



APPLIED ECONOMICS

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***ANNUAL ECONOMIC IMPACTS OF THE  
JOBPATH PROGRAM ON PIMA COUNTY***

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## 1.0 INTRODUCTION

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Applied Economics has been contracted by JobPath to prepare an independent analysis of the economic impacts of JobPath in Pima County and the return on investment it creates for the region. This analysis was initially prepared in 2008 using data on graduates from the previous two years, and has been updated annually since that time. This analysis incorporates the newest data on graduates from 2017-18.

JobPath provides annual data by graduate on pre-training wages, post-training wages and employer name for individuals placed in jobs, participation in public assistance programs and amount spent on each graduate. This annual data forms the basis for the economic impact analysis. A graduate is defined as an individual who completes their degree or certificate program. It includes individuals who are employed upon graduation, as and those who are not immediately employed or have not reported back information on their employer.

JobPath is a non-profit workforce development organization that sponsors low-income, unemployed and underemployed adults from Tucson and Pima County in long-term education and job training opportunities. JobPath was created in 1998 by Pima County Interfaith Council and community business leaders to meet an urgent need for job training programs in career areas to address a demand for skilled workers in the community. Sponsorship includes financial assistance, wrap-around case management, mentoring, peer support and assistance connecting to employers for JobPath participants in associate's degree or certification programs primarily at Pima Community College. Training programs include a variety of allied health care occupations, aviation technology, truck driving, trades and other fields. JobPath's mission is to improve the economic status of underserved adults so that they can lead healthier, more prosperous lives.

The purpose of this analysis is to calculate the overall impacts of JobPath on the economy of Pima County in terms of the direct and indirect increase in payroll, output and supported jobs, as well as an estimate of annual sales and income tax revenues created by these graduates and reductions in public assistance costs. The economic impacts are calculated using economic multipliers that are specific to Pima County. The state and local tax revenue impacts are based on post-training wages, and the reductions in public assistance costs are estimated based on the number of individuals receiving assistance prior to graduation and the average annual amount of assistance per person for various assistance programs in Pima County. The analysis also compares the aggregate increase in wages for graduates placed in jobs plus the reductions in public assistance costs to the annual amount of local funding received by JobPath to estimate a return on investment. *Additional information on methodology can be found in the appendix.*

JobPath has produced economic impacts on Pima County ranging from \$4.2 million to \$19.9 million per year over the past thirteen years, with the highest annual impacts to date occurring over the past two years as the number graduates has increased significantly. These annual impacts are driven by direct wage increases of \$1.1 million to \$3.6 million per year for graduates placed in jobs. Over the thirteen-year period, 806 individuals obtained jobs immediately upon graduation, including 90 individuals in 2017-18.

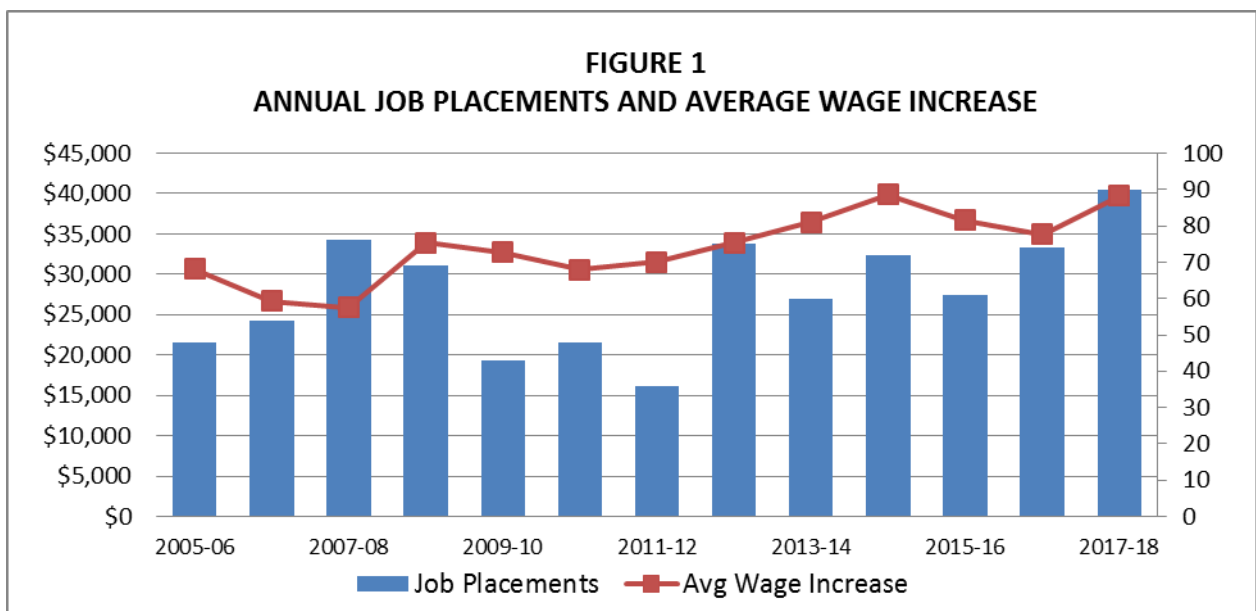
*Applied Economics LLC is an economic consulting firm, based in Phoenix, Arizona, specializing in economic development, economic and fiscal impact assessment, socioeconomic modeling and urban planning. Applied Economics conducts economic and fiscal impact studies and develops models to measure the effects of a wide variety of activities. These activities include workforce development programs, land use and policy changes, business-driven economic impacts, and incentive agreements. Applied Economics is frequently called upon by local governments to provide a third party evaluation of economic and fiscal impacts related to economic development activities. The principals at Applied Economics have worked together for more than twenty five years, and are very experienced in working with local and regional economic and planning issues.*

The information and observations contained in this report are based on our present knowledge of the components of development, and of the current physical, socioeconomic and fiscal conditions of the affected areas. Estimates made in this analysis are based on hypothetical assumptions, current tax policies, and the current economic structure of the region. However, even if the assumptions outlined in this report were to occur, there will usually be differences between the estimates and the actual results because events and circumstances frequently do not occur as expected. This analysis is based on the best available information and is intended to aid JobPath in quantifying the value of its program relative to the cost of training. In no way will Applied Economics be held responsible or have any liability or be subject to damages as a result of this analysis. This report may be used only for the purposes that it was intended.

## 2.0 IMPACT SUMMARY

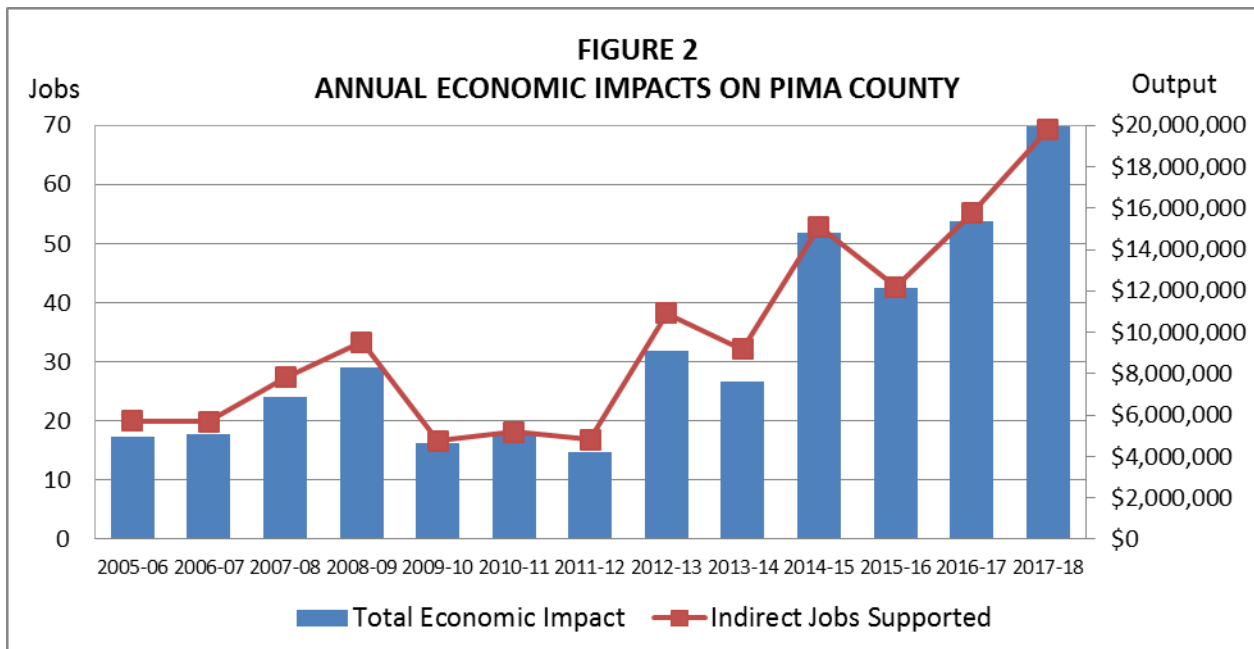
While the JobPath post-training wages and benefits are transformational to the individuals and their families, this report focuses on the significant economic benefits to the City of Tucson and Pima County. These positive impacts include the following:

- Over the past thirteen years, graduates of JobPath experienced average wage increases of \$33,800 per person compared to pre-training wages. The one-time cost per graduate to achieve this result is \$8,870. This includes individuals that are placed in jobs as well as those who have graduated but are not yet employed. In 2017-2018, the average increase in wages of \$39,700 was significantly above the long-term average (Figure 1). Note that this figure only represents the wage increase. The average post-training wage for graduates in 2017-2018 was \$47,300.
- During the past thirteen years, graduates of the JobPath program experienced a total increase in annual wages of \$27.2 million, plus there was a reduction in public assistance costs estimated at \$4.1 million per year for these individuals. To achieve these results, JobPath received \$9.5 million in total funding from the city, county and from grants and donations.
- The average return on investment in JobPath over the past thirteen years has been 228 percent, and the return for 2017-18 was 256 percent. The return on investment is estimated based on annual program funding compared to the increase in wages less the decrease in public assistance for the year.
- For every \$1.00 of funding, JobPath produced \$2.56 in direct wage increases plus decreases in public assistance costs for graduates in 2017-18.



JobPath creates an annual economic impact of \$98.3 million on the Pima County economy, based on the sum of annual impacts over the past thirteen years. A total of 806 graduates obtained jobs resulting in a direct increase in wages of \$27.2 million over pre-training levels. Based on previous studies 79 percent of JobPath graduates remain in the county and continue to produce annual economic impacts.<sup>1</sup> This increased level of economic activity indirectly supports an estimated 442 additional jobs and \$15.7 million in annual payroll *at other local businesses* throughout the County through business supplier purchases and employees spending.

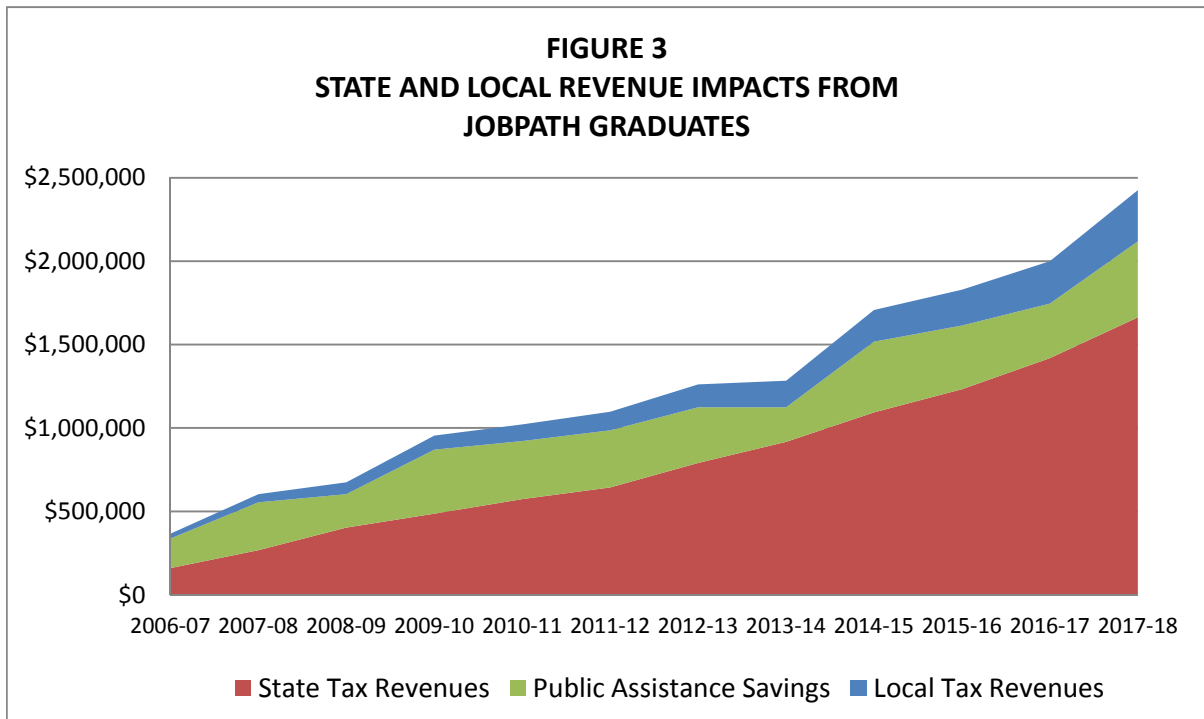
Figure 2 shows annual economic impacts and indirect jobs supported. This past year was the largest single-year impact to date, surpassing the previous peak in 2016-17. This is largely due to the increased number of graduates in 2017-18 compared to previous years, and specific types of industries in which they were placed.



- Looking at the cumulative impacts of the JobPath program and assuming that graduates from previous years continue to be employed in jobs paying at least equal to their post-training wages, the economic impact over the past thirteen years totals \$635.9 million, based on cumulative wage increases of \$166.9 million.
- These 806 graduates from the past thirteen years, and the additional workers they support at other local businesses, make a significant amount of taxable purchases. The increases in payroll that are directly and indirectly supported through the JobPath program resulted in \$1.7 million in additional city and county sales tax revenues and \$9.7 million in additional state sales and personal income tax revenues over the thirteen year period (Figure 3). These revenue impacts are based on cumulative taxes paid by employed graduates from 2005-06 through 2017-18.

<sup>1</sup> Applied Economics, Long Term Impacts of JobPath Graduates on Pima County, January 2016.

- Along with the additional tax revenues, JobPath also supported a decrease in public assistance expenditures. Many of the participants were receiving various types of public assistance prior to completing the training and being placed in jobs that enabled them to become self-sufficient. Based on the average cost per recipient for TANF, Food Stamps, General Assistance, Childcare Assistance and AHCCCS in Pima County and the number of graduates who were previously receiving assistance, JobPath created an estimated cumulative reduction of \$4.1 million in public assistance payments by the state over the past thirteen years. Annual revenue impacts are shown in Figure 3.



- Local program funding for JobPath increased by 32 percent in 2017-18 to \$1.1 million largely due to a significant increase in grants of \$188,000, including a large contribution from a single donor. County funding also increased by \$100,000, or 20 percent, while city funding decreased by \$10,000 over last year. Despite the fact that funding levels remain comparatively low, JobPath was able to achieve post-training wage increases per person of close to \$39,700 in 2017-18.
- In order to understand the scale of the JobPath program and its value to the local economy, it is useful to compare the increase in workers in key occupations in Pima County, versus the number of JobPath graduates placed in those occupations.<sup>2</sup> In the occupations where JobPath produced the largest number of graduates last year, these graduates filled a significant number of the new jobs in Pima County.

<sup>2</sup> Bureau of Labor Statistics, Occupational Employment Statistics series for Pima County.

- In the Aviation program, JobPath produced 12 graduates in 2017-18. This industry has a large number of workers retiring and, although there was no significant change in the overall number of aircraft mechanics working in Pima County in 2017, these graduates most likely filled existing positions that were vacated due to retirements or separations.
  - In the RN program, JobPath produced 33 graduates, 31 of whom were placed in jobs upon graduation, helping to meet the continued high demand for nurses in the county.
  - In the LPN program, JobPath produced 15 graduates, 13 of whom were placed in jobs immediately. The overall number of LPN's working in Pima County increased by 20 people from 2016 to 2017, with JobPath graduates accounting for 75 percent of those additional jobs.
  - The dental hygienist program produced 5 graduates who were placed in jobs. These graduates accounted for 13 percent of the increase in jobs in this occupation in Pima County.
- Along with producing graduates in high demand occupations, JobPath has also aligned its programs with the target industries for the region, including Aerospace and Defense, Transportation and Logistics, and Bioscience. The types of graduates that JobPath produces fill a critical need for middle-skill workers. According to a study by the National Skills Coalition, 52 percent of the job openings in Arizona over the next ten years will be in middle-skill jobs.<sup>3</sup>
  - The Aerospace & Defense industry is a major component of the region's economy and the Tucson metro area is ranked as one of the top five areas in the country for this industry.<sup>4</sup> Having the workforce to support this industry is critical to its long-term sustainability in Pima County. Pima Community College plays an important role in workforce development for Aerospace & Defense through its Aviation Technology Center, which produced 12 JobPath graduates this past year.
  - Pima County has also become a leading center for innovation in the Bioscience industry. Since 2002, bioscience jobs statewide have increased by 58 percent. According to the Arizona Bioscience Roadmap, jobs in hospitals account for 78 percent of all bioscience jobs in Arizona. In the Tucson metro area, there is a growing hospital sub-sector that experienced significant employment increases even during the recession. Health-allied fields accounted for 70 percent of JobPath graduates this year. While some jobs in this industry require a four year degree, Pima Community College has a significant focus in applied degree programs to support health care and bioscience in the region.

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<sup>3</sup> National Skills Coalition, [Forgotten Middle Skill Jobs: State by State Snapshots](http://www.nationalskillscoalition.org/state-policy/fact-sheets), <http://www.nationalskillscoalition.org/state-policy/fact-sheets>

<sup>4</sup> Sun Corridor Inc, <http://www.suncorridorinc.com/industry-strengths/aerospace-defense>



- Because of Southern Arizona's strategic location relative to Mexico and Southern California, more than 150 transportation and logistics providers have been attracted to Pima County. However, a nationwide shortage of truck drivers threatens to slow the flow of products across the country since close to 70 percent of all freight tonnage is currently transported by truck. JobPath's focus on training truck drivers produced 18 graduates this past year, 16 of whom found jobs with local transportation providers.

JobPath is a valuable program to support long-term workforce training in Pima County. It has generated a high return on investment based on program funding during the past thirteen years. JobPath continues to produce graduates to fill positions in key growth occupations in the county in health care, aviation, trucking and other fields. The availability of skilled workers benefits the local economy in general, plus it produces significant increases in earnings and standard of living for program graduates.

### 3.0 ECONOMIC IMPACT RESULTS

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Economic impacts measure the effects of economic stimuli or expenditures on the local economy. These impacts include direct and indirect jobs, personal income and economic activity or output that are supported by graduates of the JobPath program. Indirect impacts are the result of the multiplier effect and capture supported supplier and consumer businesses and their employees in Pima County that benefit from this economic stimulus.

The economic impact results presented here are grouped into direct and total impacts. Direct impacts include the 806 graduates of the JobPath program from 2005-06 through 2017-18 who found jobs in the region. Direct income of \$27.2 million represents the increase in wages for these individuals over their pre-training wages. The direct increase in production value or output created by these 806 workers is estimated at \$69.0 million per year.

In reality, graduates continue to contribute to the local economy even after they leave JobPath. Looking at cumulative impacts of the program over the past thirteen years, the total economic impact on the community is estimated at \$635.9 million. Of course, some graduates will move away and/or change jobs over time. However, this type of investment in human capital continues to provide benefits long after individuals complete the training programs. *A recent study of JobPath graduates from the previous five years showed that 79 percent of them were still employed in Pima County.*

The secondary impacts supported by JobPath graduates in terms of supplier purchases and employee spending are called multiplier effects. Multiplier effects are a way of representing the larger economic effects on the local economy and translate an increase in output (loosely defined as gross sales, less non-local inputs) into a corresponding increase in jobs and personal income. In essence, the multiplier effect represents the recycling of local spending. This recycling process creates new business opportunities. The multipliers used in this analysis are from IMPLAN, a national vendor of economic impact software, and are specific to Pima County.

The JobPath graduates from 2017-18 alone created a total economic impact of \$19.9 million in Pima County, which is the highest one-year impact to date. They indirectly supported an estimated 69 jobs and \$2.7 million in personal income at other local businesses through additional supplier purchases by their employers and consumer purchases made by graduates. These economic impacts at other local businesses are in addition to the 90 new jobs and \$3.6 million increase in payroll directly attributed to JobPath graduates in 2017-18. The impacts for the past three fiscal years are detailed in Figure 4. Data for previous years is included in the Appendix.

The economic multipliers used in this analysis vary by training program since industry-specific multipliers were used for each program. The average output multiplier for JobPath training programs is 1.71. Thus, for every \$1.0 million increased production as a result of JobPath graduates, an additional \$710,000 in demand is created at other supporting businesses in Pima County along with 6 indirect jobs.

**FIGURE 4  
ECONOMIC IMPACT OF JOBPATH PROGRAM OVER PAST THREE YEARS**

	Direct Impacts			Total Impacts			Total Local Funding	**Return on Investment
	Output	Jobs	Income*	Output	Jobs	Income		
<b>2015-16</b>	<b>\$7,340,566</b>	<b>61</b>	<b>\$2,238,759</b>	<b>\$12,111,274</b>	<b>104</b>	<b>\$3,630,920</b>	<b>\$732,024</b>	<b>259%</b>
Fire Science Academy	\$0	0	\$0	\$0	0	\$0	\$5,678	
Electric Utility Technology	\$561,373	1	\$52,000	\$780,247	2	\$90,945	\$7,616	
Radiology Technician	\$44,433	2	\$21,008	\$74,673	2	\$29,514	\$15,677	
Respiratory Therapy	\$222,331	4	\$105,118	\$373,643	5	\$147,679	\$42,698	
RN Program	\$1,180,947	12	\$558,352	\$1,984,668	19	\$784,423	\$109,529	
LPN Program	\$742,151	12	\$350,889	\$1,247,238	17	\$492,961	\$63,586	
Dental Hygenist	\$334,559	5	\$216,819	\$598,954	7	\$290,539	\$89,785	
Dental Assisting	\$80,177	2	\$51,961	\$143,540	3	\$69,628	\$31,462	
Biotech Research	\$13,537	1	\$7,800	\$23,482	1	\$10,599	\$2,993	
Aviation	\$2,306,851	12	\$396,653	\$3,877,469	27	\$894,246	\$232,658	
Med Lab Tech	\$154,371	3	\$88,949	\$267,783	4	\$120,867	\$33,036	
Trucking	\$1,524,214	6	\$350,355	\$2,407,662	14	\$619,142	\$17,996	
Law Enforcement	\$175,621	1	\$38,854	\$331,914	2	\$80,377	\$4,038	
Engineering	\$0	0	\$0	\$0	0	\$0	\$75,269	
<b>2016-17</b>	<b>\$8,738,759</b>	<b>74</b>	<b>\$2,583,516</b>	<b>\$15,342,967</b>	<b>129</b>	<b>\$4,780,371</b>	<b>\$857,089</b>	<b>240%</b>
Fire Science Academy	\$93,509	1	\$20,688	\$159,798.22	2	\$41,831	\$17,223	
Electric Utility Technology	\$0	0	\$0	\$0	0	\$0	\$18,883	
Radiology Technician	\$338,372	5	\$159,982	\$593,586	7	\$240,121	\$30,333	
Respiratory Therapy	\$190,161	4	\$89,908	\$333,588	5	\$134,945	\$39,242	
RN Program	\$1,146,897	12	\$542,253	\$2,011,934	19	\$813,880	\$132,671	
LPN Program	\$503,194	8	\$237,910	\$882,725	11	\$357,085	\$52,837	
Dental Hygenist	\$362,032	4	\$234,624	\$655,148	6	\$324,117	\$57,037	
Dental Assisting	\$28,047	1	\$18,177	\$50,755	1	\$25,110	\$15,080	
Aviation	\$4,053,578	19	\$696,995	\$7,248,674	46	\$1,800,161	\$267,405	
Med Lab Tech	\$227,924	4	\$131,331	\$396,944	5	\$184,674	\$29,027	
Trucking	\$1,038,720	7	\$238,760	\$1,795,649	13	\$490,390	\$41,964	
Electrician	\$225,247	5	\$73,674	\$330,139	6	\$106,317	\$132,211	
Surgical Tech	\$96,785	1	\$45,760	\$169,784	2	\$68,682	\$5,848	
Law Enforcement	\$347,200	2	\$76,814	\$593,330	4	\$155,319	\$10,334	
Welding	\$87,094	1	\$16,640	\$120,912	1	\$37,738	\$6,994	
<b>2017-18</b>	<b>\$11,496,540</b>	<b>90</b>	<b>\$3,572,194</b>	<b>\$19,938,509</b>	<b>159</b>	<b>\$6,278,336</b>	<b>\$1,131,892</b>	<b>256%</b>
Fire Science Academy	\$200,970	1	\$43,000	\$347,914	2	\$90,981	\$8,212	
Electric Utility Technology	\$0	0	\$0	\$0	0	\$0	\$10,492	
Radiology Technician	\$703,610	5	\$129,921	\$1,219,255	9	\$291,587	\$54,687	
Respiratory Therapy	\$281,444	2	\$51,440	\$487,702	4	\$116,107	\$32,529	
RN Program	\$4,362,382	31	\$1,442,599	\$7,559,380	57	\$2,444,930	\$450,065	
LPN Program	\$1,829,386	13	\$564,870	\$3,170,063	24	\$985,203	\$130,798	
Dental Hygenist	\$304,811	5	\$205,680	\$544,019	7	\$278,492	\$144,577	
Dental Assisting	\$132,439	4	\$89,367	\$236,374	5	\$121,004	\$4,218	
Aviation	\$1,325,510	8	\$285,891	\$2,379,654	17	\$651,582	\$115,427	
Med Lab Tech	\$110,526	2	\$66,404	\$191,550	3	\$91,874	\$14,636	
Trucking	\$1,747,790	16	\$582,397	\$2,987,872	26	\$993,689	\$131,949	
Surgical Tech	\$140,722	1	\$36,504	\$243,851	2	\$68,837	\$955	
Law Enforcement	\$220,287	1	\$47,133	\$381,354	2	\$99,726	\$21,757	
Welding	\$136,661	1	\$26,988	\$189,519	1	\$44,323	\$11,590	
<b>Total 2005-06 to 2017-18</b>	<b>\$69,032,590</b>	<b>806</b>	<b>\$27,226,243</b>	<b>\$118,211,770</b>	<b>1,249</b>	<b>\$42,876,635</b>	<b>\$9,539,891</b>	<b>228%</b>

Source: JobPath; Applied Economics, 2019.

\*Direct income represents only increase in salary over pre-training level, not full ending salary.

\*\*Return on investment based on increase in wages (direct income) per dollar of direct financial assistance and case management costs.

The largest program is the RN program, which has placed a total of 241 graduates in jobs over the thirteen-year period, followed by the LPN and aviation programs that had 102 and 86 graduates, respectively. In terms of the average wage increases per person, the law enforcement, fire science academy, RN and LPN programs ranked the highest, with an average wage increase of \$43,000 to \$47,100 per person in 2017-18. The overall average increase for all occupations in 2017-18 was \$39,700 per person or 521 percent. *Note that these percentage increases include individuals who were not employed prior to entering JobPath.*

Most JobPath participants are below the poverty level prior to entering the program. The average pre-training annual wage in 2017-18 was \$7,613 per person and includes 44 graduates who were previously unemployed, which is about half of the total graduates placed in jobs in the past year. Thus, a significant number of graduates from this past year were newly employed as a result of their training.

The average post-training annual wage was \$47,300 in 2017-18, or \$22.74 per hour. The City of Tucson considers \$16.42 per hour to be a livable wage, so the average wage of JobPath graduates is considerably above that standard.<sup>5</sup> The average post-training wage of \$47,300 is only somewhat higher than the average wage increase of \$39,700 because about half of the graduates placed in jobs did not have pre-training income. The magnitude of post-training wages is largely a function of the distribution of graduates by program. The RN and dental hygienist programs offered the highest post-training wages in 2017-18, at \$56,900 and \$53,400, respectively. This year, the LPN and law enforcement programs also had average post-training wages over \$47,000.

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<sup>5</sup> National Low Income Housing Coalition, Out of Reach 2018, 2-Bedroom Housing Wage for Pima County represents full time hourly wage required to afford a 2-bedroom home.

## 4.0 REVENUE IMPACT RESULTS

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In addition to economic impacts, the graduates of the JobPath program also generate revenue impacts to state and local governments. Through increases in wages and spending, they generate additional sales taxes to the city, county and state and additional state personal income taxes. It may also be the case that the companies they work for generate increased sales or income taxes as a result of increasing their production; however, information about employers is not available to calculate these types of revenue impacts.

Sales taxes from employee spending are based on typical consumer expenditure patterns. According to the Census Bureau Consumer Expenditure Survey, approximately 27 percent of gross personal income is spent on taxable goods. Applying this assumption to personal income from the economic impact results in a cumulative increase of \$1.4 million in city sales tax and \$339,000 in RTA sales tax over the thirteen-year period (Figure 5). Note that the direct impacts include only the additional taxes generated by the increase in wages for JobPath graduates, not their total wages.

In terms of state taxes, JobPath graduates from the past thirteen years directly and indirectly generated \$3.9 million in increased annual state sales tax revenues. In addition, they generated a cumulative increase of \$5.8 million in annual personal income tax revenues to the state. It is important to look at cumulative revenue impacts since graduates from previous years continue to generate local taxes as they continue to work and contribute to the economy. All total, JobPath graduates directly and indirectly supported an increase of \$11.5 million in cumulative annual state and local tax revenues over the past thirteen years.

## 5.0 REDUCTION IN PUBLIC ASSISTANCE COSTS

In addition to supporting increases in tax revenues, the JobPath program also generated a reduction in public assistance costs. Information is available to document the number of program participants that were receiving various types of public assistance when they came to JobPath. It is assumed that based on the typical increase in wages for program participants, the individuals who found jobs were able to become self-sufficient. Using average payments per recipient by type of program for Pima County from the Arizona Department of Economic Security and AHCCCS, it is possible to estimate the annual decrease in public assistance expenditures. While the reductions are shown for each year, it is assumed that these impacts would be cumulative over time. All total, the JobPath program resulted in a \$4.1 million cumulative annual decrease in public assistance in Pima County, based on job placements over the past thirteen years (Figure 6).

**FIGURE 6**  
**ANNUAL REDUCTION IN PUBLIC ASSISTANCE EXPENDITURES**  
**FROM JOBPATH GRADUATES**

Program Year	Assistance Program					Total
	Food Stamps	TANF	Utility Assistance	AHCCCS	Child Care	
2005-06	(\$43,864)	(\$3,093)	(\$3,632)	(\$115,401)	(\$46,623)	(\$212,612)
2006-07	(\$41,123)	(\$9,279)	(\$1,816)	(\$102,579)	(\$23,311)	(\$178,107)
2007-08	(\$49,347)	(\$12,372)	(\$3,632)	(\$128,223)	(\$93,245)	(\$286,819)
2008-09	(\$39,160)	(\$7,552)	(\$10,227)	(\$128,223)	(\$15,453)	(\$200,615)
2009-10	(\$96,747)	(\$7,383)	(\$2,479)	(\$207,034)	(\$69,358)	(\$383,001)
2010-11	(\$85,020)	\$0	(\$7,660)	(\$231,446)	(\$23,757)	(\$347,883)
2011-12	(\$100,619)	\$0	(\$2,538)	(\$232,259)	(\$7,201)	(\$342,616)
2012-13	(\$100,005)	(\$7,211)	(\$2,487)	(\$207,860)	(\$15,902)	(\$333,465)
2013-14	(\$57,059)	\$0	(\$4,892)	(\$123,623)	(\$21,377)	(\$206,951)
2014-15	(\$100,762)	(\$2,437)	(\$9,744)	(\$281,829)	(\$28,502)	(\$423,274)
2015-16	(\$81,654)	(\$4,848)	(\$2,417)	(\$270,668)	(\$22,360)	(\$381,948)
2016-17	(\$68,517)	\$0	\$0	(\$241,701)	(\$16,735)	(\$326,953)
<b>2017-18</b>	<b>(\$76,908)</b>	<b>\$0</b>	<b>(\$7,350)</b>	<b>(\$345,442)</b>	<b>(\$25,103)</b>	<b>(\$454,802)</b>
<b>13 Year Total</b>	<b>(\$940,787)</b>	<b>(\$54,175)</b>	<b>(\$58,872)</b>	<b>(\$2,616,288)</b>	<b>(\$408,927)</b>	<b>(\$4,079,048)</b>

Source: Arizona Department of Economic Security; AHCCCS; JobPath; Applied Economics, 2019.

## 6.0 RETURN ON INVESTMENT

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The final and most important calculation is the return on investment that JobPath is providing to the city and county based on the value of increased wages for graduates per dollar of local program funding. All total, 1,075 individuals participated in the program from 2005-06 through 2017-18. Of that total, 806 individuals found jobs immediately upon graduation. An additional 45 individuals (including 3 in this past year) completed the program between 2005-2006 and 2017-18, but decided to continue their education or joined the military and were not placed in jobs. Finally, 223 individuals who completed the program during the thirteen-year period did not provide sufficient information about post-training wages to be included in the economic impact analysis. However, based on longer term data on graduates, it is evident that a number of the graduates who were not employed immediately did ultimately find jobs in their field in Pima County.

- The return on investment calculation is equal to (Aggregate increase in wages for graduates placed in jobs in a given year + decrease in public assistance costs for graduates from that year previously receiving assistance)/ Local program funding for that year.
- The aggregate wage increase is the sum of the post-training wage minus the pre-training wage for each individual who was placed in a job based on data for graduates in the past year.
- The amount of public assistance is equal to the average cost per program times the number of graduates participating in those assistance programs as described in section 5.0.
- Local program funding figure used to estimate return on investment includes contributions from the City of Tucson and Pima County as well as grants and donations. This funding covers all direct costs for both graduates placed in jobs as well as those who did not complete the program, or decided to continue their education, or were not employed immediately upon graduation for other reasons. Local program funding includes direct financial assistance and case management as well as grant funds that may be carried forward to future years.

Case management is integral to the success of participants in the JobPath program. Typical clients are already stretched thin by family and work demands and building habits of engagement requires a concerted effort. Case managers help students navigate academic and institutional challenges, as well as providing counsel and directives that are essential to help them avoid disruptions that sabotage their ability to complete their academic program. Case managers are also able to connect students to other financial resources beyond the financial assistance provided by JobPath, including Pell Grants, scholarships, and Workforce Investment Act funds through Arizona@Work Pima County.

It is important to note that direct financial assistance includes all monies spent on individual graduates during the time they were in the program, which may extend beyond a single year. Total local funding is equal to the sum of the city, county and local grant and donation funding in a given year, some of the funding reported in a given year may have actually been carried forward from the previous year. Since this trend is consistent over time, it is assumed that the return on investment calculation is not significantly impacted.

Over the 2017-18 fiscal year, local funding included \$1.13 million from the city and county and from grants and donations. This represents a 32 percent increase over the previous year, primarily due to a significant grant from a single donor as well as increased funding from the county. The number of graduates this year (including those not placed in jobs) increased about 16 percent from the previous year to 109 representing the highest year thus far and surpassing the previous maximum of 93 graduates in 2007-08. The share of graduates able to attain jobs upon graduation in 2017-18 increased to 83 percent this year. The current funding level for the program can be compared to an increase in wages less the decrease in public assistance of \$4.0 million in 2017-18, resulting in a return on investment of 256 percent. This was also the largest wage increase to date. The average cost per graduate in 2017-18 was \$10,400, based on 109 individuals completing the program, which is slightly higher than last year given the increase in grant funding. The average wage increase for program graduates was \$39,700, which is the second highest average increase over the thirteen-year study period.

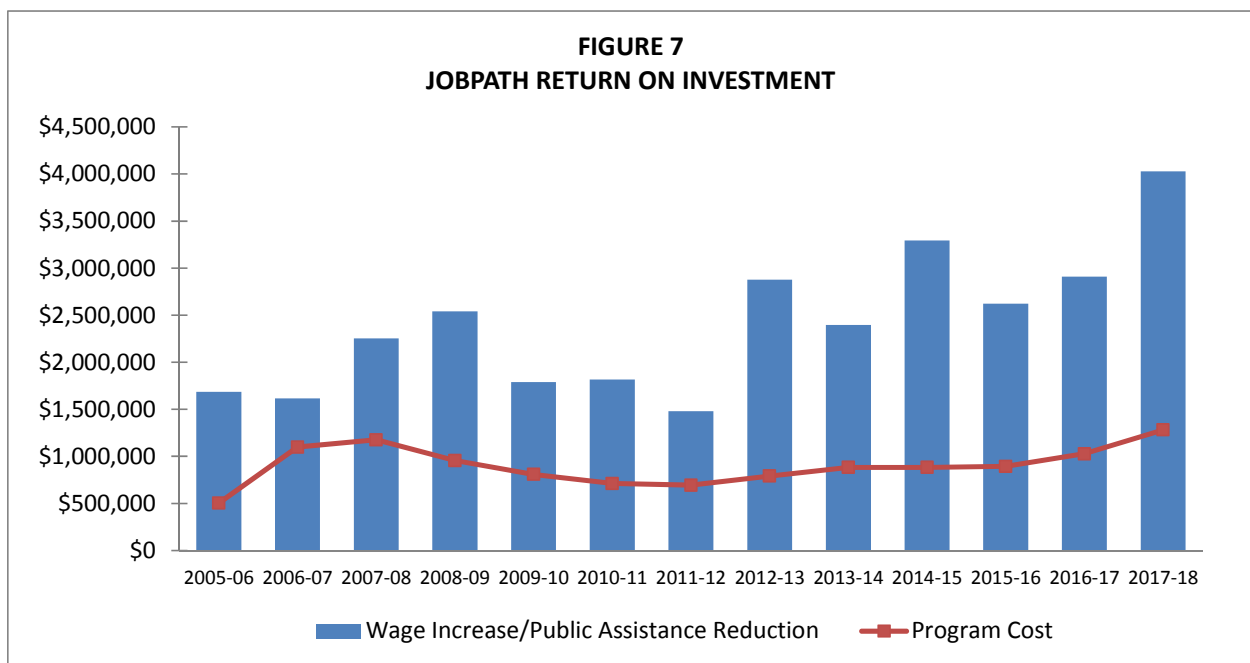
In 2016-17, local funding included \$857,100 from the city and county and from grants and donations, which is up 17 percent over the previous year, primarily due to increased grant revenues, but also due to increased funding from the county. This is the first significant funding increase in several years. The overall number of graduates (including those not placed in jobs) increased about 12 percent from the previous year, and this was the second highest year thus far in terms of the total number of graduates. The share of graduates able to attain jobs upon graduation in 2016-17 increased to 79 percent this year. The current funding level for the program can be compared to an increase in wages less the decrease in public assistance of \$2.9 million in 2016-17, resulting in a return on investment of 240 percent. The average cost per graduate in 2016-17 was \$9,100, based on 94 individuals completing the program, which is slightly higher than last year given the increase in grant funding. The average wage increase for program graduates was \$34,900.

In 2015-16, local funding included \$732,000 from the city and county and from grants and donations, which is nearly unchanged compared to 2014-15. Continuing declines in city and county funding were offset by increases in grants and donations. The overall number of graduates (including those not placed in jobs) declined about 5 percent from the previous year, although this was still the second highest year in terms of number of graduates. The share of graduates able to attain jobs in 2015-16 dropped to 73 percent, but this was almost entirely due to the 10 graduates in the new engineering program who will continue their education. The current funding level for the program can be compared to an increase in wages less the decrease in public assistance of \$2.6 million in 2015-16, resulting in a return on investment of 259 percent. The average cost per graduate in 2015-16 was \$8,700, based on 84 individuals completing the program; this figure is only slightly higher than last year and largely due to the



slightly smaller number of graduates, since costs were nearly unchanged. The average wage increase for program graduates was \$36,700, which is the second highest increase of the study period.

In 2014-15, local funding included \$728,000 from the city and county and from grants and donations. Total funding increased by 3 percent in 2014-15 compared to 2013-14 due exclusively to an increase in grants and donations. The overall number of graduates (including those not placed in jobs) was up by 21 percent over the previous year making it the highest year thus far in terms of graduates. The share of graduates with jobs remained about the same at about 82 percent, as it has over the last several years. The current funding level for the program in 2014-15 can be compared to an increase in wages less the decrease in public assistance for the year of \$3.3 million, resulting in a return on investment of 352 percent, which is the highest return to date and well above the average for the study period. The average cost per graduate in 2014-15 was \$8,300, based on 88 individuals completing the program, which is significantly lower than last year due to the larger number of graduates versus a very modest increase in costs. The average wage increase for program graduates was also 9 percent higher than last year and represents the highest average wage increase to date.



It is important to note that some of the individuals that did not obtain jobs immediately may have furthered their education with or without assistance from JobPath. Thus some of the value of increased wages that are attributed to the JobPath program may have happened anyhow, given that more than 90 percent of students are already enrolled at the community college prior to becoming JobPath clients. However, JobPath has been able to significantly decrease the dropout rate for the types of individuals that they serve with less than 5 percent of participants not completing the JobPath program, thus adding value to the community and increasing the return on investment for the public funding they receive.

JobPath provides an important service to the community by enhancing the quality of life for graduates and their families by increasing their household incomes. In 2017-18, the average increase in annual wages per graduate was \$39,700. JobPath also provides qualified motivated employees to meet the needs of local employers in high growth and targeted industries. JobPath has aligned its programs with the target industries for the region, including Aerospace and Defense, Transportation and Logistics, and Bioscience. The types of graduates that JobPath produces fill a critical need for middle-skill workers in these industries.

Based on the average increase in wages compared to local program funding, JobPath has provided an excellent return on investment over the past thirteen years, with another strong year in 2017-18 and the highest number of annual graduates in the program history. In the past year there were 109 total graduates, including 90 graduates that reported post-training wages. These employed graduates experienced a combined annual wage increase of \$27.2 million over their pre-training wage levels, plus there was a reduction in public assistance costs estimated at \$3.9 million per year for these individuals. These results can be compared to \$9.5 million in local funding for 2017-18, resulting in a return on investment of 256 percent for the year. In other words, for every \$1.00 of local funding, JobPath produced \$2.56 in direct wage increases plus decreased in public assistance costs for graduates in 2017-18.

## **APPENDIX A – METHODOLOGY AND DATA SOURCES**

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The job training impacts for JobPath relies primarily on multipliers from IMPLAN for Pima County. IMPLAN is a national vendor of input-output software and data used to create economic impact models and is widely used in government, higher education and in the private sector to evaluate economic impacts. IMPLAN is an input-output model. Input-output analysis is a means of examining relationships within an economy, both between businesses and between businesses and final consumers. It captures all monetary market transactions for consumption in a given time period. The resulting mathematical formulas allow for examination of the effects of a change in one or several economic activities on an entire economy (impact analysis).

The IMPLAN model begins with the most current national transactions matrix developed by the National Bureau of Economic Analysis Benchmark Input-Output Model. The model breaks down the U.S. economy into over 500 separate economic sectors in agriculture, manufacturing, commercial services, and government. Next, IMPLAN creates state- and county-level values by adjusting the national level data, such as removing industries that are not present in a particular state or region. These economic sector data are updated annually by IMPLAN. The most current available sectoral data are for 2017, which was used in this analysis for evaluate 2017-18 data. Multipliers for previous years were matched with historical data for JobPath graduates.

Economic impacts are typically estimated using multipliers. IMPLAN proprietary software combined with data files purchased from IMPLAN for a particular geographic region can be used to create multipliers. In this case, county-level data for Pima County were used to create the multipliers in order to focus the analysis on local job creation within the JobPath service area. In general, these multipliers quantify the total production requirements for each industry within the selected study area for every unit of production sold to final demand. Multipliers may be constructed for output, employment, and labor income. Multipliers can be used to measure the impact of industries in the region buying goods and services from other regional industries. The cycle of spending works its way backward through the supply chain until all money leaks from the regional economy, either through imports or by payments to value added.

In the case of job training and placement, multipliers for specific industries are matched to the types of businesses where graduates are placed. The increase in employment and payroll associated with newly hired JobPath graduates ultimately translates into increased production of goods or services. This increase in production triggers an increase in demand for inputs, some of which are provided by local suppliers. This activity can be quantified using economic multipliers for individual industries and then aggregated across all JobPath programs.

Multipliers are also used to measure how payroll from the businesses employing JobPath graduates results in additional consumer purchases by employees. This money is recirculated through their household spending patterns causing further economic activity in the region and supporting additional jobs and labor income. These are the induced impacts discussed above. Direct, indirect, and induced impacts are summed to generate total impacts.

The economic multipliers are applied to data on individual graduates that is provided on an annual basis by JobPath. Each student record includes the JobPath program name, graduation date, pre-training wage, post-training wage, employer name, amount of direct financial assistance provided by JobPath, and a binary indicator of previous participation in public assistance programs including AHCCCS, food stamps, utility assistance, TANF and child care assistance.

## **APPENDIX B – HISTORICAL ECONOMIC IMPACTS**

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**APPENDIX B  
ECONOMIC IMPACT OF JOBPATH PROGRAM 2005-06 TO 2014-15**

	Direct Impacts			Total Impacts			Total	**Return on Investment
	Output	Jobs	Income*	Output	Jobs	Income	Program Costs	
<b>2005-06</b>	<b>\$2,931,088</b>	<b>48</b>	<b>\$1,472,815</b>	<b>\$4,973,245</b>	<b>68</b>	<b>\$2,138,353</b>	<b>\$379,600</b>	<b>344%</b>
CNA	\$180,101	6	\$83,509	\$308,285	7	\$124,980	\$12,386	
Histology	\$256,815	4	\$119,080	\$439,601	6	\$178,216	\$30,008	
Pharmacy Technology	\$91,161	2	\$43,602	\$147,747	3	\$61,920	\$19,049	
Radiology Technician	\$164,838	3	\$76,432	\$282,160	4	\$114,389	\$30,603	
Respiratory Therapy	\$33,486	1	\$15,527	\$57,320	1	\$23,238	\$14,437	
RN Program	\$1,186,235	14	\$550,033	\$2,030,526	22	\$823,185	\$151,001	
Dental Hygenist	\$723,838	9	\$438,575	\$1,212,388	14	\$601,333	\$72,412	
Structural Repair	\$32,372	1	\$11,024	\$47,040	1	\$15,767	\$9,882	
Education	\$28,865	1	\$18,863	\$52,380	1	\$26,093	\$15,035	
Home Health	\$57,018	1	\$32,760	\$94,674	1	\$45,350	\$464	
First Path	\$14,752	2	\$8,476	\$24,495	2	\$11,733	\$7,136	
PCT	\$161,607	4	\$74,934	\$276,630	5	\$112,147	\$17,188	
<b>2006-07</b>	<b>\$3,017,612</b>	<b>54</b>	<b>\$1,439,862</b>	<b>\$5,062,855</b>	<b>74</b>	<b>\$2,106,127</b>	<b>\$879,600</b>	<b>84%</b>
CNA	\$72,537	3	\$33,634	\$124,165	4	\$50,337	\$35,757	
Histology	\$24,357	1	\$11,294	\$41,693	1	\$16,903	\$9,567	
Radiology Technician	\$120,983	3	\$56,098	\$207,092	4	\$83,956	\$43,702	
Respiratory Therapy	\$286,870	6	\$133,016	\$491,048	8	\$199,073	\$130,805	
RN Program	\$1,329,275	19	\$616,358	\$2,275,374	28	\$922,448	\$358,201	
LPN Program	\$90,433	2	\$41,932	\$154,797	3	\$62,755	\$21,051	
Dental Hygenist	\$510,643	7	\$309,400	\$855,299	10	\$424,221	\$142,122	
Dental Assisting	\$41,710	1	\$25,272	\$69,861	1	\$34,651	\$13,497	
Education	\$44,561	1	\$29,120	\$80,862	1	\$40,282	\$5,317	
Plumbing	\$128,063	2	\$31,512	\$190,091	3	\$52,551	\$35,133	
Biotech Research	\$92,638	3	\$56,264	\$167,707	4	\$81,165	\$48,562	
Aviation	\$258,250	4	\$87,945	\$375,266	5	\$125,785	\$25,959	
PCT	\$17,292	2	\$8,018	\$29,600	2	\$12,000	\$9,928	
<b>2007-08</b>	<b>\$4,060,809</b>	<b>76</b>	<b>\$1,965,069</b>	<b>\$6,866,618</b>	<b>103</b>	<b>\$2,879,811</b>	<b>\$939,600</b>	<b>140%</b>
CNA	\$71,127	10	\$32,980	\$121,750	10	\$49,358	\$22,702	
Histology	\$101,909	2	\$47,253	\$174,441	3	\$70,719	\$63,988	
Radiology Technician	\$528,272	8	\$244,949	\$904,264	12	\$366,593	\$97,613	
Respiratory Therapy	\$249,550	4	\$115,711	\$427,165	6	\$173,175	\$43,812	
RN Program	\$1,669,952	24	\$774,323	\$2,858,524	36	\$1,158,860	\$368,129	
LPN Program	\$138,386	4	\$64,167	\$236,882	5	\$96,033	\$8,019	
Dental Hygenist	\$721,852	9	\$437,372	\$1,209,062	14	\$599,684	\$101,638	
Dental Assisting	\$77,326	4	\$46,852	\$129,517	5	\$64,239	\$34,941	
Education	\$0	0	\$0	\$0	0	\$0	\$15,562	
Plumbing	\$59,171	1	\$14,560	\$87,831	1	\$24,281	\$8,982	
Biotech Research	\$68,216	2	\$41,431	\$123,494	3	\$59,768	\$19,048	
Aviation	\$139,721	4	\$47,581	\$203,031	5	\$68,054	\$84,984	
Medical Lab Tech	\$144,315	2	\$66,916	\$247,030	3	\$100,147	\$26,915	
Medical Info Tech	\$1,217	1	\$564	\$2,083	1	\$844	\$26,915	
Social Services	\$0	0	\$0	\$0	0	\$0	\$12,383	
Trucking	\$89,795	1	\$30,410	\$141,544	1	\$48,056	\$3,967	
<b>2008-09</b>	<b>\$4,900,631</b>	<b>69</b>	<b>\$2,340,648</b>	<b>\$8,325,401</b>	<b>102</b>	<b>\$3,455,308</b>	<b>\$720,283</b>	<b>253%</b>
Histology	\$28,218	1	\$13,084	\$48,301	1	\$19,582	\$8,423	
Radiology Technician	\$213,706	2	\$99,091	\$365,809	3	\$148,301	\$51,096	
Respiratory Therapy	\$290,278	4	\$134,596	\$496,880	6	\$201,438	\$40,678	
RN Program	\$2,683,393	35	\$1,244,235	\$4,593,272	54	\$1,862,135	\$390,861	
LPN Program	\$377,305	6	\$174,949	\$645,849	9	\$261,830	\$35,616	
Dental Hygenist	\$643,878	7	\$390,127	\$1,078,459	11	\$534,906	\$47,843	
Dental Assisting	\$34,329	1	\$20,800	\$57,499	1	\$28,519	\$8,870	
Plumbing	\$29,585	1	\$7,280	\$43,915	1	\$12,141	\$16,885	
Biotech Research	\$65,859	1	\$40,000	\$119,229	2	\$57,703	\$15,189	
PCT	\$148,033	3	\$68,640	\$253,394	4	\$102,727	\$13,411	
Aviation	\$37,747	2	\$12,854	\$54,850	2	\$18,385	\$23,134	
Medical Info Tech	\$114,165	1	\$52,936	\$195,421	2	\$79,225	\$12,513	
Social Services	\$0	0	\$0	\$0	0	\$0	\$19,773	
Trucking	\$116,389	2	\$39,416	\$183,465	3	\$62,288	\$15,254	
Electrician	\$54,944	1	\$13,520	\$81,557	1	\$22,547	\$9,474	

**APPENDIX B  
ECONOMIC IMPACT OF JOBPATH PROGRAM 2005-06 TO 2014-15**

	Direct Impacts			Total Impacts			Total Local Funding	**Return on Investment
	Output	Jobs	Income*	Output	Jobs	Income		
<b>2009-10</b>	<b>\$2,698,248</b>	<b>43</b>	<b>\$1,407,176</b>	<b>\$4,639,351</b>	<b>60</b>	<b>\$2,020,845</b>	<b>\$656,113</b>	<b>173%</b>
CNA	\$89,183	3	\$44,720	\$154,574	4	\$65,167	\$11,761	
Histology	\$80,410	2	\$40,321	\$139,369	3	\$58,756	\$11,325	
Radiology Technician	\$78,813	1	\$39,520	\$136,601	1	\$57,589	\$43,520	
Respiratory Therapy	\$99,553	1	\$49,920	\$172,548	2	\$72,744	\$53,360	
RN Program	\$1,228,387	17	\$615,962	\$2,129,071	25	\$897,588	\$234,050	
LPN Program	\$368,579	5	\$184,820	\$638,831	7	\$269,323	\$15,514	
Dental Hygienist	\$361,851	5	\$214,750	\$609,230	7	\$295,525	\$105,718	
Dental Assisting	\$126,172	3	\$74,880	\$212,429	4	\$103,045	\$22,961	
Plumbing	\$0	0	\$0	\$0	0	\$0	\$33,682	
Biotech Research	\$26,147	1	\$16,640	\$48,039	1	\$23,878	\$25,537	
Aviation	\$73,137	1	\$50,398	\$116,350	1	\$64,697	\$10,757	
PCT	\$77,465	2	\$38,844	\$134,264	2	\$56,604	\$10,469	
Medical Lab Tech	\$0	0	\$0	\$0	0	\$0	\$23,214	
HIT	\$41,481	1	\$20,800	\$71,895	1	\$30,310	\$16,572	
Electrician	\$47,070	1	\$15,600	\$76,150	1	\$25,619	\$10,206	
ECE	\$0	0	\$0	\$0	0	\$0	\$14,501	
EMT	\$0	0	\$0	\$0	0	\$0	\$5,976	
Solar	\$0	0	\$0	\$0	0	\$0	\$6,989	
<b>2010-11</b>	<b>\$3,017,894</b>	<b>48</b>	<b>\$1,468,349</b>	<b>\$5,165,672</b>	<b>66</b>	<b>\$2,147,617</b>	<b>\$578,149</b>	<b>214%</b>
Radiology Technician	\$305,578	5	\$153,229	\$529,635	7	\$223,287	\$38,499	
Respiratory Therapy	\$170,024	3	\$85,257	\$294,690	4	\$124,238	\$53,416	
RN Program	\$1,113,341	15	\$558,274	\$1,929,670	22	\$813,524	\$174,767	
LPN Program	\$380,514	5	\$190,805	\$659,517	7	\$278,044	\$24,599	
Dental Hygienist	\$261,013	4	\$154,905	\$439,455	6	\$213,171	\$80,560	
Dental Assisting	\$157,014	4	\$93,184	\$264,356	5	\$128,234	\$56,186	
Biotech	\$24,060	2	\$15,312	\$44,205	2	\$21,972	\$29,580	
Medical Lab Tech	\$44,592	1	\$22,360	\$77,287	1	\$32,583	\$3,980	
Electrician	\$31,380	1	\$10,400	\$50,767	1	\$17,079	\$22,450	
Medical Coding & Billing	\$210,391	5	\$124,862	\$354,224	6	\$171,827	\$67,478	
Power Plant/A&P	\$319,987	3	\$59,761	\$521,865	4	\$123,658	\$26,635	
			\$1,886,012			\$2,565,280		
<b>2011-12</b>	<b>\$2,420,421</b>	<b>36</b>	<b>\$1,136,157</b>	<b>\$4,205,571</b>	<b>53</b>	<b>\$1,699,408</b>	<b>\$572,875</b>	<b>158%</b>
Radiology Technician	\$219,385	4	\$108,526	\$390,706	6	\$161,022	\$20,602	
Respiratory Therapy	\$7,779	1	\$3,848	\$13,853	1	\$5,709	\$29,224	
RN Program	\$1,219,032	15	\$603,035	\$2,170,993	24	\$894,735	\$200,355	
LPN Program	\$309,004	5	\$152,859	\$550,309	7	\$226,800	\$27,953	
Dental Hygienist	\$162,794	2	\$103,168	\$292,785	3	\$146,307	\$48,101	
Dental Assisting	\$0	0	\$0	\$0	0	\$0	\$55,739	
Plumbing	\$24,257	1	\$8,320	\$38,355	1	\$13,292	\$17,546	
Biotech	\$6,191	1	\$3,328	\$11,676	1	\$5,188	\$10,503	
Aviation	\$67,938	1	\$36,400	\$123,734	2	\$56,878	\$17,060	
Trucking	\$32,474	1	\$14,400	\$55,562	1	\$22,935	\$6,887	
Electrician	\$48,513	1	\$16,640	\$76,711	1	\$26,584	\$11,730	
Medical Coding & Billing	\$26,814	2	\$16,993	\$48,225	2	\$24,098	\$98,100	
Power Plant/A&P	\$170,563	1	\$39,520	\$249,108	2	\$66,707	\$4,892	
Air Frame	\$125,678	1	\$29,120	\$183,554	2	\$49,153	\$24,183	
<b>2012-13</b>	<b>\$5,169,041</b>	<b>75</b>	<b>\$2,543,911</b>	<b>\$9,127,363</b>	<b>113</b>	<b>\$3,861,578</b>	<b>\$660,733</b>	<b>335%</b>
Radiology Technician	\$97,961	2	\$48,460	\$174,461	3	\$71,901	\$17,488	
Respiratory Therapy	\$74,003	2	\$36,608	\$131,793	3	\$54,316	\$13,338	
RN Program	\$1,286,006	14	\$636,166	\$2,290,268	23	\$943,892	\$127,537	
LPN Program	\$1,229,899	19	\$608,411	\$2,190,346	28	\$902,711	\$82,494	
Dental Hygienist	\$166,240	3	\$105,352	\$298,983	4	\$149,404	\$38,688	
Dental Assisting	\$117,829	4	\$74,672	\$211,915	5	\$105,895	\$26,261	
Med Lab Tech	\$39,419	1	\$19,500	\$70,202	1	\$28,933	\$15,164	
Aviation	\$683,980	13	\$366,462	\$1,245,706	19	\$572,625	\$146,747	
Trucking	\$1,402,883	15	\$622,080	\$2,400,280	25	\$990,790	\$70,302	
Electrician	\$64,257	1	\$22,040	\$101,605	1	\$35,211	\$26,569	
Medical Coding & Billing	\$6,564	1	\$4,160	\$11,806	1	\$5,899	\$96,145	

**APPENDIX B**  
**ECONOMIC IMPACT OF JOBPATH PROGRAM 2005-06 TO 2014-15**

	Direct Impacts			Total Impacts			Total Local Funding	**Return on Investment
	Output	Jobs	Income*	Output	Jobs	Income		
<b>2013-14</b>	<b>\$4,297,596</b>	<b>60</b>	<b>\$2,187,635</b>	<b>\$7,628,215</b>	<b>92</b>	<b>\$3,292,815</b>	<b>\$703,946</b>	<b>240%</b>
Radiology Technician	\$125,936	2	\$62,299	\$224,282	3	\$92,434	\$35,292	
Respiratory Therapy	\$75,685	1	\$37,440	\$134,788	2	\$55,550	\$32,845	
RN Program	\$1,157,663	15	\$572,677	\$2,061,699	23	\$849,691	\$213,688	
LPN Program	\$727,277	11	\$359,772	\$1,295,219	16	\$533,801	\$92,258	
Dental Hygenist	\$520,111	7	\$329,612	\$935,420	11	\$467,437	\$108,387	
Dental Assisting	\$56,104	4	\$35,555	\$100,903	4	\$50,422	\$37,632	
Med Lab Tech	\$84,094	1	\$41,600	\$149,765	2	\$61,723	\$2,771	
Aviation	\$660,992	12	\$354,146	\$1,203,839	17	\$553,380	\$137,431	
Trucking	\$889,734	7	\$394,534	\$1,522,301	13	\$628,377	\$27,591	
Law Enforcement	\$0	0	\$0	\$0	0	\$0	\$10,452	
Biotech	\$0	0	\$0	\$0	0	\$0	\$5,598	
<b>2014-15</b>	<b>\$8,943,383</b>	<b>72</b>	<b>\$2,870,152</b>	<b>\$14,824,728</b>	<b>125</b>	<b>\$4,585,147</b>	<b>\$727,987</b>	<b>352%</b>
Electric Utility Technology	\$343,172	1	\$31,788	\$476,971	2	\$55,595	\$1,284	
Radiology Technician	\$0	0	\$0	\$0	0	\$0	\$4,423	
Respiratory Therapy	\$223,794	3	\$105,810	\$376,103	4	\$148,651	\$34,217	
RN Program	\$1,905,526	18	\$900,933	\$3,202,375	30	\$1,265,712	\$174,889	
LPN Program	\$912,925	12	\$431,631	\$1,534,237	18	\$606,394	\$52,626	
Dental Hygenist	\$364,118	5	\$235,976	\$651,874	8	\$316,209	\$62,441	
Dental Assisting	\$145,566	4	\$94,338	\$260,605	5	\$126,413	\$20,278	
Med Lab Tech	\$73,314	1	\$42,244	\$127,176	1	\$57,402	\$30,937	
Aviation	\$2,072,516	10	\$356,360	\$3,483,586	23	\$803,407	\$198,709	
Trucking	\$2,373,328	10	\$545,532	\$3,748,929	22	\$964,056	\$41,559	
Electrician	\$80,091	5	\$26,196	\$114,226	5	\$35,797	\$86,224	
Law Enforcement	\$263,714	2	\$58,344	\$498,404	4	\$120,694	\$17,579	
Fire Science Academy	\$185,319	1	\$41,000	\$350,243	2	\$84,815	\$2,821	
<b>Total 2005-06 to 2017-18</b>	<b>\$69,032,590</b>	<b>806</b>	<b>\$27,226,243</b>	<b>\$118,211,770</b>	<b>1,249</b>	<b>\$42,876,635</b>	<b>\$9,539,891</b>	<b>228%</b>

Source: JobPath; Applied Economics, 2019.

\*Direct income represents only increase in salary over pre-training level, not full ending salary.

\*\*Return on investment based on increase in wages (direct income) per dollar of direct financial assistance and case management costs