

Arizona Department of Transportation

**MARICOPA COUNTY TRANSPORTATION EXCISE TAX
Forecasting Process & Results
FY 2012-2026**



**Financial Management Services
October 2011**

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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 2012–2026 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 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 modal 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. In the 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. At the request of the last year's panel, the Maricopa County real per capita personal income variable was replaced by Maricopa County nominal personal income variable.

The independent variables contained in the updated model are:

- Maricopa County nominal personal income growth
- Maricopa County population growth
- Maricopa County construction employment growth
- Phoenix consumer price index (CPI)
- Sky Harbor passenger traffic growth
- Maricopa County total non-farm employment growth
- 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 September 2011, a panel of fifteen 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. Based on the panelists' input, the model produced a series of forecasts with associated probabilities of occurrence.

Model Results

This year's panel inputs produced a mean forecast of \$7,260.8 million for the period FY 2012-2026 with a compound growth rate (CGR) of 5.4 percent. The FY 2012-2026 Official Forecast totals \$6,815.8 million with a compound growth rate of 5.0 percent. Compared to last year's official forecast, the estimated revenues for FY 2012-2016 decreased by \$221.0 million.

The Official Forecast result incorporates the 50 percent confidence interval for each year of the forecast except for FY 2012. The FY 2012 forecast of \$321.6 million was developed by ADOT staff independently of the econometric model using time series techniques, and historical and projected growth rates from the model.

Summary

The Department's Official Forecast for FY 2012-2026 totals \$6,815.8 million, a decrease of \$221.0 million from the October 2010 Official Forecast. The panel members were more pessimistic in their estimates for both the short and long term trends for Maricopa County compared to last year's panel. Except for Sky Harbor passenger traffic variable, the panel members predicted lower growth rates for all the independent variables for FY 2012-2026. They continue to be concerned with the depressed real estate market, slower population and job growth and the uncertainty in the global economy.

Supplementary Information

The remainder of this report presents supplementary information on the detail results of the RAP model and Risk Analysis Process. While the Official Forecast period is FY 2012-2026, panel inputs were requested for FY 2012-2016, 2021 and 2026. Data displayed for other than the requested years were extrapolated.

FY 2012 Official Forecast Results
(Dollars in Millions)

<u>Fiscal Year</u>	<u>Mean Forecast</u>	<u>Official Forecast</u>	<u>Confidence Level</u>
2012	\$329.6	\$321.6	N/A
2013	354.2	344.2	50%
2014	379.7	364.8	50%
2015	404.5	385.4	50%
2016	428.8	405.9	50%
2017	452.8	426.5	50%
2018	477.3	447.2	50%
2019	501.5	470.2	50%
2020	525.6	489.9	50%
2021	549.4	511.6	50%
2022	574.4	534.6	50%
2023	600.3	557.0	50%
2024	627.5	580.0	50%
2025	655.7	607.1	50%
2026/1	<u>399.5</u>	<u>369.8</u>	50%
Total	\$7,260.8	\$6,815.8	
Average CGR	5.4%	5.0%	

Note: Amount in current dollars

Totals may not add due to individual rounding

/1. Reflects the end of the 1/2 cent transportation excise tax extension on December 31, 2025

For comparison purposes, the October 2010 and October 2011 Official Forecasts are shown below:

FY 2012			
Comparative Forecast			
(Dollars in Millions)			
Fiscal <u>Year</u>	Oct. 10 Official <u>Forecast</u>	Oct. 11 Official <u>Forecast</u>	<u>Difference</u>
2012	\$310.4	\$321.6	\$11.2
2013	327.3	344.2	16.9
2014	349.2	364.8	15.6
2015	374.2	385.4	11.2
2016	401.1	405.9	4.8
2017	427.5	426.5	(1.0)
2018	451.6	447.2	(4.4)
2019	479.4	470.2	(9.2)
2020	508.8	489.9	(18.9)
2021	535.5	511.6	(23.9)
2022	565.4	534.6	(30.8)
2023	598.0	557.0	(41.0)
2024	630.9	580.0	(50.9)
2025	666.0	607.1	(58.9)
2026/1	<u>411.5</u>	<u>369.8</u>	<u>(41.7)</u>
Total	\$7,036.8	\$6,815.8	(\$221.0)
Average CGR	6.0%	5.0%	

Note: Amount in current dollars.

Totals may not add due to individual rounding.

/1 Reflects the end of the 1/2 cent transportation excise tax extension on December 31, 2025

RARF Official Revenue Forecast
With Category Detail by Fiscal Year
(Dollars in Millions)

Fiscal Year	Retail	Contracting	Utilities	Restaurant/ Bar	Rental Real Property	Rental Personal Property	Other	Total
2012	\$159.6	\$30.5	\$29.8	\$32.8	\$36.1	\$11.7	\$21.1	\$321.6
2013	174.0	32.0	30.4	34.6	38.4	12.8	22.0	344.2
2014	185.9	34.0	31.1	36.5	40.5	13.8	23.0	364.8
2015	196.5	36.9	32.1	38.6	42.5	14.5	24.3	385.4
2016	206.9	39.9	33.0	40.7	44.3	15.3	25.8	405.9
2017	217.2	43.1	34.0	42.8	46.4	16.1	26.9	426.5
2018	226.3	47.0	35.1	45.1	48.4	16.9	28.4	447.2
2019	238.7	50.3	36.1	47.3	50.4	17.7	29.7	470.2
2020	247.6	53.7	37.2	49.3	52.4	18.5	31.2	489.9
2021	257.7	57.0	38.4	51.6	54.6	19.3	33.0	511.6
2022	268.2	61.3	39.5	53.9	56.7	20.3	34.7	534.6
2023	278.6	64.8	40.6	56.3	59.2	21.2	36.3	557.0
2024	290.1	68.2	41.8	58.8	61.3	21.8	38.0	580.0
2025	303.1	72.0	43.0	61.5	64.1	22.9	40.5	607.1
2026/1	184.5	44.8	25.8	37.6	38.6	13.9	24.6	369.8
Total: 12-26	\$3,434.9	\$735.5	\$527.9	\$687.4	\$733.9	\$256.7	\$439.5	\$6,815.8

Note: Amount in current dollars.

Totals may not add due to individual rounding.

/1 Reflects the end of the 1/2 cent 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%
2012	\$329.6	\$375.7	\$355.9	\$343.5	\$333.8	\$325.1	\$317.4	\$309.9	\$300.8	\$290.0
2013	354.2	436.2	399.8	376.8	359.3	344.2	330.9	317.2	303.0	284.9
2014	379.7	492.2	441.4	408.7	384.8	364.8	346.1	328.1	309.5	285.3
2015	404.5	546.0	478.8	439.6	409.1	385.4	363.1	342.0	317.8	288.7
2016	428.8	590.1	513.9	468.4	432.9	405.9	381.6	355.5	329.1	296.7
2017	452.8	630.9	546.5	497.5	457.4	426.5	400.5	370.7	341.5	305.8
2018	477.3	671.2	581.2	525.0	482.4	447.2	420.4	386.3	354.3	317.2
2019	501.5	710.0	614.2	551.1	505.8	470.2	438.1	403.6	368.8	329.2
2020	525.6	749.5	646.9	579.4	530.2	489.9	457.0	421.2	383.4	342.3
2021	549.4	786.7	677.7	605.2	553.7	511.6	476.1	437.5	399.0	355.2
2022	574.4	826.8	711.5	636.3	579.2	534.6	495.1	455.2	413.9	367.7
2023	600.3	868.4	746.9	668.7	604.6	557.0	514.5	475.6	429.9	383.7
2024	627.5	911.5	780.7	698.4	632.8	580.0	535.8	493.6	446.5	396.7
2025	655.7	960.0	817.2	728.4	659.4	607.1	557.8	516.7	464.7	411.5
2026/1	684.9	1,004.2	852.7	759.3	689.0	634.0	582.8	538.1	484.9	425.8

/1 Totals reflect the fiscal year ending June 30, 2026, but the transportation excise tax expires December 31, 2025.

RARF Official Revenue Forecast

Revenue 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 %)		
2012	\$180.7	\$33.8	\$107.1	\$321.6
2013	193.4	36.2	114.6	344.2
2014	205.0	38.3	121.5	364.8
2015	216.6	40.5	128.3	385.4
2016	228.1	42.6	135.2	405.9
2017	239.7	44.8	142.0	426.5
2018	251.3	47.0	148.9	447.2
2019	264.2	49.4	156.6	470.2
2020	275.3	51.5	163.1	489.9
2021	287.6	53.7	170.3	511.6
2022	300.4	56.1	178.1	534.6
2023	313.0	58.5	185.5	557.0
2024	326.0	60.9	193.1	580.0
2025	341.2	63.7	202.2	607.1
2026 /2	207.9	38.8	123.1	369.8
TOTALS	\$3,830.5	\$715.7	\$2,269.6	\$6,815.8

Note: 1/ The Regional Public Transportation Authority received a portion of the excise tax funds for transit cost 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/ Reflects the end of the 1/2 cent transportation excise tax extension on December 31, 2025.

Totals may not add due to rounding.

Distribution

Per Laws 2004, Chapter 2 (HB 2456), the sales tax extension will be distributed as follows:

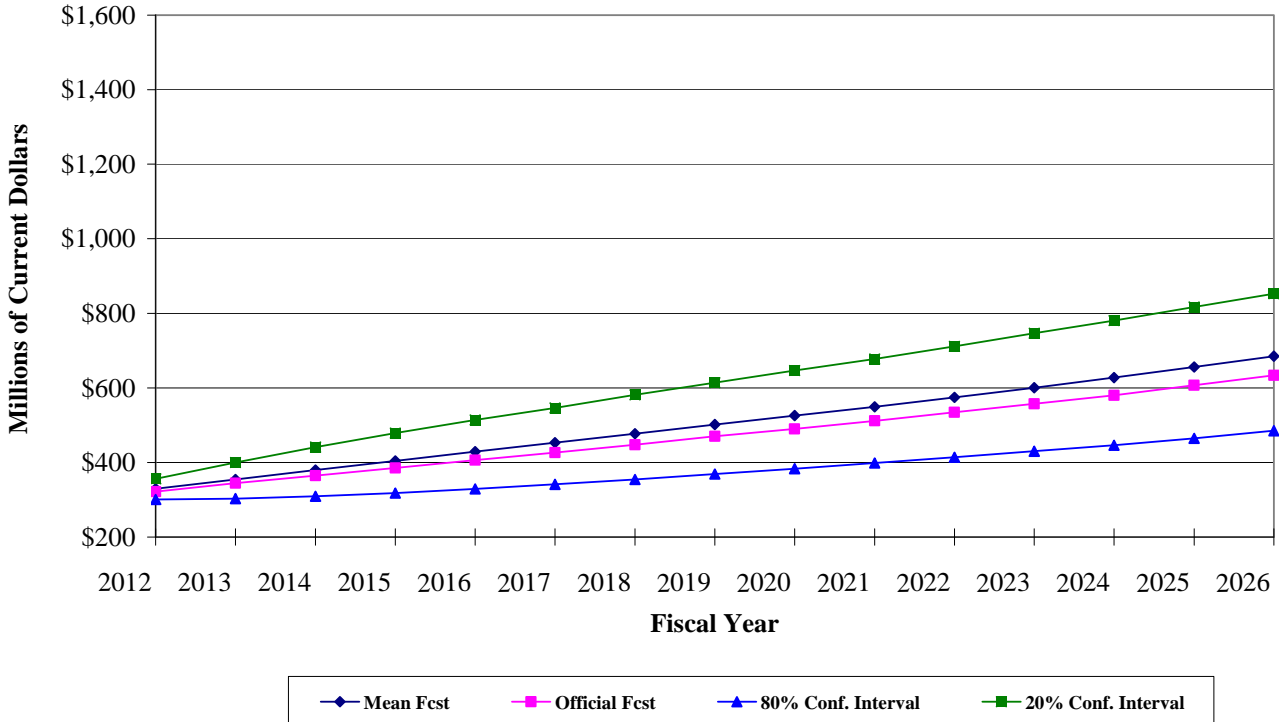
1. 56.2 percent to the Regional Area Road (RARF) fund for freeways and other routes in the state highway systems, including capital expense and maintenance.
2. 10.5 percent to the RARF fund for major arterial streets and intersection improvements, including capital expenses and implementation studies.
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.

Official Forecast Results
(Current Dollars in Millions)

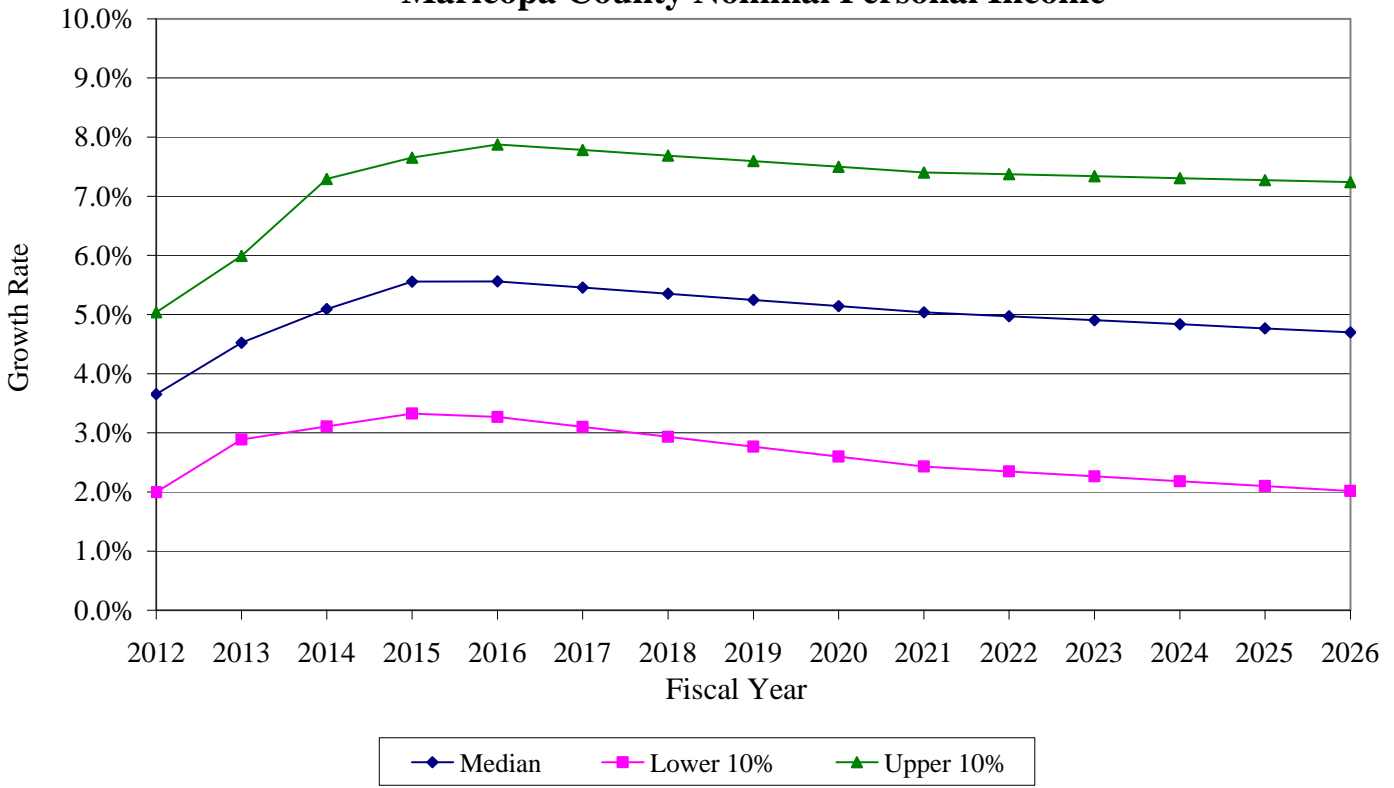
Fiscal Year	Mean Forecast	Official Forecast	80% Conf. Interval	20% Conf. Interval
2012	\$329.6	\$321.6	\$300.8	\$355.9
2013	354.2	344.2	303.0	399.8
2014	379.7	364.8	309.5	441.4
2015	404.5	385.4	317.8	478.8
2016	428.8	405.9	329.1	513.9
2017	452.8	426.5	341.5	546.5
2018	477.3	447.2	354.3	581.2
2019	501.5	470.2	368.8	614.2
2020	525.6	489.9	383.4	646.9
2021	549.4	511.6	399.0	677.7
2022	574.4	534.6	413.9	711.5
2023	600.3	557.0	429.9	746.9
2024	627.5	580.0	446.5	780.7
2025	655.7	607.1	464.7	817.2
2026 /1	399.5	369.8	282.8	497.4
Total	\$7,260.8	\$6,815.8	\$5,444.9	\$8,809.9

Note: 1/ FY 2026 totals are adjusted to reflect the end of the transportation excise tax on December 31, 2025.

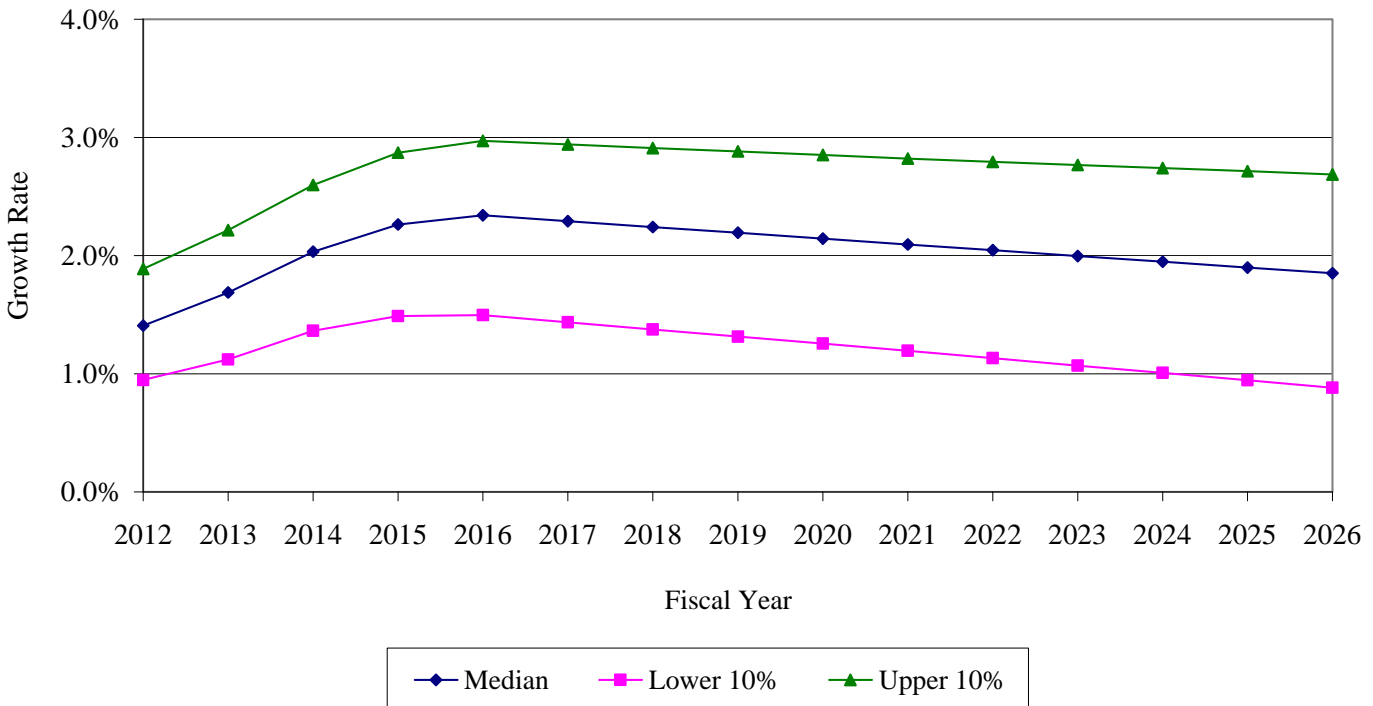
Totals may not add due to individual rounding.



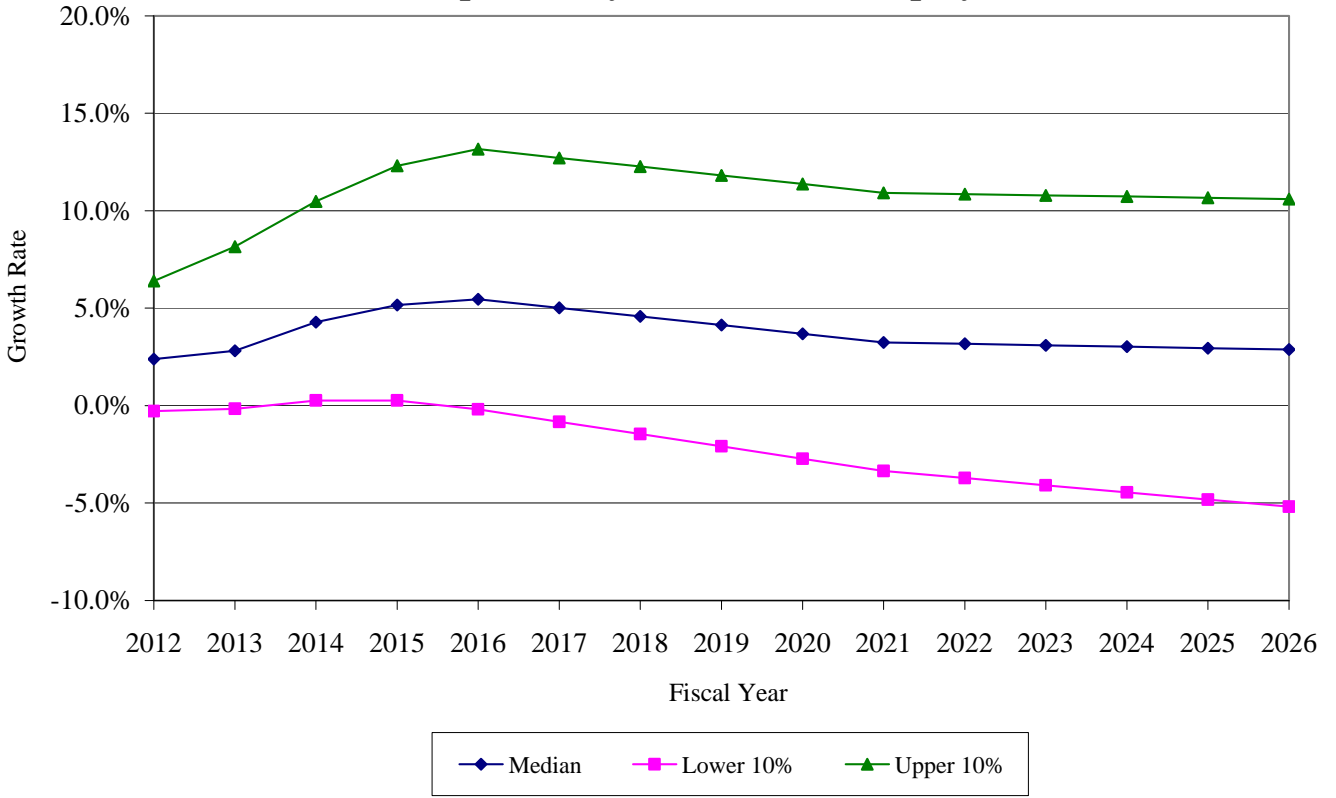
Maricopa County Nominal Personal Income



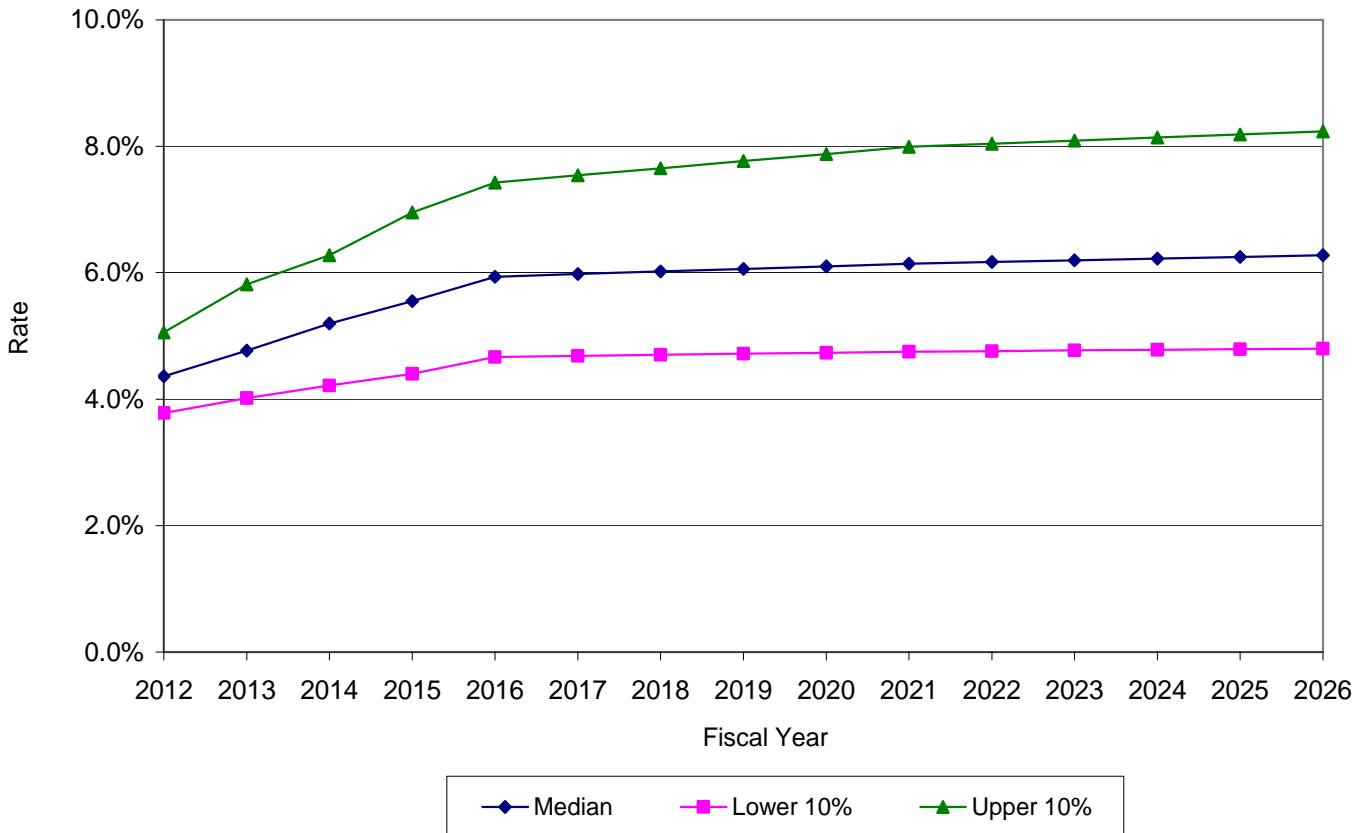
Maricopa County Population



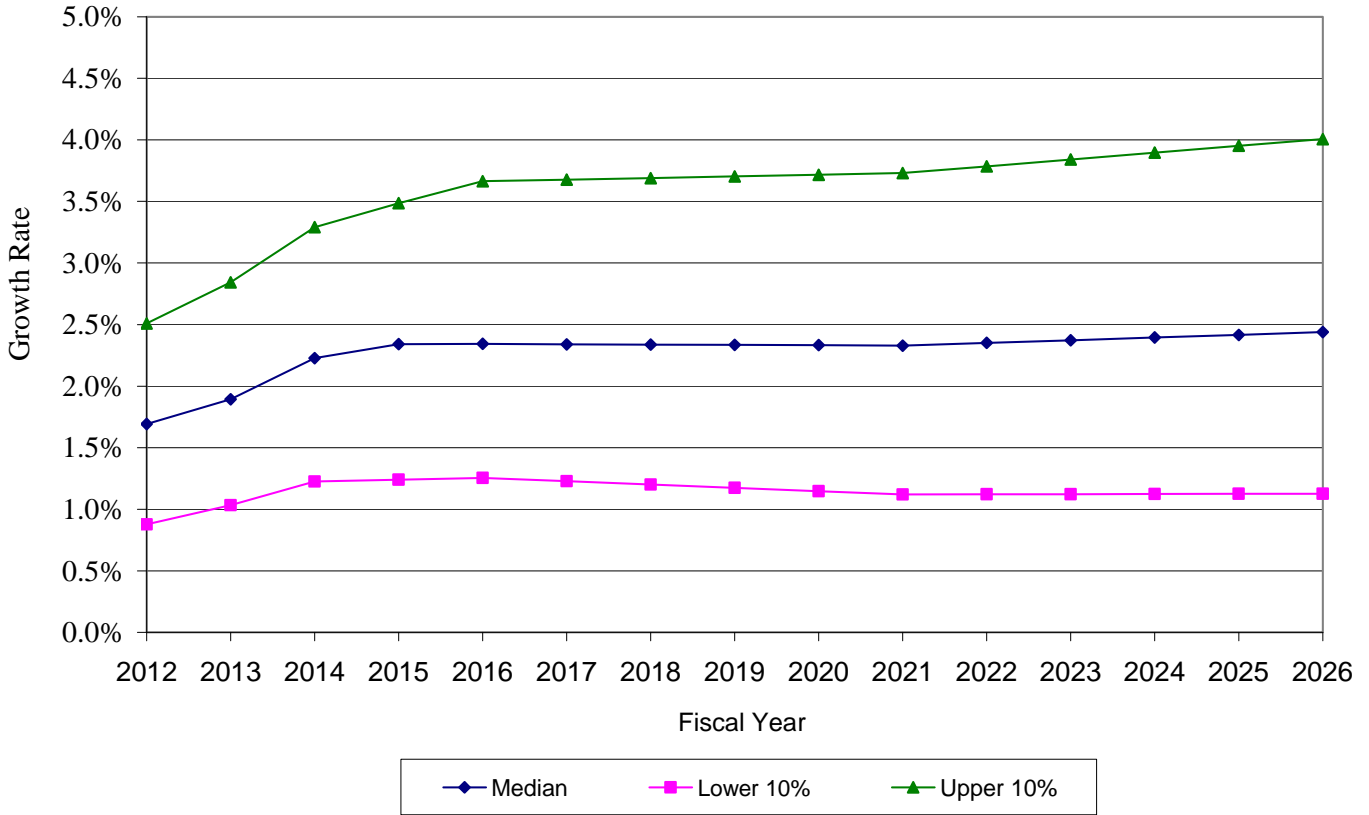
Maricopa County Construction Employment



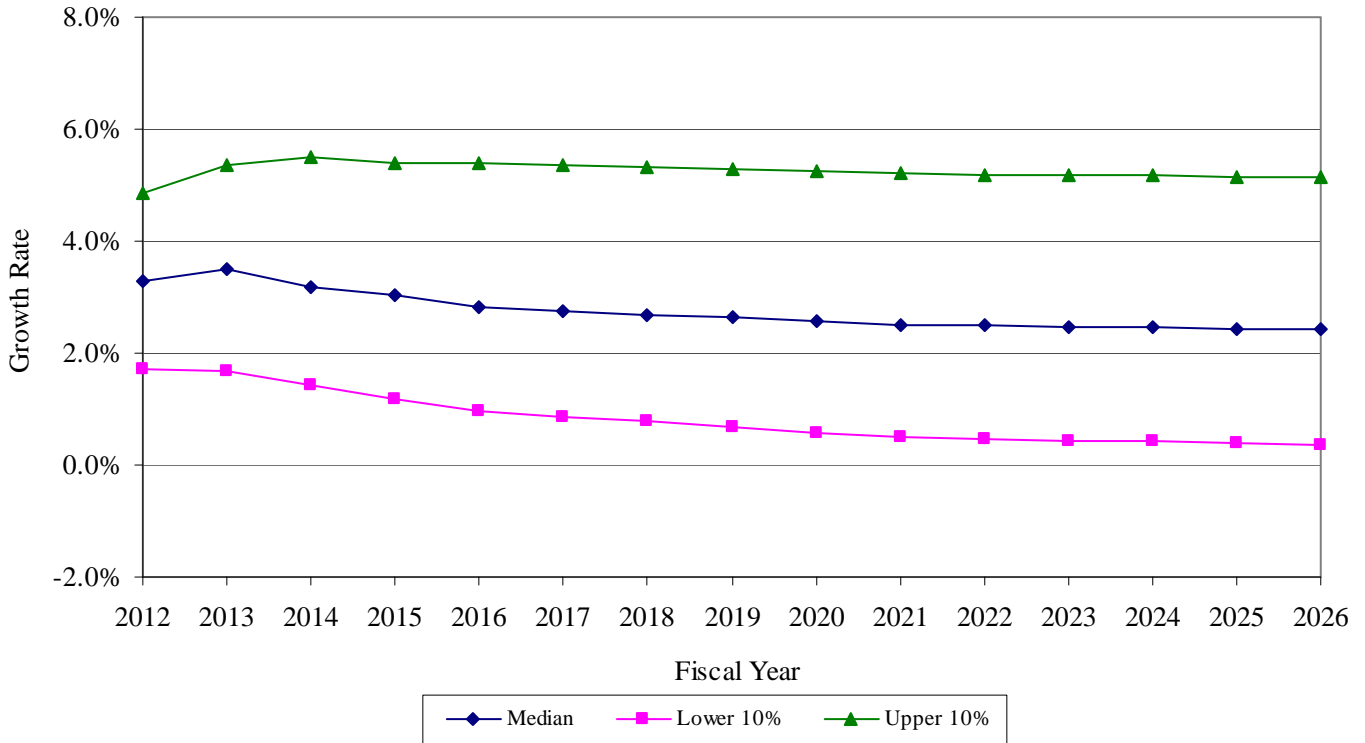
30 Year Mortgage Rate



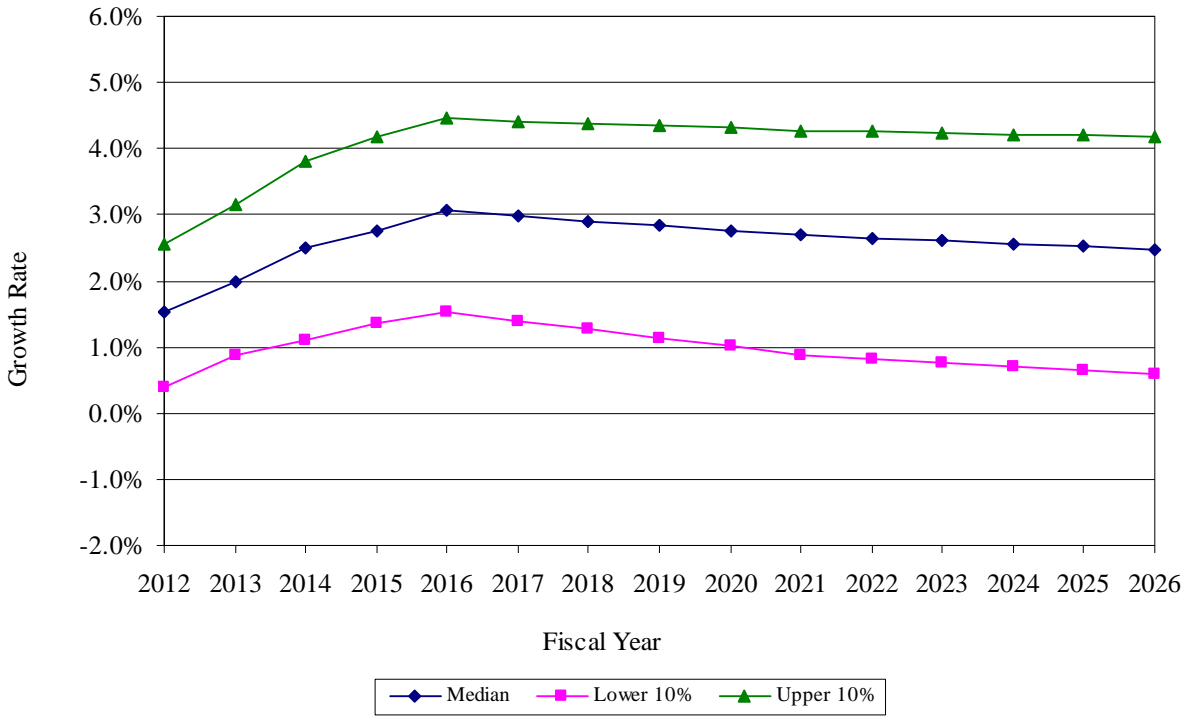
Phoenix CPI



Sky Harbor Passenger Traffic



Maricopa County Total Non-Farm Employment



Mean Panelist Data Values

	Nominal Personal Income 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
FY 2012							
Upper 10%	5.04%	1.89%	6.40%	5.05%	2.51%	4.84%	2.56%
Lower 10%	1.99%	0.95%	-0.28%	3.78%	0.88%	1.73%	0.39%
Median	3.65%	1.41%	2.39%	4.36%	1.69%	3.27%	1.53%
FY 2013							
Upper 10%	5.99%	2.22%	8.15%	5.82%	2.84%	5.36%	3.17%
Lower 10%	2.89%	1.12%	-0.16%	4.02%	1.03%	1.67%	0.87%
Median	4.52%	1.69%	2.82%	4.77%	1.89%	3.51%	2.00%
FY 2014							
Upper 10%	7.29%	2.60%	10.48%	6.28%	3.29%	5.50%	3.81%
Lower 10%	3.11%	1.36%	0.26%	4.22%	1.22%	1.41%	1.12%
Median	5.09%	2.03%	4.29%	5.19%	2.23%	3.18%	2.51%
FY 2015							
Upper 10%	7.65%	2.87%	12.30%	6.95%	3.49%	5.39%	4.17%
Lower 10%	3.32%	1.49%	0.26%	4.40%	1.24%	1.19%	1.36%
Median	5.56%	2.26%	5.17%	5.55%	2.34%	3.04%	2.75%
FY 2016							
Upper 10%	7.88%	2.97%	13.16%	7.43%	3.66%	5.40%	4.45%
Lower 10%	3.27%	1.50%	-0.19%	4.67%	1.25%	0.96%	1.52%
Median	5.56%	2.34%	5.46%	5.94%	2.34%	2.82%	3.06%
FY 2021							
Upper 10%	7.40%	2.82%	10.92%	7.99%	3.73%	5.20%	4.28%
Lower 10%	2.43%	1.19%	-3.35%	4.75%	1.12%	0.49%	0.88%
Median	5.04%	2.09%	3.25%	6.14%	2.33%	2.51%	2.68%
FY 2026							
Upper 10%	7.24%	2.69%	10.60%	8.24%	4.01%	5.15%	4.18%
Lower 10%	2.02%	0.88%	-5.19%	4.80%	1.13%	0.36%	0.58%
Median	4.70%	1.85%	2.88%	6.28%	2.44%	2.42%	2.48%

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

/1 Data for Maricopa County

Maricopa County Nominal Personal Income Growth Rate

	2012	2013	2014	2015	2016	2021	2026
Panelist 1							
Upper 10%	4.00%	4.00%	4.50%	4.50%	5.00%	5.00%	5.00%
Lower 10%	1.50%	1.50%	2.00%	2.00%	2.00%	2.00%	2.00%
Median	3.00%	3.00%	3.50%	4.00%	4.00%	4.50%	4.50%
Panelist 2							
Upper 10%	5.80%	6.20%	8.00%	8.60%	8.50%	7.10%	7.40%
Lower 10%	3.60%	4.60%	4.40%	4.80%	4.70%	2.90%	2.20%
Median	4.70%	5.40%	6.20%	6.70%	6.60%	5.00%	4.80%
Panelist 3							
Upper 10%	4.50%	5.50%	7.00%	7.00%	7.00%	7.00%	7.00%
Lower 10%	2.50%	2.50%	3.00%	3.00%	3.00%	2.00%	2.00%
Median	3.50%	4.50%	5.00%	5.50%	5.50%	5.00%	5.00%
Panelist 4							
Upper 10%	5.00%	5.80%	7.00%	7.50%	8.00%	8.50%	8.80%
Lower 10%	-1.30%	1.50%	1.30%	1.80%	2.50%	1.50%	0.50%
Median	2.80%	4.20%	4.20%	4.40%	4.80%	5.00%	5.00%
Panelist 5							
Upper 10%	4.90%	5.90%	7.80%	8.90%	8.90%	8.00%	7.50%
Lower 10%	3.10%	4.50%	4.60%	5.10%	5.40%	3.00%	2.60%
Median	3.80%	5.20%	5.70%	6.80%	6.80%	5.60%	4.80%
Panelist 6							
Upper 10%	6.00%	7.00%	7.50%	8.00%	8.00%	8.00%	8.00%
Lower 10%	2.00%	3.00%	3.00%	4.00%	4.00%	3.00%	3.00%
Median	4.00%	5.00%	5.50%	6.50%	6.50%	6.00%	6.00%
Panelist 7							
Upper 10%	4.80%	5.80%	8.40%	8.80%	9.00%	8.50%	8.00%
Lower 10%	2.80%	3.50%	4.40%	4.80%	4.50%	3.50%	3.00%
Median	3.80%	4.80%	6.40%	6.80%	7.00%	6.00%	5.50%
Panelist 8							
Upper 10%	7.90%	9.60%	9.90%	9.50%	8.90%	8.40%	7.70%
Lower 10%	-0.90%	0.80%	1.10%	0.70%	0.10%	-0.40%	-1.10%
Median	3.50%	5.20%	5.50%	5.10%	4.50%	4.00%	3.30%
Panelist 9							
Upper 10%	Not Provided						
Lower 10%							
Median							
Panelist 10							
Upper 10%	3.80%	4.50%	5.00%	6.00%	7.00%	6.50%	6.50%
Lower 10%	2.80%	3.00%	3.20%	3.30%	3.00%	2.70%	2.20%
Median	3.50%	3.80%	4.00%	4.20%	4.10%	4.00%	3.80%
Panelist 11							
Upper 10%	4.85%	6.57%	8.76%	8.87%	8.70%	8.15%	7.68%
Lower 10%	2.82%	4.31%	4.54%	4.54%	4.58%	3.33%	2.32%
Median	3.81%	5.42%	6.60%	6.50%	6.46%	5.74%	5.00%
Panelist 12							
Upper 10%	3.50%	4.00%	5.00%	5.00%	5.50%	5.50%	5.50%
Lower 10%	1.00%	2.00%	2.00%	2.50%	2.50%	2.50%	2.50%
Median	3.00%	3.50%	4.00%	5.00%	5.00%	4.50%	4.50%
Panelist 13							
Upper 10%	6.50%	7.00%	10.00%	9.00%	9.00%	7.00%	7.00%
Lower 10%	4.00%	4.50%	5.00%	5.00%	4.50%	4.00%	3.00%
Median	6.00%	6.50%	7.00%	8.00%	8.00%	6.00%	5.00%
Panelist 14							
Upper 10%	5.00%	6.00%	6.25%	6.50%	6.75%	7.00%	7.25%
Lower 10%	1.50%	1.70%	2.00%	2.00%	2.00%	2.00%	2.00%
Median	2.50%	3.00%	3.10%	3.10%	3.20%	3.20%	3.20%
Panelist 15							
Upper 10%	4.00%	6.00%	7.00%	9.00%	10.00%	9.00%	8.00%
Lower 10%	2.50%	3.00%	3.00%	3.00%	3.00%	2.00%	2.00%
Median	3.20%	3.80%	4.60%	5.20%	5.40%	6.00%	5.40%

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

Maricopa County Population Growth Rate

	2012	2013	2014	2015	2016	2021	2026
Panelist 1							
Upper 10%	1.5%	1.5%	1.5%	1.8%	1.8%	2.0%	2.0%
Lower 10%	0.5%	0.5%	1.0%	1.0%	1.0%	1.0%	1.0%
Median	1.0%	1.0%	1.0%	1.5%	1.5%	2.0%	1.5%
Panelist 2							
Upper 10%	1.8%	2.0%	2.3%	2.6%	2.7%	2.6%	2.5%
Lower 10%	1.2%	1.4%	1.5%	1.6%	1.7%	1.2%	0.7%
Median	1.5%	1.7%	1.9%	2.1%	2.2%	1.9%	1.6%
Panelist 3							
Upper 10%	2.2%	2.6%	2.7%	2.8%	2.8%	2.5%	2.2%
Lower 10%	1.5%	1.6%	1.6%	1.5%	1.5%	1.0%	0.5%
Median	1.8%	2.0%	2.2%	2.3%	2.2%	1.9%	1.5%
Panelist 4							
Upper 10%	2.1%	2.4%	2.7%	2.8%	3.0%	3.1%	3.4%
Lower 10%	1.1%	1.4%	1.3%	1.4%	1.4%	1.1%	0.6%
Median	1.5%	1.7%	1.8%	2.3%	2.5%	2.1%	1.9%
Panelist 5							
Upper 10%	2.0%	2.4%	2.8%	3.0%	3.2%	2.8%	2.7%
Lower 10%	1.0%	1.5%	1.9%	2.0%	2.0%	1.6%	1.2%
Median	1.5%	1.9%	2.3%	2.5%	2.6%	2.2%	2.1%
Panelist 6							
Upper 10%	1.3%	1.5%	3.0%	4.0%	4.0%	4.0%	4.0%
Lower 10%	0.5%	0.5%	1.0%	1.0%	1.0%	1.0%	1.0%
Median	1.0%	1.2%	2.5%	2.5%	2.5%	2.5%	2.5%
Panelist 7							
Upper 10%	1.4%	1.8%	2.2%	2.5%	2.6%	2.7%	2.3%
Lower 10%	0.9%	0.9%	1.2%	1.5%	1.5%	1.0%	0.6%
Median	1.2%	1.4%	1.7%	2.0%	2.0%	1.8%	1.5%
Panelist 8							
Upper 10%	3.1%	3.3%	3.9%	3.9%	3.9%	3.6%	3.2%
Lower 10%	1.1%	1.3%	1.9%	1.9%	1.9%	1.6%	1.2%
Median	2.1%	2.3%	2.9%	2.9%	2.9%	2.6%	2.2%
Panelist 9							
Upper 10%	0.6%	0.9%	1.6%	2.5%	2.8%	2.9%	2.4%
Lower 10%	0.4%	0.5%	0.7%	1.2%	1.5%	1.5%	1.0%
Median	0.5%	0.7%	0.9%	1.9%	2.5%	2.3%	2.0%
Panelist 10							
Upper 10%	2.0%	2.1%	2.3%	2.5%	2.5%	2.4%	2.3%
Lower 10%	1.5%	1.5%	1.5%	1.7%	1.7%	1.2%	0.5%
Median	1.7%	1.8%	2.0%	2.1%	2.1%	1.8%	1.7%
Panelist 11							
Upper 10%	1.7%	2.7%	2.9%	3.2%	3.5%	3.5%	3.3%
Lower 10%	0.0%	0.6%	1.2%	1.7%	1.6%	1.0%	1.0%
Median	0.8%	1.9%	2.2%	2.5%	2.4%	2.1%	1.8%
Panelist 12							
Upper 10%	1.7%	2.2%	2.3%	2.5%	2.8%	2.5%	2.3%
Lower 10%	1.2%	1.2%	1.4%	1.5%	1.7%	1.6%	1.5%
Median	1.5%	1.5%	2.0%	2.1%	2.4%	2.2%	2.0%
Panelist 13							
Upper 10%	2.5%	3.0%	3.5%	3.5%	3.5%	2.5%	2.5%
Lower 10%	1.0%	1.5%	2.0%	2.0%	1.5%	1.0%	0.5%
Median	2.0%	2.5%	3.0%	3.0%	3.0%	2.0%	1.5%
Panelist 14							
Upper 10%	2.2%	2.3%	2.4%	2.5%	2.6%	2.7%	2.8%
Lower 10%	1.3%	1.2%	1.1%	1.0%	0.9%	0.8%	0.7%
Median	1.5%	2.0%	2.2%	2.2%	2.2%	2.0%	2.0%
Panelist 15							
Upper 10%	2.2%	2.5%	2.8%	3.0%	3.0%	2.5%	2.4%
Lower 10%	1.0%	1.2%	1.2%	1.3%	1.5%	1.3%	1.2%
Median	1.5%	1.7%	1.9%	2.0%	2.1%	2.0%	1.9%

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

Maricopa County Construction Employment Growth Rate

	2012	2013	2014	2015	2016	2021	2026
Panelist 1							
Upper 10%	1.5%	1.5%	1.5%	2.0%	2.5%	3.0%	3.0%
Lower 10%	0.5%	0.5%	0.5%	0.5%	1.0%	1.0%	1.0%
Median	1.0%	1.0%	1.2%	1.2%	1.5%	1.5%	1.5%
Panelist 2							
Upper 10%	6.8%	9.6%	12.8%	13.9%	20.8%	12.7%	16.6%
Lower 10%	-0.8%	0.0%	1.8%	2.8%	3.3%	-6.7%	-10.6%
Median	3.0%	3.3%	6.0%	7.0%	10.0%	3.0%	3.0%
Panelist 3							
Upper 10%	4.5%	6.0%	10.0%	12.5%	12.5%	10.0%	10.0%
Lower 10%	-1.0%	-1.0%	2.0%	2.0%	2.0%	-5.0%	-10.0%
Median	2.6%	3.0%	7.0%	8.0%	7.2%	3.0%	2.5%
Panelist 4							
Upper 10%	5.0%	8.0%	12.0%	14.0%	16.0%	17.0%	18.0%
Lower 10%	-1.0%	-0.5%	1.0%	0.8%	0.0%	-10.0%	-18.0%
Median	2.0%	3.0%	5.0%	5.5%	6.0%	4.0%	3.5%
Panelist 5							
Upper 10%	6.2%	9.0%	20.0%	25.0%	22.0%	14.0%	12.0%
Lower 10%	0.0%	0.2%	2.9%	3.5%	2.0%	-2.0%	-4.0%
Median	2.8%	3.2%	7.0%	10.0%	8.0%	4.0%	3.0%
Panelist 6							
Upper 10%	5.0%	7.0%	8.0%	8.0%	9.0%	9.0%	9.0%
Lower 10%	-0.5%	0.0%	1.0%	2.0%	1.5%	0.0%	0.0%
Median	2.6%	3.0%	4.0%	5.0%	5.0%	3.0%	2.5%
Panelist 7							
Upper 10%	3.0%	4.0%	5.0%	8.0%	10.0%	10.0%	10.0%
Lower 10%	1.5%	1.0%	0.0%	-2.0%	-2.5%	-2.5%	-2.5%
Median	2.5%	2.8%	3.0%	3.5%	3.2%	2.0%	2.0%
Panelist 8							
Upper 10%	33.0%	30.0%	23.0%	18.0%	17.0%	15.0%	15.0%
Lower 10%	7.0%	4.0%	-3.0%	-8.0%	-9.0%	-11.0%	-11.0%
Median	10.0%	10.0%	10.0%	5.0%	4.0%	2.0%	2.0%
Panelist 9							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	Not Provided						
Panelist 10							
Upper 10%	1.0%	2.0%	5.0%	10.0%	12.0%	9.0%	6.0%
Lower 10%	-4.0%	-2.0%	-1.0%	0.0%	0.0%	-2.0%	-3.0%
Median	-2.0%	-2.0%	1.0%	3.0%	5.0%	4.0%	2.0%
Panelist 11							
Upper 10%	7.8%	13.3%	15.4%	16.1%	12.5%	12.2%	10.8%
Lower 10%	1.0%	2.5%	2.5%	3.1%	1.0%	-0.7%	-1.5%
Median	3.5%	4.7%	5.3%	8.2%	5.0%	5.0%	4.8%
Panelist 12							
Upper 10%	3.0%	5.0%	6.0%	7.8%	8.0%	8.0%	7.0%
Lower 10%	0.0%	0.0%	2.0%	4.0%	4.0%	4.0%	4.0%
Median	2.0%	3.0%	4.0%	5.0%	6.0%	5.0%	5.0%
Panelist 13							
Upper 10%	4.0%	5.0%	6.0%	10.0%	10.0%	6.0%	4.0%
Lower 10%	0.0%	1.0%	2.0%	4.0%	5.0%	1.0%	1.0%
Median	3.0%	3.5%	4.0%	6.0%	8.0%	3.0%	2.0%
Panelist 14							
Upper 10%	5.8%	8.8%	12.0%	12.0%	12.0%	12.0%	12.0%
Lower 10%	-0.6%	-3.0%	-3.0%	-3.0%	-3.0%	-3.0%	-3.0%
Median	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%
Panelist 15							
Upper 10%	3.0%	5.0%	10.0%	15.0%	20.0%	15.0%	15.0%
Lower 10%	-6.0%	-5.0%	-5.0%	-6.0%	-8.0%	-10.0%	-15.0%
Median	0.0%	0.0%	1.0%	3.0%	5.0%	3.0%	3.0%

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

30 Year Mortgage Rate							
	2012	2013	2014	2015	2016	2021	2026
Panelist 1							
Upper 10%	4.5%	4.5%	4.5%	5.0%	5.0%	6.0%	6.0%
Lower 10%	4.0%	3.5%	3.5%	3.5%	3.5%	4.0%	4.0%
Median	4.0%	4.0%	4.0%	5.0%	5.0%	5.0%	5.0%
Panelist 2							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	Not Provided						
Panelist 3							
Upper 10%	5.5%	6.0%	6.5%	7.5%	7.5%	8.0%	8.0%
Lower 10%	4.0%	4.5%	4.5%	4.5%	5.0%	5.0%	5.0%
Median	4.5%	5.0%	5.5%	6.0%	6.5%	7.0%	7.0%
Panelist 4							
Upper 10%	5.0%	6.0%	6.5%	7.2%	8.0%	8.5%	9.0%
Lower 10%	3.8%	4.2%	4.5%	4.7%	4.5%	4.4%	4.0%
Median	4.2%	5.0%	5.5%	6.0%	6.0%	6.5%	6.5%
Panelist 5							
Upper 10%	4.6%	5.4%	6.0%	7.0%	8.0%	8.0%	8.0%
Lower 10%	3.8%	4.2%	5.2%	6.0%	6.0%	6.0%	6.0%
Median	4.2%	4.8%	5.8%	6.5%	7.0%	7.0%	7.0%
Panelist 6							
Upper 10%	6.0%	7.0%	7.5%	8.0%	9.0%	9.0%	9.0%
Lower 10%	3.0%	3.0%	3.0%	4.0%	5.0%	5.0%	5.0%
Median	5.0%	5.5%	6.0%	6.5%	7.0%	7.0%	7.0%
Panelist 7							
Upper 10%	4.8%	5.5%	6.0%	7.5%	8.5%	9.0%	9.0%
Lower 10%	4.2%	4.2%	4.2%	4.5%	4.5%	4.5%	4.5%
Median	4.3%	4.5%	4.8%	5.0%	6.0%	5.5%	5.5%
Panelist 8							
Upper 10%	5.4%	5.4%	5.4%	4.3%	4.5%	5.4%	6.4%
Lower 10%	2.6%	2.6%	2.6%	1.5%	1.7%	2.6%	3.6%
Median	4.0%	4.0%	4.0%	2.9%	3.1%	4.0%	5.0%
Panelist 9							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	Not Provided						
Panelist 10							
Upper 10%	4.5%	4.8%	5.2%	5.8%	6.3%	7.2%	7.2%
Lower 10%	4.1%	4.1%	4.2%	4.4%	4.6%	4.4%	4.4%
Median	4.3%	4.3%	4.5%	5.0%	5.5%	6.0%	6.0%
Panelist 11							
Upper 10%	5.5%	6.1%	6.8%	7.3%	7.8%	8.3%	8.5%
Lower 10%	4.4%	5.0%	5.4%	5.9%	6.4%	5.9%	5.7%
Median	4.9%	5.6%	6.1%	6.6%	7.1%	7.1%	7.1%
Panelist 12							
Upper 10%	4.5%	6.0%	6.5%	7.5%	7.5%	7.5%	7.5%
Lower 10%	3.5%	4.5%	4.5%	4.5%	5.0%	5.0%	5.0%
Median	4.0%	5.0%	5.5%	6.0%	6.0%	6.0%	6.0%
Panelist 13							
Upper 10%	5.5%	6.5%	7.0%	8.0%	8.0%	8.5%	9.0%
Lower 10%	4.5%	4.5%	5.0%	5.0%	6.0%	6.0%	6.0%
Median	5.0%	5.5%	6.0%	6.5%	7.5%	7.5%	7.5%
Panelist 14							
Upper 10%	5.5%	6.5%	7.5%	8.5%	9.5%	10.5%	11.5%
Lower 10%	3.8%	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%
Median	4.5%	4.8%	5.0%	5.3%	5.5%	5.8%	6.0%
Panelist 15							
Upper 10%	4.5%	6.0%	6.2%	6.8%	7.0%	8.0%	8.0%
Lower 10%	3.5%	3.7%	4.0%	4.5%	4.3%	4.8%	5.0%
Median	3.8%	4.1%	4.8%	4.9%	5.0%	5.5%	6.0%

All data in the above table are in nominal rates.

Phoenix CPI Growth Rate							
	2012	2013	2014	2015	2016	2021	2026
Panelist 1							
Upper 10%	2.0%	2.0%	2.5%	2.5%	3.0%	3.0%	3.0%
Lower 10%	1.0%	1.0%	1.5%	1.5%	1.5%	1.5%	1.5%
Median	1.5%	1.5%	2.0%	2.0%	2.0%	2.5%	2.5%
Panelist 2							
Upper 10%	2.4%	2.8%	3.5%	4.1%	4.8%	4.5%	4.6%
Lower 10%	0.6%	0.8%	0.9%	1.1%	1.2%	0.5%	0.4%
Median	1.5%	1.8%	2.2%	2.6%	3.0%	2.5%	2.5%
Panelist 3							
Upper 10%	2.5%	2.7%	3.2%	3.2%	3.0%	3.0%	3.0%
Lower 10%	1.0%	1.0%	1.0%	1.0%	0.8%	0.8%	0.8%
Median	1.7%	2.0%	2.2%	2.2%	2.2%	2.0%	2.0%
Panelist 4							
Upper 10%	2.1%	2.5%	2.7%	3.2%	3.8%	4.1%	6.0%
Lower 10%	0.4%	0.6%	0.5%	0.4%	0.3%	0.2%	-0.3%
Median	0.9%	1.3%	1.7%	1.7%	1.7%	1.5%	1.5%
Panelist 5							
Upper 10%	2.5%	2.7%	3.4%	3.5%	3.4%	3.4%	3.4%
Lower 10%	0.5%	0.8%	1.0%	1.0%	1.2%	0.6%	0.5%
Median	1.5%	1.7%	2.2%	2.3%	2.4%	1.9%	2.0%
Panelist 6							
Upper 10%	2.5%	2.7%	3.2%	3.2%	3.1%	3.1%	3.4%
Lower 10%	0.6%	0.8%	0.8%	0.8%	0.8%	0.4%	0.3%
Median	1.6%	1.7%	2.0%	2.0%	1.9%	1.7%	1.8%
Panelist 7							
Upper 10%	2.2%	3.0%	3.2%	3.5%	3.5%	3.5%	3.5%
Lower 10%	1.1%	1.0%	1.5%	1.5%	1.0%	1.0%	1.0%
Median	1.6%	1.8%	2.2%	2.6%	2.1%	2.1%	2.1%
Panelist 8							
Upper 10%	3.8%	3.9%	4.2%	4.1%	4.2%	4.6%	5.1%
Lower 10%	1.6%	1.7%	2.0%	1.9%	2.0%	2.4%	2.9%
Median	2.7%	2.8%	3.1%	3.0%	3.1%	3.5%	4.0%
Panelist 9							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	Not Provided						
Panelist 10							
Upper 10%	2.3%	2.5%	2.7%	2.8%	2.9%	2.8%	2.8%
Lower 10%	1.3%	1.2%	1.2%	1.0%	1.0%	0.8%	0.8%
Median	1.8%	1.8%	1.9%	2.0%	2.0%	1.9%	1.9%
Panelist 11							
Upper 10%	2.8%	3.1%	3.5%	3.7%	3.9%	3.9%	3.6%
Lower 10%	-0.2%	0.4%	0.9%	0.8%	1.0%	0.8%	0.8%
Median	1.6%	1.8%	1.9%	2.0%	1.9%	2.3%	2.4%
Panelist 12							
Upper 10%	2.5%	2.7%	3.2%	3.2%	3.1%	3.1%	3.4%
Lower 10%	0.6%	0.8%	0.8%	0.8%	0.8%	0.4%	0.3%
Median	1.6%	1.7%	2.0%	2.0%	1.9%	1.7%	1.8%
Panelist 13							
Upper 10%	2.5%	3.0%	3.5%	3.5%	3.3%	3.0%	3.0%
Lower 10%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Median	1.8%	1.9%	2.4%	2.4%	2.0%	2.0%	2.0%
Panelist 14							
Upper 10%	2.5%	3.5%	4.5%	5.5%	6.5%	7.5%	8.5%
Lower 10%	1.3%	1.8%	2.3%	2.8%	3.3%	3.8%	4.3%
Median	2.0%	2.6%	3.2%	3.8%	4.4%	5.0%	5.6%
Panelist 15							
Upper 10%	2.5%	2.7%	2.8%	2.8%	2.8%	2.7%	2.8%
Lower 10%	1.5%	1.6%	1.7%	1.7%	1.7%	1.5%	1.5%
Median	2.0%	2.1%	2.2%	2.2%	2.2%	2.0%	2.0%

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

Sky Harbor Passenger Traffic Growth Rate

	2012	2013	2014	2015	2016	2021	2026
Panelist 1							
Upper 10%	6.0%	6.0%	7.5%	7.5%	7.5%	6.0%	5.0%
Lower 10%	3.0%	3.0%	3.0%	3.0%	3.0%	2.0%	2.0%
Median	5.0%	4.5%	4.5%	4.5%	4.0%	3.0%	3.0%
Panelist 2							
Upper 10%	3.5%	5.2%	7.1%	6.3%	6.7%	6.2%	7.0%
Lower 10%	1.7%	1.9%	1.3%	1.0%	0.7%	-0.2%	-1.0%
Median	2.6%	3.0%	3.5%	3.0%	3.0%	3.0%	3.0%
Panelist 3							
Upper 10%	3.5%	4.5%	4.5%	4.5%	4.5%	4.0%	4.0%
Lower 10%	1.7%	1.7%	1.0%	0.8%	0.5%	-1.0%	-1.0%
Median	2.8%	2.8%	2.5%	2.5%	2.5%	2.0%	2.0%
Panelist 4							
Upper 10%	4.0%	4.5%	5.0%	5.1%	5.2%	5.3%	5.4%
Lower 10%	0.6%	0.0%	-0.4%	-0.8%	-1.0%	-1.5%	-2.0%
Median	2.0%	2.5%	2.2%	2.0%	1.8%	1.5%	1.5%
Panelist 5							
Upper 10%	4.0%	4.4%	4.8%	4.8%	4.8%	4.4%	4.0%
Lower 10%	2.0%	2.0%	1.2%	1.0%	0.5%	0.0%	0.0%
Median	3.0%	3.0%	2.8%	2.6%	2.4%	2.2%	2.0%
Panelist 6							
Upper 10%	5.0%	5.5%	6.0%	6.5%	7.0%	7.0%	7.0%
Lower 10%	3.0%	2.5%	2.0%	1.5%	1.0%	0.5%	0.0%
Median	4.0%	4.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Panelist 7							
Upper 10%	4.0%	4.0%	4.5%	4.5%	4.5%	5.0%	5.0%
Lower 10%	2.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
Median	3.0%	3.0%	3.0%	3.0%	2.5%	2.5%	2.0%
Panelist 8							
Upper 10%	7.8%	7.7%	7.4%	7.1%	6.9%	6.3%	6.3%
Lower 10%	1.2%	1.1%	0.8%	0.5%	0.3%	0.0%	0.0%
Median	4.5%	4.4%	4.1%	3.8%	3.6%	3.0%	3.0%
Panelist 9							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	Not Provided						
Panelist 10							
Upper 10%	3.0%	3.1%	3.4%	3.6%	3.5%	3.5%	3.5%
Lower 10%	2.0%	2.1%	2.0%	1.8%	1.5%	1.0%	1.0%
Median	2.6%	2.8%	3.0%	3.0%	2.7%	2.4%	2.0%
Panelist 11							
Upper 10%	3.0%	3.1%	3.3%	3.6%	4.5%	5.1%	4.9%
Lower 10%	-3.0%	-1.4%	0.4%	0.8%	1.0%	1.1%	1.1%
Median	1.3%	1.5%	1.8%	2.0%	2.4%	2.6%	2.7%
Panelist 12							
Upper 10%	6.0%	7.5%	7.5%	7.5%	7.0%	7.0%	7.0%
Lower 10%	4.0%	4.5%	4.5%	4.5%	3.5%	3.0%	3.0%
Median	5.0%	6.0%	6.0%	6.5%	5.5%	4.0%	4.0%
Panelist 13							
Upper 10%	4.0%	4.5%	4.0%	3.5%	3.5%	3.0%	3.0%
Lower 10%	2.0%	2.0%	2.0%	1.5%	1.5%	1.0%	1.0%
Median	3.0%	3.5%	3.0%	2.5%	2.5%	2.0%	2.0%
Panelist 14							
Upper 10%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Lower 10%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Median	1.0%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%
Panelist 15							
Upper 10%	9.0%	10.0%	7.0%	6.0%	5.0%	5.0%	5.0%
Lower 10%	4.0%	3.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Median	6.0%	7.0%	4.0%	3.0%	2.5%	2.8%	2.6%

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

Maricopa County Total Non-Farm Employment Growth Rate

	2012	2013	2014	2015	2016	2021	2026
Panelist 1							
Upper 10%	2.0%	2.0%	2.0%	2.5%	2.5%	3.0%	3.5%
Lower 10%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Median	1.5%	2.0%	2.0%	2.0%	2.5%	2.5%	2.5%
Panelist 2							
Upper 10%	3.4%	3.4%	4.1%	4.6%	5.4%	5.3%	5.7%
Lower 10%	0.0%	1.0%	1.3%	1.8%	2.0%	0.7%	-0.1%
Median	1.7%	2.2%	2.7%	3.2%	3.7%	3.0%	2.8%
Panelist 3							
Upper 10%	2.5%	3.3%	4.0%	4.5%	4.5%	4.5%	4.0%
Lower 10%	1.0%	1.0%	1.5%	2.0%	2.0%	1.0%	0.0%
Median	1.5%	2.2%	3.0%	3.2%	3.2%	2.5%	2.2%
Panelist 4							
Upper 10%	2.1%	2.7%	3.9%	4.1%	4.5%	4.8%	5.1%
Lower 10%	-0.2%	0.5%	0.9%	1.3%	1.5%	-0.5%	-1.0%
Median	0.9%	1.8%	2.3%	2.8%	3.0%	2.5%	2.5%
Panelist 5							
Upper 10%	2.7%	3.2%	4.6%	5.1%	5.4%	5.0%	4.6%
Lower 10%	1.0%	1.5%	2.0%	2.2%	2.4%	1.0%	0.0%
Median	1.8%	2.4%	3.2%	3.6%	3.8%	3.0%	2.6%
Panelist 6							
Upper 10%	2.5%	3.0%	3.5%	4.5%	4.5%	4.5%	4.5%
Lower 10%	0.5%	1.0%	1.5%	2.5%	2.5%	2.0%	2.0%
Median	1.0%	1.5%	2.5%	3.0%	3.0%	2.5%	2.5%
Panelist 7							
Upper 10%	1.8%	2.8%	3.8%	4.3%	4.4%	3.5%	3.5%
Lower 10%	1.2%	1.0%	0.5%	0.5%	0.0%	-0.5%	-0.5%
Median	1.5%	2.0%	2.8%	3.2%	3.0%	2.0%	1.8%
Panelist 8							
Upper 10%	4.1%	4.1%	4.2%	3.4%	3.2%	2.8%	2.5%
Lower 10%	2.1%	2.1%	2.2%	1.4%	1.2%	0.8%	0.5%
Median	3.1%	3.1%	3.2%	2.4%	2.2%	1.8%	1.5%
Panelist 9							
Upper 10%	Not Provided						
Lower 10%	Not Provided						
Median	Not Provided						
Panelist 10							
Upper 10%	1.8%	2.0%	2.5%	3.0%	3.5%	3.0%	3.0%
Lower 10%	0.0%	0.2%	0.5%	0.8%	1.0%	0.5%	0.0%
Median	1.5%	1.8%	2.0%	2.1%	2.2%	2.0%	1.8%
Panelist 11							
Upper 10%	2.4%	3.3%	3.7%	4.8%	6.5%	7.2%	6.9%
Lower 10%	-0.6%	1.4%	1.2%	1.6%	1.7%	1.4%	1.8%
Median	1.4%	2.1%	2.2%	3.6%	3.2%	4.8%	4.7%
Panelist 12							
Upper 10%	2.0%	4.0%	4.5%	4.5%	5.0%	4.0%	3.5%
Lower 10%	0.0%	0.5%	0.5%	1.0%	1.5%	2.0%	1.8%
Median	1.5%	2.0%	3.0%	3.5%	3.5%	2.8%	2.8%
Panelist 13							
Upper 10%	2.5%	3.5%	4.5%	4.0%	4.5%	4.5%	4.5%
Lower 10%	1.0%	1.5%	2.0%	2.0%	2.0%	1.0%	1.0%
Median	2.0%	2.5%	3.5%	2.5%	3.5%	3.0%	2.5%
Panelist 14							
Upper 10%	4.0%	4.5%	5.0%	5.5%			
Lower 10%	-1.5%	-1.0%	-0.5%	0.0%			
Median	1.0%	0.8%	0.8%	0.8%			
Panelist 15							
Upper 10%	2.0%	2.5%	3.0%	3.5%	4.0%	3.5%	3.0%
Lower 10%	0.0%	0.5%	1.0%	1.0%	1.0%	1.0%	1.0%
Median	1.0%	1.5%	2.0%	2.5%	3.0%	2.5%	2.0%

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

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

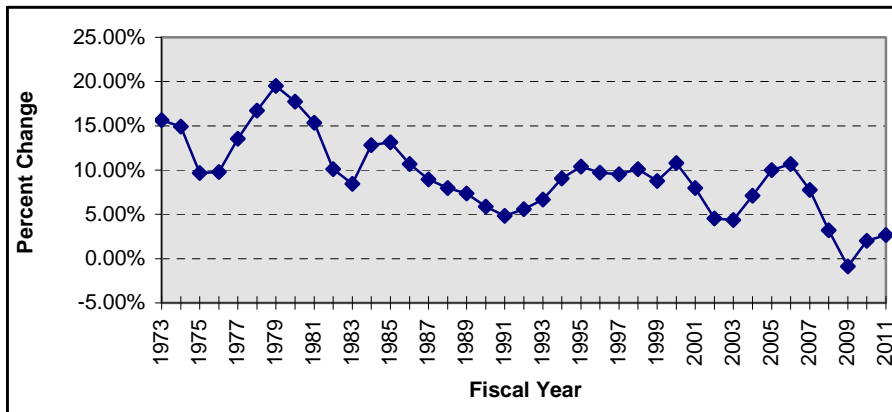
HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)

1970		1980	17.7%	1990	5.9%	2000	10.8%	2010	2.0%
1971		1981	15.3%	1991	4.8%	2001	8.0%	2011*	2.7%
1972		1982	10.1%	1992	5.6%	2002	4.5%	2012	
1973	15.6%	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	3.2%	2018	
1979	19.5%	1989	7.4%	1999	8.8%	2009	-0.9%	2019	

FY 1973-2009 data from BEA; FY 2010-2012 data from Phoenix Blue Chip. FY 2013-2026, 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	-0.9%	7.7%	2.9%	3.1%	0.3%	5.9%
10 Years	-0.9%	10.7%	5.1%	3.7%	1.7%	10.1%
Full Period	-0.9%	19.5%	9.3%	4.4%	4.1%	15.4%

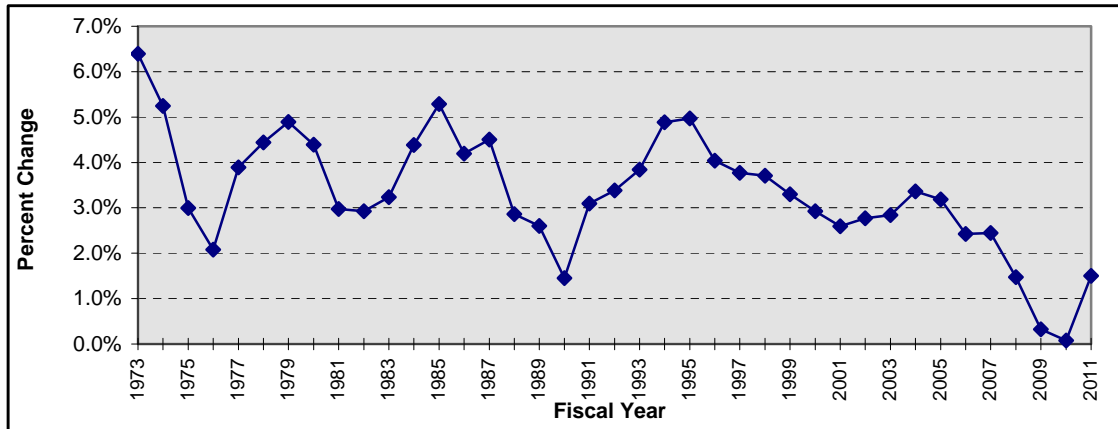
HISTORICAL DATA MARICOPA COUNTY POPULATION GROWTH RATE (Annual Percent Change)

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

1970	1980	4.4%	1990	1.4%	2000	2.9%	2010	0.1%
1971	1981	3.0%	1991	3.1%	2001	2.6%	2011*	1.5%
1972	1982	2.9%	1992	3.4%	2002	2.8%	2012	
1973	1983	3.2%	1993	3.8%	2003	2.8%	2013	
1974	1984	4.4%	1994	4.9%	2004	3.4%	2014	
1975	1985	5.3%	1995	5.0%	2005	3.2%	2015	
1976	1986	4.2%	1996	4.0%	2006	2.4%	2016	
1977	1987	4.5%	1997	3.8%	2007	2.4%	2017	
1978	1988	2.9%	1998	3.7%	2008	1.5%	2018	
1979	1989	2.6%	1999	3.3%	2009	0.3%	2019	

FY 1973-2009 from U. S. Census Bureau. FY 2000-2010 interim re-benchmark figures from ADOA Office of Employment and Population Statistics. FY 2011*-2012 based on Phoenix Blue Chip growth rate estimates while FY 2013-2015 ADOT staff estimates. FY 2016-2026 based on 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%	2.4%	1.2%	1.0%	0.2%	2.1%
10 Years	0.1%	3.4%	2.0%	1.2%	0.3%	3.2%
Full Period	0.1%	6.4%	3.3%	1.3%	1.5%	4.9%

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

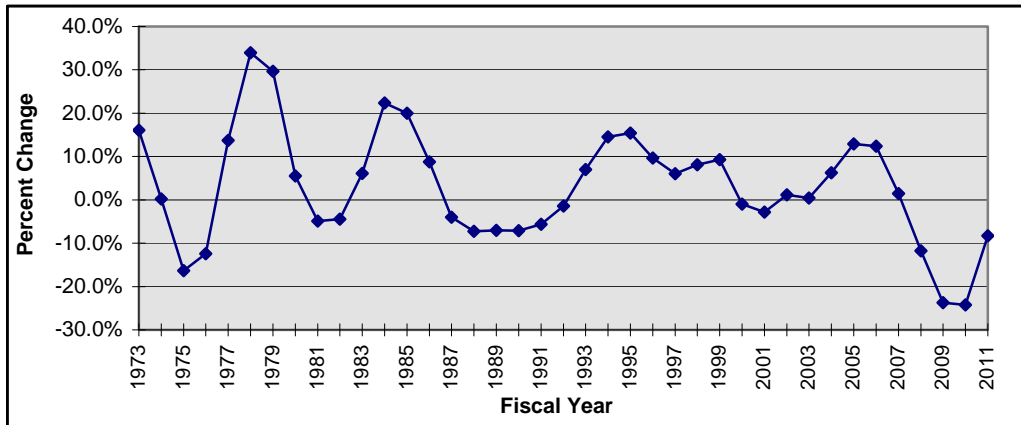
HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)

1970	1980	5.5%	1990	-7.1%	2000	-1.0%	2010	-24.3%
1971	1981	-4.9%	1991	-5.6%	2001	-2.8%	2011*	-8.3%
1972	1982	-4.5%	1992	-1.4%	2002	1.2%	2012	
1973	1983	6.1%	1993	7.0%	2003	0.4%	2013	
1974	1984	22.3%	1994	14.5%	2004	6.3%	2014	
1975	1985	20.0%	1995	15.4%	2005	12.9%	2015	
1976	1986	8.8%	1996	9.6%	2006	12.4%	2016	
1977	1987	-4.0%	1997	6.0%	2007	1.5%	2017	
1978	1988	-7.3%	1998	8.1%	2008	-11.7%	2018	
1979	1989	-7.0%	1999	9.3%	2009	-23.7%	2019	

FY 2008 and prior from BEA. FY 2009-2011* based on Phoenix Blue Chip Forecast, 1st Quarter 2011.

FY 2012-2026 based on ADOT estimates.

HISTORICAL DATA - GRAPHED



HISTORICAL DATA - ANALYSIS

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	-24.3%	1.5%	-13.3%	10.9%	-24.0%	-2.4%
10 Years	-24.3%	12.9%	-3.3%	13.4%	-23.8%	12.5%
Full Period	-24.3%	34.0%	3.0%	12.9%	-11.9%	16.8%

HISTORICAL DATA 30 YEAR MORTGAGE RATE

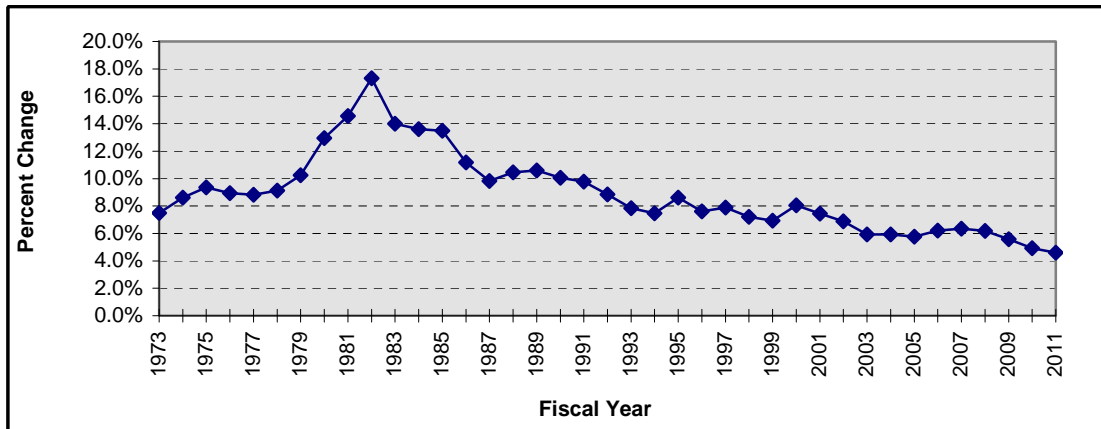
HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)

1972		1980	12.9%	1990	10.1%	2000	8.1%	2010	4.9%
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	
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	

FY 1972-2010 data from Federal Reserve. FY 2011*-2026 based on Global Insight, 1st Quarter 2011, Trend Forecast.

* Estimate

HISTORICAL DATA - GRAPHED



HISTORICAL DATA - ANALYSIS

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	4.6%	6.3%	5.5%	0.8%	4.7%	6.3%
10 Years	4.6%	6.9%	5.8%	0.7%	4.9%	6.4%
Full Period	4.6%	17.3%	8.9%	2.9%	5.9%	13.5%

HISTORICAL DATA PHOENIX CPI GROWTH RATE (Annual Percent Change)

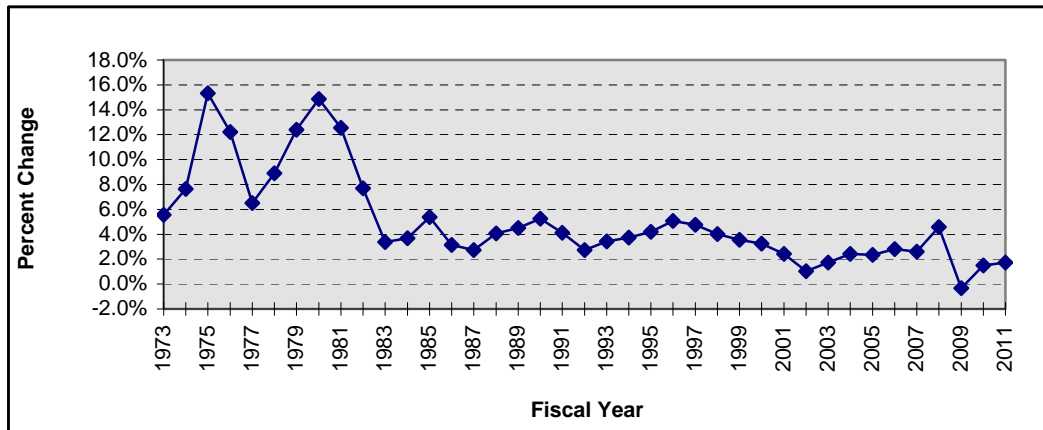
HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)

1970		1980	14.9%	1990	5.2%	2000	3.2%	2010	1.5%
1971		1981	12.5%	1991	4.1%	2001	2.4%	2011*	1.7%
1972		1982	7.7%	1992	2.7%	2002	1.0%	2012	
1973	5.6%	1983	3.4%	1993	3.4%	2003	1.7%	2013	
1974	7.6%	1984	3.7%	1994	3.7%	2004	2.4%	2014	
1975	15.3%	1985	5.4%	1995	4.2%	2005	2.3%	2015	
1976	12.2%	1986	3.1%	1996	5.1%	2006	2.8%	2016	
1977	6.5%	1987	2.7%	1997	4.8%	2007	2.6%	2017	
1978	8.9%	1988	4.1%	1998	4.0%	2008	4.6%	2018	
1979	12.4%	1989	4.5%	1999	3.6%	2009	-0.3%	2019	

FY 1972-1999 from ASU and FY 2000-2010 regressed from U.S. and Phoenix Mesa, AZ CPI (2002-2010) data from BLS.

FY 2011*-2026 estimates regressed from U.S. CPI based on Global Insight, 1st Quarter 2011, Trend Forecast.

HISTORICAL DATA - GRAPHED



HISTORICAL DATA - ANALYSIS

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	-0.3%	4.6%	2.0%	1.8%	0.4%	3.8%
10 Years	-0.3%	4.6%	2.0%	1.3%	0.9%	3.0%
Full Period	-0.3%	15.3%	5.1%	3.8%	1.7%	12.2%

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

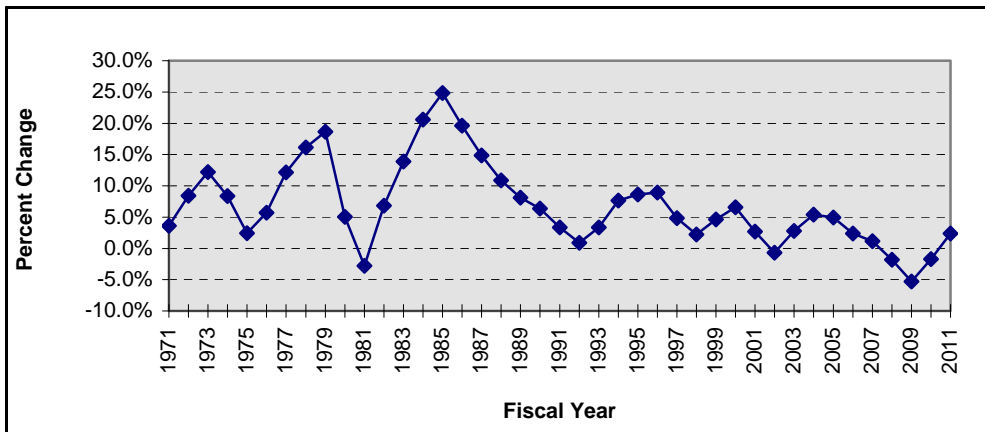
HISTORICAL DATA BY FISCAL YEAR (July 1 through June 30)

1970		1980	5.0%	1990	6.4%	2000	6.6%	2010	-1.7%
1971	3.6%	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	
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	

FY 1971-2009 data obtained from Phoenix Sky Harbor International Airport.

FY 2011*-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%	2.4%	-1.1%	3.0%	-3.9%	1.9%
10 Years	-5.3%	5.4%	1.0%	3.3%	-2.2%	5.0%
Full Period	-5.3%	24.8%	6.8%	6.7%	-0.7%	16.1%

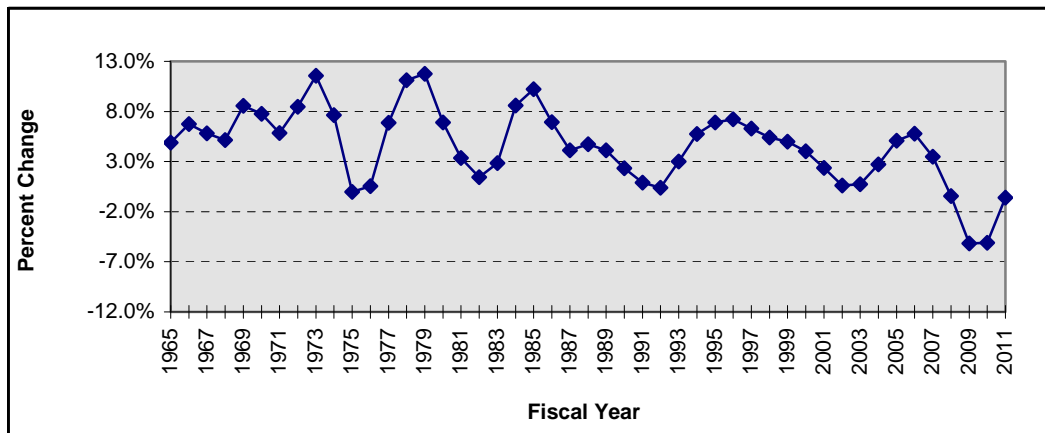
HISTORICAL DATA MARICOPA COUNTY TOTAL NON-FARM EMPLOYMENT GROWTH RATE (Annual Percent Change)

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

1970	7.8%	1980	6.9%	1990	2.3%	2000	4.0%	2010	-5.1%
1971	5.9%	1981	3.4%	1991	0.9%	2001	2.4%	2011*	-0.6%
1972	8.5%	1982	1.5%	1992	0.4%	2002	0.6%	2012	
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	

FY 1970-2010 data from Bureau of Labor Statistics. FY 2011*-2012 Arizona Workforce growth rate estimates. FY 2013-2026 ADOT staff estimates.

HISTORICAL DATA - GRAPHED



HISTORICAL DATA - ANALYSIS

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	-5.2%	3.5%	-1.6%	3.6%	-5.1%	1.9%
10 Years	-5.2%	5.8%	0.7%	3.8%	-5.1%	5.2%
Full Period	-5.2%	11.8%	4.6%	3.7%	0.3%	8.6%