farm Employment Growth



Projected Maricopa County Nominal Personal Income Growth Rates

| | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|-------------|-----------|------|------|------|------|------|------|------|
| Panelist 1 | | | | | | | | |
| | Median | 5.7% | 5.5% | 5.4% | 5.2% | 5.1% | 5.1% | 5.1% |
| | Lower 10% | 5.4% | 4.5% | 4.3% | 4.0% | 4.0% | 4.0% | 3.9% |
| | Upper 10% | 6.0% | 6.5% | 6.5% | 6.4% | 6.4% | 6.4% | 6.0% |
| Panelist 2 | | | | | | | | |
| | Median | 5.4% | 5.3% | 5.3% | 5.0% | 4.7% | 5.0% | 5.1% |
| | Lower 10% | 3.0% | 2.5% | 3.5% | 3.3% | 3.5% | 3.3% | 3.4% |
| | Upper 10% | 6.0% | 6.7% | 6.5% | 6.4% | 6.4% | 6.4% | 6.3% |
| Panelist 3 | | | | | | | | |
| | Median | 5.0% | 5.0% | 4.0% | 4.0% | 4.0% | 4.0% | 3.5% |
| | Lower 10% | 4.0% | 3.0% | 3.0% | 2.0% | 2.0% | 2.0% | 2.0% |
| | Upper 10% | 7.0% | 6.0% | 6.0% | 5.0% | 5.0% | 5.0% | 5.0% |
| Panelist 4 | | | | | | | | |
| | Median | 5.6% | 5.5% | 5.5% | 5.5% | 5.3% | 5.2% | 5.0% |
| | Lower 10% | 5.2% | 5.0% | 4.5% | 4.2% | 4.0% | 3.5% | 3.2% |
| | Upper 10% | 6.2% | 6.0% | 6.0% | 6.0% | 5.8% | 5.6% | 5.5% |
| Panelist 5 | | | | | | | | |
| | Median | 6.0% | 6.7% | 6.2% | 6.5% | 6.5% | 6.5% | 6.2% |
| | Lower 10% | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% |
| | Upper 10% | 7.0% | 7.0% | 7.0% | 7.0% | 7.0% | 7.0% | 7.0% |
| Panelist 6 | | | | | | | | |
| | Median | 5.5% | 5.5% | 5.5% | 5.2% | 5.2% | 5.2% | 5.0% |
| | Lower 10% | 5.0% | 4.8% | 4.5% | 2.0% | 4.0% | 3.8% | 3.4% |
| | Upper 10% | 6.0% | 5.8% | 5.6% | 5.6% | 5.3% | 0.0% | 0.0% |
| Panelist 7 | | | | | | | | |
| | Median | 5.6% | 5.5% | 5.4% | 5.2% | 5.2% | 5.1% | 5.1% |
| | Lower 10% | 5.3% | 4.4% | 4.3% | 4.0% | 4.0% | 3.8% | 3.9% |
| | Upper 10% | 5.9% | 6.6% | 6.5% | 6.4% | 6.4% | 6.3% | 6.3% |
| Panelist 8 | | | | | | | | |
| | Median | 5.6% | 5.5% | 5.4% | 5.2% | 5.2% | 5.2% | 5.1% |
| | Lower 10% | 5.3% | 4.5% | 4.3% | 4.0% | 4.0% | 4.0% | 4.0% |
| | Upper 10% | 6.0% | 6.5% | 6.4% | 6.4% | 6.4% | 6.4% | 6.4% |
| Panelist 9 | | | | | | | | |
| | Median | 5.6% | 5.6% | 5.5% | 5.4% | 5.3% | 5.3% | 5.2% |
| | Lower 10% | 5.1% | 4.5% | 4.3% | 3.9% | 3.8% | 3.7% | 3.6% |
| | Upper 10% | 5.9% | 6.6% | 6.6% | 6.5% | 6.4% | 6.5% | 6.5% |
| Panelist 10 | | | | | | | | |
| | Median | 5.5% | 4.9% | 4.9% | 5.0% | 5.2% | 5.2% | 5.0% |
| | Lower 10% | 4.8% | 4.0% | 3.0% | 2.0% | 2.5% | 2.5% | 2.5% |
| | Upper 10% | 6.0% | 6.0% | 5.8% | 6.0% | 6.0% | 6.0% | 6.0% |

Projected Maricopa County Population Growth Rates

| | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|-------------|-----------|------|------|------|------|------|------|------|
| Panelist 1 | | | | | | | | |
| | Median | 1.8% | 1.7% | 1.6% | 1.5% | 1.5% | 1.4% | 1.4% |
| | Lower 10% | 1.5% | 1.5% | 1.3% | 1.3% | 1.2% | 1.1% | 1.1% |
| | Upper 10% | 2.0% | 2.0% | 1.7% | 1.7% | 1.8% | 1.7% | 1.7% |
| Panelist 2 | | | | | | | | |
| | Median | 1.6% | 1.6% | 1.5% | 1.5% | 1.5% | 1.4% | 1.4% |
| | Lower 10% | 1.5% | 1.5% | 1.3% | 1.3% | 1.2% | 1.1% | 1.1% |
| | Upper 10% | 1.7% | 1.7% | 1.7% | 1.7% | 1.8% | 1.7% | 1.7% |
| Panelist 3 | | | | | | | | |
| | Median | 1.7% | 1.7% | 1.5% | 1.5% | 1.5% | 1.5% | 1.3% |
| | Lower 10% | 1.2% | 1.2% | 1.0% | 1.0% | 1.0% | 1.0% | 0.8% |
| | Upper 10% | 2.0% | 2.0% | 1.8% | 1.8% | 1.8% | 1.8% | 1.6% |
| Panelist 4 | | | | | | | | |
| | Median | 1.7% | 1.7% | 1.7% | 1.6% | 1.6% | 1.5% | 1.5% |
| | Lower 10% | 1.5% | 1.5% | 1.4% | 1.4% | 1.3% | 1.2% | 1.2% |
| | Upper 10% | 2.0% | 1.9% | 1.8% | 1.8% | 1.8% | 1.7% | 1.7% |
| Panelist 5 | | | | | | | | |
| | Median | 2.9% | 3.0% | 3.0% | 2.7% | 2.5% | 2.5% | 2.0% |
| | Lower 10% | 2.3% | 2.4% | 2.4% | 2.1% | 1.9% | 1.9% | 1.4% |
| | Upper 10% | 3.4% | 3.4% | 3.3% | 3.0% | 2.8% | 2.8% | 2.3% |
| Panelist 6 | | | | | | | | |
| | Median | 1.7% | 1.6% | 1.5% | 1.5% | 1.5% | 1.5% | 1.4% |
| | Lower 10% | 1.5% | 1.4% | 1.3% | 1.3% | 1.2% | 1.2% | 1.2% |
| | Upper 10% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |
| Panelist 7 | | | | | | | | |
| | Median | 1.7% | 1.6% | 1.6% | 1.5% | 1.5% | 1.4% | 1.3% |
| | Lower 10% | 1.5% | 1.4% | 1.4% | 1.3% | 1.3% | 1.1% | 0.9% |
| | Upper 10% | 1.9% | 1.8% | 1.8% | 1.7% | 1.7% | 1.7% | 1.7% |
| Panelist 8 | | | | | | | | |
| | Median | 1.7% | 1.6% | 1.6% | 1.5% | 1.5% | 1.4% | 1.4% |
| | Lower 10% | 1.5% | 1.5% | 1.3% | 1.3% | 1.2% | 1.1% | 1.1% |
| | Upper 10% | 1.8% | 1.8% | 1.8% | 1.7% | 1.7% | 1.6% | 1.6% |
| Panelist 9 | | | | | | | | |
| | Median | 1.7% | 1.7% | 1.6% | 1.6% | 1.5% | 1.5% | 1.5% |
| | Lower 10% | 1.5% | 1.4% | 1.3% | 1.3% | 1.2% | 1.1% | 1.0% |
| | Upper 10% | 1.8% | 1.8% | 1.9% | 1.9% | 1.8% | 1.8% | 1.8% |
| Panelist 10 | | | | | | | | |
| | Median | 1.5% | 1.5% | 1.4% | 1.4% | 1.5% | 1.6% | 1.5% |
| | Lower 10% | 1.3% | 1.3% | 1.3% | 1.0% | 0.4% | 0.4% | 0.4% |
| | Upper 10% | 1.9% | 2.0% | 2.0% | 2.0% | 1.8% | 1.8% | 1.8% |

Projected Maricopa County Construction Employment Growth Rates

| | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|-------------|-----------|-------|-------|--------|--------|-------|-------|-------|
| Panelist 1 | | | | | | | | |
| | Median | 6.7% | 5.2% | 3.9% | 3.3% | 3.1% | 3.1% | 3.1% |
| | Lower 10% | 5.3% | 3.8% | -0.2% | -0.8% | -1.6% | -1.6% | -1.6% |
| | Upper 10% | 7.5% | 6.6% | 6.6% | 7.2% | 7.1% | 7.0% | 7.0% |
| Panelist 2 | | | | | | | | |
| | Median | 5.5% | 3.0% | 3.0% | 2.8% | 3.1% | 3.1% | 3.1% |
| | Lower 10% | 5.2% | 0.5% | -0.2% | -0.8% | -1.6% | -1.6% | -1.6% |
| | Upper 10% | 7.5% | 6.6% | 8.0% | 7.4% | 10.0% | 10.0% | 10.0% |
| Panelist 3 | | | | | | | | |
| | Median | 7.0% | 6.0% | 5.0% | 5.0% | 5.0% | 3.0% | 3.0% |
| | Lower 10% | 5.0% | 2.0% | 2.0% | 2.0% | 3.0% | 2.0% | 2.0% |
| | Upper 10% | 8.0% | 8.0% | 7.0% | 7.0% | 7.0% | 6.0% | 6.0% |
| Panelist 4 | | | | | | | | |
| | Median | 5.0% | 4.5% | 3.5% | 3.0% | 2.5% | 2.5% | 2.5% |
| | Lower 10% | 4.5% | 3.0% | -1.0% | -2.0% | -2.5% | -3.0% | -3.5% |
| | Upper 10% | 7.5% | 7.0% | 6.0% | 5.0% | 5.5% | 6.0% | 6.5% |
| Panelist 5 | | | | | | | | |
| | Median | 7.8% | 7.8% | 7.2% | 6.8% | 5.0% | 5.0% | 5.0% |
| | Lower 10% | 5.4% | 5.4% | 4.8% | 4.4% | 2.6% | 2.6% | 2.6% |
| | Upper 10% | 9.3% | 9.3% | 8.7% | 8.3% | 7.4% | 7.4% | 7.4% |
| Panelist 6 | | | | | | | | |
| | Median | 7.5% | 7.0% | 6.5% | 6.0% | 5.0% | 4.0% | 3.5% |
| | Lower 10% | 5.0% | 4.8% | 4.8% | 4.5% | 4.3% | 4.0% | 3.5% |
| | Upper 10% | 8.5% | 8.6% | 8.7% | 8.8% | 8.9% | 9.0% | 9.0% |
| Panelist 7 | | | | | | | | |
| | Median | 7.0% | 6.0% | 5.0% | 4.0% | 3.1% | 3.1% | 3.1% |
| | Lower 10% | 5.0% | 4.0% | 2.0% | 0.0% | -1.6% | -1.6% | -1.6% |
| | Upper 10% | 9.0% | 8.0% | 8.0% | 8.0% | 7.8% | 7.8% | 7.8% |
| Panelist 8 | | | | | | | | |
| | Median | 7.5% | 6.8% | 5.5% | 4.0% | 4.0% | 3.5% | 3.5% |
| | Lower 10% | 5.5% | 4.0% | 2.0% | -1.0% | -1.0% | -1.5% | -1.5% |
| | Upper 10% | 8.5% | 7.8% | 7.5% | 7.2% | 7.2% | 7.0% | 7.0% |
| Panelist 9 | | | | | | | | |
| | Median | 7.0% | 6.5% | 4.5% | 4.5% | 4.0% | 4.0% | 4.0% |
| | Lower 10% | 5.3% | 4.3% | 0.5% | 0.0% | -1.5% | -2.0% | -2.0% |
| | Upper 10% | 8.3% | 8.0% | 8.0% | 8.2% | 8.0% | 8.0% | 8.0% |
| Panelist 10 | | | | | | | | |
| | Median | 5.0% | 0.0% | 2.0% | 3.0% | 3.0% | 4.0% | 5.0% |
| | Lower 10% | 3.0% | -5.0% | -10.0% | -10.0% | 0.0% | 2.0% | 2.0% |
| | Upper 10% | 10.0% | 5.0% | 5.0% | 5.0% | 8.0% | 8.0% | 8.0% |

Projected 30 Year Mortgage Rates

| | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|-------------|-----------|------|------|------|------|------|------|------|
| Panelist 1 | | | | | | | | |
| | Median | 4.5% | 4.5% | 4.7% | 4.8% | 5.0% | 5.0% | 5.0% |
| | Lower 10% | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% |
| | Upper 10% | 5.0% | 5.2% | 5.3% | 5.3% | 5.8% | 5.8% | 5.8% |
| Panelist 2 | | | | | | | | |
| | Median | 3.6% | 3.7% | 3.8% | 4.0% | 4.0% | 4.0% | 4.0% |
| | Lower 10% | 3.4% | 3.5% | 3.4% | 3.5% | 3.5% | 3.5% | 3.5% |
| | Upper 10% | 5.0% | 5.2% | 5.3% | 5.3% | 5.4% | 5.4% | 5.6% |
| Panelist 3 | | | | | | | | |
| | Median | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% |
| | Lower 10% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% |
| | Upper 10% | 6.0% | 6.0% | 6.0% | 6.0% | 6.0% | 6.0% | 6.0% |
| Panelist 4 | | | | | | | | |
| | Median | 4.7% | 4.9% | 5.2% | 5.2% | 5.2% | 5.2% | 5.2% |
| | Lower 10% | 4.4% | 4.5% | 4.5% | 4.5% | 4.5% | 4.5% | 4.3% |
| | Upper 10% | 5.0% | 5.2% | 5.4% | 5.4% | 5.4% | 5.4% | 5.4% |
| Panelist 5 | | | | | | | | |
| | Median | 3.5% | 3.2% | 3.2% | 3.5% | 3.5% | 3.5% | 3.5% |
| | Lower 10% | 3.0% | 2.7% | 2.7% | 3.0% | 3.0% | 3.0% | 3.0% |
| | Upper 10% | 4.2% | 3.9% | 3.9% | 4.2% | 4.2% | 4.2% | 4.2% |
| Panelist 6 | | | | | | | | |
| | Median | 4.0% | 4.0% | 4.0% | 4.5% | 4.5% | 4.5% | 4.5% |
| | Lower 10% | 3.5% | 3.5% | 3.5% | 3.5% | 3.5% | 3.5% | 3.5% |
| | Upper 10% | 4.5% | 4.6% | 4.7% | 4.8% | 5.0% | 5.0% | 5.5% |
| Panelist 7 | | | | | | | | |
| | Median | 4.1% | 4.6% | 4.9% | 5.0% | 5.0% | 5.0% | 5.0% |
| | Lower 10% | 3.9% | 4.4% | 4.6% | 4.7% | 4.6% | 4.6% | 4.4% |
| | Upper 10% | 4.3% | 4.8% | 5.2% | 5.3% | 5.4% | 5.4% | 5.6% |
| Panelist 8 | | | | | | | | |
| | Median | 4.0% | 4.0% | 4.0% | 4.5% | 5.0% | 5.0% | 5.0% |
| | Lower 10% | 3.8% | 3.7% | 3.7% | 4.2% | 4.6% | 4.6% | 4.6% |
| | Upper 10% | 4.2% | 4.2% | 4.3% | 4.9% | 5.3% | 5.3% | 5.4% |
| Panelist 9 | | | | | | | | |
| | Median | 4.5% | 4.6% | 4.6% | 4.6% | 4.7% | 4.7% | 4.7% |
| | Lower 10% | 3.9% | 4.0% | 3.9% | 3.9% | 4.0% | 4.0% | 3.8% |
| | Upper 10% | 4.9% | 5.0% | 5.3% | 5.4% | 5.5% | 5.5% | 5.8% |
| Panelist 10 | | | | | | | | |
| | Median | 3.8% | 3.8% | 4.0% | 4.3% | 4.3% | 4.5% | 4.5% |
| | Lower 10% | 3.5% | 3.5% | 3.5% | 3.5% | 3.5% | 3.8% | 3.8% |
| | Upper 10% | 4.5% | 4.5% | 4.5% | 4.5% | 4.5% | 5.0% | 5.0% |

Projected Phoenix CPI Growth Rates

| | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|-------------|-----------|------|------|------|------|------|------|------|
| Panelist 1 | | | | | | | | |
| | Median | 2.2% | 2.0% | 2.1% | 2.1% | 2.1% | 2.1% | 2.0% |
| | Lower 10% | 1.8% | 1.6% | 1.7% | 1.7% | 1.5% | 1.3% | 1.1% |
| | Upper 10% | 2.5% | 2.5% | 2.6% | 2.7% | 2.7% | 2.9% | 2.9% |
| Panelist 2 | | | | | | | | |
| | Median | 1.6% | 2.0% | 2.0% | 1.8% | 1.7% | 1.8% | 2.0% |
| | Lower 10% | 1.4% | 1.5% | 1.3% | 1.3% | 1.2% | 1.1% | 1.1% |
| | Upper 10% | 1.7% | 2.3% | 2.4% | 2.5% | 3.0% | 3.5% | 3.5% |
| Panelist 3 | | | | | | | | |
| | Median | 2.5% | 2.5% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |
| | Lower 10% | 2.0% | 2.0% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| | Upper 10% | 2.8% | 2.8% | 2.3% | 2.3% | 2.3% | 2.3% | 2.3% |
| Panelist 4 | | | | | | | | |
| | Median | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |
| | Lower 10% | 1.7% | 1.6% | 1.5% | 1.5% | 1.5% | 1.4% | 1.2% |
| | Upper 10% | 2.2% | 2.2% | 2.3% | 2.5% | 2.5% | 2.7% | 2.7% |
| Panelist 5 | | | | | | | | |
| | Median | 3.0% | 2.4% | 2.3% | 2.3% | 1.8% | 1.5% | 1.5% |
| | Lower 10% | 1.7% | 1.1% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% |
| | Upper 10% | 4.3% | 3.7% | 3.6% | 3.6% | 3.1% | 2.8% | 2.8% |
| Panelist 6 | | | | | | | | |
| | Median | 2.0% | 2.0% | 1.8% | 1.8% | 1.9% | 2.0% | 2.0% |
| | Lower 10% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| | Upper 10% | 2.5% | 2.5% | 2.5% | 2.5% | 2.6% | 2.7% | 2.7% |
| Panelist 7 | | | | | | | | |
| | Median | 2.5% | 2.2% | 2.4% | 2.2% | 2.1% | 2.1% | 2.0% |
| | Lower 10% | 2.0% | 1.7% | 1.9% | 1.7% | 1.5% | 1.3% | 1.1% |
| | Upper 10% | 3.0% | 2.7% | 2.9% | 2.7% | 2.7% | 2.9% | 2.9% |
| Panelist 8 | | | | | | | | |
| | Median | 2.5% | 2.3% | 2.4% | 2.2% | 2.1% | 2.1% | 2.0% |
| | Lower 10% | 1.8% | 1.6% | 1.7% | 1.7% | 1.5% | 1.3% | 1.1% |
| | Upper 10% | 2.7% | 2.6% | 2.9% | 2.7% | 2.7% | 2.9% | 2.9% |
| Panelist 9 | | | | | | | | |
| | Median | 2.1% | 2.1% | 2.2% | 2.3% | 2.3% | 2.3% | 2.3% |
| | Lower 10% | 1.7% | 1.7% | 1.6% | 1.5% | 1.4% | 1.3% | 1.2% |
| | Upper 10% | 2.6% | 2.6% | 2.9% | 2.9% | 3.0% | 3.0% | 3.0% |
| Panelist 10 | | | | | | | | |
| | Median | 3.0% | 2.0% | 2.0% | 2.0% | 2.5% | 2.5% | 2.5% |
| | Lower 10% | 2.5% | 1.0% | 1.5% | 1.0% | 1.0% | 1.0% | 1.0% |
| | Upper 10% | 4.0% | 3.5% | 3.5% | 3.5% | 3.5% | 3.5% | 3.5% |

Projected Sky Harbor/Gateway Airports Passenger Traffic Growth Rates

| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|-------------|------|------|-------|------|------|------|------|
| Panelist 1 | | | | | | | |
| Median | 2.7% | 2.3% | 2.1% | 1.9% | 1.7% | 1.6% | 1.6% |
| Lower 10% | 2.0% | 1.6% | 1.4% | 0.9% | 0.7% | 0.6% | 0.4% |
| Upper 10% | 3.4% | 3.0% | 2.8% | 2.9% | 2.7% | 2.6% | 2.8% |
| Panelist 2 | | | | | | | |
| Median | 2.7% | 2.3% | 2.1% | 1.9% | 1.7% | 1.6% | 1.6% |
| Lower 10% | 2.0% | 1.6% | 1.4% | 0.9% | 0.7% | 0.6% | 0.4% |
| Upper 10% | 3.4% | 3.0% | 2.8% | 2.9% | 2.7% | 2.6% | 2.8% |
| Panelist 3 | | | | | | | |
| Median | 3.0% | 3.0% | 3.0% | 2.0% | 2.0% | 2.0% | 2.0% |
| Lower 10% | 2.0% | 2.0% | 2.0% | 1.0% | 1.0% | 1.0% | 1.0% |
| Upper 10% | 3.5% | 3.5% | 3.5% | 2.5% | 2.5% | 2.5% | 2.5% |
| Panelist 4 | | | | | | | |
| Median | 2.7% | 2.3% | 2.1% | 1.9% | 1.7% | 1.6% | 1.6% |
| Lower 10% | 2.0% | 1.6% | 1.4% | 0.9% | 0.7% | 0.6% | 0.4% |
| Upper 10% | 3.4% | 3.0% | 2.8% | 2.9% | 2.7% | 2.6% | 2.8% |
| Panelist 5 | | | | | | | |
| Median | 1.8% | 1.8% | 1.2% | 1.0% | 1.2% | 1.8% | 2.0% |
| Lower 10% | 0.0% | 0.0% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% |
| Upper 10% | 2.8% | 2.8% | 2.8% | 3.5% | 3.5% | 3.5% | 3.5% |
| Panelist 6 | | | | | | | |
| Median | 2.7% | 2.3% | 2.1% | 1.9% | 1.7% | 1.6% | 1.6% |
| Lower 10% | 2.0% | 1.6% | 1.4% | 1.0% | 1.0% | 1.0% | 0.5% |
| Upper 10% | 3.4% | 3.3% | 3.3% | 3.3% | 3.3% | 3.2% | 3.2% |
| Panelist 7 | | | | | | | |
| Median | 2.5% | 2.0% | 1.9% | 1.9% | 1.7% | 1.6% | 1.6% |
| Lower 10% | 1.8% | 1.3% | 1.2% | 0.9% | 0.7% | 0.6% | 0.4% |
| Upper 10% | 3.2% | 2.7% | 2.6% | 2.9% | 2.7% | 2.6% | 2.8% |
| Panelist 8 | | | | | | | |
| Median | 2.7% | 2.3% | 2.1% | 1.9% | 1.7% | 1.6% | 1.6% |
| Lower 10% | 2.0% | 1.6% | 1.4% | 0.9% | 0.7% | 0.6% | 0.4% |
| Upper 10% | 3.4% | 3.0% | 2.8% | 2.9% | 2.7% | 2.6% | 2.8% |
| Panelist 9 | | | | | | | |
| Median | 2.5% | 2.4% | 2.3% | 2.0% | 2.0% | 2.0% | 2.0% |
| Lower 10% | 1.8% | 1.7% | 1.5% | 0.8% | 0.6% | 0.5% | 0.3% |
| Upper 10% | 3.5% | 3.6% | 3.3% | 3.2% | 3.1% | 3.0% | 2.9% |
| Panelist 10 | | | | | | | |
| Median | 2.5% | 1.0% | 0.0% | 1.0% | 1.3% | 1.5% | 1.5% |
| Lower 10% | 1.5% | 0.0% | -5.0% | 0.5% | 1.0% | 1.0% | 1.0% |
| Upper 10% | 3.0% | 2.0% | 0.5% | 2.0% | 2.0% | 2.0% | 2.0% |

Projected Maricopa County Total Non-Farm Employment Growth Rates

| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|--------------------|------|------|------|------|------|------|------|
| Panelist 1 | | | | | | | |
| Median | 3.2% | 3.1% | 2.8% | 2.5% | 2.4% | 2.3% | 2.3% |
| Lower 10% | 2.7% | 2.0% | 2.0% | 1.9% | 1.9% | 1.2% | 1.2% |
| Upper 10% | 3.4% | 3.4% | 3.1% | 3.0% | 3.0% | 3.1% | 3.1% |
| Panelist 2 | | | | | | | |
| Median | 2.7% | 2.3% | 2.1% | 1.9% | 1.7% | 1.6% | 1.6% |
| Lower 10% | 2.0% | 1.6% | 1.4% | 0.9% | 0.7% | 0.6% | 0.4% |
| Upper 10% | 3.4% | 3.0% | 2.8% | 2.9% | 2.7% | 2.6% | 2.8% |
| Panelist 3 | | | | | | | |
| Median | 3.0% | 3.0% | 2.0% | 2.0% | 2.0% | 1.0% | 1.0% |
| Lower 10% | 2.3% | 2.3% | 1.3% | 1.3% | 1.3% | 0.3% | 0.3% |
| Upper 10% | 3.5% | 3.5% | 2.5% | 2.5% | 2.5% | 1.5% | 1.5% |
| Panelist 4 | | | | | | | |
| Median | 2.6% | 2.4% | 2.2% | 2.0% | 2.0% | 2.0% | 2.0% |
| Lower 10% | 2.3% | 2.2% | 2.0% | 1.7% | 1.6% | 1.5% | 1.0% |
| Upper 10% | 3.2% | 3.0% | 2.9% | 2.9% | 2.9% | 3.0% | 3.2% |
| Panelist 5 | | | | | | | |
| Median | 3.6% | 3.3% | 2.7% | 2.7% | 2.7% | 2.7% | 2.7% |
| Lower 10% | 3.4% | 3.1% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% |
| Upper 10% | 3.8% | 3.5% | 2.9% | 2.9% | 2.9% | 2.9% | 2.9% |
| Panelist 6 | | | | | | | |
| Median | 3.1% | 2.9% | 2.7% | 2.7% | 2.5% | 2.5% | 2.3% |
| Lower 10% | 2.9% | 2.0% | 2.0% | 2.0% | 2.0% | 1.5% | 1.2% |
| Upper 10% | 3.5% | 3.5% | 3.5% | 3.5% | 3.5% | 3.3% | 3.3% |
| Panelist 7 | | | | | | | |
| Median | 3.0% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% |
| Lower 10% | 2.8% | 2.3% | 2.3% | 2.0% | 2.0% | 1.6% | 1.6% |
| Upper 10% | 3.2% | 2.7% | 2.7% | 3.0% | 3.0% | 3.4% | 3.4% |
| Panelist 8 | | | | | | | |
| Median | 3.1% | 2.9% | 2.6% | 2.4% | 2.4% | 2.3% | 2.3% |
| Lower 10% | 2.9% | 2.7% | 2.4% | 1.9% | 1.9% | 1.3% | 1.3% |
| Upper 10% | 3.3% | 3.1% | 2.8% | 2.9% | 2.9% | 3.4% | 3.4% |
| Panelist 9 | | | | | | | |
| Median | 3.0% | 2.8% | 2.5% | 2.3% | 2.3% | 2.3% | 2.3% |
| Lower 10% | 2.8% | 2.5% | 2.2% | 1.9% | 1.8% | 1.5% | 1.0% |
| Upper 10% | 3.3% | 3.2% | 3.1% | 3.0% | 3.0% | 3.4% | 3.5% |
| Panelist 10 | | | | | | | |
| Median | 3.0% | 2.5% | 2.5% | 2.3% | 2.5% | 2.5% | 2.6% |
| Lower 10% | 2.8% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |
| Upper 10% | 3.5% | 3.0% | 3.0% | 3.0% | 3.0% | 3.5% | 3.5% |

HISTORICAL DATA MARICOPA COUNTY NOMINAL PERSONAL INCOME GROWTH (Annual Percent Change)

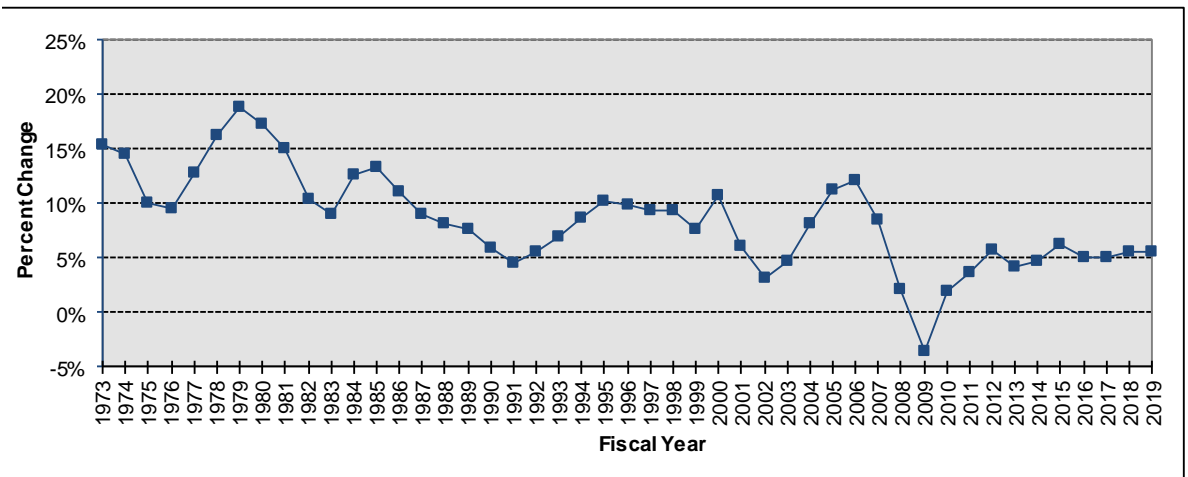
HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)

| | | | | | | | | | |
|------|-------|------|-------|------|-------|------|-------|-------|------|
| 1971 | | 1981 | 15.1% | 1991 | 4.6% | 2001 | 6.1% | 2011 | 3.7% |
| 1972 | | 1982 | 10.4% | 1992 | 5.6% | 2002 | 3.2% | 2012 | 5.7% |
| 1973 | 15.4% | 1983 | 9.0% | 1993 | 6.9% | 2003 | 4.7% | 2013 | 4.2% |
| 1974 | 14.6% | 1984 | 12.6% | 1994 | 8.7% | 2004 | 8.1% | 2014 | 4.7% |
| 1975 | 10.0% | 1985 | 13.3% | 1995 | 10.3% | 2005 | 11.3% | 2015 | 6.2% |
| 1976 | 9.6% | 1986 | 11.1% | 1996 | 9.9% | 2006 | 12.1% | 2016 | 5.0% |
| 1977 | 12.8% | 1987 | 9.0% | 1997 | 9.4% | 2007 | 8.5% | 2017 | 5.0% |
| 1978 | 16.2% | 1988 | 8.2% | 1998 | 9.3% | 2008 | 2.2% | 2018* | 5.6% |
| 1979 | 18.8% | 1989 | 7.7% | 1999 | 7.7% | 2009 | -3.5% | 2019* | 5.6% |
| 1980 | 17.2% | 1990 | 5.9% | 2000 | 10.8% | 2010 | 2.0% | 2020 | |

FY 1973-2017 data from BEA. FY 2018-2020 data from Phoenix Blue Chip. FY 2021-2039 estimates from ADOT staff.

*FY 2018 and beyond are estimates.

HISTORICAL DATA - GRAPHED



HISTORICAL DATA - ANALYSIS

| Period | Historical | | Mean | Std. Dev. | 80% Range | |
|-------------|------------|-------|------|-----------|-----------|-------|
| | Min. | Max. | | | Lower | Upper |
| 5 Years | 5.0% | 6.2% | 5.5% | 0.5% | 5.0% | 6.0% |
| 10 Years | 2.0% | 6.2% | 4.8% | 1.2% | 3.5% | 5.8% |
| Full Period | -3.5% | 18.8% | 8.5% | 4.4% | 4.0% | 14.8% |

**HISTORICAL DATA
MARICOPA COUNTY POPULATION GROWTH
(Annual Percent Change)**

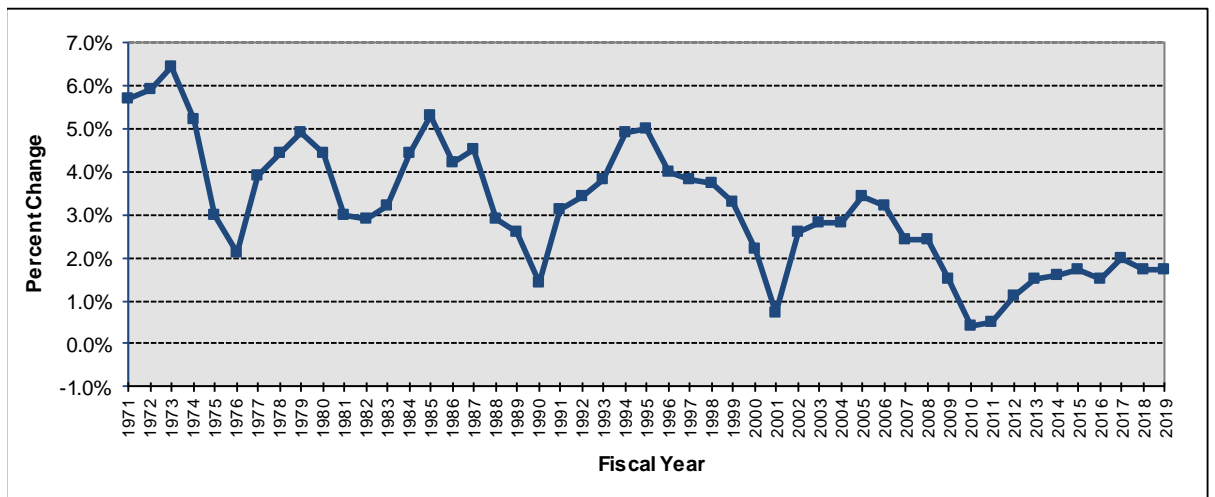
HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)

| | | | | | | | | | |
|------|------|------|------|------|------|------|------|-------|------|
| 1971 | 5.7% | 1981 | 3.0% | 1991 | 3.1% | 2001 | 0.7% | 2011 | 0.5% |
| 1972 | 5.9% | 1982 | 2.9% | 1992 | 3.4% | 2002 | 2.6% | 2012 | 1.1% |
| 1973 | 6.4% | 1983 | 3.2% | 1993 | 3.8% | 2003 | 2.8% | 2013 | 1.5% |
| 1974 | 5.2% | 1984 | 4.4% | 1994 | 4.9% | 2004 | 2.8% | 2014 | 1.6% |
| 1975 | 3.0% | 1985 | 5.3% | 1995 | 5.0% | 2005 | 3.4% | 2015 | 1.7% |
| 1976 | 2.1% | 1986 | 4.2% | 1996 | 4.0% | 2006 | 3.2% | 2016 | 1.5% |
| 1977 | 3.9% | 1987 | 4.5% | 1997 | 3.8% | 2007 | 2.4% | 2017 | 2.0% |
| 1978 | 4.4% | 1988 | 2.9% | 1998 | 3.7% | 2008 | 2.4% | 2018 | 1.7% |
| 1979 | 4.9% | 1989 | 2.6% | 1999 | 3.3% | 2009 | 1.5% | 2019* | 1.7% |
| 1980 | 4.4% | 1990 | 1.4% | 2000 | 2.2% | 2010 | 0.4% | 2020 | |

FY 1999 and prior: from U.S. Census Bureau. FY 2000-2018 AZ Office of Economic Opportunity (OEO) estimates.

*FY 2019 and beyond OEO projections Medium Series.

HISTORICAL DATA - GRAPHED



HISTORICAL DATA - ANALYSIS

| Period | Historical | | Mean | Std. Dev. | 80% Range | |
|-------------|------------|------|------|-----------|-----------|-------|
| | Min. | Max. | | | Lower | Upper |
| 5 Years | 1.5% | 2.0% | 1.7% | 0.2% | 1.6% | 1.9% |
| 10 Years | 0.4% | 2.0% | 1.4% | 0.5% | 0.5% | 1.7% |
| Full Period | 0.4% | 6.4% | 3.1% | 1.5% | 1.5% | 5.0% |

HISTORICAL DATA MARICOPA COUNTY CONSTRUCTION EMPLOYMENT GROWTH (Annual Percent Change)

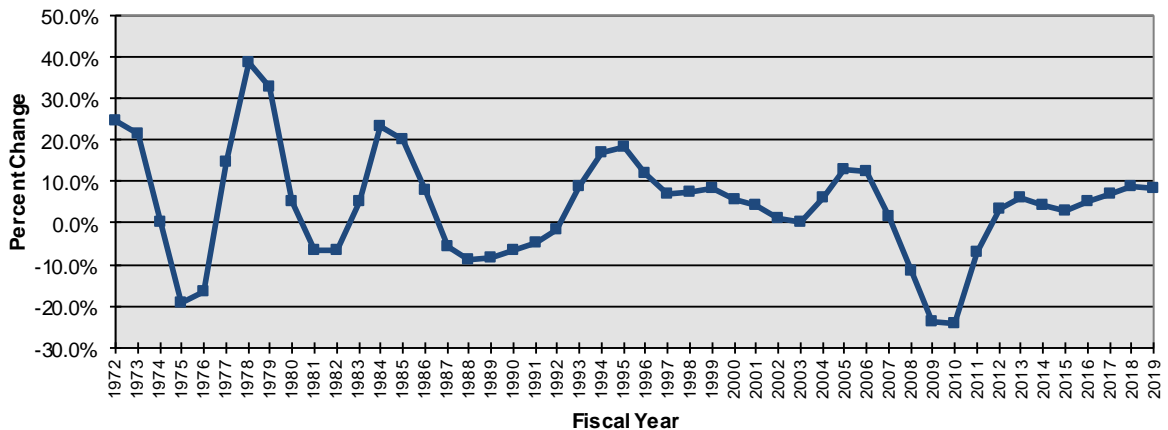
HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)

| | | | | | | | | | |
|------|--------|------|-------|------|-------|------|--------|-------|-------|
| 1971 | | 1981 | -6.7% | 1991 | -4.8% | 2001 | 4.1% | 2011 | -7.2% |
| 1972 | 24.9% | 1982 | -6.5% | 1992 | -1.5% | 2002 | 1.1% | 2012 | 3.4% |
| 1973 | 21.3% | 1983 | 5.4% | 1993 | 9.0% | 2003 | 0.4% | 2013 | 6.1% |
| 1974 | 0.4% | 1984 | 23.4% | 1994 | 16.8% | 2004 | 6.1% | 2014 | 4.1% |
| 1975 | -19.3% | 1985 | 20.3% | 1995 | 18.2% | 2005 | 12.7% | 2015 | 3.0% |
| 1976 | -16.5% | 1986 | 7.9% | 1996 | 12.2% | 2006 | 12.6% | 2016 | 5.1% |
| 1977 | 14.8% | 1987 | -5.8% | 1997 | 6.9% | 2007 | 1.6% | 2017 | 7.2% |
| 1978 | 38.9% | 1988 | -9.0% | 1998 | 7.5% | 2008 | -11.6% | 2018 | 8.7% |
| 1979 | 32.7% | 1989 | -8.4% | 1999 | 8.4% | 2009 | -23.8% | 2019* | 8.2% |
| 1980 | 5.2% | 1990 | -6.7% | 2000 | 5.7% | 2010 | -24.2% | 2020 | |

FY 1989 and prior BLS SIC not seasonally adjusted, 1990-2018 BLS NAICS not seasonally adjusted.

*FY 2019-2020 Phoenix Blue Chip, 1st Qtr 2019 forecast. FY 2021-2039 from ADOT staff.

HISTORICAL DATA - GRAPHED



HISTORICAL DATA - ANALYSIS

| Period | Historical | | Mean | Std. Dev. | 80% Range | |
|-------------|------------|-------|------|-----------|-----------|-------|
| | Min. | Max. | | | Lower | Upper |
| 5 Years | 3.0% | 8.7% | 6.4% | 2.4% | 3.8% | 8.5% |
| 10 Years | -24.2% | 8.7% | 1.4% | 10.1% | -8.9% | 8.3% |
| Full Period | -24.2% | 38.9% | 4.4% | 13.1% | -9.8% | 20.6% |

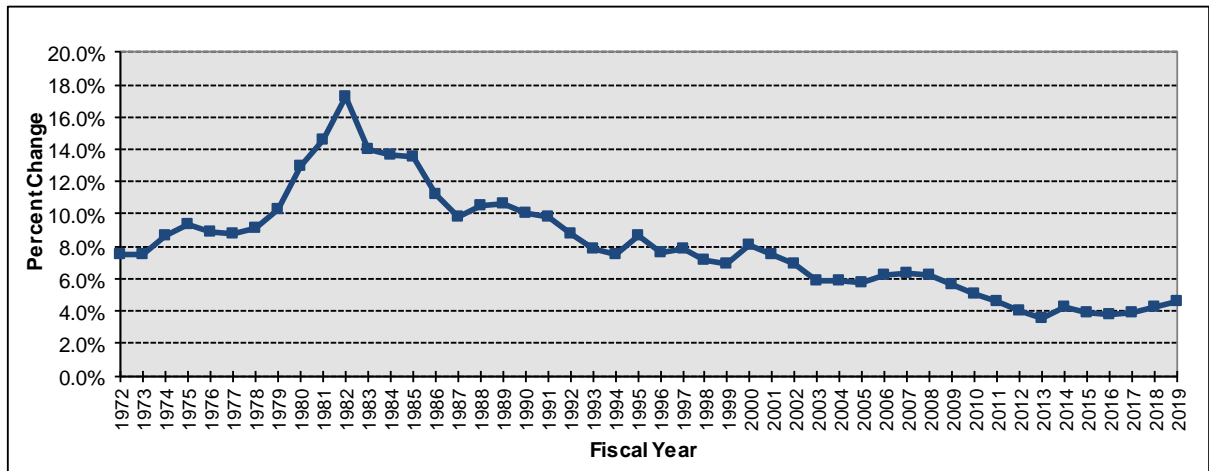
HISTORICAL DATA 30-YEAR MORTGAGE RATE

HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)

| | | | | | | | | | |
|------|-------|------|-------|------|------|------|------|------|------|
| 1971 | | 1981 | 14.6% | 1991 | 9.8% | 2001 | 7.5% | 2011 | 4.6% |
| 1972 | 7.5% | 1982 | 17.3% | 1992 | 8.8% | 2002 | 6.9% | 2012 | 4.0% |
| 1973 | 7.5% | 1983 | 14.0% | 1993 | 7.9% | 2003 | 5.9% | 2013 | 3.5% |
| 1974 | 8.6% | 1984 | 13.6% | 1994 | 7.5% | 2004 | 5.9% | 2014 | 4.3% |
| 1975 | 9.4% | 1985 | 13.5% | 1995 | 8.6% | 2005 | 5.8% | 2015 | 3.9% |
| 1976 | 8.9% | 1986 | 11.2% | 1996 | 7.6% | 2006 | 6.2% | 2016 | 3.8% |
| 1977 | 8.8% | 1987 | 9.8% | 1997 | 7.9% | 2007 | 6.3% | 2017 | 3.9% |
| 1978 | 9.1% | 1988 | 10.5% | 1998 | 7.2% | 2008 | 6.2% | 2018 | 4.2% |
| 1979 | 10.3% | 1989 | 10.6% | 1999 | 6.9% | 2009 | 5.6% | 2019 | 4.6% |
| 1980 | 12.9% | 1990 | 10.1% | 2000 | 8.1% | 2010 | 5.0% | 2020 | |

FY 1972-2019 data from Freddie Mac. FY 2020-2039 based on Global Insight, 1st Quarter 2019, Trend Forecast.

HISTORICAL DATA - GRAPHED



HISTORICAL DATA - ANALYSIS

| Period | Historical | | Mean | Std. Dev. | 80% Range | |
|-------------|------------|-------|------|-----------|-----------|-------|
| | Min. | Max. | | | Lower | Upper |
| 5 Years | 3.8% | 4.6% | 4.1% | 0.3% | 3.8% | 4.4% |
| 10 Years | 3.5% | 5.0% | 4.2% | 0.5% | 3.8% | 4.6% |
| Full Period | 3.5% | 17.3% | 8.1% | 3.2% | 4.1% | 13.1% |

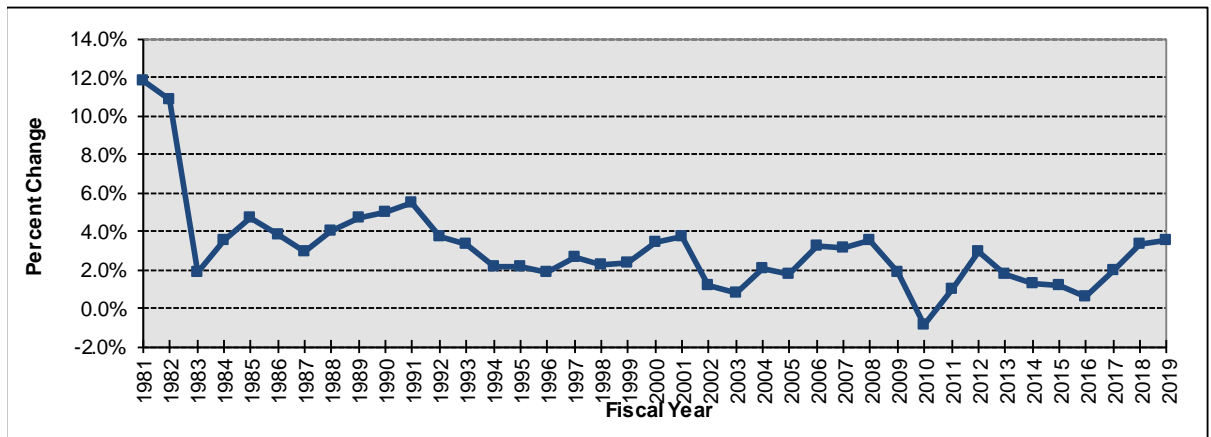
HISTORICAL DATA PHOENIX CPI GROWTH RATE (Annual Percent Change)

HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)

| | | | | | | | | |
|------|------|-------|------|------|------|-------|-------|------|
| 1971 | 1981 | 11.8% | 1991 | 5.5% | 2001 | 3.7% | 2011 | 1.0% |
| 1972 | 1982 | 10.8% | 1992 | 3.7% | 2002 | 1.2% | 2012 | 2.9% |
| 1973 | 1983 | 1.9% | 1993 | 3.3% | 2003 | 0.8% | 2013 | 1.8% |
| 1974 | 1984 | 3.5% | 1994 | 2.2% | 2004 | 2.1% | 2014 | 1.3% |
| 1975 | 1985 | 4.7% | 1995 | 2.2% | 2005 | 1.8% | 2015 | 1.2% |
| 1976 | 1986 | 3.8% | 1996 | 1.9% | 2006 | 3.2% | 2016 | 0.6% |
| 1977 | 1987 | 2.9% | 1997 | 2.6% | 2007 | 3.1% | 2017 | 2.0% |
| 1978 | 1988 | 4.0% | 1998 | 2.3% | 2008 | 3.5% | 2018 | 3.3% |
| 1979 | 1989 | 4.7% | 1999 | 2.4% | 2009 | 1.9% | 2019* | 3.5% |
| 1980 | 1990 | 5.0% | 2000 | 3.4% | 2010 | -0.9% | 2020 | |

FY 1981 - FY 2039 from Moody's Analytics. *FY 2019 and beyond are estimates.

HISTORICAL DATA - GRAPHED



HISTORICAL DATA - ANALYSIS

| Period | Historical | | Mean | Std. Dev. | 80% Range | |
|-------------|------------|-------|------|-----------|-----------|-------|
| | Min. | Max. | | | Lower | Upper |
| 5 Years | 0.6% | 3.5% | 2.1% | 1.3% | 0.8% | 3.4% |
| 10 Years | -0.9% | 3.5% | 1.7% | 1.3% | 0.5% | 3.3% |
| Full Period | -0.9% | 11.8% | 3.1% | 2.3% | 1.2% | 4.8% |

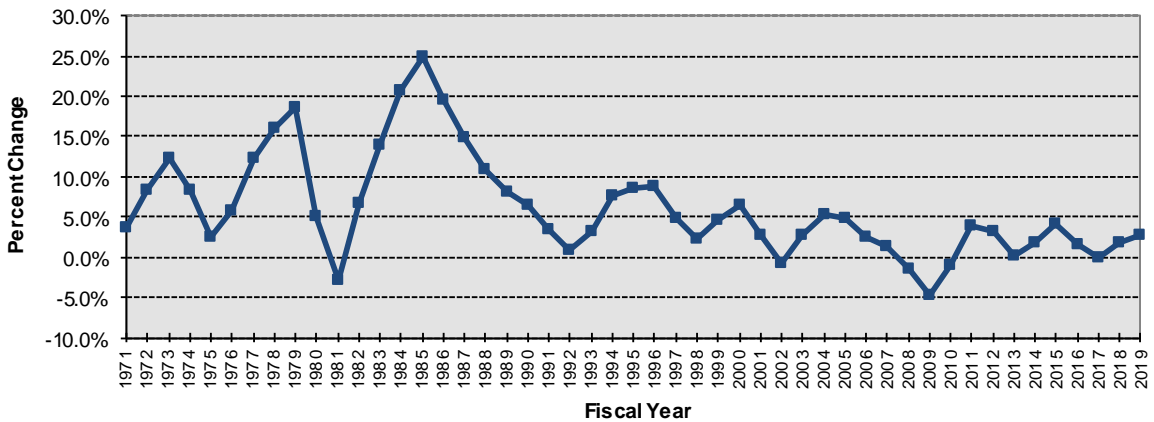
HISTORICAL DATA
PHOENIX SKY HARBOR/GATEWAY AIRPORTS PASSENGER TRAFFIC GROWTH
(Annual Percent Change)

HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)

| | | | | | | | | | |
|------|-------|------|-------|------|------|------|-------|-------|------|
| 1971 | 3.6% | 1981 | -2.8% | 1991 | 3.4% | 2001 | 2.7% | 2011 | 4.0% |
| 1972 | 8.4% | 1982 | 6.8% | 1992 | 0.9% | 2002 | -0.7% | 2012 | 3.1% |
| 1973 | 12.2% | 1983 | 13.9% | 1993 | 3.3% | 2003 | 2.8% | 2013 | 0.2% |
| 1974 | 8.4% | 1984 | 20.6% | 1994 | 7.7% | 2004 | 5.4% | 2014 | 1.9% |
| 1975 | 2.4% | 1985 | 24.8% | 1995 | 8.6% | 2005 | 4.9% | 2015 | 4.2% |
| 1976 | 5.7% | 1986 | 19.6% | 1996 | 8.9% | 2006 | 2.4% | 2016 | 1.5% |
| 1977 | 12.2% | 1987 | 14.8% | 1997 | 4.8% | 2007 | 1.3% | 2017 | 0.0% |
| 1978 | 16.1% | 1988 | 10.9% | 1998 | 2.2% | 2008 | -1.4% | 2018 | 1.9% |
| 1979 | 18.7% | 1989 | 8.1% | 1999 | 4.6% | 2009 | -4.7% | 2019* | 2.8% |
| 1980 | 5.0% | 1990 | 6.4% | 2000 | 6.5% | 2010 | -1.1% | 2020 | |

FY 1971-2018 data obtained from Phoenix Sky Harbor International Airport and combined with data obtained from Gateway Airport (FY 2004-2018). *FY 2019-2039 estimates are forecasts provided to FAA.

HISTORICAL DATA - GRAPHED



HISTORICAL DATA - ANALYSIS

| Period | Historical | | Mean | Std. Dev. | 80% Range | |
|-------------|------------|-------|------|-----------|-----------|-------|
| | Min. | Max. | | | Lower | Upper |
| 5 Years | 0.0% | 4.2% | 2.1% | 1.6% | 0.6% | 3.6% |
| 10 Years | -1.1% | 4.2% | 1.9% | 1.8% | -0.1% | 4.0% |
| Full Period | -4.7% | 24.8% | 6.1% | 6.3% | -0.1% | 15.1% |

HISTORICAL DATA MARICOPA COUNTY TOTAL NON-FARM EMPLOYMENT GROWTH (Annual Percent Change)

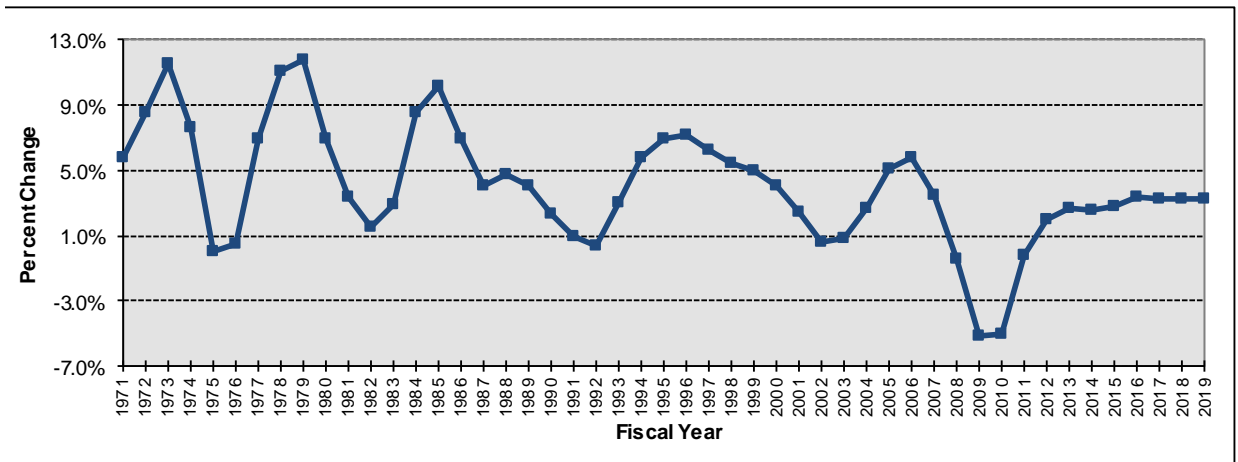
HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)

| | | | | | | | | | |
|------|-------|------|-------|------|------|------|-------|-------|-------|
| 1971 | 5.8% | 1981 | 3.4% | 1991 | 0.9% | 2001 | 2.4% | 2011 | -0.2% |
| 1972 | 8.5% | 1982 | 1.5% | 1992 | 0.4% | 2002 | 0.6% | 2012 | 2.0% |
| 1973 | 11.6% | 1983 | 2.9% | 1993 | 3.0% | 2003 | 0.8% | 2013 | 2.7% |
| 1974 | 7.6% | 1984 | 8.6% | 1994 | 5.8% | 2004 | 2.7% | 2014 | 2.6% |
| 1975 | 0.0% | 1985 | 10.2% | 1995 | 6.9% | 2005 | 5.1% | 2015 | 2.8% |
| 1976 | 0.5% | 1986 | 6.9% | 1996 | 7.2% | 2006 | 5.8% | 2016 | 3.4% |
| 1977 | 6.9% | 1987 | 4.1% | 1997 | 6.3% | 2007 | 3.5% | 2017 | 3.2% |
| 1978 | 11.1% | 1988 | 4.7% | 1998 | 5.4% | 2008 | -0.4% | 2018 | 3.2% |
| 1979 | 11.8% | 1989 | 4.1% | 1999 | 5.0% | 2009 | -5.1% | 2019* | 3.2% |
| 1980 | 6.9% | 1990 | 2.3% | 2000 | 4.1% | 2010 | -5.0% | 2020 | |

FY 1971-1989 Bureau of Labor Statistics (BLS) SIC not seasonally adjusted, FY 1990-2018 seasonally adjusted data from BLS (NAICS).

*FY 2019-2020 from Phoenix Blue Chip, 1st Qtr 2019 forecast. FY 2021-2039 from ADOT staff.

HISTORICAL DATA - GRAPHED



HISTORICAL DATA - ANALYSIS

| Period | Historical | | Mean | Std. Dev. | 80% Range | |
|-------------|------------|-------|------|-----------|-----------|-------|
| | Min. | Max. | | | Lower | Upper |
| 5 Years | 2.8% | 3.4% | 3.2% | 0.2% | 3.0% | 3.3% |
| 10 Years | -5.0% | 3.4% | 1.8% | 2.6% | -0.7% | 3.2% |
| Full Period | -5.1% | 11.8% | 4.0% | 3.6% | 0.3% | 8.5% |