# THE IMPACT OF ARIZONA STATE UNIVERSITY GRADUATES EMPLOYED IN ARIZONA 

## A Report from the Office of the University Economist

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## SUMMARY

Arizona State University (ASU) graduates are employed throughout the world. This paper examines only those graduates employed in Arizona - those contributing to the productivity and prosperity of the state.

Approximately 207,000 ASU graduates were working in Arizona in 2012. More than one-in-four of the state's working individuals who had earned at least a bachelor's degree had graduated from ASU. The aggregate earnings of the ASU graduates were around $\$ 11.4$ billion. Based on these earnings, these individuals contributed about $\$ 819$ million in state taxes.

The estimate of the number of ASU graduates working in Arizona in 2012 is based on actual employment and wage data for 127,189 individuals who graduated from ASU between 1990 and 2012 and were covered by the state's unemployment insurance program. Estimates of those who graduated from ASU prior to 1990 and of ASU graduates who were not covered by the unemployment insurance program but were working in Arizona in 2012 were added to the 127,189 figure to reach the total of approximately 207,000.

The estimates of the number of ASU graduates working in Arizona, along with their earnings and state tax payments, do not provide a complete accounting of the impacts of ASU graduates on the Arizona economy. In order to understand these other effects, assume that the number of graduates from ASU had been higher than actually recorded and that the additional graduates came from the high percentage of Arizonans whose maximum educational attainment is some college. The percentage of these additional college graduates who would have worked in Arizona is unknown. In general, more ASU graduates likely would have resulted in more jobs in Arizona, a different mix of jobs (more higher-wage jobs), and higher educational attainment among Arizona’s workforce, but the extent of these shifts is difficult to estimate.

As an example, assume that a greater number of ASU graduates would have increased the share of college graduates in the Arizona workforce by one percentage point, from 32-to-33 percent. This equates to almost 23,000 more working individuals with at least a bachelor's degree. Assuming that these individuals actually attained a partial college education, and using the difference in earnings of those with some college and those with at least a bachelor's degree, those additional individuals earning a bachelor's degree would have earned an aggregate of $\$ 324$ million more. State tax payments would have been $\$ 23$ million higher.

However, these figures do not reflect the total impact on the Arizona economy from a 1 percentagepoint increase in the share of university graduates in the workforce. One of the benefits of having highly educated individuals in the workforce is to raise the wages of the entire workforce. Those with the least educational attainment benefit the most. The spillover of benefits to all workers can be traced to the enhanced worker productivity associated with greater educational attainment. Improved productivity results from the sharing of knowledge and skills across workers and from shifts in the industrial mix to knowledge-based activities. These productivity gains translate into higher output and earnings.

Had more ASU graduates raised the share of college graduates in the workforce, wages would have been slightly higher throughout the workforce. An additional $\$ 887$ million in income would have been realized in the state had the percentage of college graduates been 1 percentage point higher. Thus, the total effect would be an increase in income of $\$ 1.211$ billion, with state tax payments $\$ 87$ million higher.

## DESCRIPTION OF DATA

## University Graduates Employed in Arizona

Each year, the Arizona Board of Regents (ABOR) creates a dataset of graduates of Arizona's three public universities who were employed in Arizona during the year. The latest data are for 2012. While the ABOR dataset includes the number of "degrees awarded," this number really refers to the number of individuals earning a degree. An individual earning more than one degree is counted only once in this dataset. Thus, the dataset's number of "degrees awarded" is less than the official number of degrees awarded.

The ABOR dataset is created by matching Social Security numbers of university graduates to the numbers in the unemployment insurance file maintained by the Arizona Department of Economic Security, which works in conjunction with the U.S. Department of Labor. Reporting from the unemployment insurance file - the Quarterly Census of Employment and Wages (QCEW) - is done quarterly, with annual average figures also produced.

Each quarter, every business that employs workers covered by the state's unemployment insurance program must report (1) employment in each of the three months of the quarter during the pay period that includes the 12th day of the month and (2) total wages paid by the business during the quarter. Federal government civilian workers covered by the comparable federal unemployment insurance program also are included in the reporting.

Various members of the workforce are not included in the QCEW: most agricultural workers on small farms, those self-employed, those in the Armed Forces, and various others. Reporting is by job, not by individual - an individual working more than one covered job will appear in the file more than once.

Since the unemployment insurance records are confidential, ABOR's dataset of graduates employed in Arizona includes only aggregate totals. There are two significant limitations to this dataset. First, the unemployment insurance file does not include a significant number of workers - in 2012, the employment count from the unemployment insurance file was only 73 percent of the total employment in Arizona, as reported by the U.S. Bureau of Economic Analysis (BEA). Second, the dataset of graduates employed in Arizona constructed by the Board of Regents only includes graduates since 1990. Thus, the number of graduates of Arizona’s public universities who are working in Arizona is understated significantly. This understatement effectively becomes even larger when the number of individuals counted in the Board of Regents dataset is compared to the total number of jobs reported in the QCEW.

The dataset constructed by the Board of Regents is subdivided by various characteristics:

- university
- bachelor's degrees versus graduate degrees
- those who attended school as Arizona residents versus nonresidents

The analysis described in this paper uses a dataset provided by the Office of Institutional Analysis at Arizona State University (ASU) by ASU campus. The total of the four campuses is comparable to the figures for ASU reported by the Board of Regents.

By year of graduation, the following data items are available from the dataset of university graduates employed in Arizona:

- number of graduates
- number employed in Arizona (in any quarter during the year)
- percent of graduates employed in Arizona
- total wages of graduates employed in Arizona
- estimated state taxes paid by graduates employed in Arizona
- number employed in Arizona in all four quarters
- median wage of those employed in Arizona in all four quarters

The number of graduates is reported by academic year - for example, for 2012, the sum of the number graduating in August 2011, December 2011, and May 2012. The employment data are for calendar year 2012.

While the median wage of those employed in all four quarters is a reasonable measure of the typical annual wage of graduates included in the dataset, use of the median wage is arithmetically quite limited. Thus, the average wage of those employed in any quarter during the year also is calculated, as total wages divided by the total number employed.

## Employment

The employment figures reported in the QCEW are based on a census of all covered workers and therefore are highly accurate, but as noted above, a large number of workers are not covered by the unemployment insurance program. Thus, focusing only on those covered by the program significantly understates the contribution of university graduates to the Arizona economy. In order to provide a more complete picture of the economic activity in Arizona of ASU graduates, more complete employment estimates from the BEA also are used in this report. Data for 2012 are used to be consistent with the Board of Regents dataset.

Employment estimates are available from several sources, but these estimates are not consistent due to definitional differences (certain categories of workers may be excluded by one source but not by another), differences in the way the data are collected (such as a sample of employers versus a census), and timing differences in when the data are collected.

Most of the employment estimates, including those of the QCEW and BEA, do not differentiate between a person working full time and one working fewer hours. Employment is categorized by the place of work, not by where the worker lives. For example, an Arizona resident of Bullhead City who works across the Colorado River in Laughlin, Nevada is counted in the Nevada employment figures. Further, most of the employment estimates report the number of jobs, not the number of people employed - an individual working two jobs is counted twice in the employment figures. This is an important distinction when comparing the number of ASU graduates (individuals) employed in Arizona to total employment (number of jobs).

Unlike other employment estimates, the employment data reported from the American Community Survey (ACS) reflects the number of individuals working and workers are classified by place of residence. The ACS is an ongoing survey of households conducted by the U.S.
Census Bureau that is the source of a wide variety of socioeconomic data. The main shortcoming
of the ACS is that it is based on a relatively small number of households. Sampling error can be a significant concern. The accuracy of self-reporting, particularly for questions related to wages and income, also is an issue. Various ACS tables provide insight on employment in Arizona. The ACS employment figures are based on an individual's employment status at the time the questionnaire is completed.

## Educational Attainment

In order to provide context on the contribution of ASU graduates employed in Arizona, the educational attainment of the Arizona workforce is examined. The ACS is the best source of data on educational attainment at a subnational level. In this report, Arizona's educational attainment is compared to the nation using three ACS tables: attainment for the population age 25 or older, attainment in each of five age groups, and attainment by labor force status among those 25-to-64 years old.

While ACS data for three or five years often are combined to reduce sampling error, the ACS data from 2012 are used in this analysis in order to be consistent with the Board of Regents dataset. For Arizona, sampling error for a single year of ACS data ranges from insignificant for broad measures to significant for small subsets of the population. Thus, the attainment data for the entire population at least 25 years of age is more reliable than the data for each of five age groups.

## The Impact of College Graduates on the Workforce

 Educational attainment is strongly correlated to an individual's earnings, with a bachelor's degree in particular causing a boost in earnings. The higher earnings realized over a lifetime of work greatly exceeds the costs of attending college. (See "Has the Return to Investing in a College Education Declined?," December 2013, and earlier papers at http://economist.asu.edu/p3/education.)Society also benefits from an educated populace in various ways, such as the lower crime rates of educated individuals. (See "Benefits From Improving Educational Attainment in Arizona," August 2012, and earlier papers at http://economist.asu.edu/p3/education.)

One of the benefits of having highly educated individuals in the workforce is to raise the wages of the entire workforce. Enrico Moretti specified this relationship in his 2004 Journal of Econometrics paper, "Estimating the Social Return to Higher Education: Evidence From Longitudinal and Repeated Cross-Sectional Data" (accessible from http://economist.asu.edu/p3/education). The spillover of benefits to all workers can be traced to the enhanced worker productivity associated with greater educational attainment. Improved productivity results from the sharing of knowledge and skills across workers and from shifts in the industrial mix to knowledge-based activities. These productivity gains translate into higher output and earnings.

## FINDINGS

## Employment

According to the QCEW, annual average Arizona employment in 2012 totaled 2,431,788. The BEA's wage and salary employment estimate was $2,558,795$, meaning that approximately 127,007 wage and salary workers were not covered by unemployment insurance. The BEA estimates that the number of proprietors (self-employed, also not included in the QCEW) was 784,140 , for a total employment figure of 3,342,935.

According to the ACS, an estimated 2,757,652 Arizonans were employed in 2012 in civilian jobs; an additional 18,539 were members of the armed forces. The total of $2,776,191$ is 83 percent of the BEA's total number of jobs, suggesting that many workers (1) are employed by more than one business and/or (2) hold a wage and salary job as well as report self-employment income. Other data from the ACS indicates that more than 25 percent of employed Arizonans worked less than 35 hours per week.

## Educational Attainment

Most commonly, educational attainment is expressed for those at least 25 years old. Though the age of 25 is arbitrary, a high proportion of individuals have completed their educations by that age. In 2012, Arizona's educational attainment in this large cohort was inferior to the nation. The share without either a high school diploma or a GED (general education development) certificate was slightly higher in Arizona: 14.3 percent versus 13.6 percent nationally. As their highest attainment, lesser shares of Arizonans had earned a graduate degree (10.2-versus-10.9 percent nationally) and a bachelor's degree (17.2-versus-18.2 percent).

An examination of educational attainment by age group reveals that Arizona was particularly far below the nation among those younger than 35 in 2012. Arizona also was below average among those 35 -to- 64 years old. In contrast, the educational attainment of those 65 or older was higher in Arizona than nationally. Since few of those age 65 or older are working, the standard statistics on the entire 25-or-older population understate Arizona's educational disadvantage as it applies to the workforce.

Data on educational attainment by labor force status indicate that among those not in the workforce, the educational attainment in Arizona of those 25 -to- 64 years old was close to the national figure in 2012. Attainment was below average among those in the workforce. Among those 25-to-64 years old who were employed in 2012, the proportion with at least a bachelor's degree was 32 percent in Arizona and 35 percent nationally.

## Arizona State University Graduates Employed in Arizona

The following are among the basic conclusions that can be reached using the dataset of ASU graduates from academic years 1990 through 2012 who were employed in Arizona in 2012:

- The number of individuals earning a degree has increased significantly over time.
- The number of individuals earning a degree has been much higher for those who were classified as residents while attending school than among those classified as nonresidents.
- The percentage of graduates employed in Arizona has been much higher for residents than nonresidents.
- The share of graduates employed in Arizona decreases significantly with the number of years since graduation, for those who were classified as residents and nonresidents while students.
- The average wage and the median wage increase significantly with the number of years elapsed since graduation.
- The median wage has been about the same for residents and nonresidents, as has the average wage.
- The average wage (of all graduates employed at some point during the year) was less than the median wage (of graduates employed in all four quarters) among recent graduates, likely due to those not employed in all four quarters lowering the calculated average wage. Among older graduates, this downward bias in the average wage is overcome, presumably because of a small number of graduates earning very high wages that boosts the average but not the median.
- The percentage employed in all four quarters was less than 80 percent among recent graduates but was greater than 80 percent among older graduates.
- Data for graduates in the most recent academic year may be misleading. In particular, the average wage and median wage each was substantially lower than for those graduating one year earlier. For those graduating in May (the majority), the employment and wage data for calendar year 2012 may reflect full-time employment after graduating and/or part-time employment while still attending school.
- Among those who graduated from ASU between academic years 1990 and 2012, 80 percent graduated from the Tempe Campus. However, this proportion dropped from 100 percent in the early 1990s to 67 percent in 2012. A large increase in the number of graduates from the Downtown Phoenix campus in recent years, combined with a decrease in the number graduating from the West campus, has pushed the number of graduates from Downtown Phoenix to greater than the number from the West campus.

The number of individuals who graduated from ASU between academic years 1990 and 2012 who worked at jobs in Arizona that were covered by the unemployment insurance program in calendar year 2012 was 127,189. ASU graduates between 1990 and 2012 accounted for 5.2 percent of the QCEW total number employed, but this share is understated since it compares individuals with ASU degrees to the number of jobs.

The aggregate wage of individuals who graduated from ASU between academic years 1990 and 2012 accounted for 6.4 percent of the QCEW total. The average wage of ASU graduates between 1990 and 2012 of $\$ 55,681$ was 23.6 percent higher than the average of the rest of the QCEW file (a group that includes those without a bachelor's degree, those who earned a degree from another institution, and ASU graduates from prior to 1990). Total payment of state taxes in 2012 by those who graduated from ASU between 1990 and 2012 - based only on wages earned as part of the unemployment insurance program - is estimated at $\$ 509$ million: 7.19 percent of aggregate wages.

Estimates from the ACS for 2012 indicate that 723,234 Arizona residents who had received at least a bachelor's degree were employed. The number of ASU graduates between academic years 1990 and 2012 employed in the state and covered by the unemployment insurance program
accounts for 17.6 percent of the number of workers with at least a bachelor’s degree reported by the ACS.

Detailed figures from the dataset of 1990-through-2012 graduates of Arizona State University who were employed in Arizona during 2012 are provided in the appendix. Figures are shown by ASU campus, by undergraduate versus graduate degree, and by residency status while a student. A summary of the cumulative figures for the 23 years of graduates is provided in Table 1.

Considerable care is needed in interpreting Table 1 for several reasons. In particular, only the Tempe campus was open at the beginning of this time period; the initial academic year in which a significant number of students graduated from the other campuses was 1994 for the West campus and 2008 for the Polytechnic and Downtown Phoenix campuses. Table 2 controls for these differing opening dates by focusing on academic year 2011 graduates. (Graduates from 2011 instead of 2012 are used since the statistics for those graduating in May 2012 are inconsistent with those of earlier graduates.)

Yet Table 2 also needs to be interpreted carefully. Student characteristics vary by campus, by residency status, and by undergraduate and graduate programs. For example, the magnitude of the difference in the average wage between undergraduate and graduate degrees reflects not only the wage premium of the graduate degree but also the greater number of years of work experience among those with a graduate degree. Among graduates from academic year 2011, the average wage in 2012 of those with a graduate degree was 68 percent higher than those with a bachelor's degree, but the differential for graduates over the entire 1990-to-2012 period was 45 percent.

The differences by campus in the share of graduates employed in Arizona represent another example in which the variations must be carefully considered. Many factors could be affecting these figures, including differences by campus in the share of nonresident students, share of parttime students, and the distribution of subject majors. An examination of the detailed data presented in the appendix can help to understand such differences, but some of the detailed data may be distorted due to the relatively small number of individuals in some of the subsets.

## Extending the Analysis to Include Those Who Graduated From ASU Before 1990

In order to provide an estimate of the number of individuals who graduated from ASU before 1990 and who were working in Arizona in 2012, actual data on the number of degrees awarded by ASU between academic years 1971 and 1989 were collected. The year 1971 was selected since the typical undergraduate from that year would have been about 64 years old in 2012; a high proportion of graduates from earlier years are presumed to have retired. The official graduation data from ASU count number of degrees - individuals with more than one ASU degree are counted more than one. These data are not consistent with the figures used in the Arizona Board of Regents dataset, which counts individuals, not number of degrees. Thus, the historical graduation data for 1971 through 1989 were adjusted, using the ratio from the 1990-through-1999 period of the number of graduates counted in the Board of Regents database to the official count of degrees granted.

TABLE 1
ARIZONA STATE UNIVERSITY GRADUATES BETWEEN 1990 AND 2012 EMPLOYED IN ARIZONA AND COVERED BY THE UNEMPLOYMENT INSURANCE PROGRAM IN 2012


TABLE 2
ARIZONA STATE UNIVERSITY GRADUATES FROM 2011
EMPLOYED IN ARIZONA AND COVERED BY THE UNEMPLOYMENT INSURANCE PROGRAM IN 2012

|  | Total | Tempe | West | Polytechnic | Downtown |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number Graduating From Arizona State University | 16,182 | 11,067 | 1,518 | 1,320 | 2,277 |  |
| Employed in Arizona and Covered by Unemployment Insurance Program: |  |  |  |  |  |  |
| Number | 10,561 | 6,754 | 1,246 | 949 | 1,612 |  |
| Share (Percent) | 65 | 61 | 82 | 72 | 71 |  |
| Aggregate Wages (Dollars, Millions) | 382 | 245 | 42 | 33 | 62 |  |
| Average Wage (Dollars) | 36,186 | 36,215 | 33,408 | 35,205 | 38,788 |  |
| Estimated State Tax Payments (Dollars, Millions) | 29 | 19 | 3 | 2 | 5 |  |
|  | Total | Resident | Nonresident | Total | Resident | Nonresident |
|  | Undergrad | Undergrad | Undergrad | Graduate | Graduate | Graduate |
|  | Degrees | Degrees | Degrees | Degrees | Degrees | Degrees |
| Number Graduating From Arizona State University | 11,451 | 9,372 | 2,079 | 4,731 | 2,883 | 1,848 |
| Employed in Arizona and Covered by Unemployment Insurance Program: |  |  |  |  |  |  |
| Number | 7,793 | 7,090 | 703 | 2,768 | 2,207 | 561 |
| Share (Percent) | 68 | 76 | 34 | 59 | 77 | 30 |
| Aggregate Wages (Dollars, Millions) | 239 | 220 | 19 | 143 | 115 | 28 |
| Average Wage (Dollars) | 30,690 | 31,052 | 27,036 | 51,659 | 52,250 | 49,331 |
| Estimated State Tax Payments (Dollars, Millions) | 19 | 17 | 2 | 10 | 8 | 2 |

Source: Arizona State University, Office of Institutional Analysis.

A "backward projection" for academic years 1971 through 1989 of the percentage of ASU graduates employed in Arizona in 2012 was made using the 1990-through-2012 time series of this percentage; the percentage drops with the number of years since graduation. The rate of decline is rapid among recent grads but is lower and relatively stable among earlier graduates. The average annual decrease of 1.25 percentage points between 1990 and 1999 was used for the 1971-through-1989 period. Using the adjusted graduation figures and the estimated percentage of graduates employed in Arizona, the number of employed ASU graduates was calculated for each year from 1971 through 1989.

The average wage for graduates from 1971 through 1989 was backward projected in the same manner as the percentage employed. The average wage rises significantly by the number of years since graduation for relatively recent graduates. Among earlier graduates, the increase in the average wage by year is lower and more stable. The annual average increase from the 1990-through-1999 period was 1.5 percent; this figure was applied to the 1971-to-1989 period.

Using these backward projections, the number of individuals who graduated from ASU between academic years 1971 and 2012 who worked at jobs in Arizona that were covered by the unemployment insurance program in 2012 is estimated to be 150,684 - 18.5 percent higher than the number of those who graduated from 1990 through 2012. Due to the high average wage of individuals who graduated prior to 1990, the aggregate wage of the 1971-to-2012 group was 30.6 percent higher than that of the 1990-to-2012 group.

Those who graduated from ASU between academic years 1971 and 2012 accounted for 6.2 percent of the QCEW number of jobs in Arizona in 2012, but again this share is understated since it compares individuals with ASU degrees to the number of jobs. The aggregate wage of individuals who graduated from ASU between 1971 and 2012 accounted for 8.3 percent of the QCEW total. The 2012 average wage of $\$ 61,366$ of those who graduated from ASU between 1971 and 2012 was 37.7 percent higher than the average of the rest of the QCEW file (a group that includes those without a bachelor's degree and those who earned a degree from another institution). Based on 7.19 percent of their wages reported to the unemployment insurance program, ASU graduates paid \$665 million in state taxes in 2012.

The number of ASU graduates between academic years 1971 and 2012 who were employed in the state and covered by the unemployment insurance program accounts for 20.8 percent of the ACS total of the number of individuals employed in Arizona in 2012 who had received at least a bachelor's degree.

Two variants of the above-described methodology were tested. Each resulted in estimates similar to those described above. First, rather than use the total of all ASU graduates in making the backward projections, estimates were derived separately for undergraduate and graduate degree holders and then summed. (An attempt at further disaggregation - separating students classified as residents and nonresidents as well as by undergraduate/graduate degree - was abandoned because the number of nonresidents who graduated from ASU in earlier years and who were employed in Arizona in 2012 was too small to produce reasonable estimates.) Second, rather than use the adjusted number of ASU graduates and a backward projection of the percentage working in Arizona, a backward projection was made directly on the number employed.

The methodology used does not directly address the increasing share of retirees among graduates from the 1970s. Thus, the estimates of the numbers employed in Arizona of graduates from this time period, particularly the early-to-mid-1970s, may be overstated. However, while graduates from before 1971 were excluded from the analysis, some were still part of the workforce. Thus, the exclusion of these workers likely offsets any overestimate of graduates from the 1970s working in Arizona in 2012.

## Extending the Analysis to Include ASU Graduates Employed in Arizona but Not Covered by the Unemployment Insurance Program

In order to estimate the number of ASU graduates working in Arizona in wage and salary jobs not covered by unemployment insurance or as proprietors (self-employed), the ASU shares of the QCEW total ( 6.20 percent of employment and 8.34 percent of wages) were applied to the BEA's total employment figure. The result is a total of 207,143 ASU graduates working in Arizona (see Table 3). This figure is understated because the 6.2 percent figure is based on individuals with ASU degrees and the number of QCEW jobs.

The estimate of 207,143 ASU graduates working in Arizona accounts for 28.5 percent of the 2012 ACS figure of employed Arizonans with at least a bachelor's degree (this figure of 726,732 includes 3,498 individuals with at least a bachelor's degree employed in the Armed Forces). Thus, more than one-in-four working individuals who had earned at least a bachelor's degree had graduated from ASU. The aggregate earnings of the ASU graduates were around $\$ 11.4$ billion. Based on these earnings, these individuals contributed about $\$ 819$ million in state taxes.

## The Impacts of ASU Graduates on the Workforce

The estimates of 207,143 ASU graduates working in Arizona, earning $\$ 11.4$ billion and paying $\$ 819$ million in state taxes, do not provide a complete accounting of the impacts of ASU graduates on the Arizona economy. In order to understand these other effects, assume that the

TABLE 3
ARIZONA STATE UNIVERSITY GRADUATES EMPLOYED IN ARIZONA IN 2012 COMPARED TO TOTAL EMPLOYMENT IN ARIZONA

|  | Employment | Wages/Propri- <br> etors' Income* <br> $\$ 110,874$ | Average <br> Earnings |
| :--- | :---: | :---: | :---: |
| $\$ 45,593$ |  |  |  |

number of graduates from ASU had been higher than actually recorded and that the additional graduates came from the high percentage of Arizonans whose maximum educational attainment is some college. The percentage of these additional college graduates who would have worked in Arizona is unknown. In general, more ASU graduates likely would have resulted in more jobs in Arizona, a different mix of jobs (more higher-wage jobs), and higher educational attainment among Arizona’s workforce, but the extent of these shifts is difficult to estimate.

As an example, assume that a greater number of ASU graduates would have increased the share of college graduates in the Arizona workforce by one percentage point, from 32.1-to-33.1 percent. This equates to 22,545 additional individuals with at least a bachelor's degree, based on the 2012 ACS figures for employed individuals age 25 or older. Assuming that these individuals actually attained a partial college education, and using the difference of the ACS median earnings figures in Arizona for those with some college and those with at least a bachelor's degree (see Chart 1) of $\$ 14,390$, those additional individuals earning a bachelor's degree would have earned an aggregate of $\$ 324.4$ million more. At 7.19 percent, state tax payments would have been $\$ 23.3$ million higher. However, these figures do not reflect the total impact on the Arizona economy from a 1 percentage-point increase in the share of university graduates in the workforce.

According to Moretti, a 1-percentage-point increase in the share of college graduates in the workforce raises wages throughout the workforce, by:

- 1.9 percent among those with less than a high school diploma
- 1.6 percent among high school graduates
- 1.2 percent among those with some college
- 0.4 percent among college graduates


## CHART 1

MEDIAN EARNINGS IN ARIZONA IN 2012 BY MAXIMUM EDUCATIONAL ATTAINMENT


Source: U.S. Department of Commerce, Census Bureau, American Community Survey, Table B20004.

Applying these percent changes in wages to the aggregate wages in each educational category as reported in the ACS, an additional $\$ 887$ million in income would have been realized in the state had the percentage of college graduates been 1 percentage point higher. Thus, the total effect would be an increase in income of $\$ 324$ million plus $\$ 887$ million, or $\$ 1.211$ billion, with state tax payments $\$ 87.1$ million higher.

These estimates understate the gain due to shortcomings in the ACS data. First, the ACS reports median, but not mean, earnings by educational attainment. Average earnings would be higher than the median. Second, while the ACS reports the median earnings figure separately for those with a bachelor's degree as their maximum attainment versus those with a graduate degree, it only reports the number of workers with a bachelor's degree or more. The median earnings figure for those with a bachelor's degree was used for all those earning at least a bachelor's degree. Other inconsistencies in the available ACS data include the median earnings by educational attainment figures being expressed for those 25 or older, while the number employed by educational attainment is available only for those 25 -to- 64 years old. The impact of the "Moretti effects" for workers 25 -to-64 years old was expanded to reflect the size of the entire workforce age 16 or older.

## APPENDIX <br> ARIZONA STATE UNIVERSITY GRADUATES FROM 1990 THROUGH 2012 EMPLOYED IN ARIZONA IN 2012

SUM OF ALL CAMPUSES, ALL DEGREES

|  |  |  |  |  |  | 2012 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Median |  | Average |
|  |  |  |  |  |  |  | Number Employed | Wage of Those | Percent | Wage as a |
|  | Number |  |  |  |  | Estimated | in Arizona | Employed | Employed | Proportion |
| Academic | of | Number | Percent | Aggregate |  | State Tax | During All | in All | in All | of the |
| Year of | Degrees | Employed | Employed | Wages in | Average | Payments | Four | Four | Four | Median |
| Graduation | Awarded | in Arizona | in Arizona | Millions | Wage | in Millions | Quarters | Quarters | Quarters | Wage |
| 1990 | 6,628 | 2,279 | 34.4\% | \$186.2 | \$81,713 | \$13.1 | 1,886 |  | 82.8\% |  |
| 1991 | 6,998 | 2,615 | 37.4 | 213.7 | 81,738 | 15.1 | 2,169 |  | 82.9 |  |
| 1992 | 6,983 | 2,639 | 37.8 | 213.3 | 80,814 | 15.1 | 2,232 |  | 84.6 |  |
| 1993 | 7,549 | 2,919 | 38.7 | 225.6 | 77,290 | 15.9 | 2,421 |  | 82.9 |  |
| 1994 | 7,671 | 3,133 | 40.8 | 244.7 | 78,090 | 17.2 | 2,618 |  | 83.6 |  |
| 1995 | 7,982 | 3,415 | 42.8 | 267.3 | 78,280 | 18.9 | 2,846 |  | 83.3 |  |
| 1996 | 7,986 | 3,521 | 44.1 | 261.5 | 74,263 | 18.5 | 2,916 |  | 82.8 |  |
| 1997 | 8,524 | 3,754 | 44.0 | 283.3 | 75,478 | 20.0 | 3,154 |  | 84.0 |  |
| 1998 | 9,092 | 4,028 | 44.3 | 291.3 | 72,326 | 20.5 | 3,403 |  | 84.5 |  |
| 1999 | 9,231 | 4,161 | 45.1 | 294.0 | 70,653 | 20.7 | 3,433 |  | 82.5 |  |
| 2000 | 9,717 | 4,568 | 47.0 | 322.1 | 70,509 | 22.7 | 3,820 |  | 83.6 |  |
| 2001 | 9,513 | 4,405 | 46.3 | 303.6 | 68,922 | 21.4 | 3,701 |  | 84.0 |  |
| 2002 | 10,156 | 5,029 | 49.5 | 326.6 | 64,950 | 23.1 | 4,200 |  | 83.5 |  |
| 2003 | 10,851 | 5,474 | 50.4 | 347.3 | 63,452 | 24.5 | 4,584 |  | 83.7 |  |
| 2004 | 11,623 | 6,006 | 51.7 | 354.1 | 58,954 | 25.1 | 4,949 |  | 82.4 |  |
| 2005 | 12,090 | 6,567 | 54.3 | 369.2 | 56,216 | 26.2 | 5,381 |  | 81.9 |  |
| 2006 | 12,538 | 6,929 | 55.3 | 378.5 | 54,622 | 26.9 | 5,696 |  | 82.2 |  |
| 2007 | 13,069 | 7,498 | 57.4 | 377.9 | 50,395 | 27.0 | 6,056 |  | 80.8 |  |
| 2008 | 13,491 | 7,690 | 57.0 | 373.7 | 48,601 | 26.9 | 6,129 |  | 79.7 |  |
| 2009 | 14,804 | 8,455 | 57.1 | 372.7 | 44,076 | 27.1 | 6,669 |  | 78.9 |  |
| 2010 | 15,472 | 9,582 | 61.9 | 387.2 | 40,410 | 28.6 | 7,461 |  | 77.9 |  |
| 2011 | 16,182 | 10,561 | 65.3 | 382.2 | 36,186 | 28.9 | 7,981 |  | 75.6 |  |
| 2012 | 16,936 | 11,961 | 70.6 | 306.0 | 25,583 | 26.0 | 7,134 |  | 59.6 |  |
| 1990-2012 | 245,083 | 127,187 | 51.9 | 7,081.5 | 55,678 | 509.4 | 94,601 |  | 74.4 |  |

SUM OF ALL CAMPUSES, ALL UNDERGRADUATE DEGREES


SUM OF ALL CAMPUSES, RESIDENT UNDERGRADUATE DEGREES


SUM OF ALL CAMPUSES, NONRESIDENT UNDERGRADUATE DEGREES


SUM OF ALL CAMPUSES, ALL GRADUATE DEGREES

sum of all campuses, resident graduate degrees


SUM OF ALL CAMPUSES, NONRESIDENT GRADUATE DEGREES


TEMPE CAMPUS, ALL DEGREES

|  |  | 2012 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic Year of Graduation | Number of Degrees Awarded | Number Employed in Arizona | Percent Employed in Arizona | Aggregate Wages in Millions | Average Wage | Estimated State Tax Payments in Millions | Number Employed in Arizona During All Four Quarters | Median Wage of Those Employed in All Four Quarters | Percent Employed in All Four Quarters | Average Wage as a <br> Proportion of the Median Wage |
| 1990 | 6,628 | 2,279 | 34.4\% | \$186.2 | \$81,713 | \$13.1 | 1,886 |  | 82.8\% |  |
| 1991 | 6,998 | 2,615 | 37.4 | 213.7 | 81,738 | 15.1 | 2,169 |  | 82.9 |  |
| 1992 | 6,983 | 2,639 | 37.8 | 213.3 | 80,814 | 15.1 | 2,232 |  | 84.6 |  |
| 1993 | 7,382 | 2,804 | 38.0 | 218.4 | 77,894 | 15.4 | 2,330 |  | 83.1 |  |
| 1994 | 7,167 | 2,847 | 39.7 | 227.9 | 80,037 | 16.1 | 2,385 |  | 83.8 |  |
| 1995 | 7,267 | 2,977 | 41.0 | 239.4 | 80,422 | 16.9 | 2,491 |  | 83.7 |  |
| 1996 | 7,164 | 3,014 | 42.1 | 230.9 | 76,603 | 16.3 | 2,514 |  | 83.4 |  |
| 1997 | 7,561 | 3,163 | 41.8 | 247.3 | 78,195 | 17.4 | 2,661 |  | 84.1 |  |
| 1998 | 8,021 | 3,384 | 42.2 | 252.5 | 74,603 | 17.8 | 2,877 |  | 85.0 |  |
| 1999 | 8,138 | 3,457 | 42.5 | 249.3 | 72,118 | 17.6 | 2,850 |  | 82.4 |  |
| 2000 | 8,544 | 3,821 | 44.7 | 273.3 | 71,523 | 19.3 | 3,213 |  | 84.1 |  |
| 2001 | 8,316 | 3,637 | 43.7 | 256.3 | 70,471 | 18.1 | 3,055 |  | 84.0 |  |
| 2002 | 8,757 | 4,114 | 47.0 | 274.5 | 66,724 | 19.4 | 3,449 |  | 83.8 |  |
| 2003 | 9,362 | 4,482 | 47.9 | 293.3 | 65,442 | 20.7 | 3,785 |  | 84.4 |  |
| 2004 | 9,940 | 4,821 | 48.5 | 292.5 | 60,674 | 20.8 | 3,993 |  | 82.8 |  |
| 2005 | 10,406 | 5,369 | 51.6 | 309.3 | 57,616 | 22.0 | 4,406 |  | 82.1 |  |
| 2006 | 10,792 | 5,666 | 52.5 | 321.1 | 56,663 | 22.8 | 4,685 |  | 82.7 |  |
| 2007 | 11,245 | 6,200 | 55.1 | 322.4 | 52,005 | 23.0 | 5,018 |  | 80.9 |  |
| 2008 | 9,723 | 5,101 | 52.5 | 252.0 | 49,395 | 18.2 | 4,013 |  | 78.7 |  |
| 2009 | 10,360 | 5,404 | 52.2 | 247.3 | 45,767 | 18.0 | 4,249 |  | 78.6 |  |
| 2010 | 10,352 | 5,835 | 56.4 | 239.2 | 40,987 | 17.7 | 4,471 |  | 76.6 |  |
| 2011 | 11,067 | 6,754 | 61.0 | 244.6 | 36,215 | 18.7 | 4,995 |  | 74.0 |  |
| 2012 | 11,819 | 7,902 | 66.9 | 197.7 | 25,021 | 16.9 | 4,536 |  | 57.4 |  |
| 1990-2012 | 203,992 | 98,285 | 48.2 | 5,802.4 | 59,037 | 416.1 | 72,027 |  | 73.3 |  |

TEMPE CAMPUS, ALL UNDERGRADUATE DEGREES

|  |  | 2012 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number Employed in Arizona | Percent Employed in Arizona | Aggregate Wages in Millions |  Estimated <br> State Tax <br> Average Payments <br> in Millions <br> Wage  |  | Number <br> Employed in Arizona During All Four Quarters | Median <br> Wage of <br> Those <br> Employed <br> in All <br> Four <br> Quarters | Percent Employed in All Four Quarters | Average Wage as a <br> Proportion of the Median Wage |
| Academic Year of Graduation | Number of Degrees Awarded |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| 1990 | 4,902 | 1,755 | 35.8\% | \$138.3 | \$78,825 | \$9.7 | 1,446 |  | 82.4\% |  |
| 1991 | 5,140 | 2,021 | 39.3 | 158.0 | 78,173 | 11.1 | 1,670 |  | 82.6 |  |
| 1992 | 5,224 | 2,063 | 39.5 | 160.4 | 77,749 | 11.3 | 1,756 |  | 85.1 |  |
| 1993 | 5,374 | 2,104 | 39.2 | 158.9 | 75,504 | 11.2 | 1,744 |  | 82.9 |  |
| 1994 | 5,046 | 2,113 | 41.9 | 163.6 | 77,426 | 11.5 | 1,784 |  | 84.4 |  |
| 1995 | 4,976 | 2,141 | 43.0 | 162.1 | 75,702 | 11.5 | 1,787 |  | 83.5 |  |
| 1996 | 4,992 | 2,180 | 43.7 | 155.7 | 71,423 | 11.0 | 1,818 |  | 83.4 |  |
| 1997 | 5,222 | 2,325 | 44.5 | 171.6 | 73,823 | 12.1 | 1,955 |  | 84.1 |  |
| 1998 | 5,639 | 2,515 | 44.6 | 173.5 | 68,985 | 12.2 | 2,126 |  | 84.5 |  |
| 1999 | 5,691 | 2,523 | 44.3 | 164.6 | 65,222 | 11.7 | 2,073 |  | 82.2 |  |
| 2000 | 6,105 | 2,848 | 46.7 | 188.0 | 65,994 | 13.3 | 2,384 |  | 83.7 |  |
| 2001 | 5,912 | 2,722 | 46.0 | 169.1 | 62,133 | 12.0 | 2,275 |  | 83.6 |  |
| 2002 | 6,220 | 3,026 | 48.6 | 184.8 | 61,054 | 13.1 | 2,518 |  | 83.2 |  |
| 2003 | 6,653 | 3,313 | 49.8 | 194.8 | 58,810 | 13.8 | 2,791 |  | 84.2 |  |
| 2004 | 7,105 | 3,617 | 50.9 | 195.7 | 54,096 | 14.0 | 2,964 |  | 81.9 |  |
| 2005 | 7,782 | 4,171 | 53.6 | 216.0 | 51,778 | 15.4 | 3,416 |  | 81.9 |  |
| 2006 | 7,995 | 4,398 | 55.0 | 221.3 | 50,329 | 15.8 | 3,586 |  | 81.5 |  |
| 2007 | 8,252 | 4,772 | 57.8 | 219.2 | 45,925 | 15.8 | 3,831 |  | 80.3 |  |
| 2008 | 7,093 | 3,882 | 54.7 | 162.2 | 41,785 | 11.8 | 3,008 |  | 77.5 |  |
| 2009 | 7,207 | 3,953 | 54.8 | 147.5 | 37,304 | 11.0 | 3,045 |  | 77.0 |  |
| 2010 | 7,285 | 4,303 | 59.1 | 145.0 | 33,689 | 11.0 | 3,244 |  | 75.4 |  |
| 2011 | 7,771 | 5,041 | 64.9 | 146.3 | 29,016 | 11.7 | 3,649 |  | 72.4 |  |
| 2012 | 8,473 | 6,072 | 71.7 | 119.1 | 19,614 | 11.0 | 3,511 |  | 57.8 |  |
| 1990-2012 | 146,059 | 73,858 | 50.6 | 3,915.5 | 53,013 | 283.2 | 58,381 |  | 79.0 |  |

TEMPE CAMPUS, RESIDENT UNDERGRADUATE DEGREES

|  |  |  |  |  |  | 2012 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Median |  | Average |
|  |  |  |  |  |  |  | Number Employed | Wage of Those | Percent | Wage as a |
|  | Number |  |  |  |  | Estimated | in Arizona | Employed | Employed | Proportion |
| Academic | of | Number | Percent | Aggregate |  | State Tax | During All | in All | in All | of the |
| Year of | Degrees | Employed | Employed | Wages in | Average | Payments | Four | Four | Four | Median |
| Graduation | Awarded | in Arizona | in Arizona | Millions | Wage | in Millions | Quarters | Quarters | Quarters | Wage |
| 1990 | 4,111 | 1,642 | 39.9\% | \$129.1 | \$78,651 | \$9.1 | 1,355 | \$69,276 | 82.5\% | 1.14 |
| 1991 | 4,278 | 1,905 | 44.5 | 149.1 | 78,284 | 10.5 | 1,574 | 67,677 | 82.6 | 1.16 |
| 1992 | 4,346 | 1,939 | 44.6 | 149.7 | 77,193 | 10.6 | 1,661 | 65,134 | 85.7 | 1.19 |
| 1993 | 4,366 | 1,954 | 44.8 | 147.7 | 75,566 | 10.4 | 1,622 | 66,924 | 83.0 | 1.13 |
| 1994 | 4,114 | 1,955 | 47.5 | 149.7 | 76,559 | 10.5 | 1,656 | 67,893 | 84.7 | 1.13 |
| 1995 | 4,165 | 2,008 | 48.2 | 150.5 | 74,931 | 10.6 | 1,678 | 65,638 | 83.6 | 1.14 |
| 1996 | 4,204 | 2,054 | 48.9 | 147.1 | 71,605 | 10.4 | 1,717 | 65,482 | 83.6 | 1.09 |
| 1997 | 4,244 | 2,134 | 50.3 | 157.7 | 73,894 | 11.1 | 1,798 | 66,925 | 84.3 | 1.10 |
| 1998 | 4,357 | 2,285 | 52.4 | 157.1 | 68,765 | 11.1 | 1,931 | 62,435 | 84.5 | 1.10 |
| 1999 | 4,351 | 2,258 | 51.9 | 146.5 | 64,871 | 10.4 | 1,862 | 61,608 | 82.5 | 1.05 |
| 2000 | 4,601 | 2,539 | 55.2 | 166.2 | 65,453 | 11.8 | 2,128 | 61,633 | 83.8 | 1.06 |
| 2001 | 4,461 | 2,464 | 55.2 | 152.3 | 61,806 | 10.8 | 2,063 | 57,884 | 83.7 | 1.07 |
| 2002 | 4,836 | 2,750 | 56.9 | 162.8 | 59,183 | 11.5 | 2,294 | 55,301 | 83.4 | 1.07 |
| 2003 | 5,173 | 2,980 | 57.6 | 172.7 | 57,955 | 12.2 | 2,512 | 55,417 | 84.3 | 1.05 |
| 2004 | 5,522 | 3,258 | 59.0 | 174.1 | 53,434 | 12.4 | 2,670 | 52,582 | 82.0 | 1.02 |
| 2005 | 6,043 | 3,739 | 61.9 | 192.8 | 51,553 | 13.8 | 3,076 | 50,837 | 82.3 | 1.01 |
| 2006 | 6,288 | 4,000 | 63.6 | 199.6 | 49,903 | 14.3 | 3,252 | 49,658 | 81.3 | 1.00 |
| 2007 | 6,464 | 4,272 | 66.1 | 196.3 | 45,944 | 14.1 | 3,457 | 46,746 | 80.9 | 0.98 |
| 2008 | 5,467 | 3,477 | 63.6 | 145.3 | 41,801 | 10.6 | 2,716 | 42,950 | 78.1 | 0.97 |
| 2009 | 5,499 | 3,539 | 64.4 | 132.1 | 37,323 | 9.8 | 2,738 | 40,042 | 77.4 | 0.93 |
| 2010 | 5,653 | 3,824 | 67.6 | 129.1 | 33,751 | 9.8 | 2,910 | 37,709 | 76.1 | 0.90 |
| 2011 | 6,073 | 4,463 | 73.5 | 130.5 | 29,231 | 10.4 | 3,282 | 33,652 | 73.5 | 0.87 |
| 2012 | 6,731 | 5,330 | 79.2 | 108.1 | 20,281 | 9.9 | 3,231 | 23,906 | 60.6 | 0.85 |
| 1990-2012 | 115,347 | 66,769 | 57.9 | 3,545.8 | 53,106 | 256.4 | 53,183 |  | 79.7 |  |

TEMPE CAMPUS, NONRESIDENT UNDERGRADUATE DEGREES

tempe campus, ALL GRADUATE DEGREES

|  |  | 2012 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic Year of Graduation | Number of <br> Degrees Awarded | Number Employed in Arizona | Percent Employed in Arizona | Aggregate Wages in Millions | Average Wage | Estimated <br> State Tax <br> Payments in Millions | Number Employed in Arizona During All Four Quarters | Median Wage of Those Employed in All Four Quarters | Percent Employed in All Four Quarters | Average Wage as a <br> Proportion of the Median Wage |
| 1990 | 1,726 | 524 | 30.4\% | \$47.9 | \$91,384 | \$3.4 | 440 |  | 84.0\% |  |
| 1991 | 1,858 | 594 | 32.0 | 55.8 | 93,869 | 3.9 | 499 |  | 84.0 |  |
| 1992 | 1,759 | 576 | 32.7 | 52.9 | 91,795 | 3.7 | 476 |  | 82.6 |  |
| 1993 | 2,008 | 700 | 34.9 | 59.6 | 85,078 | 4.2 | 586 |  | 83.7 |  |
| 1994 | 2,121 | 734 | 34.6 | 64.3 | 87,551 | 4.5 | 601 |  | 81.9 |  |
| 1995 | 2,291 | 836 | 36.5 | 77.3 | 92,508 | 5.4 | 704 |  | 84.2 |  |
| 1996 | 2,172 | 834 | 38.4 | 75.2 | 90,141 | 5.3 | 696 |  | 83.5 |  |
| 1997 | 2,339 | 838 | 35.8 | 75.7 | 90,326 | 5.3 | 706 |  | 84.2 |  |
| 1998 | 2,382 | 869 | 36.5 | 79.0 | 90,863 | 5.5 | 751 |  | 86.4 |  |
| 1999 | 2,447 | 934 | 38.2 | 84.8 | 90,748 | 5.9 | 777 |  | 83.2 |  |
| 2000 | 2,439 | 973 | 39.9 | 85.3 | 87,707 | 6.0 | 829 |  | 85.2 |  |
| 2001 | 2,404 | 915 | 38.1 | 87.2 | 95,274 | 6.1 | 780 |  | 85.2 |  |
| 2002 | 2,537 | 1,088 | 42.9 | 89.8 | 82,492 | 6.3 | 931 |  | 85.6 |  |
| 2003 | 2,709 | 1,169 | 43.2 | 98.5 | 84,237 | 6.9 | 994 |  | 85.0 |  |
| 2004 | 2,835 | 1,204 | 42.5 | 96.8 | 80,436 | 6.8 | 1,029 |  | 85.5 |  |
| 2005 | 2,624 | 1,198 | 45.7 | 93.4 | 77,939 | 6.6 | 990 |  | 82.6 |  |
| 2006 | 2,797 | 1,268 | 45.3 | 99.7 | 78,630 | 7.0 | 1,099 |  | 86.7 |  |
| 2007 | 2,993 | 1,428 | 47.7 | 103.3 | 72,324 | 7.2 | 1,187 |  | 83.1 |  |
| 2008 | 2,630 | 1,219 | 46.3 | 89.8 | 73,631 | 6.3 | 1,005 |  | 82.4 |  |
| 2009 | 3,153 | 1,451 | 46.0 | 99.9 | 68,822 | 7.0 | 1,204 |  | 83.0 |  |
| 2010 | 3,067 | 1,532 | 50.0 | 94.2 | 61,485 | 6.7 | 1,227 |  | 80.1 |  |
| 2011 | 3,296 | 1,713 | 52.0 | 98.3 | 57,399 | 7.0 | 1,346 |  | 78.6 |  |
| 2012 | 3,346 | 1,830 | 54.7 | 78.6 | 42,961 | 5.9 | 1,025 |  | 56.0 |  |
| 1990-2012 | 57,933 | 24,427 | 42.2 | 1,887.0 | 77,249 | 133.0 | 13,646 |  | 55.9 |  |

TEMPE CAMPUS, RESIDENT GRADUATE DEGREES


TEMPE CAMPUS, NONRESIDENT GRADUATE DEGREES


WEST CAMPUS, ALL DEGREES

|  |  | 2012 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic Year of Graduation | Number of <br> Degrees Awarded | Number Employed in Arizona | Percent Employed in Arizona | Aggregate Wages in Millions | Average Wage | Estimated State Tax Payments in Millions | Number Employed in Arizona During All Four Quarters | Median <br> Wage of Those Employed in All Four Quarters | Percent Employed in All Four Quarters | Average Wage as a <br> Proportion of the Median Wage |
| 1993 | 167 | 115 | 68.9\% | \$7.2 | \$62,566 | \$0.5 | 91 |  | 79.1\% |  |
| 1994 | 504 | 286 | 56.7 | 16.8 | 58,711 | 1.2 | 233 |  | 81.5 |  |
| 1995 | 714 | 437 | 61.2 | 27.9 | 63,829 | 2.0 | 354 |  | 81.0 |  |
| 1996 | 822 | 507 | 61.7 | 30.6 | 60,355 | 2.2 | 402 |  | 79.3 |  |
| 1997 | 963 | 591 | 61.4 | 36.0 | 60,936 | 2.5 | 493 |  | 83.4 |  |
| 1998 | 1,070 | 644 | 60.2 | 38.9 | 60,362 | 2.7 | 526 |  | 81.7 |  |
| 1999 | 1,093 | 704 | 64.4 | 44.7 | 63,455 | 3.2 | 583 |  | 82.8 |  |
| 2000 | 1,173 | 747 | 63.7 | 48.8 | 65,324 | 3.4 | 607 |  | 81.3 |  |
| 2001 | 1,196 | 767 | 64.1 | 47.3 | 61,629 | 3.3 | 645 |  | 84.1 |  |
| 2002 | 1,398 | 914 | 65.4 | 51.7 | 56,520 | 3.6 | 750 |  | 82.1 |  |
| 2003 | 1,486 | 990 | 66.6 | 53.9 | 54,440 | 3.8 | 797 |  | 80.5 |  |
| 2004 | 1,679 | 1,182 | 70.4 | 61.4 | 51,954 | 4.4 | 953 |  | 80.6 |  |
| 2005 | 1,681 | 1,195 | 71.1 | 59.7 | 49,940 | 4.2 | 972 |  | 81.3 |  |
| 2006 | 1,735 | 1,258 | 72.5 | 57.2 | 45,466 | 4.1 | 1,006 |  | 80.0 |  |
| 2007 | 1,798 | 1,286 | 71.5 | 55.0 | 42,745 | 3.9 | 1,028 |  | 79.9 |  |
| 2008 | 1,930 | 1,410 | 73.1 | 57.4 | 40,720 | 4.2 | 1,130 |  | 80.1 |  |
| 2009 | 1,945 | 1,422 | 73.1 | 55.6 | 39,129 | 4.1 | 1,117 |  | 78.6 |  |
| 2010 | 2,061 | 1,627 | 78.9 | 59.3 | 36,452 | 4.4 | 1,281 |  | 78.7 |  |
| 2011 | 1,518 | 1,246 | 82.1 | 41.6 | 33,408 | 3.1 | 952 |  | 76.4 |  |
| 2012 | 1,419 | 1,138 | 80.2 | 27.3 | 23,985 | 2.4 | 744 |  | 65.4 |  |
| 1990-2012 | 26,352 | 18,466 | 70.1 | 878.2 | 47,558 | 63.3 | 14,664 |  | 79.4 |  |

WEST CAMPUS, ALL UNDERGRADUATE DEGREES

|  |  | 2012 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic Year of Graduation | Number of <br> Degrees <br> Awarded | Number Employed in Arizona | Percent Employed in Arizona | Aggregate Wages in Millions | Average Wage | Estimated State Tax Payments in Millions | Number Employed in Arizona During All Four Quarters | Median Wage of Those Employed in All Four Quarters | Percent Employed in All Four Ouarters | Average Wage as a <br> Proportion of the Median Wage |
| 1993 | 162 | 113 | 69.8\% | \$7.1 | \$63,043 | \$0.5 | 90 |  | 79.6\% |  |
| 1994 | 479 | 273 | 57.0 | 15.1 | 55,370 | 1.1 | 222 |  | 81.3 |  |
| 1995 | 637 | 392 | 61.5 | 23.0 | 58,598 | 1.6 | 319 |  | 81.4 |  |
| 1996 | 725 | 452 | 62.3 | 25.9 | 57,403 | 1.8 | 361 |  | 79.9 |  |
| 1997 | 827 | 512 | 61.9 | 28.4 | 55,511 | 2.0 | 425 |  | 83.0 |  |
| 1998 | 903 | 551 | 61.0 | 29.3 | 53,163 | 2.1 | 444 |  | 80.6 |  |
| 1999 | 893 | 582 | 65.2 | 32.8 | 56,326 | 2.3 | 483 |  | 83.0 |  |
| 2000 | 970 | 618 | 63.7 | 33.5 | 54,276 | 2.4 | 498 |  | 80.6 |  |
| 2001 | 1,028 | 665 | 64.7 | 36.3 | 54,605 | 2.6 | 560 |  | 84.2 |  |
| 2002 | 1,137 | 745 | 65.5 | 37.8 | 50,762 | 2.7 | 608 |  | 81.6 |  |
| 2003 | 1,199 | 802 | 66.9 | 39.2 | 48,905 | 2.8 | 644 |  | 80.3 |  |
| 2004 | 1,355 | 962 | 71.0 | 45.8 | 47,644 | 3.3 | 779 |  | 81.0 |  |
| 2005 | 1,406 | 1,013 | 72.0 | 46.6 | 46,021 | 3.3 | 823 |  | 81.2 |  |
| 2006 | 1,501 | 1,104 | 73.6 | 46.8 | 42,350 | 3.4 | 872 |  | 79.0 |  |
| 2007 | 1,530 | 1,114 | 72.8 | 45.8 | 41,092 | 3.3 | 884 |  | 79.4 |  |
| 2008 | 1,568 | 1,143 | 72.9 | 43.7 | 38,214 | 3.2 | 902 |  | 78.9 |  |
| 2009 | 1,449 | 1,106 | 76.3 | 40.4 | 36,518 | 3.0 | 874 |  | 79.0 |  |
| 2010 | 1,466 | 1,175 | 80.2 | 39.7 | 33,827 | 3.0 | 934 |  | 79.5 |  |
| 2011 | 1,156 | 956 | 82.7 | 29.6 | 30,920 | 2.3 | 735 |  | 76.9 |  |
| 2012 | 1,079 | 900 | 83.4 | 19.3 | 21,455 | 1.8 | 585 |  | 65.0 |  |
| 1990-2012 | 21,470 | 15,178 | 70.7 | 666.2 | 43,893 | 48.3 | 12,042 |  | 79.3 |  |

WEST CAMPUS, RESIDENT UNDERGRADUATE DEGREES


WEST CAMPUS, NONRESIDENT UNDERGRADUATE DEGREES

|  |  |  |  |  |  | 2012 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Median |  | Average |
|  |  |  |  |  |  |  | Number Employed | Wage of Those | Percent | Wage as <br> a |
|  | Number |  |  |  |  | Estimated | in Arizona | Employed | Employed | Proportion |
| Academic | of | Number | Percent | Aggregate |  | State Tax | During All | in All | in All | of the |
| Year of | Degrees | Employed | Employed | Wages in | Average | Payments | Four | Four | Four | Median |
| Graduation | Awarded | in Arizona | in Arizona | Millions | Wage | in Millions | Quarters | Quarters | Quarters | Wage |
| 1993 | 0 | 0 | 0.0\% | \$0.0 | \$0 | \$0.0 | 0 | \$0 | 0.0\% | 0.00 |
| 1994 | 11 | 4 | 36.4 | 0.3 | 70,772 | 0.0 | 4 | 70,596 | 100.0 | 1.00 |
| 1995 | 15 | 6 | 40.0 | 0.3 | 44,402 | 0.0 | 6 | 41,392 | 100.0 | 1.07 |
| 1996 | 11 | 5 | 45.5 | 0.3 | 62,385 | 0.0 | 4 | 61,453 | 80.0 | 1.02 |
| 1997 | 14 | 7 | 50.0 | 0.4 | 52,418 | 0.0 | 5 | 58,952 | 71.4 | 0.89 |
| 1998 | 24 | 3 | 12.5 | 0.1 | 35,272 | 0.0 | 3 | 31,126 | 100.0 | 1.13 |
| 1999 | 22 | 4 | 18.2 | 0.2 | 43,133 | 0.0 | 3 | 32,913 | 75.0 | 1.31 |
| 2000 | 26 | 6 | 23.1 | 1.0 | 165,113 | 0.1 | 3 | 116,435 | 50.0 | 1.42 |
| 2001 | 43 | 18 | 41.9 | 1.1 | 62,361 | 0.1 | 16 | 66,797 | 88.9 | 0.93 |
| 2002 | 31 | 13 | 41.9 | 0.7 | 50,836 | 0.0 | 10 | 53,623 | 76.9 | 0.95 |
| 2003 | 45 | 14 | 31.1 | 0.8 | 59,570 | 0.1 | 12 | 52,050 | 85.7 | 1.14 |
| 2004 | 32 | 9 | 28.1 | 0.4 | 44,423 | 0.0 | 8 | 41,129 | 88.9 | 1.08 |
| 2005 | 41 | 15 | 36.6 | 0.5 | 31,486 | 0.0 | 8 | 47,054 | 53.3 | 0.67 |
| 2006 | 47 | 14 | 29.8 | 0.6 | 39,918 | 0.0 | 11 | 40,088 | 78.6 | 1.00 |
| 2007 | 37 | 19 | 51.4 | 1.0 | 54,702 | 0.1 | 16 | 43,143 | 84.2 | 1.27 |
| 2008 | 81 | 27 | 33.3 | 1.2 | 45,183 | 0.1 | 22 | 49,903 | 81.5 | 0.91 |
| 2009 | 59 | 15 | 25.4 | 0.5 | 32,314 | 0.0 | 14 | 31,149 | 93.3 | 1.04 |
| 2010 | 51 | 15 | 29.4 | 0.6 | 36,845 | 0.0 | 12 | 40,423 | 80.0 | 0.91 |
| 2011 | 33 | 15 | 45.5 | 0.3 | 19,799 | 0.0 | 7 | 37,402 | 46.7 | 0.53 |
| 2012 | 59 | 30 | 50.8 | 0.4 | 14,417 | 0.0 | 14 | 20,171 | 46.7 | 0.71 |
| 1990-2012 | 682 | 239 | 35.0 | 10.6 | 44,234 | 0.8 | 178 |  | 74.5 |  |

WEST CAMPUS, ALL GRADUATE DEGREES

|  |  | 2012 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic Year of Graduation | Number of <br> Degrees Awarded | Number Employed in Arizona | Percent Employed in Arizona | Aggregate Wages in Millions | Average Wage | Estimated State Tax Payments in Millions | Number Employed in Arizona During All Four Quarters | Median <br> Wage of Those Employed in All Four Quarters | Percent Employed in All Four Quarters | Average Wage as a Proportion of the Median Wage |
| 1993 | 5 | 2 | 40.0\% | \$0.1 | \$35,663 | \$0.0 | 1 |  | 50.0\% |  |
| 1994 | 25 | 13 | 52.0 | 1.7 | 128,888 | 0.1 | 11 |  | 84.6 |  |
| 1995 | 77 | 45 | 58.4 | 4.9 | 109,399 | 0.3 | 35 |  | 77.8 |  |
| 1996 | 97 | 55 | 56.7 | 4.7 | 84,616 | 0.3 | 41 |  | 74.5 |  |
| 1997 | 136 | 79 | 58.1 | 7.6 | 96,093 | 0.5 | 68 |  | 86.1 |  |
| 1998 | 167 | 93 | 55.7 | 9.6 | 103,012 | 0.7 | 82 |  | 88.2 |  |
| 1999 | 200 | 122 | 61.0 | 11.9 | 97,462 | 0.8 | 100 |  | 82.0 |  |
| 2000 | 203 | 129 | 63.5 | 15.3 | 118,249 | 1.1 | 109 |  | 84.5 |  |
| 2001 | 168 | 102 | 60.7 | 11.0 | 107,425 | 0.8 | 85 |  | 83.3 |  |
| 2002 | 261 | 169 | 64.8 | 13.8 | 81,904 | 1.0 | 142 |  | 84.0 |  |
| 2003 | 287 | 188 | 65.5 | 14.7 | 78,056 | 1.0 | 153 |  | 81.4 |  |
| 2004 | 324 | 220 | 67.9 | 15.6 | 70,804 | 1.1 | 174 |  | 79.1 |  |
| 2005 | 275 | 182 | 66.2 | 13.1 | 71,756 | 0.9 | 149 |  | 81.9 |  |
| 2006 | 234 | 154 | 65.8 | 10.4 | 67,802 | 0.7 | 134 |  | 87.0 |  |
| 2007 | 268 | 172 | 64.2 | 9.2 | 53,455 | 0.6 | 144 |  | 83.7 |  |
| 2008 | 362 | 267 | 73.8 | 13.7 | 51,449 | 1.0 | 228 |  | 85.4 |  |
| 2009 | 496 | 316 | 63.7 | 15.3 | 48,269 | 1.1 | 243 |  | 76.9 |  |
| 2010 | 595 | 452 | 76.0 | 19.6 | 43,276 | 1.4 | 347 |  | 76.8 |  |
| 2011 | 362 | 290 | 80.1 | 12.1 | 41,612 | 0.9 | 217 |  | 74.8 |  |
| 2012 | 340 | 238 | 70.0 | 8.0 | 33,555 | 0.6 | 159 |  | 66.8 |  |
| 1990-2012 | 4,882 | 3,288 | 67.3 | 212.0 | 64,474 | 15.0 | 2,622 |  | 79.7 |  |

WEST CAMPUS, RESIDENT GRADUATE DEGREES

|  |  |  |  |  |  | 2012 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Median |  | Average |
|  |  |  |  |  |  |  | Number Employed | Wage of Those | Percent | Wage as a |
|  | Number |  |  |  |  | Estimated | in Arizona | Employed | Employed | Proportion |
| Academic | of | Number | Percent | Aggregate |  | State Tax | During All | in All | in All | of the |
| Year of | Degrees | Employed | Employed | Wages in | Average | Payments | Four | Four | Four | Median |
| Graduation | Awarded | in Arizona | in Arizona | Millions | Wage | in Millions | Quarters | Quarters | Quarters | Wage |
| 1993 | 5 | 2 | 40.0\% | \$0.1 | \$35,663 | \$0.0 | 1 | \$44,926 | 50.0\% | 0.79 |
| 1994 | 25 | 13 | 52.0 | 1.7 | 128,888 | 0.1 | 11 | 81,106 | 84.6 | 1.59 |
| 1995 | 75 | 45 | 60.0 | 4.9 | 109,399 | 0.3 | 35 | 93,763 | 77.8 | 1.17 |
| 1996 | 91 | 53 | 58.2 | 4.6 | 87,186 | 0.3 | 41 | 87,843 | 77.4 | 0.99 |
| 1997 | 128 | 79 | 61.7 | 7.6 | 96,093 | 0.5 | 68 | 71,225 | 86.1 | 1.35 |
| 1998 | 158 | 92 | 58.2 | 9.5 | 103,103 | 0.7 | 81 | 84,703 | 88.0 | 1.22 |
| 1999 | 187 | 118 | 63.1 | 11.6 | 98,119 | 0.8 | 96 | 83,267 | 81.4 | 1.18 |
| 2000 | 195 | 128 | 65.6 | 15.1 | 117,954 | 1.1 | 108 | 91,532 | 84.4 | 1.29 |
| 2001 | 158 | 100 | 63.3 | 10.9 | 109,475 | 0.8 | 84 | 80,921 | 84.0 | 1.35 |
| 2002 | 248 | 164 | 66.1 | 13.6 | 82,678 | 0.9 | 137 | 68,172 | 83.5 | 1.21 |
| 2003 | 270 | 186 | 68.9 | 14.5 | 78,013 | 1.0 | 151 | 70,709 | 81.2 | 1.10 |
| 2004 | 302 | 215 | 71.2 | 15.3 | 71,137 | 1.1 | 171 | 62,507 | 79.5 | 1.14 |
| 2005 | 267 | 181 | 67.8 | 13.0 | 71,763 | 0.9 | 148 | 64,317 | 81.8 | 1.12 |
| 2006 | 221 | 150 | 67.9 | 10.3 | 68,466 | 0.7 | 131 | 62,968 | 87.3 | 1.09 |
| 2007 | 243 | 172 | 70.8 | 9.2 | 53,455 | 0.6 | 144 | 51,345 | 83.7 | 1.04 |
| 2008 | 340 | 258 | 75.9 | 13.3 | 51,490 | 0.9 | 220 | 47,404 | 85.3 | 1.09 |
| 2009 | 310 | 261 | 84.2 | 13.2 | 50,537 | 0.9 | 206 | 48,251 | 78.9 | 1.05 |
| 2010 | 417 | 358 | 85.9 | 16.0 | 44,818 | 1.1 | 281 | 44,163 | 78.5 | 1.01 |
| 2011 | 309 | 266 | 86.1 | 11.3 | 42,437 | 0.8 | 206 | 43,671 | 77.4 | 0.97 |
| 2012 | 236 | 203 | 86.0 | 7.1 | 35,065 | 0.5 | 142 | 39,884 | 70.0 | 0.88 |
| 1990-2012 | 4,185 | 3,044 | 72.7 | 202.7 | 66,601 | 14.3 | 2,462 |  | 80.9 |  |

WEST CAMPUS, NONRESIDENT GRADUATE DEGREES

|  |  |  |  |  |  | 2012 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Median |  | Average |
|  |  |  |  |  |  |  | Number Employed | Wage of Those | Percent | Wage as <br> a |
|  | Number |  |  |  |  | Estimated | in Arizona | Employed | Employed | Proportion |
| Academic | of | Number | Percent | Aggregate |  | State Tax | During All | in All | in All | of the |
| Year of | Degrees | Employed | Employed | Wages in | Average | Payments | Four | Four | Four | Median |
| Graduation | Awarded | in Arizona | in Arizona | Millions | Wage | in Millions | Quarters | Quarters | Quarters | Wage |
| 1993 | 0 | 0 | 0.0\% | \$0.0 | \$0 | \$0.0 | 0 | \$0 | 0.0\% | 0.00 |
| 1994 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 1995 | 2 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 1996 | 6 | 2 | 33.3 | 0.0 | 16,512 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 1997 | 8 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 1998 | 9 | 1 | 11.1 | 0.1 | 94,591 | 0.0 | 1 | 94,591 | 100.0 | 1.00 |
| 1999 | 13 | 4 | 30.8 | 0.3 | 78,074 | 0.0 | 4 | 73,321 | 100.0 | 1.06 |
| 2000 | 8 | 1 | 12.5 | 0.2 | 156,089 | 0.0 | 1 | 156,089 | 100.0 | 1.00 |
| 2001 | 10 | 2 | 20.0 | 0.0 | 4,952 | 0.0 | 1 | 8,272 | 50.0 | 0.60 |
| 2002 | 13 | 5 | 38.5 | 0.3 | 56,521 | 0.0 | 5 | 69,999 | 100.0 | 0.81 |
| 2003 | 17 | 2 | 11.8 | 0.2 | 82,028 | 0.0 | 2 | 82,028 | 100.0 | 1.00 |
| 2004 | 22 | 5 | 22.7 | 0.3 | 56,475 | 0.0 | 3 | 76,185 | 60.0 | 0.74 |
| 2005 | 8 | 1 | 12.5 | 0.1 | 70,402 | 0.0 | 1 | 70,402 | 100.0 | 1.00 |
| 2006 | 13 | 4 | 30.8 | 0.2 | 42,870 | 0.0 | 3 | 39,881 | 75.0 | 1.07 |
| 2007 | 25 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2008 | 22 | 9 | 40.9 | 0.5 | 50,293 | 0.0 | 8 | 45,439 | 88.9 | 1.11 |
| 2009 | 186 | 55 | 29.6 | 2.1 | 37,505 | 0.1 | 37 | 49,340 | 67.3 | 0.76 |
| 2010 | 178 | 94 | 52.8 | 3.5 | 37,400 | 0.2 | 66 | 45,507 | 70.2 | 0.82 |
| 2011 | 53 | 24 | 45.3 | 0.8 | 32,464 | 0.1 | 11 | 41,604 | 45.8 | 0.78 |
| 2012 | 104 | 35 | 33.7 | 0.9 | 24,793 | 0.1 | 17 | 31,138 | 48.6 | 0.80 |
| 1990-2012 | 697 | 244 | 35.0 | 9.3 | 37,929 | 0.7 | 160 |  | 65.6 |  |

POLYTECHNIC CAMPUS, ALL DEGREES


POLYTECHNIC CAMPUS, ALL UNDERGRADUATE DEGREES


POLYTECHNIC CAMPUS, RESIDENT UNDERGRADUATE DEGREES

|  |  |  |  |  |  | 2012 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Median |  | Average |
|  |  |  |  |  |  |  | Number Employed | Wage of Those | Percent | Wage as a |
|  | Number of |  |  |  |  | Estimated State Tax | in Arizona During All | Employed in All | Employed in All | Proportion of the |
| Year of | Degrees | Employed | Employed | Wages in | Average | Payments | Four | in All | in All | Median |
| Graduation | Awarded | in Arizona | in Arizona | Millions | Wage | in Millions | Quarters | Quarters | Quarters | Wage |
| 2002 | 0 | 0 | 0.0\% | \$0.0 | \$0 | \$0.0 | 0 | \$0 | 0.0\% | 0.00 |
| 2003 | 1 | 1 | 100.0 | 0.1 | 65,626 | 0.0 | 1 | 65,626 | 100.0 | 1.00 |
| 2004 | 2 | 1 | 50.0 | 0.0 | 44,000 | 0.0 | 1 | 44,000 | 100.0 | 1.00 |
| 2005 | 2 | 2 | 100.0 | 0.1 | 31,987 | 0.0 | 2 | 31,987 | 100.0 | 1.00 |
| 2006 | 8 | 5 | 62.5 | 0.2 | 46,468 | 0.0 | 5 | 44,400 | 100.0 | 1.05 |
| 2007 | 13 | 6 | 46.2 | 0.3 | 45,867 | 0.0 | 6 | 42,139 | 100.0 | 1.09 |
| 2008 | 605 | 410 | 67.8 | 19.0 | 46,264 | 1.4 | 345 | 43,774 | 84.1 | 1.06 |
| 2009 | 743 | 531 | 71.5 | 20.5 | 38,540 | 1.5 | 420 | 40,274 | 79.1 | 0.96 |
| 2010 | 777 | 571 | 73.5 | 21.2 | 37,091 | 1.6 | 449 | 39,480 | 78.6 | 0.94 |
| 2011 | 951 | 732 | 77.0 | 24.1 | 32,986 | 1.8 | 590 | 35,480 | 80.6 | 0.93 |
| 2012 | 682 | 588 | 86.2 | 15.2 | 25,806 | 1.3 | 370 | 27,978 | 62.9 | 0.92 |
| 1990-2012 | 3,784 | 2,847 | 75.2 | 100.6 | 35,340 | 7.6 | 2,189 |  | 76.9 |  |

POLYTECHNIC CAMPUS, NONRESIDENT UNDERGRADUATE DEGREES

|  |  |  |  |  |  | 2012 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Median |  | Average |
|  |  |  |  |  |  |  | Number Employed | Wage of Those | Percent | Wage as |
|  | Number |  |  |  |  | Estimated | in Arizona | Employed | Employed | Proportion |
| Academic | of | Number | Percent | Aggregate |  | State Tax | During All | in All | in All | of the |
| Year of | Degrees | Employed | Employed | Wages in | Average | Payments | Four | Four | Four | Median |
| Graduation | Awarded | in Arizona | in Arizona | Millions | Wage | in Millions | Quarters | Quarters | Quarters | Wage |
| 2002 | 0 | 0 | 0.0\% | \$0.0 | \$0 | \$0.0 | 0 | \$0 | 0.0\% | 0.00 |
| 2003 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2004 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2005 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2006 | 1 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2007 | 3 | 2 | 66.7 | 0.0 | 24,368 | 0.0 | 1 | 27,300 | 50.0 | 0.89 |
| 2008 | 115 | 29 | 25.2 | 1.0 | 35,837 | 0.1 | 19 | 42,502 | 65.5 | 0.84 |
| 2009 | 112 | 35 | 31.3 | 1.4 | 38,951 | 0.1 | 28 | 44,757 | 80.0 | 0.87 |
| 2010 | 117 | 36 | 30.8 | 1.0 | 28,131 | 0.1 | 26 | 32,828 | 72.2 | 0.86 |
| 2011 | 118 | 41 | 34.7 | 1.1 | 27,837 | 0.1 | 31 | 31,806 | 75.6 | 0.88 |
| 2012 | 87 | 46 | 52.9 | 0.7 | 15,223 | 0.1 | 16 | 24,603 | 34.8 | 0.62 |
| 1990-2012 | 553 | 189 | 34.2 | 5.3 | 28,072 | 0.4 | 121 |  | 64.0 |  |

POLYTECHNIC CAMPUS, ALL GRADUATE DEGREES

|  |  | 2012 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic Year of Graduation | Number of <br> Degrees <br> Awarded | Number Employed in Arizona | Percent Employed in Arizona | Aggregate Wages in Millions | Average Wage | Estimated State Tax Payments in Millions | Number <br> Employed in Arizona During All Four Quarters | Median <br> Wage of Those Employed in All Four Quarters | Percent Employed in All Four Quarters | Average Wage as a <br> Proportion of the Median Wage |
| 2002 | 1 | 1 | 100.0\% | \$0.5 | \$471,470 | \$0.0 | 1 |  | 100.0\% |  |
| 2003 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2004 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2005 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2006 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2007 | 4 | 1 | 25.0 | 0.0 | 41,650 | 0.0 | 1 |  | 100.0 |  |
| 2008 | 204 | 119 | 58.3 | 6.1 | 51,125 | 0.4 | 103 |  | 86.6 |  |
| 2009 | 201 | 134 | 66.7 | 6.8 | 50,936 | 0.5 | 106 |  | 79.1 |  |
| 2010 | 251 | 181 | 72.1 | 8.3 | 45,715 | 0.6 | 153 |  | 84.5 |  |
| 2011 | 251 | 176 | 70.1 | 8.1 | 46,155 | 0.6 | 146 |  | 83.0 |  |
| 2012 | 188 | 138 | 73.4 | 5.0 | 36,013 | 0.4 | 81 |  | 58.7 |  |
| 1990-2012 | 1,099 | 749 | 68.2 | 34.3 | 45,819 | 2.5 | 590 |  | 78.8 |  |

POLYTECHNIC CAMPUS, RESIDENT GRADUATE DEGREES

|  |  |  |  |  |  | 2012 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Median |  | Average |
|  |  |  |  |  |  |  | Number Employed | Wage of Those | Percent | Wage as a |
|  | Number |  |  |  |  | Estimated | in Arizona | Employed | Employed | Proportion |
| Academic | of | Number | Percent | Aggregate |  | State Tax | During All | in All | in All | of the |
| Year of | Degrees | Employed | Employed | Wages in | Average | Payments | Four | Four | Four | Median |
| Graduation | Awarded | in Arizona | in Arizona | Millions | Wage | in Millions | Quarters | Quarters | Quarters | Wage |
| 2002 | 1 | 1 | 100.0\% | \$0.5 | \$471,470 | \$0.0 | 1 | \$471,470 | 100.0\% | 1.00 |
| 2003 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2004 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2005 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2006 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2007 | 2 | 1 | 50.0 | 0.0 | 41,650 | 0.0 | 1 | 41,650 | 100.0 | 1.00 |
| 2008 | 151 | 103 | 68.2 | 5.1 | 49,762 | 0.4 | 90 | 47,696 | 87.4 | 1.04 |
| 2009 | 152 | 119 | 78.3 | 5.8 | 48,398 | 0.4 | 94 | 51,292 | 79.0 | 0.94 |
| 2010 | 202 | 167 | 82.7 | 7.5 | 44,879 | 0.5 | 141 | 43,133 | 84.4 | 1.04 |
| 2011 | 187 | 159 | 85.0 | 7.3 | 45,662 | 0.5 | 133 | 42,626 | 83.6 | 1.07 |
| 2012 | 130 | 117 | 90.0 | 4.3 | 36,870 | 0.3 | 73 | 41,836 | 62.4 | 0.88 |
| 1990-2012 | 824 | 666 | 80.8 | 30.0 | 45,038 | 2.2 | 532 |  | 79.9 |  |

POLYTECHNIC CAMPUS, NONRESIDENT GRADUATE DEGREES


DOWNTOWN PHOENIX CAMPUS, ALL DEGREES

|  |  | 2012 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic Year of Graduation | Number of <br> Degrees <br> Awarded | Number Employed in Arizona | Percent Employed in Arizona | Aggregate Wages in Millions | Average Wage | Estimated State Tax Payments in Millions | Number Employed in Arizona During All Four Quarters | Median <br> Wage of <br> Those <br> Employed in All Four Quarters | Percent Employed in All Four Quarters | Average Wage as a Proportion of the Median Wage |
| 1995 | 1 | 1 | 100.0\% | \$0.0 | \$18,288 | \$0.0 | 1 |  | 100.0\% |  |
| 1996 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 1997 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 1998 | 1 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 1999 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2000 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2001 | 1 | 1 | 100.0 | 0.0 | 29,570 | 0.0 | 1 |  | 100.0 |  |
| 2002 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2003 | 2 | 1 | 50.0 | 0.1 | 63,233 | 0.0 | 1 |  | 100.0 |  |
| 2004 | 2 | 2 | 100.0 | 0.1 | 57,956 | 0.0 | 2 |  | 100.0 |  |
| 2005 | 1 | 1 | 100.0 | 0.1 | 86,301 | 0.0 | 1 |  | 100.0 |  |
| 2006 | 2 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2007 | 6 | 3 | 50.0 | 0.1 | 29,638 | 0.0 | 2 |  | 66.7 |  |
| 2008 | 914 | 621 | 67.9 | 38.3 | 61,621 | 2.7 | 519 |  | 83.6 |  |
| 2009 | 1,443 | 929 | 64.4 | 41.0 | 44,182 | 2.9 | 749 |  | 80.6 |  |
| 2010 | 1,914 | 1,332 | 69.6 | 58.3 | 43,754 | 4.2 | 1,081 |  | 81.2 |  |
| 2011 | 2,277 | 1,612 | 70.8 | 62.5 | 38,788 | 4.6 | 1,267 |  | 78.6 |  |
| 2012 | 2,741 | 2,149 | 78.4 | 60.1 | 27,985 | 5.0 | 1,387 |  | 64.5 |  |
| 1990-2012 | 9,303 | 6,651 | 71.5 | 260.6 | 39,188 | 19.5 | 5,010 |  | 75.3 |  |

DOWNTOWN PHOENIX CAMPUS, ALL UNDERGRADUATE DEGREES

|  |  | 2012 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic Year of Graduation | Number of <br> Degrees Awarded | Number Employed in Arizona | Percent Employed in Arizona | Aggregate Wages in Millions | Average Wage | Estimated State Tax Payments in Millions | Number Employed in Arizona During All Four Quarters | Median Wage of Those Employed in All Four Quarters | Percent <br> Employed <br> in All <br> Four Quarters | Average Wage as a <br> Proportion of the Median Wage |
| 1995 | 1 | 1 | 100.0\% | \$0.0 | \$18,288 | \$0.0 | 1 |  | 100.0\% |  |
| 1996 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 1997 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 1998 | 1 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 1999 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2000 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2001 | 1 | 1 | 100.0 | 0.0 | 29,570 | 0.0 | 1 |  | 100.0 |  |
| 2002 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2003 | 2 | 1 | 50.0 | 0.1 | 63,233 | 0.0 | 1 |  | 100.0 |  |
| 2004 | 2 | 2 | 100.0 | 0.1 | 57,956 | 0.0 | 2 |  | 100.0 |  |
| 2005 | 1 | 1 | 100.0 | 0.1 | 86,301 | 0.0 | 1 |  | 100.0 |  |
| 2006 | 1 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2007 | 4 | 1 | 25.0 | 0.0 | 30,507 | 0.0 | 0 |  | 0.0 |  |
| 2008 | 543 | 364 | 67.0 | 18.7 | 51,356 | 1.3 | 309 |  | 84.9 |  |
| 2009 | 1,009 | 638 | 63.2 | 26.5 | 41,591 | 1.9 | 519 |  | 81.3 |  |
| 2010 | 1,349 | 938 | 69.5 | 37.0 | 39,442 | 2.7 | 761 |  | 81.1 |  |
| 2011 | 1,455 | 1,023 | 70.3 | 38.1 | 37,195 | 2.8 | 807 |  | 78.9 |  |
| 2012 | 1,887 | 1,472 | 78.0 | 37.6 | 25,575 | 3.1 | 999 |  | 67.9 |  |
| 1990-2012 | 6,254 | 4,441 | 71.0 | 158.2 | 35,633 | 12.0 | 3,400 |  | 76.6 |  |

DOWNTOWN PHOENIX CAMPUS, RESIDENT UNDERGRADUATE DEGREES

|  |  | 2012 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic Year of Graduation | Number of <br> Degrees <br> Awarded | Number Employed in Arizona | Percent Employed in Arizona | Aggregate Wages in Millions | Average Wage | Estimated State Tax Payments in Millions | Number Employed in Arizona During All Four Quarters | Median <br> Wage of Those Employed in All Four Quarters | Percent Employed in All Four Quarters | Average Wage as a <br> Proportion of the Median Wage |
| 1995 | 0 | 0 | 0.0\% | \$0.0 | \$0 | \$0.0 | 0 | \$0 | 0.0\% | 0.00 |
| 1996 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 1997 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 1998 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 1999 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2000 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2001 | 1 | 1 | 100.0 | 0.0 | 29,570 | 0.0 | 1 | 29,570 | 100.0 | 1.00 |
| 2002 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2003 | 2 | 1 | 50.0 | 0.1 | 63,233 | 0.0 | 1 | 63,233 | 100.0 | 1.00 |
| 2004 | 2 | 2 | 100.0 | 0.1 | 57,956 | 0.0 | 2 | 57,956 | 100.0 | 1.00 |
| 2005 | 1 | 1 | 100.0 | 0.1 | 86,301 | 0.0 | 1 | 86,301 | 100.0 | 1.00 |
| 2006 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2007 | 3 | 1 | 33.3 | 0.0 | 30,507 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2008 | 448 | 339 | 75.7 | 17.6 | 51,812 | 1.3 | 286 | 57,800 | 84.4 | 0.90 |
| 2009 | 816 | 593 | 72.7 | 25.0 | 42,092 | 1.8 | 489 | 45,024 | 82.5 | 0.93 |
| 2010 | 1,130 | 871 | 77.1 | 34.7 | 39,819 | 2.5 | 710 | 41,201 | 81.5 | 0.97 |
| 2011 | 1,225 | 954 | 77.9 | 36.3 | 38,045 | 2.7 | 758 | 39,461 | 79.5 | 0.96 |
| 2012 | 1,578 | 1,336 | 84.7 | 35.3 | 26,394 | 2.9 | 927 | 28,828 | 69.4 | 0.92 |
| 1990-2012 | 5,206 | 4,099 | 78.7 | 149.1 | 36,372 | 11.2 | 3,175 |  | 77.5 |  |

DOWNTOWN PHOENIX CAMPUS, NONRESIDENT UNDERGRADUATE DEGREES

|  |  |  |  |  |  | 2012 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Median |  | Aver |
|  |  |  |  |  |  |  | Number Employed | Wage of Those | Percent | Wage as a |
|  | Number |  |  |  |  | Estimated | in Arizona | Employed | Employed | Proportion |
| Academic | of | Number | Percent | Aggregate |  | State Tax | During All | in All | in All | of the |
| Year of | Degrees | Employed | Employed | Wages in | Average | Payments | Four | Four | Four | Median |
| Graduation | Awarded | in Arizona | in Arizona | Millions | Wage | in Millions | Quarters | Quarters | Quarters | Wage |
| 1995 | 1 | 1 | 100.0\% | \$0.0 | \$18,288 | \$0.0 | 1 | \$18,288 | 100.0\% | 0.00 |
| 1996 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 1997 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 1998 | 1 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 1999 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2000 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2001 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2002 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2003 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2004 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2005 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2006 | 1 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2007 | 1 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2008 | 95 | 25 | 26.3 | 1.1 | 45,162 | 0.1 | 23 | 46,169 | 92.0 | 0.98 |
| 2009 | 193 | 45 | 23.3 | 1.6 | 34,996 | 0.1 | 30 | 39,143 | 66.7 | 0.89 |
| 2010 | 219 | 67 | 30.6 | 2.3 | 34,540 | 0.2 | 51 | 39,597 | 76.1 | 0.87 |
| 2011 | 230 | 69 | 30.0 | 1.8 | 25,448 | 0.1 | 49 | 31,590 | 71.0 | 0.81 |
| 2012 | 309 | 136 | 44.0 | 2.4 | 17,524 | 0.2 | 72 | 23,929 | 52.9 | 0.73 |
| 1990-2012 | 1,048 | 342 | 32.6 | 9.2 | 26,776 | 0.7 | 225 |  | 65.8 |  |

DOWNTOWN PHOENIX CAMPUS, ALL GRADUATE DEGREES

|  |  | 2012 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic Year of Graduation | Number of Degrees Awarded | Number Employed in Arizona | Percent Employed in Arizona | Aggregate Wages in Millions | Average Wage | Estimated State Tax Payments in Millions | Number <br> Employed in Arizona During All Four Quarters | Median Wage of Those Employed in All Four Quarters | Percent <br> Employed in All Four Quarters | Average Wage as a <br> Proportion of the Median Wage |
| 1995 | 0 | 0 | 0.0\% | \$0.0 | \$0 | \$0.0 | 0 |  | 0.0\% |  |
| 1996 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 1997 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 1998 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 1999 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2000 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2001 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2002 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2003 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2004 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2005 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2006 | 1 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 |  | 0.0 |  |
| 2007 | 2 | 2 | 100.0 | 0.1 | 29,203 | 0.0 | 2 |  | 100.0 |  |
| 2008 | 371 | 257 | 69.3 | 19.6 | 76,161 | 1.4 | 210 |  | 81.7 |  |
| 2009 | 434 | 291 | 67.1 | 14.5 | 49,862 | 1.0 | 230 |  | 79.0 |  |
| 2010 | 565 | 394 | 69.7 | 21.3 | 54,019 | 1.5 | 320 |  | 81.2 |  |
| 2011 | 822 | 589 | 71.7 | 24.5 | 41,554 | 1.8 | 460 |  | 78.1 |  |
| 2012 | 854 | 677 | 79.3 | 22.5 | 33,224 | 1.8 | 388 |  | 57.3 |  |
| 1990-2012 | 3,049 | 2,210 | 72.5 | 102.4 | 46,332 | 7.5 | 1,610 |  | 72.9 |  |

DOWNTOWN PHOENIX CAMPUS, RESIDENT GRADUATE DEGREES

|  |  |  |  |  |  | 2012 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Median |  | Average |
|  |  |  |  |  |  |  | Number Employed | Wage of Those | Percent | Wage as a |
|  | Number |  |  |  |  | Estimated | in Arizona | Employed | Employed | Proportion |
| Academic | of | Number | Percent | Aggregate |  | State Tax | During All | in All | in All | of the |
| Year of | Degrees | Employed | Employed | Wages in | Average | Payments | Four | Four | Four | Median |
| Graduation | Awarded | in Arizona | in Arizona | Millions | Wage | in Millions | Quarters | Quarters | Quarters | Wage |
| 1995 | 0 | 0 | 0.0\% | \$0.0 | \$0 | \$0.0 | 0 | \$0 | 0.0\% | 0.00 |
| 1996 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 1997 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 1998 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 1999 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2000 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2001 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2002 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2003 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2004 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2005 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2006 | 1 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2007 | 1 | 1 | 100.0 | 0.0 | 9,490 | 0.0 | 1 | 9,490 | 100.0 | 1.00 |
| 2008 | 332 | 245 | 73.8 | 19.1 | 78,151 | 1.4 | 202 | 49,089 | 82.4 | 1.59 |
| 2009 | 393 | 276 | 70.2 | 13.8 | 50,067 | 1.0 | 216 | 49,445 | 78.3 | 1.01 |
| 2010 | 490 | 366 | 74.7 | 20.1 | 54,899 | 1.4 | 296 | 49,176 | 80.9 | 1.12 |
| 2011 | 596 | 481 | 80.7 | 21.2 | 44,117 | 1.5 | 396 | 44,035 | 82.3 | 1.00 |
| 2012 | 604 | 518 | 85.8 | 18.0 | 34,807 | 1.4 | 326 | 39,482 | 62.9 | 0.88 |
| 1990-2012 | 2,417 | 1,887 | 78.1 | 92.3 | 48,923 | 6.7 | 1,437 |  | 76.2 |  |

downtown phoenix campus, Nonresident graduate degrees

|  |  |  |  |  |  | 2012 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Median |  | Average |
|  |  |  |  |  |  |  | Number Employed | Wage of Those | Percent | Wage as a |
|  | Number |  |  |  |  | Estimated | in Arizona | Employed | Employed | Proportion |
| Academic | of | Number | Percent | Aggregate |  | State Tax | During All | in All | in All | of the |
| Year of | Degrees | Employed | Employed | Wages in | Average | Payments | Four | Four | Four | Median |
| Graduation | Awarded | in Arizona | in Arizona | Millions | Wage | in Millions | Quarters | Quarters | Quarters | Wage |
| 1995 | 0 | 0 | 0.0\% | \$0.0 | \$0 | \$0.0 | 0 | \$0 | 0.0\% | 0.00 |
| 1996 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 1997 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 1998 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 1999 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2000 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2001 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2002 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2003 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2004 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2005 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2006 | 0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.00 |
| 2007 | 1 | 1 | 0.0 | 0.0 | 48,917 | 0.0 | 1 | 48,917 | 100.0 | 1.00 |
| 2008 | 39 | 12 | 30.8 | 0.4 | 35,542 | 0.0 | 8 | 39,404 | 66.7 | 0.90 |
| 2009 | 41 | 15 | 36.6 | 0.7 | 46,090 | 0.0 | 14 | 49,423 | 93.3 | 0.93 |
| 2010 | 75 | 28 | 37.3 | 1.2 | 42,525 | 0.1 | 24 | 41,860 | 85.7 | 1.02 |
| 2011 | 226 | 108 | 47.8 | 3.3 | 30,136 | 0.2 | 64 | 40,852 | 59.3 | 0.74 |
| 2012 | 250 | 159 | 63.6 | 4.5 | 28,068 | 0.4 | 62 | 40,467 | 39.0 | 0.69 |
| 1990-2012 | 632 | 323 | 51.1 | 10.1 | 31,192 | 0.8 | 173 |  | 53.6 |  |


[^0]:    ARIZONA
    STATE UNIVERSITY

