

**MARICOPA COUNTY TRANSPORTATION EXCISE TAX  
Forecasting Process & Results  
FY 2013-2026**



**Financial Management Services  
October 2012**

# TABLE OF CONTENTS

<b>Introduction</b>	<b>1</b>
<b>Background</b>	<b>1</b>
<b>Risk Analysis Panel</b>	<b>2</b>
<b>Model Results</b>	<b>2</b>
<b>Summary</b>	<b>3</b>
<b>Supplementary Information</b>	
<b>1. RARF Official Revenue Forecast</b>	<b>4</b>
<b>2. RARF Revenue Risk Analysis Results by Probability</b>	<b>5</b>
<b>3. RARF Official Revenue Forecast Distribution</b>	<b>6</b>
<b>4. Panelist Data Values</b>	<b>7-11</b>
<b>6. Panel Members Inputs by Independent Variable</b>	<b>12-18</b>
<b>7. Independent Variable Historical Values</b>	<b>19-25</b>

**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 2013–2026 as developed by the Arizona Department of Transportation (the Department) in cooperation with the Maricopa Association of Governments, Valley Metro and Valley Metro Rail.

**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 1997 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.

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. Sky Harbor passenger traffic growth
6. Maricopa County total non-farm employment growth
7. 30 year mortgage rate

**Risk Analysis Panel**

The Risk Analysis Process relies heavily on the judgments of an expert panel of economic and financial participants to provide information critical to the forecasting process. In August 2012, a panel of fourteen 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 model to produce a series of forecasts with associated probabilities of occurrence. The panelists’ inputs are reflected in the attached tables at the back of this report.

**Model Results**

This year’s panel inputs produced a mean forecast of \$6,851.7 million for the period FY 2013-2026 with a compound growth rate (CGR) of 5.4 percent. The Department’s Official Forecast for FY 2013-2026 totals \$6,446.8 million with a compound growth rate of 4.9 percent. This year’s Official Forecast is \$47.4 million lower than last year’s Official Forecast.

The Department’s Official Forecast result incorporates the 50 percent confidence interval growth rate amount for each year of the forecast except for FY 2013. The FY 2013 forecast of \$340.5 million was developed by ADOT staff using time series techniques, historical and projected growth rates and recent legislative changes.

<b>FY 2013 Official Forecast (Dollars in Millions)</b>			
<b><u>Fiscal</u></b>	<b><u>Mean</u></b>	<b><u>Official</u></b>	<b><u>Confidence</u></b>
<b><u>Year</u></b>	<b><u>Forecast</u></b>	<b><u>Forecast</u></b>	<b><u>Level</u></b>
<b>2013</b>	\$344.4	\$340.5	50%
<b>2014</b>	372.5	361.1	50%
<b>2015</b>	397.8	381.4	50%
<b>2016</b>	422.7	401.8	50%
<b>2017</b>	446.6	422.9	50%
<b>2018</b>	470.7	443.0	50%
<b>2019</b>	495.4	464.3	50%
<b>2020</b>	519.9	487.9	50%
<b>2021</b>	544.2	509.3	50%
<b>2022</b>	569.7	532.4	50%
<b>2023</b>	596.1	554.0	50%
<b>2024</b>	623.2	578.0	50%
<b>2025</b>	651.5	602.3	50%
<b>2026/1</b>	<u>397.0</u>	<u>367.9</u>	50%
<b>Total</b>	\$6,851.7	\$6,446.8	
<b>Average CGR</b>	5.4%	4.9%	

Note: /1. FY 2026 totals reflect the transportation excise tax extension expires on December 31, 2025

For comparison purposes, the October 2011 Official Forecast and the October 2012 Official Forecast are shown below:

<b>FY 2013-2026 Comparative Forecast</b>			
<b>(Dollars in Millions)</b>			
<b>Fiscal</b>	<b>Oct. 11</b>	<b>Oct. 12</b>	
<b>Year</b>	<b>Official</b>	<b>Official</b>	
	<b>Forecast</b>	<b>Forecast</b>	<b>Difference</b>
<b>2013</b>	\$344.2	\$340.5	(\$3.7)
<b>2014</b>	364.8	361.1	(3.7)
<b>2015</b>	385.4	381.4	(4.0)
<b>2016</b>	405.9	401.8	(4.1)
<b>2017</b>	426.5	422.9	(3.6)
<b>2018</b>	447.2	443.0	(4.2)
<b>2019</b>	470.2	464.3	(5.9)
<b>2020</b>	489.9	487.9	(2.0)
<b>2021</b>	511.6	509.3	(2.3)
<b>2022</b>	534.6	532.4	(2.2)
<b>2023</b>	557.0	554.0	(3.0)
<b>2024</b>	580.0	578.0	(2.0)
<b>2025</b>	607.1	602.3	(4.8)
<b>2026/1</b>	<u>369.8</u>	<u>367.9</u>	<u>(1.9)</u>
<b>Total</b>	\$6,494.2	\$6,446.8	(\$47.4)
<b>Average CGR</b>	4.8%	4.9%	

Note: /1 FY 2026 totals reflect the transportation excise tax extension expires on December 31, 2025

### **Summary**

The Department’s Official Forecast for FY 2013-2026 totals \$6,446.8 million, a decrease of \$47.4 million from the October 2011 Official Forecast. The RAP results reflect the panel members’ continued concern with Maricopa County’s slower population and job growth going forward and the global economic uncertainty. Compared to last year, the panel inputs were very different for the construction employment and 30-year mortgage rate independent variables. The construction employment growth rates for fiscal years 2013 to 2017 were significantly higher while the 30-year mortgage rates were lower for fiscal years 2013 to 2016 but were higher for fiscal years 2021 to 2026. The remainder of the RAP panel inputs were similar as last year.

### **Supplementary Information**

The remainder of this report presents supplementary information on the detailed results of the Risk Analysis Process, the Department’s model and the values of the independent variables forecast by the expert panel. While the Official Forecast period is FY 2013-2026, panel inputs were requested for FY 2013-2017, 2021 and 2026. Data displayed for other than the requested years, has been extrapolated.

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

Fiscal Year Percentile	2012 Actual	2013 50%	2014 50%	2015 50%	2016 50%	2017 50%	2018 50%	2019 50%	2020 50%	2021 50%	2022 50%	2023 50%	2024 50%	2025 50%	2026 50%	Total 50%
Retail Sales	\$162.4	\$171.3	\$180.6	\$189.5	\$199.2	\$209.6	\$219.4	\$229.5	\$242.3	\$253.1	\$265.6	\$276.3	\$287.7	\$300.5	\$183.8	\$3,208.4
Contracting	30.5	32.9	37.8	42.4	45.8	49.0	51.2	54.3	57.2	59.1	61.1	63.4	66.1	68.5	41.8	730.6
Utilities	30.2	30.9	31.8	32.9	34.0	35.1	36.3	37.6	38.8	40.0	41.3	42.7	44.1	45.6	27.5	518.6
Restaurant and Bar	34.3	36.4	38.5	40.7	43.1	45.3	47.7	50.5	53.0	55.8	58.1	61.0	64.2	66.7	40.9	701.9
Rental of Real Property	36.4	37.7	39.3	41.2	43.3	45.6	47.7	49.9	51.9	54.5	57.3	59.3	62.1	64.7	39.2	693.7
Rental of Personal Property	12.0	12.4	13.3	14.0	14.8	15.5	16.7	17.6	18.6	19.3	20.3	21.2	22.1	23.1	14.2	243.1
Other	18.4	18.9	19.8	20.7	21.6	22.8	24.0	24.9	26.1	27.5	28.7	30.1	31.7	33.2	20.5	350.5
<b>Total</b>	<b>\$324.2</b>	<b>\$340.5</b>	<b>\$361.1</b>	<b>\$381.4</b>	<b>\$401.8</b>	<b>\$422.9</b>	<b>\$443.0</b>	<b>\$464.3</b>	<b>\$487.9</b>	<b>\$509.3</b>	<b>\$532.4</b>	<b>\$554.0</b>	<b>\$578.0</b>	<b>\$602.3</b>	<b>\$367.9</b>	<b>\$6,446.8</b>

Note: /1 FY 2026 totals reflect the transportation excise tax extension expires on December 31, 2025

### RARF TOTAL TAX REVENUE RISK ANALYSIS RESULTS

(Current Dollars in Millions)

<b>Fiscal Year</b>	<b>Mean</b>	<b>10%</b>	<b>20%</b>	<b>30%</b>	<b>40%</b>	<b>50%</b>	<b>60%</b>	<b>70%</b>	<b>80%</b>	<b>90%</b>
<b>2013</b>	\$344.4	\$392.5	\$372.4	\$359.3	\$349.3	\$340.5	\$331.2	\$322.5	\$313.3	\$301.0
<b>2014</b>	372.5	458.0	420.7	397.7	379.8	361.1	347.7	333.2	316.7	295.4
<b>2015</b>	397.8	515.9	462.8	431.2	405.0	381.4	363.1	342.2	320.5	292.5
<b>2016</b>	422.7	569.0	501.9	462.2	430.4	401.8	378.4	354.8	328.0	295.4
<b>2017</b>	446.6	615.2	536.8	492.9	455.2	422.9	395.5	366.7	336.1	300.5
<b>2018</b>	470.7	660.7	571.9	522.3	481.9	443.0	412.4	381.6	346.9	306.4
<b>2019</b>	495.4	703.9	605.5	550.4	507.3	464.3	430.8	397.9	360.9	315.7
<b>2020</b>	519.9	744.0	638.9	577.7	532.3	487.9	450.5	413.9	375.3	324.2
<b>2021</b>	544.2	783.4	673.7	607.1	556.0	509.3	471.1	431.6	389.5	336.0
<b>2022</b>	569.7	822.8	706.9	637.4	582.4	532.4	491.1	449.0	406.0	349.2
<b>2023</b>	596.1	871.5	740.5	669.0	612.3	554.0	508.9	469.3	418.5	359.4
<b>2024</b>	623.2	915.4	776.2	698.9	638.1	578.0	532.6	487.3	435.6	374.3
<b>2025</b>	651.5	963.0	815.9	731.3	665.1	602.3	552.5	504.6	452.2	387.4
<b>2026/1</b>	397.0	588.1	498.0	445.4	405.9	367.9	336.0	306.2	274.2	234.9
<b>Total</b>	\$6,851.7	\$9,603.4	\$8,322.1	\$7,582.8	\$7,001.0	\$6,446.8	\$6,001.8	\$5,560.8	\$5,073.7	\$4,472.3

Note: /1 FY 2026 totals reflect the transportation excise tax extension expires on December 31, 2025.

**RARF OFFICIAL REVENUE FORECAST DISTRIBUTION  
(Current Dollars in Millions)**

Fiscal Year	Regional Area Road Fund (RARF) /1		Public Transportation Fund (33.3%)	Total
	Freeways (56.2%)	Arterial Streets (10.5 %)		
2013	\$191.4	\$35.7	\$113.4	\$340.5
2014	202.9	37.9	120.3	361.1
2015	214.3	40.1	127.0	381.4
2016	225.8	42.2	133.8	401.8
2017	237.7	44.4	140.8	422.9
2018	249.0	46.5	147.5	443.0
2019	260.9	48.8	154.6	464.3
2020	274.2	51.2	162.5	487.9
2021	286.2	53.5	169.6	509.3
2022	299.2	55.9	177.3	532.4
2023	311.3	58.2	184.5	554.0
2024	324.8	60.7	192.5	578.0
2025	338.5	63.2	200.6	602.3
2026 /2	206.8	38.6	122.5	367.9
<b>TOTALS</b>	<b>\$3,623.0</b>	<b>\$676.9</b>	<b>\$2,146.9</b>	<b>\$6,446.8</b>

Note: 1/ The Regional Public Transportation Authority receives a portion of the excise tax funds for transit costs which is adjusted annually by the GDP price deflator. Beginning July 1, 2005, this transfer from RARF is divided equally between MAG and the Public Transportation Fund for planning and administering the regional transportation plan.

2/ FY 2026 totals reflect the transportation excise tax extension expires on December 31, 2025

**Distribution**

Per Laws 2004, Chapter 2 (HB 2456), the sales tax extension are 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 expense and maintenance.
- / 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

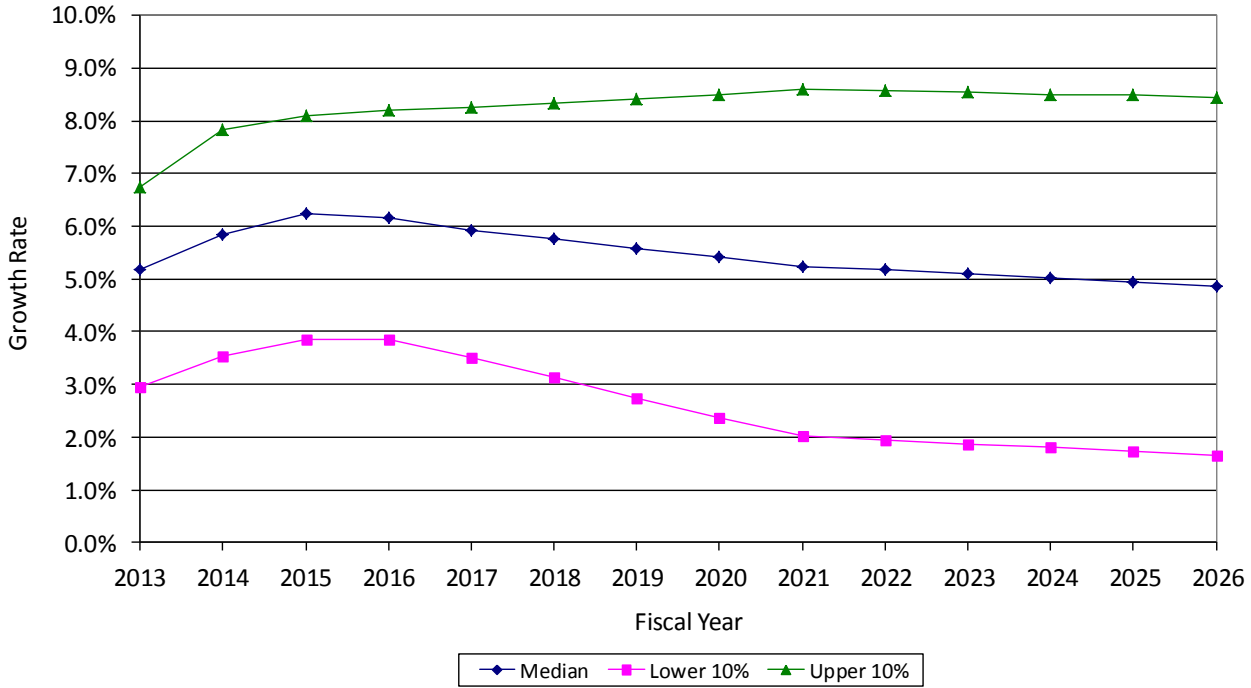
	Nominal Pers. Inc. Growth /1	Population Growth /1	Construction Employment Growth /1	30 Year Mortgage Rate	Phoenix CPI Growth/1	Sky Harbor Passenger Traffic Growth	Total Non-Farm Employment Growth /1
<b>FY 2013</b>							
Upper 10%	6.74%	2.14%	14.14%	4.74%	2.74%	4.26%	3.55%
Lower 10%	2.94%	0.99%	4.16%	3.66%	1.00%	1.25%	1.25%
Median	5.17%	1.63%	8.21%	4.19%	1.87%	2.93%	2.53%
<b>FY 2014</b>							
Upper 10%	7.83%	2.69%	16.45%	5.18%	3.21%	4.38%	3.83%
Lower 10%	3.52%	1.30%	5.22%	3.84%	1.42%	1.31%	1.38%
Median	5.85%	2.06%	10.53%	4.53%	2.28%	2.95%	2.89%
<b>FY 2015</b>							
Upper 10%	8.10%	3.02%	16.67%	5.74%	3.61%	4.57%	4.43%
Lower 10%	3.86%	1.44%	4.41%	4.08%	1.39%	0.93%	1.35%
Median	6.25%	2.34%	10.56%	4.91%	2.40%	2.78%	3.18%
<b>FY 2016</b>							
Upper 10%	8.21%	3.01%	13.68%	6.44%	3.79%	4.49%	4.62%
Lower 10%	3.86%	1.42%	2.88%	4.58%	1.41%	0.73%	1.42%
Median	6.15%	2.34%	8.15%	5.55%	2.37%	2.64%	3.33%
<b>FY 2017</b>							
Upper 10%	8.24%	2.97%	12.34%	7.13%	4.01%	4.47%	4.63%
Lower 10%	3.50%	1.33%	0.90%	4.94%	1.21%	0.50%	1.20%
Median	5.92%	2.22%	6.20%	5.94%	2.28%	2.45%	3.31%
<b>FY 2021</b>							
Upper 10%	8.59%	3.10%	10.46%	7.78%	4.26%	5.03%	5.30%
Lower 10%	2.01%	0.79%	-4.81%	5.10%	0.87%	-0.18%	0.12%
Median	5.24%	1.96%	3.64%	6.37%	2.32%	2.26%	2.77%
<b>FY 2026</b>							
Upper 10%	8.45%	3.00%	10.43%	7.91%	4.70%	5.06%	5.19%
Lower 10%	1.66%	0.67%	-5.62%	5.15%	0.92%	-0.31%	-0.41%
Median	4.86%	1.74%	3.54%	6.45%	2.38%	2.19%	2.58%

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

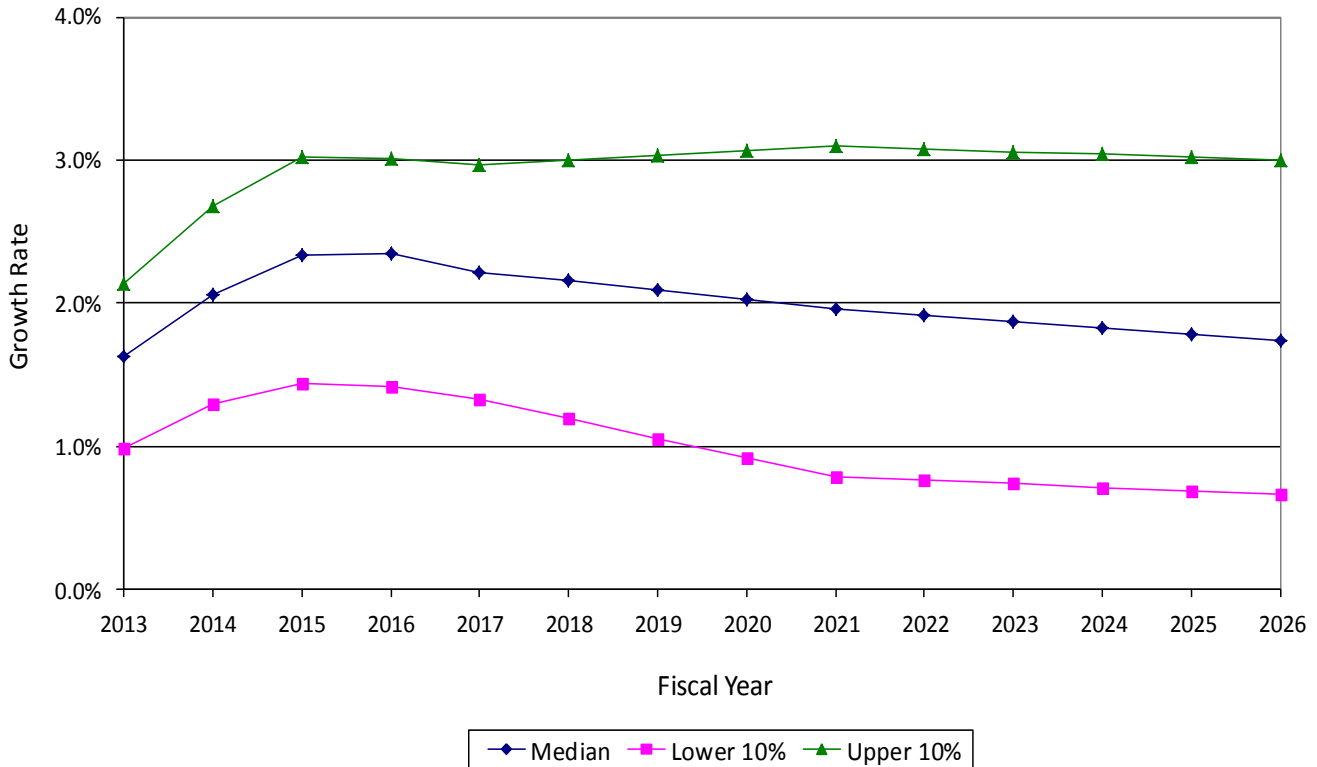
Personal income and 30 year mortgage rate are nominal rates.

/1 Data for Maricopa County

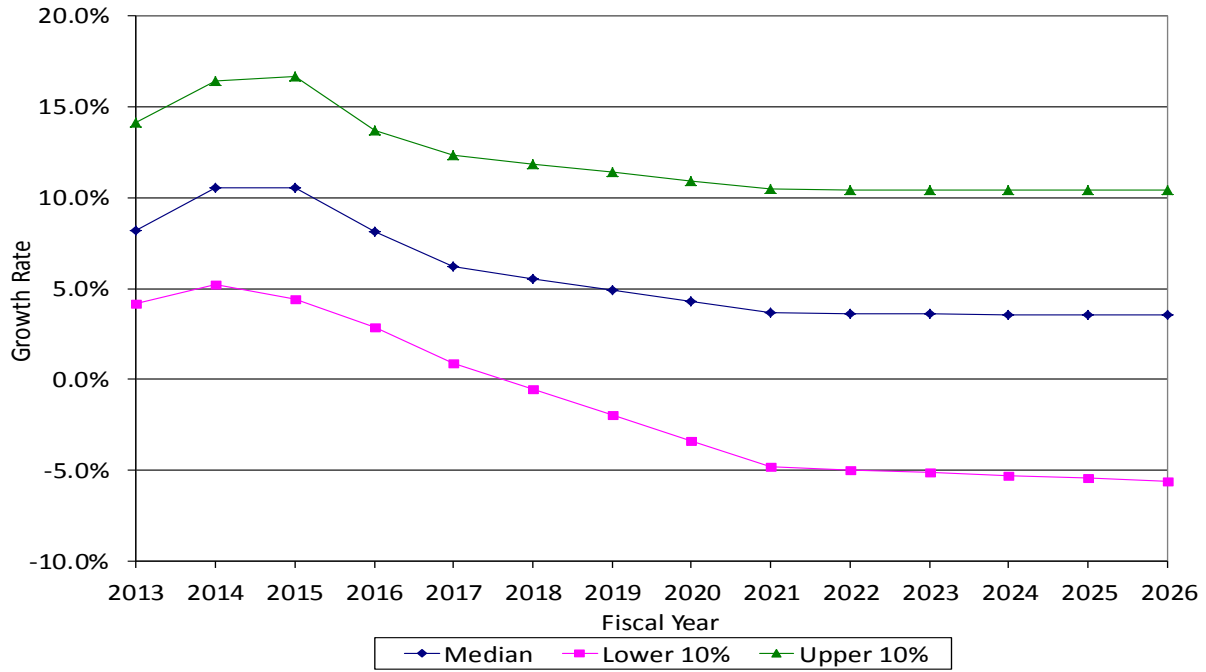
## Maricopa County Nominal Personal Income



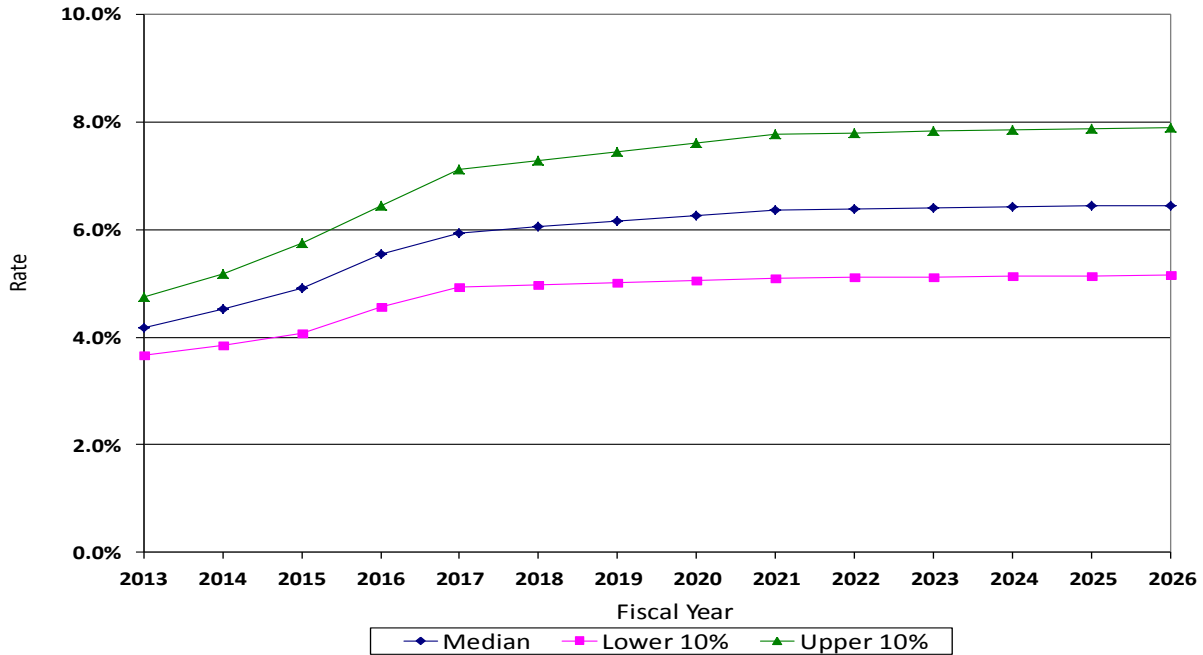
## Maricopa County Population



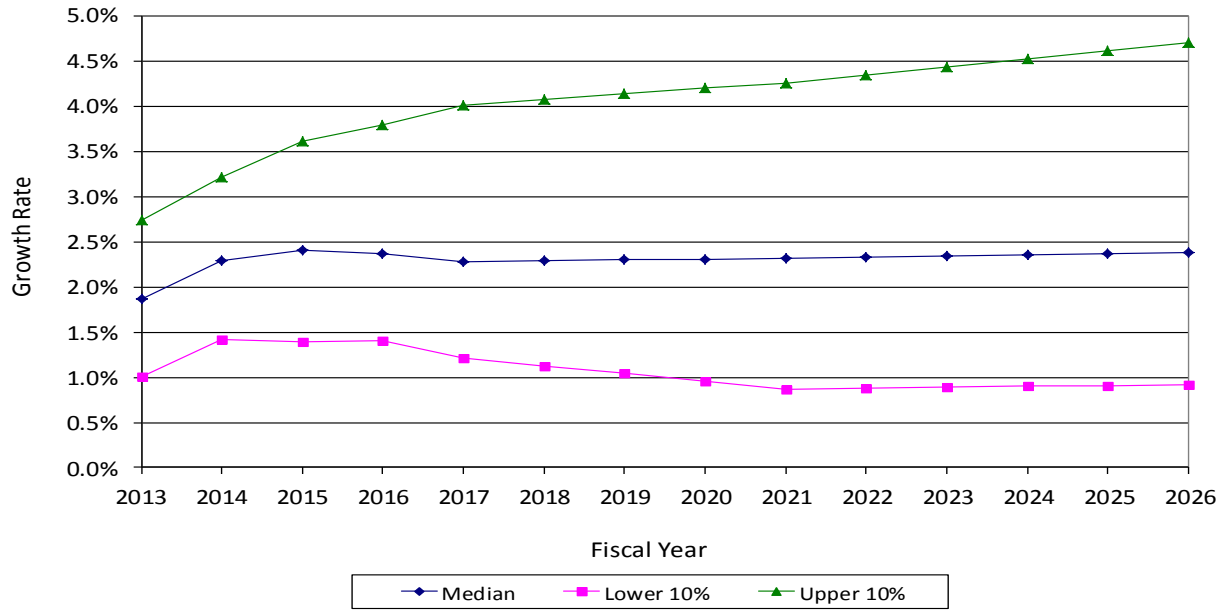
## Maricopa County Construction Employment



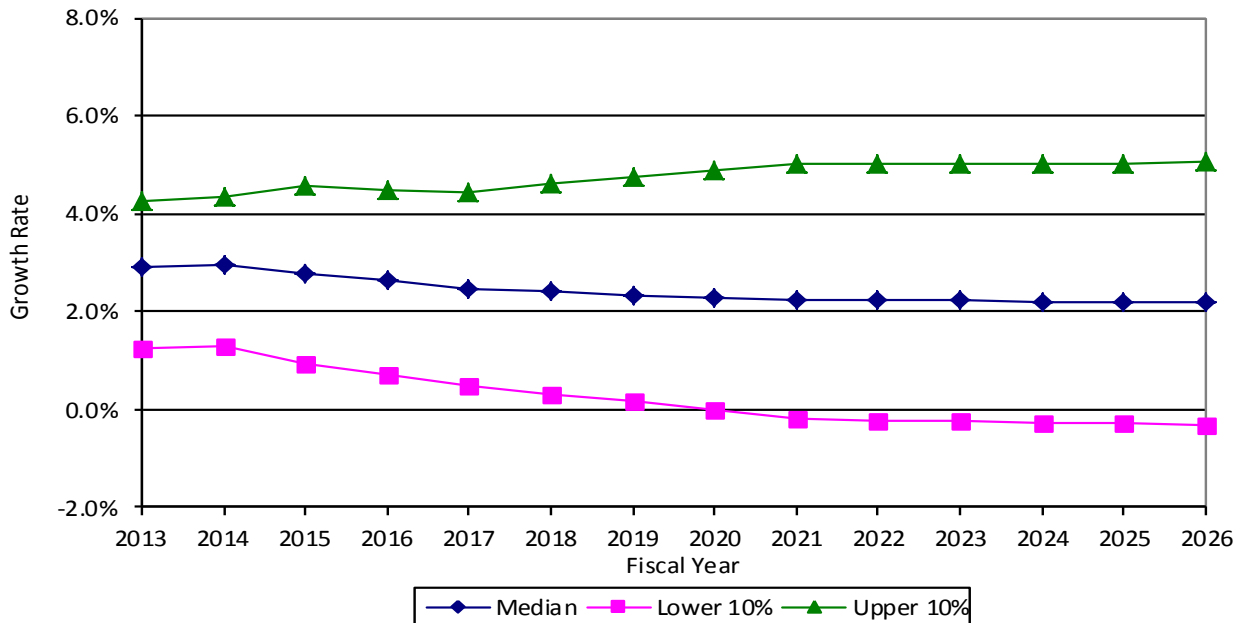
## 30 Year Mortgage Rate



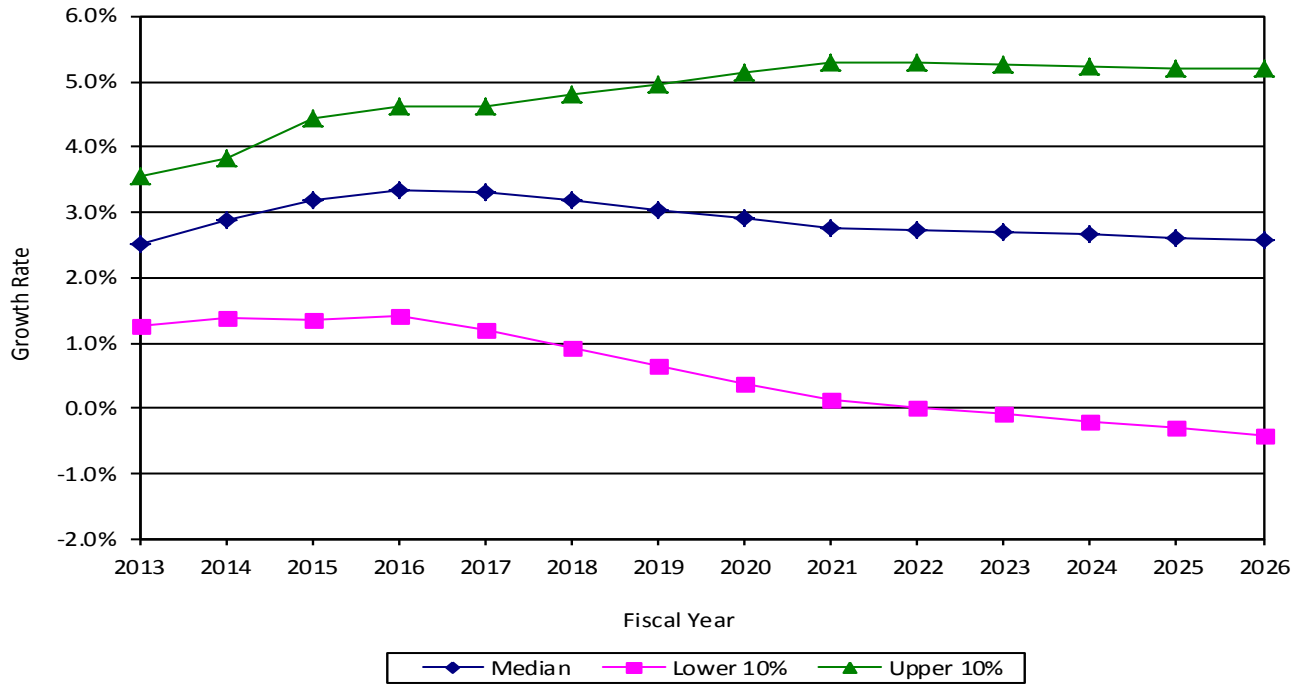
### Phoenix CPI



### Sky Harbor Passenger Traffic



# Maricopa County Total Non-Farm Employment Growth



## Maricopa County Nominal Personal Income Growth

	2013	2014	2015	2016	2017	2021	2026
<b>Panelist 1</b>							
Upper 10%	7.67%	8.20%	8.61%	8.54%	8.57%	9.53%	9.60%
Lower 10%	3.33%	4.20%	4.79%	4.66%	4.43%	0.47%	0.00%
Median	5.50%	6.20%	6.70%	6.60%	6.50%	5.00%	4.80%
<b>Panelist 2</b>							
Upper 10%	7.00%	8.00%	8.00%	8.00%	8.00%	8.50%	8.50%
Lower 10%	3.50%	4.00%	4.50%	4.50%	4.00%	0.00%	0.00%
Median	5.00%	5.50%	6.00%	6.50%	6.00%	5.00%	5.00%
<b>Panelist 3</b>							
Upper 10%	6.50%	7.00%	7.50%	8.00%	8.10%	9.00%	9.50%
Lower 10%	2.50%	2.40%	3.00%	3.50%	3.40%	1.00%	0.00%
Median	4.60%	5.00%	5.50%	6.00%	6.00%	5.00%	5.00%
<b>Panelist 4</b>							
Upper 10%	7.00%	8.20%	8.70%	8.50%	8.20%	10.00%	10.00%
Lower 10%	3.00%	4.20%	4.70%	4.50%	4.20%	1.00%	1.00%
Median	5.00%	6.20%	6.70%	6.50%	6.20%	5.50%	5.00%
<b>Panelist 5</b>							
Upper 10%	8.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Lower 10%	0.00%	0.00%	1.00%	2.00%	2.00%	2.00%	2.00%
Median	5.00%	6.10%	6.90%	6.70%	6.20%	5.74%	5.20%
<b>Panelist 6</b>							
Upper 10%	6.40%	6.80%	7.20%	8.20%	8.50%	8.30%	8.30%
Lower 10%	4.20%	3.80%	3.60%	3.10%	2.60%	0.80%	0.80%
Median	5.70%	6.20%	6.70%	6.70%	6.70%	5.70%	4.80%
<b>Panelist 7</b>							
Upper 10%	7.50%	8.10%	7.80%	7.30%	6.80%	6.70%	6.30%
Lower 10%	2.70%	3.50%	3.20%	2.70%	2.20%	2.10%	1.70%
Median	6.00%	5.80%	5.50%	5.00%	4.50%	4.40%	4.00%
<b>Panelist 8</b>							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	Not Provided						
<b>Panelist 9</b>							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	5.00%	6.00%	6.00%	5.00%	5.00%	4.00%	4.00%
<b>Panelist 10</b>							
Upper 10%	5.00%	7.10%	7.90%	8.50%	7.70%	8.00%	6.90%
Lower 10%	2.50%	4.10%	4.20%	4.40%	4.20%	3.70%	2.90%
Median	4.76%	5.30%	6.50%	6.40%	6.20%	5.80%	5.40%
<b>Panelist 11</b>							
Upper 10%	6.80%	7.50%	8.00%	7.50%	7.50%	6.50%	5.80%
Lower 10%	3.50%	4.50%	4.80%	5.00%	4.50%	4.50%	3.50%
Median	5.50%	6.20%	6.80%	6.60%	6.10%	5.50%	5.00%
<b>Panelist 12</b>							
Upper 10%	6.00%	9.00%	9.00%	8.00%	8.00%	8.00%	8.00%
Lower 10%	4.00%	5.00%	5.50%	6.00%	5.00%	4.00%	3.50%
Median	5.00%	6.00%	7.00%	7.50%	7.00%	6.00%	5.00%
<b>Panelist 13</b>							
Upper 10%	6.00%	6.50%	6.50%	7.00%	7.50%	7.50%	7.50%
Lower 10%	4.00%	4.00%	4.00%	3.00%	2.50%	1.50%	1.50%
Median	5.10%	5.50%	5.00%	4.50%	4.50%	4.50%	4.00%
<b>Panelist 14</b>							
Upper 10%	7.00%	7.50%	8.00%	9.00%	10.00%	11.00%	11.00%
Lower 10%	2.00%	2.50%	3.00%	3.00%	3.00%	3.00%	3.00%
Median	5.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%

All data in the above table are in nominal growth rates.

### Maricopa County Population Growth

	2013	2014	2015	2016	2017	2021	2026
<b>Panelist 1</b>							
Upper 10%	1.7%	2.4%	2.7%	2.8%	2.7%	3.3%	3.0%
Lower 10%	0.7%	1.4%	1.5%	1.6%	1.5%	0.5%	0.2%
Median	1.2%	1.9%	2.1%	2.2%	2.1%	1.9%	1.6%
<b>Panelist 2</b>							
Upper 10%	2.0%	2.5%	3.0%	3.0%	3.0%	3.0%	3.0%
Lower 10%	1.2%	1.5%	1.7%	1.7%	1.5%	1.0%	0.5%
Median	1.6%	1.8%	2.0%	2.2%	2.1%	2.0%	1.5%
<b>Panelist 3</b>							
Upper 10%	2.2%	2.4%	2.7%	2.8%	2.9%	3.0%	3.4%
Lower 10%	0.9%	1.4%	1.5%	1.5%	1.4%	0.5%	0.2%
Median	1.6%	1.7%	2.0%	2.2%	2.1%	1.8%	1.6%
<b>Panelist 4</b>							
Upper 10%	2.2%	2.6%	2.8%	2.8%	2.7%	2.8%	2.8%
Lower 10%	1.0%	1.4%	1.5%	1.3%	1.2%	0.5%	0.5%
Median	1.6%	2.0%	2.1%	2.2%	2.3%	1.9%	1.7%
<b>Panelist 5</b>							
Upper 10%	2.0%	2.4%	2.8%	3.0%	3.0%	3.2%	3.2%
Lower 10%	1.0%	0.5%	0.5%	0.5%	0.5%	0.0%	0.0%
Median	1.7%	2.0%	2.1%	2.2%	2.1%	1.9%	1.6%
<b>Panelist 6</b>							
Upper 10%	2.0%	2.5%	2.9%	3.2%	3.2%	3.0%	2.7%
Lower 10%	0.8%	1.1%	1.4%	1.5%	1.3%	0.4%	0.2%
Median	1.5%	1.9%	2.4%	2.6%	2.7%	2.2%	1.7%
<b>Panelist 7</b>							
Upper 10%	2.2%	2.7%	2.9%	2.8%	2.8%	2.7%	2.7%
Lower 10%	0.8%	1.3%	1.5%	1.4%	1.4%	1.3%	1.3%
Median	1.5%	2.0%	2.2%	2.1%	2.1%	2.0%	2.0%
<b>Panelist 8</b>							
Upper 10%	2.0%	2.4%	2.7%	2.8%	2.9%	3.3%	3.1%
Lower 10%	0.8%	1.2%	1.5%	1.6%	1.7%	0.5%	0.2%
Median	1.4%	1.8%	2.1%	2.2%	2.3%	1.9%	1.7%
<b>Panelist 9</b>							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	2.0%	2.5%	3.0%	3.0%	2.5%	2.0%	1.5%
<b>Panelist 10</b>							
Upper 10%	2.3%	2.7%	3.0%	3.1%	3.4%	3.5%	3.3%
Lower 10%	0.8%	0.8%	1.1%	1.2%	1.3%	1.0%	1.0%
Median	1.7%	2.1%	2.5%	2.5%	2.6%	2.1%	1.8%
<b>Panelist 11</b>							
Upper 10%	2.5%	3.0%	3.5%	3.5%	3.0%	2.8%	2.6%
Lower 10%	1.5%	1.8%	2.0%	1.7%	1.6%	1.5%	1.5%
Median	2.0%	2.5%	3.0%	2.5%	2.2%	2.1%	2.2%
<b>Panelist 12</b>							
Upper 10%	2.0%	3.0%	4.0%	3.0%	3.0%	3.0%	3.0%
Lower 10%	1.0%	2.0%	2.0%	1.7%	1.5%	1.0%	1.0%
Median	1.5%	2.5%	3.0%	2.5%	2.0%	2.0%	2.0%
<b>Panelist 13</b>							
Upper 10%	2.3%	3.0%	2.9%	2.8%	2.7%	3.3%	3.0%
Lower 10%	1.1%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Median	1.7%	2.2%	2.1%	2.1%	2.0%	1.9%	1.6%
<b>Panelist 14</b>							
Upper 10%	2.5%	3.2%	3.4%	3.4%	3.2%	3.5%	3.3%
Lower 10%	1.3%	1.5%	1.6%	1.7%	1.4%	1.0%	1.0%
Median	1.8%	2.0%	2.2%	2.3%	2.0%	1.8%	1.8%

All data in the above table are in percentage growth rates.

## Maricopa County Construction Employment Growth

	2013	2014	2015	2016	2017	2021	2026
<b>Panelist 1</b>							
Upper 10%	7.8%	17.2%	18.7%	16.0%	16.6%	16.0%	16.0%
Lower 10%	3.2%	8.8%	7.3%	4.0%	1.4%	-10.0%	-10.0%
Median	5.5%	13.0%	13.0%	10.0%	9.0%	3.0%	3.0%
<b>Panelist 2</b>							
Upper 10%	15.0%	20.0%	20.0%	15.0%	10.0%	7.5%	7.5%
Lower 10%	5.0%	7.0%	8.0%	7.0%	0.0%	-10.0%	-10.0%
Median	10.0%	13.0%	13.0%	10.0%	5.0%	2.5%	2.5%
<b>Panelist 3</b>							
Upper 10%	12.0%	15.0%	18.0%	16.0%	15.0%	17.0%	18.0%
Lower 10%	4.0%	3.0%	2.0%	1.5%	0.0%	-10.0%	-18.0%
Median	8.0%	9.0%	10.0%	8.0%	7.0%	4.0%	3.5%
<b>Panelist 4</b>							
Upper 10%	19.0%	20.0%	19.0%	16.0%	12.0%	15.0%	15.0%
Lower 10%	5.0%	8.0%	7.0%	4.0%	0.0%	-10.0%	-10.0%
Median	12.0%	14.0%	13.0%	10.0%	8.0%	3.0%	3.0%
<b>Panelist 5</b>							
Upper 10%	8.0%	10.0%	12.0%	14.0%	16.0%	7.0%	6.0%
Lower 10%	2.0%	2.0%	2.0%	2.0%	2.0%	1.0%	0.0%
Median	5.0%	5.0%	5.0%	5.0%	5.0%	4.0%	3.0%
<b>Panelist 6</b>							
Upper 10%	12.0%	14.0%	15.0%	12.0%	10.0%	10.0%	10.0%
Lower 10%	6.5%	5.0%	3.0%	0.0%	-0.5%	-5.0%	-5.0%
Median	9.0%	10.5%	10.0%	8.0%	5.0%	2.5%	2.5%
<b>Panelist 7</b>							
Upper 10%	7.2%	8.2%	6.5%	6.5%	7.3%	7.3%	8.1%
Lower 10%	-2.8%	-1.8%	-3.5%	-3.5%	-2.7%	-2.7%	-1.9%
Median	2.2%	3.2%	1.5%	1.5%	2.3%	2.3%	3.1%
<b>Panelist 8</b>							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	Not Provided						
<b>Panelist 9</b>							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	8.0%	12.0%	12.0%	8.0%	4.0%	3.0%	3.0%
<b>Panelist 10</b>							
Upper 10%	15.8%	16.8%	20.7%	17.5%	16.1%	12.5%	12.2%
Lower 10%	3.5%	4.6%	5.8%	5.7%	4.5%	3.1%	3.2%
Median	7.6%	8.4%	11.2%	8.8%	7.9%	6.2%	6.5%
<b>Panelist 11</b>							
Upper 10%	20.0%	16.0%	15.0%	9.0%	7.0%	5.0%	5.0%
Lower 10%	5.0%	5.0%	5.0%	3.0%	2.0%	1.0%	1.0%
Median	10.0%	12.0%	10.0%	7.5%	5.0%	4.0%	4.0%
<b>Panelist 12</b>							
Upper 10%	15.0%	20.0%	15.0%	8.0%	8.0%	5.0%	5.0%
Lower 10%	3.0%	5.0%	5.0%	4.0%	3.0%	1.0%	1.0%
Median	8.0%	12.0%	12.0%	7.0%	5.0%	3.0%	3.0%
<b>Panelist 13</b>							
Upper 10%	15.0%	12.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Lower 10%	4.5%	3.5%	-3.5%	-3.5%	-3.5%	-9.0%	-9.0%
Median	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
<b>Panelist 14</b>							
Upper 10%	16.0%	20.0%	20.0%	17.0%	15.0%	10.0%	10.0%
Lower 10%	4.0%	5.5%	7.0%	4.0%	1.0%	-5.0%	-5.0%
Median	10.0%	12.0%	12.0%	10.0%	8.0%	3.0%	3.0%

All data in the above table are in percentage growth rates.



### 30 Year Mortgage

	2013	2014	2015	2016	2017	2021	2026
<b>Panelist 1</b>							
Upper 10%	3.9%	4.1%	4.7%	5.5%	5.8%	8.9%	8.9%
Lower 10%	3.3%	3.5%	3.7%	4.5%	4.8%	6.1%	6.1%
Median	3.6%	3.8%	4.2%	5.0%	5.3%	7.5%	7.5%
<b>Panelist 2</b>							
Upper 10%	4.8%	5.0%	5.5%	6.5%	7.5%	7.5%	7.5%
Lower 10%	3.5%	3.8%	4.3%	5.0%	5.3%	5.5%	5.5%
Median	4.2%	4.5%	5.0%	6.0%	6.3%	6.5%	6.5%
<b>Panelist 3</b>							
Upper 10%	5.0%	5.7%	6.5%	7.2%	8.0%	8.5%	9.0%
Lower 10%	3.4%	3.6%	3.5%	3.4%	3.3%	3.5%	3.3%
Median	4.2%	4.5%	5.0%	5.0%	5.0%	5.5%	5.5%
<b>Panelist 4</b>							
Upper 10%	4.5%	5.0%	6.0%	6.9%	7.5%	8.0%	8.0%
Lower 10%	3.5%	3.7%	4.0%	4.5%	5.0%	5.5%	5.5%
Median	4.0%	4.2%	4.8%	5.8%	6.5%	6.5%	6.5%
<b>Panelist 5</b>							
Upper 10%	4.6%	5.1%	6.0%	6.8%	7.3%	7.9%	7.9%
Lower 10%	3.8%	4.3%	4.6%	5.4%	5.9%	5.5%	5.5%
Median	4.2%	4.7%	5.3%	6.1%	6.6%	6.7%	6.7%
<b>Panelist 6</b>							
Upper 10%	4.6%	5.2%	6.0%	6.5%	7.0%	7.0%	7.0%
Lower 10%	3.9%	3.8%	4.0%	4.0%	4.5%	4.2%	4.2%
Median	4.3%	4.7%	5.1%	5.8%	6.0%	6.0%	6.0%
<b>Panelist 7</b>							
Upper 10%	5.5%	5.2%	4.2%	4.8%	5.7%	6.4%	6.9%
Lower 10%	3.9%	3.6%	2.6%	3.2%	4.1%	4.8%	5.3%
Median	4.7%	4.4%	3.4%	4.0%	4.9%	5.6%	6.1%
<b>Panelist 8</b>							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	Not Provided						
<b>Panelist 9</b>							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	4.5%	5.0%	5.5%	6.0%	6.0%	6.0%	6.0%
<b>Panelist 10</b>							
Upper 10%	5.0%	5.4%	6.1%	6.4%	6.5%	6.8%	7.3%
Lower 10%	4.4%	4.7%	5.2%	5.3%	5.4%	5.2%	4.9%
Median	4.8%	5.1%	5.8%	6.1%	6.1%	6.4%	6.4%
<b>Panelist 11</b>							
Upper 10%	4.6%	5.1%	6.0%	6.8%	7.3%	7.9%	7.9%
Lower 10%	3.8%	4.3%	4.6%	5.4%	5.9%	5.5%	5.5%
Median	4.2%	4.7%	5.3%	6.1%	6.6%	6.7%	6.7%
<b>Panelist 12</b>							
Upper 10%	5.5%	5.5%	6.0%	6.0%	7.0%	7.5%	7.5%
Lower 10%	4.0%	4.0%	4.0%	5.0%	5.0%	5.0%	5.0%
Median	4.5%	5.0%	5.0%	5.5%	6.0%	6.5%	7.0%
<b>Panelist 13</b>							
Upper 10%	4.5%	5.5%	6.0%	7.0%	8.0%	9.0%	9.0%
Lower 10%	3.2%	3.2%	4.6%	5.0%	5.0%	5.0%	5.0%
Median	3.8%	4.5%	5.2%	6.0%	6.0%	6.0%	6.0%
<b>Panelist 14</b>							
Upper 10%	4.5%	5.5%	6.0%	7.0%	8.0%	8.0%	8.0%
Lower 10%	3.2%	3.5%	3.7%	4.2%	5.0%	5.5%	6.0%
Median	3.5%	3.8%	4.2%	4.8%	6.0%	7.0%	7.0%

All data in the above table are in nominal rates.

### Phoenix CPI Growth

	2013	2014	2015	2016	2017	2021	2026
<b>Panelist 1</b>							
Upper 10%	2.6%	2.9%	3.4%	3.9%	3.9%	4.4%	4.4%
Lower 10%	1.0%	1.5%	1.8%	2.1%	1.9%	0.6%	0.6%
Median	1.8%	2.2%	2.6%	3.0%	2.9%	2.5%	2.5%
<b>Panelist 2</b>							
Upper 10%	2.5%	3.2%	3.5%	3.5%	3.5%	3.5%	3.5%
Lower 10%	1.5%	1.5%	1.5%	1.5%	1.2%	1.0%	1.0%
Median	2.0%	2.2%	2.5%	2.5%	2.2%	2.2%	2.2%
<b>Panelist 3</b>							
Upper 10%	2.1%	2.6%	2.7%	3.3%	3.9%	4.2%	6.0%
Lower 10%	0.9%	1.0%	0.8%	0.7%	0.6%	0.2%	-0.3%
Median	1.5%	1.7%	1.7%	1.7%	1.7%	1.5%	1.5%
<b>Panelist 4</b>							
Upper 10%	2.0%	2.8%	3.0%	3.0%	3.2%	3.5%	4.5%
Lower 10%	0.4%	0.8%	1.0%	1.0%	1.0%	0.8%	0.8%
Median	1.2%	1.8%	2.0%	2.0%	2.2%	2.4%	2.4%
<b>Panelist 5</b>							
Upper 10%	2.5%	3.5%	4.5%	4.5%	4.5%	4.5%	4.5%
Lower 10%	1.0%	1.0%	1.0%	1.0%	1.0%	0.5%	0.5%
Median	1.6%	2.2%	2.2%	2.1%	1.8%	2.2%	2.3%
<b>Panelist 6</b>							
Upper 10%	2.5%	3.0%	3.5%	4.0%	4.3%	4.5%	4.5%
Lower 10%	0.8%	1.6%	1.6%	1.5%	1.0%	0.8%	0.8%
Median	1.7%	2.3%	2.4%	2.4%	2.3%	2.2%	2.2%
<b>Panelist 7</b>							
Upper 10%	5.1%	5.4%	4.7%	4.7%	5.2%	5.4%	6.2%
Lower 10%	1.7%	2.0%	1.3%	1.3%	1.8%	2.0%	2.8%
Median	3.4%	3.7%	3.0%	3.0%	3.5%	3.7%	4.5%
<b>Panelist 8</b>							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	Not Provided						
<b>Panelist 9</b>							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	2.0%	2.5%	3.0%	3.0%	3.0%	2.5%	2.0%
<b>Panelist 10</b>							
Upper 10%	2.9%	3.2%	4.4%	4.7%	5.2%	5.5%	6.4%
Lower 10%	0.4%	0.9%	0.8%	1.1%	1.2%	1.1%	1.0%
Median	1.8%	1.9%	2.0%	1.9%	2.1%	2.3%	2.4%
<b>Panelist 11</b>							
Upper 10%	3.0%	3.0%	3.5%	3.5%	3.5%	3.5%	3.5%
Lower 10%	0.9%	1.5%	1.5%	1.4%	1.1%	0.5%	0.6%
Median	1.6%	2.2%	2.2%	2.1%	1.8%	2.2%	2.3%
<b>Panelist 12</b>							
Upper 10%	2.5%	3.0%	3.5%	3.0%	3.0%	3.0%	3.0%
Lower 10%	1.0%	2.0%	2.0%	2.0%	1.0%	1.0%	1.0%
Median	2.0%	2.5%	3.0%	2.5%	2.0%	2.0%	2.0%
<b>Panelist 13</b>							
Upper 10%	2.2%	2.9%	3.5%	4.0%	4.5%	5.0%	6.0%
Lower 10%	0.9%	1.5%	1.5%	1.4%	1.1%	0.5%	0.6%
Median	1.6%	2.2%	2.2%	2.1%	1.8%	2.2%	2.3%
<b>Panelist 14</b>							
Upper 10%	3.0%	3.1%	3.2%	3.4%	3.4%	4.0%	4.0%
Lower 10%	1.5%	1.6%	1.7%	1.8%	1.6%	1.5%	1.6%
Median	2.2%	2.3%	2.4%	2.5%	2.3%	2.2%	2.3%

All data in the above table are in percentage growth rates.

### Sky Harbour Passenger Traffic Growth

	2013	2014	2015	2016	2017	2021	2026
<b>Panelist 1</b>							
Upper 10%	4.4%	5.4%	5.3%	5.5%	5.7%	7.5%	7.5%
Lower 10%	1.6%	1.6%	0.7%	0.5%	0.3%	-1.5%	-1.5%
Median	3.0%	3.5%	3.0%	3.0%	3.0%	3.0%	3.0%
<b>Panelist 2</b>							
Upper 10%	4.0%	3.8%	4.0%	4.0%	3.5%	4.0%	4.5%
Lower 10%	2.0%	2.0%	1.5%	1.0%	0.5%	-1.0%	-1.0%
Median	3.0%	2.5%	2.5%	2.0%	2.0%	1.8%	1.8%
<b>Panelist 3</b>							
Upper 10%	4.0%	4.2%	4.4%	4.5%	4.2%	5.0%	5.4%
Lower 10%	0.6%	0.5%	-0.2%	-0.4%	-0.8%	-1.5%	-2.0%
Median	2.5%	2.5%	2.0%	2.0%	2.0%	1.5%	1.5%
<b>Panelist 4</b>							
Upper 10%	4.2%	4.0%	3.8%	3.8%	3.6%	5.0%	5.0%
Lower 10%	1.4%	1.0%	0.6%	0.6%	0.0%	-1.0%	-1.0%
Median	2.8%	2.5%	2.0%	2.0%	1.8%	1.8%	1.8%
<b>Panelist 5</b>							
Upper 10%	4.2%	3.9%	4.0%	3.8%	3.6%	4.9%	4.9%
Lower 10%	1.4%	1.1%	0.6%	0.4%	0.2%	-1.0%	-1.0%
Median	2.8%	2.5%	2.3%	2.1%	1.9%	1.9%	2.0%
<b>Panelist 6</b>							
Upper 10%	3.5%	3.5%	4.0%	4.0%	3.5%	3.5%	3.5%
Lower 10%	1.5%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Median	2.8%	2.5%	2.3%	2.2%	2.2%	2.0%	2.0%
<b>Panelist 7</b>							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	Not Provided						
<b>Panelist 8</b>							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	Not Provided						
<b>Panelist 9</b>							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	3.0%	3.0%	3.0%	3.0%	2.0%	2.0%	2.0%
<b>Panelist 10</b>							
Upper 10%	3.2%	3.4%	3.7%	4.2%	5.5%	6.4%	5.8%
Lower 10%	-2.5%	-1.4%	-0.1%	0.8%	0.9%	1.2%	1.4%
Median	1.5%	1.8%	2.0%	2.4%	2.6%	2.8%	3.0%
<b>Panelist 11</b>							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	Not Provided						
<b>Panelist 12</b>							
Upper 10%	4.0%	4.5%	4.5%	4.0%	4.0%	4.0%	4.0%
Lower 10%	2.0%	3.0%	2.5%	2.0%	2.0%	2.0%	2.0%
Median	3.0%	4.0%	3.5%	3.0%	3.0%	3.0%	3.0%
<b>Panelist 13</b>							
Upper 10%	4.2%	3.9%	4.0%	4.0%	4.0%	4.0%	4.0%
Lower 10%	1.4%	1.1%	-0.5%	-1.0%	-1.0%	-1.0%	-1.0%
Median	2.8%	2.5%	2.5%	2.3%	2.0%	2.0%	2.0%
<b>Panelist 14</b>							
Upper 10%	7.0%	7.3%	8.0%	7.1%	7.0%	6.0%	6.0%
Lower 10%	3.0%	3.1%	3.2%	2.4%	2.0%	1.0%	0.0%
Median	5.0%	5.2%	5.5%	5.0%	4.5%	3.0%	2.0%

All data in the above table are in percentage growth rates.

### Maricopa County Total Non-Farm Employment Growth

	2013	2014	2015	2016	2017	2021	2026
<b>Panelist 1</b>							
Upper 10%	3.5%	3.8%	4.6%	5.3%	5.2%	7.4%	7.1%
Lower 10%	1.1%	1.6%	1.8%	2.1%	2.0%	-1.4%	-1.5%
Median	2.3%	2.7%	3.2%	3.7%	3.6%	3.0%	2.8%
<b>Panelist 2</b>							
Upper 10%	3.5%	4.0%	4.5%	5.0%	5.0%	5.0%	5.0%
Lower 10%	1.5%	2.0%	2.0%	2.0%	1.5%	-1.0%	-1.5%
Median	2.5%	3.0%	3.0%	3.5%	3.5%	2.5%	2.5%
<b>Panelist 3</b>							
Upper 10%	3.2%	3.7%	4.5%	4.6%	4.6%	4.9%	5.5%
Lower 10%	1.0%	1.5%	1.6%	1.5%	1.3%	0.7%	-0.5%
Median	2.2%	2.4%	3.0%	3.2%	3.3%	3.1%	3.1%
<b>Panelist 4</b>							
Upper 10%	4.0%	4.0%	5.0%	5.0%	5.0%	8.0%	8.0%
Lower 10%	1.2%	1.8%	2.0%	2.0%	1.8%	-2.0%	-2.0%
Median	2.4%	3.0%	3.5%	3.5%	3.4%	2.8%	2.7%
<b>Panelist 5</b>							
Upper 10%	2.8%	3.5%	4.5%	4.5%	4.5%	4.0%	3.5%
Lower 10%	0.7%	0.9%	1.5%	1.5%	1.5%	1.0%	0.5%
Median	2.2%	2.4%	3.0%	3.0%	3.0%	2.5%	2.0%
<b>Panelist 6</b>							
Upper 10%	3.1%	3.5%	3.8%	4.4%	4.4%	4.2%	3.2%
Lower 10%	1.8%	1.3%	0.8%	0.5%	0.3%	0.0%	-0.5%
Median	2.7%	3.2%	3.2%	3.4%	3.6%	2.2%	1.8%
<b>Panelist 7</b>							
Upper 10%	5.4%	4.4%	4.7%	4.7%	4.5%	4.5%	4.3%
Lower 10%	1.0%	0.0%	-0.7%	-0.7%	-0.9%	-0.9%	-1.1%
Median	4.2%	3.2%	2.5%	2.5%	2.3%	2.3%	2.1%
<b>Panelist 8</b>							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	Not Provided						
<b>Panelist 9</b>							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	2.5%	3.5%	4.0%	3.5%	3.0%	2.0%	2.0%
<b>Panelist 10</b>							
Upper 10%	2.5%	3.2%	3.5%	4.1%	4.5%	6.8%	6.6%
Lower 10%	0.9%	1.2%	1.5%	1.7%	1.8%	1.0%	-0.7%
Median	1.8%	2.6%	2.9%	3.4%	3.8%	4.1%	4.7%
<b>Panelist 11</b>							
Upper 10%	3.5%	4.0%	4.0%	4.2%	4.0%	3.5%	3.5%
Lower 10%	1.5%	1.8%	2.2%	2.5%	2.0%	1.8%	1.8%
Median	2.6%	3.2%	3.5%	3.6%	3.4%	3.0%	2.7%
<b>Panelist 12</b>							
Upper 10%	3.5%	3.5%	4.0%	3.5%	3.5%	3.5%	3.5%
Lower 10%	2.0%	N/P	N/P	3.0%	2.0%	2.0%	1.0%
Median	2.5%	3.0%	3.5%	3.5%	3.4%	3.0%	2.5%
<b>Panelist 13</b>							
Upper 10%	3.6%	4.2%	5.0%	5.0%	4.9%	5.8%	6.1%
Lower 10%	1.2%	1.8%	0.7%	-1.0%	-1.0%	-1.3%	-1.4%
Median	2.8%	3.0%	3.2%	3.3%	3.3%	2.6%	2.3%
<b>Panelist 14</b>							
Upper 10%	4.0%	4.2%	5.0%	5.2%	5.4%	6.0%	6.0%
Lower 10%	1.1%	1.3%	1.5%	2.0%	2.1%	1.5%	1.0%
Median	2.2%	2.4%	2.8%	3.2%	3.5%	2.8%	2.4%

All data in the above table are in percentage growth rates.

N/P: Not Provided

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

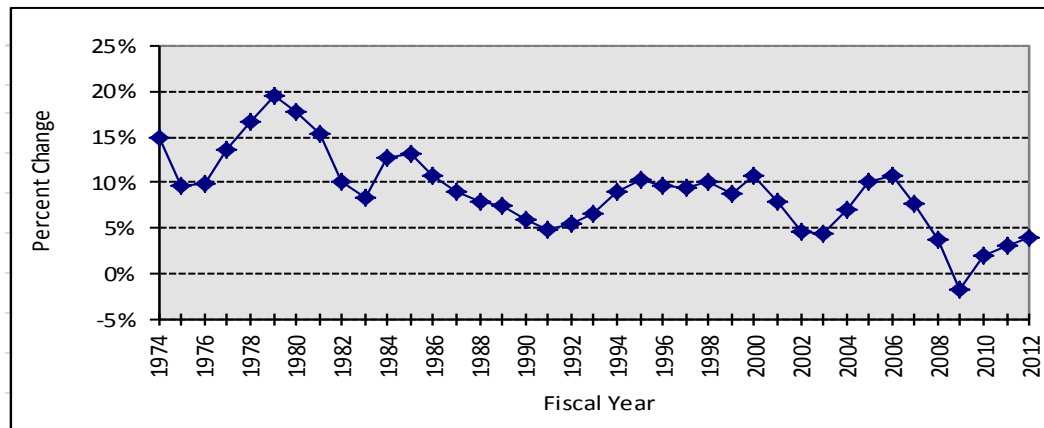
**HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)**

1971		1981	15.3%	1991	4.8%	2001	8.0%	2011	3.0%
1972		1982	10.1%	1992	5.6%	2002	4.5%	2012*	4.0%
1973		1983	8.4%	1993	6.7%	2003	4.4%	2013	
1974	14.9%	1984	12.8%	1994	9.1%	2004	7.1%	2014	
1975	9.7%	1985	13.1%	1995	10.4%	2005	10.0%	2015	
1976	9.8%	1986	10.7%	1996	9.7%	2006	10.7%	2016	
1977	13.5%	1987	9.0%	1997	9.5%	2007	7.7%	2017	
1978	16.7%	1988	8.0%	1998	10.1%	2008	3.8%	2018	
1979	19.5%	1989	7.4%	1999	8.8%	2009	-1.7%	2019	
1980	17.7%	1990	5.9%	2000	10.8%	2010	2.0%	2020	

FY 1973-2010 data from BEA; FY 2011-2013 data from Phoenix Blue Chip. FY 2014-2026, ADOT staff estimates.

Data include inflation rate.

**HISTORICAL DATA - GRAPHED**



**HISTORICAL DATA - ANALYSIS**

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	-1.7%	4.0%	2.2%	2.3%	-0.2%	3.9%
10 Years	-1.7%	10.7%	5.1%	3.8%	1.6%	10.1%
Full Period	-1.7%	19.5%	9.0%	4.4%	3.9%	15.0%

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

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

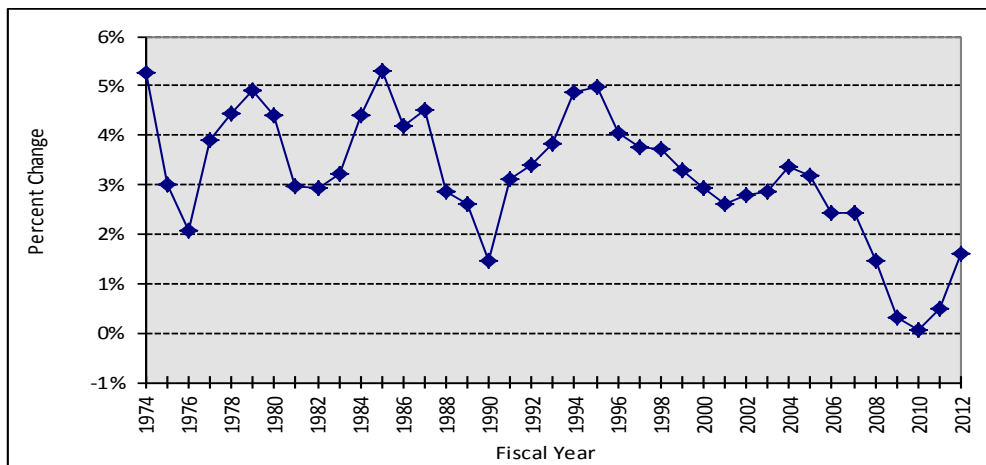
1971		1981	3.0%	1991	3.1%	2001	2.6%	2011	0.5%
1972		1982	2.9%	1992	3.4%	2002	2.8%	2012*	1.6%
1973		1983	3.2%	1993	3.8%	2003	2.8%	2013	
1974	5.2%	1984	4.4%	1994	4.9%	2004	3.4%	2014	
1975	3.0%	1985	5.3%	1995	5.0%	2005	3.2%	2015	
1976	2.1%	1986	4.2%	1996	4.0%	2006	2.4%	2016	
1977	3.9%	1987	4.5%	1997	3.8%	2007	2.4%	2017	
1978	4.4%	1988	2.9%	1998	3.7%	2008	1.5%	2018	
1979	4.9%	1989	2.6%	1999	3.3%	2009	0.3%	2019	
1980	4.4%	1990	1.4%	2000	2.9%	2010	0.1%	2020	

FY 1974-1999 from U. S. Census Bureau. FY 2000-2011 from ADOA Office of Employment and Population Statistics.

FY 2012\*-2013 based on Phoenix Blue Chip 2nd quarter 2012 growth rate estimates. FY 2014-2015 from ADOT staff.

FY 2016-2026 based on DES/ADOC, Arizona Population Projections FY 2006-2055 growth rates dated March 31, 2006.

**HISTORICAL DATA - GRAPHED**



**HISTORICAL DATA - ANALYSIS**

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	0.1%	1.6%	0.8%	0.7%	0.2%	1.6%
10 Years	0.1%	3.4%	1.8%	1.2%	0.3%	3.2%
Full Period	0.1%	5.3%	3.2%	1.3%	1.5%	4.9%

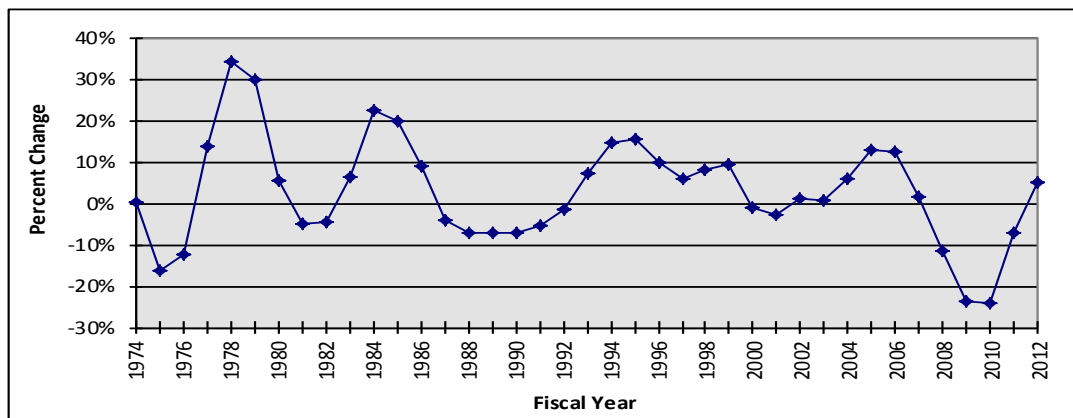
**HISTORICAL DATA  
MARICOPA COUNTY CONSTRUCTION EMPLOYMENT GROWTH  
(Annual Percent Change)**

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

1971		1981	-4.9%	1991	-5.6%	2001	-2.8%	2011	-7.3%
1972		1982	-4.5%	1992	-1.4%	2002	1.2%	2012*	4.8%
1973		1983	6.1%	1993	7.0%	2003	0.5%	2013	
1974	0.2%	1984	22.3%	1994	14.5%	2004	6.1%	2014	
1975	-16.4%	1985	20.0%	1995	15.4%	2005	12.8%	2015	
1976	-12.4%	1986	8.8%	1996	9.6%	2006	12.6%	2016	
1977	13.7%	1987	-4.0%	1997	6.0%	2007	1.6%	2017	
1978	34.0%	1988	-7.3%	1998	8.1%	2008	-11.6%	2018	
1979	29.7%	1989	-7.0%	1999	9.3%	2009	-23.8%	2019	
1980	5.5%	1990	-7.1%	2000	-1.0%	2010	-24.2%	2020	

FY 2011 and prior from BEA. FY 2012 and after based on ADOT staff estimates.

**HISTORICAL DATA - GRAPHED**



**HISTORICAL DATA - ANALYSIS**

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	-24.2%	4.8%	-12.4%	12.2%	-24.0%	-0.1%
10 Years	-24.2%	12.8%	-2.9%	13.5%	-23.8%	12.6%
Full Period	-24.2%	34.0%	2.8%	12.7%	-11.8%	16.4%

**HISTORICAL DATA  
30 YEAR MORTGAGE RATE**

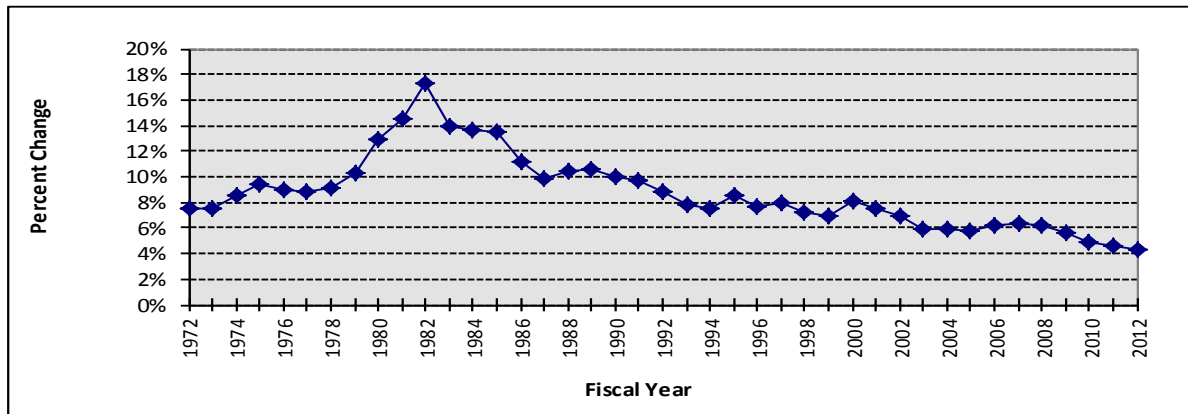
**HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)**

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*	4.3%
1973	7.5%	1983	14.0%	1993	7.9%	2003	5.9%	2013	
1974	8.6%	1984	13.6%	1994	7.5%	2004	5.9%	2014	
1975	9.4%	1985	13.5%	1995	8.6%	2005	5.8%	2015	
1976	8.9%	1986	11.2%	1996	7.6%	2006	6.2%	2016	
1977	8.8%	1987	9.8%	1997	7.9%	2007	6.3%	2017	
1978	9.1%	1988	10.5%	1998	7.2%	2008	6.2%	2018	
1979	10.3%	1989	10.6%	1999	6.9%	2009	5.6%	2019	
1980	12.9%	1990	10.1%	2000	8.1%	2010	4.9%	2020	

FY 1973-2011 data from Federal Reserve. FY 2012\*-2026 based on Global Insight, 2nd Quarter 2012, Trend Forecast.

\* Estimate

**HISTORICAL DATA - GRAPHED**



**HISTORICAL DATA - ANALYSIS**

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	4.3%	6.2%	5.1%	0.8%	4.4%	5.9%
10 Years	4.3%	6.3%	5.6%	0.7%	4.6%	6.2%
Full Period	4.3%	17.3%	8.7%	2.9%	5.8%	13.5%



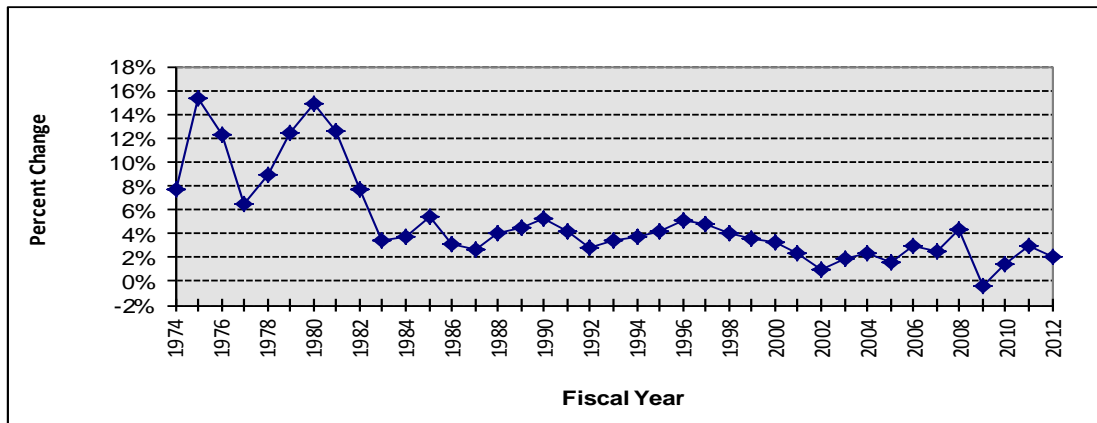
**HISTORICAL DATA  
PHOENIX CPI GROWTH RATE  
(Annual Percent Change)**

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

1971		1981	12.5%	1991	4.1%	2001	2.4%	2011	2.9%
1972		1982	7.7%	1992	2.7%	2002	1.0%	2012*	2.0%
1973		1983	3.4%	1993	3.4%	2003	1.9%	2013	
1974	7.6%	1984	3.7%	1994	3.7%	2004	2.3%	2014	
1975	15.3%	1985	5.4%	1995	4.2%	2005	1.6%	2015	
1976	12.2%	1986	3.1%	1996	5.1%	2006	2.9%	2016	
1977	6.5%	1987	2.7%	1997	4.8%	2007	2.5%	2017	
1978	8.9%	1988	4.1%	1998	4.0%	2008	4.3%	2018	
1979	12.4%	1989	4.5%	1999	3.6%	2009	-0.3%	2019	
1980	14.9%	1990	5.2%	2000	3.2%	2010	1.5%	2020	

FY 1974-1999 Phoenix CPI data from ASU. FY 2000-2001 regressed from U.S. CPI and FY 2002-2011 data derived from Phoenix Mesa CPI (BLS). FY 2012\* -2026 estimates regressed from U.S. CPI based on Global Insight, 2nd Quarter 2012, Trend Forecast.

**HISTORICAL DATA - GRAPHED**



**HISTORICAL DATA - ANALYSIS**

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	-0.3%	4.3%	2.1%	1.7%	0.4%	3.7%
10 Years	-0.3%	4.3%	2.2%	1.2%	1.3%	3.1%
Full Period	-0.3%	15.3%	5.0%	3.8%	1.8%	12.2%

**HISTORICAL DATA  
SKY HARBOR PASSENGER TRAFFIC GROWTH  
(Annual Percent Change)**

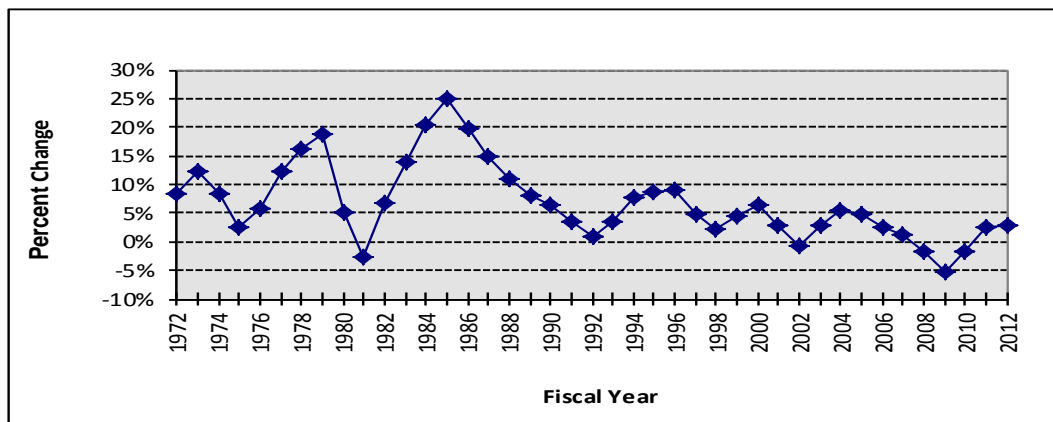
**HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)**

1971		1981	-2.8%	1991	3.4%	2001	2.7%	2011	2.4%
1972	8.4%	1982	6.8%	1992	0.9%	2002	-0.7%	2012*	3.0%
1973	12.2%	1983	13.9%	1993	3.3%	2003	2.8%	2013	
1974	8.4%	1984	20.6%	1994	7.7%	2004	5.4%	2014	
1975	2.4%	1985	24.8%	1995	8.6%	2005	4.9%	2015	
1976	5.7%	1986	19.6%	1996	8.9%	2006	2.4%	2016	
1977	12.2%	1987	14.8%	1997	4.8%	2007	1.2%	2017	
1978	16.1%	1988	10.9%	1998	2.2%	2008	-1.8%	2018	
1979	18.7%	1989	8.1%	1999	4.6%	2009	-5.3%	2019	
1980	5.0%	1990	6.4%	2000	6.5%	2010	-1.7%	2020	

FY 1972-2011 data obtained from Phoenix Sky Harbor International Airport.

FY 2012\*-2026 estimates are from Phoenix Sky Harbor International Airport staff.

**HISTORICAL DATA - GRAPHED**



**HISTORICAL DATA - ANALYSIS**

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	-5.3%	3.0%	-0.7%	3.4%	-3.9%	2.7%
10 Years	-5.3%	5.4%	1.3%	3.3%	-2.2%	5.0%
Full Period	-5.3%	24.8%	6.8%	6.7%	-0.7%	16.1%

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

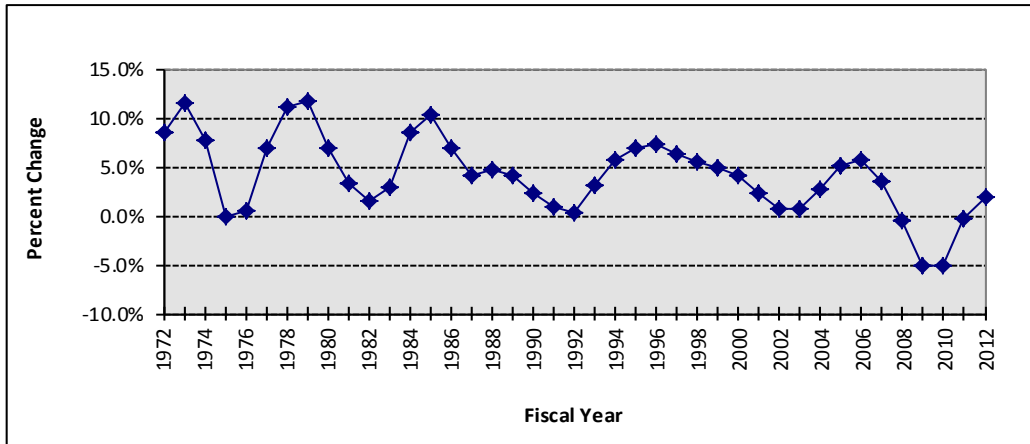
**HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)**

1971		1981	3.4%	1991	0.9%	2001	2.4%	2011	-0.3%
1972	8.5%	1982	1.5%	1992	0.4%	2002	0.6%	2012*	1.9%
1973	11.6%	1983	2.9%	1993	3.0%	2003	0.7%	2013	
1974	7.6%	1984	8.6%	1994	5.8%	2004	2.7%	2014	
1975	0.0%	1985	10.2%	1995	6.9%	2005	5.1%	2015	
1976	0.5%	1986	6.9%	1996	7.2%	2006	5.8%	2016	
1977	6.9%	1987	4.1%	1997	6.3%	2007	3.5%	2017	
1978	11.1%	1988	4.7%	1998	5.4%	2008	-0.4%	2018	
1979	11.8%	1989	4.1%	1999	5.0%	2009	-5.2%	2019	
1980	6.9%	1990	2.3%	2000	4.0%	2010	-5.1%	2020	

FY 1972-2011 data from Bureau of Labor Statistics. ADOA, Arizona's Workforce Report, May 4, 2012 for FY 2012\* and 2013.

FY 2014-2026 ADOT staff estimates.

**HISTORICAL DATA - GRAPHED**



**HISTORICAL DATA - ANALYSIS**

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	-5.2%	1.9%	-1.8%	3.2%	-5.1%	1.0%
10 Years	-5.2%	5.8%	0.9%	3.8%	-5.1%	5.2%
Full Period	-5.2%	11.8%	4.2%	3.9%	0.0%	8.6%