

May 1, 2014

## Nonfarm Employment to Continue a Slow, Subpar Growth in 2014; Mild Acceleration in 2015

### Introduction

The Office of Employment and Population Statistics (EPS) within the Arizona Department of Administration (ADOA) is forecasting gradual gains in Nonfarm employment in Arizona for the 2014-2015 projections time period. In comparison to the employment forecast released in November 2013, Nonfarm employment growth has been forecast to be slightly slower in 2014. An over-the-year gain of 53,500 Nonfarm jobs is expected in 2014 and 60,400 in 2015. The previous forecast in November 2013 was for a 59,000 job gain in 2014. In the current forecast, the rate of growth projected for total Nonfarm employment is 2.1 percent in 2014 and 2.4 percent in 2015. A total of 114,000 Nonfarm jobs are forecast to be gained over the two projected years (2014 & 2015) (Table 1).

The overall employment situation in Arizona continues to improve. This is consistent with improvement seen in many economic indicators including population growth. Compared to 2012, population grew faster in 2013 at 1.27 percent based on our internal EPS ADOA preliminary numbers. Population is projected to grow at 1.33 percent in 2014 and 1.76 percent in 2015.

Arizona's year-over-year average Nonfarm employment growth rate exceeded the national average in both 2012 and 2013. The US averaged Nonfarm employment growth of 1.7 percent in both 2012 and 2013 while Arizona averaged 2.1 percent in both 2012 and 2013. Despite Arizona's better performance compared to the US, the Nonfarm employment growth rate in Arizona has stagnated at 2.1 percent in 2012, 2013, and is forecast to be the same for 2014. Despite the forecasted employment growth in nine of the eleven major sectors in 2014 and ten sectors in 2015, overall Arizona Nonfarm employment level remains well below its prerecession peak.

Arizona's Nonfarm employment is forecast to continue a slow, subpar growth in 2014 and gradually gain momentum in 2015. Although the economic fundamentals continue to improve, the Arizona economy continues to have some aftereffects of various policies that were enacted post-recession: sequestration cuts in

Table 1

### Total Nonfarm Employment Annual Average Growth Rate

	2013 <sup>(a)</sup>	2014 <sup>(b)</sup>	2015 <sup>(b)</sup>
Arizona	2.1%	2.1%	2.4%
Phoenix MSA <sup>1</sup>	2.8%	2.5%	2.6%
Tucson MSA <sup>2</sup>	0.7%	1.2%	1.8%
Balance of State <sup>3</sup>	0.2%	1.3%	1.7%

1) Maricopa and Pinal counties

2) Pima County

3) Arizona less Maricopa, Pinal and Pima counties

a) Historical

b) Forecast

**Table 1** shows the average annual growth rate in Total Nonfarm employment for Arizona, Phoenix MSA, Tucson MSA, and Balance of State. In 2014, all regions are forecast to have positive annual over-the-year growth rates in Nonfarm employment. Arizona is forecast to grow at 2.1% in 2014. Phoenix is expected to grow faster than the state at 2.5%. However, the projected growth rates for Tucson (1.2%) and the Balance of State (1.3%) are slower than the statewide and Phoenix MSA rates. The expected Nonfarm job gains in 2014 for the Phoenix MSA are 44,600 jobs, for Tucson MSA are 4,400 jobs, and for Balance of State are 4,500 jobs.

Nonfarm employment growth rate for Arizona in 2015 is expected to be 2.4%. Phoenix is forecast to continue growing at a faster pace (2.6%) than Tucson (1.8%), and Balance of State (1.7%). For 2015 the job gains forecast for Phoenix MSA are 48,000 jobs, Tucson MSA are 6,400 jobs, and Balance of State are 6,000 jobs (See tables starting on page 11).

2011 followed by a continuing resolution that went into effect in March 2013; payroll tax increase to the default 6.2 percent in January 2013; the October 2013 partial shutdown of the federal government and continued conflict over the federal debt ceiling.<sup>1</sup> The combined effect of many of these decisions has resulted in economic uncertainty and made investment planning more problematic, thus creating an environment not conducive to strong growth.<sup>2</sup> Arizona's reliance on federal government outlays due to its dependence on defense-related industries followed by a reduction in both civilian and military program spending has made the state particularly vulnerable. Various economic sectors have felt the trickle-down effect with projects coming to an end and no new projects in the pipeline.<sup>3</sup> In response to the increased economic uncertainty, many corporations are holding their profits as cash instead of investing.<sup>4</sup>

The US and Arizona economies have fit the historical pattern of a build-up of private credit, financial crisis and economic downturn with a gradual economic recovery.<sup>5</sup> The indicators of a slow economic recovery include a gradual increase in employment, wages, income, output, consumer and business spending, and asset values especially in real estate.<sup>6</sup> Private household debts have been gradually paid down and financial institutions are gradually more willing to lend and are extending more credit.<sup>7</sup> Compared to a year ago consumers and businesses overall are in better shape.

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<sup>1</sup> As per the Budget Control Act of 2011, the federal government enacted across-the-board budget cuts also known as sequestration followed by a continuing resolution that went into effect in March 2013. The objective was to reduce the federal government deficit and debt levels. Spending was reduced in both civilian and military programs. In addition, the payroll tax cuts of 2 percent expired in December 2012, bringing the rate back to the default of 6.2 percent as of January 2013. For further discussion of the federal budget sequestration and tax increases, see (a) IHS Global Insight. U.S. Forecast for September and October 2012. At the website: [www.ihs.com/products/global-insight/index.aspx](http://www.ihs.com/products/global-insight/index.aspx).

(b) Wells Fargo Economics Group. Monthly Outlook. October 2, 2012. At the website: [www.wellsfargo.com/com/research/economics](http://www.wellsfargo.com/com/research/economics).

(c) Wells Fargo Economics Group. Special Commentary. U.S. Fiscal Primer: The Deficit and Debt. August 2012. At the website: [www.wellsfargo.com/com/research/economics](http://www.wellsfargo.com/com/research/economics).

(d) IHS Global Insight. U. S. Economy Article: The Fiscal Cliff: An Update. December 19, 2012. At the website: [www.ihs.com/products/global-insight/index.aspx](http://www.ihs.com/products/global-insight/index.aspx).

(e) The Pew Center on the States. Fiscal Federalism Initiative. The Impact of the Fiscal Cliff on the States. November 2012. At the website: [www.pewtrusts.org/fiscal-federalism](http://www.pewtrusts.org/fiscal-federalism).

<sup>2</sup> See: (a) The New York Times. Gridlock Has Cost US Billions, and the Meter is Still Running. Annie Lowrey, Nathaniel Popper and Nelson D. Schwartz. October 16, 2013. At the website: [www.nytimes.com](http://www.nytimes.com).

(b) IHS Global Insight. US Economy: Article. Washington's potential twin fiscal calamities heighten economic and financial market risks. Paul Edelstein and Doug Handler. September 27, 2013. At the website: <http://www.ihs.com/products/global-insight>.

(c) IHS Global Insight. US Economic Outlook. October 2013. At the website: <http://www.ihs.com/products/global-insight>.

<sup>3</sup> See: (a) Wells Fargo Economics Group. Special Commentary. Arizona Economic Outlook: November 2013. Mark Vitner and Michael T. Wolf. November 4, 2013. At the website: [www.wellsfargo.com/com/research/economic](http://www.wellsfargo.com/com/research/economic).

(b) IHS Global Insight. US Markets State Economies. Arizona. Jim Diffley. Winter 2013-14. At the website: <http://www.ihs.com/products/global-insight>.

<sup>4</sup> See The Federal Reserve Bank of St. Louis Review. Why Are US Firms Holding So Much Cash?: An Exploration of Cross-Sectional Variation. Juan M. Sanchez and Emircan Yurdagul. July/August 2013. Volume 95(4). Pp. 293-325. At the website: <http://research.stlouisfed.org/>.

<sup>5</sup> See (a) Moritz Schularick and Alan M. Taylor. 2009. Credit Booms Gone Bust: Monetary Policy, Leverage Cycles and Financial Crisis, 1870-2008. NBER Working Paper No. 15512. November. At the website: <http://www.nber.org/papers/w15512>.

(b) Oscar Jorda, Moritz Schularick and Alan M. Taylor. 2010. Financial Crisis, Credit Booms, and External Imbalances: 140 Years of Lessons. NBER Working Paper No. 16567. December. At the website: <http://www.nber.org/papers/w16567>.

(c) Oscar Jorda, Moritz HP. Schularick and Alan M. Taylor. 2011. When Credit Bites Back: Leverage, Business Cycles, and Crises. NBER Working Paper No. 17621. December. At the website: <http://www.nber.org/papers/w17621>.

(d) Alan M. Taylor. 2012. The Great Leveraging. NBER Working Paper No. 18290. August. At the website: <http://www.nber.org/papers/w18290>.

<sup>6</sup> See FRED graphs and data for the variables: all employees; total nonfarm in the US(PAYNSA); all employees; total nonfarm in Arizona(SMU0400000000000001A); real personal consumption expenditures in the US(PCECC96); real personal income in the US(RPI); total personal income in Arizona(AZOTOT); compensation of employees: wages and salaries in the US(A576RC1A027NBEA); total wages and salaries in Arizona(AZWTOT); real gross domestic product(GDPC1); real gross private domestic investment, 3 decimal (GPDIC96); industrial production index (INDPRO); capacity utilization (TCU); manufacturing (MCUMFN); corporate profits after tax (CP); new private housing units authorized by building permits - in structures with 1 unit (PERMIT1); privately owned housing starts authorized by building permits, 1-unit structures for Arizona (AZBP1FH); and new private housing units authorized by building permit for Arizona (AZBPPRIV). At the website: <http://research.stlouisfed.org/fred2/>.

<sup>7</sup> See FRED graphs and data for the variables: net percentage of domestic respondents reporting increased willingness to make consumer installment loans(DRIWCIL); net percentage of domestic banks tightening standards for consumer loans excluding credit card and auto loans(STDSOTHCONS); net percentage of domestic banks tightening standards on consumer loans, credit cards(DRTSCLCC); households and nonprofit organizations; total liabilities, level(HNOTOLQ027S); households and nonprofit organizations; total mortgages; liability, level(HNOTMLQ027S); households; owners' equity in real estate, level(OEHRENWBSHNO); households; owners' equity in real estate as a percentage of household real estate, level(HOEREPHRE); households and nonprofit organizations; home mortgages; liability, level(HHMSDODNS); and household debt service payments as a percent of disposable personal income(TDSP). At the website: <http://research.stlouisfed.org/fred2/>.

Following factors supporting Arizona's economic growth continue to persist.

- Continued improvement in real Gross Domestic Product (GDP), real personal income at the state and national levels, employment, and retail sales.<sup>8</sup>
- Continued employment gains in the private sector, increasing private domestic investment, gradual increase in the index of industrial production and rate of capacity utilization, high levels of corporate profit, and a gradual resurgence in private residential construction permits.<sup>9</sup>
- Continued gradual climb in household net worth resulting from paying down of debts and accumulation of assets either through cash savings or through their homes. U.S. exports are also increasing.<sup>10</sup>
- Residential real estate markets in the state of Arizona and the metropolitan area of Phoenix are showing improvement. Home prices in Arizona are improving but are still way off peak<sup>11</sup>. In private residential real estate, a majority of the growth recently has been in the construction of multi-family structures, or apartments. Construction and sales of single family, private residences, though gradually increasing, are well below their most recent peaks of the housing bubble.<sup>12</sup> Commercial real estate is gradually improving with lower vacancy rates, higher rental rates and lower rates of default and delinquency in mortgage loans.<sup>13</sup> Industrial real estate sectors are also improving with increasing levels of construction activity across the nation for the building of warehouses and distribution centers to support online commerce.<sup>14</sup>

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<sup>8</sup>See FRED graphs and data for the variables: real gross domestic product, 1 decimal (GDPC1); real personal income (RPI); real disposable personal income (DSPIC96); total personal income in Arizona (AZOTOT); per capital personal income in Arizona (AZPCPI); and real retail and food services sales (RRSFS). At the website: <http://research.stlouisfed.org/fred2/>.

<sup>9</sup>See FRED graphs and data for the variables: real gross private domestic investment, 3 decimal (GPDIC96); industrial production index (INDPRO); capacity utilization (TCU); capacity utilization – manufacturing (MCUMFN); corporate profits after tax (CP); new private housing units authorized by building permits - in structures with 1 unit (PERMIT1); privately owned housing starts authorized by building permits, 1-unit structures for Arizona (AZBP1FH); and new private housing units authorized by building permit for Arizona (AZBPPRIV) . At the website: <http://research.stlouisfed.org/fred2/>.

<sup>10</sup>See FRED graphs and data for the variables: total net worth - balance sheet of households and nonprofit organizations (TNWBESHNO); total assets - balance sheet of households and nonprofit organizations (TABSHNO); owners' equity in household real estate - net worth - balance sheet of households and nonprofit organizations (OEHRENWBESHNO); total liabilities - balance sheet of households and nonprofit organizations (TLBESHNO); home mortgages - liabilities - balance sheet of households and nonprofit organizations (HMLBESHNO); debt outstanding domestic nonfinancial sectors - household, consumer credit sector (HCCSDODNS); debt outstanding domestic nonfinancial sectors - household, home mortgage sector (HHMSDODNS); household debt service payments as a percent of disposable personal income (TDSP); and real exports of goods & services, 1 decimal (EXPGSC1). At the website: <http://research.stlouisfed.org/fred2/>.

<sup>11</sup>See FRED graphs and data for the variables: all-transactions house price index for the United States (USSTHPI); all-transactions house price index for Arizona (AZSTHPI); home price index for Phoenix, Arizona (PHXRNSA); new private housing units authorized by building permit for Phoenix-Mesa-Scottsdale, AZ (MSA) (PHOE004BPPRIV); privately owned housing starts authorized by building permits: 1-unit structures for Phoenix-Mesa-Scottsdale, AZ (MSA) (PHOE004BP1FHSA); privately owned housing starts, authorized by building permits, 1-unit structures for Tucson, AZ, MSA, (TUCS004BP1FHSA); new private housing units authorized by building permits for Tucson, AZ, MSA, (TUCS004BPPRIV) ;privately owned housing starts authorized by building permits, 1-unit structures for Arizona (AZBP1FH); and new private housing units authorized by building permit for Arizona (AZBPPRIV); total private construction spending: residential (PRESCONS); private residential fixed investment (PRFI); and real private residential fixed investment, 3 decimal (PRFIC96). At the website: <http://research.stlouisfed.org/fred2/>.

<sup>12</sup> See (a) FRED graphs and data for the variable: new private housing units authorized by building permits for Arizona(AZBPPRIV); privately owned housing starts authorized by building permits: 1-unit structures for arizona(AZBP1FH); housing starts: total: new privately owned housing units started(HOUST); privately owned housing starts: 1-unit structures(HOUST1F); new privately-owned housing units authorized by building permits: total(PERMITNSA); and new private housing units authorized by building permits - in structures with 1 unit(PERMIT1) . At the website: <http://research.stlouisfed.org/fred2/>.

(b) Wells Fargo Economics Group. Special Commentary. Housing Data Wrap-Up: February 2014. Mark Vitner. Anika R. Kahn. February 28, 2014 . At the website: [www.wellsfargo.com/com/research/economics](http://www.wellsfargo.com/com/research/economics).

(c) Wells Fargo Economics Group. Special Commentary. Housing Chartbook: March 2014. Mark Vitner. Anika R. Kahn. April 9, 2014 . At the website: [www.wellsfargo.com/com/research/economics](http://www.wellsfargo.com/com/research/economics).

(d) IHS Global Insight U.S. Forecast for April 2014. At the website: [www.ihs.com/products/global-insight/index.aspx](http://www.ihs.com/products/global-insight/index.aspx).

<sup>13</sup> See (a) Wells Fargo Economics Group. Special Commentary. Commercial Real Estate Chartbook:Q4. Mark Vitner. Anika R. Kahn. March 13, 2014 . At the website: [www.wellsfargo.com/com/research/economics](http://www.wellsfargo.com/com/research/economics).

(b) IHS Global Insight U.S. Forecast for April 2014. At the website: [www.ihs.com/products/global-insight/index.aspx](http://www.ihs.com/products/global-insight/index.aspx).

<sup>14</sup> See (a) Wells Fargo Economics Group. Special Commentary. Industrial Fundamentals Move Ahead. Anika R. Kahn. March 28, 2014 . At the website: [www.wellsfargo.com/com/research/economics](http://www.wellsfargo.com/com/research/economics).

(b) IHS Global Insight U.S. Forecast for April 2014. At the website: [www.ihs.com/products/global-insight/index.aspx](http://www.ihs.com/products/global-insight/index.aspx).

- While revolving consumer credit levels have remained flat, an expansion of non-revolving consumer credit since 2011 has served as an impetus to expanding economic activity. Consumer sentiment and consumer spending have shown signs of improvement, but the rate of growth has been slowing down.<sup>15</sup> Banks are gradually making new consumer loans and increasing the quality of existing loans. Bank delinquency and default rates on consumer credit are declining.<sup>16</sup>

Some factors that could further dampen the growth of the local economy are given below. However, the positive factors listed above outweigh the uncertainties in the sections described below in support of our forecast:

- Constrained budgets persist for a large majority of households. Despite some job growth and lowering in the unemployment rate, many consumers in the US continue to face employment insecurity, lower wages and benefits, debt, and rising prices for essentials that limits the amount of funds available for discretionary spending.<sup>17</sup> Real per capita disposable income in the US is contracting as well as median household income in the US and AZ.<sup>18</sup> Because of slow employment and income growth in this recovery, the share of gross domestic income to wage and salary accruals has continued to fall to near historic lows. Even the share of gross domestic income paid as compensation to employees continues to fall to a level near the early 1950's.<sup>19</sup> Personal savings rate is growing limiting the amount they spend on goods and services.<sup>20</sup>
- The residential real estate market has improved. However, with Dodd-Frank rules, the underwriting standards have become more stringent and require higher down payment, higher FICO score, lower debt to income ratios, increasing lockout period after a foreclosure and considerably more paperwork. Increased government scrutiny may limit the entry of new firms into the mortgage market. Rising interest rates could serve as a deterrent to some prospective buyers.<sup>21</sup>
- Although real business investment continues to grow, the rate of growth has slowed as a consequence of demand uncertainty.<sup>22</sup>

<sup>15</sup>See FRED graphs and data for the variables: total revolving credit owned and securitized, outstanding (REVOLSL); total nonrevolving credit owned and securitized, outstanding (NONREVSL); University of Michigan: consumer sentiment (UMCSENT); and real personal consumption expenditures (PCEC96). At the website: <http://research.stlouisfed.org/fred2/>.

<sup>16</sup> See FRED graphs and data for the variables: net percentage of domestic respondents reporting increased willingness to make consumer installment loans(DRIWCIL); net percentage of domestic banks tightening standards on consumer loans, credit cards(DRTSCLCC); net percentage of domestic banks tightening standards for consumer loans excluding credit card and auto loans(STDSOTHCONS); delinquency rate on consumer loans, all commercial banks(DRCLACBS); delinquency rate on commercial real estate loans (excluding farmland), booked in domestic offices, all commercial banks(DRCRELEXFACBS); delinquency rate on single-family residential mortgages, booked in domestic offices, all commercial banks(DRSFRMACBS); and delinquency rate on business loans, all commercial banks(DRBLACBS). At the website: <http://research.stlouisfed.org/fred2/>.

<sup>17</sup>See (a) Global Insight U.S. Forecast for October 2013. At the website: [www.ihs.com/products/global-insight/index.aspx](http://www.ihs.com/products/global-insight/index.aspx).

(b) Wells Fargo Economics Group. Special Commentary. The U.S. labor Market Is Not Working For Many. Jay H. Bryson and Sarah Watt. August 29, 2013. At the website: [www.wellsfargo.com/com/research/economics](http://www.wellsfargo.com/com/research/economics).

(c) Wells Fargo Economics Group. Special Commentary. Economic Western Round Up: Western States Leading the Nation's Recovery. Mark Vitner, Michael T. Wolf and Sara Silverman. July 24, 2013. Page 4. At the website: [www.wellsfargo.com/com/research/economics](http://www.wellsfargo.com/com/research/economics).

<sup>18</sup> See FRED graphs and data for the variables: real median household income in the United States(MEHAINUSA672N); real median household income in Arizona(MEHAINUSA672N); and real disposable personal income: per capita(A229RX0Q048SBEA). At the website: <http://research.stlouisfed.org/fred2/>.

<sup>19</sup> See FRED graphs and data for the variables: shares of gross domestic income: compensation of employees, paid: wage and salary accruals: disbursements: to persons(W270RE1A156NBEA); shares of gross domestic income: compensation of employees, paid: wage and salary accruals(A4102E1A156NBEA); and shares of gross domestic income: compensation of employees, paid(A4002E1A156NBEA). At the website: <http://research.stlouisfed.org/fred2/>.

<sup>20</sup> See FRED graphs and data for the variables: personal saving rate(PSAVERT); personal saving(PSAVE); personal saving as a percentage of disposable personal income(A072RC1Q156SBEA); and ratio of personal saving to disposable personal income for United States(Q1074BUSQ163SNBR). At the website: <http://research.stlouisfed.org/fred2/>.

<sup>21</sup> See Finance Advisory Committee. Revenue and Budget Update. Joint Legislative Budget Committee. State of Arizona Legislature. April 10, 2014. At the web site: <http://www.azleg.gov/jlbc/revenuebudgetupdate041014.pdf>.

<sup>22</sup>See (a) See FRED graphs and data for the variable: real gross private domestic investment, 3 decimal (GPDIC96). At the website: <http://research.stlouisfed.org/fred2/>.

- In the public sector, the policies of the federal government have turned from fiscal stimulus during and immediately after the most recent economic downturn to austerity in the form of reduced expenditures and higher taxes as a means of reducing the federal budget deficit. The cost of austerity policy measures that include spending cuts, tax increases, or a mixture of the two have slowed the aggregate demand in the US economy, thereby slowing the rate of economic and employment growth.<sup>23</sup>
- Arizona is one of the states in the nation most vulnerable to federal government expenditure changes because of the large proportion of military spending in the state's economy. Operating at a lower level of federal government expenditures is projected to have the greatest impact in the following major industry sectors: Manufacturing; Retail Trade; Professional and Business Services; and Government.<sup>24</sup>

In addition to the factors listed above there are some grounds for limited optimism and concern on the international front:

- Arizona exports could have a slight stimulating effect with a gradual improvement in the overall world economy, especially in the major US trading partners such as Canada and Mexico.<sup>25</sup>
- A notable current geopolitical risk is the conflict between Russia and Ukraine with Russia being a major international petroleum and natural gas supplier. A political conflict could increase the global price of petroleum and natural gas and, thus slow the pace of world economic growth.<sup>26</sup>
- China's national economy grew an annual 7.4 percent in the first quarter, slowing from 7.7 per cent in the previous quarter. Some analysts have raised suspicion over the growth data, pointing to sluggish factory growth and weak investment. China's resource-dependent and manufacturing-heavy provinces suffered the sharpest economic slowdown in the first quarter as the government pushed to tackle excessive factory capacity and pollution, official data showed.<sup>27</sup>

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(b) Wells Fargo Economics Group. Special Commentary. Business Spending Mid-Year Outlook. Tim Quinlan and Sarah Watt. June 28, 2013. At the website: [www.wellsfargo.com/com/research/economic](http://www.wellsfargo.com/com/research/economic).

(c) IHS Global Insight. U.S. Economic Outlook for October 2013. At the website: [www.ihs.com/products/global-insight/index.aspx](http://www.ihs.com/products/global-insight/index.aspx).

<sup>23</sup>See (a) Global Insight U.S. Forecast for April 2013. at the website [www.ihs.com/products/global-insight/index.aspx](http://www.ihs.com/products/global-insight/index.aspx).

(b) Wells Fargo Economics Group. Special Commentary. Economic Impact of Sequestration. February 25, 2013. At the website: [www.wellsfargo.com/com/research/economic](http://www.wellsfargo.com/com/research/economic).

(c) Wells Fargo Economics Group. Special Commentary. Sequestering Economic Growth?. John E. Silvia and Michael A. Brown. September 27, 2013. At the website: [www.wellsfargo.com/com/research/economic](http://www.wellsfargo.com/com/research/economic).

<sup>24</sup>See: (a) Wells Fargo Economics Group. Special Commentary. Sequestration: Which States Are Most Vulnerable?. February 18, 2013. At the website: [www.wellsfargo.com/com/research/economic](http://www.wellsfargo.com/com/research/economic).

(b) Wells Fargo Economics Group. Special Commentary. Economic Impact of Sequestration. February 25, 2013. At the website: [www.wellsfargo.com/com/research/economic](http://www.wellsfargo.com/com/research/economic).

(c) Wells Fargo Economics Group. Special Commentary. Arizona Economic Outlook: November 2013. Mark Vitner and Michael T. Wolf November 4, 2013. At the website: [www.wellsfargo.com/com/research/economic](http://www.wellsfargo.com/com/research/economic).

(d) Wells Fargo Economics Group. Joint Economics and Municipal Commentary. FY 2014 State Budgets and Beyond. John E. Silvia, Natalie Cohen, Michael A. Brown and Roy Eappen. July 9, 2013. At the website: [www.wellsfargo.com/com/research/economics](http://www.wellsfargo.com/com/research/economics).

(e) IHS Global Insight. US Markets State Economies. Arizona. Jim Diffley. Winter2013-14. At the website: <http://www.ihs.com/products/global-insight>.

<sup>25</sup> See IHS Global Insight. U.S. Economic Outlook for April 2014. At the website: [www.ihs.com/products/global-insight/index.aspx](http://www.ihs.com/products/global-insight/index.aspx).

<sup>26</sup> See (a) IHS Global Insight. U.S. Economic Outlook for April 2014. At the website: [www.ihs.com/products/global-insight/index.aspx](http://www.ihs.com/products/global-insight/index.aspx).

(b) Wells Fargo Economics Group. Monthly Outlook. April 9, 2014. At the website: [www.wellsfargo.com/com/research/economics](http://www.wellsfargo.com/com/research/economics).

(c) Wells Fargo Economics Group. Global Chartbook: March 2014. March 18, 2014. At the website: [www.wellsfargo.com/com/research/economics](http://www.wellsfargo.com/com/research/economics).

<sup>27</sup> See Economic Times. China's provincial GDP data adds to slowdown concerns. Reuters. April 29, 2014. At the website: <http://economictimes.indiatimes.com/news/international/business/chinas-provincial-gdp-data-adds-to-slowdown-concerns/articleshow/34374966.cms>.

## Arizona Industry Employment Projections (2013 – 2015)

**Table 2** describes the average employment over-the-year percentage change for each sector for 2013, 2014, and 2015 where 2013 is the base year or last full year of employment data. Forecast years are 2014 and 2015. Job gains are projected in all major sectors of the Arizona economy with the exception of one sector during the forecast time period. This would suggest a continuous improvement in the rate of Nonfarm employment gains in 2014 and 2015 compared to 2013.

**Figure 1** describes the major sectors of the Arizona economy with projected gains and losses in employment from 2013 to 2015. Gains are expected in ten sectors while losses are expected in one sector over the two-year period.

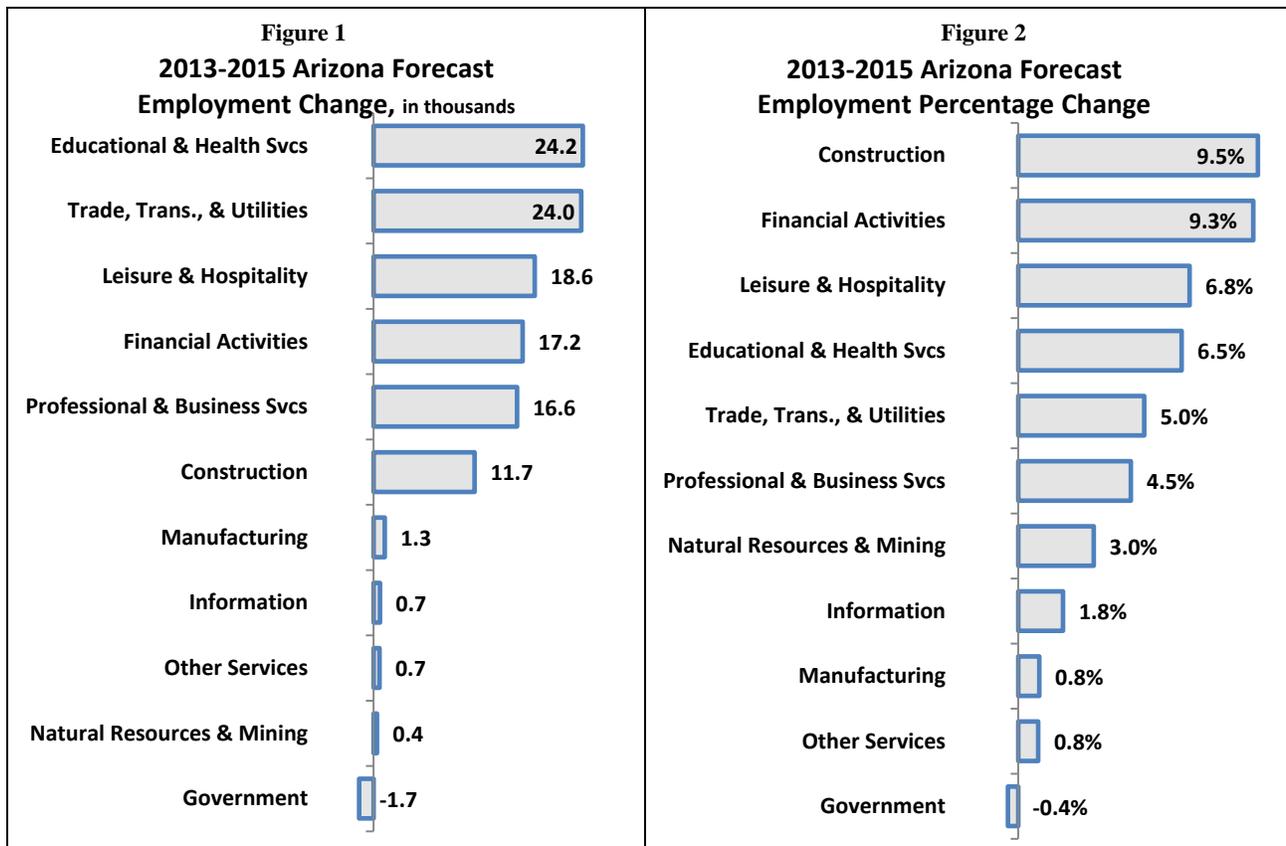
**Figure 2** lists projected job gains as a percentage change in employment for all sectors.

For the 2013 to 2015 forecast time period, the major sectors with the largest projected employment gains are: Educational and Health Services (24,200 jobs); Trade, Transportation and Utilities (24,000 jobs); Leisure and Hospitality (18,600); Financial Activities (17,200); Professional and Business Services (16,600 jobs); and Construction (11,700 jobs). Smaller gains are forecast for these sectors: Manufacturing (1,300 jobs); Information (700 jobs); Other Services (700 jobs); and Natural Resources and Mining (400 jobs). The only major sector with a projected loss in employment for 2013 to 2015 is the Government (1,700 jobs).

	2013(a)	2014(b)	2015(b)
<b>Total Nonfarm</b>	<b>2.1%</b>	<b>2.1%</b>	<b>2.4%</b>
Construction	5.9%	4.0%	5.3%
Natural Resources & Mining	4.7%	1.5%	1.4%
Profess & Business Svcs	4.0%	2.0%	2.4%
Financial Activities	4.7%	5.1%	4.0%
Information	4.8%	0.8%	0.9%
Leisure & Hospitality	2.9%	3.2%	3.5%
Educational & Health Svcs	2.0%	3.3%	3.0%
Government	-0.1%	-0.4%	0.0%
Trade, Trans. & Utilities	0.9%	2.3%	2.6%
Manufacturing	0.1%	-0.1%	0.9%
Other Services	1.0%	0.2%	0.6%

a) Historical (BLS Current Employment Statistics)  
b) Forecast

During the two-year forecast time period, the major industry sectors arranged in the descending order of growth rates are: Construction (9.5 percent); Financial Activities (9.3 percent); Leisure and Hospitality (6.8 percent); Educational and Health Services (6.5 percent); Trade, Transportation and Utilities (5.0 percent); Professional and Business Services (4.5 percent); and Natural Resources and Mining (3.0 percent). Relatively, slower rate of growth is projected for Information (1.8 percent); Manufacturing (0.8 percent); and Other Services (0.8 percent). The only major sector with forecast job losses is Government (-0.4 percent).



**Educational and Health Services (EHS):** The EHS sector is forecast to gain 12,400 jobs (3.3 percent) in 2014 and 11,800 jobs (3.0 percent) in 2015. The largest projected increase in employment is forecast in the sub-sector of Ambulatory Health Care Services. Increases are also expected in Nursing and Residential Care Services, Hospitals and Social Assistance sectors. Expansions in state spending through the provisions of the federal 2010 Affordable Care Act and population increases are projected to bolster employment growth in the health care services related sectors.<sup>28</sup> Federal government uncertainty has the potential of curtailing employment growth in the health care sectors. Private Educational Services sub-sector is forecast to have slowing growth in employment as more people leave school to re-enter the workforce as the economy gradually improves or shun the pursuit of higher education to avoid acquiring non-payable levels of student debt.<sup>29</sup> In addition, the opening of several new private colleges focusing on health related occupations training in Arizona have bolstered the projection in the sector.<sup>30</sup>

<sup>28</sup>See (a) Center on Budget and Policy Priorities. CBO Finds Health Reform's Medicaid Expansion Is an Even Better Deal for States. Edwin Park. April 22, 2014. At the website: <http://www.cbpp.org/cms/index.cfm?fa=view&id=4131>.

(b) The Los Angeles Times. Arizona Gov. Jan Brewer pushes through Obama's Medicaid expansion. Cindy Carcamo. June 14, 2013. At the website: <http://articles.latimes.com/print/2013/jun/14/nation/la-na-nn-ff-jan-brewer-arizona-medicaid-20130613>.

(c) Grand Canyon Institute. Arizona's Medicaid Options under the Affordable Care Act: Fiscal and Economic Consequences. Dave Wells, Ph.D., Research Director, Grand Canyon Institute. Policy Paper. September 26, 2012. At the website: <http://grandcanyoninstitute.org/>.

<sup>29</sup>See (a) See FRED graphs and data for the variable, FGCCSAQ027S, the asset level of federal government student loan consumer credit. At the website: <http://research.stlouisfed.org/fred2/>.

(b) Demos. At What Cost?: How Student Debt Reduces Lifetime Wealth. Robert Hiltonsmith. August 2013. At the website: <http://www.demos.org/what-cost-how-student-debt-reduces-lifetime-wealth>.

(b) Federal Reserve Bank of New York. The Financial Crisis at the Kitchen Table: Trends in Household Debt and Credit. Meta Brown, Andrew Haughwout, Donghoon Lee and Wilbert van der Klaauw. Current Issues in Economics and Finance. Volume 19:2. 2013. Pp. 1-10. At the website: [www.newyorkfed.org/research/current\\_issues](http://www.newyorkfed.org/research/current_issues).

(c) The Wall Street Journal. Student Loan Pretenders: New Evidence that Subsidized Debt is Harming Borrowers. July 10, 2013. At the website: <http://online.wsj.com>.

**Trade, Transportation and Utilities (TTU):** The TTU sector is forecast to gain 11,100 jobs (2.3 percent) in 2014 and 12,900 jobs (2.6 percent) in 2015. Retail Trade is the TTU sub-sector with the most projected gains in employment with the majority of these gains coming from Motor Vehicles and Parts Dealers. Fewer gains are forecast in Wholesale Trade and Transportation and Warehousing and Utilities sectors. Within Retail Trade sub-sectors, all components are projected to post employment gains. However, Air Transportation, Truck Transportation, and Utilities is forecast to have job losses as a consequence of industry consolidation and recent budget cuts. The unreported sub-sectors in Transportation, Warehousing and Utilities are projected to have job gains.

**Leisure and Hospitality (L&H):** The L&H sector is projected to have an increase of 8,900 jobs (3.2 percent) in 2014 and 9,800 jobs (3.5 percent) in 2015. The sub-sectors with the largest projected job gains are Food Services and Drinking Places. Fewer job gains are forecast in the sub-sectors of Accommodations and Arts, Entertainment and Recreation. A tighter fiscal environment and is expected to limit business and recreational related travel. However, domestic and international tourism demand is projected to bolster employment in the Leisure and Hospitality sector.

**Financial Activities (FA):** This sector is projected to have an employment increase of 9,500 jobs (5.1 percent) in 2014 and 7,700 jobs (4.0 percent) in 2015. The job growth in Financial Activities over the two-year period is projected to slow in 2015 when compared to 2014. The employment forecast is reinforced by rising interest rates in 2014 which could hinder employment growth in this sector.<sup>31</sup> During the 2014 and 2015 forecast time frame, the sub-sectors with the largest projected gains in employment are: Insurance, Funds and Trusts; Real Estate, Rental and Leasing; and Securities; Credit Intermediation and Monetary Authorities; Securities, Commodities Contracts, and Investments.

**Professional and Business Services (PBS):** The PBS sector is projected to have an increase of 7,600 jobs (2.0 percent) in 2014 and 9,000 jobs (2.4 percent) in 2015. The Administrative and Waste Services sub-sectors have the largest projected job gains over the projection period including Employment Services, Business Support Services, and Services to Buildings and Dwellings. Business firms are expected to hire contingent labor as a lower-cost means to expand output during these uncertain times. Because of recent federal government expenditure reductions, job losses are forecast in the sub-sectors of Professional, Scientific and Technical Services along with Management of Companies and Enterprises.

**Construction:** This sector is forecast to gain 4,900 jobs (4.0 percent) in 2014 and 6,700 jobs (5.3 percent) in 2015. Job gains are forecast across almost all Construction sub-sectors with the largest employment gains expected in the Specialty Trades sub-sector. Building construction is the only Construction sub-sector with projected job losses from 2013 to 2015. The Western Blue Chip Consensus forecast for single-family housing permits over the year in Arizona are 22.5 percent for 2014 and 37.4 percent in 2015, also supports an employment increase in the Construction sector.<sup>32</sup> Multi-family private residence construction is also forecast to bolster employment levels in the construction sectors.<sup>33</sup> Other factors supporting growth in this sector are:

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(d) The Guardian. Helaine Olen's Money Blog: Want to fix the US student loan crisis?. July 11, 2013. At the website: <http://www.guardian.co.uk/us-money-blog>.

(e) The Guardian. Helaine Olen's Money Blog: The curse of student loan debt: owe while you're young, live when you're old. August 8, 2013. At the website: <http://www.guardian.co.uk/us-money-blog>.

<sup>30</sup>See as an example of a private educational institution beginning operations in 2014, the description of the new veterinary medicine school program at Midwestern University in Glendale, Arizona that will begin classes in the Fall of 2014 at the website: <http://www.midwestern.edu/programs-and-admission/az-veterinary-medicine.html>.

<sup>31</sup>IHS Global Insight. U.S. Economic Outlook for April 2014. At the website: [www.ihsglobal.com/products/global-insight/index.aspx](http://www.ihsglobal.com/products/global-insight/index.aspx).

<sup>32</sup>See Western Blue Chip Economic Forecast. Arizona Single-family Housing Permits for 2014-2015. April 1, 2014. At the website: <http://legacy.wpcarey.asu.edu/bluechip/western/arizona.cfm>.

<sup>33</sup>See (a) FRED graphs and data for the variable, AZBPPRIV, new private housing units authorized by building permits for Arizona. At the website: <http://research.stlouisfed.org/fred2/>.

(b) Wells Fargo Economics Group. Special Commentary. Housing Data Wrap-Up: February 2014. Mark Vitner. Anika R. Kahn. February 28, 2014. At the website: [www.wellsfargo.com/research/economics](http://www.wellsfargo.com/research/economics).

home repair and maintenance activities, population growth, and new infrastructure projects such as the expansion of light rail in Phoenix. However, projections of the exhaustion of the federal government's Highway Trust Fund in the last half of 2014 have the potential to restrain the growth of employment in Construction especially in the sub-sectors of Heavy and Civil Engineering Construction.<sup>34</sup>

**Manufacturing:** This sector is projected to have an employment decrease of 200 jobs (0.1 percent) in 2014 and a gain of 1,400 jobs (0.9 percent) in 2015. During the two-year forecast, job gains are anticipated only in the reported Durable Goods sector of Fabricated Metal Products. Job gains are also forecast in the unreported Durable Goods sectors. However, job losses are projected in the remaining reported Durable Goods sectors of Aerospace Products and Parts and Computer and Electronic Products. In the face of uncertainties in federal spending, defense related industries are expected to have leaner staffing levels. In contrast to many Durable Goods sectors, Non-Durable goods sector is forecast to gain employment in 2014 and 2015.

**Information:** This sector is projected to have a gain in employment of 300 jobs (0.8 percent) in 2014 and an increase in employment of 400 jobs (0.9 percent) in 2015. Job gains are forecast in the telecommunications and non-telecommunications sub-sectors of Information.

**Other Services (OS):** OS is forecast to gain 200 jobs (0.2 percent) in 2014 and 500 jobs (0.6 percent) in 2015. A slowly improving economy with gradually rising levels of business and consumer spending is forecast to bolster the demand and employment for the services provided by this sector.

**Natural Resources and Mining (NRM):** The NRM sector is forecast to gain 200 jobs (1.5 percent) in 2014 and 200 jobs (1.4 percent) in 2015. From 2013 to 2015, slowing job gains are projected. Gradual recoveries in the Euro Monetary Zone, Asia, and Latin American economies are expected to bolster export demand. Employment growth might be dampened with the price of copper falling 13.1 percent from March 2013 to March 2014.<sup>35</sup>

**Government:** This sector is forecast to lose 1,700 jobs (0.4 percent) in 2014 and to remain unchanged in 2015. The majority of projected decreases in employment from 2014 to 2015 are expected in the federal and local government sub-sectors.<sup>36</sup> Job gains are forecast in the education<sup>37</sup> and non-education sub-sectors of state government.

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(c) Wells Fargo Economics Group. Special Commentary. Commercial Real Estate Chartbook:Q4. Mark Vitner. Anika R. Kahn. March 13, 2014 . At the website: [www.wellsfargo.com/com/research/economics](http://www.wellsfargo.com/com/research/economics).

(d) Wells Fargo Economics Group. Special Commentary. Housing Chartbook: March 2014. Mark Vitner. Anika R. Kahn. April 9, 2014 . At the website: [www.wellsfargo.com/com/research/economics](http://www.wellsfargo.com/com/research/economics).

(e) IHS Global Insight U.S. Forecast for April 2014. At the website: [www.ihs.com/products/global-insight/index.aspx](http://www.ihs.com/products/global-insight/index.aspx).

<sup>34</sup> See (a) The Financial Times. Threat to US Building Projects as Cash Runs Out: Transportation Plans Cancelled by States. Robert Wright in New York. Richard McGregor in Washington. April 29, 2014. Available at the web site: <http://www.ft.com/home/us>.

(b) The Financial Times. Broken System: US Infrastructure. Robert Wright. April 29, 2014. Available at the web site: <http://www.ft.com/home/us>.

<sup>35</sup> See Index Mundi. Copper Futures End of Day Settlement Price. At the website: <http://www.indexmundi.com/commodities/?commodity=copper&months=12> .

<sup>36</sup> See (a) Wells Fargo Economics Group. Special Commentary. 2013 Local Budget Outlook: A Turnaround in Revenue, But Uncertainty Remains. John E. Silvia and Michael A. Brown. August 26, 2013. At the website: [www.wellsfargo.com/com/research/economics](http://www.wellsfargo.com/com/research/economics).

(b) Wells Fargo Economics Group. Joint Economics and Municipal Commentary. FY 2014 State Budgets and Beyond. John E. Silvia, Natalie Cohen, Michael A. Brown and Roy Eappen. July 9, 2013. At the website: [www.wellsfargo.com/com/research/economics](http://www.wellsfargo.com/com/research/economics).

(c) Center on Budget and Policy Priorities. Policy Basics: Where Do Our State Tax Dollars Go? March 27, 2014. At the website: [www.cbpp.org/reports](http://www.cbpp.org/reports).

<sup>37</sup> See State of Arizona Board of Regents. Table 2:Enrollments for Fall Semester: Headcounts and Full-Time Equivalents (21<sup>st</sup> Day). Academic Affairs Committee Meeting. December 5, 2013. Agenda Item #6A. Page 5.

## Conclusion

Arizona is projected to gain 114,000 Nonfarm jobs over the two projected years (2014 & 2015). This represents a growth rate of 4.5 percent over the two projected years. An over-the-year gain of 53,500 jobs is projected in 2014 and 60,400 jobs in 2015. The rate of growth projected for Nonfarm employment is 2.1 percent in 2014 and 2.4 percent in 2015. Arizona's Nonfarm employment is forecast to continue a slow, subpar growth in 2014 and gradually gain momentum in 2015. This is consistent with improvement seen in many economic indicators.

While the U.S. has regained 95 percent of the jobs lost since its prerecession peak, Arizona has recovered only 56 percent of lost jobs as of February 2014. Despite this discrepancy, the economic fundamentals in Arizona continue to improve. Ten of the eleven major sectors are forecast to see employment growth over the two forecast years. The housing market in Arizona continues to grow. Home prices are also gradually increasing but still lower than the pre-recession peak. Arizona's population compared to 2012 grew faster in 2013 based on our internal EPS ADOA preliminary numbers. The population forecast is expected to improve further in the outlying years.

All sectors of the Arizona economy are projected to gain jobs during the 2013-2015 forecast time period with the exception of the Government sector. For the two forecast years, the major sectors with projected employment gains in descending order include: Educational and Health Services (24,200 jobs); Trade, Transportation and Utilities (24,000 jobs); Leisure and Hospitality (18,600); Financial Activities (17,200); Professional and Business Services (16,600 jobs); and Construction (11,700 jobs). Smaller gains are forecast in: Manufacturing (1,300 jobs); Information (700 jobs); Other Services (700 jobs); and Natural Resources and Mining (400 jobs). The only major sector with a projected loss is the Government (1,700 jobs).

The growth rate over the 2013-2015 forecast time period for various sectors in descending order of magnitude are: Construction (9.5 percent); Financial Activities (9.3 percent); Leisure and Hospitality (6.8 percent); Educational and Health Services (6.5 percent); Trade, Transportation and Utilities (5.0 percent); Professional and Business Services (4.5 percent); and Natural Resources and Mining (3.0 percent). Relatively, slower rate of growth is projected for Information (1.8 percent); Manufacturing (0.8 percent); and Other Services (0.8 percent). The only major sector with negative rate of growth forecast is the Government (-0.4 percent).

The state faces headwinds with respect to federal government uncertainty. Austerity policies adopted have slowed the pace of economic recovery to some extent as reduced government spending, employment, investment and higher taxes reduce the level of real, effective demand in the economy. There are risks from consumers that could add uncertainty to the forecast. Despite some job growth and lowering in the unemployment rate, many consumers in the U.S. continue to face employment insecurity, lower wages and high debt. Constrained budgets persist for a large majority of households inhibiting their spending ability.

There are many positive indicators suggesting improvement in the overall economy. An overall improving international economy is expected to foster economic activity on the domestic front. Economic indicators such as; GDP, employment, industrial production, wholesale and retail sales, capacity utilization rate, household net worth, income levels, consumer spending, residential real estate markets, private domestic investment are showing an improvement since the recession. There are also risks associated with uncertainties as mentioned above. However, we believe the positive factors listed above outweigh the uncertainties in support of our forecast.

# Arizona Employment Forecast

(In Thousands)

	Historical			Forecast	
	2011	2012	2013	2014	2015
<b>Total Nonfarm Employment</b>	2412.1	2463.5	2515.2	2568.7	2629.2
<i>Numerical Change</i>	26.0	51.4	51.7	53.5	60.4
<i>Percent Change</i>	1.1%	2.1%	2.1%	2.1%	2.4%
<b>Manufacturing</b>	150.5	155.1	155.2	155.0	156.5
<i>Numerical Change</i>	2.0	4.6	0.1	-0.2	1.4
<i>Percent Change</i>	1.3%	3.1%	0.1%	-0.1%	0.9%
<b>Natural Resources &amp; Mining</b>	11.6	12.7	13.3	13.5	13.7
<i>Numerical Change</i>	0.7	1.1	0.6	0.2	0.2
<i>Percent Change</i>	6.4%	9.5%	4.7%	1.5%	1.4%
<b>Construction</b>	110.9	116.0	122.9	127.8	134.6
<i>Numerical Change</i>	-0.6	5.1	6.9	4.9	6.7
<i>Percent Change</i>	-0.5%	4.6%	5.9%	4.0%	5.3%
<b>Trade, Transportation, &amp; Utilities</b>	472.9	476.4	480.9	492.0	504.9
<i>Numerical Change</i>	5.1	3.5	4.5	11.1	12.9
<i>Percent Change</i>	1.1%	0.7%	0.9%	2.3%	2.6%
<b>Information</b>	37.1	39.6	41.5	41.8	42.2
<i>Numerical Change</i>	0.7	2.5	1.9	0.3	0.4
<i>Percent Change</i>	1.9%	6.7%	4.8%	0.8%	0.9%
<b>Financial Activities</b>	171.3	176.7	185.0	194.5	202.2
<i>Numerical Change</i>	3.7	5.4	8.3	9.5	7.7
<i>Percent Change</i>	2.2%	3.2%	4.7%	5.1%	4.0%
<b>Professional &amp; Business Services</b>	347.1	357.7	371.9	379.5	388.5
<i>Numerical Change</i>	6.6	10.6	14.2	7.6	9.0
<i>Percent Change</i>	1.9%	3.1%	4.0%	2.0%	2.4%
<b>Educational &amp; Health Services</b>	355.4	366.3	373.7	386.1	397.9
<i>Numerical Change</i>	10.9	10.9	7.4	12.4	11.8
<i>Percent Change</i>	3.2%	3.1%	2.0%	3.3%	3.0%
<b>Leisure &amp; Hospitality</b>	259.3	266.8	274.5	283.4	293.1
<i>Numerical Change</i>	5.4	7.5	7.7	8.9	9.8
<i>Percent Change</i>	2.1%	2.9%	2.9%	3.2%	3.5%
<b>Other Services</b>	87.9	86.2	87.1	87.3	87.8
<i>Numerical Change</i>	-0.3	-1.7	0.9	0.2	0.5
<i>Percent Change</i>	-0.3%	-1.9%	1.0%	0.2%	0.6%
<b>Government</b>	408.1	409.9	409.4	407.7	407.7
<i>Numerical Change</i>	-8.2	1.8	-0.5	-1.7	0.0
<i>Percent Change</i>	-2.0%	0.4%	-0.1%	-0.4%	0.0%

Note - All figures are annual averages rounded to the nearest tenth for percentage change or the nearest hundred for employment. Numerical change and percent change are based on the difference from the previous year's annual average employment.

# Phoenix-Mesa-Glendale\* MSA Employment Forecast

(In Thousands)

	Historical			Forecast	
	2011	2012	2013	2014	2015
<b>Total Nonfarm Employment</b>	1719.0	1762.9	1811.4	1856.0	1904.0
<i>Numerical Change</i>	25.8	43.9	48.5	44.6	48.0
<i>Percent Change</i>	1.5%	2.6%	2.8%	2.5%	2.6%
<b>Manufacturing</b>	112.8	116.8	116.9	116.6	117.6
<i>Numerical Change</i>	2.1	4.0	0.1	-0.3	1.0
<i>Percent Change</i>	1.9%	3.5%	0.1%	-0.3%	0.9%
<b>Natural Resources &amp; Mining</b>	3.3	3.7	4.1	4.1	4.1
<i>Numerical Change</i>	0.3	0.4	0.4	0.0	0.0
<i>Percent Change</i>	10.0%	12.1%	10.8%	0.5%	0.6%
<b>Construction</b>	83.1	88.2	92.9	97.1	102.7
<i>Numerical Change</i>	0.7	5.1	4.7	4.2	5.6
<i>Percent Change</i>	0.8%	6.1%	5.3%	4.6%	5.7%
<b>Trade, Transportation, &amp; Utilities</b>	349.9	353.7	356.8	365.0	374.3
<i>Numerical Change</i>	4.0	3.8	3.1	8.2	9.3
<i>Percent Change</i>	1.2%	1.1%	0.9%	2.3%	2.5%
<b>Information</b>	28.5	31.2	33.1	33.4	33.7
<i>Numerical Change</i>	1.1	2.7	1.9	0.3	0.3
<i>Percent Change</i>	4.0%	9.5%	6.1%	0.9%	1.0%
<b>Financial Activities</b>	145.3	150.4	158.9	167.7	174.9
<i>Numerical Change</i>	4.3	5.1	8.5	8.8	7.2
<i>Percent Change</i>	3.0%	3.5%	5.7%	5.5%	4.3%
<b>Professional &amp; Business Services</b>	277.6	286.8	300.1	306.9	314.2
<i>Numerical Change</i>	6.2	9.2	13.3	6.8	7.3
<i>Percent Change</i>	2.3%	3.3%	4.6%	2.3%	2.4%
<b>Educational &amp; Health Services</b>	247.6	255.8	262.3	272.1	281.1
<i>Numerical Change</i>	8.5	8.2	6.5	9.8	9.0
<i>Percent Change</i>	3.6%	3.3%	2.5%	3.7%	3.3%
<b>Leisure &amp; Hospitality</b>	177.8	183.4	190.7	197.7	205.4
<i>Numerical Change</i>	4.4	5.6	7.3	7.0	7.7
<i>Percent Change</i>	2.5%	3.1%	4.0%	3.7%	3.9%
<b>Other Services</b>	63.9	62.5	64.0	64.4	64.8
<i>Numerical Change</i>	-0.1	-1.4	1.5	0.4	0.5
<i>Percent Change</i>	-0.2%	-2.2%	2.4%	0.6%	0.7%
<b>Government</b>	229.2	230.6	231.7	230.9	231.0
<i>Numerical Change</i>	-5.6	1.4	1.1	-0.8	0.1
<i>Percent Change</i>	-2.4%	0.6%	0.5%	-0.3%	0.0%

Note - All calculations are based on actual figures and then rounded to the nearest tenth for percentage change or the nearest hundred for employment.

\*Phoenix-Mesa-Glendale MSA includes all of Maricopa and Pinal Counties

# Tucson MSA Employment Forecast

(In Thousands)

	Historical			Forecast	
	2011	2012	2013	2014	2015
<b>Total Nonfarm Employment</b>	353.5	358.8	361.2	365.6	372.1
<i>Numerical Change</i>	1.2	5.3	2.4	4.4	6.4
<i>Percent Change</i>	0.3%	1.5%	0.7%	1.2%	1.8%
<b>Manufacturing</b>	23.4	23.4	23.2	23.3	23.5
<i>Numerical Change</i>	-0.6	0.0	-0.2	0.1	0.2
<i>Percent Change</i>	-2.5%	0.0%	-0.9%	0.2%	1.0%
<b>Natural Resources &amp; Mining</b>	1.9	2.1	2.3	2.4	2.4
<i>Numerical Change</i>	0.1	0.2	0.2	0.1	0.1
<i>Percent Change</i>	5.6%	10.5%	9.5%	3.0%	3.0%
<b>Construction</b>	14.5	14.4	15.3	15.7	16.4
<i>Numerical Change</i>	-0.5	-0.1	0.9	0.4	0.7
<i>Percent Change</i>	-3.3%	-0.7%	6.3%	2.7%	4.6%
<b>Trade, Transportation, &amp; Utilities</b>	57.7	57.8	58.8	60.4	62.3
<i>Numerical Change</i>	0.8	0.1	1.0	1.6	1.8
<i>Percent Change</i>	1.4%	0.2%	1.7%	2.8%	3.1%
<b>Information</b>	4.2	4.2	4.3	4.3	4.4
<i>Numerical Change</i>	-0.1	0.0	0.1	0.0	0.0
<i>Percent Change</i>	-2.3%	0.0%	2.4%	0.7%	0.9%
<b>Financial Activities</b>	16.8	16.8	17.0	17.2	17.5
<i>Numerical Change</i>	-0.4	0.0	0.2	0.2	0.3
<i>Percent Change</i>	-2.3%	0.0%	1.2%	1.2%	1.6%
<b>Professional &amp; Business Services</b>	46.7	48.4	49.2	49.8	50.9
<i>Numerical Change</i>	1.0	1.7	0.8	0.6	1.1
<i>Percent Change</i>	2.2%	3.6%	1.7%	1.1%	2.2%
<b>Educational &amp; Health Services</b>	59.8	60.9	61.2	62.6	64.1
<i>Numerical Change</i>	1.5	1.1	0.3	1.4	1.5
<i>Percent Change</i>	2.6%	1.8%	0.5%	2.3%	2.4%
<b>Leisure &amp; Hospitality</b>	39.1	40.3	39.8	40.1	40.5
<i>Numerical Change</i>	1.0	1.2	-0.5	0.3	0.4
<i>Percent Change</i>	2.6%	3.1%	-1.2%	0.7%	1.0%
<b>Other Services</b>	12.5	12.8	12.7	12.7	12.7
<i>Numerical Change</i>	-0.2	0.3	-0.1	0.0	0.1
<i>Percent Change</i>	-1.6%	2.4%	-0.8%	-0.3%	0.5%
<b>Government</b>	76.8	77.7	77.3	77.2	77.4
<i>Numerical Change</i>	-1.4	0.9	-0.4	-0.1	0.2
<i>Percent Change</i>	-1.8%	1.2%	-0.5%	-0.1%	0.3%

Note - All calculations are based on actual figures and then rounded to the nearest tenth for percentage change or the nearest hundred for employment.

\*Tucson MSA includes all of Pima County

## Balance of State\* Employment Forecast

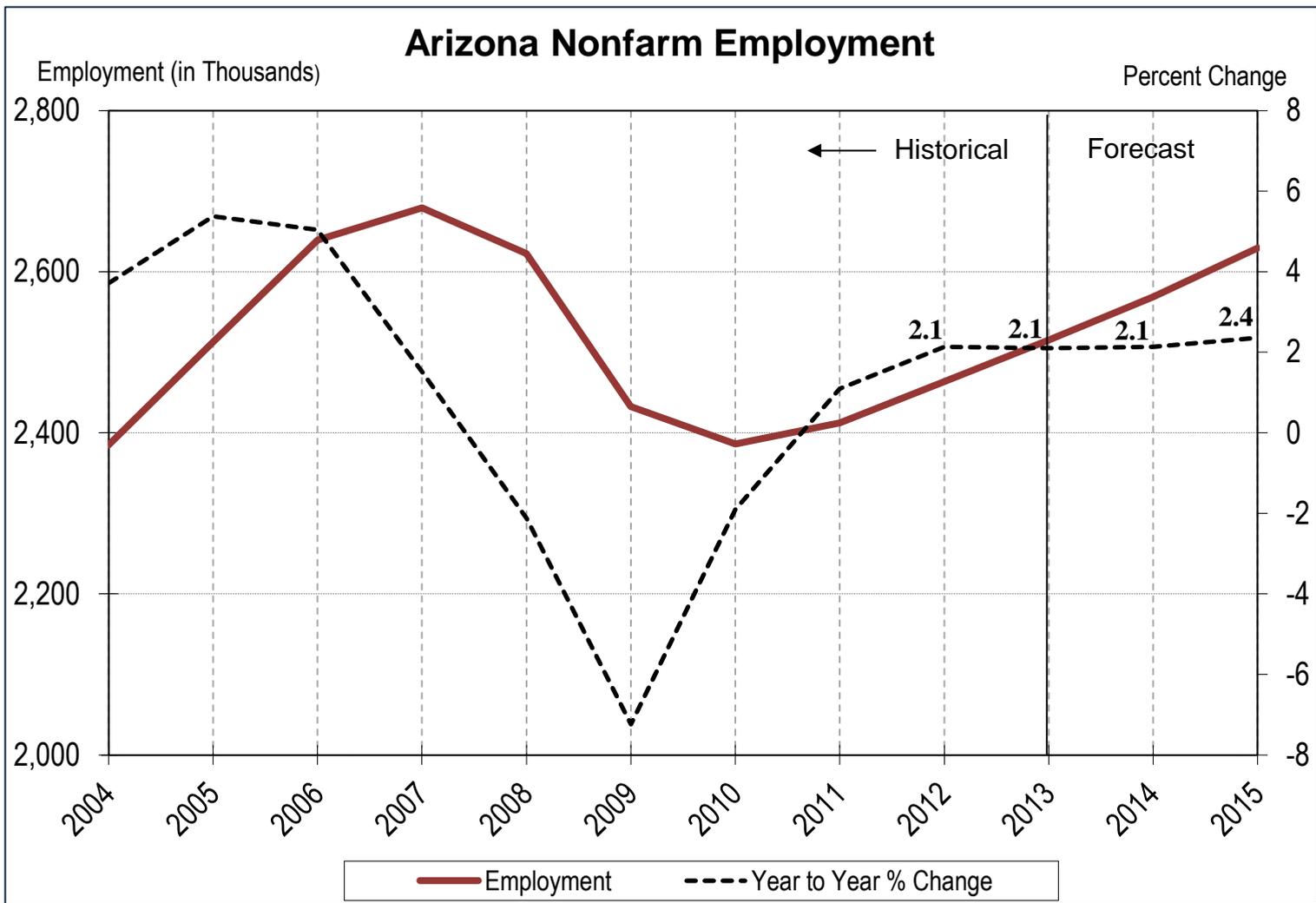
(In Thousands)

	Historical			Forecast	
	2011	2012	2013	2014	2015
<b>Total Nonfarm Employment</b>	339.6	341.8	342.6	347.1	353.2
<i>Numerical Change</i>	-1.0	2.2	0.8	4.5	6.0
<i>Percent Change</i>	-0.3%	0.6%	0.2%	1.3%	1.7%
<b>Manufacturing</b>	14.3	14.9	15.1	15.2	15.4
<i>Numerical Change</i>	0.5	0.6	0.2	0.1	0.2
<i>Percent Change</i>	3.6%	4.2%	1.3%	0.9%	1.2%
<b>Natural Resources &amp; Mining</b>	6.4	6.9	6.9	7.0	7.1
<i>Numerical Change</i>	0.3	0.5	0.0	0.1	0.1
<i>Percent Change</i>	4.9%	7.8%	0.0%	1.6%	1.4%
<b>Construction</b>	13.3	13.4	14.7	15.0	15.4
<i>Numerical Change</i>	-0.8	0.1	1.3	0.3	0.5
<i>Percent Change</i>	-5.7%	0.8%	9.7%	1.9%	3.0%
<b>Trade, Transportation, &amp; Utilities</b>	65.3	64.9	65.3	66.6	68.3
<i>Numerical Change</i>	0.3	-0.4	0.4	1.3	1.7
<i>Percent Change</i>	0.5%	-0.6%	0.6%	2.0%	2.6%
<b>Information</b>	4.4	4.2	4.1	4.1	4.1
<i>Numerical Change</i>	-0.3	-0.2	-0.1	0.0	0.0
<i>Percent Change</i>	-6.4%	-4.5%	-2.4%	0.1%	0.4%
<b>Financial Activities</b>	9.2	9.5	9.1	9.6	9.9
<i>Numerical Change</i>	-0.2	0.3	-0.4	0.5	0.3
<i>Percent Change</i>	-2.1%	3.3%	-4.2%	5.4%	2.7%
<b>Professional &amp; Business Services</b>	22.8	22.5	22.6	22.8	23.4
<i>Numerical Change</i>	-0.6	-0.3	0.1	0.2	0.5
<i>Percent Change</i>	-2.6%	-1.3%	0.4%	1.0%	2.4%
<b>Educational &amp; Health Services</b>	48.0	49.6	50.2	51.4	52.7
<i>Numerical Change</i>	0.9	1.6	0.6	1.2	1.3
<i>Percent Change</i>	1.9%	3.3%	1.2%	2.5%	2.5%
<b>Leisure &amp; Hospitality</b>	42.4	43.1	44.0	45.5	47.2
<i>Numerical Change</i>	0.0	0.7	0.9	1.5	1.7
<i>Percent Change</i>	0.0%	1.7%	2.1%	3.5%	3.8%
<b>Other Services</b>	11.5	10.9	10.4	10.2	10.2
<i>Numerical Change</i>	0.0	-0.6	-0.5	-0.2	0.0
<i>Percent Change</i>	0.0%	-5.2%	-4.6%	-1.6%	0.0%
<b>Government</b>	102.1	101.6	100.4	99.6	99.3
<i>Numerical Change</i>	-1.2	-0.5	-1.2	-0.8	-0.3
<i>Percent Change</i>	-1.2%	-0.5%	-1.2%	-0.8%	-0.3%

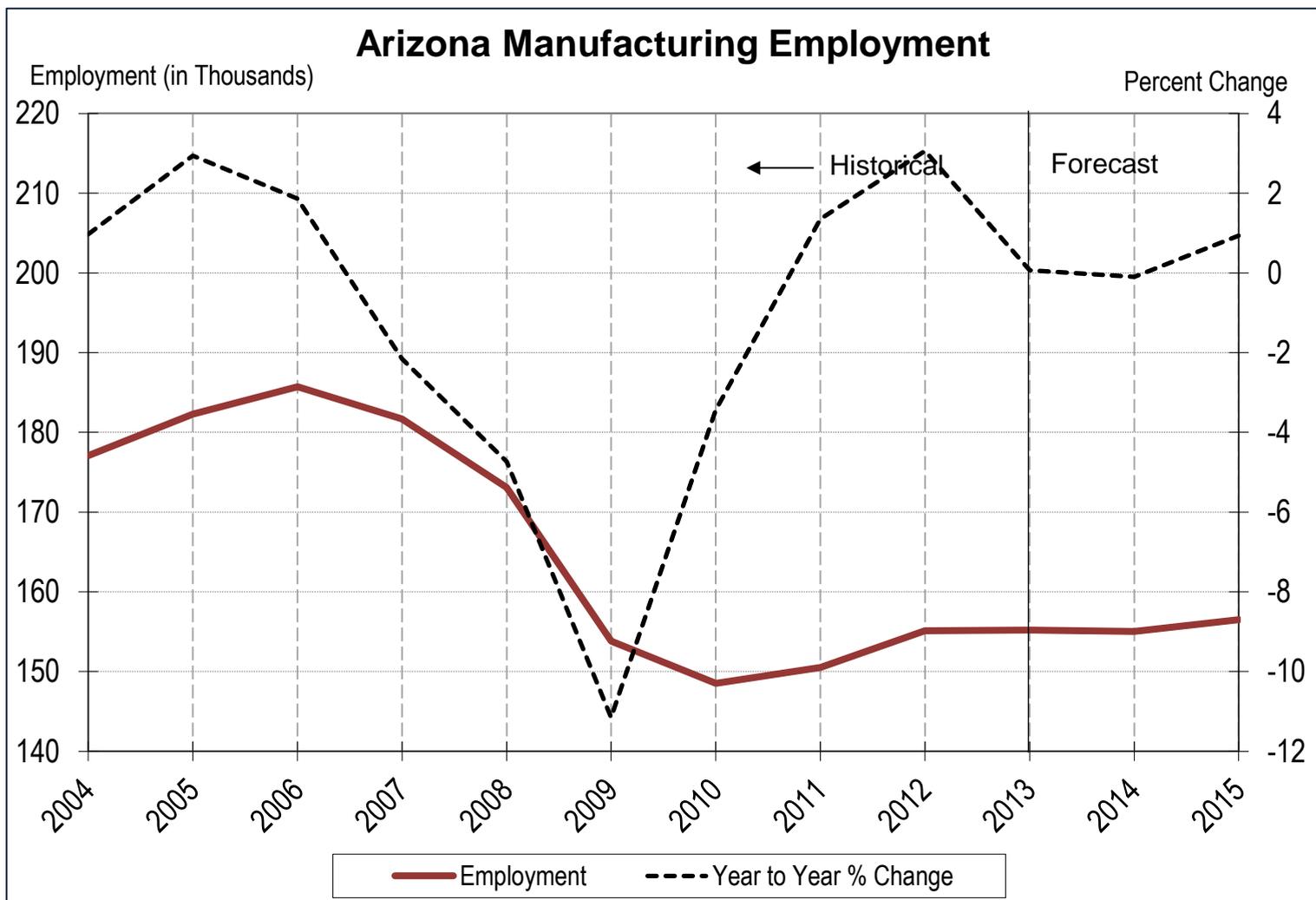
Note - All calculations are based on actual figures and then rounded to the nearest tenth for percentage change or the nearest hundred for employment.

\*Balance of state includes all areas in Arizona outside of the Phoenix and Tucson Metro areas (MSAs)

**Figure 3**



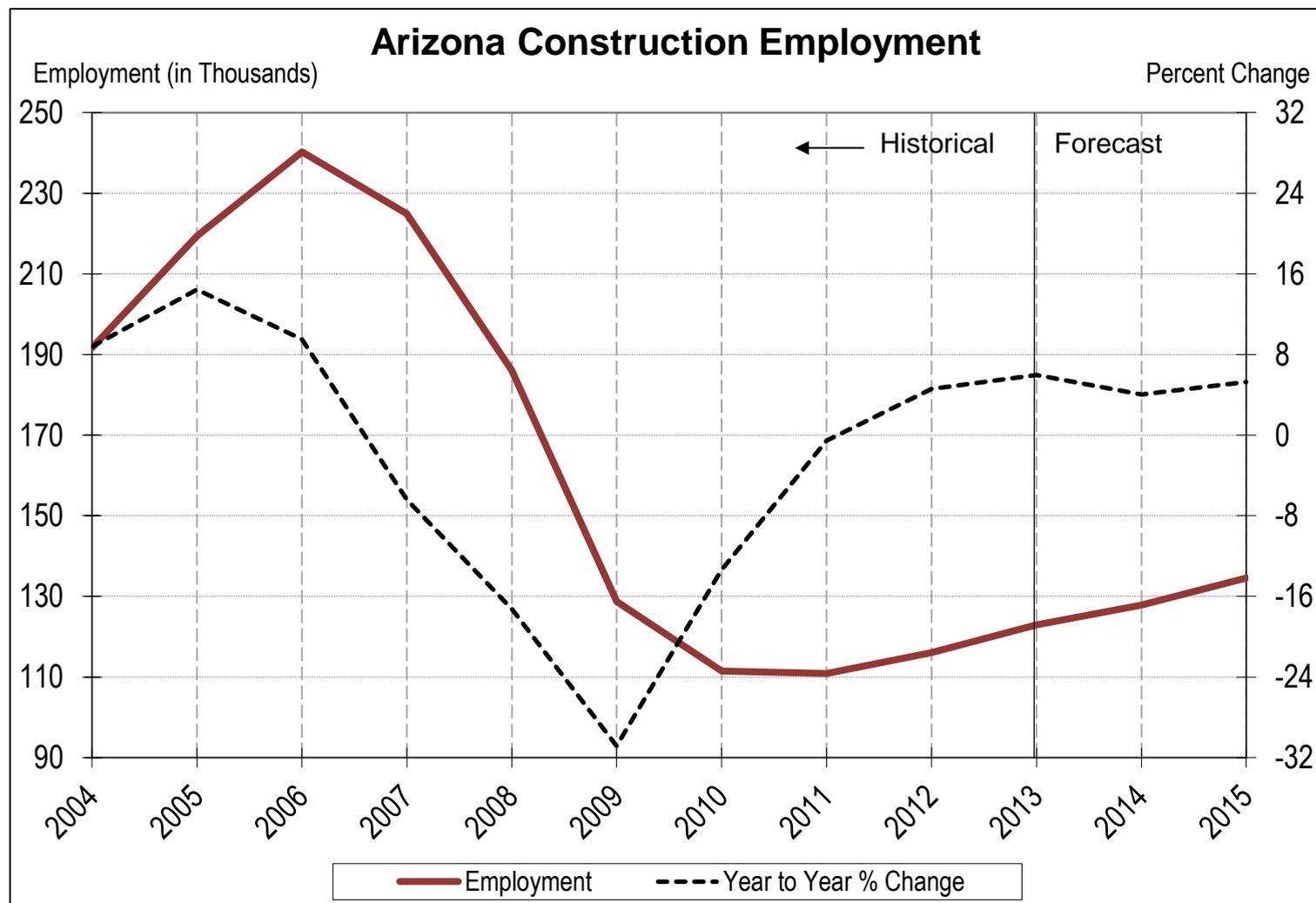
**Figure 4**



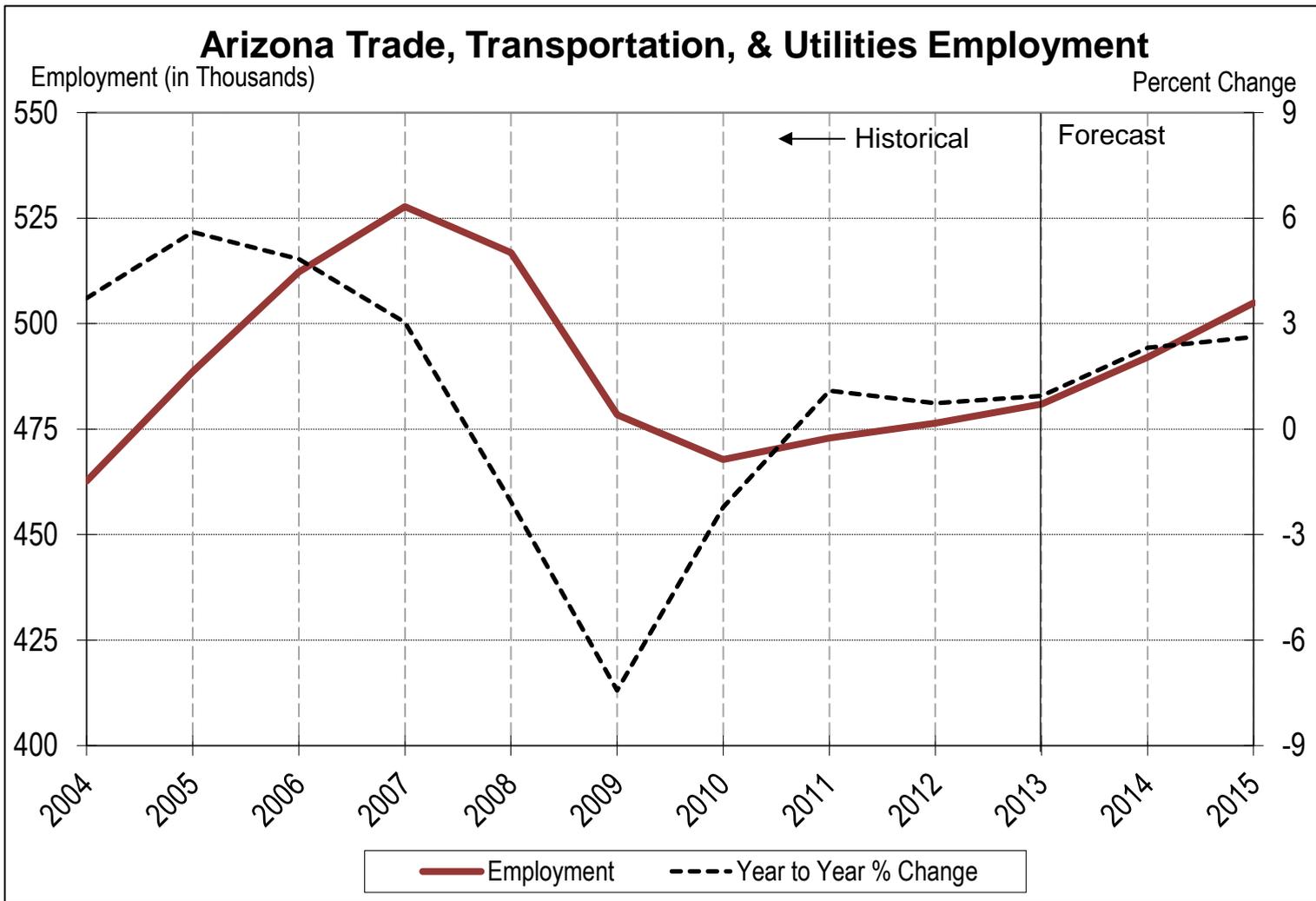
**Figure 5**



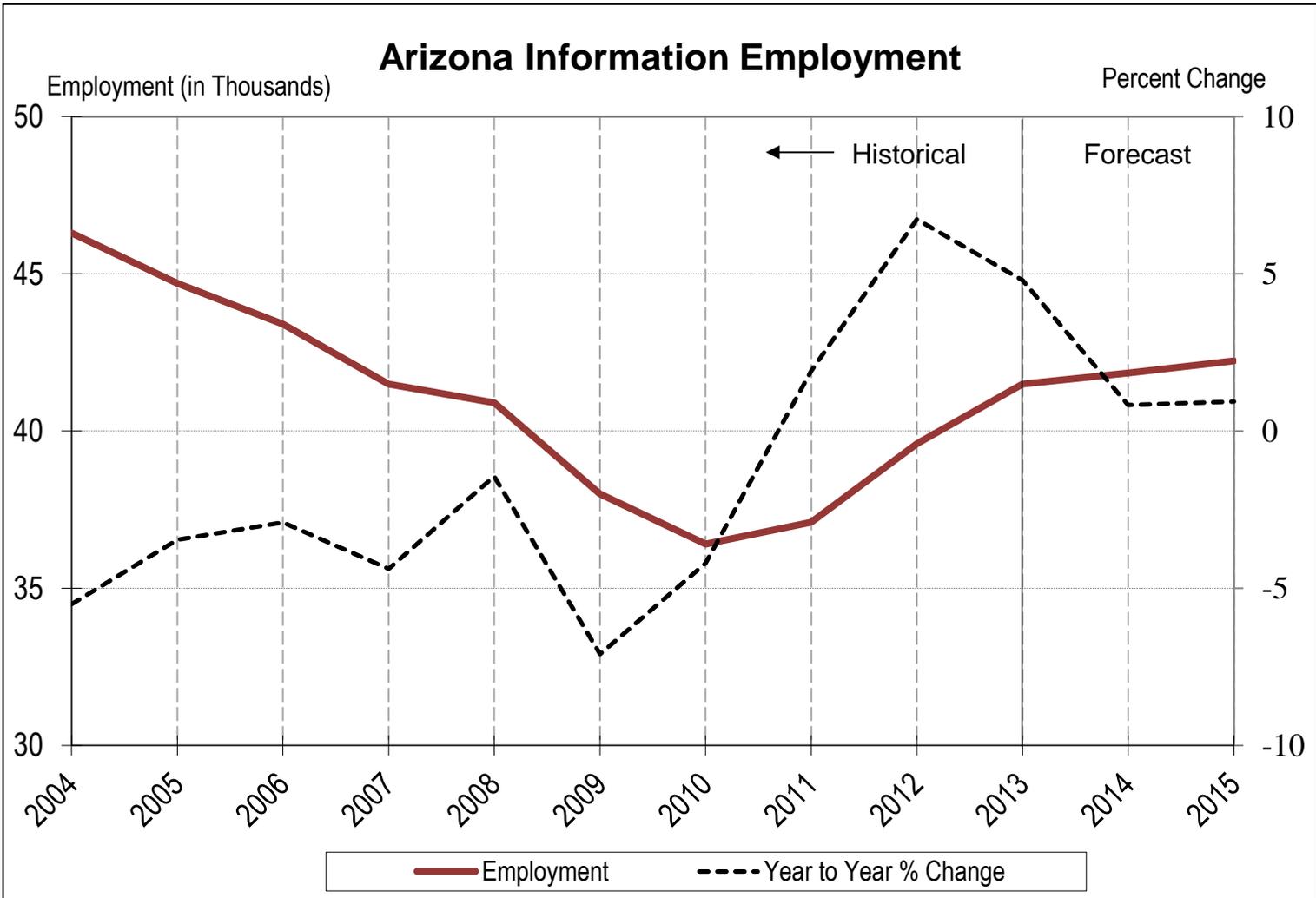
**Figure 6**



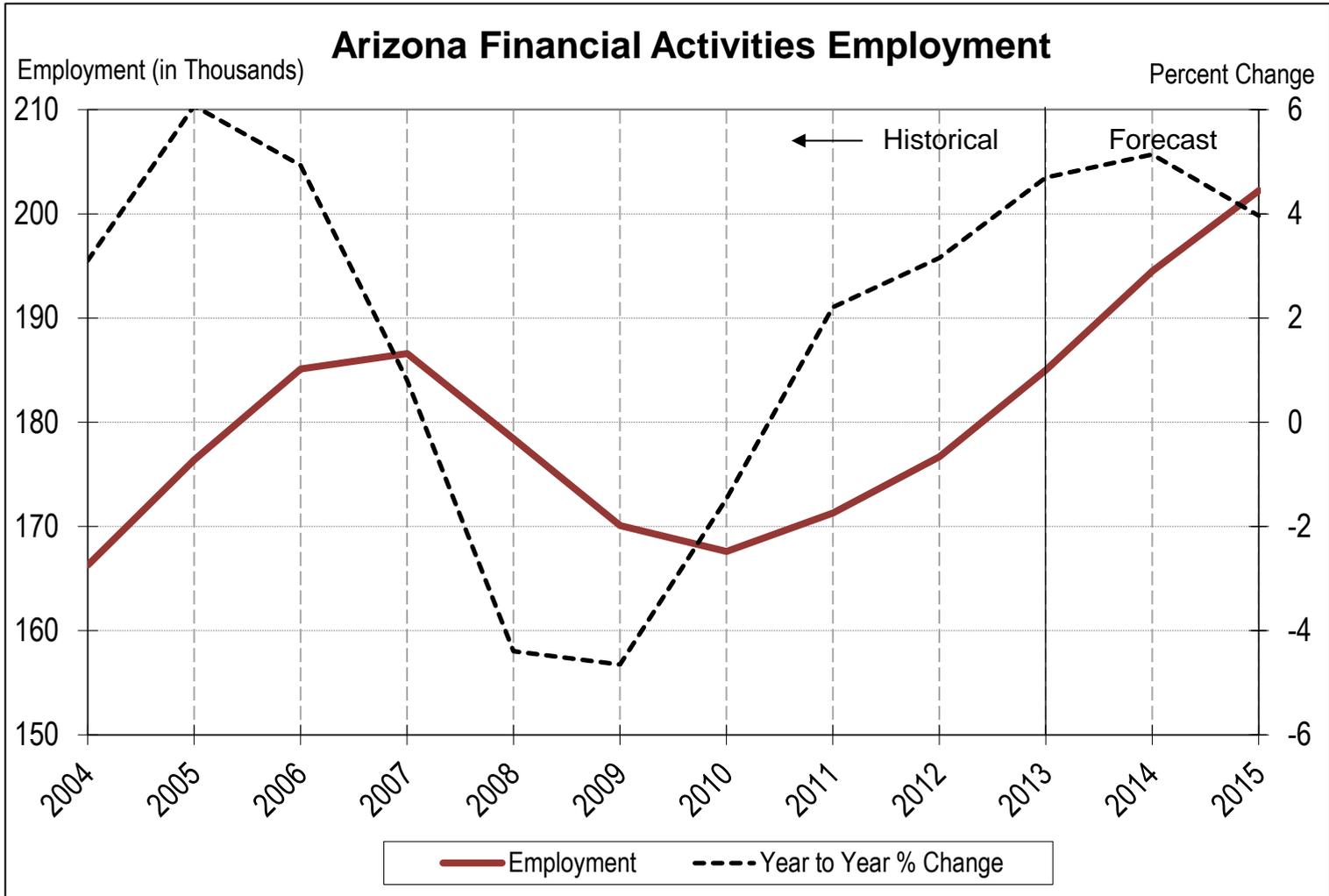
**Figure 7**



**Figure 8**



**Figure 9**



**Figure 10**

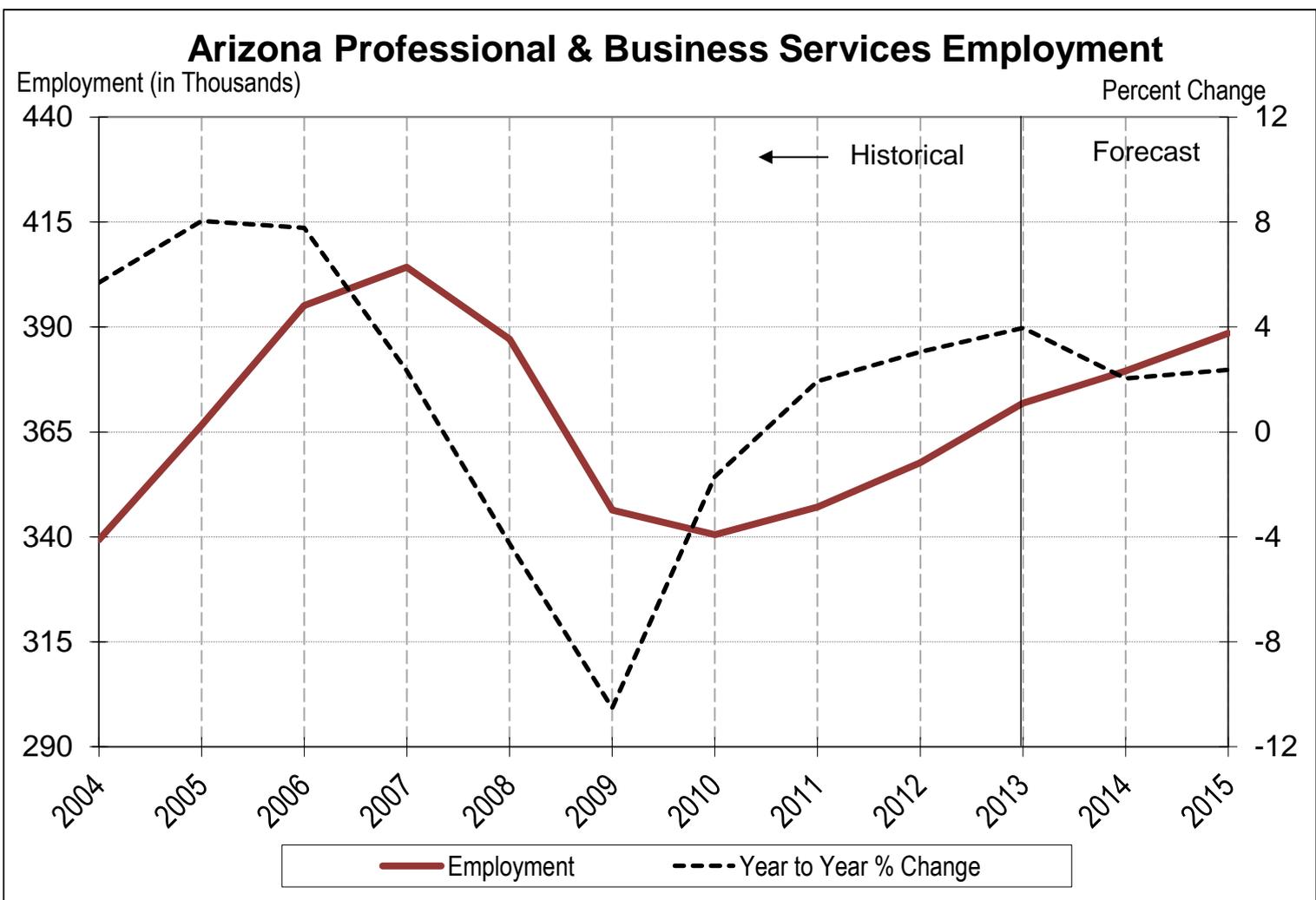


Figure 11

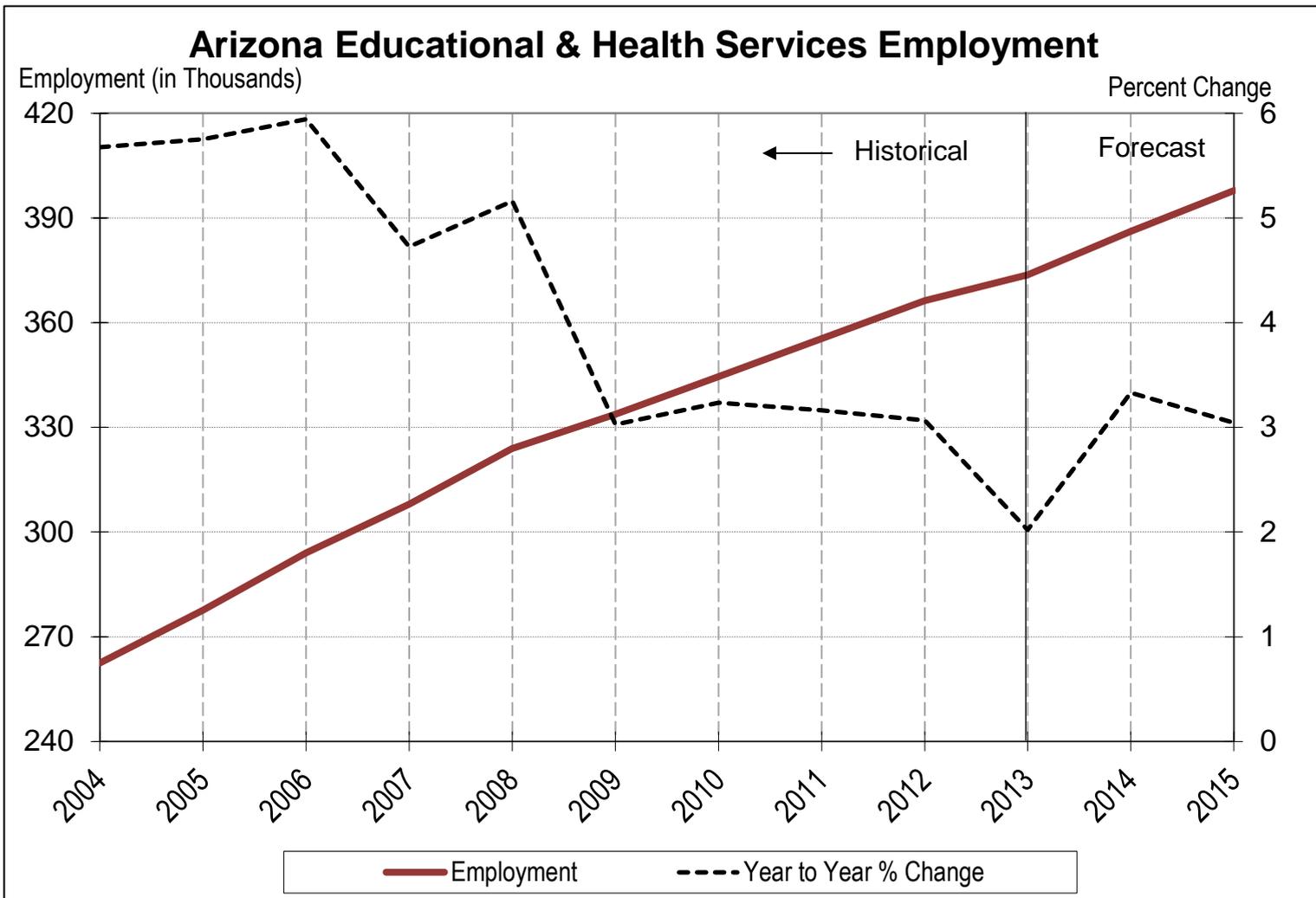
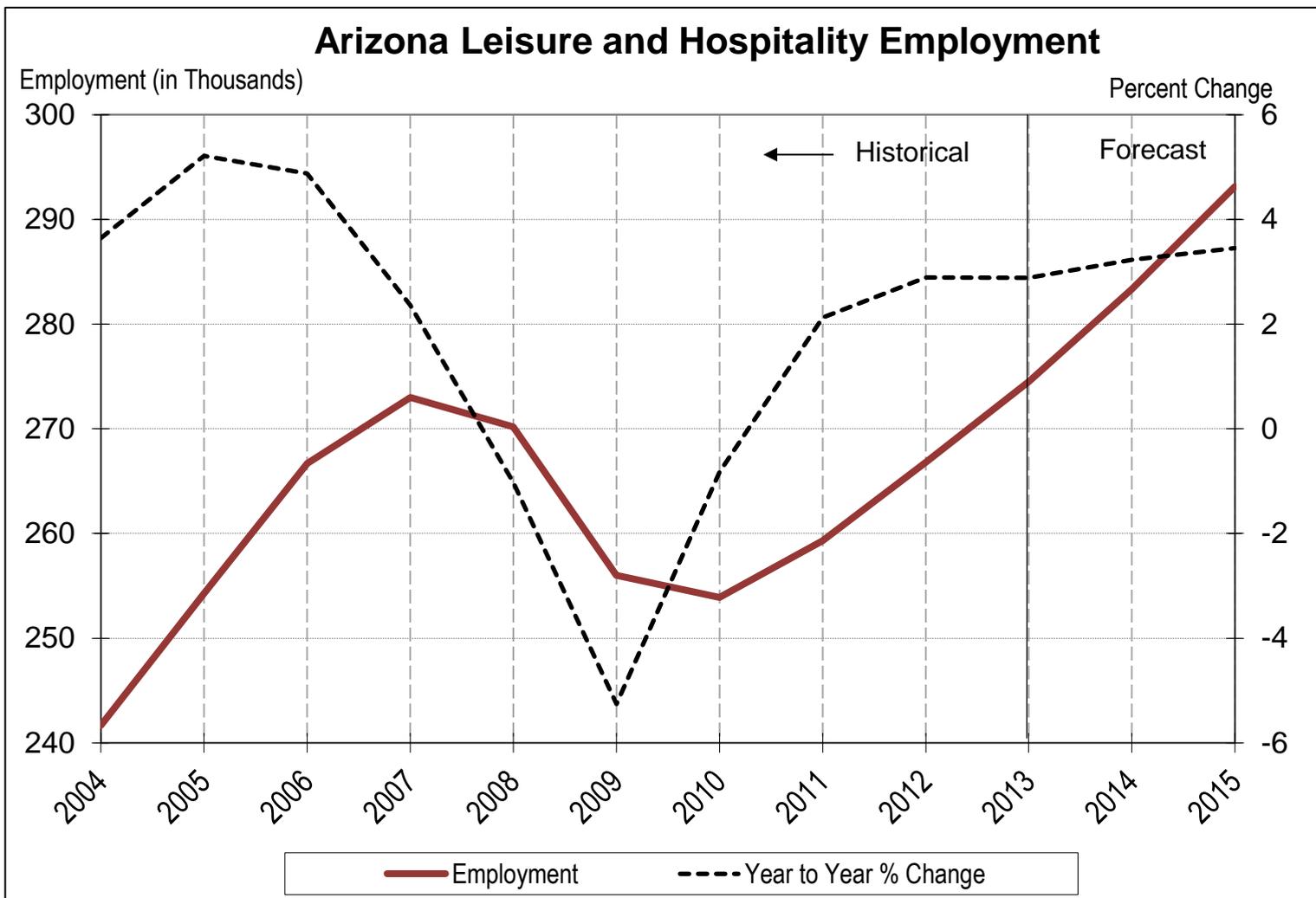
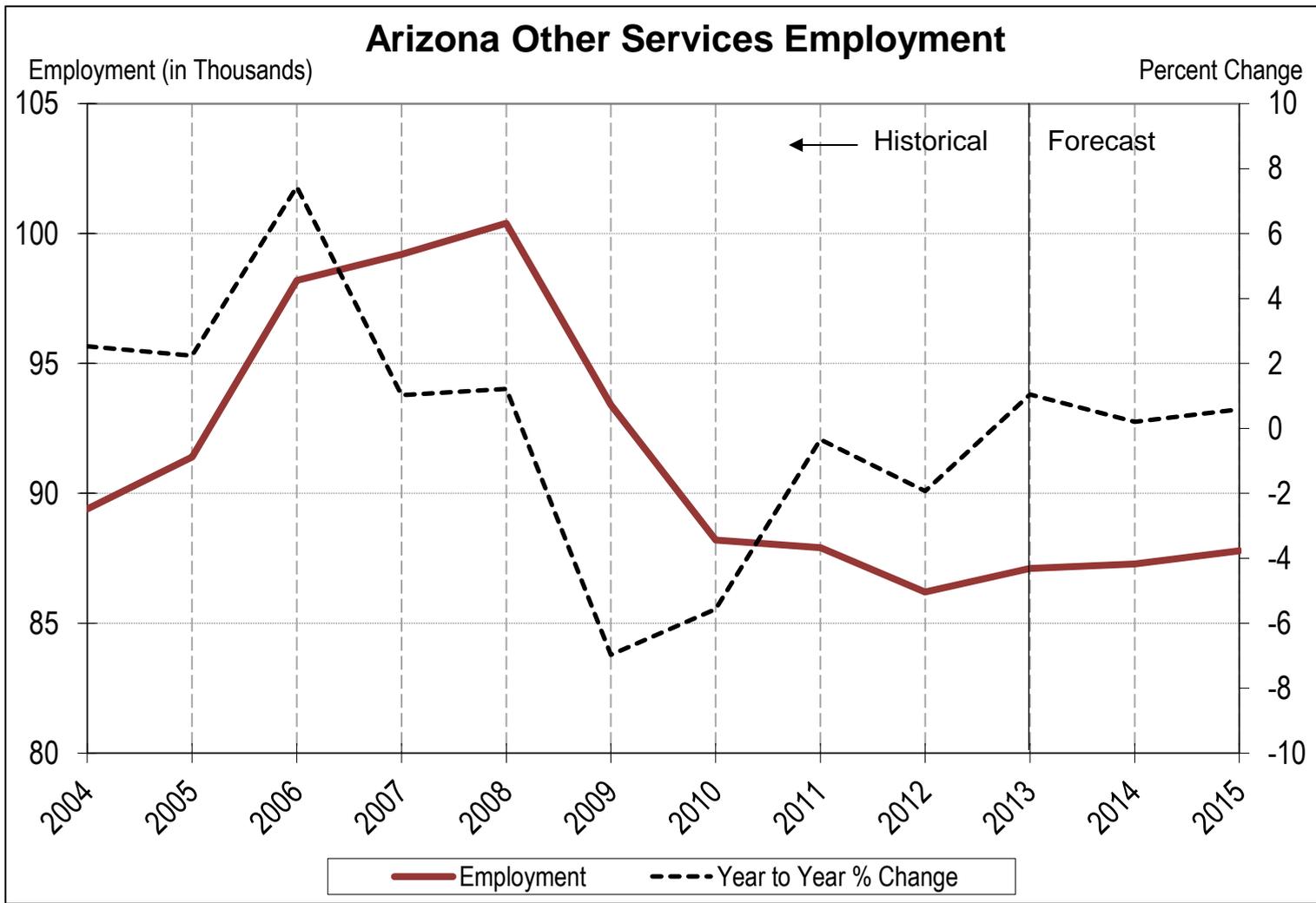


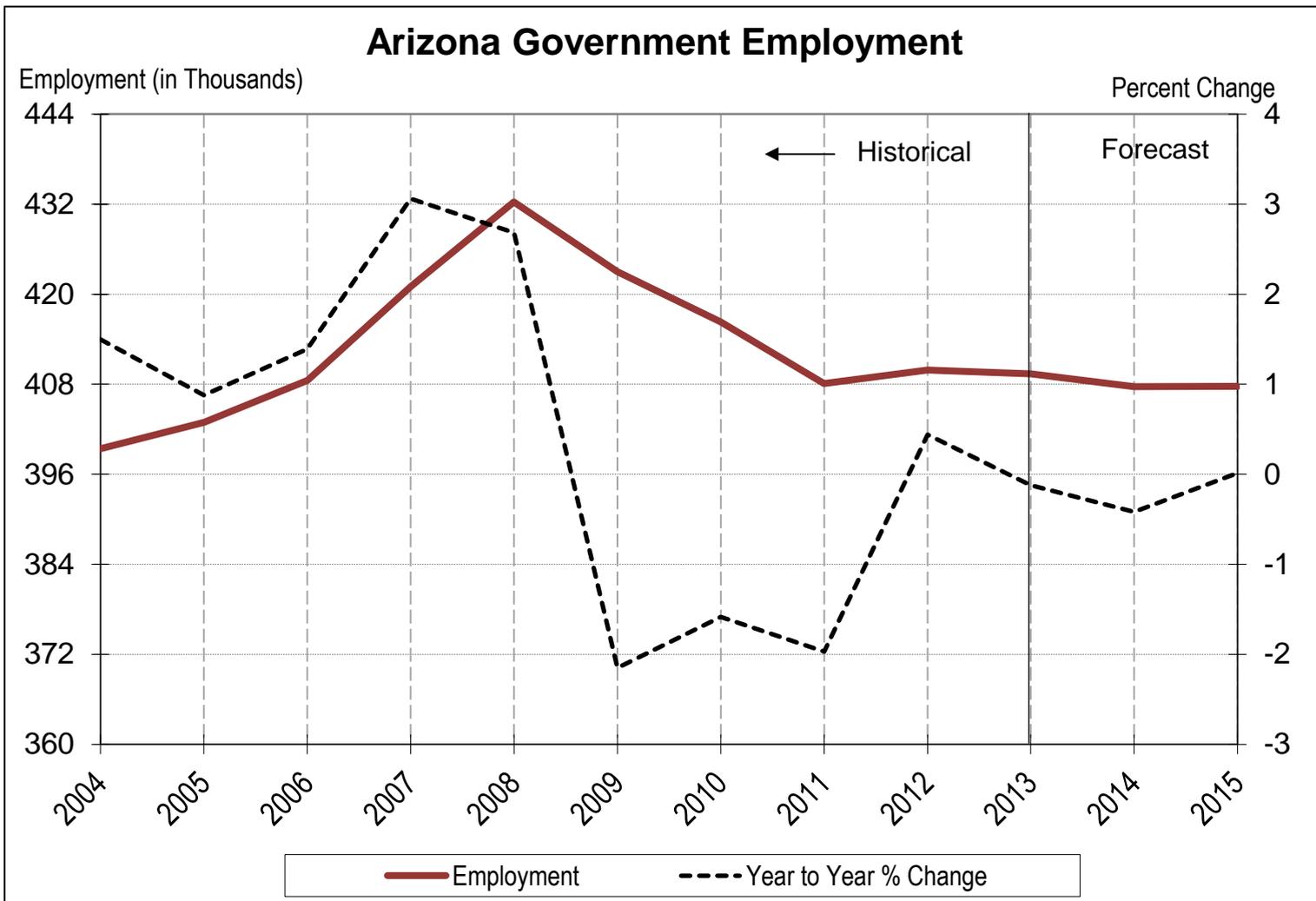
Figure 12



**Figure 13**



**Figure 14**



### **About This Publication**

*Arizona's Workforce* is published 14 times a year by the State of Arizona Office of Employment and Population Statistics (EPS) — 12 times as the monthly Employment Report and twice a year as a two-year Forecast Report. EPS is the state agency responsible for labor market information and demographic data for the state of Arizona.

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**Next Release:**

***April Employment Report, Thursday, May 15, 2014, 10 am,***

***Location: AZ Dept of Administration, 100 N. 15<sup>th</sup> Ave, Room 440, Phoenix, AZ***

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