

# The Regional Economic Impact of the **NEW RIVER/MOUNT ROGERS** **WDB'S JOB PLACEMENT AND CAREER TRAINING SERVICES: PY 2016-2017**



**NOVEMBER 2017**

Report prepared by



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**The Regional Economic Impact of  
New River Mount Rogers WDB  
Job Placement and Career Training Services  
July 2016 - June 2017**

**November 2017**

## Executive Summary

**This report assesses the economic and fiscal impact attributable to the job placement and career training services provided by the New River/Mount Rogers WDB in program year 2016-2017 (PY 2016). The principle findings from that assessment are as follows:**

**1. In recent years, total employment growth in the New River/Mount Rogers Workforce Development Area has under-performed the statewide trend:**

- Over the five year period from the second quarter of 2012 to the second quarter of 2017, regional employment in the New River/Mount Rogers Workforce Development Area increased by 1,919 jobs or 1.4 percent. By way of comparison, statewide in Virginia total employment increased by 6.2 percent over the same period.
- Between the second quarter of 2016 and the second quarter of 2017, the largest private sector employment gains in the New River/Mount Rogers Workforce Development Area occurred in the relatively low wage sectors of *Other Services, Administrative and Support and Waste Management Services*, and *Educational Services*, while the largest employment losses occurred in the relatively high-wage sectors of *Manufacturing, Health Care and Social Assistance*, and *Management of Companies and Enterprises*.
- These economic trends underscore the New River/Mount Rogers Workforce Development Area's need to maintain a flexible and responsive labor market in response to changing economic conditions, and further emphasize the importance of the workforce services that the New River/Mount Rogers WDB provides.

**2. The job placement and career training services provided by the New River/Mount Rogers WDB have a large economic and fiscal impact on its service area:**

- In PY 2016, the New River/Mount Rogers WDB was instrumental in transitioning 183 individuals into employment through its Workforce Innovation and Opportunity Act (WIOA) Enhanced Career Services and other grant programs. The average annual salaries associated with those 183 placements ranged from \$20,966 to \$34,299. In combination these placements generated approximately \$5.6 million in additional household income in the region.
- Our analysis indicates that the total regional economic and fiscal impact associated with the consumption expenditures attributable to this \$5.6 million increase in income included: approximately 216 full time equivalent jobs, \$6.7 million in additional regional

labor income, \$3.9 million in additional regional economic output, and \$548,004 in state, local, and federal tax revenue.

- If one broadens the scope of workforce services provided to include staff-assisted direct placement and self-referred individuals who take advantage of the New River/Mount Rogers WDB's Basic Career Services, the New River/Mount Rogers WDB was instrumental in placing 707 previously unemployed individuals into employment in PY 2016, and the increased household income associated with that employment was approximately \$17.5 million.
- Our analysis indicates that the total regional economic and fiscal impact associated with the consumption expenditures attributable to this \$17.5 million increase in income included: approximately 812 full time equivalent jobs, \$21.0 million in additional regional labor income, \$12.4 million in additional regional economic output, and \$1.7 million in state, local, and federal tax revenue.

**3. Comparing the costs attributable to these programs to their economic benefits shows that benefits far exceed costs.**

- In PY 2016, The New River/Mount Rogers WDB's cost of providing the WIOA Enhanced Career Services and other grant programs included in this economic impact assessment was approximately \$3.6 million.
- Comparing that cost to the \$6.7 million in total additional regional labor income attributable to job placements from the WIOA Enhanced Career Services and other grant programs shows that the benefit/cost ratio is approximately 1.9, indicating that the benefits derived from these programs were almost two times the costs required to generate those benefits.
- If the analysis is expanded to encompass Basic Career Services as well, the benefit/cost ratio rises to approximately 5.9, indicating that the benefits were almost six times the costs required to generate them.

**4. In conclusion, in PY 2016 the New River/Mount Rogers WDB made a significant contribution to the economy of its service area.**



## Introduction

This report assesses the economic and fiscal contribution that the New River/Mount Rogers Workforce Development Board's (WDB's) program year 2016-2017 (PY 2016) <sup>1</sup> career training and job placement services made to its service area.<sup>2</sup> The remainder of the report is divided into three sections. The *Background* section provides details on the New River/Mount Rogers WDB's service area, the services it provided in PY 2016, and recent economic trends within the region. The *Economic Impact – PY 2016* section provides an estimate of the economic and fiscal impact that the job placement and training services provided by the New River/Mount Rogers WDB had on the region in PY 2016. Finally, the *Conclusion* section provides a brief summary. This report was prepared by Mangum Economics through a contract with the New River/Mount Rogers WDB.

## Background

### New River/Mount Rogers WDB

The New River/Mount Rogers WDB administers federally funded workforce development programs.<sup>3</sup> These programs aid businesses in finding qualified workers, assist jobseekers by providing access to workforce training and job placement services, and generally boost economic growth and competitiveness by strategically enhancing the region's available pool of human capital. The New River/Mount Rogers WDB's service area includes the counties of Bland, Carroll, Floyd, Giles, Grayson, Montgomery, Pulaski, Smyth, Washington, and Wythe, and the cities of Bristol, Galax, and Radford. In 2016, these localities had a combined population of almost 372,054, accounting for more than one out of every twenty-three people in the state of Virginia as a whole.<sup>4</sup>

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<sup>1</sup> July 1, 2016 through June 30, 2017.

<sup>2</sup> The New River/Mount Rogers Workforce Development Board's service area includes the counties of Bland, Carroll, Floyd, Giles, Grayson, Montgomery, Pulaski, Smyth, Washington, and Wythe, and the cities of Bristol, Galax, and Radford.

<sup>3</sup> In program year 2016, funding was through the Workforce Investment and Opportunity Act.

<sup>4</sup> *Data Source:* U.S. Census Bureau.



The mission of the New River/Mount Rogers WDB is to “support the region’s economy through a collaborative approach to meeting needs of businesses and job seekers that is flexible and adaptable to the changing economic ecosystem.” More specifically, the New River/Mount Rogers WDB accomplishes that mission through:

1. Strategic Workforce Development

- Coordinate workforce development partners to align their services with the needs of the economic development and business community.
- Convening sector partnerships to bring representatives from specific industries together with regional education, workforce development, economic development and community organizations to address workforce issues.
- Serve as the region’s workforce analyst.
- Advocate for workforce programs and initiatives.
- Build capacity for system performance.

2. Business Services

- Job posting, job matching, and applicant screening.
- Job fairs and customized recruitment events
- Skills assessments, customized job profiling, and customized training.

3. Jobseeker Services

- Providing information on in-demand jobs, training, job search assistance, help with resume writing, computer skills training, and veterans’ services.

4. Youth Services

- Providing career exploration, high school completion and post-secondary education transition services for youth.

## Services Provided in PY 2016

In PY 2016, The New River/Mount Rogers WDB provided career training and job placement services through nine separate workforce programs:

- Workforce Innovation and Opportunity Act (WIOA) Adult Program – provides employment and training services to assist eligible adults (individuals 18 years of age and older) in finding meaningful employment.
- WIOA Dislocated Worker Program – provides employment and training services to dislocated workers (an individual who has been terminated or laid off, or has received notice that they will be terminated or laid off) in finding meaningful employment.
- WIOA Youth Program – provides summer and year-round development programs to at risk youth (*e.g.*, dropouts, foster children, juvenile offenders, children of incarcerated parents, and migrant children).
- WIOA Basic Career Services – provides staff-assisted direct placement, job-search workshops, and self-service tools that assist a job seeker in making an effective job search.
- Power – prepares coal and energy workers for positions in other regional industry sectors.
- Rapid Response – provides traditional and non-traditional reemployment services for dislocated workers.

As shown in Table 1, in PY 2016 these programs were instrumental in transitioning 707 individuals into well-paying jobs (average annual salaries ranged from \$20,966 to \$34,299). Out of this number, 183 were placed through the New River/Mount Rogers WDB's WIOA Enhanced Career Services programs (adult, dislocated worker, and youth) and other grant programs (Power and Rapid Response), and 524 found employment as a result of the direct placement and self-service job placement tools provided through the New River/Mount Rogers WDB's WIOA Basic Career Services.



**Table 1: New River/Mount Rogers WDB Job Placements in PY 2016<sup>5</sup>**

| Program                                                                     | Job Placements | Average Annual Salary |
|-----------------------------------------------------------------------------|----------------|-----------------------|
| WIOA – Adult                                                                | 30             | \$22,422              |
| WIOA – Dislocated Worker                                                    | 48             | \$30,576              |
| WIOA – Youth                                                                | 23             | \$20,966              |
| Power                                                                       | 14             | \$31,304              |
| Rapid Response                                                              | 116            | \$34,299              |
| <b>WIOA Enhanced Services and Other Grant Programs Subtotal<sup>6</sup></b> | <b>183</b>     | <b>\$30,447</b>       |
| <b>WIOA Basic Career Services Subtotal</b>                                  | <b>524</b>     | <b>\$22,672</b>       |
| <b>TOTAL</b>                                                                | <b>707</b>     | <b>\$24,685</b>       |

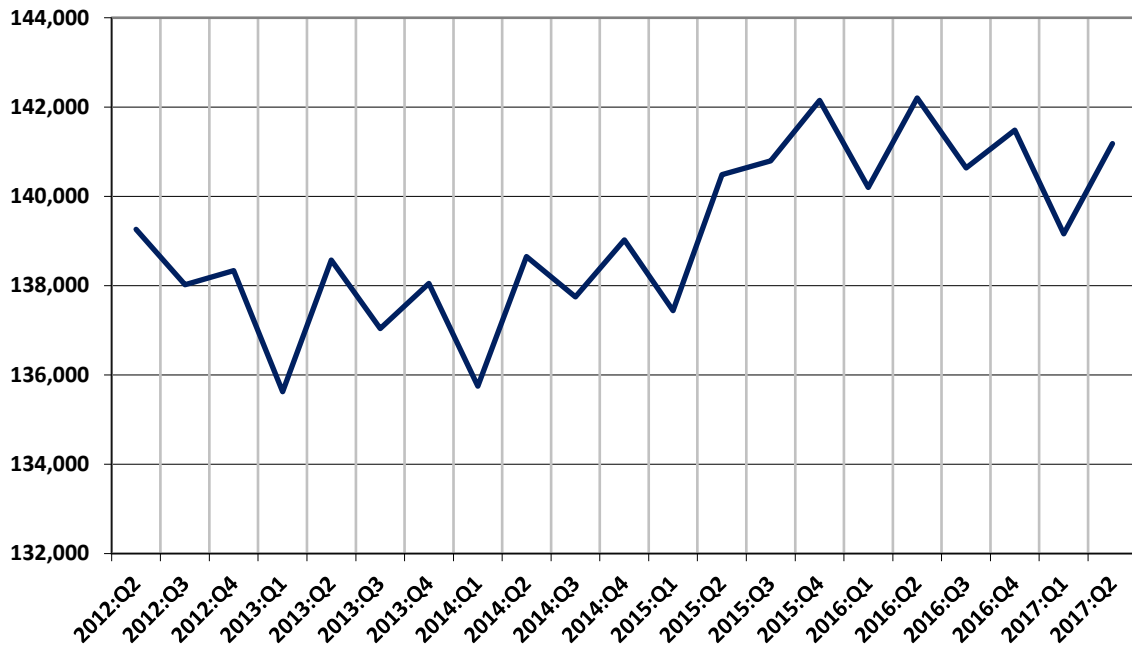
### Regional Economic Trends

Figure 1 depicts changes in total employment in the New River/Mount Rogers Workforce Development Area for the five-year period from the second quarter of 2012 through the second quarter of 2017 (the most recent quarter for which data are available).<sup>7</sup> What these data show is that regional employment remained relatively flat through 2013, exhibited an upward trend in 2014 and 2015, and began to stall in 2016. Over the period as a whole, total employment in the New River/Mount Rogers Workforce Development Area increased by 1,919 jobs or 1.4 percent. By way of comparison, statewide in Virginia total employment increased by 6.2 percent over the same period.

<sup>5</sup> Data Source: New River/Mount Rogers WDB.

<sup>6</sup> Controls for the 48 Dislocated Worker placements that are also included in the total presented for the Rapid Response program.

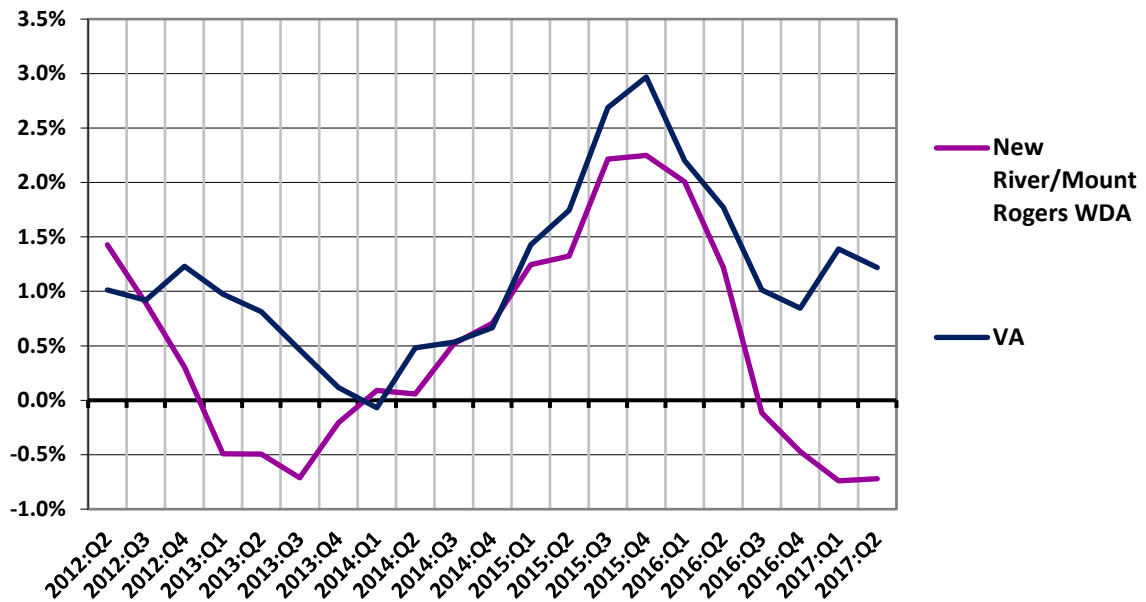
<sup>7</sup> In this graph and those that follow in this section, the New River/Mount Rogers Workforce Development Area is defined to include the counties of Bland, Carroll, Floyd, Giles, Grayson, Montgomery, Pulaski, Smyth, Washington, and Wythe, and the cities of Bristol, Galax, and Radford.



**Figure 1: New River/Mount Rogers Workforce Development Area Total Employment, 2012:Q2 through 2017:Q2<sup>8</sup>**

Figure 2 puts these numbers in perspective by comparing year-over-year changes in total employment in the New River/Mount Rogers Workforce Development Area to that of the state as a whole. Any observation above the horizontal zero line in this graph reflects an increase in employment from the prior year, while any observation below the zero line reflects a decrease in employment from the prior year. As these data indicate, year-over-year changes in total employment in the New River/Mount Rogers Workforce Development Area substantially under-performed the statewide norm throughout the period. However, this disparity was most pronounced from the fourth quarter of 2012 through the fourth quarter of 2013, and then again from the third quarter of 2016 through the second quarter of 2017.

<sup>8</sup> Data Source: Virginia Employment Commission, *Quarterly Census of Employment and Wages*.



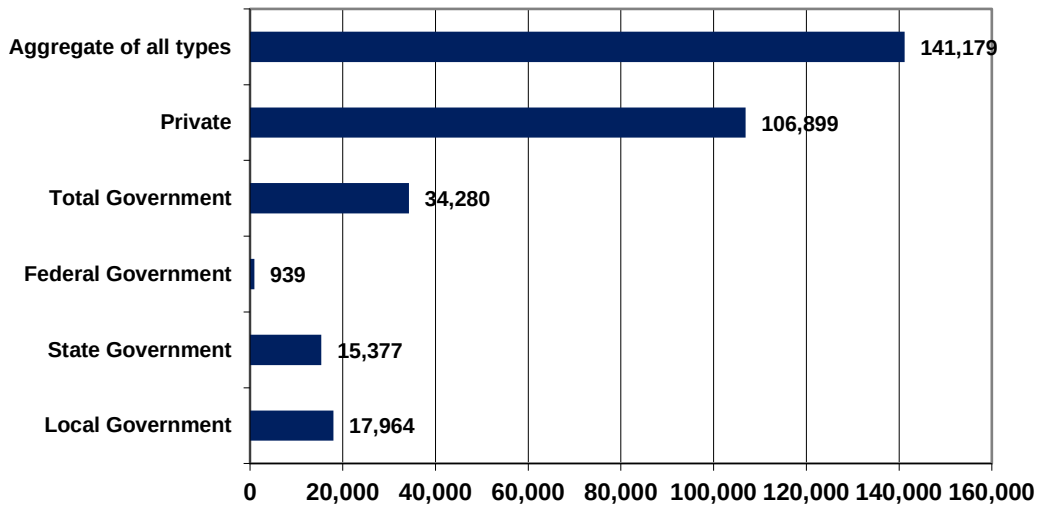
**Figure 2: Year-Over-Year Change in Total Employment, 2012:Q2 through 2017:Q2<sup>9</sup>**

Figures 3 through 5 provide a break-down of total employment in the New River/Mount Rogers Workforce Development Area in the second quarter of 2017 by ownership category. As the data depicted in Figure 3 show, the private sector accounted for 106,899 jobs (or 76 percent) of the region's 141,179 in total employment that quarter, while the government sector accounted for 34,280 jobs (or 24 percent).<sup>10</sup> As depicted in Figure 4, average wages in the second quarter of 2017 were \$704 per week overall in the region, \$679 per week in the private sector, and \$785 per week in the government sector.

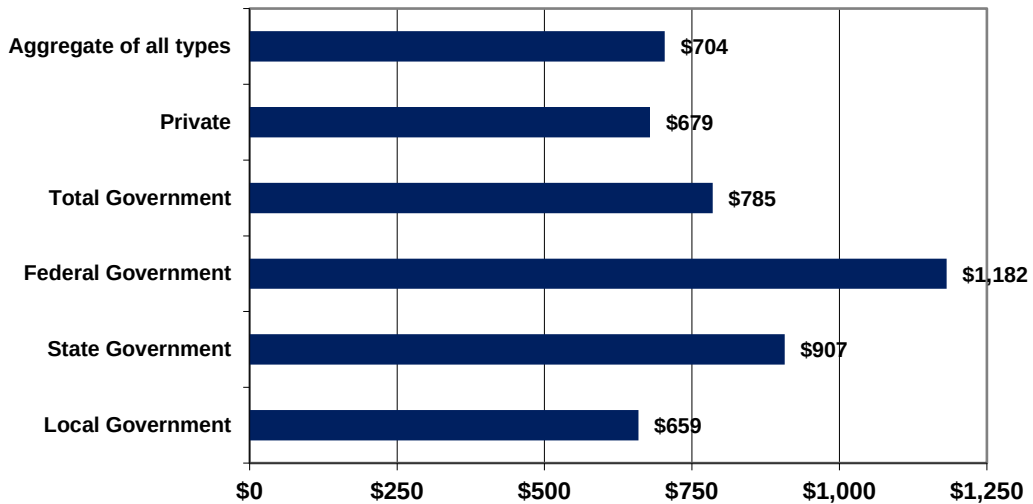
Figure 5 depicts the change in employment in the New River/Mount Rogers Workforce Development Area between the second quarter of 2016 and the second quarter of 2017 by ownership category. As these data indicate, total employment in the New River/Mount Rogers Workforce Development Area decreased by 1,024 jobs over the period, with the private sector experiencing a net loss of 1,176 jobs, and the government sector experiencing a net gain of 152 jobs.

<sup>9</sup> Data Source: Virginia Employment Commission, *Quarterly Census of Employment and Wages*.

<sup>10</sup> These data do not include military personnel.



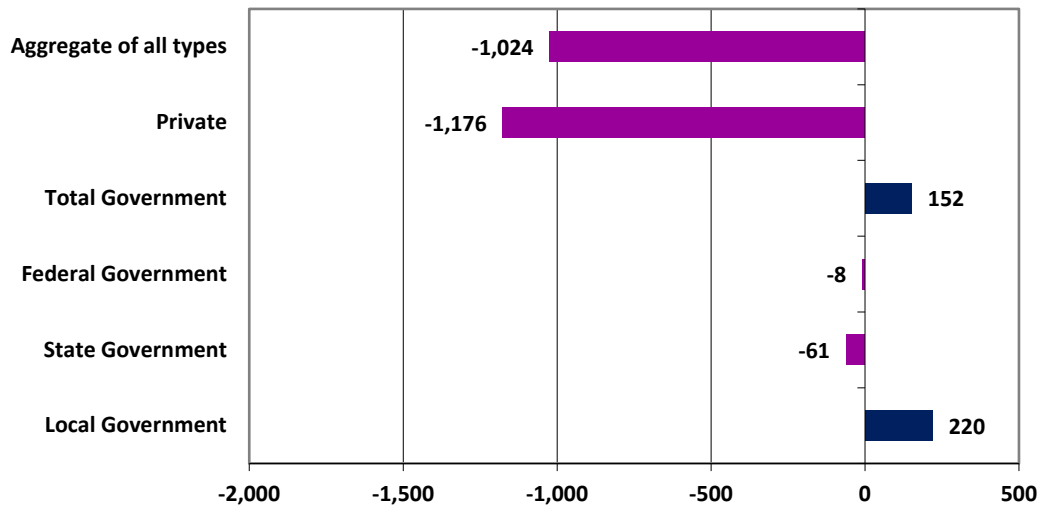
**Figure 3: New River/Mount Rogers Workforce Development Area Employment by Ownership Category, 2017:Q2<sup>11</sup>**



**Figure 4: New River/Mount Rogers Workforce Development Area Average Weekly Wages by Ownership Category, 2017:Q2<sup>12</sup>**

<sup>11</sup> Data Source: Virginia Employment Commission, *Quarterly Census of Employment and Wages*.

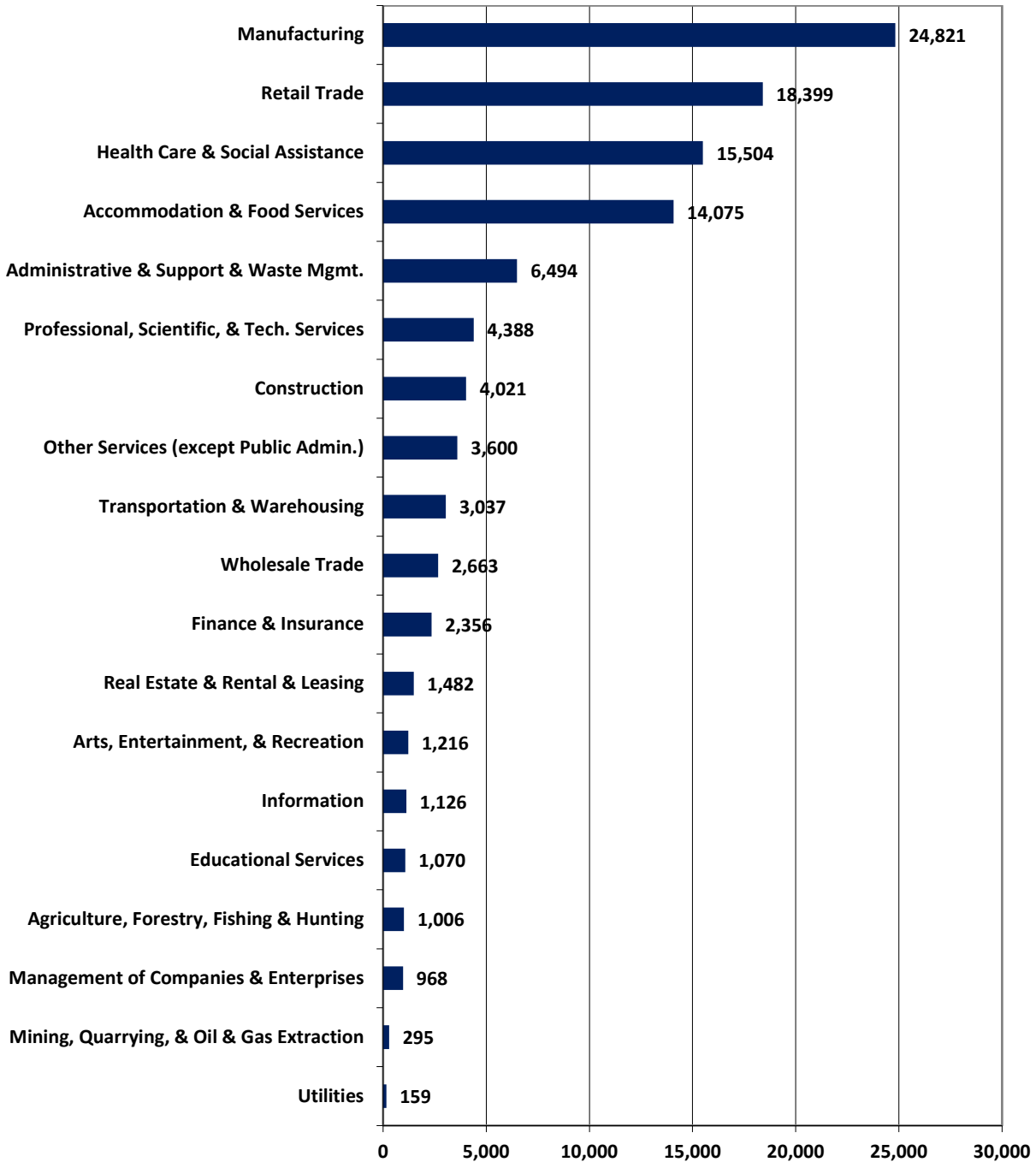
<sup>12</sup> Data Source: Virginia Employment Commission, *Quarterly Census of Employment and Wages*.



**Figure 5: New River/Mount Rogers Workforce Development Area Change in Employment by Ownership Category, 2016:Q2 to 2017:Q2<sup>13</sup>**

Figures 6 through 7 provide a more detailed picture of private sector employment in the New River/Mount Rogers Workforce Development Area. Figure 6 depicts employment by major industry category in the second quarter of 2017. As these data indicate, *Manufacturing* was the largest private sector employer in the New River/Mount Rogers Workforce Development Area that quarter, accounting for 24,821 jobs or 23 percent of total private sector employment. *Retail Trade* ranked second with 18,399 jobs (17 percent), *Health Care and Social Assistance* third with 15,504 jobs (15 percent), *Accommodation and Food Services* fourth with 14,075 jobs (13 percent), and *Administrative and Support and Waste Management Services* fifth with 6,494 jobs (6 percent).

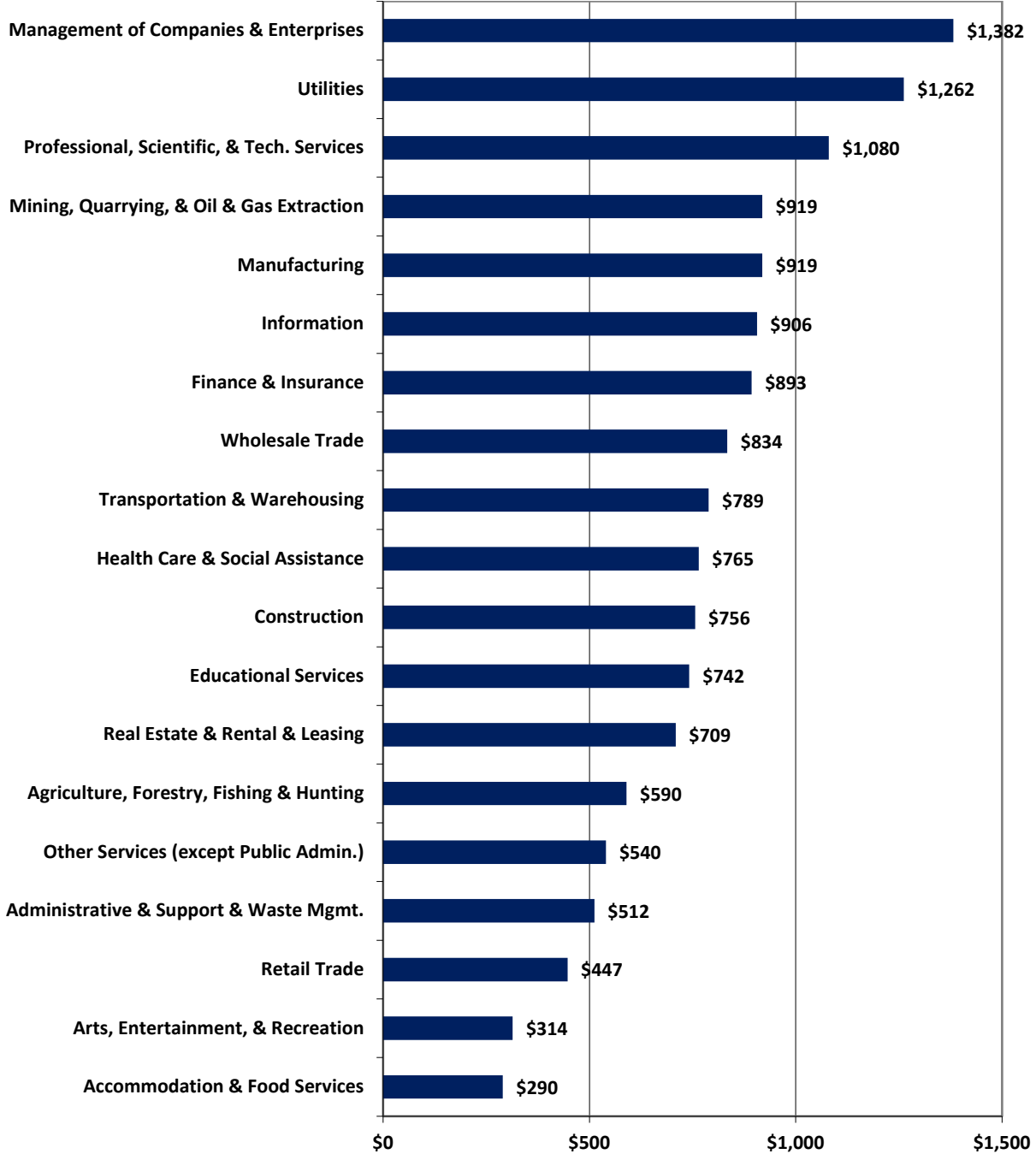
<sup>13</sup> Data Source: Virginia Employment Commission, *Quarterly Census of Employment and Wages*.



**Figure 6: New River/Mount Rogers Workforce Development Area Private Employment by Major Industry Category, 2017:Q2<sup>14</sup>**

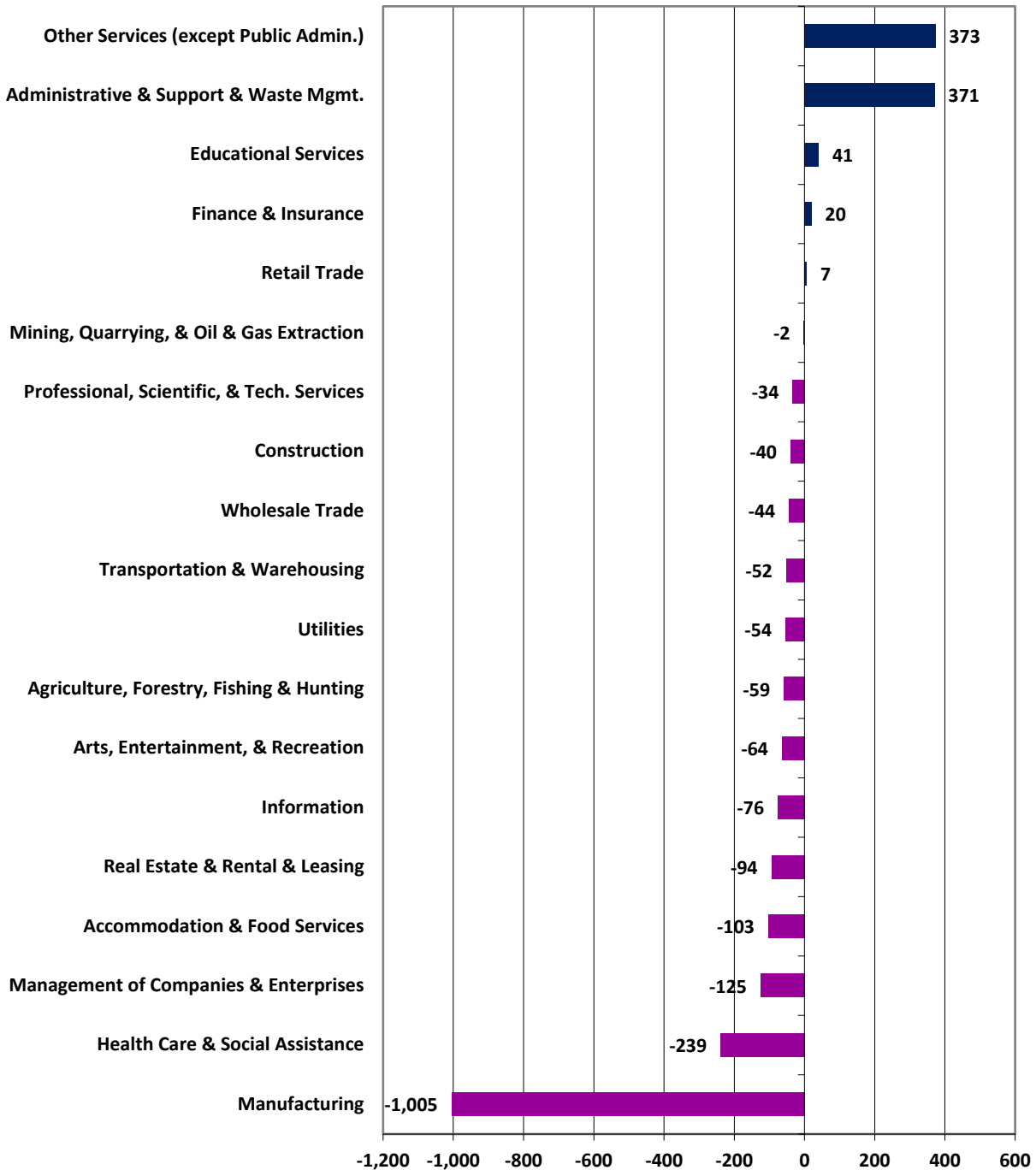
<sup>14</sup> Data Source: Virginia Employment Commission, *Quarterly Census of Employment and Wages*.





**Figure 7: New River/Mount Rogers Workforce Development Area Private Average Weekly Wages by Major Industry Category, 2017:Q2<sup>15</sup>**

<sup>15</sup> Data Source: Virginia Employment Commission, *Quarterly Census of Employment and Wages*.



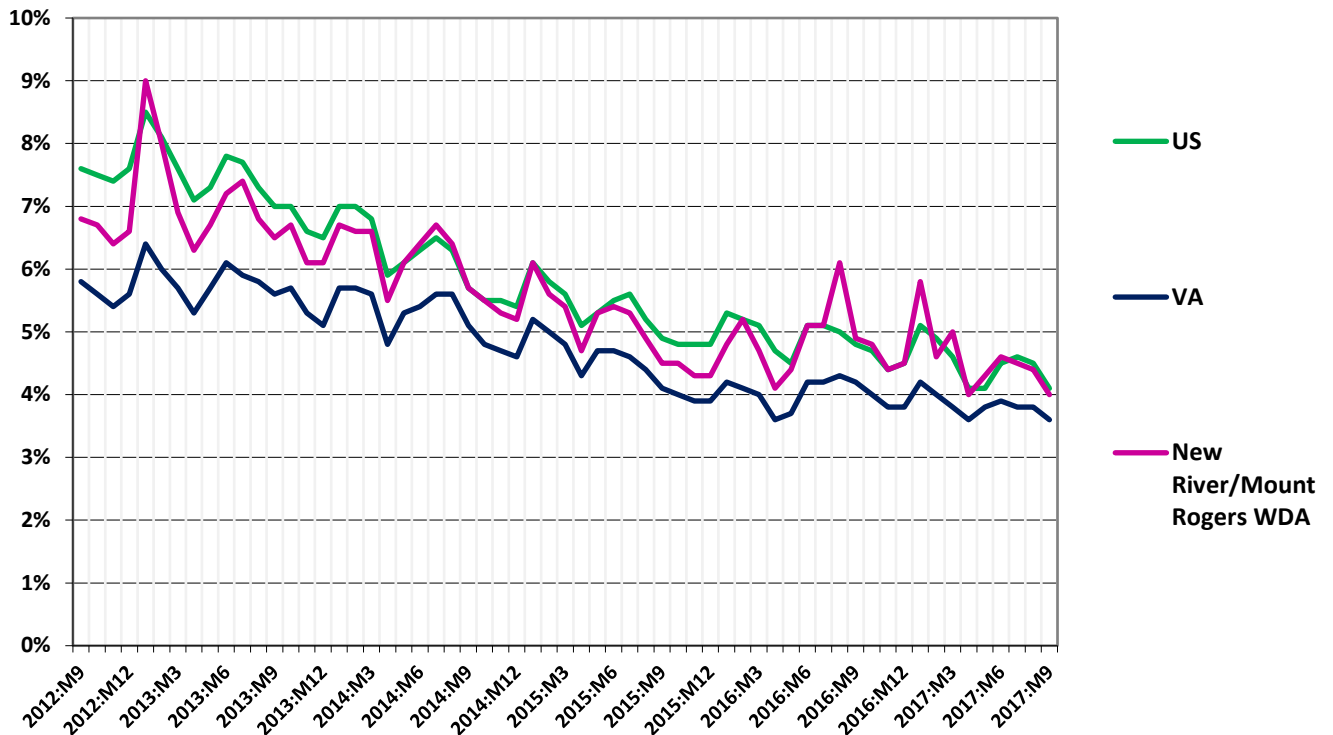
**Figure 8: New River/Mount Rogers Workforce Development Area Change in Private Employment Average by Major Industry Category, 2016:Q2 to 2017:Q2<sup>16</sup>**

<sup>16</sup> Data Source: Virginia Employment Commission, *Quarterly Census of Employment and Wages*.

Figure 7 provides similar information for average weekly wages by major industry category. As these data show, *Management of Companies and Enterprises* was the highest paying private sector employer in the New River/Mount Rogers Workforce Development Area in the second quarter of 2017, with average weekly wages of \$1,382. *Utilities* ranked second with average weekly wages of \$1,262, *Professional, Scientific, and Technical Services* ranked third with average weekly wages of \$1,080, *Mining, Quarrying, and Oil and Gas Extraction* ranked fourth with average weekly wages of \$919, and *Manufacturing* ranked fifth with average weekly wages of \$919. To put these numbers in perspective, recall that the average weekly wage across all private sector industries in the New River/Mount Rogers Workforce Development Area was \$679 in the second quarter of 2017.

Figure 8 depicts the change in private sector employment in the New River/Mount Rogers Workforce Development Area between the second quarter of 2016 and the second quarter of 2017. As these data indicate, the largest private sector employment gains over the period occurred in the relatively low wage sectors of *Other Services* (up 373 jobs), *Administrative and Support and Waste Management Services* (up 371 jobs), and *Educational Services* (up 41 jobs). At the other end of the spectrum, the largest private sector employment losses over the period occurred in the relatively high-wage sectors of *Manufacturing* (down 1,005 jobs), *Health Care and Social Assistance* (down 239 jobs), and *Management of Companies and Enterprises* (down 125 jobs).

Finally, Figure 9 compares recent unemployment trends in the New River/Mount Rogers Workforce Development Area to those at the state and national level. These data are monthly and cover the five-year period from September of 2012 through September of 2017 (the most recent month for which data are available). As these data show, unemployment rates slowly, but steadily, declined in all three jurisdictions until 2016 and have since generally leveled off. As of September 2017, unemployment stood at 4.0 percent in the New River/Mount Rogers Workforce Development Area, 3.6 percent statewide, and 4.1 percent nationally.



**Figure 9: Unemployment Rate, September 2012 to September 2017<sup>17</sup>**

## Economic and Fiscal Impact – PY 2016

In this section, we assess the economic and fiscal impact that the career training, job placement, and other workforce services provided by the New River/Mount Rogers WDB in PY 2016 had on the economy of the New River/Mount Rogers Workforce Development Area. The primary nature of that impact had to do with the new income earned by the previously unemployed individuals that the New River/Mount Rogers WDB was instrumental in transitioning into meaningful employment and for whom data on salary at placement were available.<sup>18</sup> As shown in Table 2, the total additional household income generated through those placements is estimated to be \$17.5 million.

<sup>17</sup> Data Source: Virginia Employment Commission, *Local Area Unemployment Statistics*.

<sup>18</sup> It is important to note that whereas the wages earned by these previously unemployed individuals constitute the primary economic impact of the career training, job placement, and other workforce services provided by the New River/Mount Rogers WDB in PY 2016, they are by no means the only economic impact. Although it is beyond the scope of the analysis presented here, a more inclusive definition of economic impact would also include, among other things, the cost of any social assistance that these individuals were receiving while unemployed (e.g., unemployment assistance, food stamps, etc.) and that they no longer required after they became employed.

**Table 2: Total Additional Household Income Attributable to PY 2016 Job Placements<sup>19</sup>**

| Program                                       | Job Placements    | Average Annual Salary  | Total Household Income     |
|-----------------------------------------------|-------------------|------------------------|----------------------------|
| WIOA – Adult                                  | 30                | \$22,422               | \$672,672                  |
| WIOA – Dislocated Worker                      | 48                | \$30,576               | \$1,467,648                |
| WIOA – Youth                                  | 23                | \$20,966               | \$482,227                  |
| Power                                         | 14                | \$31,304               | \$438,256                  |
| Rapid Response                                | 116               | \$34,299               | \$3,978,707                |
| <b><i>TOTAL w/o Basic Career Services</i></b> | <b><i>183</i></b> | <b><i>\$30,447</i></b> | <b><i>\$5,571,862</i></b>  |
| <b><i>WIOA Basic Career Services</i></b>      | <b><i>524</i></b> | <b><i>\$22,672</i></b> | <b><i>\$11,880,128</i></b> |
| <b>TOTAL w/ Basic Career Services</b>         | <b>707</b>        | <b>\$24,685</b>        | <b>\$17,451,990</b>        |

To quantify the regional economic and fiscal impact attributable to this increase in household income, we employ a commonly used impact simulation model called IMPLAN.<sup>20</sup> The IMPLAN model uses regional and national data on production and trade flows to construct region-specific economic multipliers and uses these multipliers to quantify economic impact. Economic multipliers measure the second round, or ripple, effects that an expenditure has as it makes its way through the economy. For example, as when individuals that the New River/Mount Rogers WDB transitioned into employment spend their newly acquired salaries and wages on housing, groceries, and transportation, thereby generating income for someone else, which is in turn spent, thereby becoming income for yet someone else, and so on, and so on.

Through this process, one dollar in expenditures generates multiple dollars of income. The mathematical relationship between the initial expenditure and the total income generated is the economic multiplier. The cumulative result of these second round effects is called indirect impact when it refers to business to business transactions, and induced impact when, as in the current case, it refers to household (employee) to business transactions.

In the analysis that follows, we also provide estimates for four categories of impact. The first is employment, or the total number of full time equivalent jobs that are created in the regional

<sup>19</sup> Data Source: New River/Mount Rogers WDB.

<sup>20</sup> IMPLAN v.3 is produced by Minnesota IMPLAN Group, Inc.

economy through first round direct effects (*i.e.*, the jobs that are filled by individuals transitioned into employment through services provided by the New River/Mount Rogers WDB) and as a result of second round transactions. The second is labor income, or the salaries and wages that are associated with that total employment. The third is economic output, or the total amount of regional economic activity that is generated through second round effects. The fourth is fiscal impact, or the state and local tax revenues generated as a result of this economic activity.

### WIOA Enhanced Career Services and Other Grant Programs

We first look at the economic and fiscal impact associated with the New River/Mount Rogers WDB's WIOA Enhanced Career Services and Other Grant Programs – those programs where the New River/Mount Rogers WDB directly provided career training and job placement services that enabled an individual to transition from unemployment into a well-paying job. In assessing the likely economic impact attributable to these programs, we employ the following assumptions:

- A total of 183 individuals exited from these programs and were placed into jobs in PY 2016.
- The average salary and total pre-tax income associated with these programs are as detailed in Table 2.
- All consumption expenditures were made within the New River/Mount Rogers Workforce Development Area.
- Economic and fiscal impact are based on a “representative year” and no attempt is made to phase placements in based on actual job start data from PY 2016.

By feeding this assumption into the IMPLAN model, we obtain the estimates of annual regional economic impact shown in Table 3:

- Regional Employment: In addition to the 183 full time equivalent jobs filled by individuals transitioned into employment through the New River/Mount Rogers WDB programs included in this analysis, the household expenditures made by these individuals were responsible for supporting approximately 33 full time equivalent jobs through second round effects, for a total regional employment impact of approximately 216 full time equivalent jobs.
- Regional Labor Income: In addition to the \$5.6 million in labor income paid to individuals transitioned into employment through the New River/Mount Rogers WDB

programs included in this analysis, the household expenditures made by these individuals were also responsible for creating approximately \$1.1 million in additional regional labor income through second round effects, for a total regional labor income impact of approximately \$6.7 million.

- **Regional Economic Output:** Second round effects from the \$5.6 million in labor income paid to individuals transitioned into employment through the New River/Mount Rogers WDB programs included in this analysis were also responsible for generating approximately \$3.9 million in additional economic output in the region.
- **Fiscal Impact:** The \$5.6 million in labor income paid to individuals transitioned into employment through the New River/Mount Rogers WDB programs included in this analysis were responsible for generating approximately \$237,092 in additional state and local tax revenue, and approximately \$310,912 in additional federal tax revenue, for a total fiscal impact of approximately \$548,004.

**Table 3: Estimated Economic Impact of the New River/Mount Rogers WDB's WIOA Enhanced Career Services and Other Grant Programs in PY 2016**

|                                                               | Employment      | Labor Income | Output      |
|---------------------------------------------------------------|-----------------|--------------|-------------|
| <i>First Round Direct Economic Activity</i>                   | 183             | \$5,571,862  | \$0         |
| <i>Second Round Indirect and Induced Economic Activity</i>    | 33              | \$1,138,241  | \$3,947,139 |
| <i>Total, Direct, Indirect, and Induced Economic Activity</i> | 216             | \$6,710,103  | \$3,947,139 |
|                                                               | State and Local | Federal      | Total       |
| <i>Fiscal Impact</i>                                          | \$237,092       | \$310,912    | \$548,004   |

## WIOA Enhanced Career Services and Other Grant Programs, plus Basic Career Services

In this section, PY 2016 placements from Basic Career Services are added to the placements attributable to the WIOA Enhanced Career Services and other Grant Programs. Basic Career Services have an arguably less direct impact on job placement since these services primarily involve staff-assisted direct placement, job-search workshops, and self-service tools that assist a job seeker in making an effective job search. In assessing the likely economic impact attributable to these programs, we employ the following assumptions:

- A total of 707 individuals exited from these programs and found employment in PY 2016.
- The average salary and total pre-tax income associated with these programs are as detailed in Table 2.
- All consumption expenditures were made within the New River/Mount Rogers Workforce Development Area
- Economic and fiscal impact are based on a “representative year” and no attempt is made to phase placements in based on actual job start data from PY 2016.

By feeding this assumption into the IMPLAN model, we obtain the estimates of annual regional economic impact shown in Table 4:

- Regional Employment: In addition to the 707 full time equivalent jobs filled by individuals through the New River/Mount Rogers WDB programs included in this analysis, the household expenditures made by these newly employed individuals also were responsible for supporting approximately 105 full time equivalent jobs through second round effects, for a total regional employment impact of approximately 812 full time equivalent jobs.
- Regional Labor Income: In addition to the \$17.5 million in labor income paid to individuals transitioned into employment through the New River/Mount Rogers WDB programs included in this analysis, the household expenditures made by these newly employed individuals also were responsible for creating approximately \$3.6 million in additional regional labor income through second round effects, for a total regional labor income impact of approximately \$21.0 million (does not sum due to rounding).
- Regional Economic Output: Second round effects from the \$17.5 million in labor income paid to individuals transitioned into employment through the New River/Mount Rogers



WDB programs included in this analysis were also responsible for generating approximately \$12.4 million in additional economic output in the region.

- **Fiscal Impact:** Second round effects from the \$17.5 million in labor income paid to individuals transitioned into employment through the New River/Mount Rogers WDB programs included in this analysis were responsible for generating approximately \$745,964 in additional state and local tax revenue, and approximately \$980,697 in additional federal tax revenue, for a total fiscal impact of approximately \$1.7 million.

**Table 4: Estimated Economic Impact of the New River/Mount Rogers WDB's WIOA Enhanced Career Services and other Grant Programs, plus Basic Career Services, in PY 2016**

|                                                               | Employment      | Labor Income | Output       |
|---------------------------------------------------------------|-----------------|--------------|--------------|
| <i>First Round Direct Economic Activity</i>                   | 707             | \$17,451,990 | \$0          |
| <i>Second Round Indirect and Induced Economic Activity</i>    | 105             | \$3,589,624  | \$12,445,251 |
| <i>Total, Direct, Indirect, and Induced Economic Activity</i> | 812             | \$21,041,614 | \$12,445,251 |
|                                                               | State and Local | Federal      | Total        |
| <i>Fiscal Impact</i>                                          | \$745,964       | \$980,697    | \$1,726,661  |

### Benefit/Cost Ratio

In PY 2016, the cost associated with the WIOA Enhanced Career Services and Grant Programs provided by The New River/Mount Rogers WDB that are included in the economic impact analysis above was approximately \$3.6 million.<sup>21</sup> Comparing this cost to the benefits derived from these programs, in terms of total household (or labor) income, allows us to calculate a

<sup>21</sup> Data Source: New River/Mount Rogers WDB.

benefit/cost ratio. If the analysis is restricted to the WIOA Enhanced Career Services and other grant programs, that benefit/cost ratio is approximately 1.9, indicating that the benefits derived from the programs were almost two times the costs required to generate those benefits. If the analysis is expanded to encompass Basic Career Services as well, the benefit/cost ratio rises to approximately 5.9, indicating that the benefits were almost six times the costs required to generate them.

## Conclusion

The New River/Mount Rogers WDB provides workforce services to the counties of Bland, Carroll, Floyd, Giles, Grayson, Montgomery, Pulaski, Smyth, Washington, and Wythe, and the cities of Bristol, Galax, and Radford. In 2016, these localities had a combined population of almost 372,054, accounting for more than one out of every twenty-three people in the state of Virginia as a whole.

Our analysis has shown that, over the five year period from the second quarter of 2012 to the second quarter of 2017 regional employment in the New River/Mount Rogers Workforce Development Area increased by 1,919 jobs or 1.4 percent. By way of comparison, statewide in Virginia total employment increased by 6.2 percent over the same period. In addition, year-over-year changes in total employment in the New River/Mount Rogers Workforce Development Area substantially under-performed the statewide norm throughout most of this period.

Between the second quarter of 2016 and the second quarter of 2017, the largest private sector employment gains in the New River/Mount Rogers Workforce Development Area occurred in the relatively low wage sectors of *Other Services* (up 373 jobs), *Administrative and Support and Waste Management Services* (up 371 jobs), and *Educational Services* (up 41 jobs), while the largest private sector employment losses occurred in the relatively high-wage sectors of *Manufacturing* (down 1,005 jobs), *Health Care and Social Assistance* (down 239 jobs), and *Management of Companies and Enterprises* (down 125 jobs). These economic trends underscore the New River/Mount Rogers Workforce Development Area's need to maintain a flexible and responsive labor market in response to changing economic conditions, and further emphasize the importance of the workforce services that the New River/Mount Rogers WDB provides.

This report has shown that the most significant economic and fiscal contribution that the New River/Mount Rogers WDB made to its service area in PY 2016 has to do with the 707 individuals

that it was instrumental in transitioning into well-paying jobs. Out of that total, 183 were placed through the New River/Mount Rogers WDB's WIOA Enhanced Career Services programs (adult, dislocated worker, and youth) and other grant programs (Power and Rapid Response), and 524 found employment as a result of the direct placement and self-service job placement tools provided through the New River/Mount Rogers WDB's WIOA Basic Career Services.

The average annual salaries associated with these 707 placements ranged from \$20,966 to \$34,299, and in combination these placements generated approximately \$17.5 million in additional household income in the region. Focusing first on the 183 placements associated with WIOA Enhanced Career Services and other grant programs, the total first and second round impact from those placements is estimated to be 216 full time equivalent jobs, \$6.7 million in additional regional labor income, \$3.9 million in additional regional economic output, and \$548,004 in state, local, and federal tax revenue. If we increase the scope of workforce services to include Basic Career Services, the total first and second round economic impact associated with the resulting combined 707 placements is estimated to be 812 full time equivalent jobs, \$21.0 million in additional regional labor income, \$12.4 million in additional regional economic output, and \$1.7 million in state, local, and federal tax revenue.

Comparing these estimated benefits to the \$3.6 million in costs associated with providing these programs allows us to calculate a benefit/cost ratio. If the analysis is restricted to the WIOA Enhanced Career Services and other grant programs, that benefit/cost ratio is approximately 1.9, indicating that the benefits derived from the programs were almost two times the costs required to generate those benefits. If the analysis is expanded to encompass Basic Career Services as well, the benefit/cost ratio rises to approximately 5.9, indicating that the benefits were almost six times the costs required to generate them.

In conclusion, in PY 2016 The New River/Mount Rogers WDB made a significant contribution to the economy of its service area.



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