

*Arizona Department of Transportation*

**ARIZONA HIGHWAY USER REVENUE FUND**

**Forecasting Process & Results**

**FY 2003-2012**



**Financial Management Services**

**November 2002**

**ARIZONA HIGHWAY USER REVENUE FUND  
OFFICIAL FORECAST UPDATE  
RISK ANALYSIS OF EXPECTED VALUES  
as of November 2002**

**Introduction**

This document presents the Arizona Department of Transportation's (Department) forecast of expected values for the Arizona Highway User Revenue Fund for the period FY 2003-2012.

**Background**

The State of Arizona taxes motor fuels and collects a variety of fees relating to the registration and operation of motor vehicles in the state. These collections include gasoline and use fuel taxes, motor carrier fees, vehicle license taxes, motor vehicle registration fees, and other miscellaneous fees. These revenues are deposited in the Arizona Highway User Revenue Fund (HURF) and are then distributed to the cities, towns and counties of the State and to the State Highway Fund, which is administered by the Department. These taxes and fees represent the primary source of revenues available to the state for highway construction, improvements and other related expenses.

Since 1986, the Department has estimated Highway Revenues for the State using a comprehensive regression-based econometric model. In 1989, the model was updated by Dr. Alberta Charney of the University of Arizona. The model relied on the estimates of certain "independent variables" to predict future tax revenues. The model's revenue forecast was highly dependent on estimates of the independent variables. Any variability between estimated and actual values could lead to variances in the tax forecast. In order to deal with this variability, the Department introduced the Risk Analysis Process (RAP) in 1992. The RAP relies upon probability analysis and the independent evaluation of the model's variables by an expert panel of economists. This results in a series of forecasts with specified probabilities of occurrence, rather than a single or "best guess" estimate.

In 1997, Hickling Lewis Brod Inc. (HLB), working in conjunction with Dr. Dennis Hoffman of Arizona State University, developed a new forecasting model to incorporate certain economic data generated over the past ten years and evaluate the inclusion of independent variables absent from the 1989 model, to enhance the model's forecasting accuracy. HLB also eliminated independent variables that were either not significant to the model or were not readily available.

The new model also took into consideration 1997 legislation (SB 1144 and SB 1398) which eliminated the weight distance tax on motor carriers, increased weight and use fees for use class vehicles, and changed the point of taxation on fuel. In September 2000, HLB reviewed the model and updated the equations. The independent variables contained in the updated model include:

- Arizona real income growth per capita
- Arizona population growth
- Arizona wage & salary employment growth
- Arizona fleet fuel efficiency

## Risk Analysis Panel

The Risk Analysis Process relies heavily on the judgments of an expert panel of economists to provide information critical to the forecasting process. In September 2002, an expert panel of eleven economists 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 updated 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 RAP panel inputs resulted in a mean forecast of \$13,414.0 million for the period FY 2003-2012. The average compound growth rate associated with the forecast was 4.2 percent.

The Department's Official Forecast totals \$13,442.7 million for the period of FY 2003-2012 with an average compound growth rate of 4.3 percent. The Official Forecast incorporates the 50 percent confidence interval for each year of the forecast. The FY 2003 forecast of \$1,107.7 million was developed independently of the econometric model using time-series techniques, historical and projected growth rates from the model, and recent legislative changes.

<b>FY 2003 Official Forecast (Dollars in Millions)</b>			
<b>Fiscal Year</b>	<b>Mean Forecast</b>	<b>Official Forecast</b>	<b>Confidence Level</b>
<b>2003</b>	\$1,107.9	\$1,107.7	N/A
<b>2004</b>	\$1,150.1	\$1,151.1	50%
<b>2005</b>	\$1,197.8	\$1,199.5	50%
<b>2006</b>	\$1,248.7	\$1,249.8	50%
<b>2007</b>	\$1,302.9	\$1,305.0	50%
<b>2008</b>	\$1,359.2	\$1,361.6	50%
<b>2009</b>	\$1,417.7	\$1,421.4	50%
<b>2010</b>	\$1,478.5	\$1,484.5	50%
<b>2011</b>	\$1,541.9	\$1,546.5	50%
<b>2012</b>	<u>\$1,609.3</u>	<u>\$1,615.6</u>	50%
<b>Total</b>	<b>\$13,414.0</b>	<b>\$13,442.7</b>	
<b>Avg. CGR</b>	<b>4.2%</b>	<b>4.3%</b>	

A comparison of the December 2001 Official Forecast with the November 2002 Official Forecast is shown below:

**FY 2003 Comparative Forecast  
(Dollars in Millions)**

<b>Fiscal Year</b>	<b>Dec. 01 Official Forecast</b>	<b>Nov. 02 Official Forecast</b>	<b>Difference</b>
<b>2003</b>	\$1,102.0	\$1,107.7	\$5.7
<b>2004</b>	\$1,148.5	\$1,151.1	\$2.6
<b>2005</b>	\$1,199.4	\$1,199.5	\$0.1
<b>2006</b>	\$1,256.2	\$1,249.8	(\$6.4)
<b>2007</b>	\$1,316.8	\$1,305.0	(\$11.8)
<b>2008</b>	\$1,375.7	\$1,361.6	(\$14.1)
<b>2009</b>	\$1,441.8	\$1,421.4	(\$20.4)
<b>2010</b>	\$1,509.6	\$1,484.5	(\$25.1)
<b>2011</b>	\$1,581.6	\$1,546.5	(\$35.1)
<b>2012</b>	<u>\$1,656.5</u>	<u>\$1,615.6</u>	<u>(\$40.9)</u>
<b>Total</b>	<b>\$13,588.1</b>	<b>\$13,442.7</b>	<b>(\$145.4)</b>
<b>Avg. CGR</b>	<b>4.6%</b>	<b>4.3%</b>	

**Summary**

The panel believes that the economy will continue to grow but at a slower pace. They forecasted lower growth rates for Arizona real income per capita and Arizona wage and salary employment during FY 2003-2012. However, they believe the Arizona population growth rate will remain about the same. For FY 2003-2012, there was a \$145.4 million decrease in HURF revenue forecast, which was due mainly to the panel's more conservative view of Arizona's long term economic outlook.

**Supplementary Information**

The remaining pages of this report present 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 2003-2012, panel inputs were requested for FY 2003-2008, 2011, 2016, 2021 and 2026. Data displayed for other than the requested years, has been extrapolated.

**HURF OFFICIAL REVENUE FORECAST**  
**With Category Detail and Confidence Interval By Fiscal Year**

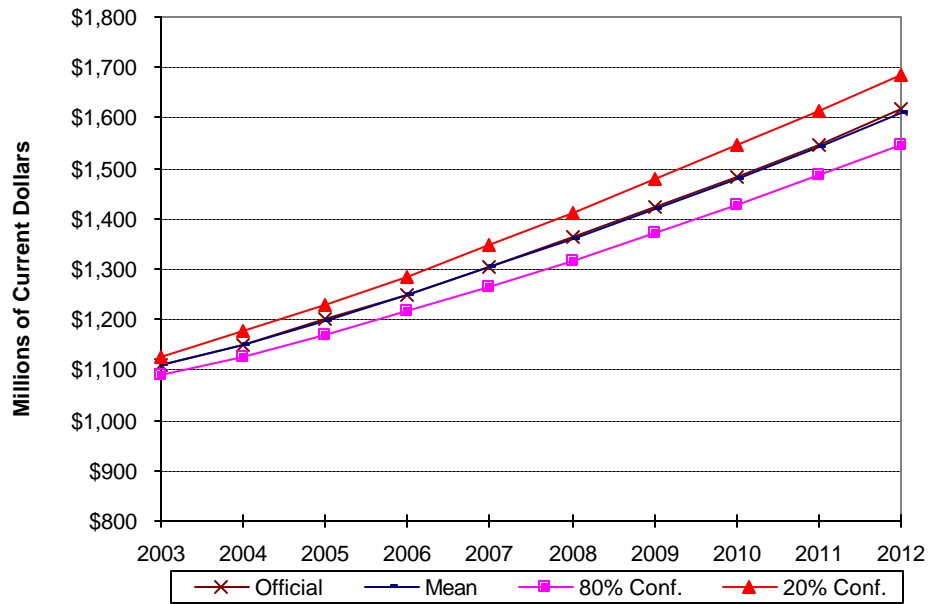
<b>Fiscal Year Percentile</b>	<b>2002 Actual</b>	<b>2003 50%</b>	<b>2004 50%</b>	<b>2005 50%</b>	<b>2006 50%</b>	<b>2007 50%</b>	<b>2008 50%</b>	<b>2009 50%</b>	<b>2010 50%</b>	<b>2011 50%</b>	<b>2012 50%</b>
<b>Gasoline Tax</b>	\$434.8	\$447.9	\$460.2	\$474.5	\$489.0	\$504.2	\$520.3	\$536.2	\$553.4	\$569.8	\$588.8
<b>Use Fuel Tax</b>	161.5	166.4	171.0	176.9	182.8	189.5	195.9	203.1	210.6	217.8	225.7
<b>Motor Carrier Fee</b>	29.3	31.8	32.8	33.9	34.7	35.8	36.8	38.0	39.1	40.1	41.3
<b>Vehicle License Tax</b>	270.7	281.1	300.3	320.5	343.3	368.3	394.0	421.4	450.8	480.5	512.8
<b>Registration</b>	138.2	137.9	142.3	147.0	151.0	155.6	160.4	165.6	170.5	175.2	180.5
<b>Other</b>	41.9	42.6	44.5	46.7	49.0	51.6	54.2	57.1	60.1	63.1	66.5
<b>Total</b>	\$1,076.4	\$1,107.7	\$1,151.1	\$1,199.5	\$1,249.8	\$1,305.0	\$1,361.6	\$1,421.4	\$1,484.5	\$1,546.5	\$1,615.6

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

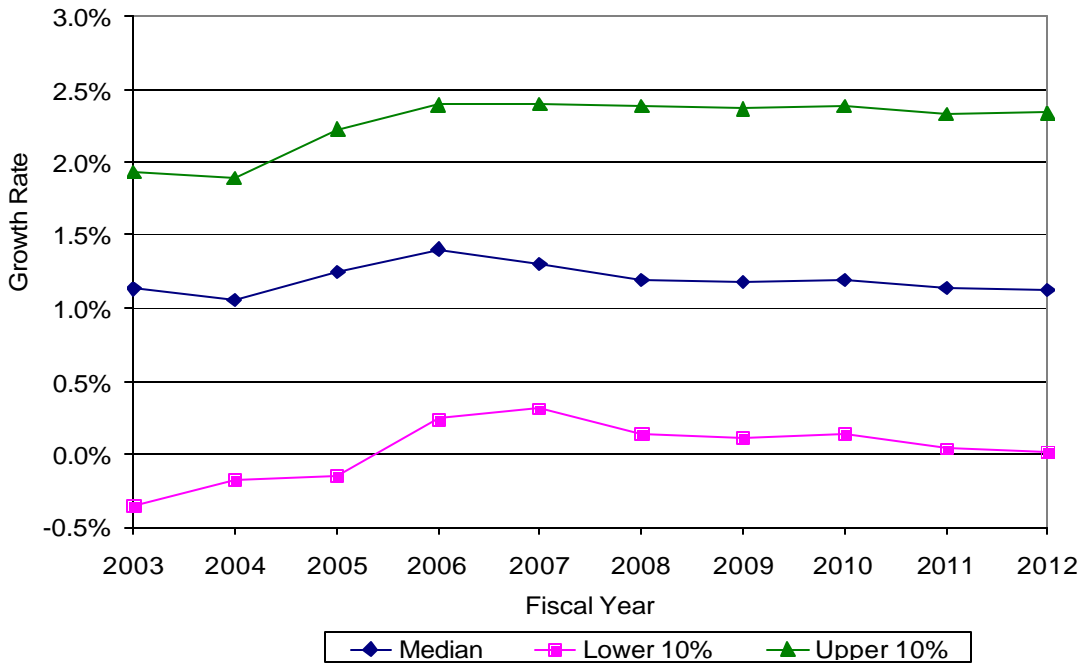
<b>Fiscal Year</b>	<b>Mean</b>	<b>10%</b>	<b>20%</b>	<b>30%</b>	<b>40%</b>	<b>50%</b>	<b>60%</b>	<b>70%</b>	<b>80%</b>	<b>90%</b>
<b>2003</b>	\$1,107.9	\$1,138.6	\$1,125.2	\$1,118.5	\$1,112.0	\$1,107.7	\$1,103.3	\$1,097.0	\$1,090.1	\$1,079.3
<b>2004</b>	1,150.1	1,192.6	1,176.0	1,166.0	1,157.1	1,151.1	1,143.8	1,135.3	1,124.2	1,109.9
<b>2005</b>	1,197.8	1,246.6	1,229.1	1,218.2	1,207.8	1,199.5	1,189.9	1,179.4	1,167.4	1,150.8
<b>2006</b>	1,248.7	1,307.8	1,285.0	1,272.9	1,262.1	1,249.8	1,239.3	1,226.9	1,215.3	1,195.0
<b>2007</b>	1,302.9	1,367.9	1,347.8	1,330.9	1,320.6	1,305.0	1,292.0	1,279.6	1,265.7	1,240.6
<b>2008</b>	1,359.2	1,434.7	1,409.2	1,392.1	1,375.5	1,361.6	1,348.9	1,335.7	1,317.7	1,287.9
<b>2009</b>	1,417.7	1,504.8	1,476.9	1,453.5	1,435.7	1,421.4	1,407.9	1,389.8	1,370.7	1,341.9
<b>2010</b>	1,478.5	1,573.5	1,544.8	1,517.4	1,497.7	1,484.5	1,464.7	1,447.4	1,428.3	1,393.0
<b>2011</b>	1,541.9	1,651.9	1,614.5	1,586.3	1,567.9	1,546.5	1,528.9	1,506.9	1,486.2	1,447.6
<b>2012</b>	1,609.3	1,726.9	1,684.7	1,662.9	1,639.6	1,615.6	1,593.1	1,569.3	1,546.4	1,503.9

## OFFICIAL FORECAST RESULTS (Current Dollars in Millions)

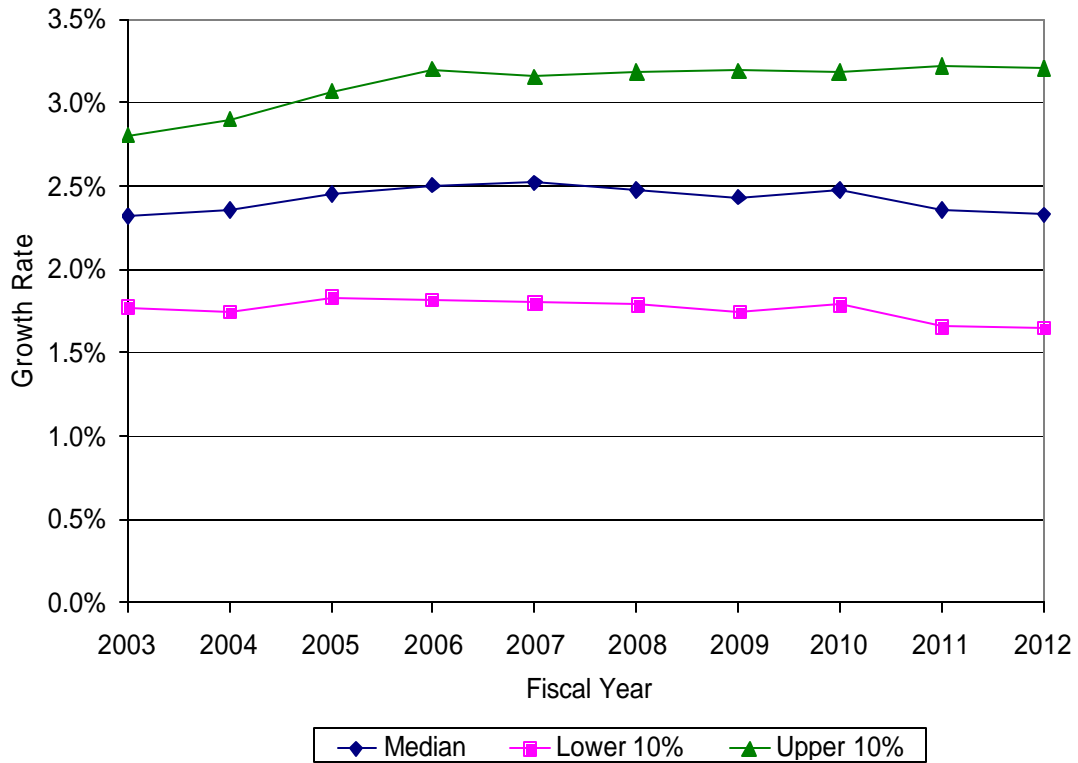
Fiscal Year	Official Forecast	Mean Forecast	80% Conf. Interval	20% Conf. Interval
2003	\$1,107.7	\$1,107.9	\$1,090.1	\$1,125.2
2004	1,151.1	1,150.1	1,124.2	1,176.0
2005	1,199.5	1,197.8	1,167.4	1,229.1
2006	1,249.8	1,248.7	1,215.3	1,285.0
2007	1,305.0	1,302.9	1,265.7	1,347.8
2008	1,361.6	1,359.2	1,317.7	1,409.2
2009	1,421.4	1,417.7	1,370.7	1,476.9
2010	1,484.5	1,478.5	1,428.3	1,544.8
2011	1,546.5	1,541.9	1,486.2	1,614.5
2012	1,615.6	1,609.3	1,546.4	1,684.7
<b>Total</b>	<b>\$13,442.7</b>	<b>\$13,414.0</b>	<b>\$13,012.0</b>	<b>\$13,893.2</b>



### ARIZONA REAL INCOME PER CAPITA

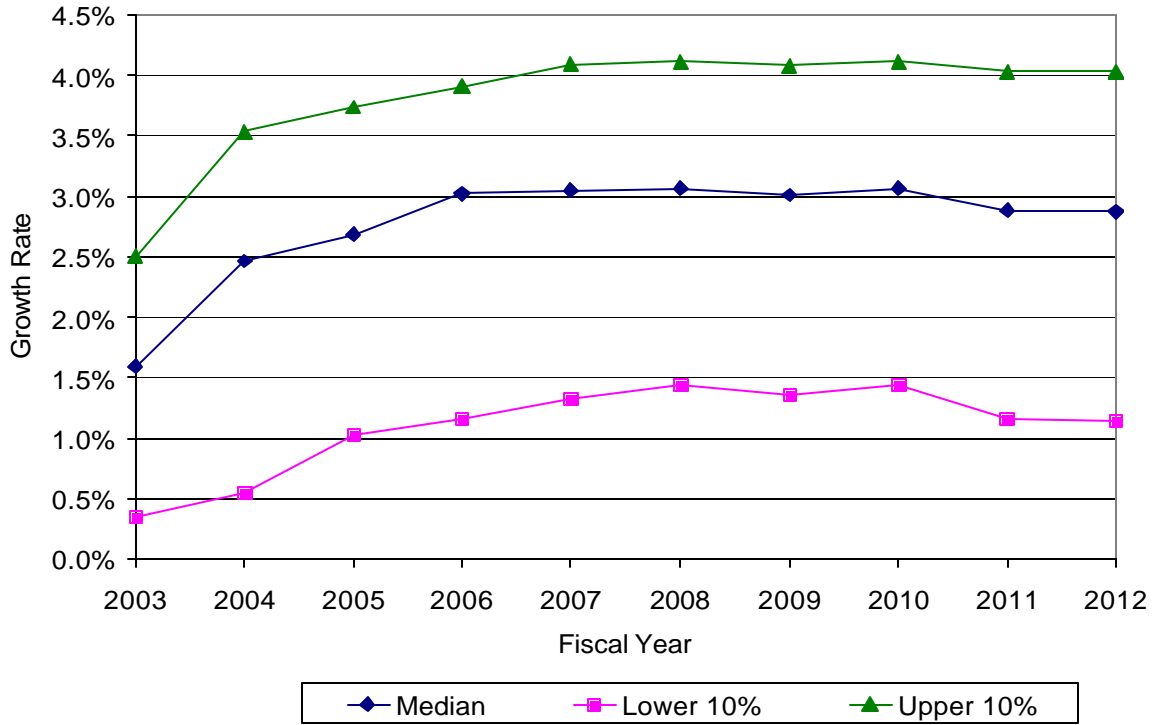


### ARIZONA POPULATION GROWTH





### ARIZONA WAGE & SALARY EMPLOYMENT



## PANELIST MEAN DATA VALUES

	Income Growth	Population Growth	Wage & Salary Employment
<b>FY 2003</b>			
<b>Upper 10%</b>	1.93	2.80	2.50
<b>Lower 10%</b>	-0.36	1.77	0.35
<b>Median</b>	1.13	2.32	1.59
<b>FY 2004</b>			
<b>Upper 10%</b>	1.89	2.90	3.53
<b>Lower 10%</b>	-0.17	1.75	0.54
<b>Median</b>	1.05	2.35	2.47
<b>FY 2005</b>			
<b>Upper 10%</b>	2.22	3.07	3.74
<b>Lower 10%</b>	-0.15	1.83	1.02
<b>Median</b>	1.25	2.45	2.68
<b>FY 2006</b>			
<b>Upper 10%</b>	2.39	3.20	3.91
<b>Lower 10%</b>	0.24	1.82	1.16
<b>Median</b>	1.40	2.50	3.02
<b>FY 2007</b>			
<b>Upper 10%</b>	2.40	3.16	4.09
<b>Lower 10%</b>	0.31	1.80	1.33
<b>Median</b>	1.30	2.52	3.05
<b>FY 2008</b>			
<b>Upper 10%</b>	2.38	3.18	4.11
<b>Lower 10%</b>	0.14	1.79	1.44
<b>Median</b>	1.19	2.48	3.07
<b>FY 2011</b>			
<b>Upper 10%</b>	2.33	3.22	4.03
<b>Lower 10%</b>	0.04	1.66	1.16
<b>Median</b>	1.14	2.35	2.89
<b>FY 2016</b>			
<b>Upper 10%</b>	2.37	3.18	4.03
<b>Lower 10%</b>	-0.05	1.59	1.11
<b>Median</b>	1.06	2.22	2.80
<b>FY 2021</b>			
<b>Upper 10%</b>	2.35	3.15	4.06
<b>Lower 10%</b>	-0.18	1.51	1.04
<b>Median</b>	1.03	2.12	2.75
<b>FY 2026</b>			
<b>Upper 10%</b>	2.37	3.15	4.04
<b>Lower 10%</b>	-0.26	1.45	0.95
<b>Median</b>	1.00	2.08	2.66

All data in the above table are percentage growth rates.

## ARIZONA REAL PER CAPITA INCOME GROWTH

	2003	2004	2005	2006	2007	2008	2011	2016	2021	2026
<b>Panelist 1</b>										
Upper 10%	1.10	1.50	1.90	2.30	2.20	2.20	2.20	2.20	2.20	2.20
Lower 10%	-0.50	-0.70	-0.70	-0.30	0.00	-0.50	-0.70	-1.00	-1.50	-2.00
Median	0.30	0.30	0.50	0.80	0.50	0.30	0.30	0.40	0.40	0.40
<b>Panelist 2</b>										
Upper 10%	1.25	1.25	1.50	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Lower 10%	-1.00	-1.00	0.00	0.00	0.25	0.25	0.25	0.25	0.25	0.25
Median	0.50	0.50	1.00	1.50	1.25	1.00	0.75	0.50	0.50	0.50
<b>Panelist 3</b>										
Upper 10%	2.50	2.50	3.50	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Lower 10%	-4.00	-1.50	-3.00	-2.00	-2.00	-3.00	-3.00	-3.00	-3.00	-3.00
Median	1.50	1.70	1.50	1.30	1.00	1.00	1.00	1.00	1.00	1.00
<b>Panelist 4</b>										
Upper 10%	3.00	3.10	3.10	3.00	3.00	3.00	3.00	3.50	3.50	3.50
Lower 10%	1.00	1.10	1.10	1.00	1.00	1.00	0.90	0.80	0.70	0.60
Median	3.00	2.10	2.10	2.00	2.00	2.00	1.90	1.90	1.80	1.70
<b>Panelist 5</b>										
Upper 10%	1.60	1.70	1.90	2.00	2.10	2.20	2.10	2.00	1.90	2.10
Lower 10%	0.70	0.80	0.60	0.60	0.50	0.30	0.10	0.00	-0.70	-0.90
Median	1.20	1.40	1.40	1.30	1.30	1.10	1.00	0.70	0.60	0.50
<b>Panelist 6</b>										
Upper 10%	1.00	1.00	1.20	1.50	1.50	1.70	1.50	1.50	1.50	1.50
Lower 10%	-1.00	-1.00	-1.00	0.00	0.00	0.50	0.30	0.30	0.30	0.30
Median	0.00	0.00	0.50	1.00	1.00	1.00	0.80	0.80	0.80	0.80
<b>Panelist 7</b>										
Upper 10%	2.60	2.10	2.20	2.10	2.10	2.10	2.10	2.10	2.10	2.10
Lower 10%	0.00	-0.50	-0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Median	1.00	0.50	0.90	0.80	0.80	0.80	0.80	0.80	0.80	0.80
<b>Panelist 8</b>										
Upper 10%	2.00	2.00	2.10	2.10	2.10	2.10	1.90	1.90	1.80	1.80
Lower 10%	1.50	1.30	1.40	1.30	1.30	1.30	1.20	0.80	0.80	0.80
Median	1.80	1.70	1.90	1.80	1.80	1.80	1.60	1.50	1.40	1.30
<b>Panelist 9</b>										
Upper 10%										
Lower 10%										
Median	1.10	1.00	0.70	0.60	0.50	0.50				
<b>Panelist 10</b>										
Upper 10%	3.00	2.50	2.30	2.00	1.80	1.60	1.60	1.60	1.60	1.60
Lower 10%	0.50	0.30	0.00	-0.20	-0.20	-0.20	-0.40	-0.40	-0.40	-0.40
Median	1.00	1.30	1.50	1.80	1.60	1.40	1.00	0.80	0.80	0.80
<b>Panelist 11</b>										
Upper 10%	1.25	1.25	2.50	2.90	3.20	2.90	2.90	2.90	2.90	2.90
Lower 10%	-0.75	-0.50	0.50	2.00	2.20	1.75	1.75	1.75	1.75	1.75
Median	1.00	1.00	1.75	2.50	2.60	2.20	2.20	2.20	2.20	2.20

All data in the above table are percentage growth rates.

## ARIZONA POPULATION GROWTH

	2003	2004	2005	2006	2007	2008	2011	2016	2021	2026
<b>Panelist 1</b>										
Upper 10%	3.30	3.30	3.50	3.90	3.70	3.60	3.50	3.50	3.50	3.50
Lower 10%	1.70	1.60	1.90	1.90	1.90	1.80	1.50	1.50	1.40	1.40
Median	2.30	2.20	2.50	2.70	3.00	2.70	2.30	2.10	2.00	2.00
<b>Panelist 2</b>										
Upper 10%	2.30	2.75	3.25	3.50	3.50	3.50	3.50	3.50	3.50	3.50
Lower 10%	1.00	1.20	1.20	1.50	2.00	2.25	2.25	2.25	2.25	2.25
Median	1.80	2.20	2.50	2.75	3.00	3.00	2.90	2.90	2.75	2.75
<b>Panelist 3</b>										
Upper 10%	2.50	2.60	2.70	2.80	2.90	2.90	3.00	3.00	3.10	3.20
Lower 10%	1.80	1.50	1.00	1.00	1.00	0.80	0.80	0.80	0.80	0.80
Median	2.30	2.20	2.20	2.20	2.20	2.10	2.00	1.70	1.70	1.70
<b>Panelist 4</b>										
Upper 10%	3.00	3.00	3.00	2.90	2.90	2.90	2.80	2.80	2.80	2.80
Lower 10%	2.00	2.00	2.00	1.90	1.90	1.90	1.70	1.70	1.70	1.60
Median	2.50	2.50	2.50	2.40	2.40	2.40	2.30	2.30	2.30	2.30
<b>Panelist 5</b>										
Upper 10%	2.50	2.60	2.60	2.80	3.00	3.10	3.40	3.50	3.60	3.70
Lower 10%	2.00	1.80	1.70	1.40	1.30	1.20	1.00	0.60	0.50	0.30
Median	2.30	2.20	2.20	2.10	2.10	2.00	1.90	1.60	1.50	1.40
<b>Panelist 6</b>										
Upper 10%	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Lower 10%	1.80	1.80	1.80	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Median	2.30	2.30	2.30	2.40	2.40	2.40	2.20	2.20	2.00	2.00
<b>Panelist 7</b>										
Upper 10%	3.80	3.90	4.40	4.40	3.90	3.90	3.90	3.90	3.90	3.90
Lower 10%	2.00	2.10	2.60	2.60	2.10	2.10	2.10	2.10	2.10	2.10
Median	2.90	3.00	3.50	3.50	3.00	3.00	3.00	3.00	3.00	3.00
<b>Panelist 8</b>										
Upper 10%	2.40	2.50	2.60	2.90	3.20	3.30	3.00	2.80	2.70	2.60
Lower 10%	1.90	2.00	2.10	2.20	2.10	2.00	1.80	1.70	1.70	1.60
Median	2.20	2.20	2.40	2.50	2.50	2.40	2.10	2.00	1.90	1.80
<b>Panelist 9</b>										
Upper 10%	2.30	2.50	2.40	2.40	2.50	2.60				
Lower 10%	1.80	1.90	1.90	1.80	1.80	1.90				
Median	2.00	2.20	2.10	2.10	2.20	2.30				
<b>Panelist 10</b>										
Upper 10%	3.00	2.90	2.80	2.80	2.70	2.70	2.60	2.50	2.40	2.30
Lower 10%	2.00	1.90	1.90	1.90	1.70	1.70	1.40	1.20	1.00	0.80
Median	2.50	2.40	2.30	2.30	2.20	2.20	2.00	1.80	1.60	1.60
<b>Panelist 11</b>										
Upper 10%	2.75	2.80	3.50	3.80	3.50	3.50	3.50	3.25	3.00	3.00
Lower 10%	1.50	1.50	2.00	2.30	2.50	2.50	2.50	2.50	2.10	2.10
Median	2.40	2.40	2.50	2.60	2.70	2.80	2.80	2.60	2.40	2.20

All data in the above table are percentage growth rates.

## ARIZONA WAGE & SALARY EMPLOYMENT GROWTH

	2003	2004	2005	2006	2007	2008	2011	2016	2021	2026
<b>Panelist 1</b>										
Upper 10%	2.00	4.50	5.00	6.00	6.20	6.00	5.80	5.80	5.80	5.80
Lower 10%	-1.00	0.00	2.00	2.50	2.50	2.50	2.00	2.00	2.00	2.00
Median	0.00	2.50	3.20	4.80	4.80	4.30	4.00	4.00	4.00	4.00
<b>Panelist 2</b>										
Upper 10%	1.50	3.50	4.00	4.00	4.50	4.00	4.00	4.00	4.00	4.00
Lower 10%	-1.00	-1.00	0.00	0.50	1.00	1.00	1.00	1.00	1.00	1.00
Median	0.50	2.00	2.50	3.00	3.00	2.75	2.50	2.50	2.50	2.50
<b>Panelist 3</b>										
Upper 10%	0.00	3.00	3.50	3.50	3.70	3.50	3.00	3.00	3.00	2.60
Lower 10%	-1.20	-2.00	-2.00	-2.00	-1.50	-1.50	-2.00	-2.00	-2.50	-3.00
Median	-0.80	1.00	1.50	2.80	2.70	2.50	2.30	2.10	2.00	1.50
<b>Panelist 4</b>										
Upper 10%	4.00	4.20	4.20	4.20	4.30	4.30	4.40	4.50	4.50	4.50
Lower 10%	1.50	1.70	1.70	1.70	1.60	1.60	1.40	1.40	1.20	1.00
Median	3.00	3.20	3.20	3.20	3.20	3.20	3.00	2.80	2.80	2.60
<b>Panelist 5</b>										
Upper 10%	3.00	3.50	3.60	4.00	4.20	4.40	4.90	5.00	5.30	5.60
Lower 10%	1.30	1.20	1.10	1.00	0.90	0.90	0.80	0.80	0.80	0.70
Median	2.00	2.50	2.60	2.60	2.50	2.50	2.50	2.30	2.20	2.20
<b>Panelist 6</b>										
Upper 10%	4.00	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Lower 10%	0.00	0.00	1.00	1.00	1.50	1.50	1.30	1.00	1.00	1.00
Median	3.00	3.00	2.90	2.90	2.90	2.90	2.80	2.80	2.80	2.70
<b>Panelist 7</b>										
Upper 10%	3.10	3.80	3.50	3.70	4.00	4.40	4.10	3.90	3.90	3.80
Lower 10%	1.10	1.80	1.50	1.70	2.00	2.40	2.10	1.90	1.90	1.80
Median	2.60	3.30	3.00	2.70	3.00	3.40	3.10	2.90	2.90	2.80
<b>Panelist 8</b>										
Upper 10%	3.10	3.00	3.10	3.30	3.40	3.60	3.70	3.70	3.70	3.70
Lower 10%	2.30	2.20	2.10	2.20	2.30	2.50	2.40	2.40	2.40	2.40
Median	2.90	2.80	2.80	2.90	3.00	3.20	3.30	3.30	3.30	3.30
<b>Panelist 9</b>										
Upper 10%										
Lower 10%										
Median										
<b>Panelist 10</b>										
Upper 10%	3.00	3.00	3.00	2.60	2.60	2.60	2.40	2.40	2.40	2.40
Lower 10%	1.00	1.00	1.00	0.50	0.50	0.50	0.60	0.60	0.60	0.60
Median	1.70	2.60	2.60	2.40	2.40	2.40	2.40	2.30	2.00	2.00
<b>Panelist 11</b>										
Upper 10%	1.25	2.25	3.00	3.25	3.50	3.75	3.50	3.50	3.50	3.50
Lower 10%	-0.50	0.50	1.75	2.50	2.50	3.00	2.00	2.00	2.00	2.00
Median	1.00	1.75	2.50	2.90	3.00	3.50	3.00	3.00	3.00	3.00

All data in the above table are percentage growth rates.

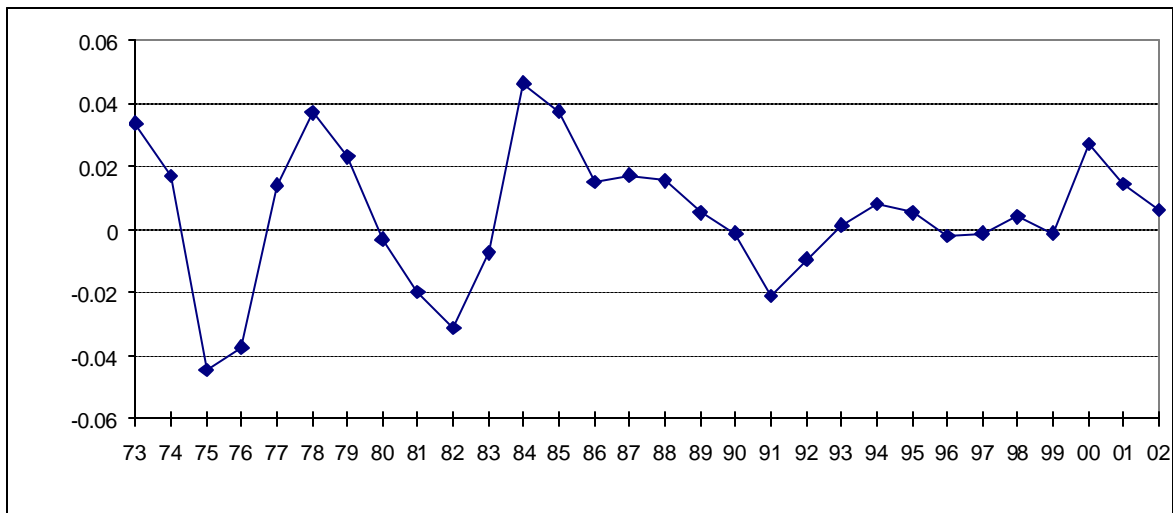
**HISTORICAL DATA**  
**ARIZONA REAL PER CAPITA INCOME GROWTH**  
**Using Phoenix CPI to Measure Inflation**  
**(Annual Percent Change)**

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

1960	1970	1980	-0.3%	1990	-0.1%	2000	2.7%
1961	1971	1981	-2.0%	1991	-2.1%	2001	1.4%
1962	1972	1982	-3.1%	1992	-0.9%	2002*	0.6%
1963	1973	1983	-0.7%	1993	0.1%	2003	
1964	1974	1984	4.6%	1994	0.8%	2004	
1965	1975	1985	3.8%	1995	0.5%	2005	
1966	1976	1986	1.5%	1996	-0.2%	2006	
1967	1977	1987	1.7%	1997	-0.1%	2007	
1968	1978	1988	1.6%	1998	0.4%	2008	
1969	1979	1989	0.5%	1999	-0.1%	2009	

\* Estimate

**HISTORICAL DATA - GRAPHED**



**HISTORICAL DATA - ANALYSIS**

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	-0.1%	2.7%	1.0%	1.1%	0.1%	2.2%
10 Years	-0.2%	2.7%	0.6%	0.9%	-0.1%	1.6%
Full Period	-4.5%	4.6%	0.5%	2.2%	-2.2%	3.4%

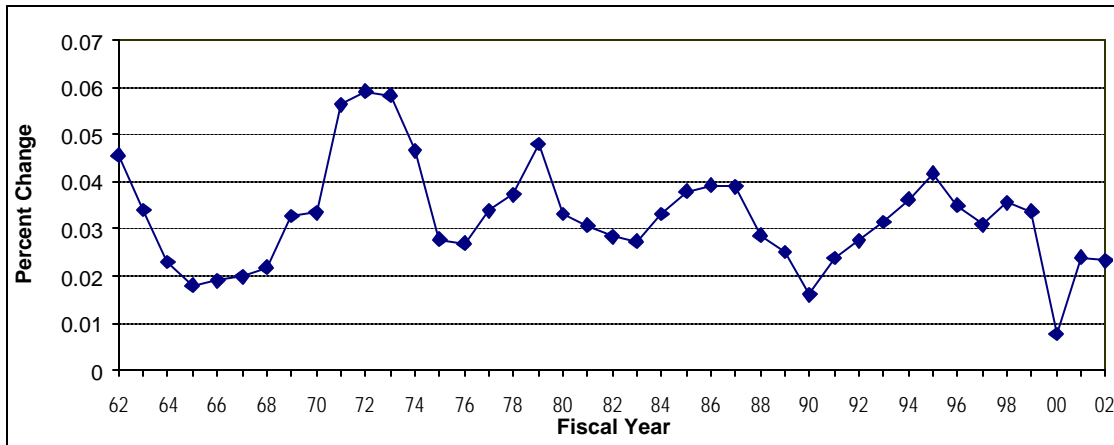
**Historical Data  
ARIZONA POPULATION GROWTH  
(Annual Percent Change)**

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

1960		1970	3.3%	1980	3.3%	1990	1.6%	2000	0.8%
1961		1971	5.6%	1981	3.1%	1991	2.4%	2001	2.4%
1962	4.5%	1972	5.9%	1982	2.8%	1992	2.7%	2002	2.3%
1963	3.4%	1973	5.8%	1983	2.7%	1993	3.1%	2003	
1964	2.3%	1974	4.7%	1984	3.3%	1994	3.6%	2004	
1965	1.8%	1975	2.8%	1985	3.8%	1995	4.2%	2005	
1966	1.9%	1976	2.7%	1986	3.9%	1996	3.5%	2006	
1967	2.0%	1977	3.4%	1987	3.9%	1997	3.1%	2007	
1968	2.2%	1978	3.7%	1988	2.9%	1998	3.6%	2008	
1969	3.3%	1979	4.8%	1989	2.5%	1999	3.4%	2009	

DES smoothed out the 1991 to 1995 figures. 1996-1999 data from October 2000 approved DES estimates and 2000-2002 from February 1997 approved DES projections.

**HISTORICAL DATA - GRAPHED**



**HISTORICAL DATA - ANALYSIS**

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	0.76%	3.56%	2.48%	1.11%	1.39%	3.48%
10 Years	0.76%	4.18%	3.00%	0.96%	2.17%	3.68%
Full Period	0.76%	5.91%	3.25%	1.11%	1.98%	4.66%

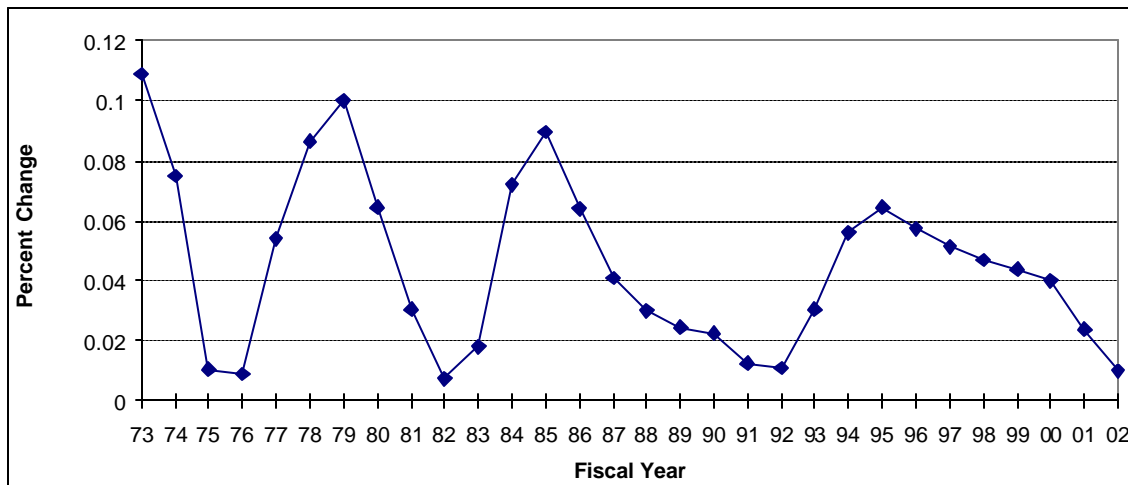
**HISTORICAL DATA  
ARIZONA WAGE & SALARY EMPLOYMENT GROWTH  
(Annual Percent Change)**

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

1960	1970	1980	6.5%	1990	2.3%	2000	4.0%
1961	1971	1981	3.1%	1991	1.3%	2001	2.4%
1962	1972	1982	0.8%	1992	1.1%	2002*	1.0%
1963	1973	1983	1.8%	1993	3.1%	2003	
1964	1974	1984	7.2%	1994	5.6%	2004	
1965	1975	1985	9.0%	1995	6.5%	2005	
1966	1976	1986	6.4%	1996	5.8%	2006	
1967	1977	1987	4.1%	1997	5.2%	2007	
1968	1978	1988	3.0%	1998	4.7%	2008	
1969	1979	1989	2.5%	1999	4.4%	2009	

\* Estimate

**HISTORICAL DATA - GRAPHED**



**HISTORICAL DATA - ANALYSIS**

Period	Historical		Mean	Std. Dev.	80% Range	
	Min.	Max.			Lower	Upper
5 Years	1.0%	4.7%	3.3%	1.6%	1.6%	4.6%
10 Years	1.0%	6.5%	4.3%	1.7%	2.3%	5.8%
Full Period	0.8%	10.9%	4.5%	2.9%	1.0%	8.7%