

# ARIZONA'S ECONOMY

ECONOMIC AND BUSINESS RESEARCH CENTER

## Don't This Road Look Rough and Rocky

By Marshall J. Vest, Forecasting Project Director

June 1, 2011



Arizona's economy shows evidence that it has finally entered the recovery stage but serious headwinds will restrain progress. The most serious issue is housing (too much inventory and falling prices). A close second and related issue is the lack of mobility of the population, which will keep population growth depressed for some time. Finally, reduced spending at the state and local levels will subtract significantly from aggregate demand. Results from the 2010 Census highlight the importance of the Hispanic population in Arizona, which accounted for nearly half of population growth during the past decade.

The nation's economy is performing well, considering a number of factors that are challenging growth including the dreadful situation for housing, rising prices, supply chain disruptions from disasters in Japan, contractionary effects of reduced state and local government spending, and bad weather. Consensus forecasts are for

growth to accelerate in the second half and continue growing at almost a 3% annual rate over the next two years.

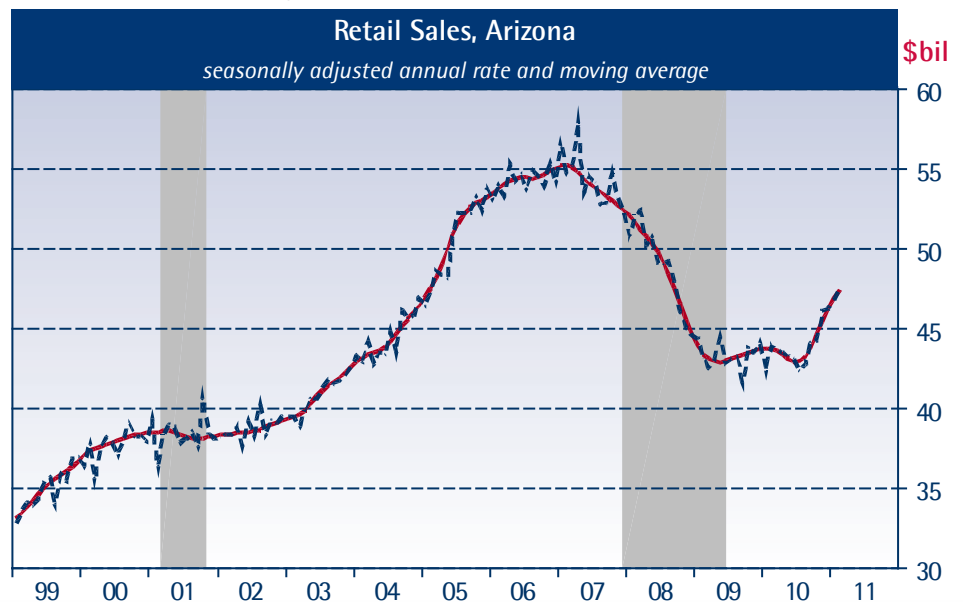
By contrast, Arizona's economy has been stuck in neutral and bouncing along the bottom since the recession officially ended in June 2009. Only in the past few months has evidence begun to appear that the recovery has finally arrived.

Arizona's consumers have started to "squeeze the trigger" on spending. Retail sales reached bottom in June of last year and have increased at double-digit annual rates (seasonally adjusted) in each of the past six months (data through February) (Exhibit 1). Auto sales have been particularly strong, registering increases in the 20-30% range in recent months as consumers satisfy the need to

replace aging vehicles. Higher gasoline prices, which climbed in recent months to near \$4.00 per gallon, haven't exerted much constraint on other categories either. Apparel sales are growing by 15-20%, general merchandise sales at a 9-10% annual rate, and even building materials sales are growing at double-digit annual rates. Even furniture and food & liquor store sales are no longer declining, although the increases remain in the low single-digit range. Restaurant and bar sales also are showing increases in the neighborhood of 20% annual rates.

Although initial unemployment insurance claims nationwide moved upward recently, that's not the case in Arizona. Claims continue to decline rapidly although they are still much higher than normal. Arizona's unemployment rate fell to 9.5%

Exhibit 1: Sales No Longer Stuck On Bottom



**IN THIS ISSUE**

Don't This Road Look Rough and Rocky.....1  
 2010 Census Demographic Profiles Released.....4  
 The L&D Arizona Financial Index Reflects Market Resilience...7  
 Property Tax Shifting from Businesses to Homeowners.....9

Arizona's Housing Market Haunted by Shadow Inventory.....12  
 Forecast Tables.....17  
 Arizona Economic Indicators.....18

“Recent downward revisions to employment show that the jobs recovery in Arizona didn't start until September of last year.”

in March, down from 10.4% at the end of 2009. Unemployment should fall another full percentage point by year end.

Recent downward revisions to employment show that the jobs recovery in Arizona didn't start until September of last year. After falling 312,000 during the recession, all of 23,500 jobs have been restored. Strong growth in export-based manufacturing is a key component in the nation's recovery, but manufacturing employment in Arizona remains near cycle lows. After falling by nearly 30%, or 60,000 jobs over the past decade, manufacturing employment is now back to a level was first attained back in 1980! Only a modest recovery is expected. Aerospace manufacturing, buoyed by missile production, has been the strongest component in recent years but is now declining and will move lower going forward as defense spending shrinks. Computer and electronic parts as well as nondurable manufacturing have little upside potential. That leaves fabricated metals and other

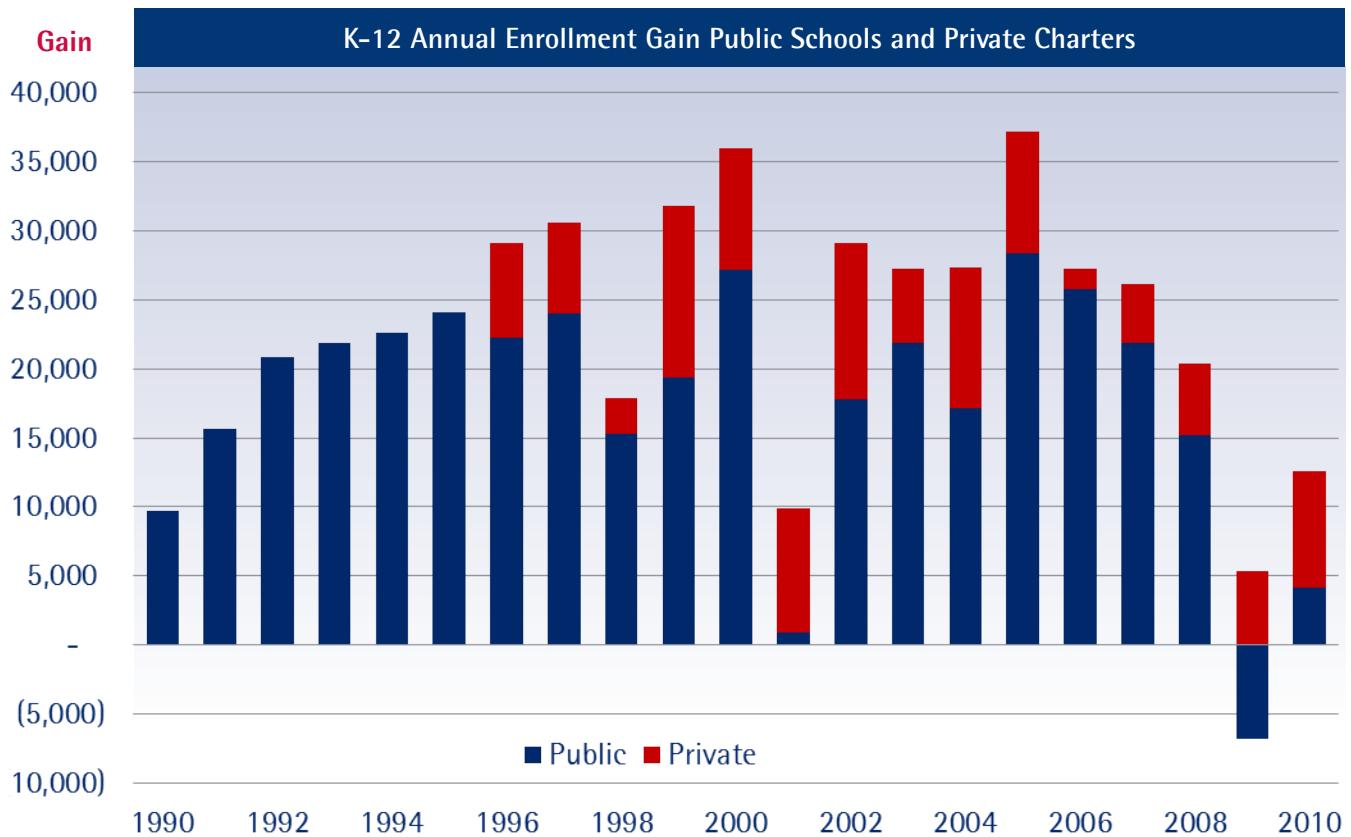
durables (such as biotechnology and solar) to lead the way.

Given budget challenges at both state and local levels, government employment statewide has declined by an unprecedented 25,000 so far. Parents also have been sending their children to (privately-owned) charter schools rather than public schools. While private educational services continues growing at double-digit annual rates, public school enrollment actually declined in 2009 and grew very little in 2010 (Exhibit 2).

With the ending of federal assistance, the state cut \$1.1 billion from the FY2011-12 budget. As expected, the cuts came largely from Medicaid (\$511 million) and education (K-12 at \$163 million and universities at \$198 million). Some costs also were shifted to cities and counties. The public sector will continue to be a drag on the economy for the next 2-3 years.

The biggest concern and downside risk is the continuation of falling housing prices

Exhibit 2: Public School Enrollment Has Declined



and large inventory of vacant housing. The 2010 Census found 463,000 vacant houses statewide. That's enough to accommodate an entire decade of population growth at "normal" rates. During the past decade, Arizona's population increased by 1-1/4 million. Roughly 180,000 of the 463,000 are vacation or second homes so even if the house was occupied, the owners are counted in their home state and the house recorded as vacant. Subtracting second homes leaves roughly 280,000 or roughly 10% vacant. Historically, "normal" vacancy rates range between 1-2% for the entire housing stock (and roughly 8% for apartments).

Home sales, driven by investor interest, have strengthened in recent months in both Phoenix and Tucson metro areas. Even so, home prices, as measured by realtor data and Standard & Poor's Case-Shiller indexes, continue to fall due to the large number of vacant houses and the large portion (over 55% in 2010) that are distressed sales (bank-owned and "short sales").

We continue to forecast an anemic recovery for the next 2-3 years due to the drag from the public sector, delayed recovery in construction activity, and lack of mobility of the nation's population, which will depress migration flows and population growth.

After declining in 2010 and virtually no change in 2011, population will grow by a small amount in 2012. Annual growth won't top 100,000 until 2014 and doesn't exceed a 2% growth rate until 2015. We expect a little less than million new residents to be added over the decade of the teens compared to a 1.25 million increase during the aughts. Most of the growth will occur in the latter half of the decade.

Subdued gains in population will limit growth in other aggregate measures as well. Employment will grow very little near term, and it will be 2015 before job growth tops 3%. Personal income will grow 3.3% this year, then only 2.7% in 2012. The payroll tax cut boosted growth this year and will subtract next year when it expires (contributions to social security represent a subtraction from income). After a temporary splurge in spending, retail sales growth will slow next year. ■

## >>2010 Census Highlights

Information from the 2010 enumeration of all residents continues to become available for states and smaller geographic areas. In mid-May, demographic profiles data was released. Here are some of the highlights.

- U.S. Census Bureau estimates of Arizona's population predicted that the Census enumeration would find 6,654,358 residents. The actual count was 6,392,017, or over a quarter million shy. The 4.1% miss was the largest "under-count" of any state.
- Maricopa and Pima Counties account for nearly all the shortfall. Maricopa County's 3.8 million county is 235,704 short of expectations. In Pima County, the count is 45,023 lower than expected, putting the resident population just below 1 million (980,263). Surprisingly, nearly 12,000 *more* people were counted in Pinal County than estimated with more than 375,000 residents enumerated.
- Hispanics now account for 29.6% of Arizona's population. That's up from 25.3% a decade ago. Hispanics account for 29.6% in Maricopa County, 34.6% in Pima, and 28.5% in Pinal. The highest and lowest proportions are in Santa Cruz (82.8%) and Apache (5.8%) counties.
- The 2010 Census counted 1,895,149 Hispanics statewide, an addition of 599,532 since the last decennial census. During the decade, the Hispanic population grew by 46.3%, compared to 17.3% for non-Hispanics (an increase of 661,853). Therefore, Hispanics accounted for nearly half (47.5%) of Arizona's population growth over the decade.
- The American Indian population grew more slowly than the total population to reach 296,529 or 4.6% of all Arizonans. Only Oklahoma has a larger American Indian population.
- The median age of Arizonans is 35.9 years, about a year older than ten years earlier. Seventeen percent are 62 and older.
- Arizona's population is one of the youngest in the nation. Over a quarter (25.5%) of Arizona's population is under 18 years of age; only five states have higher proportions (UT, ID, TX, AK, GA). Of the under 18 population, 43.2% is Hispanic, ranking Arizona 4th behind only NM, CA, and TX.
- While Hispanics accounted for nearly half of Arizona's population growth over the decade, this demographic provided over 80% of the growth in the under 18 population.
- Phoenix is the 6th largest city in America with 1,445,632 residents. The city of Tucson ranks 33rd with 520,116 residents. Mesa follows closely with 439,041 and a 38th ranking. Within Arizona, Phoenix added the most new residents over the decade (nearly 125,000) followed by Gilbert (98,756), Surprise (86,669), and Chandler (59,542).

# 2010 Census Demographic Profiles Released for Arizona Cities and Towns

By Valorie H. Rice

On May 12th demographic profiles from the 2010 Census were released for Arizona counties, cities and towns. These profiles yield information on changes in the age of the population, household relationships, and housing vacancy for these smaller geographies. The next important information to come out of the 2010 Census will provide data separated out by age, race, and sex, and will be released from June through August.

## Age

The median age in Arizona is 35.9, which is older than we were in 2000 by about a year. While most counties in the state grew older, some significantly so, Pinal grew

younger and Yuma stayed essentially the same as compared to the last census. Pinal saw the largest total population gain of all the counties over the decade and was the only one to see an increase in the under 18 population leaving it with a median age of 35.3 (it was 37.1 in 2000). This trend moved the county from 11th to 8th when ranked by median age. La Paz retained its ranking as the oldest county with a median age of 53.9 and it was also the county that increased the most in age, adding a little over 7 years to its median age as compared to 2000. Coconino replaced Apache as the youngest at 31. In 2000, the range in median age was from 27 to 46.8. (See [Table 1.](#))

**Table 1:** Age Distribution Compared 2000 Census and 2010 Census

	2010				2000		
	Median age	Rank	% Under 18	% 65 +	Median age	% Under 18	% 65 +
Arizona	35.9		25.5	13.8	34.2	26.6	13.0
Coconino	31.0	1	23.6	8.9	29.6	28.7	7.0
Graham	31.6	2	28.4	11.4	30.9	30.1	11.9
Apache	32.4	3	31.7	11.6	27.0	38.5	8.3
Yuma	33.8	4	28.2	15.7	33.9	28.9	16.5
Maricopa	34.6	5	26.4	12.1	33.0	27.0	11.7
Navajo	34.7	6	29.8	13.3	30.2	35.4	10.0
Greenlee	34.8	7	29.2	12.0	33.6	31.7	9.9
Pinal	35.3	8	26.5	13.9	37.1	25.1	16.2
Santa Cruz	35.6	9	30.7	13.1	31.8	33.6	10.7
Pima	37.7	10	23.0	15.4	35.7	24.6	14.2
Cochise	39.7	11	23.0	17.3	36.9	26.3	14.7
Mohave	47.6	12	20.6	23.3	42.9	23.1	20.5
Gila	47.9	13	21.4	23.2	42.3	25.1	19.8
Yavapai	49.2	14	19.1	24.1	44.5	21.1	22.0
La Paz	53.9	15	18.0	32.6	46.8	21.1	25.8

## Households

There are 2,380,990 households in Arizona, 26.4 percent of which include someone who is 65 or older and 33.6 percent that contain someone younger than 18. The average household size in Arizona is 2.63 persons, which is just slightly smaller than the 2.64 persons seen in 2000. Apache County has the largest households, with an average household size of 3.1. La Paz averages 2.19 persons per household and in line with being the oldest county; it has the most households with a member over 65 (see [Table 2](#)).

## Housing

As of April 2010, there were 2,844,526 housing units in Arizona, 83.7 percent of which were occupied. The number of households described earlier corresponds to the number of "occupied housing units". The state as a whole has a 16.3 percent vacancy rate which, as expected, is larger than 2000 (13.1). Of the 463,536 vacant housing units in Arizona, 184,327 of them are vacation or seasonal homes. Gila, La Paz, Navajo and Yuma counties have the largest percentage of seasonal homes.. Most homes are occupied by the owners and this stands through all counties, though Greenlee is an exception in that housing there is evenly split between owners and renters ([Tables 3 & 4](#)).

**Table 2:** Household Age and Size

	Total households	Percent Households with individuals under 18 years	Percent Households with individuals 65 and over	Average household size (number)
Arizona	2,380,990	33.6	26.4	2.63
Apache	22,771	42.3	27.8	3.10
Cochise	50,865	30.4	32.3	2.46
Coconino	46,711	33.1	18.8	2.69
Gila	22,000	25.3	40.1	2.39
Graham	11,120	41.4	27.7	3.01
Greenlee	3,188	37.5	23.3	2.64
La Paz	9,198	19.3	50.2	2.19
Maricopa	1,411,583	35.1	23.5	2.67
Mohave	82,539	24.5	39.9	2.39
Navajo	35,658	39.2	29.0	2.95
Pima	388,660	29.8	27.8	2.46
Pinal	125,590	37.0	28.8	2.78
Santa Cruz	15,437	45.6	29.5	3.05
Yavapai	90,903	22.8	39.3	2.28
Yuma	64,767	41.1	32.4	2.93

“The state as a whole has a 16.3 percent vacancy rate which, as expected, is larger than in 2000 (13.1). Of the 463,536 vacant housing units in Arizona, 184,327 of them are vacation or seasonal homes.”

**Table 3:** Housing Unit Status by County

	Total housing units	Occupied housing units	Percent owner occupied	Percent renter occupied
Arizona	2,844,526	2,380,990	66.0	34.0
Apache	32,514	22,771	75.2	24.8
Cochise	59,041	50,865	68.2	31.8
Coconino	63,321	46,711	60.9	39.1
Gila	32,698	22,000	76.2	23.8
Graham	12,980	11,120	72.7	27.3
Greenlee	4,372	3,188	50.0	50.0
La Paz	16,049	9,198	76.9	23.1
Maricopa	1,639,279	1,411,583	64.5	35.5
Mohave	110,911	82,539	69.9	30.1
Navajo	56,938	35,658	71.9	28.1
Pima	440,909	388,660	64.1	35.9
Pinal	159,222	125,590	76.1	23.9
Santa Cruz	18,010	15,437	67.6	32.4
Yavapai	110,432	90,903	70.8	29.2
Yuma	87,850	64,767	69.2	30.8

**Table 4:** Vacancy by Type

	Percent vacant housing units	Percent for rent	Percent rented & not occupied	Percent for sale only	% sold & not occupied	% seasonal, recreational, occasional use	Percent all other vacancies
Arizona	16.3	4.2	0.2	2.3	0.4	6.5	2.8
La Paz	42.7	3.7	0.3	2.3	0.3	33.1	3.0
Navajo	37.4	2.6	0.2	2.0	0.3	25.8	6.5
Gila	32.7	2.5	0.2	2.2	0.4	22.8	4.7
Apache	30.0	2.2	0.2	0.7	0.1	17.3	9.5
Greenlee	27.1	10.7	0.6	0.8	1.8	6.2	7.0
Yuma	26.3	2.9	0.5	1.4	0.3	18.4	2.8
Coconino	26.2	2.0	0.2	1.3	0.2	19.0	3.5
Mohave	25.6	3.2	0.1	2.7	0.4	14.7	4.4
Pinal	21.1	3.1	0.2	3.6	0.6	9.7	4.0
Yavapai	17.7	2.7	0.1	2.5	0.4	8.4	3.5
Graham	14.3	3.9	0.2	2.4	0.3	2.4	5.1
Santa Cruz	14.3	3.6	0.1	2.1	0.3	4.2	3.9
Maricopa	13.9	4.9	0.2	2.4	0.4	3.9	2.1
Cochise	13.8	3.2	0.2	1.9	0.3	3.1	5.1
Pima	11.9	4.0	0.2	1.7	0.3	3.4	2.2

...

# The L&D Arizona Financial Index Reflects Market Resilience<sup>1</sup>

By Lora Mwaniki-Lyman and Daniel Joseph Kinnear

The L&D Arizona Composite Index has gained some ground since it was launched in December 2010. The Index shrugged off global economic and political uncertainties such as the European debt woes, the possibility of armed conflict in the Korean Peninsula and the popular uprisings across the Middle East, to finish off 2.4 percent higher in March 2011 (**Exhibit 1**).

The Index is price-weighted and tracks the stock performance of Arizona-based companies traded in both the NASDAQ and NYSE. Two sub-indices assess the performance of stocks by exchange;

The L&D Arizona 13 sub-index made up of companies traded in the NYSE, and the L&D Arizona Tech sub-index composed of stock prices of companies traded in the NASDAQ.

Most of the gains in the L&D Arizona Composite Index were driven by stocks of

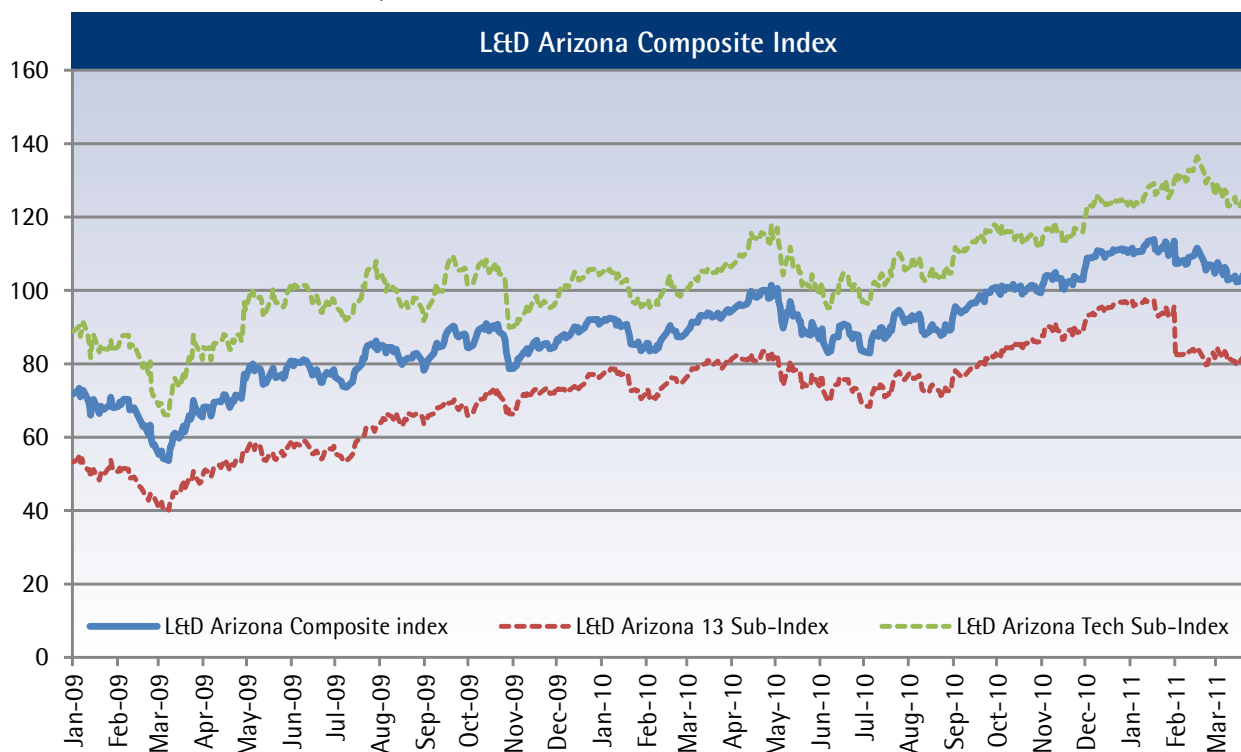
technology companies traded in the NASDAQ stock exchange. The L&D Arizona Tech sub-index was up 8.6 percent between December 2009 and March 2010 while companies whose stocks are traded in the NYSE lost 1.5 percent in the same period, as indicated by the L&D Arizona 13 sub-index.

When compared to the broader market, both the L&D Arizona Composite Index and its Tech sub-index continue to outperform their market benchmarks. The L&D Arizona Composite Index grew by a compounded annual growth rate of 2.6 percent in the last 4 years, a faster growth rate than the S&P Small Cap 600, which grew at 1.5 percent in the same period (**Exhibit 2**).

The Tech sub-index continued to prove that small-cap growth companies generally lead out of a recession. The sub-index grew at an annual rate of 5.9 percent since 2006 compared to the NASDAQ, its market

“...compared to the broader market, both the L&D Arizona Composite Index and its Tech sub-index continue to outperform their market benchmarks.”

**Exhibit 1:** L&D Arizona Composite Index Gains Ground



<sup>1</sup>The Economic and Business Research Center does not offer any financial advising or recommend that investment decisions be based purely on the performance of the L&D Arizona Composite Index and sub-indices. Therefore, investment decisions are the sole responsibility of the reader.



benchmark, which grew by 2.7 percent within the same period. More than 80 percent of the companies in the Tech sub-index have a market capitalization of less than \$2 billion.

Arizona's mainstream companies stocks traded in the NYSE did not perform well over the last 4 years but still managed to outperform their market benchmark. The L&D Arizona 13 sub-index contracted at a compounded annual growth rate of -1.2 percent since 2006, beating the S&P 500 and DJIA which shrank at -2.7 and -1.7 percent respectively.

The L&D Arizona Composite Index and its Tech sub-index bring into the limelight Arizona's exceptional high-tech cluster industries and strong manufacturing base (**Exhibit 3**).

The L&D Arizona Composite Index is heavily weighted in manufacturing stocks (57 percent), with companies in the Computer and Electronic Products category accounting for 25 percent of the firms in the index.

It is not surprising that this category also featured as Arizona's top export category in 2010. ■

**Exhibit 2:** Arizona's Mainstream Companies Outperform Market Benchmark

	2007	2008	2009	2010
L&D Arizona Composite	13.7%	-15.5%	-2.9%	2.6%
L&D Arizona 13 Sub-index	-16.6%	-27.7%	-8.7%	-1.2%
L&D Arizona Tech Sub-Index	42.4%	-5.4%	2.1%	5.9%
<b>Major Indices</b>				
DJIA	4.6%	-14.9%	-5.3%	-1.7%
S&P 500	2.2%	-18.9%	-7.2%	-2.7%
NASDAQ Composite	7.7%	-17.9%	-1.6%	2.7%
S&P Small Cap 600	-2.2%	-17.4%	-5.2%	1.5%

**Exhibit 3:** Company Breakdown by NAICS Industries

<b>Goods Producing</b>	<b>70%</b>
21 Mining	4%
23 Construction	9%
31-33 Manufacturing	57%
<b>Service Providing</b>	<b>30%</b>
22 Utilities	9%
42 Wholesale Trade	9%
44-45 Retail Trade	4%
48-49 Transportation and Warehousing	9%

Data Source: Yahoo Finance and EBR

# Property Tax Shifting from Businesses to Homeowners: A Historical Perspective

Alberta H. Charney, Ph.D.

Although many taxpayers have the perception that their property taxes are increasing but they are getting less in terms of public services, few understand that changes in tax codes over the last 30 years have actually shifted property tax burden from businesses to individuals. Taxpayer voters are, in fact, paying a higher share of total property taxes being levied than they used to.

## Property Tax Computation

In general, each taxing jurisdiction determines the amount of property taxes to levy, then divides the levy by the net assessed value within the jurisdiction to determine the property tax rate. Rates are summed across jurisdictions and property owners pay a tax amount equal to the combined rate (dollars per \$100 assessed valuation) times the net assessed value of their property.

In Arizona, property tax implementation is somewhat more complicated than this. In

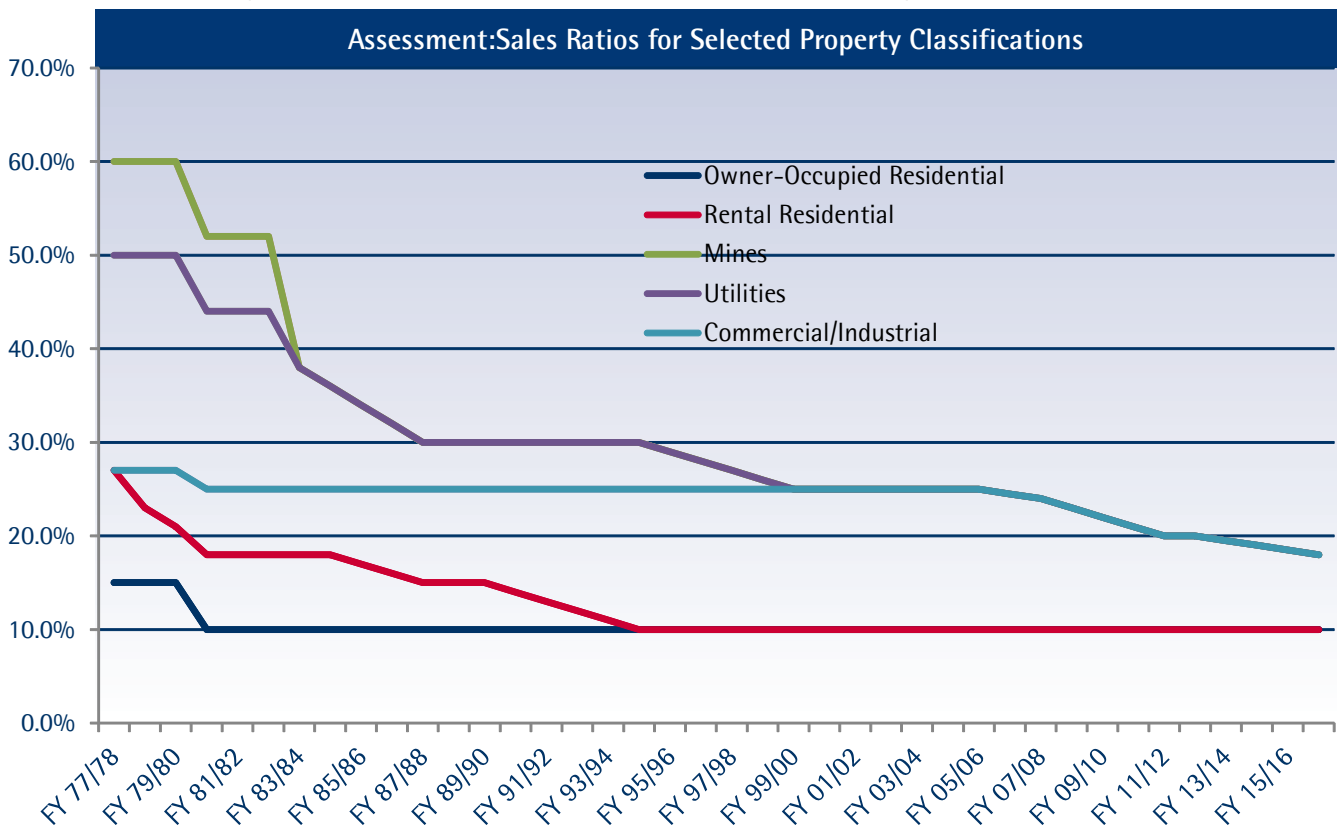
addition to the full cash value, each property also has a limited cash value. While the full cash value is related to, but usually less than, the market value of the property, limited cash value is a legislated value that is limited in its growth rate during periods of high housing inflationary periods.

The two valuations have different tax rates associated with them. The limited cash value is used with primary tax rates, which are established by each jurisdictions. Although primary tax rates are technically not limited, the growth of the resulting tax levy amount is limited by statute for each jurisdiction. In cases where voters approve additional tax levies, the full cash value is used along with voter-approved secondary tax rates. The total tax bill is the sum of primary taxes and secondary taxes for all jurisdictions.

## Assessment:Sales Ratios

Tax rates are not applied to directly to full cash value or to limited cash value.

**Exhibit 1:** Legislated Assessment:Sales Ratios Have Dramatically Changed Over Time



“The consequence of the falling assessment:sales ratios for Mines, Utilities and Commercial/Industrial properties is that the share of total net assessed valuation attributable to residential property has been increasing.”

Rather, these are converted to Net Assessed Value and Limited Net Assessed Value by multiplying by legislated assessment:sales ratios. Assessment:sales ratios vary across the following eight different property classes: Owner occupied housing, Rental occupied housing, Mines, Utilities, Commercial/Industrial, Vacant land, Agriculture, and Railroads. There are additional classes, such as historical property, that are ignored in this discussion.

Legislated assessment:sales ratios have dramatically changed over time (Exhibit 1). Assessment:sales ratios for Mines and Utilities, which were 60% and 50%, respectively, in fiscal year FY77/78, converged with the ratios for commercial and industrial properties by FY 99/00. The assessment:sales ratio for Mines, Utilities and Commercial/Industrial property are scheduled for additional reductions through FY 15/16, as shown in Exhibit 1. Between FY 77/78 and FY 95/95, the ratio for Rental residential declined from 27% to 10%, equal

to the ratio for Owner-occupied residential property. Although the ratios for Railroad property also fell from 60% to converge with Commercial/Industrial properties, the amount of assessed value represented by this category is very small so it was omitted from the graph. In addition, Agriculture and Vacant land property categories were omitted from the graph because their assessment:sales ratios have been held constant at 16% since FY80/81.

### Shares of Assessed Value

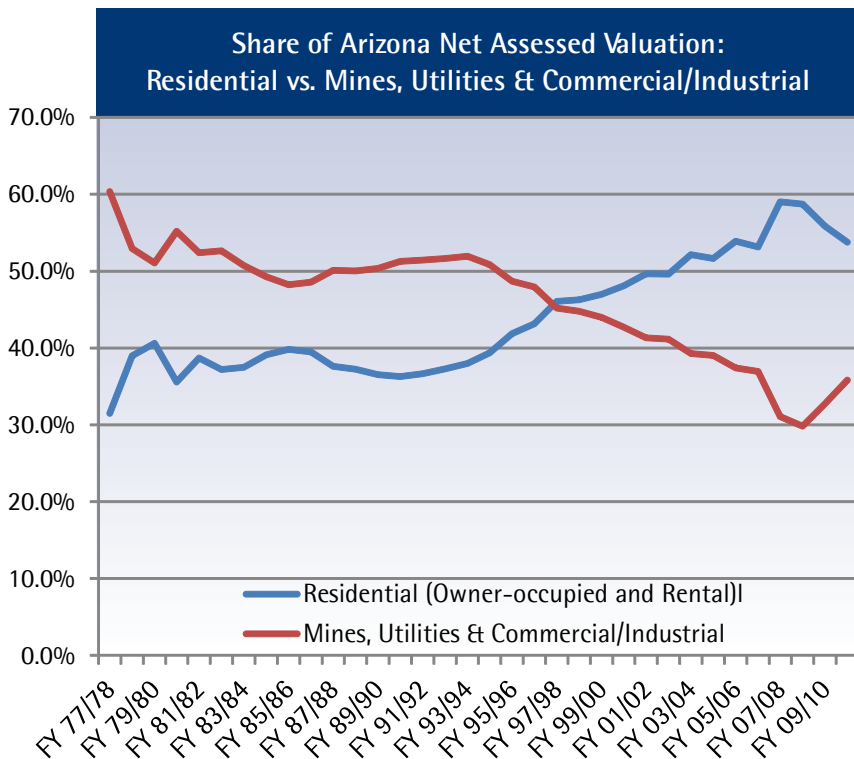
The consequence of the falling assessment:sales ratios for Mines, Utilities and Commercial/Industrial properties is that the share of total net assessed valuation attributable to residential property has been increasing. Exhibit 2 presents total residential net assessed value (both Owner-occupied and Rental residential) and compares that to the sum of the assessed value of Mines, Utilities and Commercial/Industrial. The share of net assessed value in Residential increased from 31.5% in FY 77/78 to 53.8% in FY 10/11 and the corresponding share of Mines, Utilities and Commercial/Industrial declined from 60.4% to 35.8% over the same period<sup>1</sup>. The proportion of total state net assessed value attributable to residential almost doubled over three decades because of these legislated changes in assessment:sales ratios.

The shares of net assessed valuations shown in Exhibit 2 are statewide numbers and therefore do not represent any particular jurisdiction. The actual share of assessed valuation attributable to residential depends on the mix of property classifications in each jurisdiction. Rather, it is intended to demonstrate the general shift in tax burden from Residential to non-residential properties.

### Potential Mitigating Factors

An important tax break for homeowners, known as Additional State Aid to School Districts ARSS15-972 or, more commonly, the Homeowner's Rebate, reduces property taxes paid by owners of owner-occupied

Exhibit 2: Residential Portion Nearly Doubles in 3 Decades



<sup>1</sup>These percentages do not total to 100% because of the omission of Railroad, Vacant and Agriculture property classes.

residential property. Initially enacted by Laws of 1980, the rebate to homeowners was set at 45% of owner-occupied residential school district primary property taxes. The rebate percentage increased to a maximum of 56% beginning in FY 83/84, then was reduced by 6% in FY 90/91 and reduced an additional 5% per year until completely phased out. Instead, when it reached 35% in FY 94/95, the phase-out was discontinued and the 35% ratio was maintained until FY 05/06, when it began increasing 1% per year until it reached 40%, which is its current level (Exhibit 3).

In 1988, the maximum size of the rebate for a given residential property was limited to \$500. This limit was increased by \$20 per year beginning in 2006 until it reached the current maximum of \$600. The rebates are also implicitly limited in that they are computed on school district primary property taxes collected locally by school districts net of state-provided Equalization Assistance or "Basic State Aid."

The Homeowner's Rebate clearly reduces taxes paid by homeowners, but it doesn't reduce the shift of tax burden from businesses to residential. Rather, because the current 40% rebate is below the 45%-56% that existed between FY 80/81 and FY 89/90, the changes in the rebate have enhanced the shift in property tax burden toward residential property rather than mitigating it. Had it been completely phased out as had been legislated in FY90/91, the shift in tax burden toward residential property would have accelerated.

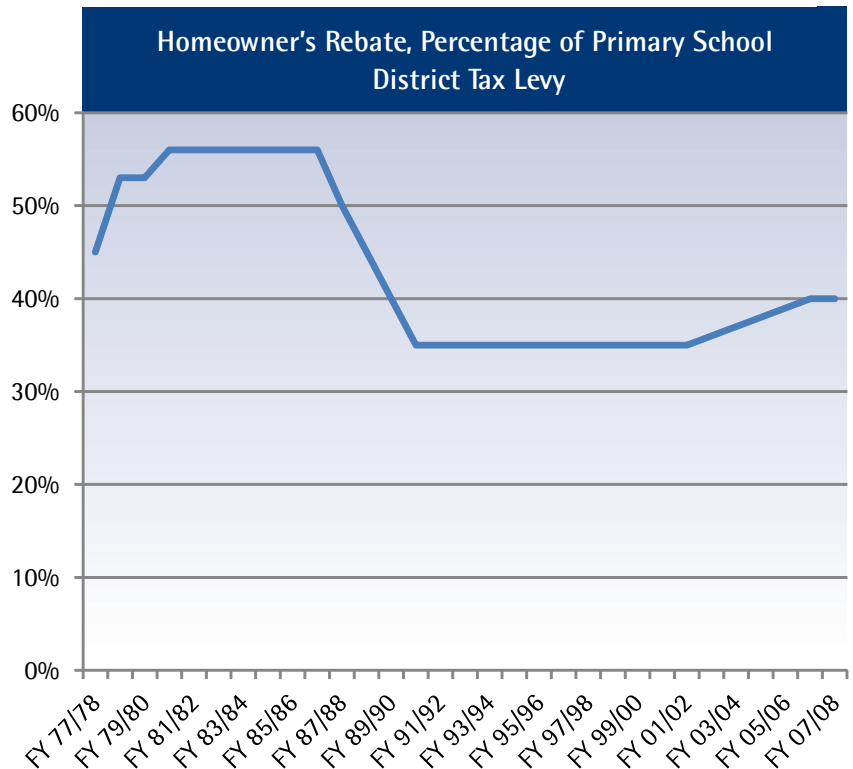
A provision in the Arizona constitution that limits the amount of property tax that can be collected from residential property each year to 1% of the limited value of the property may mitigate the shift of property taxes to homeowners in some jurisdictions. After calculating the amount of the homeowner's rebate, it must be determined for each residential property whether or not the resulting total primary property tax levy exceeds 1% of the limited value of the property. If the 1% is exceeded, the homeowner only pays a primary tax bill of

1% of limited cash value and the additional is paid by the state to the local school district in the form of additional state aid.

### Conclusion

Although it can be argued that, for economic efficiency, all property should be taxed in a similar manner, most taxpayers do not understand the shift in the property tax burden from business property to residential property that has occurred over the past three decades. ■

Exhibit 3: Homeowner Rebate Was Initially Set at 45%



“...the changes in the rebate have enhanced the shift in property tax burden toward residential property rather than mitigating it.”

# Arizona's Housing Market Haunted by Shadow Inventory

By Lora Mwaniki-Lyman and Ruth Christopherson

## Introduction

Economic data released in the month of May confirmed that the housing market in Arizona has not hit bottom yet. Building starts and permits remain at record lows and average home prices attempt to stabilize amidst a fragile economic recovery and foreclosure market. Home prices in the Phoenix metro area as measured by the S&P/Case-Shiller Home Price Indices<sup>1</sup>, dropped for the 10th consecutive month in March 2011 reporting an 8.45 percent decline since a year ago. At the national level, residential home prices dropped to their lowest level since mid 2002 after experiencing a short-lived rise in home prices in 2009 and 2010 attributed to the housing market targeted stimulus.

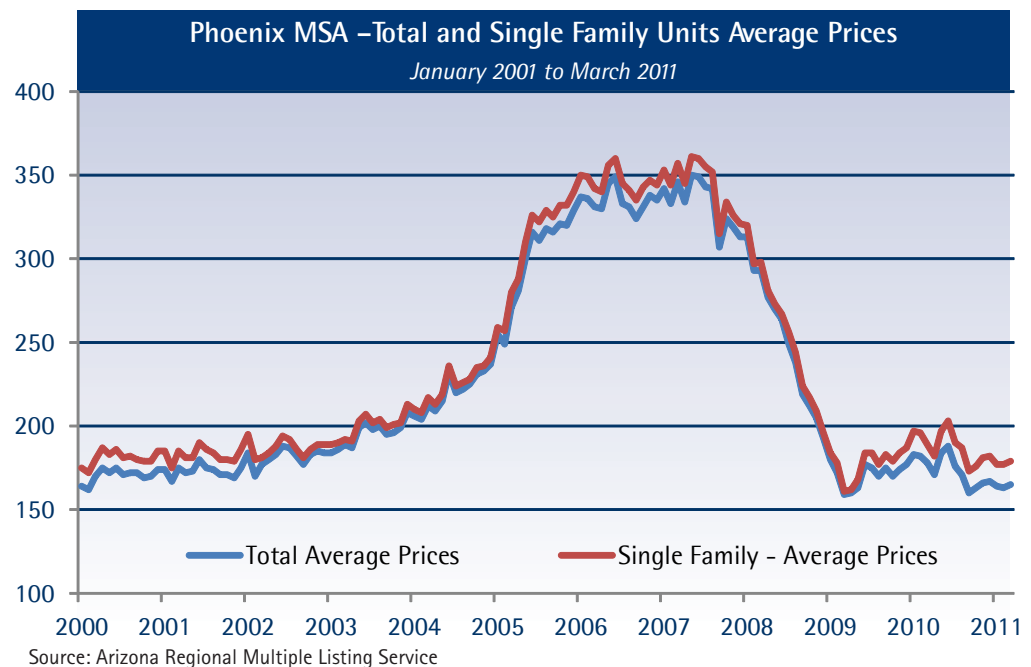
In the last two years, the federal government has injected over \$1 trillion into the economy through spending, tax-cuts, incentives and entitlements among other programs. The overall goal of the bills

was to stimulate a job-based recovery by inducing consumer spending and promoting investment. The only stimulus directly aimed at the housing market was Federal Home Buyer Tax Credit.

## Federal Home Buyer Tax Credit

In an effort to stimulate the housing market, Congress passed the Federal Home Buyer Tax Credit included in the Housing and Economic Recovery Act of 2008. The 2009 American Recovery and Reinvestment Act expanded the first-time homebuyer credit by increasing the credit amount from \$7,500 to \$8,000 for purchases made in 2009 before December 1 while the Worker, Homeownership, and Business Assistance Act of 2009 expanded the deadline from December 1, 2009 to May 1, 2010. The Home Buyer Tax Credit provided eligible individuals with a financial incentive to buy a home now instead of later. First time home buyers were eligible for a tax credit equal to 10 percent of the purchase price of a house, with a maximum credit of

**Exhibit 1: Tax Credit Bumped Up Home Prices in Phoenix Metro Area**



<sup>1</sup>S&P/Case-Shiller Home Price Indices are the leading measure of U.S. residential home prices. The indices capture about 75 percent of nation's residential home stock by value. There are a total of 23 S&P/Case-Shiller Home Price Indices: the S&P/Case-Shiller U.S. National Home Price Index, a quarterly index that tracks the nation's home prices; 20 Metro Area Indices that track single-family home prices in 20 select cities; and the 10-cities and 20-cities S&P/Case-Shiller composite indices calculated from the 20 metro areas tracked.

\$8,000. Repeat home buyers were eligible for a similar 10 percent of the purchase price of a house, with a maximum credit of \$6,500. Buyers qualified for the tax credits if a binding contract was signed between November 7, 2009 and April 30, 2010 with a closing date no later than September 30, 2010. One positive effect on the housing market that ended with the Federal Home Buyer Tax Credit on April 30, 2010 was the temporary increase in the demand for houses, both new and resale.

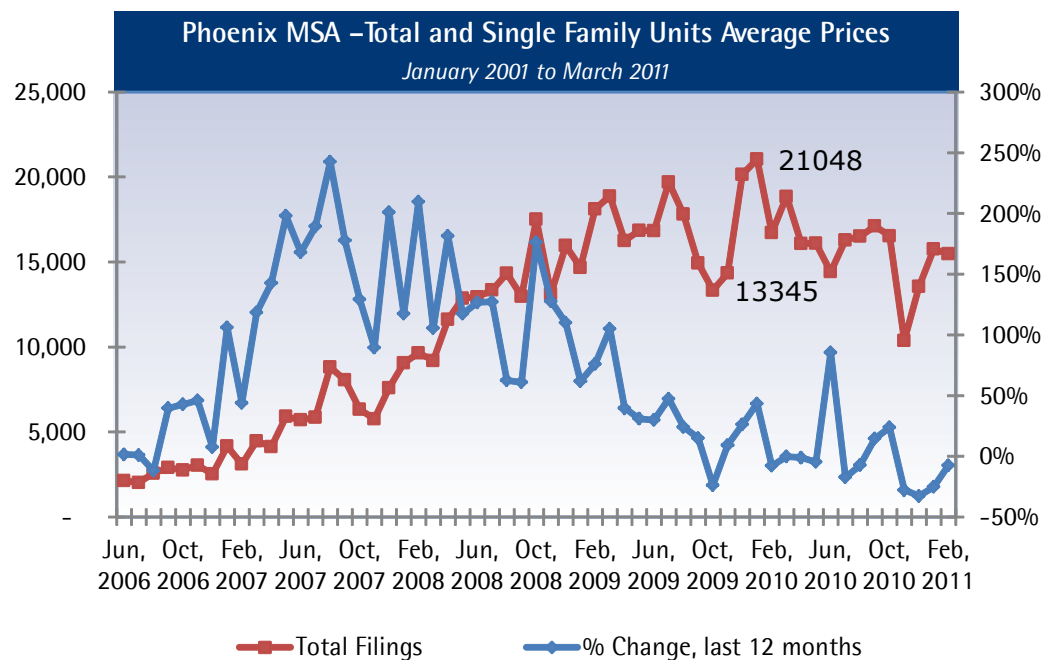
Coupled with the historically low home prices and mortgage rates, the Home Buyer Tax Credit gave sidelined home buyers the extra push they needed to purchase one of the biggest assets in their portfolio in an uncertain economic environment. The increased demand for homes was expected to reduce the inventory of distressed homes in the market and encourage a flattening of, if not an upward movement in, home prices. During the time the Tax Credit was in effect, average single family home prices in the

Phoenix metro area bumped up 10.1 percent, from \$179,000 in November 2009 to a new peak of \$197,000 in January and later in May 2010 to coincide with the Home Buyer Tax Credit deadline extension. Average home prices (both single and multi-family) in the Tucson metro area remained flat (**Exhibit 1**).

The Arizona Regional Multiple Listing Service reported a 2.2 percent increase in home sales in the second quarter of 2010 compared to the same period in 2009 for the Region<sup>2</sup> it covers.

The foreclosure market in Arizona showed some anomalies during this period as well. While it was expected that home inventories would decline, the exact opposite happened. In the three months between October 2009 and January 2010, over 7,000 houses were entered into the foreclosure process and this was not a typical Holiday effect. According to RealtyTrac Inc. which maintains one of the largest and most comprehensive databases of foreclosure and bank-owned properties with

**Exhibit 2:** Arizona Foreclosure Filings Spiked in October 2009



Data Source: EBRC and RealtyTrac Inc.

<sup>1</sup>The Arizona Region includes: Phoenix, Scottsdale Area, SouthEast Valley, West Maricopa and Western Pinal Associations.

nation-wide coverage, foreclosure activities in Arizona spiked from 13,345 foreclosure filings in October 2009, the lowest since June 2008, to a new peak of 21,048 foreclosure filings in January 2010 (Exhibit 2). Total foreclosure filings include default notices, auction sale notices and bank repossessions.

It seemed as though houses had appeared from the shadows – a real possibility since a shadow inventory of bank-owned houses that have been pulled out of the market has been building up.

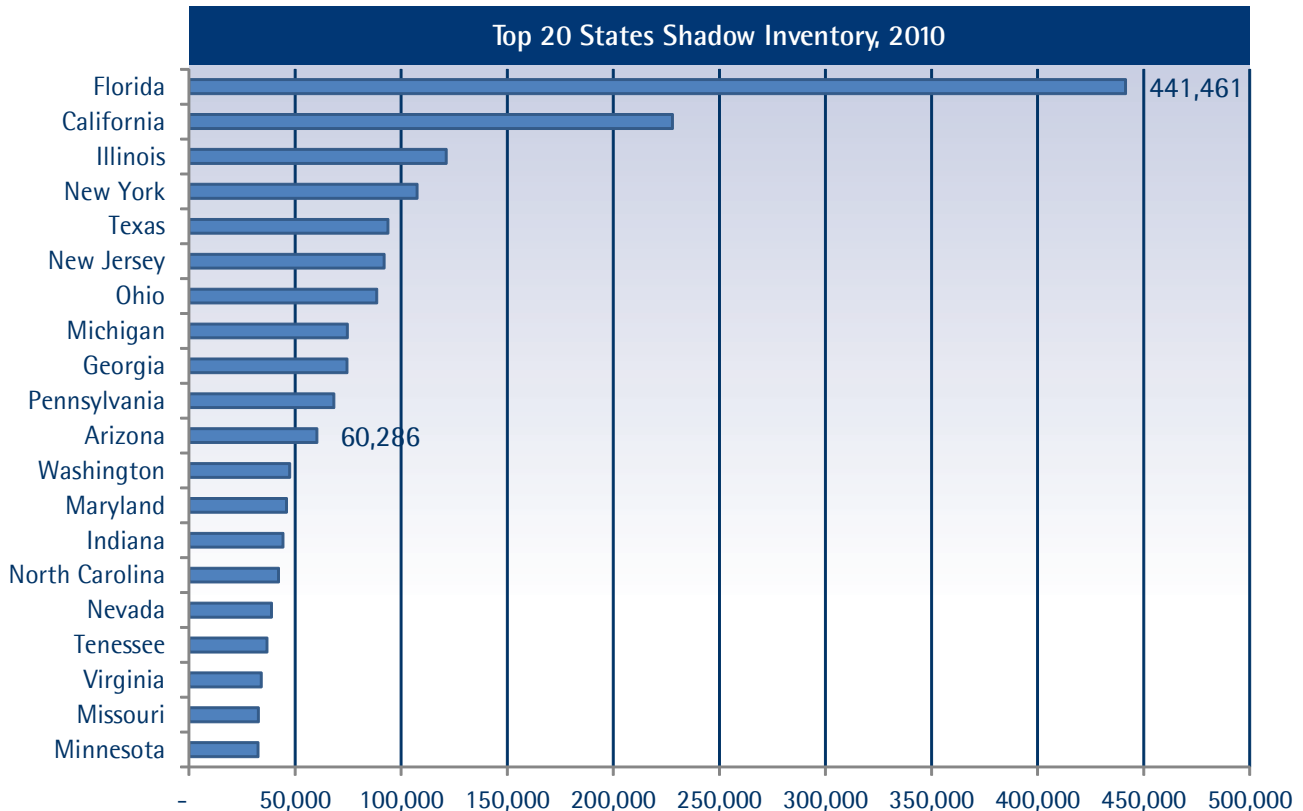
The short-term stimulus to the housing market had succeeded in raising home prices as well as bringing houses in the foreclosure process back into the formal market for clearing. There is fear however that the market may lose its momentum now that the homebuyer tax credit is expired, mortgage rates are rising and other economic stimulus programs are coming to an end.

### Shadow Inventory

Shadow inventory is the inventory of homes that could enter the market in the near future and includes distressed properties of unlisted foreclosed homes, unlisted bank-repossessed homes, or any home whose principle borrowers are 90 days late on a mortgage payment.

According to a study by Selma Lewis<sup>3</sup>, a Research Economist at the National Association of Realtors (NAR), the amount of shadow inventory in the United States through January 2010 was estimated at over 2.4 million homes. The estimates of shadow inventory uses the share of seriously delinquent homes (60+ days delinquent) that are already in the foreclosure process by the fourth quarter of 2009. These estimates are based on Lender Processing Services (LPS) roll rates<sup>4</sup>. It excludes from the inventory of delinquent homes;

**Exhibit 3:** Could Take Arizona Nine Months to Clear Inventories at Today's Sales' Prices.



Source: National Association of Realtors

<sup>3</sup> Selma Lewis "'Foreclosing' on 2009, Part II: Shadow Inventory," Real Estate Insights, March 2010.

<sup>4</sup> Roll rates is the percentage of loans that will 'roll' into the next stage of the foreclosure process.

24 percent of distressed homes in the foreclosure process that are already in the market, and 75 percent of delinquent loans under modification, and adds 75 percent of lender-owned properties (REOs) not on the market. Hence shadow inventory estimates by NAR differ significantly from shadow inventory estimates by other agencies that do not adjust for delinquent loan under modification, distress-home sales, ROEs among others. According to the study, Florida is reported to have the highest shadow inventory numbers at 441,461 homes, followed by California (227,961) and Illinois (121,226). These top three states account for 35.4 percent of total estimated shadow inventories in the U.S. while the top ten states accounted for a total of 62.2 percent.

Arizona fell right behind the top ten estimated states for shadow inventory, ranking in at 11th with a total of 60,286 shadow inventories estimated by the National Association of Realtors for 2010. Arizona accounted for 2.7 percent of total shadow inventories estimated for the U.S. Arizona reported a large amount of foreclosures in 2010, with 55 percent of all existing home sales in the state being distressed sales. Assuming only shadow inventory properties would be sold NAR estimates it would take Arizona nine months to completely clear the total amount of shadow inventories at today's sales prices. While Arizona is ranked among the top five states for foreclosure processes by RealtyTrac Inc., and the top fifteen for shadow inventory by NAR, the state is doing relatively better in terms of getting rid of distressed properties. According to the NAR Study, Arizona's shadow inventory seems to be moving relatively faster through the pipe lines and makes up a large share of existing sales ([Exhibit 3](#)).

The rate at which the shadow inventory clears is dependent on the number of borrowers who are becoming 90 days or more delinquent on their mortgage payments. Even though the economy appears to be in recovery, the delinquency rate

remains high. The Federal Reserve<sup>5</sup> reported a 10.23 percent delinquency rate for all real estate residential bank loans in the 1st quarter 2011. This was a decline from an all-time high of 11.34 percent reported in the 2nd quarter 2010. According to a study by Standard and Poor's Ratings Services<sup>7</sup> estimates, the principle balance of the National shadow inventory - residential properties that are 90 days delinquent, are in the foreclosure process or are real estate owned but not yet on the market - stood at 433 billion in 1st quarter 2011, a drop from 450 billion dollars in the 4th quarter 2010. The amount of homes they estimate as shadow inventory, which does not account for delinquent loans that may not end up in the market, would take 52 months to sell at current home sales prices. The effects of the shadow inventory will be to depress home prices. When the large build-up of shadow inventory hits the market, the number of sellers will once again outweigh the number of buyers. Another concern is large amount of mortgages established during the peak of the home-sale bubble in 2006, which are scheduled to be reset in 2011. The fear is that the bottom has not been reached and there could possibly be worse times for the housing market ahead as the influx of shadow inventory floods an already saturated housing market.

### Robo-signing Controversy

It is debatable how effective the tax credits were in the long-run since by September 2010 banks had succeeded in muddling up the housing market again. Word that banks, overwhelmed with paperwork, had been signing off on foreclosures without verifying the information on the documents led to bank-led and congressional investigations. As a result, several banks, including GMAC, Bank of America, Ally Financial and JP Morgan Chase, imposed a moratorium on foreclosure sales in October 2010. This led to a sharp decline in the number of foreclosure filings reported by RealtyTrac Inc. nationwide as well as in Arizona. As described by RealtyTrac inc., foreclosure activities in Arizona dropped

“ *In February 2011 (in Arizona), one in every 178 households was involved in the foreclosure process compared to the national average of one foreclosure for every 577 households.* ”

<sup>6</sup> "First Quarter Shadow Inventory Update: Relief is Further Away, But There is Light at the End of the Tunnel," May 2011, Standard and Poor's Rating Services  
<sup>7</sup> 2010 Year End and Q4 Foreclosure Sales Report, Press Release, February 2011, RealtyTrac Staff

from 16,538 in October 2010 to 10,384 foreclosure filings in November 2010 after the moratorium on foreclosures was imposed. This resulted in a drop in Arizona's ranking by foreclosure rates from 3rd in October to 4th in November 2010; it's lowest since November 2009. It is not exactly understood how the effects of the controversy continues to affect the non-judicial and judicial foreclosure process in Arizona, however as a whole, foreclosure activities are back on the rise as banks resume processing foreclosure sales. By December 2010 Arizona had returned to ranking the 2nd highest in foreclosure rates.

### Arizona's Foreclosure Market

According to RealtyTrac Inc. data, Arizona has steadily ranked 2nd in foreclosure rates over the last three months, after relinquishing the position in August last year. In February 2011, one in every 178 households was involved in the foreclosure process compared to the national average of one foreclosure for every 577 households. This meant that 15,485 households in Arizona received a foreclosure filing. However, this was a decrease of 1.7 percent since January and 7.4 percent compared to February of last year.

The foreclosure market is exceptionally large in Arizona with over half of homes sold in Arizona's housing market being distressed homes. According to RealtyTrac Inc., Arizona recorded the second highest percentage of foreclosure sales in 2010. 55 percent of all residential sales in Arizona for 2010 were foreclosure sales, a decline from 54 percent in 2009. The share of foreclosure sales to residential sales for the fourth quarter 2010 were 55 percent, compared to 46 percent in the 4th quarter of 2009. According to James J. Saccacio, the CEO of RealtyTrac Inc., fourth quarter and 2010 total foreclosures

could have been higher if the foreclosure-documentation controversy and expiring home-tax credit had not slowed down the sale of foreclosed homes towards the end of the year.

While 2011 will continue to be plagued by the foreclosure crisis as the housing market tries to clear the shadow inventory of houses and employment hopefully kicks into gear, the general long-term trend indicates that foreclosures are on the decline. In 2010, the total number of foreclosure filings reported by RealtyTrac Inc. dropped by 4 percent compared to 2009. However, the level of foreclosure filings in Arizona still remained the third largest in the nation with Arizona registering 155,878 foreclosure filings in 2010 and ranked 2nd among all states in foreclosure rates for the second year in a row. The Phoenix-Mesa-Glendale Metro Area ranked 4th in foreclosure rates in 2010, with 124,720 foreclosure filings reported. The metro area also reported 55,372 bank repossessions in 2010, the largest number of bank repossessions (REOs) among all metro areas and 17 percent more than 2009. The Tucson metro area recorded a total of 14,480 foreclosure filings in 2010 and was ranked 38 in 2010 by foreclosure rates by RealtyTrac Inc., up from 41 in 2009. RealtyTrac Inc. tracks 206 metro areas in the nation.

Arizona's high ranking in foreclosure rates implies that the state's housing market is still in critical condition. Arizona continues to be second only to Nevada for foreclosure filings, which has topped the nation in foreclosures for 50 months. Arizona's housing market was among the first in the nation to crash and continues to be deeply affected by its aftershock. Therefore, it will probably take Arizona's housing market longer than the national average to recover. ■

“ Arizona continues to be second only to Nevada for foreclosure filings, which has topped the nation in foreclosures for 50 months. Arizona's housing market was among the first in the nation to crash and continues to be deeply affected by its aftershock. ”

# Forecast Tables

Arizona	2010	2011	2012	2013	2014
Personal Income (\$mill)	223,789.4	231,110.7	237,451.6	247,848.1	261,684.2
% change	2.2	3.3	2.7	4.4	5.6
Retail Sales (\$mill)	43,866.9	46,635.2	48,594.0	52,069.0	55,786.3
% change	1.2	6.3	4.2	7.2	7.1
Non Farm Employment (000s)	2,381.8	2,367.3	2,382.6	2,423.5	2,474.3
% change	-2.0	-0.6	0.6	1.7	2.1
Population (000s)	6,392.0	6,365.0	6,360.6	6,398.5	6,472.3
% change	-0.6	-0.4	-0.1	0.6	1.2
Residential Permits (units)	12,641.0	10,711.3	13,283.5	20,835.0	29,827.7
% change	-11.4	-15.3	24.0	56.8	43.2

Phoenix-Mesa MSA	2010	2011	2012	2013	2014
Personal Income (\$mill)	153,347.5	159,405.9	164,335.0	171,480.5	181,171.4
% change	2.0	4.0	3.1	4.3	5.7
Retail Sales (\$mill)	30,526.8	32,271.3	34,291.8	36,676.4	39,161.9
% change	2.4	5.7	6.3	7.0	6.8
Non Farm Employment (000s)	1,679.1	1,671.6	1,684.1	1,712.2	1,756.7
% change	-2.6	-0.5	0.7	1.7	2.6
Population (000s)	4,192.9	4,159.0	4,159.8	4,190.1	4,251.4
% change	-0.9	-0.8	0.0	0.7	1.5
Residential Permits (units)	8,195.0	7,215.1	10,472.3	15,800.4	23,054.4
% change	-11.6	-12.0	45.1	50.9	45.9

Tucson MSA	2010	2011	2012	2013	2014
Personal Income (\$mill)	35,073.8	36,372.0	37,503.5	39,346.9	42,089.0
% change	1.6	3.7	3.1	4.9	7.0
Retail Sales (\$mill)	6,449.2	6,736.1	7,139.3	7,726.6	8,451.5
% change	-1.5	4.4	6.0	8.2	9.4
Non Farm Employment (000s)	352.8	351.1	353.7	358.8	369.2
% change	-2.5	-0.5	0.7	1.4	2.9
Population (000s)	980.3	974.9	977.1	984.9	1,000.9
% change	-1.1	-0.5	0.2	0.8	1.6
Residential Permits (units)	2,145.0	1,973.2	2,290.8	4,132.4	6,918.1
% change	0.8	-8.0	16.1	80.4	67.4

## >>Need More?

Do you need more detailed and comprehensive forecast data and analysis? Learn about the benefits of becoming a Forecasting Project sponsor. Forecasting Project sponsorship allows your company or organization to access an in-depth menu of economic forecasting and consulting services, as well as, quarterly forecast update meetings. Contact Marshall Vest at [mvest@eller.arizona.edu](mailto:mvest@eller.arizona.edu) or call 520.621.4075.

Forecasting Project is a community-sponsored research unit within the Economic and Business Research Center producing quarterly economic forecasts for Arizona and its metro areas. These forecasts are recognized as among the most accurate in the Western states.

# Arizona Economic Indicators

Arizona Monthly Data	Dec 10	Jan 11	Feb 11	Mar 11	Apr 11
Civilian Labor Force (000s), OSPB	3,165.5	3,164.6	3,164.7	3,181.7	3,177.5
Unemployment Rate, Seas. Adj. (%)	9.6	9.6	9.6	9.5	9.3
Total Non Farm Employment (000s), OSPB & EBR	2,407.7	2,363.2	2,388.0	2,397.3	2,414.5
Aggregate Retail Sales,(\$000s), ADOR	7,460,329.0	5,940,603.0	6,339,413.0	7,118,238.0	...
Total New Residential Permits (units), Census C-40	809	697	1,056	1,241	1,007
Arizona Quarterly Data	10 I	10 II	10 III	10 IV	11 I
Population (000s, seas adj), ADHS & EBR	6,407.0	6,397.0	6,388.0	6,380.7	6,374.4
Natural Increase	11.3	10.5	9.7	9.8	10.1
Net Migration	220,882	222,851	225,042	226,382	228,988
Total Personal Income (\$mil, SAAR) BEA & EBR	34,475	34,837	35,229	35,479	35,923
Per Capita Personal Income (\$, SAAR) EBR	45,018	45,235	45,864	46,279	...
Average Wage Per Employee, Annual Rate (\$) EBR	44,806	44,544	44,576	44,922	...

Inflation and Prices	Dec 10	Jan 11	Feb 11	Mar 11	Apr 11
U.S. Consumer Price Index - All Urban Consumers All Items (1982-1984=100) BLS	219.2	220.2	221.3	223.5	224.9
U.S. Inflation Rate	1.50	1.63	2.11	2.68	3.16
Western States Consumer Price Index - All Urban Consumers (1982-1984=100) BLS	222.1	223.2	224.4	226.6	227.8

Arizona Travel and Tourism	Dec 10	Jan 11	Feb 11	Mar 11	Apr 11
Visits to Parks & Other Recreational Areas, NPS & ASPB					
Northern Arizona	974,337	680,563	634,661	671,108	1,198,196
Southern Arizona	220,254	205,331	255,406	342,523	647,292
Total International Border Crossings, USBCBP					
Persons	1,756,915	1,962,556	1,728,738	1,575,304	...
Vehicles	572,791	622,951	592,131	524,834	...

## SOURCES AND ABBREVIATIONS

**ADES:** Arizona Department of Economic Security

**ADHS:** Arizona Department of Health Services

**ADOR:** Arizona Department of Revenue

**ADOT:** Arizona Department of Transportation

**ARMLS:** Arizona Regional Multiple Listing Service

**ASPB:** Arizona State Parks Board

**BEA:** Bureau of Economic Analysis, U.S. Department of Commerce

**BLS:** Bureau of Labor Statistics, U.S. Department of Labor

**Census C-40:** U.S. Census Bureau, U.S. Department of Commerce

**EBR:** Economic & Business Research Center, The University of Arizona

**OSPB:** Office of Strategic Planning and Budgeting (Arizona)

**PSHIA:** Phoenix Sky Harbor International Airport

**SAAR:** Seasonally adjusted at annual rates

**TAR:** Tucson Association of Realtors

**U.S. Bankruptcy Court:** District of Arizona

**USCBP:** U.S. Customs and Border Protection, U.S. Department of Homeland Security

\* All Aggregate Retail Sales figures reported by EBR include retail, food, restaurant & bars and gasoline sales.  
Source: Economic and Business Research Center, Eller College of Management, The University of Arizona.

# Arizona Economic Indicators

Phoenix-Mesa-Glendale MSA - Monthly	Dec 10	Jan 11	Feb 11	Mar 11	Apr 11
Civilian Labor Force (000s), ADOC & EBR	2,125.6	2,126.6	2,127.4	2,134.4	2,131.8
Unemployment Rate, Seas. Adj. (%)	8.5	9.3	8.8	8.7	8.1
Total Non Farm Employment (000s), OSPB & EBR	1,713.9	1,682.1	1,698.4	1,704.3	1,714.8
Aggregate Retail Sales,(\$000s), ADOR	5,136,402	4,099,591	4,340,741	4,924,116	...
Total New Residential Permits (units), Census C-40	463	434	508	887	750
Total Number Housing Units Sold, ARMLS	7,409	5,736	6,298	8,674	9,328
Average Unit Price (\$), ARMLS	167,085	163,941	162,583	165,465	161,228
Phoenix-Mesa-Glendale MSA - Quarterly	10 I	10 II	10 III	10 IV	11 I
Population (000s, seas adj), ADHS & EBR	4,205.8	4,197.1	4,188.2	4,188.2	...
Natural Increase	9.2	8.9	8.5	8.2	...
Net Migration	-17.6	-17.6	-17.4	-8.2	...
Total Personal Income (\$mil, SAAR) BEA & EBR	152,224	152,973	153,722	154,471	...
Per Capita Personal Income (\$, SAAR) EBR	36,194	36,447	36,703	36,882	...

Tucson MSA - Monthly	Dec 10	Jan 11	Feb 11	Mar 11	Apr 11
Civilian Labor Force (000s), OSPB	488.9	487.3	488.1	491.8	491.4
Unemployment Rate, Seas. Adj. (%)	8.4	9.2	8.7	8.5	7.9
Total Non Farm Employment (000s), OSPB & EBR	356.3	349.2	353.3	355.2	359.4
Aggregate Retail Sales,(\$000s), ADOR	1,115,830	865,678	937,707	1,039,571	...
Total New Residential Permits (units), Census C-40	172	114	425	195	124
Total Number Housing Units Sold, TAR	907	780	879	1,169	1,152
Average Unit Price (\$), TAR	186,399	166,998	182,388	163,590	173,981
Tucson MSA - Quarterly	10 I	10 II	10 III	10 IV	11 I
Population (000s, seas adj), ADHS & EBR	984.2	981.6	978.9	978.9	...
Natural Increase	1.2	1.1	1.0	1.0	...
Net Migration	-3.8	-3.7	-3.7	-1.0	...
Total Personal Income (\$mil, SAAR) BEA & EBR	34,865	35,004	35,143	35,283	...
Per Capita Personal Income (\$, SAAR) EBR	35,425	35,662	35,901	36,043	...

Apache County	Dec 10	Jan 11	Feb 11	Mar 11	Apr 11
Civilian Labor Force, OSPB & EBR	22,825	23,050	22,750	22,725	22,300
Unemployment Rate (%)	15.6	17.1	17	16.5	15.6
Total Non Farm Employment (000s), OSPB & EBR	19,325	19,025	18,900	18,825	18,825
Total Private	7,250	7,125	7,100	7,075	7,150
Government	12,075	11,900	11,800	11,750	11,675
Gross Retail Sales (\$000s), ADOR	12,409	13,100	17,635	15,435	...

## >>Need More?

For historical data and many more detailed economic indicators for Arizona in simple easy to generate reports online, subscribe to the *EBR Database Online*. To learn more visit: [http://ebr.eller.arizona.edu/datacenter/EBR\\_Database.aspx](http://ebr.eller.arizona.edu/datacenter/EBR_Database.aspx).

The Economic and Business Research Center has maintained economic indicators on the State of Arizona since 1949.

# Arizona Economic Indicators

<b>Flagstaff MSA (Coconino County)</b>	<b>Dec 10</b>	<b>Jan 11</b>	<b>Feb 11</b>	<b>Mar 11</b>	<b>Apr 11</b>
Civilian Labor Force, ADOC & EBR	76,400	76,600	76,600	78,000	78,600
Unemployment Rate (%)	8.5	9.4	8.9	8.5	7.6
Total Non Farm Employment (000s), OSPB & EBR	61,700	60,900	61,400	62,500	64,400
Total Private	42,400	41,900	41,900	42,900	44,500
Government	19,300	19,000	19,500	19,600	19,900
Gross Retail Sales (\$000s), ADOR	130,977	96,695	110,925	130,358	...
Total New Residential Permits (units), Census C-40	79	6	7	10	18

<b>Lake Havasu City – Kingman MSA (Mohave County)</b>	<b>Dec 10</b>	<b>Jan 11</b>	<b>Feb 11</b>	<b>Mar 11</b>	<b>Apr 11</b>
Civilian Labor Force, ADOC & EBR	90,600	91,300	91,400	92,400	92,100
Unemployment Rate (%)	10.7	11.5	11.1	10.9	10.1
Total Non Farm Employment (000s), OSPB & EBR	45,400	44,800	45,500	46,100	46,300
Total Private	37,400	36,800	37,200	37,900	37,900
Government	8,000	8,000	8,300	8,200	8,400
Gross Retail Sales (\$000s), ADOR	165,311	130,943	148,602	164,962	...
Total New Residential Permits (units), Census C-40	15	16	15	30	21

<b>La Paz County</b>	<b>Dec 10</b>	<b>Jan 11</b>	<b>Feb 11</b>	<b>Mar 11</b>	<b>Apr 11</b>
Civilian Labor Force, ADOC & EBR	7,275	7,500	7,400	7,300	7,125
Unemployment Rate (%)	10.3	11.3	10.8	10.6	10.2
Total Non Farm Employment (000s), OSPB & EBR	4,325	4,525	4,500	4,350	4,325
Total Private	2,500	2,525	2,525	2,625	2,575
Government	1,825	2,000	1,975	1,725	1,750
Gross Retail Sales (\$000s), ADOR	21,335	29,553	26,183	26,493	...

<b>Nogales Micropolitan SA (Santa Cruz County)</b>	<b>Dec 10</b>	<b>Jan 11</b>	<b>Feb 11</b>	<b>Mar 11</b>	<b>Apr 11</b>
Civilian Labor Force, ADOC & EBR	22,900	22,975	23,100	23,650	23,850
Unemployment Rate (%)	16.0	15.0	15.0	16.6	17.2
Total Non Farm Employment (000s), OSPB & EBR	19,500	19,875	20,150	19,675	19,675
Total Private	6,850	6,950	7,100	7,025	7,050
Government	12,650	12,925	13,050	12,650	12,625
Gross Retail Sales (\$000s), ADOR	11,502	13,263	-1,437	14,798	...
Total New Residential Permits (units), Census C-40	1,171	673	651	707	585

<b>Payson MSA (Gila County)</b>	<b>Dec 10</b>	<b>Jan 11</b>	<b>Feb 11</b>	<b>Mar 11</b>	<b>Apr 11</b>
Civilian Labor Force, ADOC & EBR	23,175	23,150	23,000	23,100	22,925
Unemployment Rate (%)	10.7	11.6	11.1	10.9	10.3
Total Non Farm Employment (000s), OSPB & EBR	13,700	13,500	13,575	13,500	13,700
Total Private	8,800	8,725	8,775	8,725	8,875
Government	4,900	4,775	4,800	4,775	4,825
Gross Retail Sales (\$000s), ADOR	34,214	27,151	30,270	32,943	...

# Arizona Economic Indicators

<b>Prescott Micropolitan SA (Yavapai County)</b>	<b>Dec 10</b>	<b>Jan 11</b>	<b>Feb 11</b>	<b>Mar 11</b>	<b>Apr 11</b>
Civilian Labor Force, ADOC & EBR	96,800	96,900	96,900	98,600	98,100
Unemployment Rate (%)	10.0	11.0	10.4	10.1	9.5
Total Non Farm Employment (000s), OSPB & EBR	54,200	53,400	54,000	54,500	55,200
Total Private	43,400	42,700	42,800	43,400	43,900
Government	10,800	10,700	11,200	11,100	11,300
Gross Retail Sales (\$000s), ADOR	167,187	127,096	138,779	159,070	...
Total New Residential Permits (units), Census C-40	20	17	20	30	18

<b>Safford MSA (Graham &amp; Greenlee Counties)</b>	<b>Dec 10</b>	<b>Jan 11</b>	<b>Feb 11</b>	<b>Mar 11</b>	<b>Apr 11</b>
Civilian Labor Force, ADOC & EBR	19,175	18,800	19,175	19,325	19,100
Unemployment Rate (%)	11.1	12.0	11.1	10.6	10.2
Total Non Farm Employment (000s), OSPB & EBR	11,600	11,175	11,700	11,700	11,775
Total Private	8,050	7,950	8,100	8,150	8,200
Government	3,550	3,225	3,600	3,550	3,575
Gross Retail Sales (\$000s), ADOR	37,012	34,270	37,852	42,737	...

<b>Showlow Micropolitan SA (Navajo County)</b>	<b>Dec 10</b>	<b>Jan 11</b>	<b>Feb 11</b>	<b>Mar 11</b>	<b>Apr 11</b>
Civilian Labor Force, ADOC & EBR	41,325	41,300	41,100	41,175	40,325
Unemployment Rate (%)	15.4	16.7	16.0	15.7	14.9
Total Non Farm Employment (000s), OSPB & EBR	26,800	26,225	26,500	26,400	26,300
Total Private	16,775	16,525	16,300	16,200	16,425
Government	10,025	9,700	10,200	10,200	9,875
Gross Retail Sales (\$000s), ADOR	108,386	74,030	73,444	80,976	...

<b>Sierra Vista - Douglas Micropolitan SA (Cochise County)</b>	<b>Dec 10</b>	<b>Jan 11</b>	<b>Feb 11</b>	<b>Mar 11</b>	<b>Apr 11</b>
Civilian Labor Force, ADOC & EBR	64,275	64,550	64,150	64,850	63,650
Unemployment Rate (%)	8.2	9.2	8.9	8.5	8.2
Total Non Farm Employment (000s), OSPB & EBR	37,200	36,875	36,900	37,175	36,950
Total Private	24,325	24,025	24,000	24,275	24,050
Government	12,875	12,850	12,900	12,900	12,900
Gross Retail Sales (\$000s), ADOR	103,584	76,338	84,549	95,472	...

<b>Yuma MSA (Yuma County)</b>	<b>Dec 10</b>	<b>Jan 11</b>	<b>Feb 11</b>	<b>Mar 11</b>	<b>Apr 11</b>
Civilian Labor Force, ADOC & EBR	90,700	88,800	88,100	89,500	91,700
Unemployment Rate (%)	22.9	23.1	21.3	21.8	25.3
Total Non Farm Employment (000s), OSPB & EBR	50,300	49,200	50,100	50,200	49,700
Total Private	35,000	34,700	34,800	34,900	34,500
Government	15,300	14,500	15,300	15,300	15,200
Gross Retail Sales (\$000s), ADOR	185,779	144,172	167,266	174,929	...
Total New Residential Permits (units), Census C-40	11	18	38	37	33

# ARIZONA'S ECONOMY

ECONOMIC AND BUSINESS RESEARCH CENTER

McClelland Hall, Room 103  
P.O. Box 210108  
1130 E. Helen Street  
Tucson, AZ, 85721-0108

Phone: 520-621-2155  
Fax: 520-621-2150  
E-mail:  
ebrpublications@eller.arizona.edu

**Marshall J. Vest**  
*Director*  
(520) 621-4075  
mvest@eller.arizona.edu

**Alberta Charney, Ph.D.**  
*Senior Research Economist*  
(520) 621-2291  
aچارney@eller.arizona.edu

**Pia Montoya**  
*Database Specialist*  
(520) 621-2523  
pmontoya@eller.arizona.edu

**Lora Mwaniki-Lyman**  
*Research Economist*  
(520) 626-6439  
loramwa@eller.arizona.edu

**Maile L. Nadelhoffer**  
*Senior Research  
Economist & Webmaster*  
(520) 621-4050  
mln@eller.arizona.edu

**Vera Pavlakovich-Kochi, Ph.D.**  
*Senior Regional Scientist*  
(520) 626-0520  
vkp@eller.arizona.edu

**Valorie Rice**  
*Librarian & State Data Center*  
(520) 621-2109  
vrice@eller.arizona.edu

To subscribe to Arizona's Economy or other Economic and Business Research Publications, visit:  
[ebr.eller.arizona.edu/subscribe/](http://ebr.eller.arizona.edu/subscribe/)

Arizona's Economy, published quarterly by the Economic and Business Research Center at the Eller College of Management, is provided as an educational service by The University of Arizona. Correspondence should be addressed to EBR Publications, McClelland Hall Room 103, PO Box 210108, Tucson, Arizona 85721-0108.

Arizona's Economy is available online at: [azeconomy.eller.arizona.edu](http://azeconomy.eller.arizona.edu)  
As part of The University of Arizona's public mission to improve quality of life for the people of Arizona and the nation, the Economic and Business Research Center is dedicated to providing Arizona citizens and decision makers with high quality economic data and objective forecasts and analyses.

Copyright 2011 by The University of Arizona. Information contained in this publication may be copied or reprinted with credit to the **Eller College of Management at The University of Arizona.**

>> Visit us online at [ebr.eller.arizona.edu/](http://ebr.eller.arizona.edu/)

## Thank you to our community sponsors for their ongoing support of Economic and Business Research Center programs.

*Arizona Electric Power Cooperative*

*Elliott D. Pollack and Company*

*Arizona Joint Legislative Budget Committee*

*Maricopa Association of Governments*

*Arizona Public Service Company*

*Maricopa County*

*BBVA Compass*

*Pima Association of Governments*

*CB Richard Ellis*

*Pima County*

*JPMorgan Chase & Co.*

*Pinal County*

*City of Phoenix*

*Salt River Project*

*City of Tempe*

*Tucson Electric Power Company*

*Cox Communications*

Special thanks to **JPMORGAN CHASE & CO.** for its ongoing support of the Economic and Business Research Center website!

<http://ebr.eller.arizona.edu/>