May 3, 2021

ECONOMIC IMPACT & RETURN ON INVESTMENT OF THE VIRGINIA CAREER WORKS NORTHERN REGION

FISCAL YEAR 2020
1. Executive Summary

This report assesses the economic impact and return on investment (ROI) attributable to the workforce programs and services provided by the Virginia Career Works Northern Region (VCWNR) for Fiscal Year (FY) 2020 in the region of Northern Virginia. The main findings of the report are summarized below.

The COVID-19 Pandemic interrupted the continued expansion of the economy in Northern Virginia partway through Fiscal Year 2020.

By the fourth quarter of 2019, wage and salaried employment in Northern Virginia reached 1.27 million. As the COVID-19 pandemic caused shut downs across the nation, employment dropped to 1.14 million by the second quarter of 2020. Regional employment dropped 10.4% between June 2019 and June 2020.

As of the second quarter of 2020, the average annual wage per worker in Northern Virginia was $85,128. This was significantly higher than the state average of $63,146 and the national average of $61,825.

Comparing the four-quarter average ending with the second quarter of 2020 against the prior year, the Northern Virginia region lost 16,223 total wage and salaried jobs. Losses of nearly 16,900 in the private sector were partially offset by gains of 838 jobs in federal government and 95 in state government. Local government employment lost 259 jobs.

In FY2020, the largest industry by employment in Northern Virginia was professional, scientific, and technical services followed by health care and social assistance, and retail trade.

At the end of FY2020 (June 2020), the unemployment rate stood at 7.8% in Northern Virginia, lower than 8.9% statewide and 11.2% nationally. The regional unemployment rate has continued to decline to 5.1% as of January 2021 as the region is in the process of gradually reopening and vaccines are being administered.

The various workforce programs and services provided by the Virginia Career Works Northern Region have a large economic impact in Northern Virginia.

In FY2020, Virginia Career Works Northern Region provided the following workforce programs and services:

- Workforce Innovation and Opportunity Act (WIOA) Adult Program
- WIOA Dislocated Workers Program
- WIOA Youth Program
- Virginia Financial Services Network (VFSN)
- Incumbent Worker Training (IWT)
- NoVA IT Employment Partnership (NVITE)
- Fairfax Alternative Incarceration Branch Center (AIB)
- Temporary Assistance for Needy Families (TANF)
- Ticket to Work
- Employment Support for Lifelong Achievement (ESLA)
- Senior Community Service Employment Program (SCSEP)
- One-Stop services, providing self-service resources for jobseekers

1 Fiscal Year 2020 starts on July 1, 2019 and ends June 30, 2020. Virginia Career Works Northern Region serves the counties of Fairfax, Loudoun, and Prince William, and the cities of Fairfax, Falls Church, Manassas, and Manassas Park. This region is referred to as the VCWNR service area. However, in this report, the study region is defined as Northern Virginia, which also includes Arlington County and the City of Alexandria, in addition to seven localities served by VCWNR.

2 In this report, all workforce programs and services excluding One-Stop services are collectively termed VCWNR non-self-service programs. Economic impact and ROI are evaluated for all non-self-service VCWNR programs and all VCWNR programs and services.
In FY2020, the Virginia Career Works Northern Region successfully helped 387 individuals either obtain employment or improve their skills through its non-self-service programs. The increased annual household income associated with those programs is estimated to have been $17.8 million in FY2020. The number of individuals served and total household income effects are lower than typical levels seen in past reports, as following orders from Virginia’s Governor, all six One-Stop Employment Centers in the region closed to the public in mid-March 2020.

The increased income resulting from VCWNR non-self-service programs is estimated to have supported 484 total jobs in Northern Virginia in FY2020, associated with $23.2 million in total regional labor income. In addition, the increased income is estimated to have generated $16.8 million in additional regional economic output, and $2.1 million in state, local, and federal tax revenue.

If job placements through One-Stop services were included, VCWNR was instrumental in helping 621 individuals either obtain employment or improve their skills in FY2020. The increased annual household income associated with those job placements is estimated to have been $26.0 million in FY2020.

Increased income resulting from VCWNR programs is estimated to have supported 763 total jobs in Northern Virginia in FY2020, associated with $33.9 million in total regional labor income. In addition, the increased income was also responsible for $24.6 million in additional regional economic output, and $3.0 million in state, local, and federal tax revenue.

The return on investment analysis shows that the benefit of VCWNR programs and services exceeds the cost.

In FY2020, the cost associated with all VCWNR programs and services was $6.1 million.

The benefit is defined as the total labor income attributable to persons served through VCWNR programs and services.

Excluding One-Stop services, the benefit-to-cost ratio of VCWNR non-self-service programs was 3.8 in FY2020, indicating that the benefit of VCWNR programs was nearly four times the public cost required.

If the ROI analysis is expanded to encompass One-Stop services, the benefit-to-cost ratio of all VCWNR programs and services in FY2020 would rise to 5.5. This indicates that the benefit is more than five times the public cost required.
2. Background

Virginia Career Works Northern Region (VCWNR) serves the counties of Fairfax, Loudoun, and Prince William, and the cities of Fairfax, Falls Church, Manassas, and Manassas Park (VCWNR service area). Through the SkillSource Group, Inc., Virginia Career Works Northern Region provides a comprehensive list of workforce development programs, such as the Workforce Innovation and Opportunity Act (WIOA) Adult, Youth, and Dislocated Worker programs; and other career services. In addition, there are six SkillSource-managed centers (One-Stop Employment Centers) in the region (Figure 2.1).

Each year, the SkillSource Group commissions a study of the economic and fiscal impacts of the Virginia Career Works Northern Region focusing on the varied workforce training and career services programs it provides. In addition, SkillSource seeks to understand the return on investment (ROI) of VCWNR programs and services. Chmura Economics & Analytics (Chmura) was contracted to perform such an analysis for Fiscal Year 2020.

The remainder of this report is organized as follows:

• Section 3 explains the methodology in conducting economic impact and return on investment analysis for workforce programs and services.
• Section 4 provides a profile of VCWNR programs and services and an economic profile of Northern Virginia.
• Section 5 analyzes the economic impact of VCWNR programs and services in Northern Virginia.
• Section 6 performs the ROI analysis for VCWNR programs and services.
• Section 7 provides a summary and conclusion.

Figure 2.1: Virginia Career Works Northern Region Center Locations

Source: SkillSource Group. The numbers on the map represent VCWNR Center locations.

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3 Source: SkillSource website, https://vcwnorthern.com/contact/. Please note that the economic impact and economic profile are analyzed for the broader Northern Virginia region, which also includes Arlington County and the City of Alexandria.
3. Economic Impact Methodology

To maintain consistency with prior reports published by SkillSource on the economic impact and ROI of VCWNR programs and services, this study utilizes the same methodology as previous studies. Based on the needs of SkillSource and a review of prior studies, this report includes three major components:

1. A profile of Virginia Career Works Northern Region programs and services, and an economic profile of Northern Virginia for FY2020.
2. The economic impact of VCWNR programs and services in Northern Virginia for FY2020.
3. Return on investment analysis of VCWNR programs and services for FY2020.

3.1. Profile of VCWNR and Economic Profile of Northern Virginia

The profile of VCWNR is a summary of existing programs and services and demonstrated roles they play in helping regional workers achieve career success. This profile presents information such as a list of VCWNR programs and services, participants and job placements by program, and post-training wages for program participants. The main data sources for this analysis are SkillSource program reports, audited SkillSource financial records, and administrative data. An economic profile of Northern Virginia is also included, providing a broad context to evaluate the economic impact and ROI of VCWNR programs and services. Chmura analyzed data on total employment and employment growth, employment by major industry sector, employment by ownership category, average wages, and unemployment rate for the region. Data from Chmura’s proprietary JobsEQ® platform were utilized to complete this analysis.

3.2. Economic Impact Analysis

In this analysis, Chmura examined the economic impact of VCWNR programs and services in Northern Virginia. The main source of economic impact is the incremental income gained by individuals who either successfully transitioned into employment or gained new training with the help of VCWNR programs and services. For individuals who were unemployed prior to utilizing VCWNR programs and services, the incremental wage is equivalent to wages and salaries they would receive in their new jobs. For individuals receiving training, the incremental wage is defined as the difference between pre- and post-training wages. When individuals spend incremental income in Northern Virginia, additional economic impact is generated in the region. While incremental spending constitutes the direct economic impact of VCWNR programs and services in Northern Virginia, the total economic impact also includes economic ripple effects from the direct impact. Ripple effects, categorized as indirect and induced impacts (see Appendix 1 for definitions), measure the secondary benefits of increased household spending at regional businesses. For example, when newly employed individuals spend their wages on housing and groceries, they help other businesses and support additional jobs. The cumulative result of these secondary effects is called indirect impact when it represents business-to-business transactions, and induced impact when it represents household (employee)-to-business transactions.

Direct impact, measured as household spending from incremental income, was estimated based on data from SkillSource. Chmura estimated the indirect and induced economic impacts with the IMPLAN Model after the direct impacts were estimated.

In the analysis, Chmura examined economic impacts of VCWNR programs and services in four dimensions:

1. Employment, or the total number of jobs that are supported in the regional

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4 For examples of previous studies, please see https://vcwnorthern.com/public-documents/.
5 The operation of VCWNR will also generate positive economic impact in the area. In addition, VCWNR also manages other programs such as the Center for Business Planning and Development. Those impacts are not included in this study as the focus is the success of participants of VCWNR programs.
3. Economic output, or the total amount of regional economic activity that is generated through secondary indirect and induced transactions.

4. Fiscal impact, or the federal, state, and local tax revenue as a result of the increased economic activity.

3.3. Return on Investment Analysis

In addition to the economic impact analysis, Chmura also assessed the return on investment (ROI) of VCWNR programs and services. ROI is expressed as a benefit-to-cost ratio. In this study, the cost is represented by all expenses associated with workforce programs and services provided by Virginia Career Works Northern Region in FY2020. The benefit is represented by the total annual labor income attributable to VCWNR programs and services, resulting from new job placements and improved skills.6

To conclude the ROI analysis, a benefit-to-cost ratio was computed for two broad programs. These included all non-self-service VCWNR programs, and all VCWNR programs and services, including One-Stop services.

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6 This definition is consistent with prior studies.
4. Profile of VCWNR and the Northern Virginia Regional Economy

4.1. Profile of VCWNR Programs and Services

The Virginia Career Works Northern Region provides a wide range of workforce training programs and services to regional jobseekers to help them locate employment in the area. In particular, VCWNR offers several structured workforce programs in which individuals are enrolled and work with case managers (non-self-service programs). In addition, VCWNR also maintains seven One-Stop Employment Centers (SkillSource centers) where individuals can utilize facilities and resources in search of employment.

4.1.1. Description of VCWNR Programs & Services

In FY2020, Virginia Career Works Northern Region provided career training and job placement services through the following programs:

- **Workforce Innovation and Opportunity Act (WIOA) Programs**
  - **WIOA Adult Program** – provides employment and training services to assist eligible adults (individuals 18 years 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 ages 16 – 24 years (e.g., dropouts, foster children, juvenile offenders, children of incarcerated parents, and migrant children).

- **Other WIOA Grant Programs**
  - **Virginia Financial Success Network (VFSN)** – enhances long-term financial stability of individuals by employing an integrated approach where jobseekers are connected to workforce, education, income support, and financial services.
  - **Incumbent Workers Training (IWT)** – reimburses employers for the cost of training their incumbent workers, and covers instructional costs for training courses, classes for certification exams, online training, textbooks, and manuals.
  - **NoVA IT Employment Partnership (NVITE)** – provides unemployed, underemployed, and low-income jobseekers with intensive case management, employment coaching, and on-the-job skills training to launch them into entry-level, living-wage careers such as computer user support specialists.
  - **Additional WIOA Programs** – includes some programs carried over from prior years.

- **Non-WIOA Grants Programs**
  - **Fairfax Alternative Incarceration Branch (AIB) Center** – previously known as Fairfax pre-release employment center (PRC), supports the transition of long-term incarcerated adults into the workforce and community.
  - **Temporary Assistance for Needy Families (TANF) Employment Advancement (EA) Program** – provides subsidized and unsubsidized employment opportunities for Prince William, Fairfax, and Loudoun TANF participants and increases self-sufficiency through employment.
  - **Ticket to Work** – provides workforce and employment services for adults receiving Social Security disability benefits who want to return to employment.
  - **Employment Support for Lifelong Achievement (ESLA)** – provides subsidized and unsubsidized employment opportunities to eligible TANF/VIEW WIOA recipients.
  - **Senior Community Service Employment Program (SCSEP)** – provides temporary community service training opportunities as a bridge to find employment opportunities outside the program.

In the analysis that follows, Chmura refers to all programs and services (other than One-Stop services) as VCWNR non-self-service programs. Economic impact and ROI evaluations are conducted for all VCWNR programs and services, as well as for non-self-service programs.
4.1.2. Outcome of VCWNR Programs & Services

Table 4.1 summarizes participants and job placements for different VCWNR programs and services in FY2020. Participation and successful job placements were hindered by the COVID-19 pandemic and closure of all VCW centers in mid-March 2020. In FY2020, a total of 1,064 individuals were enrolled in various non-self-service programs. Almost all (722) were enrolled in WIOA Adult, WIOA Dislocated Worker, and WIOA Youth programs. In addition, at least 284 were enrolled in other WIOA grant programs, such as NVITE. An additional 58 jobseekers were enrolled in non-WIOA funded programs, such as Fairfax AIB and SCSEP. Finally, 15,859 unique individuals utilized the VCWNR’s One-Stop Employment Centers to conduct job searches. They registered 34,039 total visits in FY2020.

In total, these programs and services were instrumental in transitioning 621 individuals to employment or improving their skills. VCWNR helped place them into meaningful jobs, with an average annual wage of $41,909. Out of this number, 295

<table>
<thead>
<tr>
<th>VCWNR PROGRAMS &amp; SERVICES</th>
<th>ENROLLMENT</th>
<th>JOB PLACEMENTS</th>
<th>AVERAGE INCREMENTAL ANNUAL SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIOA Enhanced Career Services</td>
<td>722</td>
<td>295</td>
<td>$46,376</td>
</tr>
<tr>
<td>WIOA – Adult</td>
<td>366</td>
<td>147</td>
<td>$35,287</td>
</tr>
<tr>
<td>WIOA – Dislocated Worker</td>
<td>189</td>
<td>83</td>
<td>$73,904</td>
</tr>
<tr>
<td>WIOA – Youth</td>
<td>167</td>
<td>65</td>
<td>$25,022</td>
</tr>
<tr>
<td>Other WIOA Grant Programs</td>
<td>284</td>
<td>61</td>
<td>$53,465</td>
</tr>
<tr>
<td>NVITE</td>
<td>284</td>
<td>61</td>
<td>$53,465</td>
</tr>
<tr>
<td>Other Programs</td>
<td>58</td>
<td>31</td>
<td>$28,297</td>
</tr>
<tr>
<td>Fairfax AIB</td>
<td>21</td>
<td>16</td>
<td>$29,203</td>
</tr>
<tr>
<td>SCSEP</td>
<td>37</td>
<td>15</td>
<td>$27,331</td>
</tr>
<tr>
<td>Total Non-Self-Service Programs</td>
<td>1,064</td>
<td>387</td>
<td>$46,046</td>
</tr>
<tr>
<td>One-Stop Services*</td>
<td>15,859</td>
<td>234</td>
<td>$35,069</td>
</tr>
<tr>
<td>Total VCWNR Programs &amp; Services</td>
<td>621</td>
<td></td>
<td>$41,909</td>
</tr>
</tbody>
</table>

*Data represent visits between July 1, 2019 and February 29, 2020, as VCW centers closed due to COVID-19 pandemic. Some programs may not be displayed here if data are not available.

were placed into employment through the WIOA Adult, Dislocated Worker, and Youth programs. An additional 31 jobseekers found jobs through non-WIOA funded programs, such as Fairfax AIB and SCSEP. Finally, 234 jobseekers found employment as a result of utilizing VCWNR One-Stop services.
4.2. Regional Economic Profile

4.2.1. Trend in Employment and Wages

Employment size and growth is the broadest and timeliest indicator of a region’s overall economic health. A growing labor market also increases the chances that participants of VCWNR programs and services can find meaningful employment in the region.

The data show that in the second quarter of 2020 (last quarter of FY2020), Northern Virginia had a total wage and salaried employment of 1.18 million, 10.4% less than the 2nd quarter of 2019. Employment dropped rapidly at the end of the first quarter and over the second quarter of 2020 due to the COVID-19 pandemic and state-wide stay-at-home orders.7

Figure 4.1 depicts quarterly trends in total employment in Northern Virginia since 2010. Despite the seasonal regional employment decline in the first quarter of each year, the overall employment trend shows a steady expansion since 2010. However, regional employment growth stalled during 2013 and 2014, largely due to federal spending cuts as a result of federal budget sequestration. Growth resumed after 2014, with robust employment expansion occurring from 2016 through 2019. Employment peaked at 1.27 million in the fourth quarter of 2019, up 11.3% (or more than 129,600 jobs) since 2010. Job losses due to the pandemic set employment in the region back to its lowest level since the first quarter of 2011.

In terms of employment growth, since 2010, Northern Virginia’s employment expanded at an average rate of 0.8% year-over-year; this is compared with 0.0% for Virginia and 0.9% for the nation. As Figure 4.2 shows, Northern Virginia rebounded from the 2007 to 2009 recession better than both the state and nation, as job

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7 Wage and salaried employment does not include proprietors or self-employed individuals. Chmura excluded those groups to be consistent with prior studies.
growth from 2010 to 2012 outpaced those two regions. However, regional job growth lagged state and national averages from 2013 to 2015. This is largely due to federal budget cuts resulting from budget sequestration, which affected Northern Virginia disproportionately as the region has a high concentration of federal employees and federal contractors. The negative effect of federal budget cuts has since worn off. Employment growth in the region was steady from 2015 to 2019. However, there was a sharp decline in the second quarter of 2020 due to the COVID-19 pandemic, with some recovery in the third quarter of 2020.

As of the second quarter of 2020, the average annual wage per worker in Northern Virginia was $83,805, significantly higher than the state average of $62,153 and the national average of $60,896. As analyzed later, the higher average wage can be primarily attributed to the industry mix of the region. Northern Virginia has a high concentration of professional services and high-tech jobs, as well as federal government employees, which tend to pay high salaries. But wage growth in Northern Virginia trailed both state and national averages. Since 2010, the average annual wage per worker in Northern Virginia grew at 2.2% per year, compared with state and national averages of 2.5% and 3.0%, respectively.
4.2.2. Employment and Wage by Ownership

Figure 4.4 provides a breakdown of total wage and salaried employment in Northern Virginia in FY2020 by ownership category. The data show that in FY2020, 1.03 million jobs (or 83.2%) of the region’s total employment of 1.23 million were in the private sector. With 206,846 jobs (or 16.8%) in the government sector, the percentage of overall government employment in Northern Virginia is smaller than the state average of 18.4%. However, there is a higher percentage (6.5%) of federal government employment in the region than in Virginia (4.8%).

Among different ownership categories, average wage was the highest for workers in the federal government, averaging $116,633 in FY2020. This is significantly higher than the average of $83,805 for all wage and salaried workers in Northern Virginia (Figure 4.5). In contrast, workers employed in state and local governments had average wages of $56,456 and $62,829, respectively—much lower than wages in the federal government and private sector.

Figure 4.6 depicts the changes in employment by ownership category from FY2019 to FY2020 in Northern Virginia. The job losses due to the COVID-19 pandemic heavily impacted the private sector, which lost 16,897 jobs over this period. Local government lost 259 jobs while state government added 95 jobs and federal government employment increased by 838 jobs.
4.2.3. Employment and Wage by Industry Sector

Northern Virginia is home to many different industries. As Figure 4.7 shows, in FY2020, the largest industry by employment was professional, scientific, and technical services (264,460 jobs), followed by health care and social assistance (120,306 jobs), and retail trade (111,490 jobs). Other large industry sectors included accommodation and food services (95,402 jobs), public administration (92,922 jobs), and administrative and support and waste management. The high-paying professional, scientific, and technical services industry plays an important role in the regional economy as more than one in five (21.4%) regional workers were employed in this industry, compared with 12.4% for the state average.

Figure 4.8 presents the average annual wages by major industry in Northern Virginia for FY2020. Management of companies and enterprises was the highest-paying industry, with an average annual wage of $178,217. This industry represents many corporate headquarters in Northern Virginia, employing a large number of corporate executives and highly-skilled professionals. Finance and insurance was ranked second with an average annual wage of $140,344. Other high-paying industries were information ($137,820 average annual wage), professional, scientific, and technical services ($126,156), and wholesale trade ($122,825).

On the other end of the spectrum, accommodation and food services, and agriculture, forestry, fishing and hunting paid the lowest annual wages, averaging $25,942 and $36,265, respectively, in FY2020. Workers in those industries may face challenges to maintain a certain standard of living as costs for housing and transportation in Northern Virginia are higher than in other areas of Virginia. Accommodation and food services workers also faced the worst of the impacts of shutdowns due to the pandemic.

Source: JobsEQ
Figure 4.9 summarizes the employment changes by industry in Northern Virginia between FY2019 and FY2020. The largest employment gains over the period occurred in professional, scientific, and technical services (up 3,852 jobs), transportation and warehousing (up 2,936 jobs), management of companies and enterprises (up 2,342 jobs), and public administration (up 1,141 jobs). On the other hand, the largest employment losses over the period occurred in accommodation and food services (down 12,017 jobs), and retail trade (down 6,797 jobs). From the perspective of many participants of VCWNR programs and services, opportunities may lie in growing industries such as health care and social assistance, educational services, and construction.

### 4.2.4. Unemployment Rate

Another broad indicator of the health of a regional economy is the unemployment rate. Figure 4.10 compares recent unemployment trends in Northern Virginia to those at the state and national levels. The unemployment rate data is monthly from January 2010 through January 2021 (the most recent month for which such data were available).

Since 2010, the unemployment rates of the region, state, and nation have steadily declined as the country recovered from the recession of 2007 to 2009. The data also show that unemployment rates in Northern Virginia have been consistently below the Virginia and U.S. levels since 2010. At the end of FY2020 (June 2020), unemployment rates stood at 7.8% in Northern Virginia, 8.9% statewide, and 11.2% nationally. The unemployment rate spiked in April to 10.0% in the region due to the pandemic, compared with 11.4% in the state. The regional unemployment rate has fallen to 5.1% in January 2021, indicating a rather quick recovery from the unemployment caused by the pandemic.

The resilient economy and recovery bode well for participants of VCWNR programs and services as they are more likely to find employment with adequate wages in the region.
5. Economic Impact of VCWNR

As noted earlier, the main benefit for a jobseeker to enroll in VCWNR workforce training programs and services is the potential for obtaining a job and receiving higher earnings for those formerly unemployed. For incumbent workers who participated in different training courses, the training can improve their skills and increase their income. When this additional income is spent within local communities, it generates additional economic impact in Northern Virginia.

As shown in Table 5.1, a total of 621 individuals found employment or improved their skills after enrolling in VCWNR programs or utilizing One-Stop services in FY2020. Their average incremental wage was $41,909 per year. As a result, the total annual incremental household income generated through VCWNR programs’ job placements is estimated to be $26.0 million. Of this figure, $17.8 million is the incremental income for those who found jobs or received training through VCWNR non-self-service programs, and $8.2 million is for those using One-Stop services, which were limited during the closures in 2020.

5.1. Economic Impact of VCWNR Non-Self-Service Programs

Excluding job placements through One-Stop services, a total of 387 individuals either found jobs or improved their skills with the help of VCWNR non-self-service programs in FY2020. They earned $17.8 million in annual incremental income from wages and salaries.

It is assumed that all consumption expenditures were made within Northern Virginia. In addition, the economic impact is estimated based on a “representative year” assuming all those individuals work a full year, even though employment start dates were likely spread out over FY2020.8

Table 5.2 sums up the economic impact of VCWNR non-self-service programs in Northern Virginia in FY2020. In terms of regional employment, direct impact is represented by 387 individuals who either transitioned into employment or improved their skills through VCWNR programs. The household expenditures made by these newly employed individuals also supported an additional 97 jobs in the area through indirect and induced impact, for a total employment impact of 484 jobs in Northern Virginia.

For regional labor income, the direct impact is represented by $17.8 million in annual wages and salaries paid to individuals benefiting from VCWNR non-self-service programs. The household expenditures made by these individuals also generated $5.4 million in additional regional labor income through indirect and induced impact, for a total regional labor income of $23.2 million in FY2020.

Finally, household spending by newly employed individuals also generated $16.8 million in annual total economic output in.

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8 This same assumption has been used in previous studies.
the region. In addition, this household spending is estimated to have generated $1.0 million in state and local tax revenue, and $1.1 million in federal tax revenue—for a total fiscal impact of $2.1 million in FY2020.

5.2. Economic Impact of all VCWNR Programs and Services

Including job placements from One-Stop services, a total of 621 individuals either found jobs or improved their skills with the help of VCWNR programs and services in FY2020. They earned an estimated $26.0 million in annual income in terms of wages and salaries.

Table 5.3 summarizes the economic impact of all VCWNR programs and services in Northern Virginia in FY2020. In terms of regional employment, direct impact is represented by 621 individuals who either transitioned into employment or improved their skills through VCWNR programs and services. Household expenditures made by these individuals also supported an additional 142 jobs in the area through indirect and induced impact, for a total regional employment impact of 763 jobs.

Table 5.3: Economic Impact of all VCWNR Programs and Services, FY2020

<table>
<thead>
<tr>
<th></th>
<th>Employment</th>
<th>Labor Income ($Million)</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct Impact</strong></td>
<td>621</td>
<td>$26.0</td>
<td>$0.0</td>
</tr>
<tr>
<td><strong>Indirect &amp; Induced Impact</strong></td>
<td>142</td>
<td>$7.8</td>
<td>$24.6</td>
</tr>
<tr>
<td><strong>Total Impact</strong></td>
<td>763</td>
<td>$33.9</td>
<td>$24.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>State &amp; Local</th>
<th>Federal</th>
<th>Total</th>
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<tbody>
<tr>
<td><strong>Fiscal Impact ($Million)</strong></td>
<td>$1.4</td>
<td>$1.6</td>
<td>$3.0</td>
</tr>
</tbody>
</table>

Note: Numbers may not sum due to rounding
Source: IMPLAN 2019

For regional labor income, the direct impact is represented by $26.0 million in annual wages and salaries paid to individuals benefiting from all VCWNR programs and services. Household expenditures made by these individuals also generated $7.8 million in regional labor income through indirect and induced impact, for a total regional labor income of $33.9 million in FY2020.

In addition, household spending was responsible for generating $1.4 million in additional state and local tax revenue, and $1.6 million in additional federal tax revenue. The total fiscal impact was $3.0 million in FY2020.

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9 Economic output is typically represented by total sales (revenue of all businesses) in a region.
6. Return on Investment

In FY2020, the public cost associated with delivering VCWNR programs and services was $6.1 million. Comparing this cost to the benefit derived from these programs, measured in total labor income, it is estimated that the benefit-to-cost ratio was 3.8 in FY2020 for VCWNR non-self-service programs. This indicates that the benefit derived from the programs was nearly four times the public cost required (Figure 6.1). The ROI is lower than in previous years due to the COVID-19 pandemic.

If the analysis is expanded to encompass all programs and services provided by VCWNR, including One-Stop services, the benefit-to-cost ratio rose to 5.5 in FY2020, indicating that the benefit was more than five times the public cost required.

The ratios estimated above only capture the annual benefits of VCWNR programs and services. However, the benefits will recur in Northern Virginia each year, provided those individuals remain employed. As a result, the long-term return on investment of VCWNR programs and services can be significantly higher.

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10 Source: Audit Report, Financial and Federal Award Compliance Examination, for Year Ending June 30, 2019, SkillSource Group.
11 To be consistent with prior studies, this report does not differentiate costs for One-Stop services.
7. Conclusion

In FY2020, Virginia Career Works Northern Region made significant contributions to the economy of Northern Virginia. Despite the interruption of the COVID-19 Pandemic partway through Fiscal Year 2020, the system was instrumental in helping 621 individuals obtain jobs and improve their skills in FY2020. The associated incremental household income for those individuals was approximately $26.0 million. The total impact of those programs and services is estimated to be 763 jobs in Northern Virginia, associated with $33.9 million in total regional labor income, $24.6 million in additional regional economic output, and $3.0 million in state, local, and federal tax revenue.

Excluding job placements through One-Stop services, the Virginia Career Works Northern Region helped 387 individuals obtain employment and improve their skills through its non-self-service programs in FY2020. The increased household income for those was approximately $17.8 million. The total impact of those programs is estimated to be 484 jobs in Northern Virginia, associated with $23.2 million in total regional labor income, $16.8 million in additional regional economic output, and $2.1 million in state, local, and federal tax revenue.

In FY2020, the public cost associated with all VCWNR programs and services was $6.1 million. Comparing benefit and cost, the benefit-to-cost ratio for VCWNR non-self-service programs was 3.8, while the benefit-to-cost ratio rose to 5.5 for all VCWNR programs and services.
Appendix 1: Impact Analysis Glossary

**Impact Analysis**—an examination of business-business and business-consumer economic relationships capturing all monetary transactions in a given period, allowing one to calculate the effects of a change in an economic activity on the entire economy (input-output analysis).

**Direct Impact**—economic activity generated by a project or operation. For construction, this represents activity of the contractor; for operations, this represents activity by tenants of the property.

**Overhead**—construction inputs not provided by the contractor.

**Indirect Impact**—secondary economic activity that is generated by a project or operation. An example might be a new office building generating demand for parking garages.

**Induced (Household) Impact**—economic activity generated by household income resulting from direct and indirect impacts.

**Ripple Effect**—the sum of induced and indirect impacts. In some projects, it is more appropriate to report ripple effects than indirect and induced impacts separately.

**Total Economic Impact**—the sum of the direct, indirect and induced impacts.

**Fiscal Impact**—the tax revenue for federal, state or local governments derived from the direct economic impact.

**Multiplier**—the cumulative impacts of a unit change in economic activity on the entire economy.
## Appendix 2: The SkillSource Group, Inc. Board of Directors

<table>
<thead>
<tr>
<th>Name</th>
<th>Company/Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kim Clark-Pakstys</td>
<td>Strategic Organization Solutions</td>
</tr>
<tr>
<td>Debra Eshelman</td>
<td>Management Concepts</td>
</tr>
<tr>
<td>Karen Garvin</td>
<td>AHT Insurance</td>
</tr>
<tr>
<td>George Harben</td>
<td>Prince William County Department of Planning Services</td>
</tr>
<tr>
<td>Rebecca Hughes</td>
<td>SAP Public Sector Industry Business Solutions</td>
</tr>
<tr>
<td>Joseph Carter</td>
<td>R&amp;K Cyber Solutions, LLC</td>
</tr>
<tr>
<td>Todd House</td>
<td>Washington Gas</td>
</tr>
<tr>
<td>Eugene Frogale</td>
<td>Annandale Millwork and Allied Systems Corporation</td>
</tr>
<tr>
<td>Donna L. Motsek</td>
<td>Prince William County Schools</td>
</tr>
<tr>
<td>Christopher Rieley</td>
<td>Bank of Clarke County</td>
</tr>
<tr>
<td>Todd Rowley</td>
<td>Old Dominion National Bank</td>
</tr>
<tr>
<td>Marc Tate</td>
<td>Amazon Web Services</td>
</tr>
<tr>
<td>William Trumbull</td>
<td>ICF International</td>
</tr>
<tr>
<td>Hector Velez</td>
<td>Vector Talent</td>
</tr>
<tr>
<td>Wayne Hallheimer</td>
<td>WCH Realty Advisors, LLC</td>
</tr>
<tr>
<td>Nicole Smith</td>
<td>City of Manassas Department of Economic Development</td>
</tr>
</tbody>
</table>
Appendix 3: Virginia Career Works Northern Region Board of Directors

Shakera Alvarado  
Fairfax County Public Schools

Marc Austin  
George Mason University

Robert J. Bartolotta  
New Editions Consulting

Michael Becketts  
Fairfax County Department of Family Services

Anthony Cancelosi  
Columbia Lighthouse for the Blind

Joseph Carter  
R&K Cyber Solutions LLC

Rodney Caulkins  
Caulkins Construction Company, Inc.

Nicholas Dunn  
Integrated Federal Solutions

Robert M. Frew  
Balfour Beatty Construction

Kenneth Garrison  
Heavy Construction Contractors Association

Larry Hoffman  
George Washington University

Patricia Hughes  
Talent Connections, LLC

Mohamed Hussein  
PGLS

William Mountjoy  
AFL-CIO

Fatimah A. Ogungbade  
Dominion Energy

Steven B. Partridge  
Northern Virginia Community College

Bruce Patterson  
ServiceSource

Leanne Rerko  
Virginia Department for Aging and Rehabilitative Services

Christopher Rieley  
Bank of Clarke County

Roopal Saran  
Northern Virginia Literacy Council

Mary Ann Shurtz  
Stratford University

Olivia Shultz  
SAP NS2

Karen Smaw  
Fairfax County Economic Development Agency

Zuzana Steen  
Micron Technology, Inc.

Paul Steiner  
Fairfax County Public Schools

Joseph Terry  
J Terry & Associates
Susana Marino
Northern Virginia Hispanic Chamber of Commerce

Roxana Mejia
IUPAT District Council 51

Tanya Moore
IBM

Julie Mullen
Northern Virginia Family Service

William Threlkeld
Cornerstones Virginia

William Trumbull
ICF International

Hector Velez
Vector Talent

Lisa Whetzel
Britepaths, Inc.