

MARICOPA COUNTY TRANSPORTATION EXCISE TAX
Forecasting Process & Results
FY 2024-2026



Financial Management Services
September 2023

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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.

In the summer of 2023, SB1102 was signed into law allowing voters in Maricopa County to vote in November 2024 on the extension of the Maricopa County Transportation Excise Tax for another 20 years (January 1, 2026 to December 31, 2046). If approved, this extension would maintain the current ½ cent rate but modify the distribution of monies collected.

This document contains the official forecast of expected values for the Maricopa County Transportation Excise Tax for the period FY 2024–2026 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 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 2023, a panel of eight 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 \$2,038.2 million for the period FY 2024-2026 with a compound growth rate (CGR) of 5.5 percent. The Department's Official Forecast for FY 2024-2026 totals \$2,008.1 million with a compound growth rate of 4.9 percent. This year's official forecast is \$30.1 million lower than the mean and \$5.2 million higher than last year's official forecast.

The Official Forecast result incorporates the 60 percent confidence interval amounts for each year of the forecast except for FY 2024. The FY 2024 forecast of \$745.8 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.

The Official Forecast result incorporates the 60 percent confidence interval amounts for each year of the forecast except for FY 2024. The FY 2024 forecast of \$745.8 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.

2023 Official Forecast Results (Dollars in Millions)			
Fiscal Year	Mean Forecast	Official Forecast	Confidence Level
2024 /1	753.7	745.8	N/A
2025	795.3	783.4	60%
2026 /2	<u>489.2</u>	<u>478.9</u>	60%
Total	\$2,038.2	\$2,008.1	
Average CGR /3	5.5%	4.9%	

Notes:

- /1 FY 2024 official forecast was developed by ADOT staff independently and varies slightly from the Risk Analysis Results.
- /2 FY 2026 forecast reflects the expiration of the Prop 400 Transportation Excise Tax on December 31, 2025.
- /3 Compound Growth Rate is based on full fiscal year estimates.

For comparison purposes, the September 2022 and September 2023 Official Forecasts are shown below:

FY 2024-2026 Comparative Forecast (Dollars in Millions)			
Fiscal Year	Sep. 22 Official Forecast	Sep. 23 Official Forecast	Difference
2024 /1	742.8	745.8	3.0
2025	780.9	783.4	2.5
2026 /2	<u>479.2</u>	<u>478.9</u>	<u>(0.3)</u>
Total	\$2,002.9	\$2,008.1	\$5.2
Average CGR	5.2%	4.9%	

Notes:

- /1 Sep 23 official forecast of FY 2024 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.

Summary

The Department's September 2023 Official Forecast for FY 2024-2026 totals \$2,008.1 million, which is \$5.2 million higher than the September 2022 Official Forecast.

Compared to last year, the panel inputs for projected growth in Maricopa County Personal Income and Population are slightly higher from FY 2024 to FY 2026. In contrast, Phoenix Non-Farm Employment and Maricopa County Construction Employment are projected to grow less than anticipated by last year's panel. 30 year Mortgage Rates are anticipated to grow more than last year's panel forecasted in FY 2024, with no change between the two panels for FY 2025, and then have lower growth than previously forecasted in FY 2026. This year's panel anticipates that Phoenix CPI growth will be higher in FY 2024 and FY 2025, then slightly lower than previously forecasted in FY 2026. Anticipated growth of passenger traffic at Sky Harbor/Gateway Airports is considerably lower than last year's panel forecast for FY 2024, higher in FY 2025, and slightly lower in FY 2026.

FY 2023 Maricopa County Transportation Excise Tax revenues were 8.7 percent above FY 2022 revenues and 0.3 percent or \$2.5 million above the forecast.

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	2023 Actual	2024 N/A /1	2025 60%	2026/2 60%
Retail Sales	\$403.9	\$405.8	\$435.7	\$266.9
Contracting	91.2	98.3	99.3	61.9
Utilities	38.2	41.8	40.9	24.5
Restaurant and Bar	76.1	80.7	84.2	50.9
Rental of Real Property	66.2	70.9	72.1	43.9
Rental of Personal Property	26.6	28.8	30.8	19.0
Other	20.5	19.5	20.5	11.9
Total /3	\$722.6	\$745.8	\$783.4	\$478.9

Notes:

/1 FY 2024 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.

/3 Totals may not add due to rounding.

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

Fiscal Year	Mean	10%	20%	30%	40%	50%	60%	70%	80%	90%
2024 /1	753.7	791.2	778.1	768.6	761.1	753.6	746.2	737.5	728.8	716.4
2025	795.3	853.2	833.2	818.3	805.9	794.5	783.4	770.2	756.1	737.1
2026 /2	489.2	536.4	518.6	506.4	496.8	488.1	478.9	469.3	458.1	443.7
Total	\$2,038.2	\$2,180.8	\$2,129.9	\$2,093.3	\$2,063.8	\$2,036.2	\$2,008.5	\$1,977.0	\$1,943.0	\$1,897.2

Notes:

/1 FY 2024 forecast was developed by ADOT staff independently and varies slightly from the Risk Analysis results.

/2 FY 2026 forecast reflects the expiration of the Prop 400 Transportation Excise Tax on December 31, 2025.

RARF OFFICIAL REVENUE FORECAST DISTRIBUTION
(Current Dollars in Millions)

Fiscal Year	Regional Area Road Fund (RARF)		Public Transportation Fund (33.3%)	Total
	Freeways /1 (56.2%)	Arterial Streets (10.5 %)		
2024	419.1	78.3	248.4	745.8
2025	440.3	82.2	260.9	783.4
2026 /2	269.1	50.3	159.5	478.9
TOTAL	\$1,128.5	\$210.8	\$668.8	\$2,008.1

Notes:

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

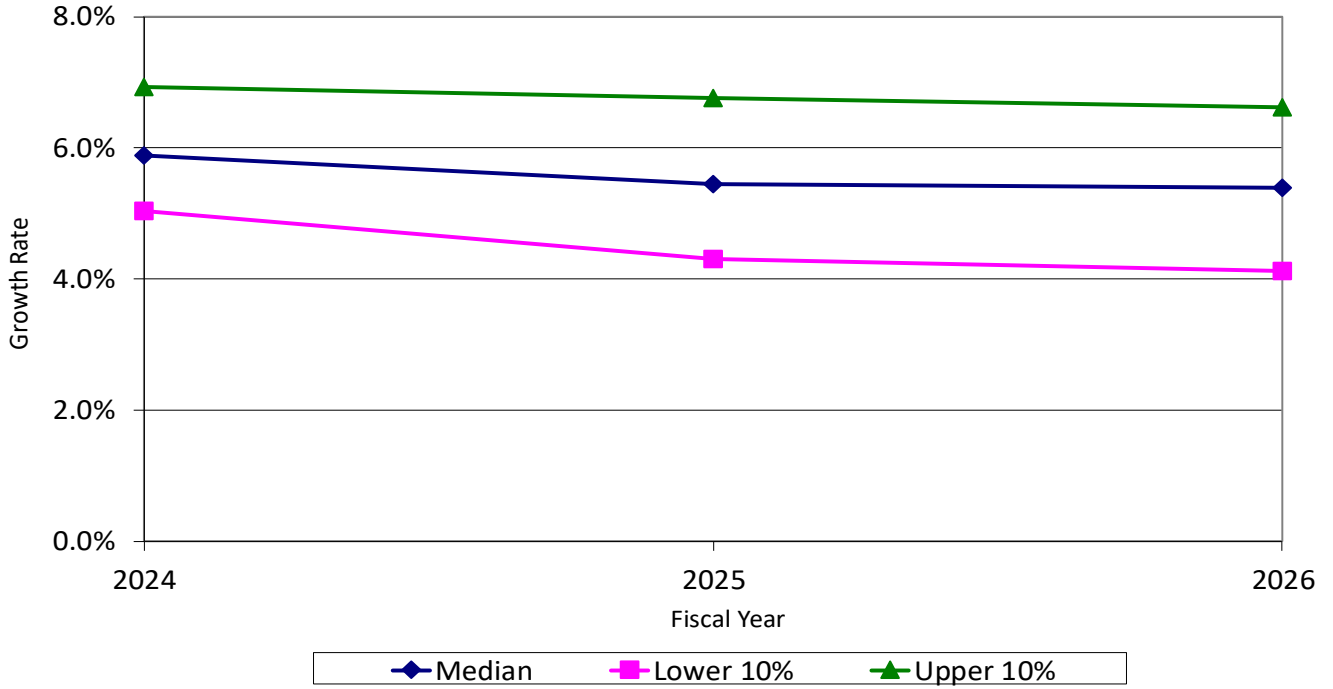
	Nominal Pers. Inc. Growth /1	Population Growth /1	Construction Employment Growth /1	30 Year Mortgage Rate	Phoenix CPI Growth/1	Sky Harbor/Gateway Passenger Traffic Growth	Total Non-Farm Employment Growth /1
FY 2024							
Median	5.88%	1.73%	2.57%	6.11%	4.10%	7.87%	1.93%
Lower 10%	5.03%	1.60%	1.13%	5.55%	2.52%	6.82%	1.31%
Upper 10%	6.93%	1.88%	3.48%	6.77%	5.19%	9.34%	2.41%
FY 2025							
Median	5.45%	1.63%	2.12%	5.39%	3.27%	6.02%	1.56%
Lower 10%	4.31%	1.46%	-0.10%	4.69%	1.81%	4.65%	0.53%
Upper 10%	6.76%	1.93%	3.22%	6.24%	4.27%	7.62%	2.40%
FY 2026							
Median	5.40%	1.58%	2.01%	4.94%	2.42%	3.95%	1.51%
Lower 10%	4.13%	1.38%	-0.79%	4.41%	1.39%	2.46%	0.49%
Upper 10%	6.62%	1.82%	4.19%	5.70%	3.44%	5.29%	2.41%

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

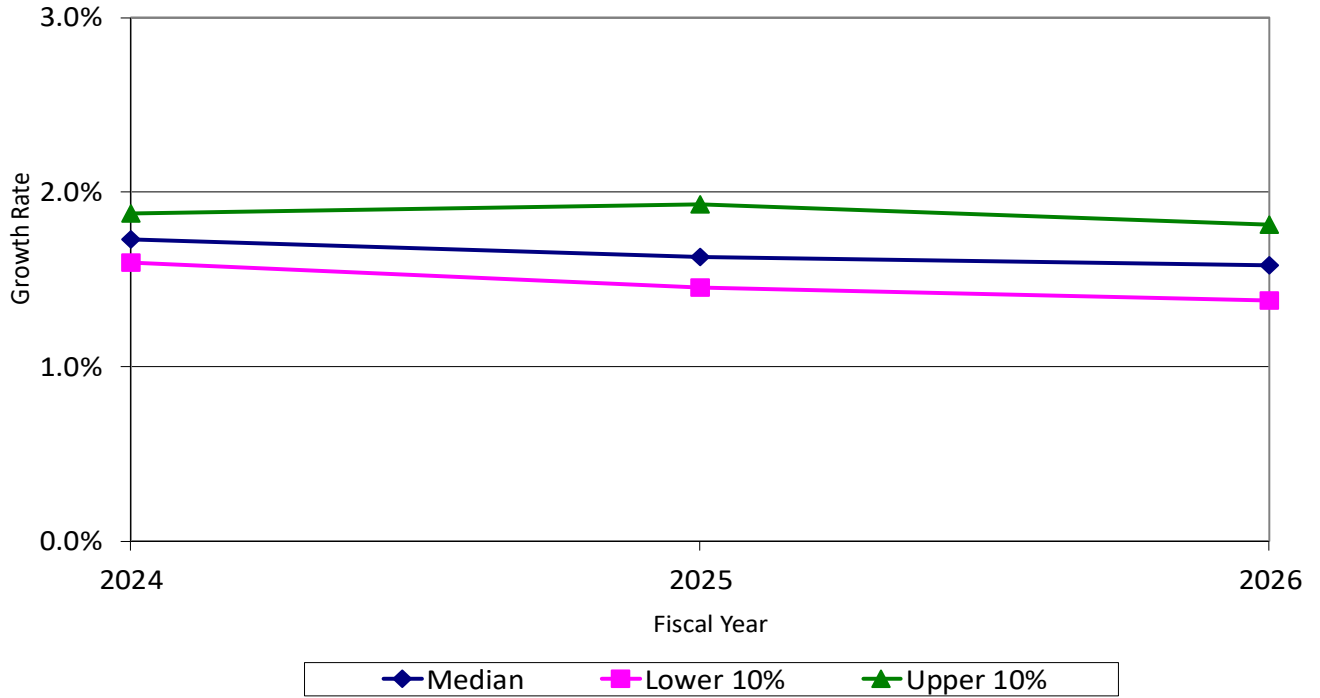
Personal income and 30 year mortgage rate are nominal rates.

/1 Data for Maricopa County/Phoenix Area.

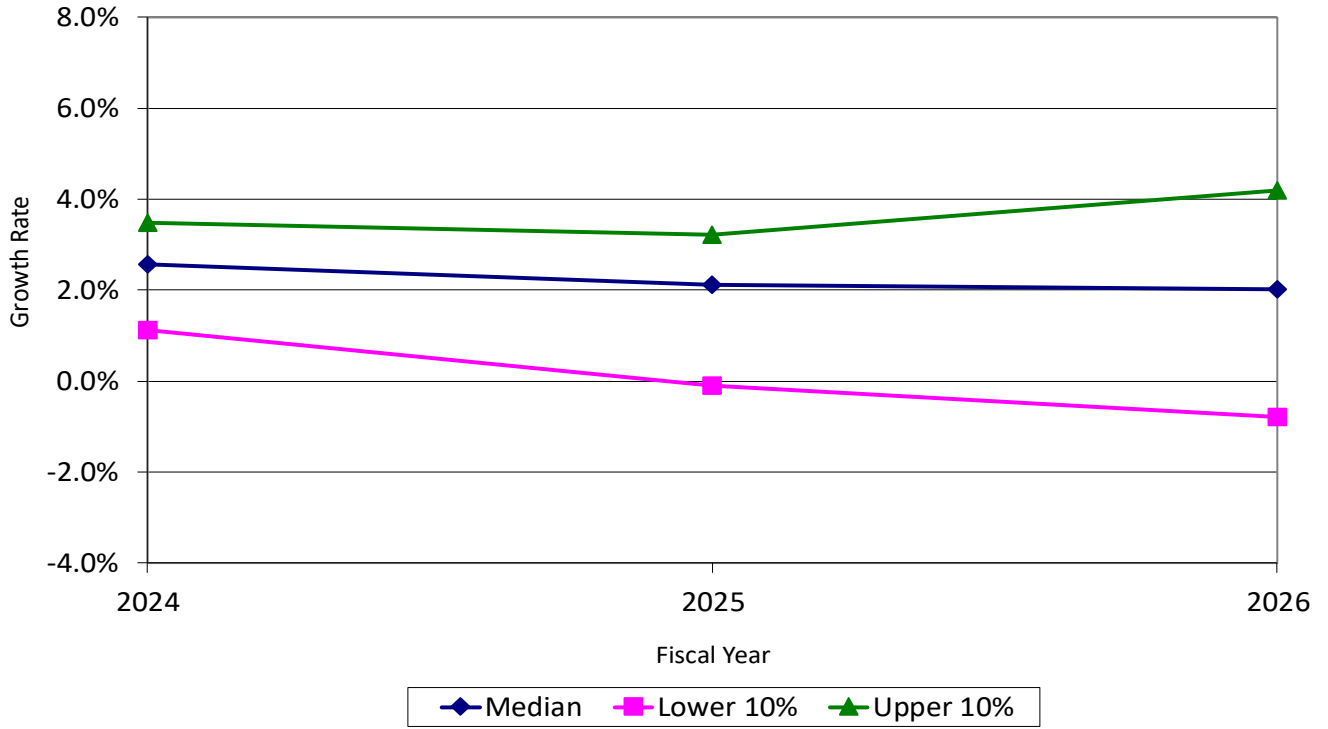
Maricopa County Nominal Personal Income Growth



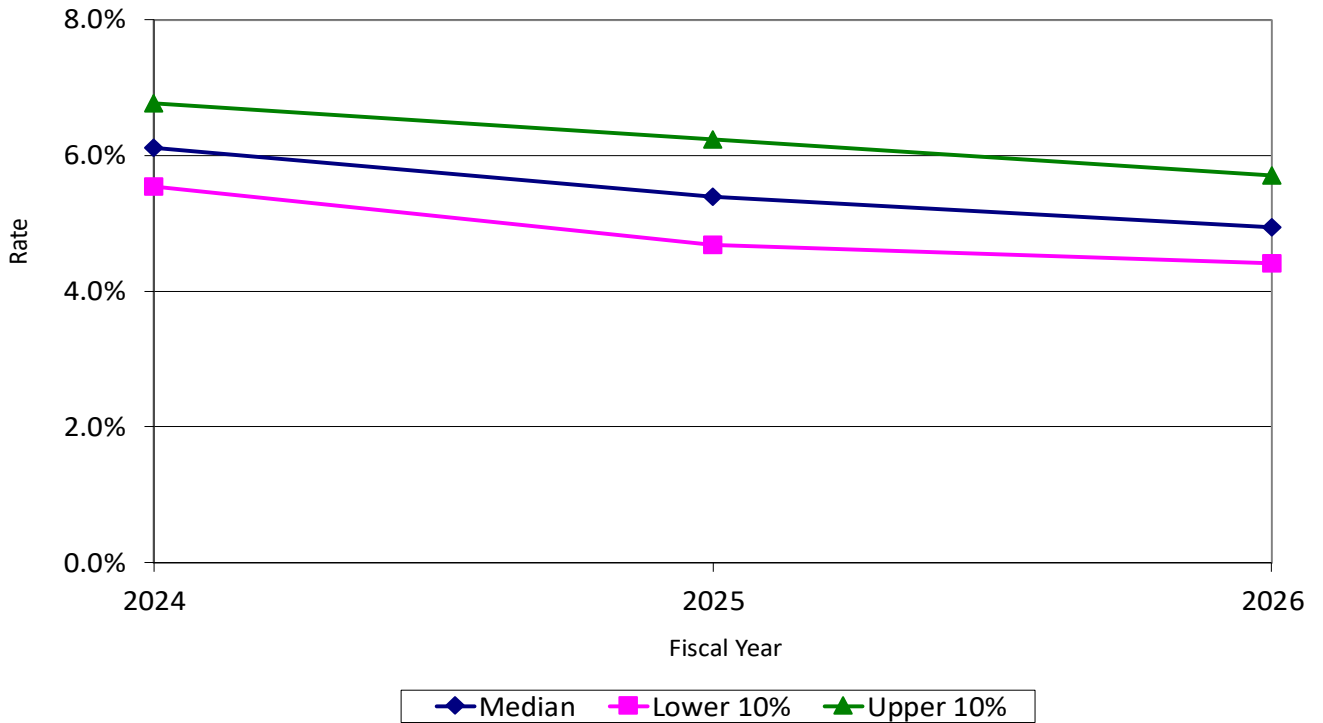
Maricopa County Population Growth



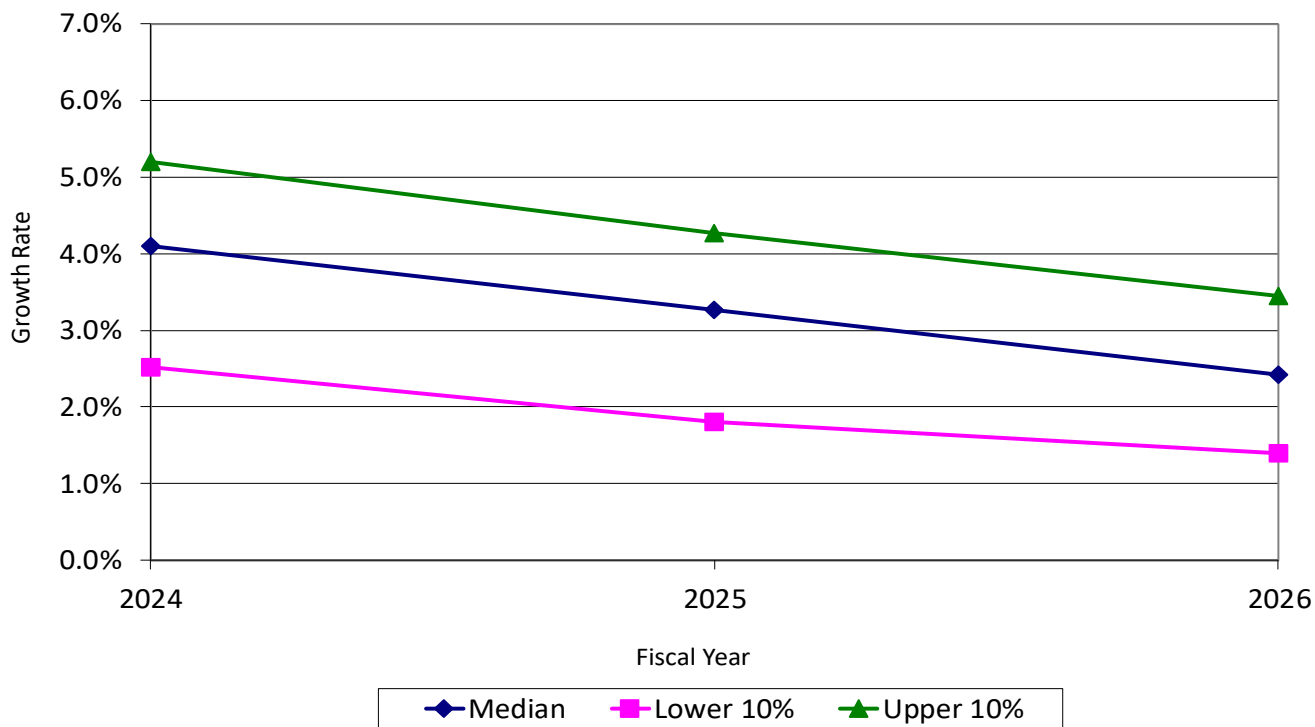
Maricopa County Construction Employment Growth



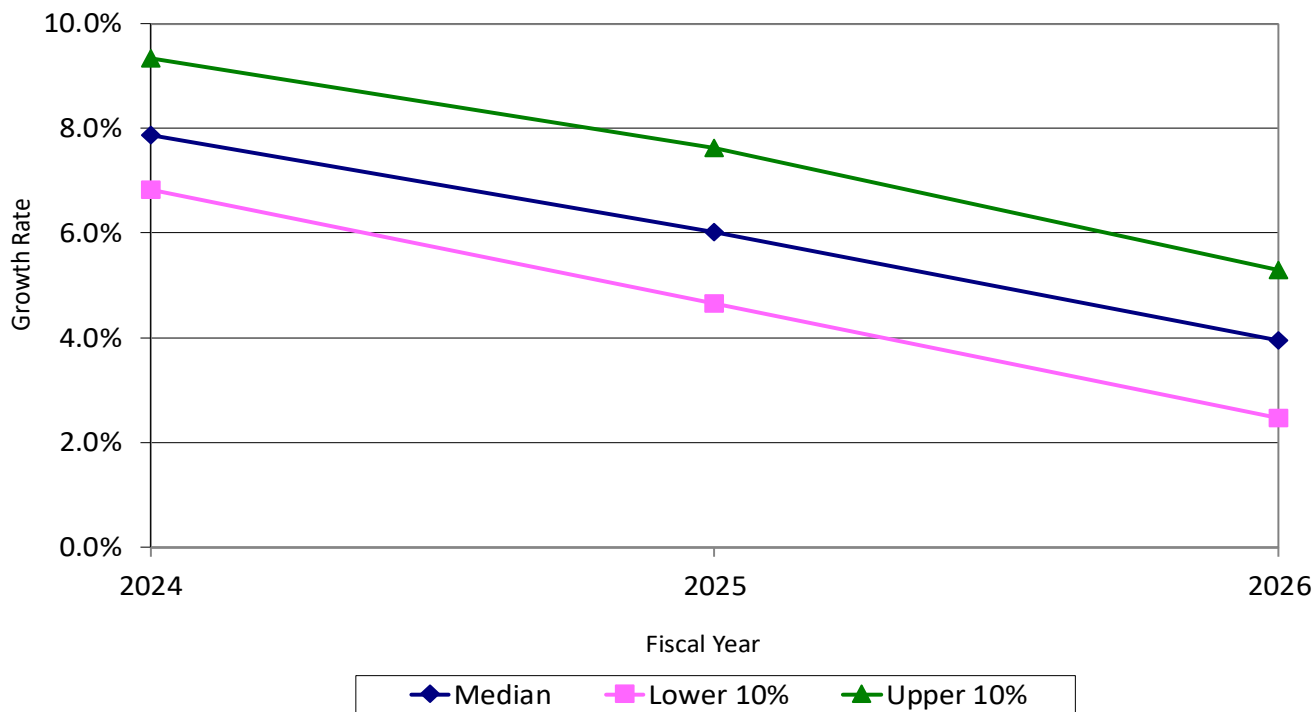
30 Year Mortgage Rate



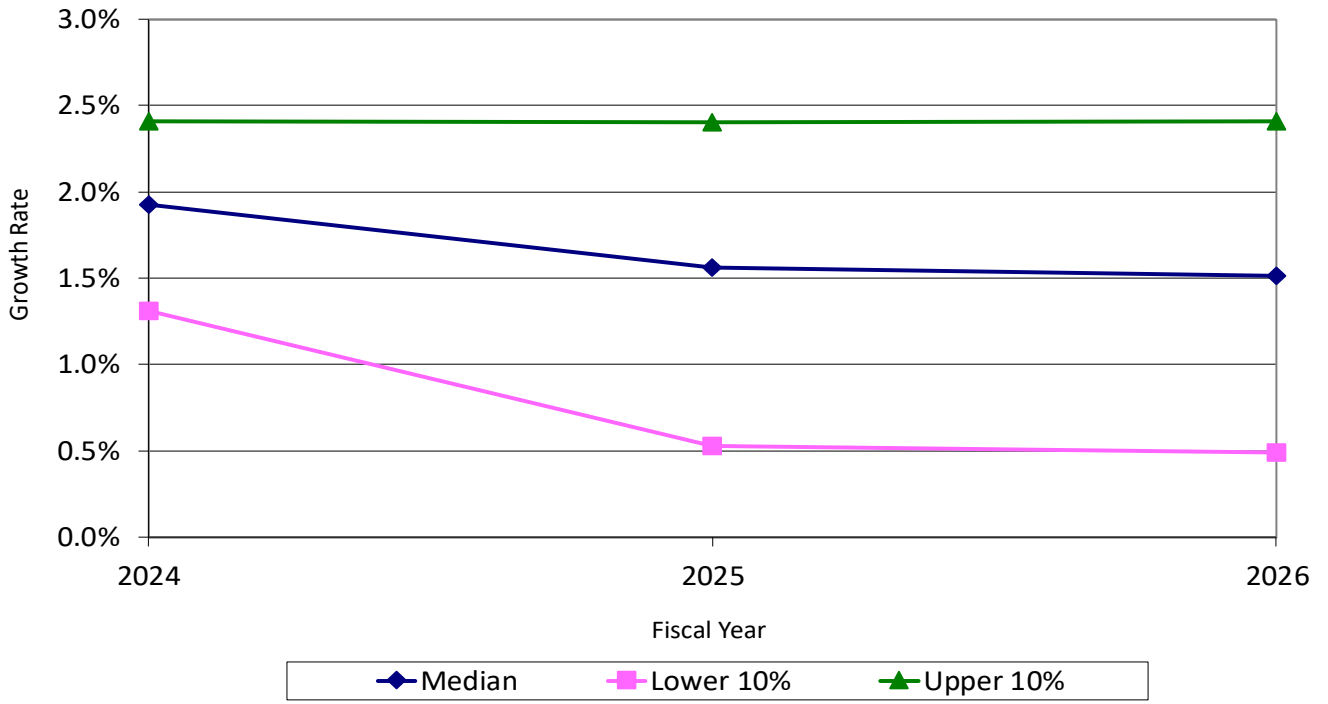
Phoenix CPI Growth



Phoenix Sky Harbor/Gateway Airports Passenger Traffic Growth



Maricopa County Total Non-Farm Employment Growth



Projected Maricopa County Nominal Personal Income Growth Rates

	2024	2025	2026
Panelist 1			
Median	6.1%	5.5%	5.3%
Lower 10%	5.3%	4.3%	4.1%
Upper 10%	6.8%	6.6%	6.4%
Panelist 2			
Median	5.0%	4.5%	5.0%
Lower 10%	2.8%	2.3%	2.8%
Upper 10%	7.5%	7.0%	7.5%
Panelist 3			
Median	6.3%	6.0%	5.8%
Lower 10%	5.5%	5.2%	5.0%
Upper 10%	7.0%	6.8%	6.6%
Panelist 4			
Median	6.6%	6.2%	6.1%
Lower 10%	5.8%	5.0%	4.9%
Upper 10%	7.2%	7.2%	7.0%
Panelist 5			
Median	5.7%	5.5%	5.5%
Lower 10%	5.2%	4.6%	4.4%
Upper 10%	6.5%	6.6%	6.5%
Panelist 6			
Median	6.1%	5.1%	5.1%
Lower 10%	5.3%	4.3%	4.1%
Upper 10%	6.8%	6.6%	6.4%
Panelist 7			
Median	6.1%	6.0%	5.9%
Lower 10%	5.3%	4.3%	4.1%
Upper 10%	6.8%	6.8%	6.6%
Panelist 8			
Median	5.3%	4.8%	4.5%
Lower 10%	5.0%	4.3%	3.5%
Upper 10%	6.8%	6.6%	6.0%

Projected Maricopa County Population Growth Rates

	2024	2025	2026
Panelist 1			
Median	1.8%	1.8%	1.6%
Lower 10%	1.8%	1.5%	1.3%
Upper 10%	2.0%	2.1%	1.9%
Panelist 2			
Median	1.8%	1.7%	1.6%
Lower 10%	1.7%	1.6%	1.5%
Upper 10%	2.0%	1.9%	1.8%
Panelist 3			
Median	1.8%	1.7%	1.6%
Lower 10%	1.7%	1.5%	1.4%
Upper 10%	1.9%	1.9%	1.8%
Panelist 4			
Median	1.6%	1.6%	1.6%
Lower 10%	1.5%	1.5%	1.4%
Upper 10%	1.7%	1.8%	1.8%
Panelist 5			
Median	1.6%	1.6%	1.6%
Lower 10%	1.5%	1.5%	1.4%
Upper 10%	1.8%	1.9%	1.8%
Panelist 6			
Median	1.8%	1.6%	1.5%
Lower 10%	1.6%	1.4%	1.2%
Upper 10%	1.9%	2.0%	1.8%
Panelist 7			
Median	1.8%	1.8%	1.6%
Lower 10%	1.8%	1.6%	1.4%
Upper 10%	1.9%	2.0%	1.8%
Panelist 8			
Median	1.6%	1.3%	1.5%
Lower 10%	1.3%	1.1%	1.4%
Upper 10%	1.9%	2.0%	1.8%

Projected Maricopa County Construction Employment Growth Rates

	2024	2025	2026
Panelist 1			
Median	1.9%	1.9%	1.9%
Lower 10%	0.9%	0.6%	0.4%
Upper 10%	2.9%	3.1%	3.4%
Panelist 2			
Median	2.0%	1.8%	1.8%
Lower 10%	1.5%	1.3%	1.3%
Upper 10%	2.4%	2.2%	2.2%
Panelist 3			
Median	3.0%	2.5%	2.0%
Lower 10%	1.0%	0.5%	0.0%
Upper 10%	4.0%	3.5%	4.0%
Panelist 4			
Median	1.4%	1.2%	1.8%
Lower 10%	0.6%	0.4%	0.0%
Upper 10%	2.4%	2.0%	3.5%
Panelist 5			
Median	2.0%	1.8%	1.8%
Lower 10%	1.0%	0.5%	-1.0%
Upper 10%	3.0%	3.5%	4.0%
Panelist 6			
Median	1.7%	1.3%	1.8%
Lower 10%	0.8%	0.4%	-1.0%
Upper 10%	2.8%	2.5%	4.9%
Panelist 7			
Median	3.0%	1.4%	2.0%
Lower 10%	1.3%	0.4%	-1.0%
Upper 10%	3.5%	2.5%	4.9%
Panelist 8			
Median	5.5%	5.0%	3.0%
Lower 10%	2.0%	-5.0%	-5.0%
Upper 10%	6.8%	6.5%	6.6%

Projected 30 Year Mortgage Rates

	2024	2025	2026
Panelist 1			
Median	6.3%	5.2%	5.0%
Lower 10%	5.8%	4.7%	4.6%
Upper 10%	6.8%	5.7%	5.3%
Panelist 2			
Median	5.5%	5.0%	4.5%
Lower 10%	5.0%	4.5%	4.0%
Upper 10%	5.9%	5.4%	4.9%
Panelist 3			
Median	6.0%	5.5%	5.0%
Lower 10%	5.5%	5.0%	4.5%
Upper 10%	6.5%	6.0%	5.5%
Panelist 4			
Median	6.0%	4.8%	4.6%
Lower 10%	5.5%	4.3%	4.1%
Upper 10%	6.5%	5.3%	5.1%
Panelist 5			
Median	5.3%	4.9%	4.5%
Lower 10%	5.0%	4.6%	4.1%
Upper 10%	6.8%	6.5%	6.5%
Panelist 6			
Median	7.2%	7.0%	6.0%
Lower 10%	5.8%	4.7%	4.6%
Upper 10%	8.0%	8.0%	6.5%
Panelist 7			
Median	6.3%	5.5%	5.0%
Lower 10%	6.0%	5.0%	4.6%
Upper 10%	6.8%	6.0%	5.3%
Panelist 8			
Median	6.3%	5.2%	5.0%
Lower 10%	5.8%	4.7%	4.6%
Upper 10%	6.8%	7.0%	6.5%

Projected Phoenix CPI Growth Rates

	2024	2025	2026
Panelist 1			
Median	3.5%	2.0%	1.7%
Lower 10%	2.1%	1.4%	1.0%
Upper 10%	4.8%	2.5%	2.3%
Panelist 2			
Median	4.0%	3.5%	3.0%
Lower 10%	3.6%	3.1%	2.6%
Upper 10%	4.3%	3.8%	3.3%
Panelist 3			
Median	3.0%	2.5%	2.0%
Lower 10%	2.0%	1.5%	1.3%
Upper 10%	4.0%	3.5%	2.7%
Panelist 4			
Median	2.9%	2.6%	2.4%
Lower 10%	2.6%	2.1%	1.7%
Upper 10%	3.2%	2.8%	2.7%
Panelist 5			
Median	4.0%	2.8%	2.5%
Lower 10%	2.5%	2.0%	1.5%
Upper 10%	5.0%	3.3%	3.4%
Panelist 6			
Median	3.5%	3.0%	2.0%
Lower 10%	2.1%	1.6%	1.0%
Upper 10%	4.8%	4.0%	2.3%
Panelist 7			
Median	4.5%	3.0%	1.8%
Lower 10%	3.0%	1.4%	1.0%
Upper 10%	5.5%	3.3%	2.8%
Panelist 8			
Median	7.5%	6.8%	4.0%
Lower 10%	2.1%	1.4%	1.0%
Upper 10%	10.0%	11.0%	8.0%

Projected Phoenix Sky Harbor/Gateway Airports Passenger Traffic Growth Rates

	2024	2025	2026
Panelist 1			
Median	8.4%	5.7%	2.8%
Lower 10%	7.2%	4.4%	1.5%
Upper 10%	9.7%	6.9%	4.0%
Panelist 2			
Median	8.0%	8.0%	7.5%
Lower 10%	7.0%	7.0%	6.5%
Upper 10%	8.8%	8.8%	8.3%
Panelist 3			
Median	7.5%	6.0%	5.0%
Lower 10%	6.5%	4.5%	3.5%
Upper 10%	8.5%	7.5%	6.5%
Panelist 4			
Median	7.4%	5.2%	2.8%
Lower 10%	6.0%	4.2%	1.5%
Upper 10%	9.0%	7.0%	4.0%
Panelist 5			
Median	8.0%	6.0%	3.0%
Lower 10%	7.0%	4.2%	2.0%
Upper 10%	9.5%	9.0%	5.0%
Panelist 6			
Median	8.2%	6.0%	2.8%
Lower 10%	7.2%	4.4%	1.5%
Upper 10%	9.7%	6.9%	4.0%
Panelist 7			
Median	7.0%	5.7%	2.8%
Lower 10%	6.5%	4.0%	1.5%
Upper 10%	10.0%	8.0%	4.0%
Panelist 8			
Median	8.4%	5.7%	5.0%
Lower 10%	7.2%	4.4%	1.5%
Upper 10%	9.7%	6.9%	6.5%

Projected Maricopa County Total Non-Farm Employment Growth Rates

	2024	2025	2026
Panelist 1			
Median	1.8%	1.8%	1.8%
Lower 10%	0.8%	0.5%	0.3%
Upper 10%	2.8%	3.0%	3.3%
Panelist 2			
Median	1.8%	2.0%	2.0%
Lower 10%	1.5%	1.7%	1.7%
Upper 10%	2.0%	2.2%	2.2%
Panelist 3			
Median	2.5%	2.0%	1.5%
Lower 10%	2.0%	1.0%	0.5%
Upper 10%	3.0%	3.0%	2.5%
Panelist 4			
Median	1.9%	1.8%	1.8%
Lower 10%	1.3%	0.4%	0.4%
Upper 10%	2.4%	2.3%	2.3%
Panelist 5			
Median	1.8%	1.5%	1.4%
Lower 10%	1.4%	0.5%	0.2%
Upper 10%	2.2%	2.3%	2.4%
Panelist 6			
Median	1.6%	1.0%	1.1%
Lower 10%	1.2%	0.1%	0.2%
Upper 10%	2.2%	2.1%	2.2%
Panelist 7			
Median	2.0%	1.7%	1.4%
Lower 10%	1.2%	0.5%	0.4%
Upper 10%	2.5%	2.2%	2.2%
Panelist 8			
Median	2.0%	0.7%	1.1%
Lower 10%	1.2%	-0.5%	0.2%
Upper 10%	2.2%	2.1%	2.2%

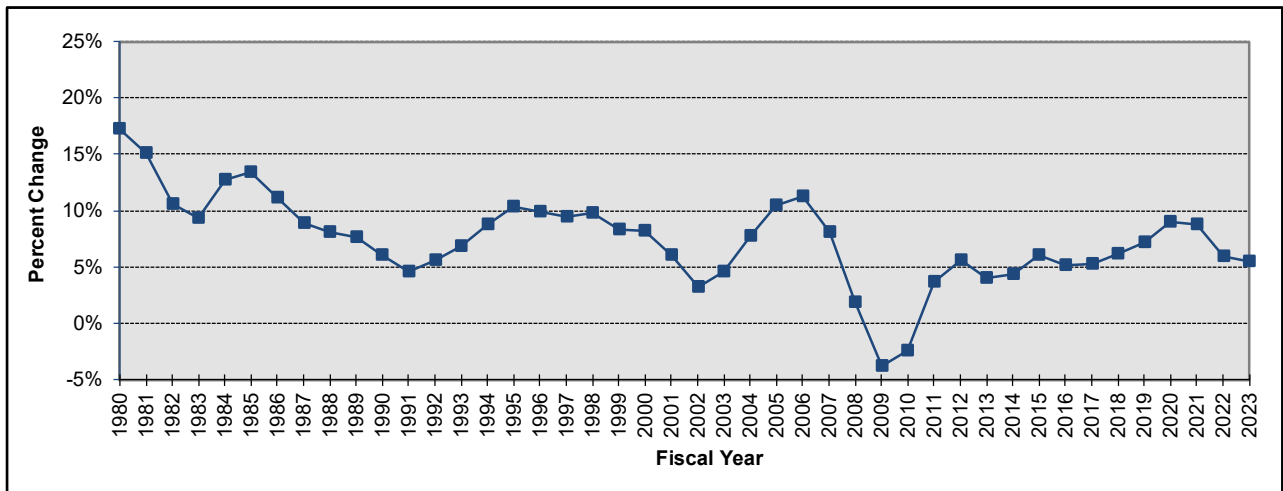
**HISTORICAL DATA
MARICOPA COUNTY NOMINAL PERSONAL INCOME GROWTH
(Annual Percent Change)**

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

1980	17.3%	1990	6.0%	2000	8.2%	2010	-2.4%	2020	9.0%
1981	15.1%	1991	4.6%	2001	6.1%	2011	3.7%	2021	8.7%
1982	10.6%	1992	5.6%	2002	3.2%	2012	5.6%	2022	6.0%
1983	9.4%	1993	6.9%	2003	4.6%	2013	4.1%	2023*	5.4%
1984	12.8%	1994	8.8%	2004	7.8%	2014	4.4%	2024	
1985	13.4%	1995	10.4%	2005	10.4%	2015	6.1%	2025	
1986	11.2%	1996	9.9%	2006	11.3%	2016	5.2%	2026	
1987	8.9%	1997	9.5%	2007	8.0%	2017	5.2%	2027	
1988	8.1%	1998	9.8%	2008	1.9%	2018	6.2%	2028	
1989	7.7%	1999	8.3%	2009	-3.8%	2019	7.2%	2029	

FY 1980 - FY 2023 BEA Total Personal Income from Moody's Analytics Baseline Scenario (June 2023). *FY 2023 projected.

HISTORICAL DATA - GRAPHED



HISTORICAL DATA - ANALYSIS

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	5.4%	9.0%	7.3%	1.6%	5.7%	8.9%
10 Years	4.4%	9.0%	6.3%	1.5%	5.1%	8.8%
Full Period	-3.8%	17.3%	7.4%	3.9%	3.8%	11.2%

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

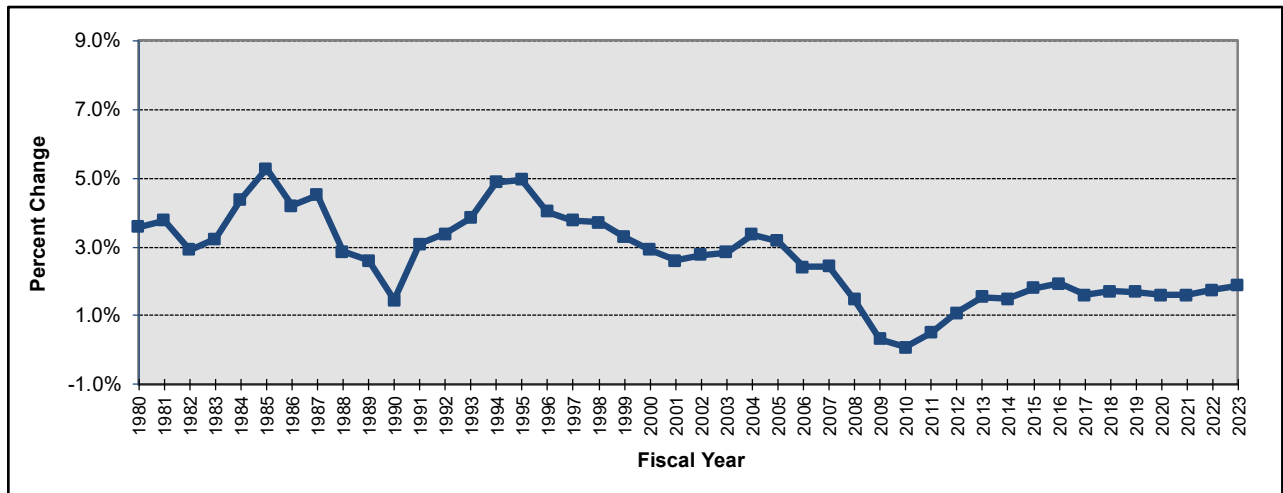
HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)

1980	3.6%	1990	1.4%	2000	2.9%	2010	0.1%	2020	1.6%
1981	3.8%	1991	3.1%	2001	2.6%	2011	0.5%	2021	1.6%
1982	2.9%	1992	3.4%	2002	2.8%	2012	1.1%	2022	1.6%
1983	3.2%	1993	3.8%	2003	2.8%	2013	1.5%	2023*	1.9%
1984	4.4%	1994	4.9%	2004	3.4%	2014	1.5%	2024	
1985	5.3%	1995	5.0%	2005	3.2%	2015	1.8%	2025	
1986	4.2%	1996	4.0%	2006	2.4%	2016	1.9%	2026	
1987	4.5%	1997	3.8%	2007	2.4%	2017	1.6%	2027	
1988	2.9%	1998	3.7%	2008	1.5%	2018	1.7%	2028	
1989	2.6%	1999	3.3%	2009	0.3%	2019	1.7%	2029	

FY 1999 and prior: from U.S. Census Bureau. FY 2000-2022 AZ Office of Economic Opportunity (OEO) estimates.

*FY 2023 growth rate from the December 23, 2022 AOEO Population Projections for Maricopa County.

HISTORICAL DATA - GRAPHED



HISTORICAL DATA - ANALYSIS

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	1.6%	1.9%	1.7%	0.1%	1.6%	1.8%
10 Years	1.5%	1.9%	1.7%	0.1%	1.6%	1.9%
Full Period	0.1%	5.3%	2.7%	1.3%	1.5%	4.3%

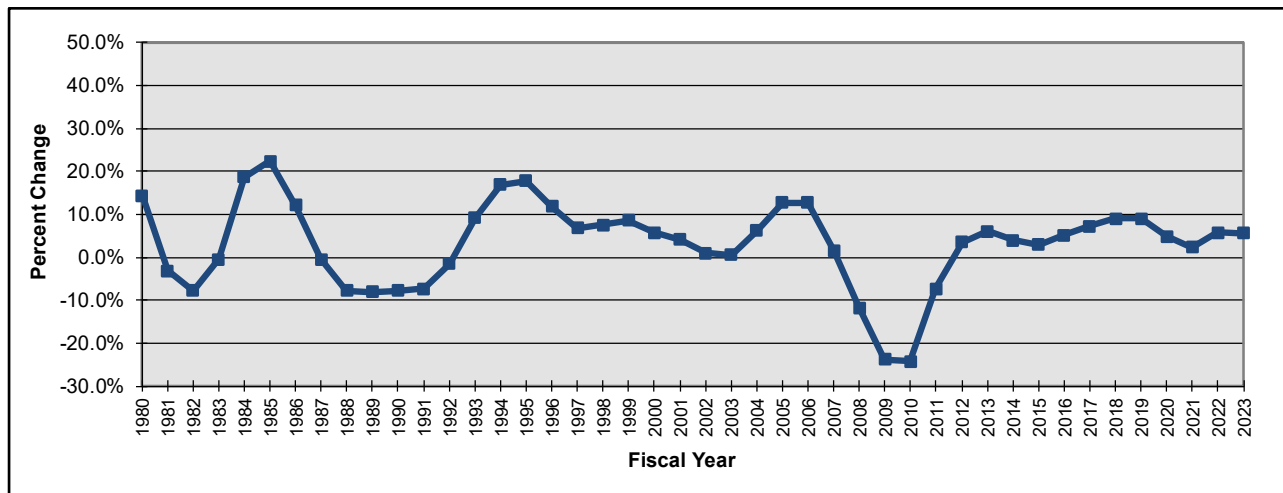
**HISTORICAL DATA
MARICOPA COUNTY CONSTRUCTION EMPLOYMENT GROWTH
(Annual Percent Change)**

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

1980	14.3%	1990	-7.8%	2000	5.7%	2010	-24.2%	2020	4.8%
1981	-3.2%	1991	-7.4%	2001	4.1%	2011	-7.3%	2021	2.3%
1982	-7.8%	1992	-1.6%	2002	1.1%	2012	3.5%	2022	5.8%
1983	-0.5%	1993	9.2%	2003	0.5%	2013	6.1%	2023*	5.6%
1984	18.6%	1994	16.9%	2004	6.2%	2014	3.9%	2024	
1985	22.4%	1995	17.7%	2005	12.7%	2015	2.9%	2025	
1986	12.2%	1996	11.9%	2006	12.7%	2016	5.1%	2026	
1987	-0.6%	1997	6.8%	2007	1.6%	2017	7.3%	2027	
1988	-7.8%	1998	7.5%	2008	-11.8%	2018	9.0%	2028	
1989	-8.1%	1999	8.5%	2009	-23.8%	2019	9.0%	2029	

FY 1980 - FY 2023 BLS Construction Employment from Moody's Analytics Baseline Scenario (June 2023). *FY 2023 projected.

HISTORICAL DATA - GRAPHED



HISTORICAL DATA - ANALYSIS

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	2.3%	9.0%	5.5%	2.4%	3.3%	7.7%
10 Years	2.3%	9.0%	5.6%	2.3%	2.8%	9.0%
Full Period	-24.2%	38.8%	4.8%	11.7%	-7.9%	17.6%

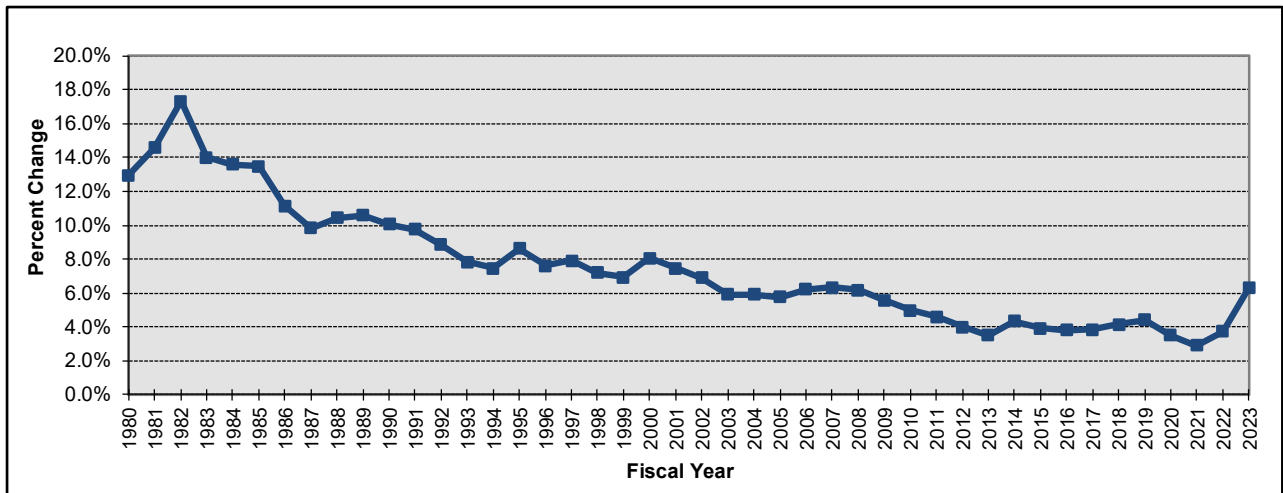
HISTORICAL DATA 30-YEAR MORTGAGE RATE

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

1980	12.9%	1990	10.1%	2000	8.1%	2010	5.0%	2020	3.5%
1981	14.6%	1991	9.8%	2001	7.5%	2011	4.6%	2021	2.9%
1982	17.3%	1992	8.8%	2002	6.9%	2012	4.0%	2022	3.7%
1983	14.0%	1993	7.9%	2003	5.9%	2013	3.5%	2023	6.3%
1984	13.6%	1994	7.5%	2004	5.9%	2014	4.3%	2024	
1985	13.5%	1995	8.6%	2005	5.8%	2015	3.9%	2025	
1986	11.2%	1996	7.6%	2006	6.2%	2016	3.8%	2026	
1987	9.8%	1997	7.9%	2007	6.3%	2017	3.9%	2027	
1988	10.5%	1998	7.2%	2008	6.2%	2018	4.2%	2028	
1989	10.6%	1999	6.9%	2009	5.6%	2019	4.4%	2029	

FY 1980-2023 data from Freddie Mac

HISTORICAL DATA - GRAPHED



HISTORICAL DATA - ANALYSIS

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	2.9%	6.3%	4.2%	1.3%	3.1%	5.5%
10 Years	2.9%	6.3%	4.1%	0.9%	3.5%	4.6%
Full Period	2.9%	17.3%	7.7%	3.3%	3.8%	12.8%

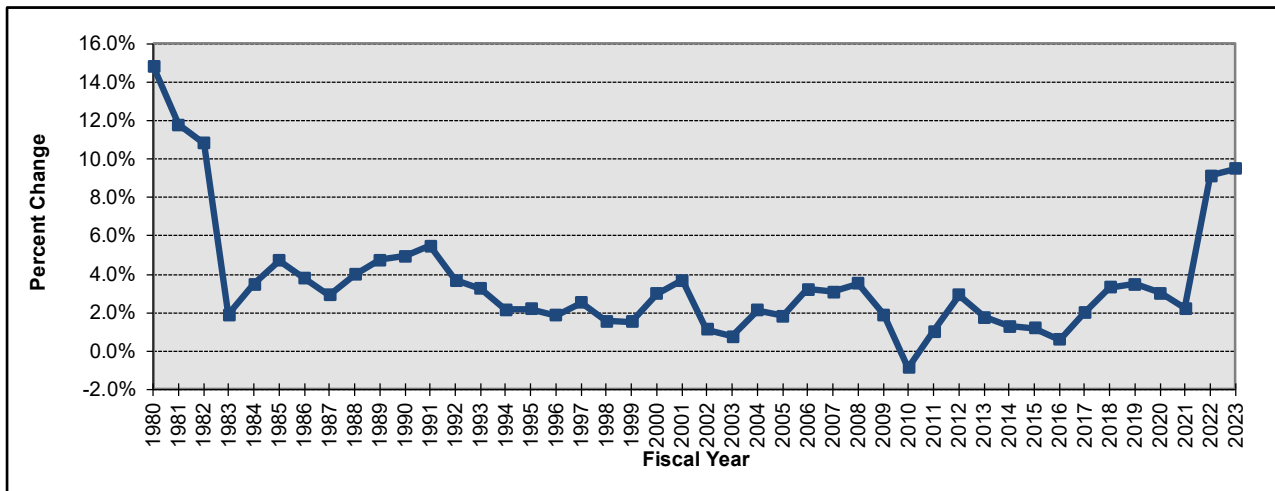
**HISTORICAL DATA
PHOENIX CPI GROWTH RATE
(Annual Percent Change)**

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

1980	14.9%	1990	5.0%	2000	3.0%	2010	-0.9%	2020	3.0%
1981	11.8%	1991	5.5%	2001	3.7%	2011	1.0%	2021	2.2%
1982	10.8%	1992	3.7%	2002	1.1%	2012	2.9%	2022	9.1%
1983	1.9%	1993	3.3%	2003	0.8%	2013	1.8%	2023*	9.5%
1984	3.5%	1994	2.2%	2004	2.1%	2014	1.3%	2024	
1985	4.7%	1995	2.2%	2005	1.8%	2015	1.2%	2025	
1986	3.8%	1996	1.9%	2006	3.2%	2016	0.6%	2026	
1987	2.9%	1997	2.5%	2007	3.1%	2017	2.0%	2027	
1988	4.0%	1998	1.6%	2008	3.5%	2018	3.3%	2028	
1989	4.7%	1999	1.5%	2009	1.9%	2019	3.5%	2029	

FY 1980 - FY 2023 BLS CPI from Moody's Analytics Baseline Scenario (June 2023). *FY 2023 projected.

HISTORICAL DATA - GRAPHED



HISTORICAL DATA - ANALYSIS

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	2.2%	9.5%	5.5%	3.5%	2.6%	9.3%
10 Years	0.6%	9.5%	3.6%	3.2%	1.1%	9.2%
Full Period	-0.9%	14.9%	3.6%	3.1%	1.2%	8.0%

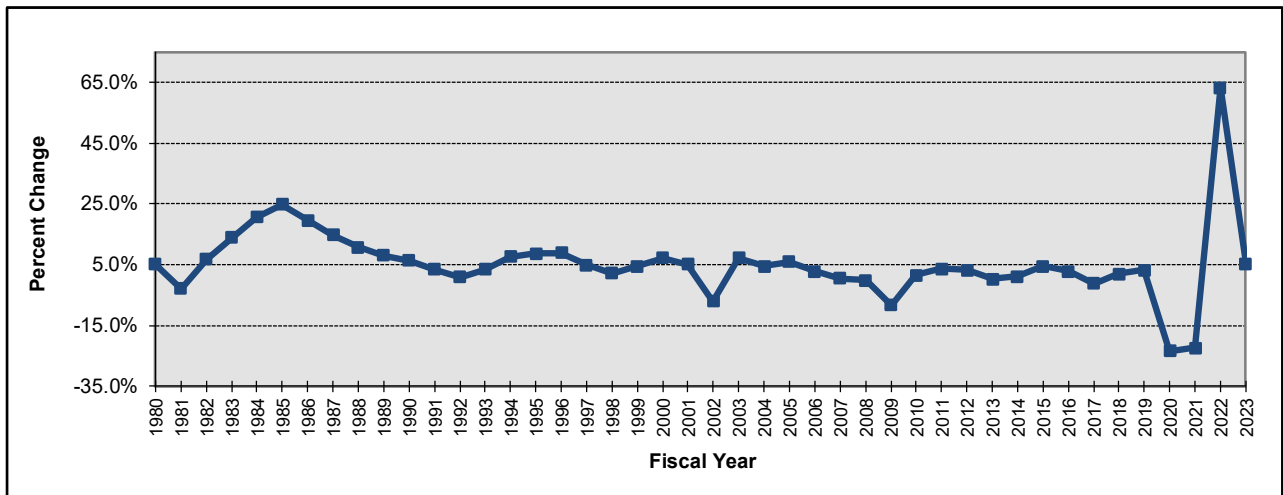
**HISTORICAL DATA
PHOENIX SKY HARBOR/GATEWAY AIRPORTS PASSENGER TRAFFIC GROWTH
(Annual Percent Change)**

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

1980	5.0%	1990	6.4%	2000	7.2%	2010	1.5%	2020	-23.5%
1981	-2.8%	1991	3.4%	2001	5.0%	2011	3.7%	2021	-22.4%
1982	6.8%	1992	0.9%	2002	-7.0%	2012	3.3%	2022	63.2%
1983	13.9%	1993	3.3%	2003	7.1%	2013	0.3%	2023*	5.4%
1984	20.6%	1994	7.7%	2004	4.5%	2014	1.1%	2024	
1985	24.8%	1995	8.6%	2005	5.9%	2015	4.5%	2025	
1986	19.6%	1996	8.9%	2006	2.8%	2016	2.7%	2026	
1987	14.8%	1997	4.8%	2007	0.6%	2017	-1.2%	2027	
1988	10.9%	1998	2.2%	2008	-0.1%	2018	1.9%	2028	
1989	8.1%	1999	4.5%	2009	-8.3%	2019	3.2%	2029	

FY 1980-2022 data obtained from Phoenix Sky Harbor International Airport and combined with data obtained from Mesa Gateway Airport (FY 2004-2022). *FY 2023 is an ADOT staff projection based on FYTD actual through May 2023.

HISTORICAL DATA - GRAPHED



HISTORICAL DATA - ANALYSIS

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	-23.5%	63.2%	5.2%	35.2%	-23.1%	40.1%
10 Years	-23.5%	63.2%	3.5%	23.6%	-22.5%	11.2%
Full Period	-23.5%	63.2%	6.1%	11.6%	-1.0%	15.9%

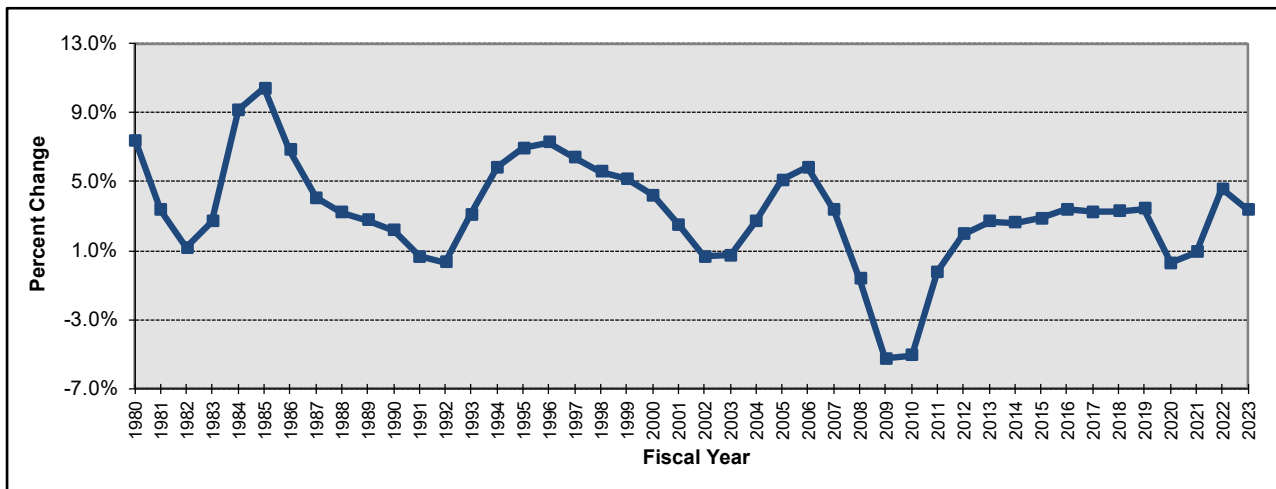
HISTORICAL DATA
MARICOPA COUNTY TOTAL NON-FARM EMPLOYMENT GROWTH
(Annual Percent Change)

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

1980	7.4%	1990	2.2%	2000	4.2%	2010	-5.1%	2020	0.3%
1981	3.3%	1991	0.7%	2001	2.5%	2011	-0.2%	2021	0.9%
1982	1.2%	1992	0.3%	2002	0.7%	2012	2.0%	2022	4.6%
1983	2.7%	1993	3.1%	2003	0.7%	2013	2.7%	2023*	3.4%
1984	9.2%	1994	5.8%	2004	2.7%	2014	2.6%	2024	
1985	10.4%	1995	6.9%	2005	5.1%	2015	2.9%	2025	
1986	6.8%	1996	7.3%	2006	5.8%	2016	3.4%	2026	
1987	4.1%	1997	6.4%	2007	3.4%	2017	3.2%	2027	
1988	3.2%	1998	5.6%	2008	-0.6%	2018	3.3%	2028	
1989	2.8%	1999	5.2%	2009	-5.2%	2019	3.4%	2029	

FY 1980 - FY 2023 BLS Non-farm Employment from Moody's Analytics Baseline Scenario (June 2023). *FY 2023 projected.

HISTORICAL DATA - GRAPHED



HISTORICAL DATA - ANALYSIS

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	0.3%	4.6%	2.5%	1.8%	0.5%	4.1%
10 Years	0.3%	4.6%	2.8%	1.3%	0.8%	3.5%
Full Period	-5.2%	13.6%	4.0%	3.8%	0.4%	8.9%