

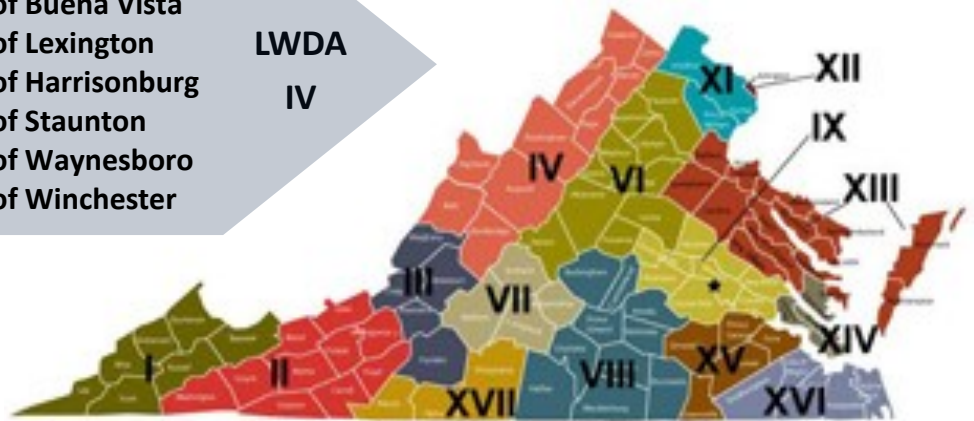


Local Workforce Development Area IV Plan 2016-2020

Augusta County
Bath County
Clarke County
Frederick County
Highland County
Page County
Shenandoah County
Rockbridge County

Rockingham County
Warren County
City of Buena Vista
City of Lexington
City of Harrisonburg
City of Staunton
City of Waynesboro
City of Winchester

LWDA
IV



Two-Year Local Plan Modification Addendum added February, 2019

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Introduction Shenandoah Valley Workforce Development Board (SVWDB)

The Local WDB Plan is organized according to the requirements of Virginia Workforce Letter # 16-01 and subsequent amendments.

Policy Emphasis

Goals 1 – 5 meet the requirement of consistency with the Combined State Plan, in accordance with WIOA Section 108. The SVWDB endorses these goals as necessary to work to the highest standards of workforce development and economic growth. The goals are presented, initially, as a unified body and are then broken into discrete elements in alignment with supporting objectives.

Following approval of the Local Workforce Development Plan, SVWDB will identify the supporting strategies, action items, and timelines for the goals and objectives identified below. Implementation will use data driven information and will capture pre-and post-implementation metrics.

Strategic Plan & Policy Emphasis

Goals, Objectives, Strategies, Action Items A. All Goals, Objectives, Strategies, and Action Items must be data driven. B. All Goals, Objectives, Strategies, and Action Items must conform to SMART Goals: Specific, Measurable, Aligned with Vision and Mission, Realistic, and Time-bound.
Goal 1:* Increase business services and engagement to deliver value to our business customers. Promote awareness and engagement with agencies and organizations that support business development. (GenEdge, SBDC, Rapid Response, SCORE, etc.)
Objective 1.1: Create a Business Engagement Committee.
Objective 1.2: Determine primary services to be provided to businesses and develop business marketing/outreach plan and collateral materials.
Objective 1.3: Develop sustainable work-based learning models to include roles and responsibilities, policies, processes, and forms for On-the-Job Training (OJT), Registered Apprenticeships (RA), Incumbent Worker Training (IWT), and customized training.
Objective 1.4: Define local business engagement performance metrics and tracking method considering WIOA and Virginia defined business engagement metrics.
Objective 1.5: Measure business customer satisfaction with services.
Objective 1.6: Maintain current efforts to implement American Apprenticeship Initiative (AAI) V2V initiative, work with GO Virginia, implement Virginia “business easy button.”
Objective 1.7: Continue to build the partnership with Rapid Response to expand the WIOA allowable layoff aversion activities working with businesses.

Goal 2:* Achieve measurable skills development in our job seeking customers in the form of workforce credentials that matter to business.
Objective 2.1: Maintain a regional workforce “Credentials Inventory,” working with community colleges, technical centers, businesses and economic developers.
Goal 3:* Fill jobs in demand-occupations that show promise for long-term growth in industries that are strategic to Virginia’s economy and strengthen Virginia’s regions.
Objective 3.1: Require and support data driven planning and decision making. Commission annual state of the workforce, economic impact, and target specific studies. Continue to lease JobsEQ® or other online resource.
Objective 3.2: Collect, analyze, and communicate data regarding growth industries, in-demand occupations, and skills.
Objective 3.3: Define SVWDB philosophy and strategy for awarding training funds. Review and determine policy and process for awarding Individual Training Account (ITA) funding.
Objective 3.4: Develop one sector strategy within a high growth target sector and related career pathways for an in-demand occupation. Align efforts with the Virginia Sector Strategy and Career Pathway Academy.
Goal 4:*Help individuals, including individuals with barriers, gain access to the middle class and experience career progression.
Objective 4.1: Develop a partnership-driven delivery system, based on data and proven models, to address challenges faced by the “high school to workforce” population using WIOA Youth funds.

Objective 4.2: Investigate out-of-school/opportunity youth program models and identify a proven regional model to implement.
Objective 4.3: Refine SVWDB philosophy and strategy for determining priority of service for adults. Review and determine policy and process for determining priority of service.
Objective 4.4: Refine SVWDB philosophy and strategy for supportive services. Work with new partnerships to streamline and seek efficiencies of supportive services funds.
Objective 4.5: Focus on Veterans Services as an area of interest and emphasis to increase credentialing, career opportunities, and wraparound services for veterans in demand, growth occupations and pathways to wage growth.
Objective 4.6: Promote awareness of tax credits available to businesses for hiring veterans.
Objective 4.7: Partner with BRCC, DSLCC, and LFCC to create and execute a plan to assist businesses in preparing V3 applications in their service regions.
Objective 4.8: Work with Planning District Commissions to determine the extent of individuals who are deemed “over-qualified” for available employment who, as a result, are unemployed.
Goal 5:* Ensure that workforce system public investments generate a quality return to Virginia and the customers we serve.
Objective 5.1: Finalize a regional partner cost allocation model and agreement.
Objective 5.2: Develop a partner MOU including local vision and values and guiding service delivery principles to include, but not be limited to, affirmative referrals, co-enrollments, integrated service delivery, customer satisfaction, quality improvement, professional development, center management, and commitment to partnership.

<p>Objective 5.3: Adopt a customer centered design (CCD) philosophy and implement the model.</p> <p>Revise partner MOU to reflect CCD.</p>
<p>Objective 5.4: Measure economic impact (ROI study), analyze results, and adjust.</p>
<p>Objective 5.5: Investigate pay-for-performance for successful service delivery as a contract model.</p>
<p>Objective 5.6: Facilitate communication and coordination among training providers to reduce unnecessary duplication of services.</p>
<p>Objective 5.7: Facilitate communication and coordination among training providers to minimize over-reliance on a limited number of individuals in advisory roles and focus groups.</p>
<p>Goal 6: Evolve to a more strategic Workforce Board and create opportunities for Board members and Local Elected Officials engagement.</p>
<p>Objective 6.1: Engage in Board Development to create more opportunities for Board Member engagement.</p>
<p>Strategy.6.1.1: Investigate Board Orientation models and methods. Develop and implement board member and chief elected official orientations. Plan for ongoing board member training during committee and board meetings.</p>
<p>Strategy 6.1.2: Conduct an annual Board Retreat.</p>
<p>Strategy 6.1.3: Focus Board meetings on a balance between strategic discussions that results in guidance of workforce-related issues and time for learning. Build networking time into formal board meeting schedule.</p>
<p>Strategy 6.1.4: Develop a Board leadership succession plan.</p>

Strategy 6.1.5: Work with Chief Elected Officials to identify board appointments to fill gaps with professionals who want to be engaged in strengthening our workforce and broader economy.
Strategy 6.1.6: Provide a process for board member internal feedback.
Strategy 6.1.7: Assess the relevance of the board to board members. Conduct a board assessment.
Strategy 6.1.8: Evaluate the committee structure as it aligns with strategic goals. Include non-Board members on committees.
Objective 6.2: Conduct asset mapping to identify existing resources and overlapping resources. Make recommendations regarding the use of regional resources to meet strategic goals and eliminate inefficiencies.
Objective 6.3: Create a resource development plan to align with strategic goals.
Objective 6.4: Investigate the use of technology and proven models for service delivery access in remote service regions.
Objective 6.5: Survey the Workforce Board and Local Elected Officials to identify methods for increasing engagement in workforce issues.
Objective 6.6: Increase awareness of Area IV workforce services among Local Elected Officials through marketing collateral, presentations to Councils and Boards of Supervisors, and through partnered efforts with economic development officers.
Objective 6.7: Update SVWDB website to include Workforce Board member bios and workforce service recipients' testimonials.

*Required by State Local Plan Guidelines, Virginia Workforce Letter #16-01

State of the Workforce: LWDB Area IV

Executive Summary

In support of on-going strategic planning efforts in the Shenandoah Valley Workforce Development Area (SVWDA), this report provides an assessment of the region's state of the workforce.

The principal findings from that assessment are as follows:

1) SVWDA has enjoyed steadily rising employment over the last five years:

- Total employment increased by 11,972 jobs between the second quarter of 2011 and the second quarter of 2016, or 5.8 percent.
- Almost all growth was driven by the private sector. More specifically, the largest increases in private sector employment over this period occurred in the *Health Care and Social Assistance* (up 2,513 jobs), *Transportation and Warehousing* (up 2,217 jobs), and *Accommodation and Food Services* (up 1,889 jobs) sectors.

2) SVWDA remains heavily dependent on *Manufacturing*, but is experiencing significant employment and wage growth in other sectors.

- Manufacturing is the region's largest employment sector. It accounted for 31,718 private sector jobs in the second quarter of 2016 and was the region's 5th highest paying employment sector.
- Several subsectors within the region's *Manufacturing* sector (*e.g. Petroleum and Coal Products Manufacturing; Nonmetallic Mineral Product Manufacturing; Electrical Equipment, Appliance, and Component Manufacturing; Food Manufacturing*, and *Paper Manufacturing*) are high growth industries in terms

of employment and/or wages, have disproportionately large employment and establishment footprints within the region, and are very significant export industries.

- SVWDA's *Transportation and Warehousing* sector is high growth industry in terms of both employment and wages, has a disproportionately large employment and establishment footprint within the region, and is one of the region's significant export industries.
- The majority of subsectors in the region's *Transportation and Warehousing* sector (e.g., *Couriers and Messengers, Pipeline Transportation, Support Activities for Transportation, Transit and Ground Passenger Transportation, and Warehousing and Storage*) qualify as high growth industries in terms of employment and/or wages, have disproportionately large employment and establishment footprints within the region, and, in some cases, are among the region's most significant export industries.
- All subsectors in SVWDA's *Health Care* sector (i.e., *Nursing and Residential Care Facilities, Hospitals, and Ambulatory Health Care Services*) qualify as high growth industries in terms of employment and/or wages.

3) SVWDA faces potential gaps in its pipeline of trained workers:

- Our assessment of potential gaps between the occupation-driven demand for graduates in SVWDA, and the pipeline of graduates from regional postsecondary education institutions, has shown that there are potential shortfalls of trained workers in the following occupations: Nursing Assistants; Teacher Assistants;

Industrial Machinery Mechanics; Licensed Practical and Licensed Vocational Nurses; Medical Assistants; Electricians; Child Care Workers; First-Line Supervisors of Construction Trades and Extraction; Dental Assistants; and Real Estate Sales Agents.

4) SVWDA faces demographic challenges in terms of an aging population:

- Overall population growth in SVWDA between 2000 and 2015 was comparable to the statewide norm.
- Just as at the statewide level, however, that population growth was driven by increases in the region's 65 and older population. Moreover, in SVWDA that population shift was further exacerbated by absolute losses in the region's 19 and under population.

5) In sum, SVWDA is a region that has experienced steady employment growth, remains heavily dependent upon its *Manufacturing* sector, but is also experiencing significant employment and wage growth in other key areas such as *Transportation and Warehousing* and *Health Care*.

Introduction

To aid in on-going strategic planning efforts, this report provides an assessment of the state of the workforce in the Shenandoah Valley Workforce Development Area (SVWDA).¹ The remainder of the report is divided into five sections. The *Area Profile* section provides general

¹ The Shenandoah Valley Workforce Development Area is defined to encompass the cities of Buena Vista, Harrisonburg, Lexington, Staunton, Waynesboro, Winchester, and the counties of Augusta, Bath, Clarke, Frederick, Highland, Page, Rockbridge, Rockingham, Shenandoah, and Warren.

background information on recent economic and demographic trends within SVWDA. The *Key Sectors* section augments this general information by providing additional detail on four major industries in SVWDA that have been designated by SVWDA staff as key employment sectors. Next, the *Industry Performance* section details recent performance trends in major and targeted industry sectors within SVWDA. This is followed by the *Gap Analysis* section that compares the occupation-driven demand for graduates in SVWDA with the pipeline of graduates from regional postsecondary education institutions to identify areas of potential unmet need. Finally, the *Conclusion* section provides a summary and concluding comments.

This report was commissioned by the Shenandoah Valley Workforce Development Board and produced by Mangum Economics.

Area Profile

In this section, we set the stage for the analysis to follow by providing background information on SVWDA's economic and demographic characteristics.

Employment Characteristics

Total Employment

Figure 1 details the change in total employment in SVWDA as a whole from the five-year period from the second quarter of 2011 through the second quarter of 2016. As these data show, total employment increased steadily over the period, rising from 205,894 jobs in the second quarter of 2011 to 217,866 jobs in the second quarter of 2016, for a gain 11,972 jobs over the period, or a 5.8 percent increase in total employment.

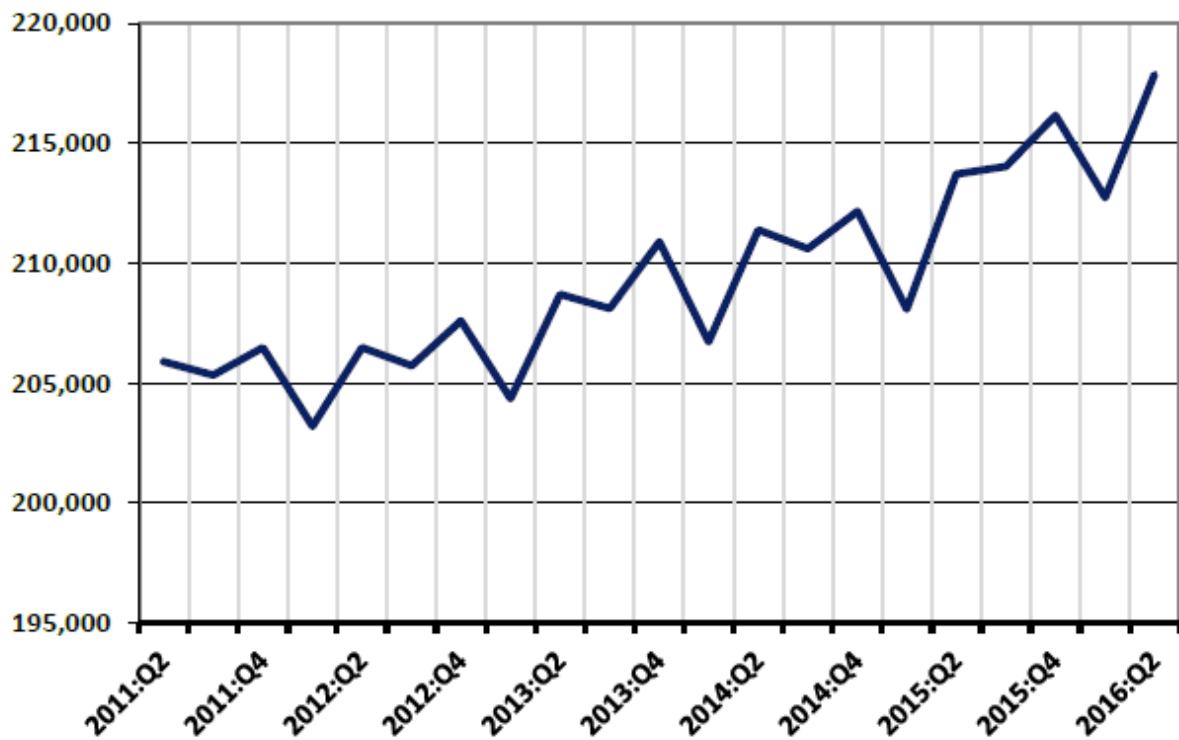


Figure 1: SVWDA Total Employment – 2011:Q2 to 2016:Q2²

Figure 2 puts these numbers in perspective by comparing year-over-year changes in employment in SVWDA 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, although SVWDA Area enjoyed positive employment growth throughout the period, that growth was subject to periods of deceleration from the fourth quarter of 2011 through the third quarter of 2012, and throughout 2014. With the exception of the most recent quarter, employment growth has since accelerated, and as of the second quarter of 2016 stood at 1.9 percent in SVWDA and 1.7 percent statewide.

² Data Source: Virginia Employment Commission, “Quarterly Census of Employment and Wages.”

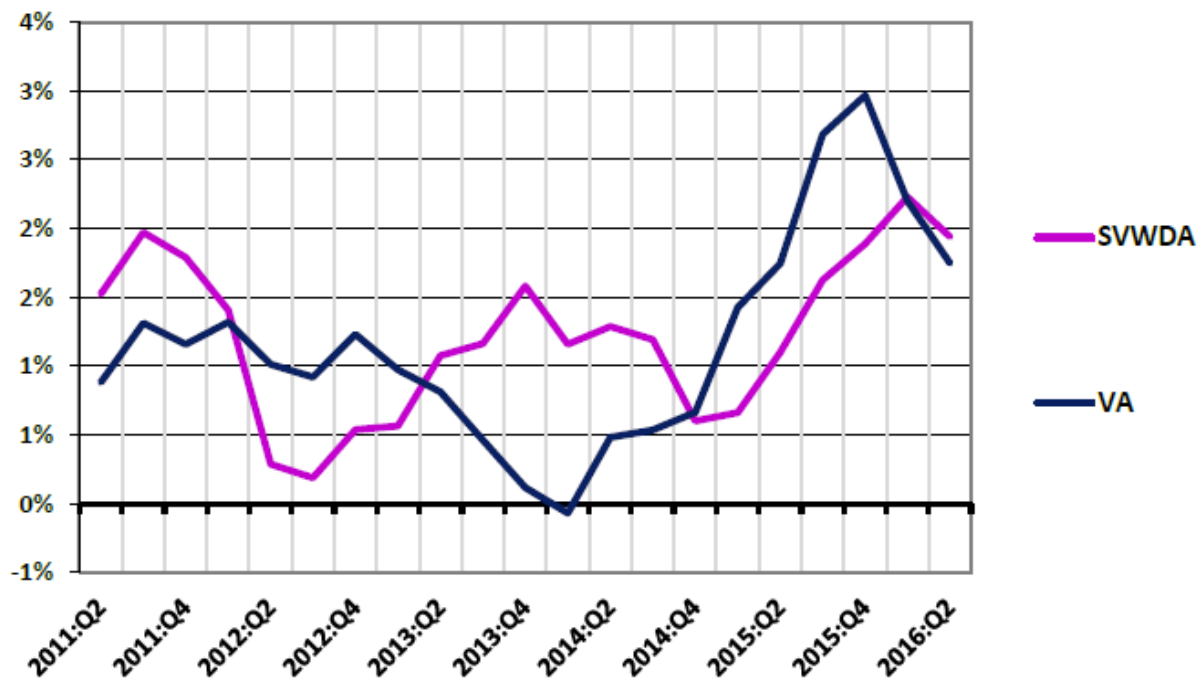


Figure 2: Year-Over-Year Change in Employment – 2011:Q2 to 2016:Q2³

Drilling down to a local level, Figure 3 provides a breakdown of the 271,866 in total employment in SVWDA in the second quarter of 2016 for each of the 16 localities that comprise SVWDA. As these data demonstrate, the City of Harrisonburg exhibited the largest employment that quarter (31,398 jobs), followed by Rockingham County (31,509 jobs), Frederick County (30,181 jobs), Augusta County (27,249 jobs), and the City of Winchester (24,912 jobs).

³ Data Source: Virginia Employment Commission, “Quarterly Census of Employment and Wages.”

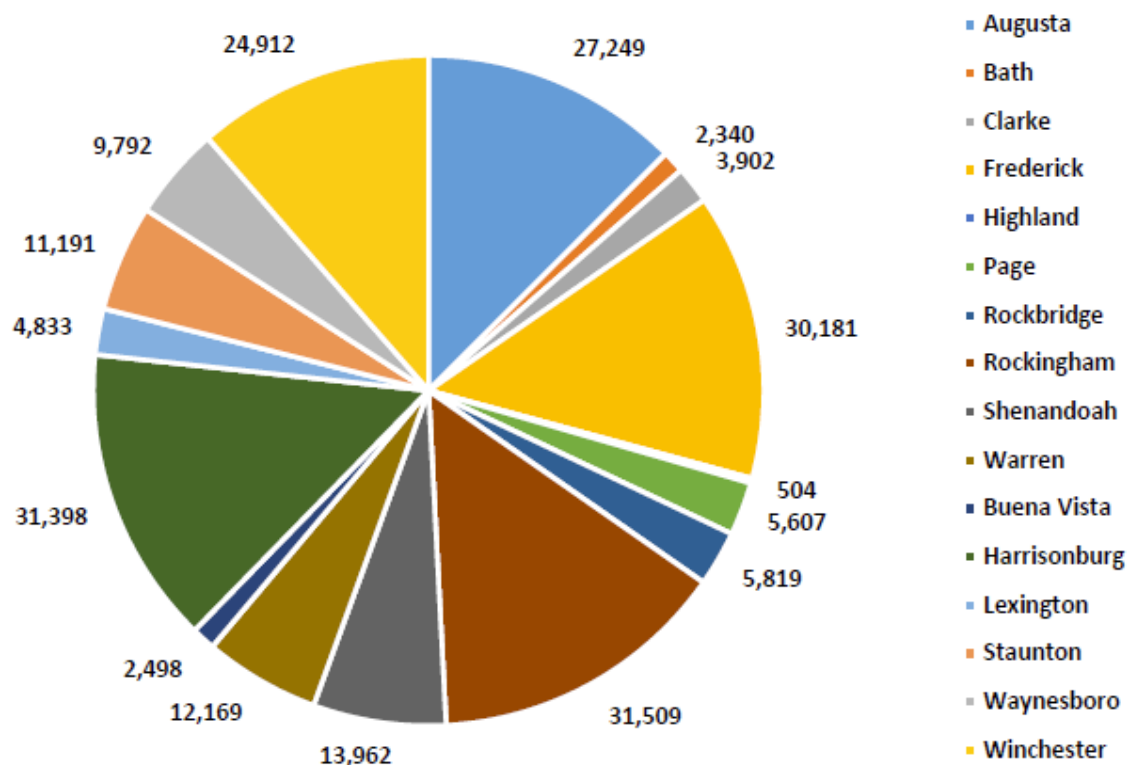


Figure 3: SVWDA Total Employment by Locality in 2016:Q2⁴

Lastly, Figures 4A and 4B respectively depict the most recent one-year and five-year total employment growth rates in SVWDA and each of its sixteen localities. As shown in Figure 4A, between the second quarter of 2015 and the second quarter of 2016 the short-term one-year increase in total employment in SVWDA was 1.9 percent and the top three fastest growing localities were Clarke County (4.0 percent), Highland County (3.5 percent), and Augusta County (3.2 percent). While as shown in Figure 4B, between the second quarter of 2011 and the second quarter of 2016 the long-term five-year increase in total employment in SVWDA was 5.8 percent and the top three fastest growing localities over that period were Frederick County (23.0 percent), the City of Buena Vista (15.6 percent), and Rockingham County (13.1 percent).

⁴ Data Source: Virginia Employment Commission, "Quarterly Census of Employment and Wages."

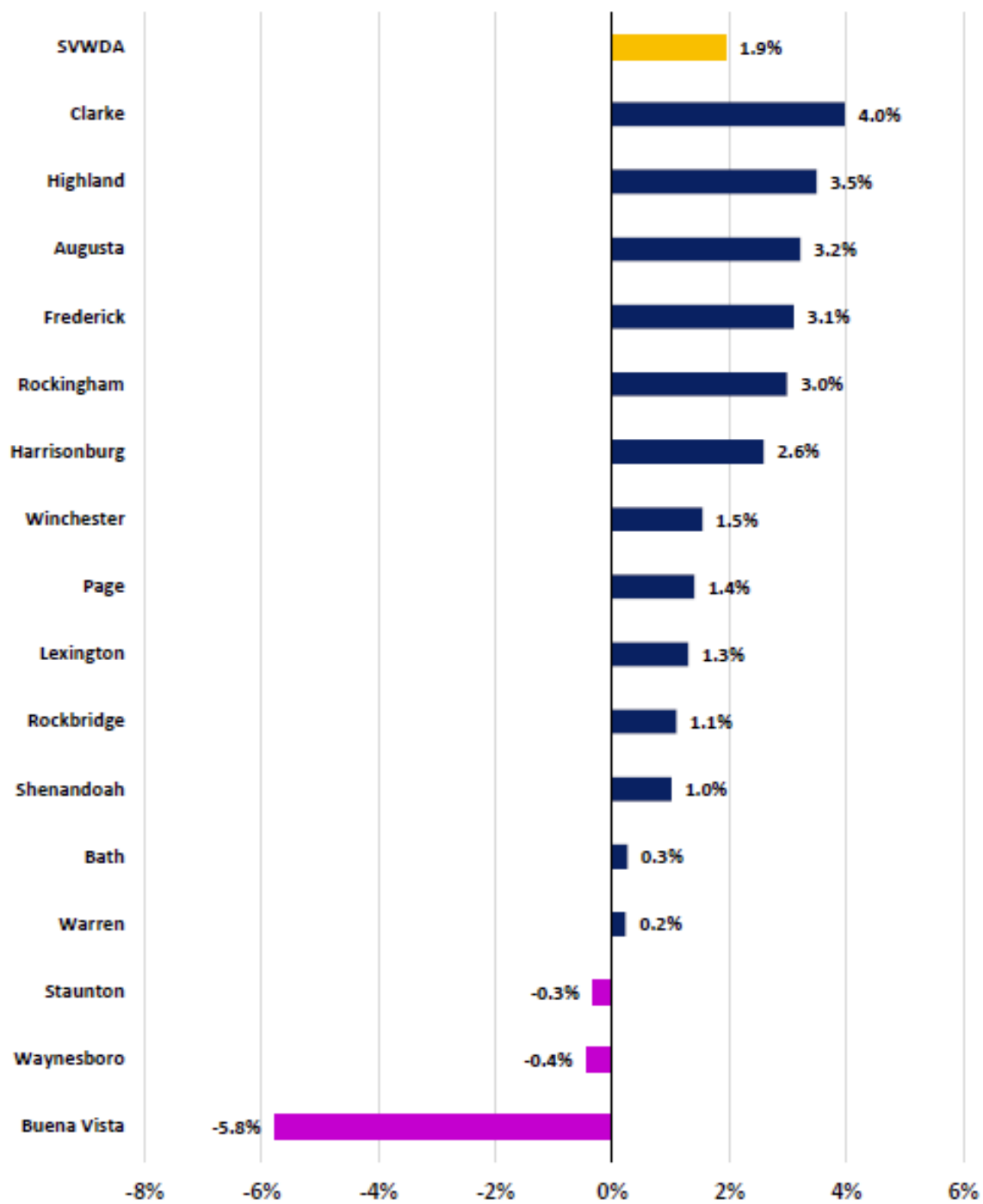


Figure 4A: One-Year Growth in Total Employment – 2015:Q2 to 2016:Q2⁵

⁵ Data Source: Virginia Employment Commission, “Quarterly Census of Employment and Wages.”

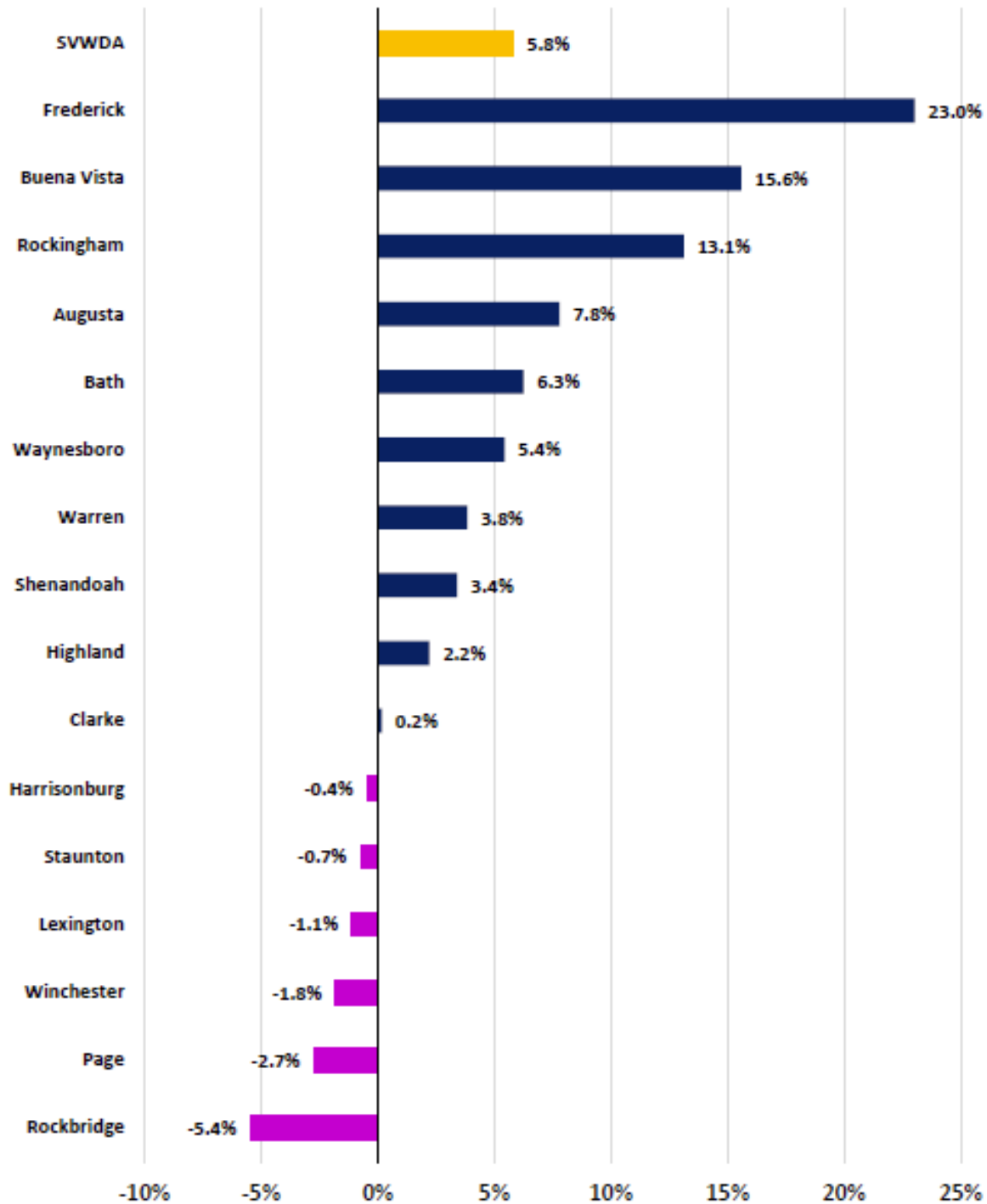


Figure 4B: Five-Year Growth in Total Employment – 2011:Q2 to 2016:Q2⁶

⁶ Data Source: Virginia Employment Commission, “Quarterly Census of Employment and Wages.”

Total Employment by Industry Size

In this portion of the section, we look at total employment in terms of small versus large businesses, where small businesses are defined as having less than 50 employees and large businesses are defined as having 50 or more employees. Figure 5 depicts the distribution of total employment in SVWDA in the second quarter of 2016 by small versus large businesses and compares those proportions to data for the state of Virginia. As these data show, small businesses accounted for a larger proportion of SVWDA's total employment that quarter (42 percent) than was typical at the statewide level (39 percent).

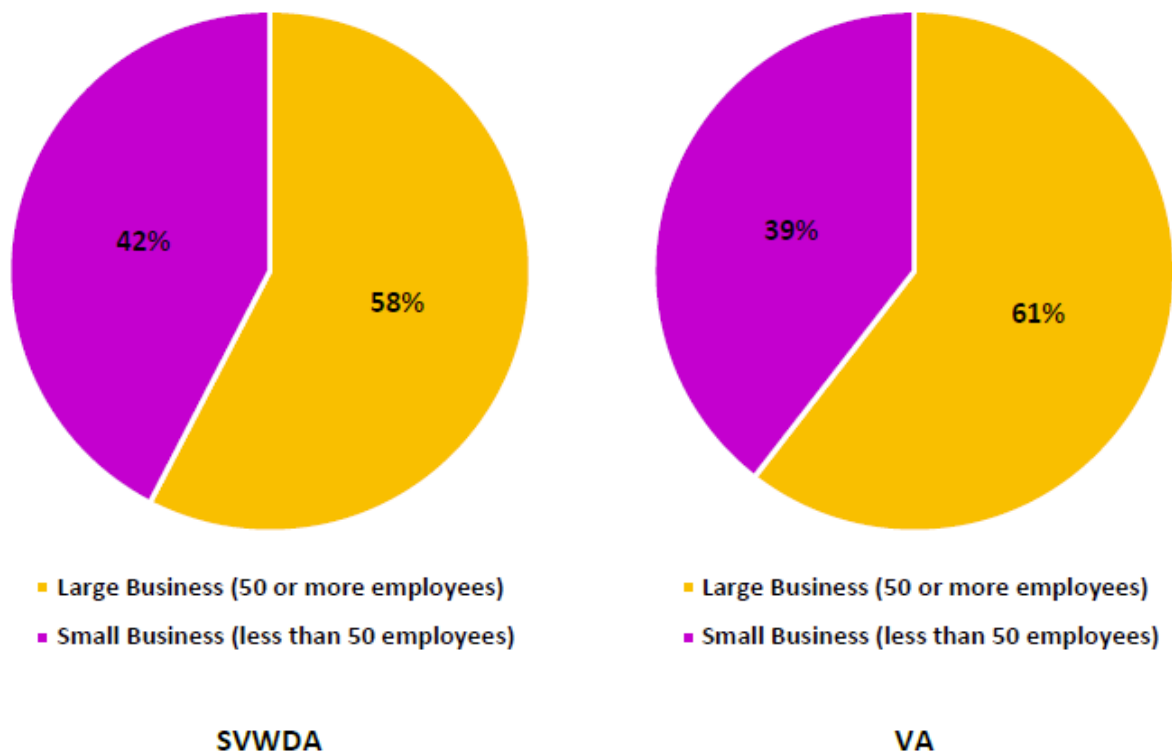


Figure 5: Total Employment by Industry Size in 2016:Q2⁷

⁷ Data Source: Virginia Employment Commission, "Establishments by Size Class."

Figure 6 provides additional data on the relative contributions of small and large businesses to the one-year and five-year growth in total employment in SVWDA and benchmarks those data against the state of Virginia. What these data show is that, just as total employment was more evenly split between small and large businesses in SVWDA than at the statewide level, these difference classes of business size also contributed more evenly to total employment growth in SVWDA than at the statewide level.

In SVWDA, small businesses were responsible for generating 49 percent of total employment growth between the second quarter of 2015 to second quarter of 2016, and 52 percent of total employment growth between the second quarter of 2011 to second quarter of 2016. In contrast, at the statewide level employment growth was much more dependent on small businesses, even though they comprised a smaller proportion of the overall employment picture. In Virginia as a whole, small businesses were responsible for generating 59 percent of total employment growth between the second quarter of 2015 to second quarter of 2016, and 53 percent of total employment growth between the second quarter of 2011 to second quarter of 2016.

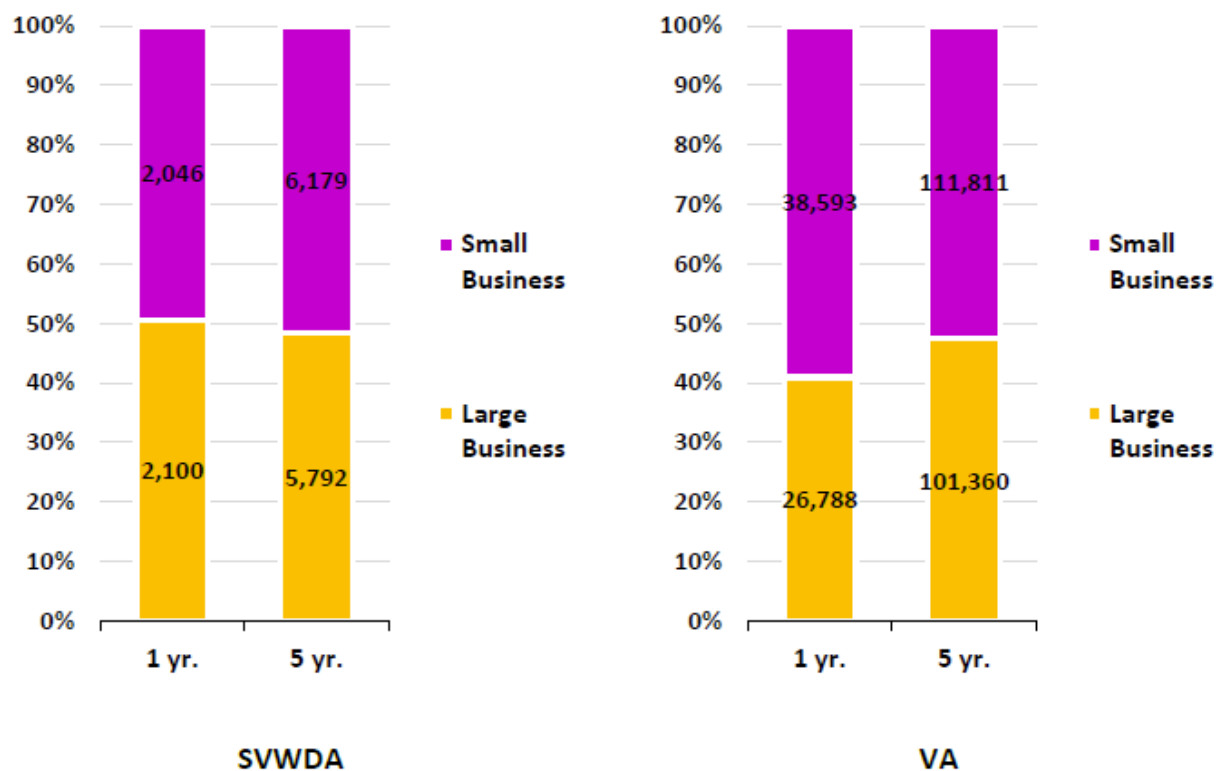


Figure 6: One-Year and Five-Year Change in Total Employment by Industry Size⁸

Total Employment by Ownership Category

In this portion of the section, we provide a break-down of total employment in SVWDA in the second quarter of 2016 by ownership category. As the data depicted in Figure 7 show, the private sector accounted for 181,728 jobs (or 83 percent) of the region’s total employment of 217,866 that quarter, while the government sector accounted for 36,138 jobs (or 17 percent). As depicted in Figure 8, average wages across all sectors were \$746 per week in the first quarter of 2016, \$737 per week in the private sector, and \$792 per week in the government sector.

⁸ *Data Source:* Virginia Employment Commission, “Establishments by Size Class.”

Lastly, Figures 9A and 9B respectively depict the one-year and five-year change in employment in each of these ownership categories in SVWDA. As shown in Figure 9A, total employment in SVWDA increased by 4,147 jobs between the second quarter of 2015 and the second quarter of 2016, with the private sector experiencing a net gain of 4,301 jobs and the government sector experiencing a net loss of 155 jobs. While as shown in Figure 9B, total employment in SVWDA increased by 11,972 jobs between the second quarter of 2011 and the second quarter of 2016, with the private sector experiencing a net gain of 11,705 jobs and the government sector experiencing a net gain of 267 jobs.

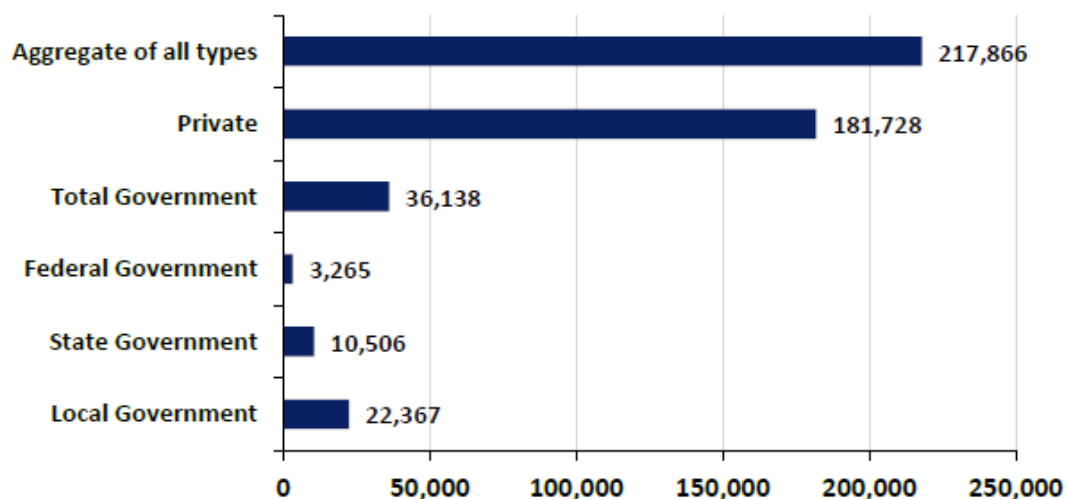


Figure 7: SVWDA Total Employment by Ownership Category, 2016:Q2⁹

⁹ Data Source: Virginia Employment Commission, "Quarterly Census of Employment and Wages."

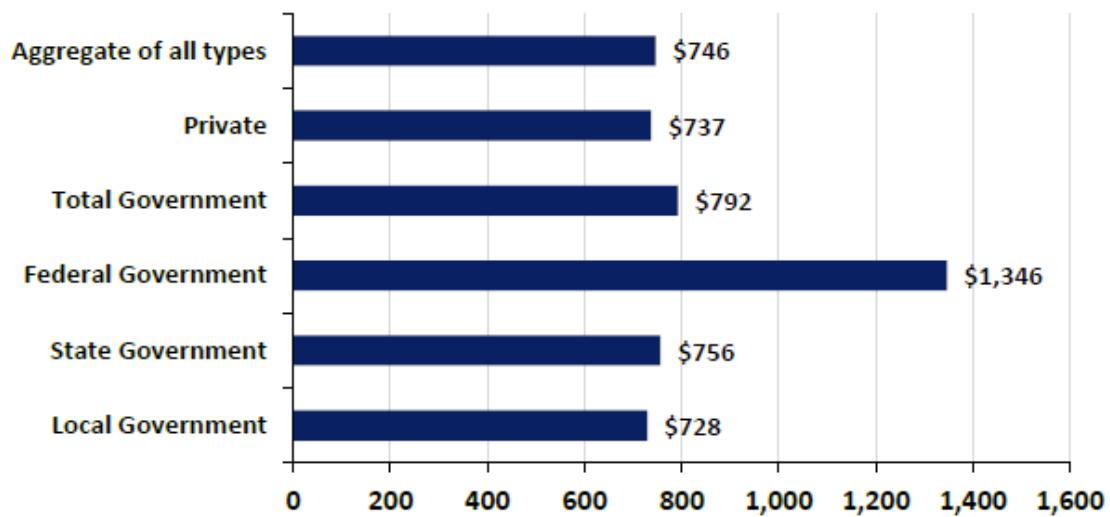


Figure 8: SVWDA Average Weekly Wages by Ownership Category, 2016:Q2¹⁰

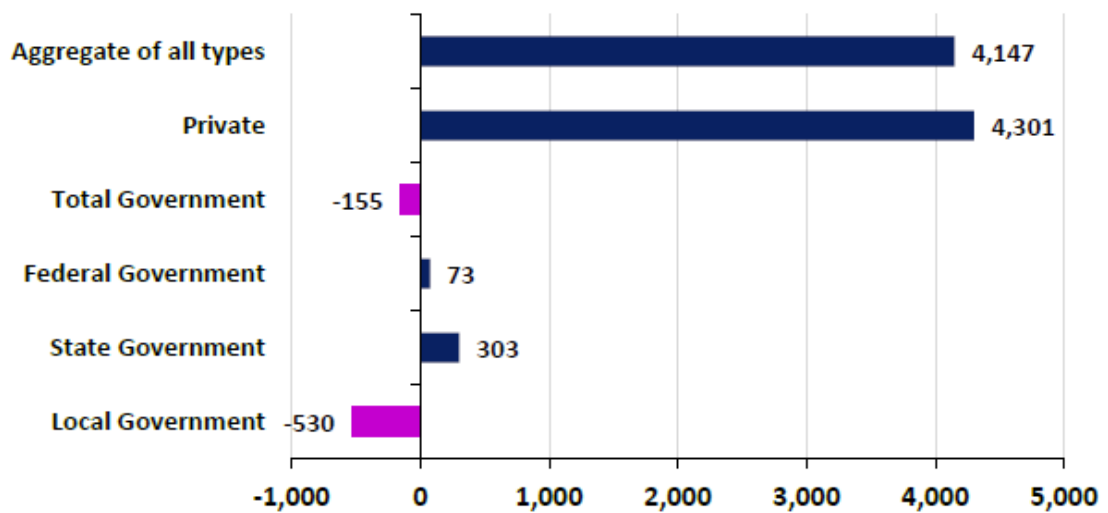


Figure 9A: SVWDA One-Year Change in Total Employment by Ownership Category, 2015:Q2 to 2016:Q2¹¹

¹⁰ Data Source: Virginia Employment Commission, "Quarterly Census of Employment and Wages."

¹¹ Data Source: Virginia Employment Commission, "Quarterly Census of Employment and Wages."

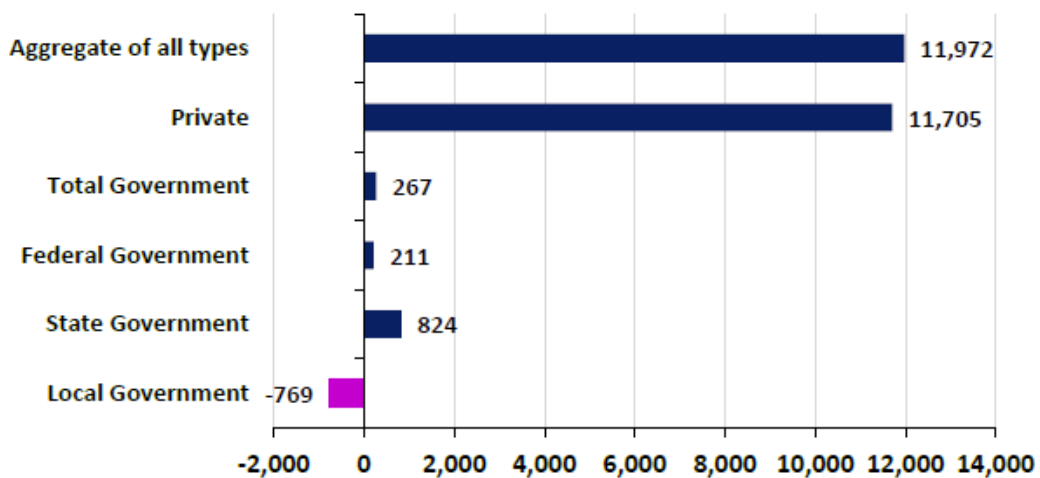


Figure 9B: SVWDA Five-Year Change in Total Employment by Ownership Category, 2011:Q2 to 2016:Q2¹²

Private Employment by Major Industry Sector

To provide a better understanding of the factors underlining some of the changes in total employment described earlier, in this portion of the section we provide a drill down for private employment by major industry sector. Figure 10 depicts private employment by major industry sector in SVWDA in the second quarter of 2016. As these data indicate, Manufacturing was the largest employment sector in SVWDA that quarter, accounting for 31,718 jobs or 18 percent of total private sector employment. Health Care and Social Assistance ranked second with 27,532 jobs (16 percent of total private sector employment), Retail Trade third with 26,741 jobs (15 percent), Accommodation and Food Services fourth with 23,134 jobs (13 percent), and Transportation and Warehousing fifth with 11,049 jobs (6 percent). Recall from Figure 7 that total private employment in SVWDA in the second quarter of 2016 was 181,728 jobs.

¹² Data Source: Virginia Employment Commission, "Quarterly Census of Employment and Wages."

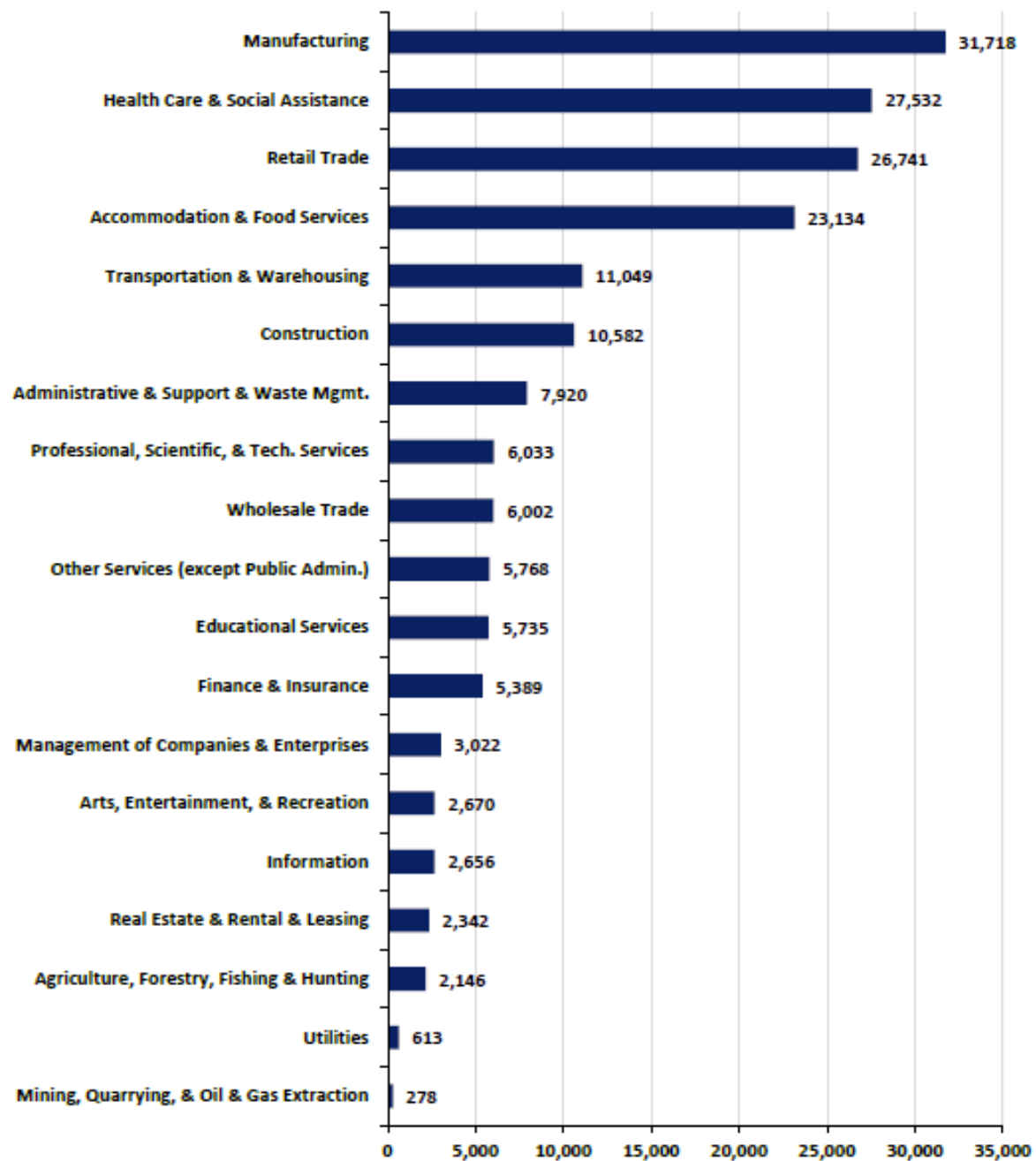


Figure 10: SVWDA Private Employment by Major Industry Category, 2016:Q2¹³

¹³ Data Source: Virginia Employment Commission, "Quarterly Census of Employment and Wages."

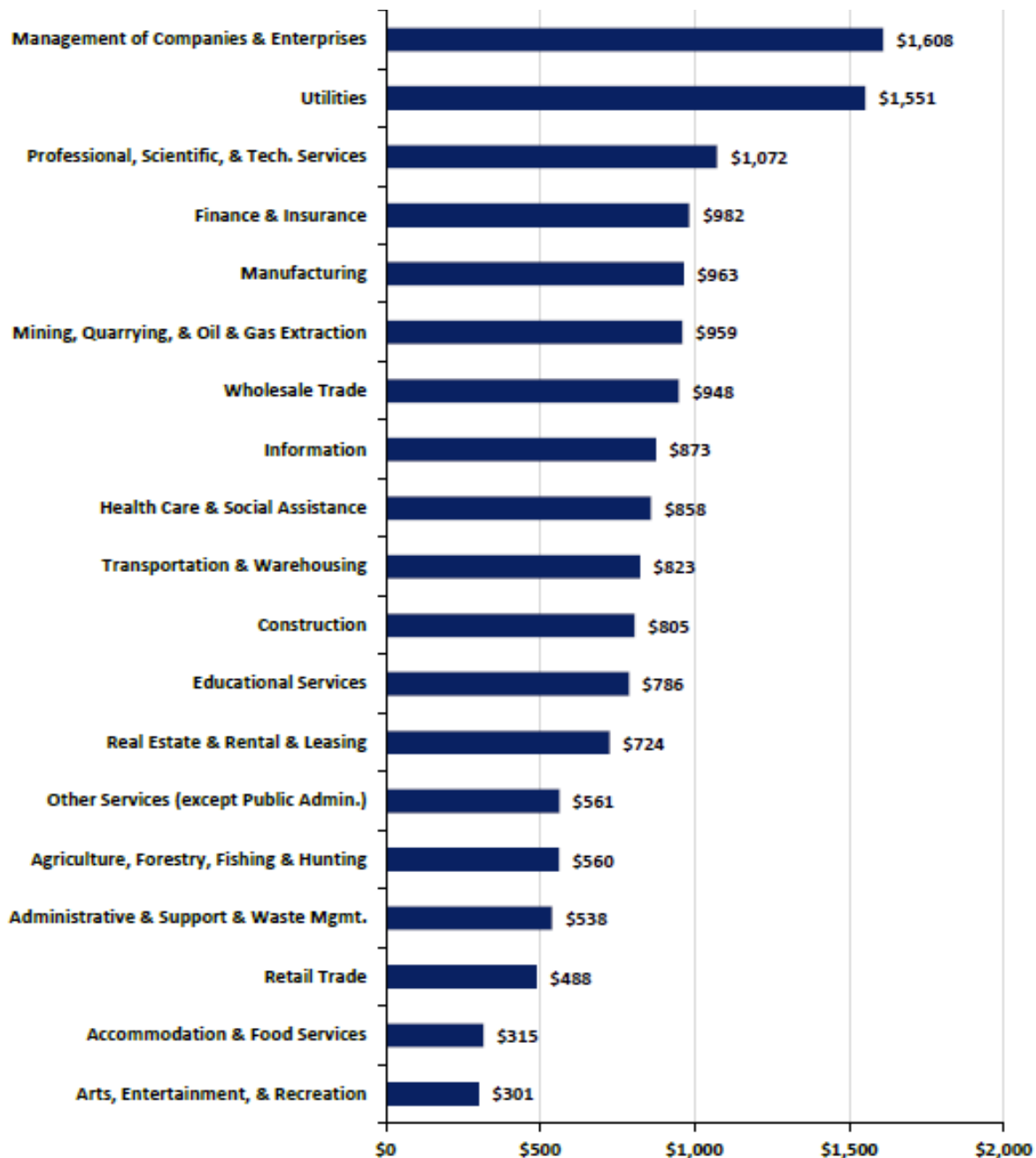


Figure 11: SVWDA Private Average Weekly Wages by Major Industry Category, 2016:Q2¹⁴

¹⁴ Data Source: Virginia Employment Commission, "Quarterly Census of Employment and Wages."

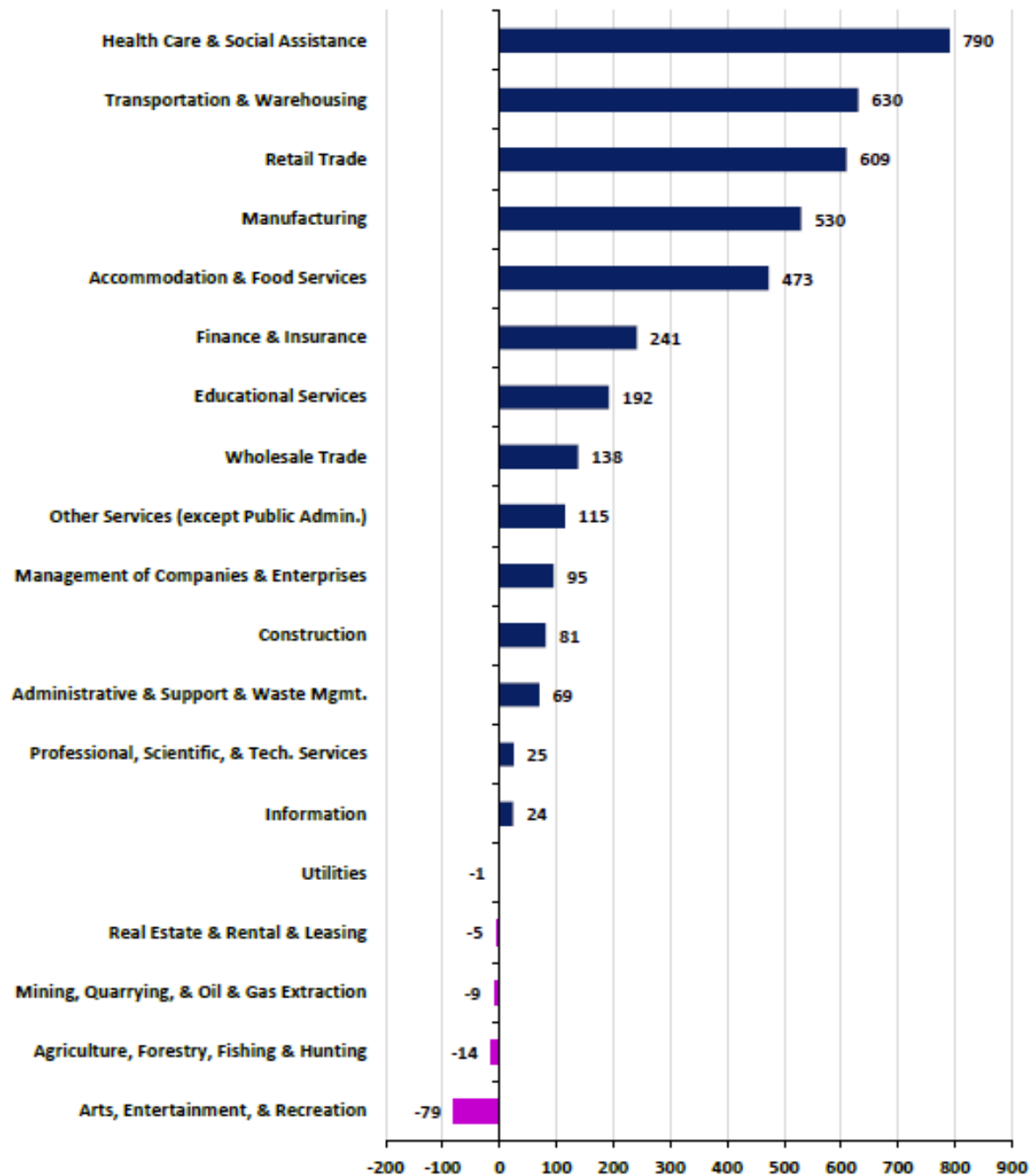


Figure 12A: SVWDA One-Year Change in Private Employment by Major Industry Category, 2015:Q2 to 2016:Q2¹⁵

¹⁵ Data Source: Virginia Employment Commission, "Quarterly Census of Employment and Wages."

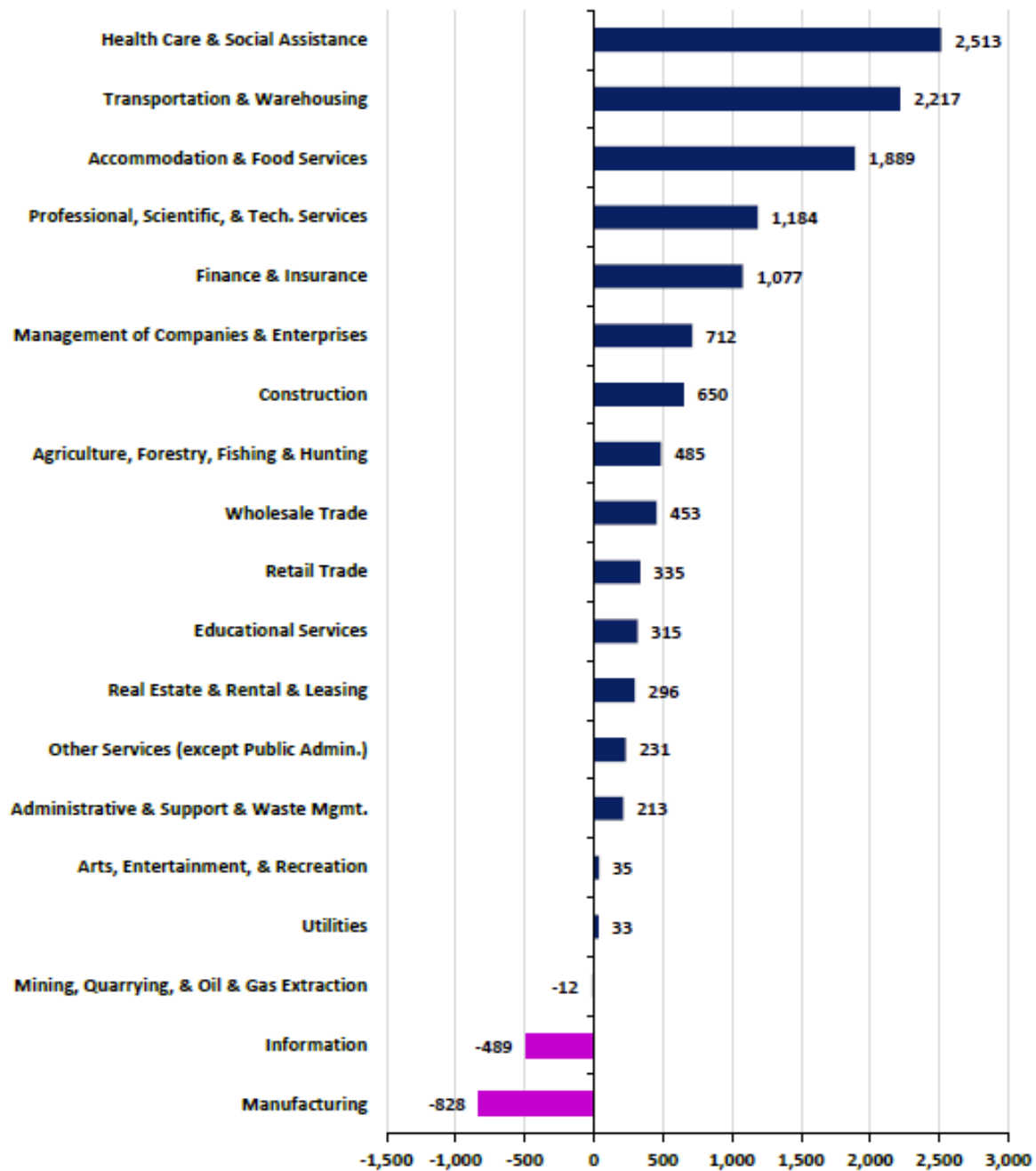


Figure 12B: SVWDA Five-Year Change in Private Employment by Major Industry Category, 2011:Q2 to 2016:Q2¹⁶

¹⁶ Data Source: Virginia Employment Commission, "Quarterly Census of Employment and Wages."

Figure 11 provides similar information for private sector average weekly wages by major industry category. As these data show, *Management of Companies and Enterprises* was the highest paying employment sector in SVWDA in the second quarter of 2016, with average weekly wages of \$1,608. *Utilities* ranked second with average weekly wages of \$1,551, *Professional, Scientific, and Technical Services* third at \$1,072 per week, *Finance and Insurance* fourth at \$982 per week, and *Manufacturing* fifth at \$963 per week. To put these numbers in perspective, recall from Figure 8 that the average weekly wage across all private industry sectors in the Shenandoah Valley Workforce Development Area was \$737 in the second quarter of 2016.

Figure 12A depicts the private employment gain by major industry sector in SVWDA between the second quarter of 2015 and the second quarter of 2016 in SVWDA. Overall over this one-year period, SVWDA gained a total of 4,301 private sector jobs. As shown in Figure 12A, the largest employment gains occurred in *Health Care and Social Assistance* (up 790 jobs), *Transportation and Warehousing* (up 630 jobs), and *Retail Trade* (up 609 jobs). At the other end of the spectrum, the largest one-year employment losses occurred in *Arts, Entertainment, and Recreation* (down 79 jobs), *Agriculture* (down 14 jobs), and *Mining* (down 9 jobs).

Similarly, Figure 12B depicts the employment gain by major industry category in SVWDA between the second quarter of 2011 and the second quarter of 2016 in SVWDA. During this five-year period, SVWDA gained a total of 11,705 private sector jobs, with the largest increases occurring in *Health Care and Social Assistance* (up 2,513 jobs), *Transportation and Warehousing* (up 2,217 jobs), and *Accommodation and Food Services* (up

1,889 jobs). At the other end of the spectrum, the largest five-year employment losses occurred in *Manufacturing* (down 828 jobs), *Information* (down 489 jobs), and *Mining* (down 12 jobs).

Unemployment

In this portion of the section we review recent unemployment trends in SVWDA. Figure 13 depicts the monthly unemployment rate in SVWDA from November of 2011 through November of 2016 and benchmarks those numbers against the state of Virginia. As these data show, unemployment rates slowly, but steadily, declined throughout the period in both jurisdictions. In addition, unemployment rates in the SVWDA have very closely tracked the statewide unemployment rate, particularly since the beginning of 2013. As of November 2016, unemployment stood at 3.9 percent in SVWDA and 4.0 percent statewide in Virginia.

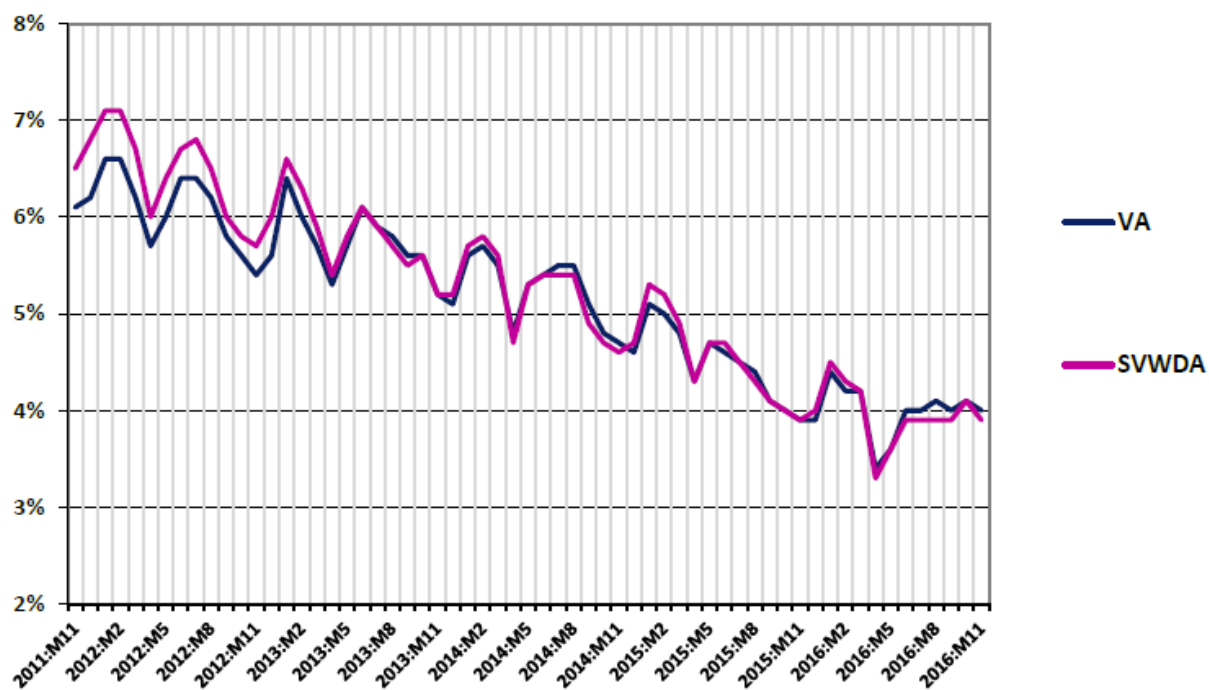


Figure 13: Unemployment Rate, November 2011 to November 2016¹⁷

Drilling down to a local level, Figure 14 provides a breakdown of the November 2016 unemployment rates for each of the sixteen localities that comprise SVWDA. As these data demonstrate, the City of Lexington exhibited the largest unemployment rate that month (6.3 percent), followed by the City of Buena Vista (4.9 percent), and Rockbridge County (4.5 percent). At the other end of the spectrum, the lowest unemployment rates that month were in Frederick County (3.3 percent), Rockingham County (3.4 percent) and Highland County (3.4 percent).

¹⁷ Data Source: Virginia Employment Commission, "Local Area Unemployment Statistics."

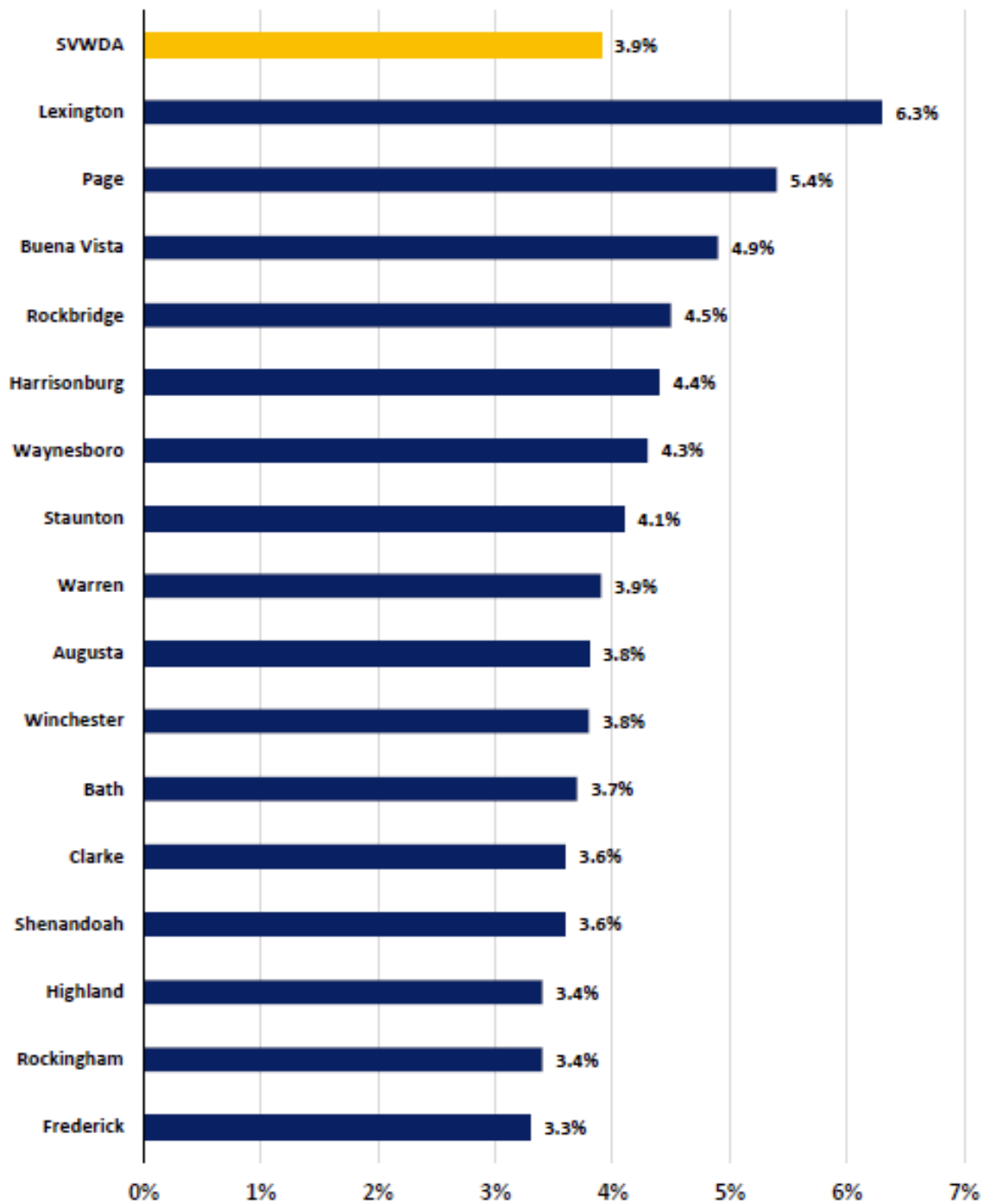


Figure 14: SVWDA Unemployment Rate by Locality – November 2016 ¹⁸

¹⁸ Data Source: Virginia Employment Commission, "Local Area Unemployment Statistics."

Lastly, Figures 15A through 15C provide key characteristics of the unemployed in SVWDA in November of 2016. As these data show, those individuals were predominantly white (86 percent), 45 years of age or older (56 percent), and possessed only a high school education or less (62 percent).

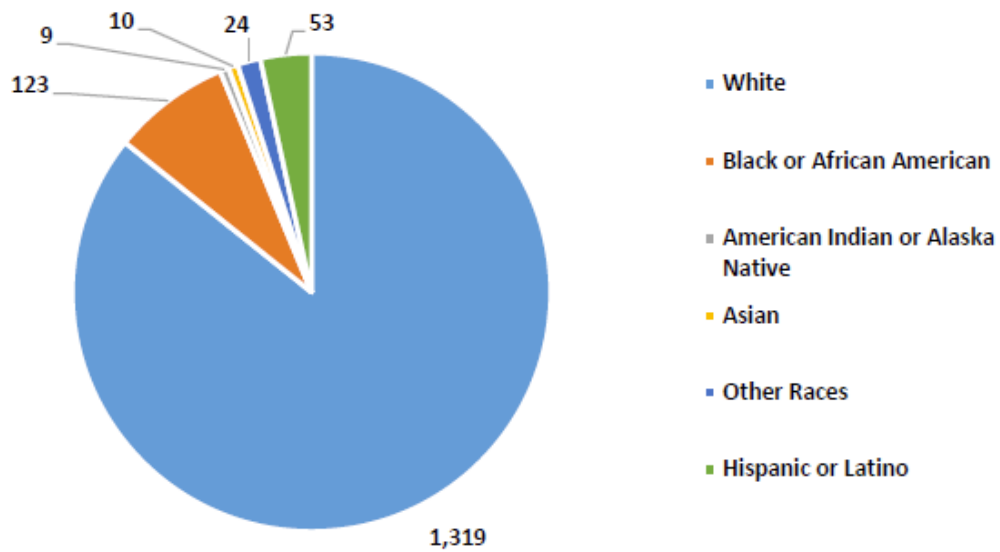


Figure 15A: Characteristics of the Unemployed in SVWDA in November 2016 – Race¹⁹

¹⁹ Data Source: Virginia Employment Commission, “Local Unemployment Statistics.”

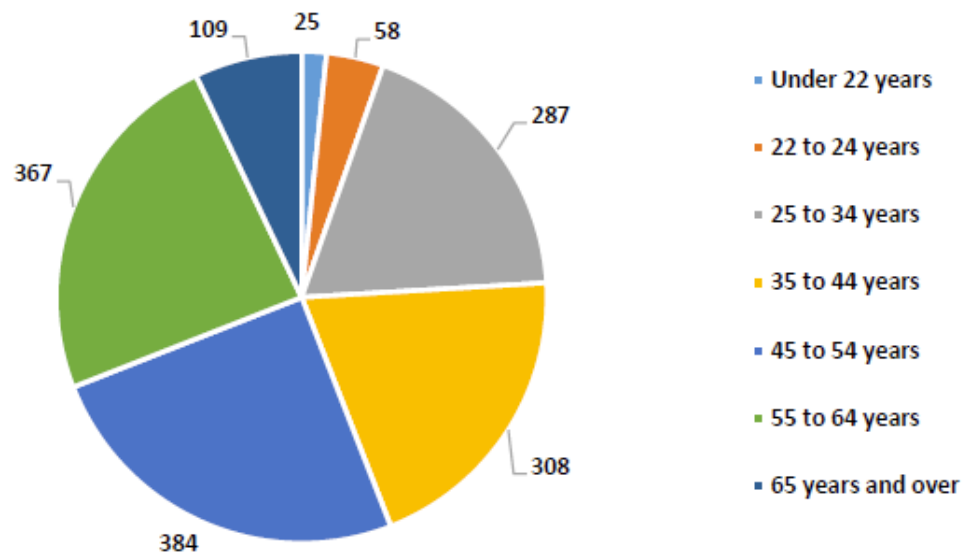


Figure 15B: Characteristics of the Unemployed in SVWDA in November 2016 – Age²⁰

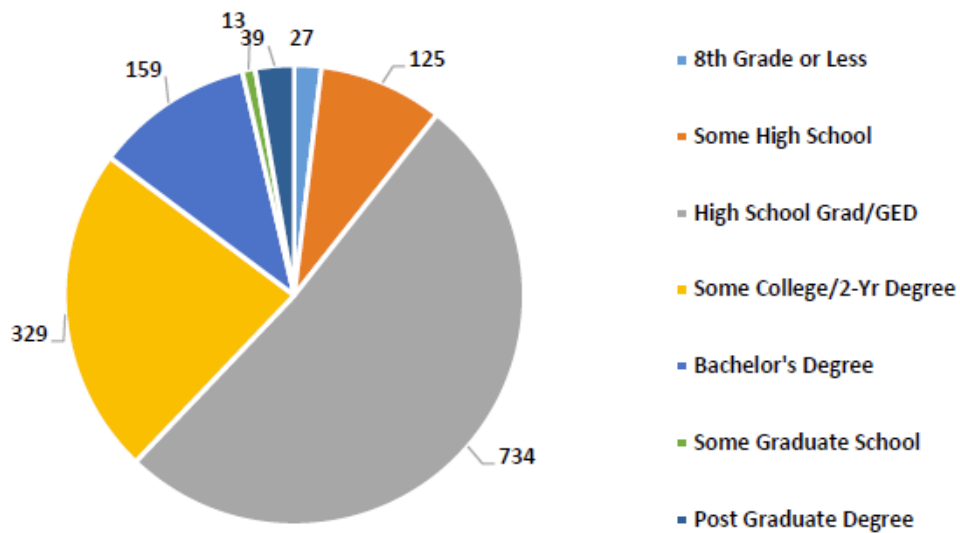


Figure 15B: Characteristics of the Unemployed in SVWDA in November 2016 – Educational Attainment²¹

²⁰ Data Source: Virginia Employment Commission, "Local Unemployment Statistics."

²¹ Data Source: Virginia Employment Commission, "Local Unemployment Statistics."

Demographic Characteristics

Population Characteristics in 2015

Tables 1A and 1B provide an age breakdown of the population in SVWDA and the sixteen localities that it encompasses in 2015. As these data demonstrate, overall the age distribution in the SVWDA tended to mirror that of the state of Virginia as a whole that year. At the local level, however, the population of Bath County (56 percent 45 and older), Clarke County (51 percent 45 and older), Highland County (69 percent 45 and older), and Rockbridge County (54 percent 45 and older) tended to be older than that of SVWDA (43 percent 45 and older) or the state of Virginia as a whole (40 percent 45 and older). While driven by university student enrollments, the population of the City of Harrisonburg (77 percent 44 and younger) and the City of Lexington (78 percent 44 and younger) tended to be younger than that of SVWDA (57 percent 44 and younger) or the state of Virginia as a whole (59 percent 44 and younger).

Tables 2A and 2B provide a similar breakdown of the 2015 population by race and ethnicity. As these data indicate, in 2015 the population of the Shenandoah Valley was less diverse than the statewide norm, with an 85 percent majority white population as compared to 63 percent at the statewide level. At the local level, the most diverse localities within SVWDA in 2015 were the City of Harrisonburg (69 percent white) and the City of Winchester (68 percent white). These were also the localities with SVWDA's proportionally largest Hispanic populations – 18 percent in the City of Harrisonburg and 16 percent in the City of Winchester.

Table 1A: 2015 SVWDA Population by Age – Absolute²²

Locality	0 to 19	20 to 44	45 to 64	65+	Total
Augusta County	16,598	21,327	22,577	13,551	74,053
Bath County	975	1,076	1,498	1,034	4,583
Clarke County	3,489	3,560	4,565	2,685	14,299
Frederick County	21,197	25,218	23,105	11,820	81,340
Highland County	348	353	780	763	2,244
Page County	5,412	6,768	7,054	4,609	23,843
Rockbridge County	4,432	5,759	6,989	5,264	22,444
Rockingham County	20,042	22,444	21,729	13,570	77,785
Shenandoah County	9,857	12,018	12,437	8,412	42,724
Warren County	9,820	11,727	11,510	5,424	38,481
Buena Vista	1,824	2,299	1,472	1,071	6,666
Harrisonburg	15,209	24,242	7,924	4,013	51,388
Lexington	2,157	3,311	781	822	7,071
Staunton	5,412	7,656	6,276	4,849	24,193
Waynesboro	5,297	6,801	5,266	3,786	21,150
Winchester	7,107	9,130	7,041	3,890	27,168
SVWDA	129,176	163,689	141,004	85,563	519,432
Virginia	2,098,628	2,840,713	2,215,628	1,101,661	8,256,630

²² *Data Source:* U.S. Census Bureau, “American Community Survey.” It is important to point out that, unlike the decennial census, the annual American Community Survey is indeed a survey. In 2015, only about 1.6 percent of Virginia households were included in the American Community Survey. As a result, the smaller a locality, the more likely this survey is to undercount small subpopulations.

Table 1B: 2015 SVWDA Population by Age – Percentage²³

Locality	0 to 19	20 to 44	45 to 64	65+	Total
Augusta County	22%	29%	30%	18%	100%
Bath County	21%	23%	33%	23%	100%
Clarke County	24%	25%	32%	19%	100%
Frederick County	26%	31%	28%	15%	100%
Highland County	16%	16%	35%	34%	100%
Page County	23%	28%	30%	19%	100%
Rockbridge County	20%	26%	31%	23%	100%
Rockingham County	26%	29%	28%	17%	100%
Shenandoah County	23%	28%	29%	20%	100%
Warren County	26%	30%	30%	14%	100%
Buena Vista	27%	34%	22%	16%	100%
Harrisonburg	30%	47%	15%	8%	100%
Lexington	31%	47%	11%	12%	100%
Staunton	22%	32%	26%	20%	100%
Waynesboro	25%	32%	25%	18%	100%
Winchester	26%	34%	26%	14%	100%
SVWDA	25%	32%	27%	16%	100%
Virginia	25%	34%	27%	13%	100%

²³ *Data Source:* U.S. Census Bureau, “American Community Survey.” It is important to point out that, unlike the decennial census, the annual American Community Survey is indeed a survey. In 2015, only about 1.6 percent of Virginia households were included in the American Community Survey. As a result, the smaller a locality, the more likely this survey is to undercount small subpopulations.

Table 2A: 2015 SVWDA Population by Race and Ethnicity – Absolute²⁴

Locality	White	Black	Hispanic	Asian	Other	Total
Augusta County	67,951	2,939	1,749	430	984	74,053
Bath County	4,179	157	159	0	88	4,583
Clarke County	12,496	784	581	124	314	14,299
Frederick County	69,273	3,587	5,877	1,143	1,460	81,340
Highland County	2,233	0	0	0	11	2,244
Page County	22,569	381	426	123	344	23,843
Rockbridge County	20,927	637	337	157	386	22,444
Rockingham County	70,230	1,395	4,586	550	1,024	77,785
Shenandoah County	38,050	904	2,886	219	665	42,724
Warren County	33,831	1,530	1,509	401	1,210	38,481
Buena Vista	5,927	70	91	473	105	6,666
Harrisonburg	35,479	3,358	9,110	2,105	1,336	51,388
Lexington	5,331	761	273	486	220	7,071
Staunton	19,749	2,890	635	249	670	24,193
Waynesboro	16,526	2,496	1,421	204	503	21,150
Winchester	18,444	2,824	4,430	652	818	27,168
SVWDA	443,195	24,713	34,070	7,316	10,138	519,432
Virginia	5,237,848	1,560,316	709,156	489,610	478,873	8,256,630

²⁴ *Data Source:* U.S. Census Bureau, “American Community Survey.” It is important to point out that, unlike the decennial census, the annual American Community Survey is indeed a survey. In 2015, only about 1.6 percent of Virginia households were included in the American Community Survey. As a result, the smaller a locality, the more likely this survey is to undercount small subpopulations.

Table 2B: 2015 SVWDA Population by Race and Ethnicity – Percentage²⁵

Locality	White	Black	Hispanic	Asian	Other	Total
Augusta County	92%	4%	2%	1%	1%	100%
Bath County	91%	3%	3%	0%	2%	100%
Clarke County	87%	5%	4%	1%	2%	100%
Frederick County	85%	4%	7%	1%	2%	100%
Highland County	100%	0%	0%	0%	0%	100%
Page County	95%	2%	2%	1%	1%	100%
Rockbridge County	93%	3%	2%	1%	2%	100%
Rockingham County	90%	2%	6%	1%	1%	100%
Shenandoah County	89%	2%	7%	1%	2%	100%
Warren County	88%	4%	4%	1%	3%	100%
Buena Vista	89%	1%	1%	7%	2%	100%
Harrisonburg	69%	7%	18%	4%	3%	100%
Lexington	75%	11%	4%	7%	3%	100%
Staunton	82%	12%	3%	1%	3%	100%
Waynesboro	78%	12%	7%	1%	2%	100%
Winchester	68%	10%	16%	2%	3%	100%
SVWDA	85%	5%	7%	1%	2%	100%
Virginia	63%	19%	9%	6%	3%	100%

²⁵ *Data Source:* U.S. Census Bureau, “American Community Survey.” It is important to point out that, unlike the decennial census, the annual American Community Survey is indeed a survey. In 2015, only about 1.6 percent of Virginia households were included in the American Community Survey. As a result, the smaller a locality, the more likely this survey is to undercount small subpopulations.

Population Growth between 2010 and 2015

Figure 16 depicts the overall growth in population between 2010 and 2015 in SVWDA and the sixteen localities that it encompasses, and benchmarks those data against population growth in the state of Virginia. Overall over this period, total population growth in SVWDA (2 percent) was relatively close to that for the state of Virginia as a whole (3 percent). At the local level, the largest population increases occurred in the City of Harrisonburg (5 percent), the City of Winchester (4 percent), and Frederick County (4 percent). While at the other end of the spectrum, both Highland County and Bath County experienced a 3 percent decline in population over the period.

Tables 3A and 3B break these overall growth rates down into the age cohorts displayed earlier in Figures 1A and 2B. With regard to absolute change, as these data show SVWDA's total population increased by 10,698 over this period, with the largest absolute gains occurring in Frederick County (up 3,035), the City of Harrisonburg (up 2,474), and Rockingham County (up 1,471). While at the other end of the spectrum, both Bath County (down 148) and Highland County (down 77) experienced population declines over the period.

The most striking feature of these data, however, is that both in SVWDA and the state of Virginia population increases between 2010 and 2015 were driven by increases in the 65 and older population. At a local level in SVWDA, the largest increases in this age cohort occurred in Frederick County (up 1,866), Augusta County (up 1,712) and Rockingham County (up 1,606). Moreover, this age shift was further exacerbated in SVWDA by an absolute decline in the area's 19 and under population. More specifically, this age cohort declined by 988 in Augusta County, 445 in Frederick County, 342 in Shenandoah County, 323 in Warren County, 296 in Rockingham

County, 278 in Rockbridge County, 101 in the City of Waynesboro, 36 in Highland County, and 25 in Clarke County.

Similarly, Tables 4A and 4B break the region's overall population growth down into the race and ethnicity categories that were shown in Tables 2A and 2B. In this case, the most interesting feature of these data is that most of SVWDA's 10,698 population growth between 2000 and 2015 was driven by two race/ethnicity categories specifically – the area's Hispanic population increased by 4,145 (with the largest portion of that increase occurring in the City of Harrisonburg), and the area's Asian population increased by 2,720 (with the largest portion of that increase occurring in Frederick County).

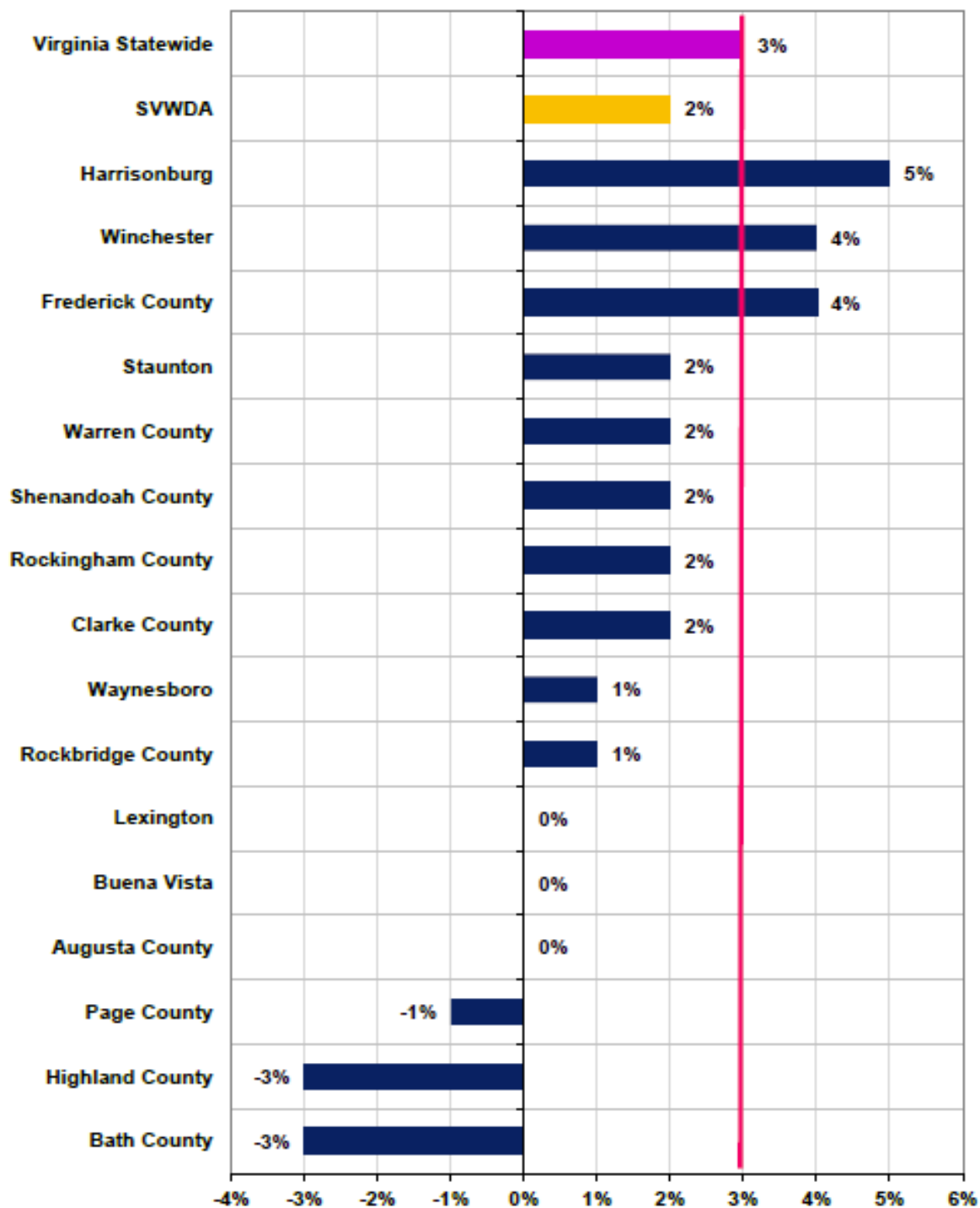


Figure 16: 2010 to 2015 Population Growth²⁶

²⁶ *Data Source:* U.S. Census Bureau, “2010 Census” and “American Community Survey.” It is important to point out that, unlike the decennial census, the annual American Community Survey is indeed a survey. 1.6 percent of Virginia households were included in the American Community Survey. As a result, the smaller a locality, the more likely this survey is to undercount small subpopulations.

Table 3A: 2010 to 2015 Population Growth by Age – Absolute Change²⁷

Locality	0 to 19	20 to 44	45 to 64	65+	Total
Augusta County	-988	-145	-276	1,712	303
Bath County	65	-175	-20	-18	-148
Clarke County	-25	45	-153	398	265
Frederick County	-445	392	1,222	1,866	3,035
Highland County	-36	-121	-104	184	-77
Page County	-435	-586	264	484	-273
Rockbridge County	-278	-184	-45	644	137
Rockingham County	-296	-73	234	1,606	1,471
Shenandoah County	-342	112	317	644	731
Warren County	-323	121	464	644	906
Buena Vista	75	149	-211	3	16
Harrisonburg	1,169	281	1,044	-20	2,474
Lexington	266	357	-339	-255	29
Staunton	67	366	-145	159	447
Waynesboro	-101	147	-121	219	144
Winchester	232	-171	690	214	965
Shenandoah Valley	-1,395	515	2,821	8,484	10,425
Virginia	14,943	69,275	46,664	124,724	255,606

²⁷ *Data Source:* U.S. Census Bureau, “2010 Census” and “American Community Survey.” It is important to point out that, unlike the decennial census, the annual American Community Survey is indeed a survey. In 2015, only about 1.6 percent of Virginia households were included in the American Community Survey. As a result, the smaller a locality, the more likely this survey is to undercount small subpopulations.

Table 3B: 2010 to 2015 Population Growth by Age – Percentage Change²⁸

Locality	0 to 19	20 to 44	45 to 64	65+	Total
Augusta County	-6%	-1%	-1%	14%	0%
Bath County	7%	-14%	-1%	-2%	-3%
Clarke County	-1%	1%	-3%	17%	2%
Frederick County	-2%	2%	6%	19%	4%
Highland County	-9%	-26%	-12%	32%	-3%
Page County	-7%	-8%	4%	12%	-1%
Rockbridge County	-6%	-3%	-1%	14%	1%
Rockingham County	-1%	0%	1%	13%	2%
Shenandoah County	-3%	1%	3%	8%	2%
Warren County	-3%	1%	4%	13%	2%
Buena Vista	4%	7%	-13%	0%	0%
Harrisonburg	8%	1%	15%	0%	5%
Lexington	14%	12%	-30%	-24%	0%
Staunton	1%	5%	-2%	3%	2%
Waynesboro	-2%	2%	-2%	6%	1%
Winchester	3%	-2%	11%	6%	4%
Shenandoah Valley	-1%	0%	2%	11%	2%
Virginia	1%	2%	2%	13%	3%

²⁸ *Data Source:* U.S. Census Bureau, “2010 Census” and “American Community Survey.” It is important to point out that, unlike the decennial census, the annual American Community Survey is indeed a survey. In 2015, only about 1.6 percent of Virginia households were included in the American Community Survey. As a result, the smaller a locality, the more likely this survey is to undercount small subpopulations.

Table 4A: 2010 to 2015 Population Growth by Race/Ethnicity – Absolute Change²⁹

Locality	White	Black	Hispanic	Asian	Other	Total
Augusta County	-60	58	224	65	16	303
Bath County	-184	-56	58	-7	41	-148
Clarke County	109	42	91	3	20	265
Frederick County	1,683	520	709	961	-838	3,035
Highland County	-51	-6	-18	-4	2	-77
Page County	-389	-62	47	4	127	-273
Rockbridge County	12	52	41	54	-22	137
Rockingham County	590	179	510	96	96	1,471
Shenandoah County	164	205	309	9	44	731
Warren County	486	-179	191	51	357	906
Buena Vista	-55	-275	-12	444	-86	16
Harrisonburg	88	447	1,445	400	94	2,474
Lexington	-476	93	2	478	-68	29
Staunton	165	31	122	67	62	447
Waynesboro	-178	320	84	50	-132	144
Winchester	359	41	389	53	123	965
Shenandoah Valley	2,263	1,410	4,192	2,724	-164	10,425
Virginia	51,398	36,612	72,331	53,312	36,953	255,606

²⁹ *Data Source:* U.S. Census Bureau, “2010 Census” and “American Community Survey.” It is important to point out that, unlike the decennial census, the annual American Community Survey is indeed a survey. In 2015, only about 1.6 percent of Virginia households were included in the American Community Survey. As a result, the smaller a locality, the more likely this survey is to undercount small subpopulations.

Table 4B: 2010 to 2015 Percentage Growth in Population by Race/Ethnicity – Percentage Change³⁰

Locality	White	Black	Hispanic	Asian	Other	Total
Augusta County	0%	2%	15%	18%	2%	0%
Bath County	-4%	-26%	57%	-100%	87%	-3%
Clarke County	1%	6%	19%	2%	7%	2%
Frederick County	2%	17%	14%	528%	-36%	4%
Highland County	-2%	-100%	-100%	-100%	22%	-3%
Page County	-2%	-14%	12%	3%	59%	-1%
Rockbridge County	0%	9%	14%	52%	-5%	1%
Rockingham County	1%	15%	13%	21%	10%	2%
Shenandoah County	0%	29%	12%	4%	7%	2%
Warren County	1%	-10%	14%	15%	42%	2%
Buena Vista	-1%	-80%	-12%	1,531%	-45%	0%
Harrisonburg	0%	15%	19%	23%	8%	5%
Lexington	-8%	14%	1%	5,975%	-24%	0%
Staunton	1%	1%	24%	37%	10%	2%
Waynesboro	-1%	15%	6%	32%	-21%	1%
Winchester	2%	1%	10%	9%	18%	4%
Shenandoah Valley	0%	6%	14%	61%	-2%	2%
Virginia	1%	2%	11%	12%	17%	3%

³⁰ *Data Source:* U.S. Census Bureau, “2000 Census” and “American Community Survey.” It is important to point out that, unlike the decennial census, the annual American Community Survey is indeed a survey. In 2015, only about 1.6 percent of Virginia households were included in the American Community Survey. As a result, the smaller a locality, the more likely this survey is to undercount small subpopulations.

Other Demographic Characteristics

Table 5 provides data for SVWDA and its sixteen localities on six other pertinent demographic characteristics:

- High School Education Attainment: Across the localities of SVWDA, the proportion of individuals 25 years of age and older with a high school degree or above varies from a low of 77 percent in the Page County to a high of 88 percent in the Counties of Bath and Clarke. While overall SVWDA has a slightly lower proportion of individuals 25 years of age and older with a high school degree or above than the state of Virginia as a whole (84 percent vs. 88 percent).
- Bachelor's Degree Attainment: Across the localities of SVWDA, the proportion of individuals 25 years of age and older with a bachelor's degree or above varies from a low of 13 percent in the Page County to a high of 44 percent in the City of Lexington. While overall SVWDA has a significantly lower proportion of individuals 25 years of age and older with a bachelor's degree or above than the state of Virginia as a whole (25 percent vs. 36 percent).
- Median Household Income: Across the localities of SVWDA, median household income varies from a low of \$29,097 in the City of Buena Vista to a high of \$71,295 in Clarke County. While overall SVWDA has a lower median household income than the state of Virginia (\$53,635 vs. \$65,015).
- Poverty: Across the localities of SVWDA, the proportion of families below the poverty level varies from a high of 27 percent in the City of Buena Vista to a low of 5 percent in Frederick County. While overall SVWDA has almost the same proportion of families

below the poverty level as the state of Virginia (9 percent vs. 8 percent).

- Female Households with Children Under 18: Across the localities of SVWDA, the proportion of female households with children under 18 varies from a high of 10 percent in the City of Waynesboro to a low of 3 percent in Highland County. While overall SVWDA has a lower proportion of female households with children under 18 than the state of Virginia (7 percent vs. 12 percent).
- English Not Spoken at Home: Across the localities of SVWDA, the proportion of individuals five years of age and older for whom English is not spoken at home varies from a high of 24 percent in the City of Harrisonburg to a low of 1 percent in Highland County. While overall SVWDA has a lower proportion of individuals five years of age and older for whom English is not spoken at home than the state of Virginia (8 percent vs. 15 percent).

Table 5: Other Demographic Characteristics, 2011-2015³¹

Locality	High school graduates, % of persons age 25+	Bachelor's degree or higher, % of persons age 25+	Median household income	% of Families below poverty level	Female households with children under 18	Language other than English spoken at home, % age 5+
Augusta County	86%	22%	\$54,558	7%	6%	3%
Bath County	88%	22%	\$43,646	7%	4%	2%
Clarke County	88%	31%	\$71,295	7%	5%	5%
Frederick County	87%	29%	\$69,098	5%	7%	9%
Highland County	84%	22%	\$43,914	9%	3%	1%
Page County	77%	13%	\$43,895	12%	9%	3%
Rockbridge County	86%	26%	\$48,901	8%	6%	3%
Rockingham County	81%	24%	\$53,744	8%	6%	8%
Shenandoah County	85%	19%	\$49,406	8%	7%	8%
Warren County	86%	21%	\$61,454	7%	7%	5%
Buena Vista	82%	16%	\$29,097	27%	9%	4%
Harrisonburg	84%	36%	\$38,750	13%	7%	24%
Lexington	80%	44%	\$34,017	13%	5%	7%
Staunton	87%	31%	\$40,842	11%	8%	4%
Waynesboro	85%	18%	\$45,643	13%	10%	7%
Winchester	84%	28%	\$45,363	11%	9%	18%
SVWDA	84%	25%	\$52,635	9%	7%	8%
Virginia	88%	36%	\$65,015	8%	12%	15%
United States	87%	30%	\$53,889	11%	8%	21%

³¹ *Data Source:* U.S. Census Bureau, "American Community Survey." It is important to point out that, unlike the decennial census, the annual American Community Survey is indeed a survey. In 2015, only about 1.6 percent of Virginia households were included in the American Community Survey. As a result, the smaller a locality, the more likely this survey is to undercount small subpopulations.

In Short

With regard to overall employment trends, our analysis has shown that SVWDA has enjoyed steadily rising employment over the last five years and experienced an overall increase of 11,972 jobs, or 5.8 percent in total employment, between the second quarter of 2011 and the second quarter of 2016. At a local level, the largest proportional increases in employment over this period occurred in Frederick County (up 23.0 percent), the City of Buena Vista (up 15.6 percent), and Rockingham County (up 13.1 percent). In addition, unlike at the statewide level where employment growth was disproportionately driven by small business over this period, in SVWDA employment gains were evenly distributed between small and large businesses.

Almost all of the employment increase in SVWDA between the second quarter of 2011 and the second quarter of 2016 was driven by the private sector, which accounted for 11,705 of the 11,972 increase in jobs over the period. At an industry level, the largest increases in private sector employment over this period occurred in the *Health Care and Social Assistance* (up 2,513 jobs), *Transportation and Warehousing* (up 2,217 jobs), and *Accommodation and Food Services* (up 1,889 jobs) sectors. While at the other end of the spectrum, the largest employment losses occurred in the *Manufacturing* (down 828 jobs), *Information* (down 489 jobs), and *Mining* (down 12 jobs) sectors.

With regard to the structure of the regional economy, our analysis has also shown that SVWDA is heavily dependent on the *Manufacturing* sector. At 31,718 jobs in the second quarter of 2016, *Manufacturing* is SVWDA's largest employment sector and its 5th highest paying at \$963 per week. While at 27,532 jobs *Healthcare and Social Assistance* was SVWDA's second largest employment sector that quarter and 9th highest paying at \$858 per week, and at 26,741

jobs *Retail Trade* was SVWDA's third largest employment sector an 17th highest paying at \$488 per week.

From a demographic perspective, our analysis has shown that overall population growth in SVWDA between 2000 and 2015 was comparable to the statewide norm. In addition, just as at the statewide level, that population growth was driven by increases the region's 65 and older population. However, in SVWDA that population shift was further exacerbated by absolute losses in the regions 19 and under population. Finally, population growth in SVWDA between 2000 and 2015 was disproportionately driven by the region's Hispanic and Asian populations.

Key Sectors

In this section, we provide additional detail on four major industry categories that have been designated by SVWDA staff as key employment sectors. Those four sectors are:

Construction, Health Care, Manufacturing, and Transportation and Warehousing.

Construction

Figure 17 details the change in *Construction* sector private employment in SVWDA for the five- year period from the second quarter of 2011 through the second quarter of 2016. As these data show, employment generally increased over the period, peaking at 10,675 jobs in the third quarter of 2014. Over the period as a whole, employment increased from 9,932 jobs in the second quarter of 2011 to 10,582 jobs in the second quarter of 2016, for a total gain 650 jobs, or a 6.5 percent increase in total employment. By way of comparison, overall private employment increased by 6.9 percent in SVWDA over this period.

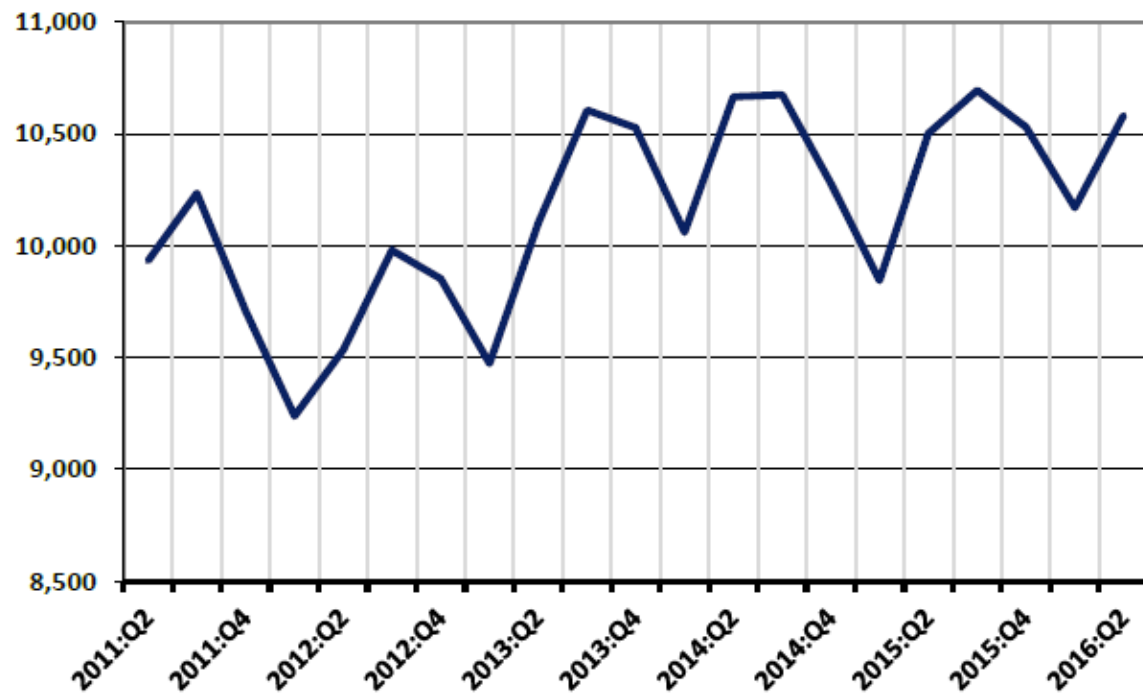


Figure 17: SVWDA Construction Sector Private Employment – 2011:Q2 to 2016:Q2³²

Figure 18 provides a larger context for these data by benchmarking the year-over-year change in *Construction* sector private employment in SVWDA over this period against the year-over-year change in total private employment in the region. Recall that any observation above the zero line in this graph represents a positive increase in employment from the previous year, while any observation below the zero line represents a decline in employment relative to the previous year. As these data clearly indicate, SVWDA’s *Construction* sector was subject to much wider employment swings over the period than the private sector as a whole.

³² *Data Source:* Virginia Employment Commission, “Quarterly Census of Employment and Wages.”

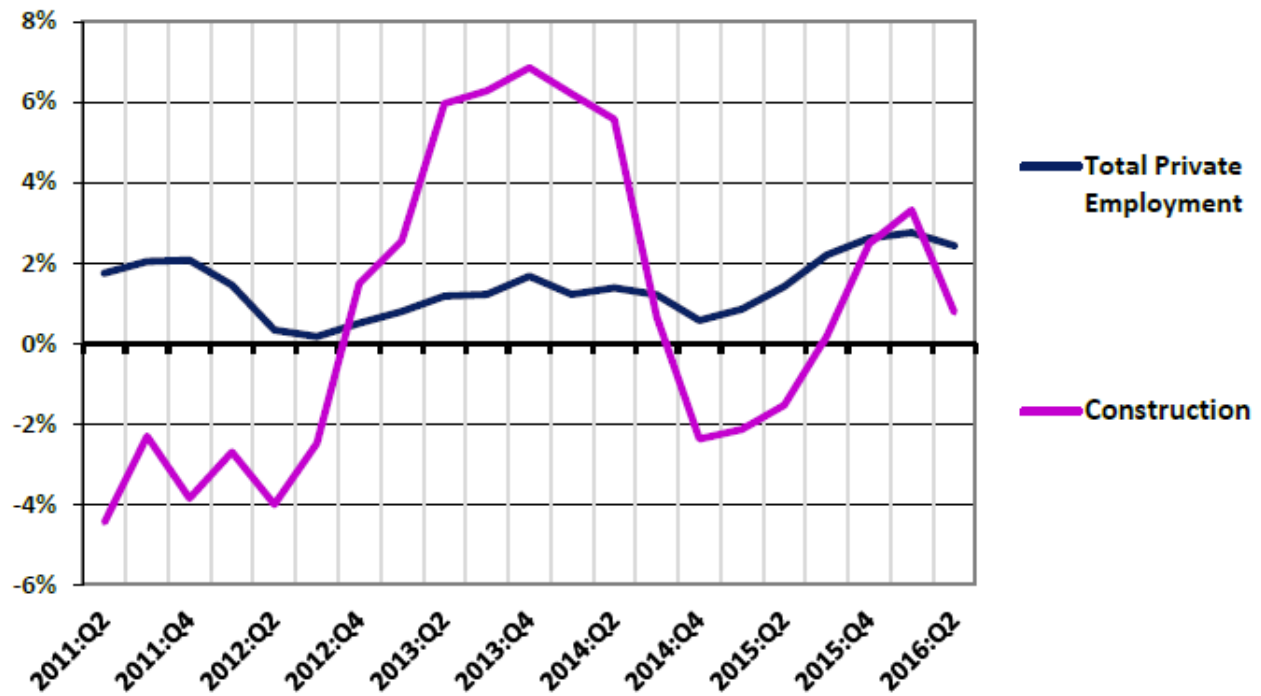


Figure 18: Year-Over-Year Change in Private Employment – 2011:Q2 to 2016:Q2³³

Table 6 provides additional information on the structure of SVWDA’s *Construction* sector, by detailing private employment and wages in the second quarter of 2016 at a subsector level. As these data show, there were three subsectors in SVWDA’s *Construction* sector that quarter. The largest of which was *Specialty Trade Contractors* (7,068 jobs), while the highest paying was *Heavy and Civil Construction* (\$877 per week).

³³ Data Source: Virginia Employment Commission, “Quarterly Census of Employment and Wages.”

Table 6: Private Employment in SVWDA's Construction Sector – 2016:Q2³⁴

Sector and Subsector	Establishments	Employment	Average Weekly Wage
Construction	1,438	10,582	\$805
Construction of Buildings	483	2,752	\$831
Heavy and Civil Engineering Construction	73	763	\$877
Specialty Trade Contractors	882	7,068	\$786

Health Care

Figure 19 provides comparable data on the change in private employment in SVWDA's *Health Care* sector over the five-year period from the second quarter of 2011 through the second quarter of 2016. As these data demonstrate, employment increased initially during period, peaking at 22,430 jobs in the fourth quarter of 2014, before falling to a low of 21,764 jobs in the first quarter of 2015, and then rising to 22,451 jobs in the second quarter of 2016. Over the period as a whole, private employment in SVWDA's *Health Care* sector increased by 1,164 jobs, or by 5.5 percent, as compared to 6.9 percent across all private sector employers.

³⁴ *Data Source:* Virginia Employment Commission, "Quarterly Census of Employment and Wages."

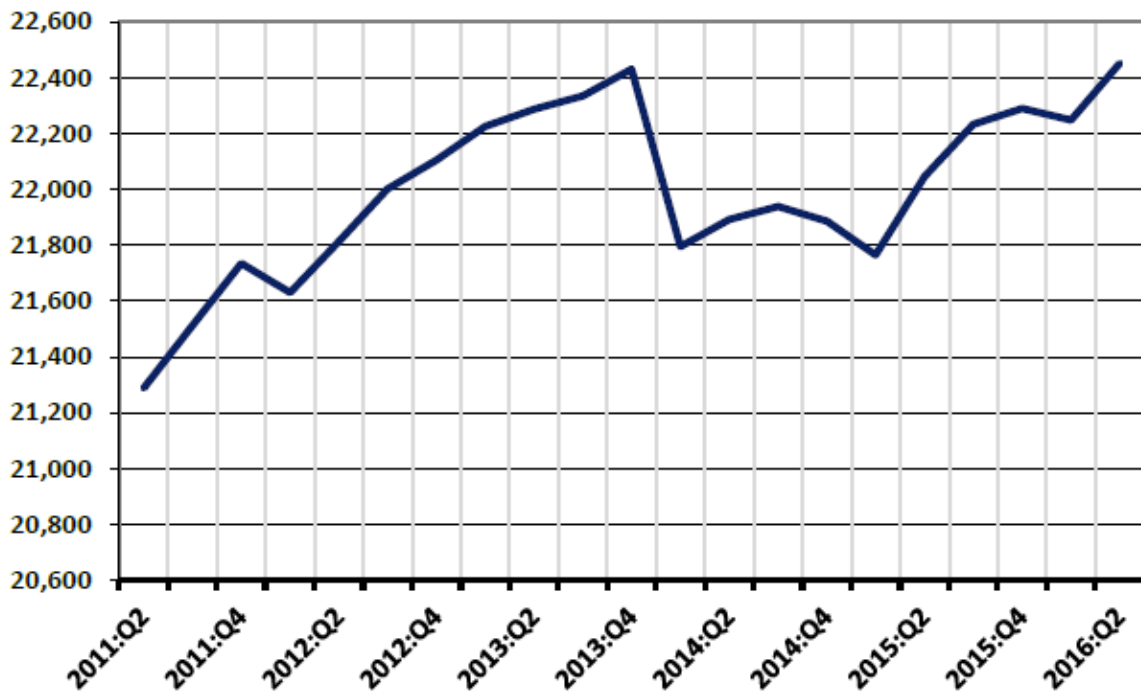


Figure 19: SVWDA Health Care Sector Private Employment – 2011:Q2 to 2016:Q2³⁵

Figure 20 again puts these data in a larger context by benchmarking the year-over-year change in *Health Care* sector private employment in SVWDA against the year-over-year change in total private employment in the region over the same period. As these data show, SVWDA’s *Health Care* sector initially out-performed the region’s overall private sector. However, as private employment in *Health Care* began to decline in 2014, the sector slipped below the region’s overall private sector and has uniformly under-performed the regional norm since. Although it is important to point out that in recent quarters private employment growth in this sector has once again moved into positive territory.

³⁵ Data Source: Virginia Employment Commission, “Quarterly Census of Employment and Wages.”

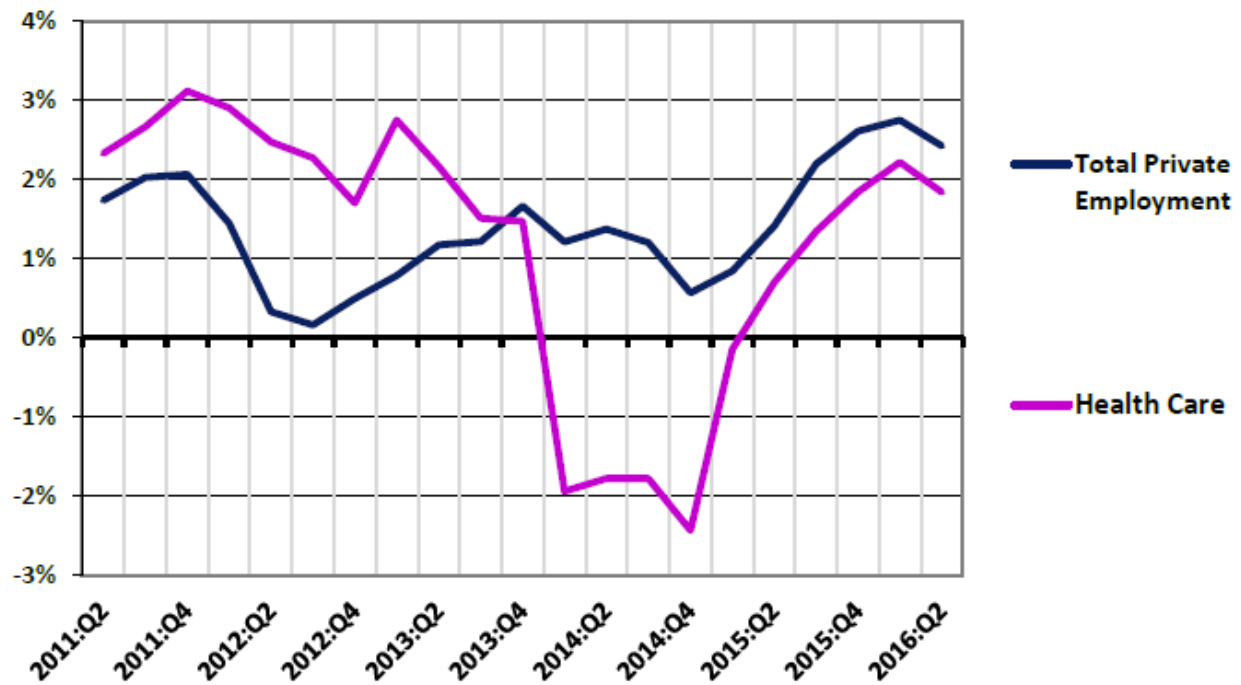


Figure 20: Year-Over-Year Change in Private Employment – 2011:Q2 to 2016:Q2³⁶

Table 7 provides additional detail on the structure of SVWDA’s *Health Care* sector in the second quarter of 2016. As these data indicate, there were three subsectors in SVWDA’s *Health Care* sector that quarter. The largest and highest paying of which was *Hospitals* (8,246 jobs and \$1,150 per week).

³⁶ Data Source: Virginia Employment Commission, “Quarterly Census of Employment and Wages.”

Table 7: Private Employment in SVWDA's Health Care Sector – 2016:Q2³⁷

Sector and Subsector	Establishments	Employment	Average Weekly Wage
Health Care	919	22,451	\$972
Ambulatory Health Care Services	770	8,108	\$1,115
Hospitals	10	8,246	\$1,150
Nursing and Residential Care Facilities	139	6,097	\$543

Manufacturing

Figure 21 provides data on the five-year change in private employment in SVWDA's *Manufacturing* sector between the second quarter of 2011 through the second quarter of 2016. As these data show, regional private employment in this sector declined steadily from a peak of 32,735 jobs in the third quarter of 2011 to a low of 30,806 jobs in the first quarter of 2011. It has since rebounded slowly, and reached 31,718 jobs in the second quarter of 2016. Overall, private employment in SVWDA's *Manufacturing* sector decreased by 828 jobs, or by minus 2.5 percent, over the period, in contrast to a 6.9 percent increase across all private sector employers.

³⁷ *Data Source:* Virginia Employment Commission, "Quarterly Census of Employment and Wages."

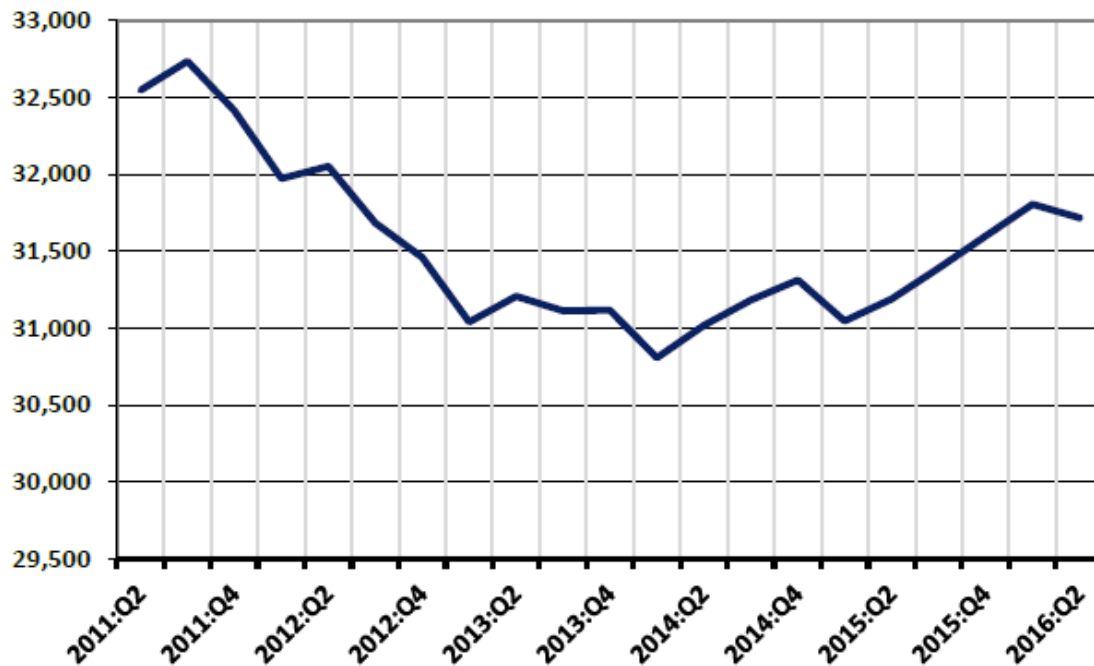


Figure 21: SVWDA Manufacturing Sector Private Employment – 2011:Q2 to 2016:Q2³⁸

Figure 22 benchmarks the year-over-year change in private employment in SVWDA’s *Manufacturing* sector against the year-over-year change in total private employment in the region over the same period. As these data indicate, SVWDA’s *Manufacturing* sector underperformed the region’s overall private sector throughout the period, although that gap in performance closed substantially starting in late 2013 as employment growth in this sector once again moved into positive territory.

³⁸ *Data Source:* Virginia Employment Commission, “Quarterly Census of Employment and Wages.”

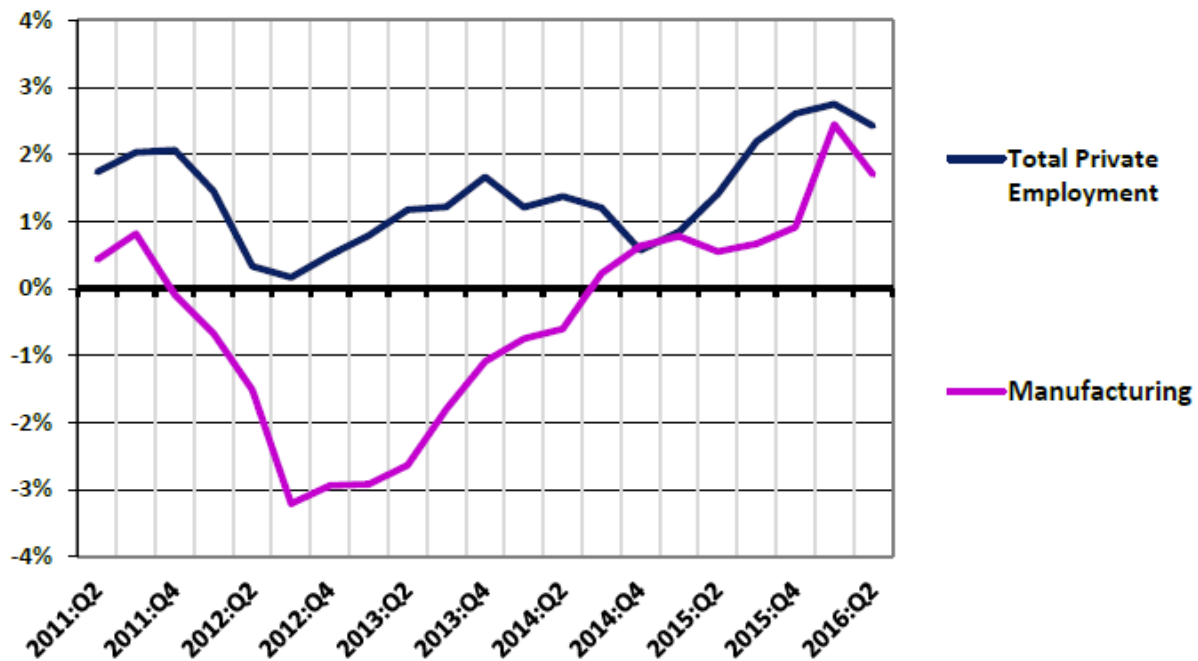


Figure 22: Year-Over-Year Change in Private Employment – 2011:Q2 to 2016:Q2³⁹

Table 8 provides further detail on the structure of SVWDA’s *Manufacturing* sector in the second quarter of 2016. As these data show, there were 16 subsectors in SVWDA’s *Manufacturing* sector that quarter. Of which *Food Manufacturing* (10,161 jobs) was the largest, and *Chemical Manufacturing* (\$1,642 per week) was the highest paying.

³⁹ *Data Source:* Virginia Employment Commission, “Quarterly Census of Employment and Wages.”

Table 8: Private Employment in SVWDA's Manufacturing Sector – 2016:Q2⁴⁰

Sector and Subsector	Establishments	Employment	Average Weekly Wage
Manufacturing	540	31,718	\$963
Beverage and Tobacco Product Manufacturing	20	738	\$1,164
Chemical Manufacturing	19	1,926	\$1,642
Computer and Electronic Product Manufacturing	20	576	\$849
Electrical Equipment, Appliance, and Components	7	16	\$572
Fabricated Metal Product Manufacturing	74	2,515	\$965
Food Manufacturing	72	10,161	\$860
Furniture and Related Product Manufacturing	41	672	\$630
Machinery Manufacturing	32	1,574	\$1,099
Miscellaneous Manufacturing	42	846	\$999
Nonmetallic Mineral Product Manufacturing	38	1,074	\$999
Paper Manufacturing	9	876	\$983

Table 8: Private Employment in SVWDA's Manufacturing Sector – 2016:Q2⁴⁰

Sector and Subsector	Establishments	Employment	Average Weekly Wage
Manufacturing	540	31,718	\$963
Petroleum and Coal Products Manufacturing	4	110	\$988
Plastics and Rubber Products Manufacturing	32	3,905	\$1,104
Primary Metal Manufacturing	10	542	\$828
Printing and Related Support Activities	45	2,819	\$804
Wood Product Manufacturing	51	1,469	\$723

Transportation and Warehousing

Lastly, Figure 23 details the change in private employment in SVWDA's *Transportation and Warehousing* sector over the five-year period from the second quarter of 2011 through the second quarter of 2016. As these data demonstrate, employment in this sector increased steadily over the period, rising from 8,832 jobs in the second quarter of 2011 to 11,049 jobs in the second quarter of 2016. Overall, SVWDA's *Transportation and Warehousing* sector experienced an increase of 2,217 jobs over the period, or a 25.1 percent increase in employment – nearly four times the 6.9 percent employment increase the region experienced across all private sector employers.

⁴⁰ Data Source: Virginia Employment Commission, "Quarterly Census of Employment and Wages."

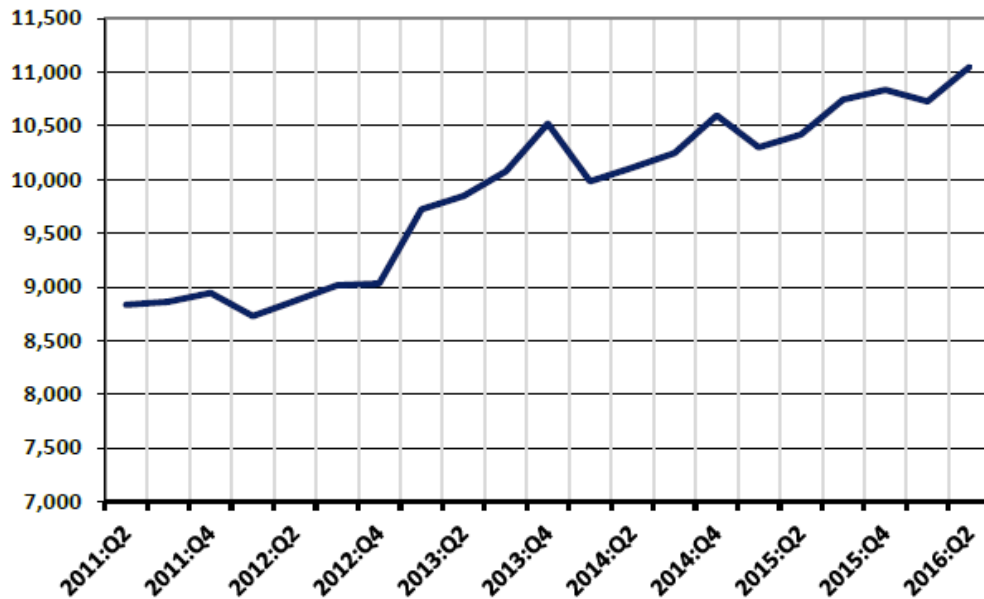


Figure 23: SVWDA Transportation and Warehousing Sector Private Employment – 2011:Q2 to 2016:Q2⁴¹

Figure 24 once again puts these data in a larger context by benchmarking the year-over-year change in *Transportation and Warehousing* sector private employment in SVWDA between the second quarter of 2011 and the second quarter of 2016 against comparable data for total private employment. As these data show, this sector substantially out-performed the region’s overall private sector over much of the period.

⁴¹ *Data Source:* Virginia Employment Commission, “Quarterly Census of Employment and Wages.”

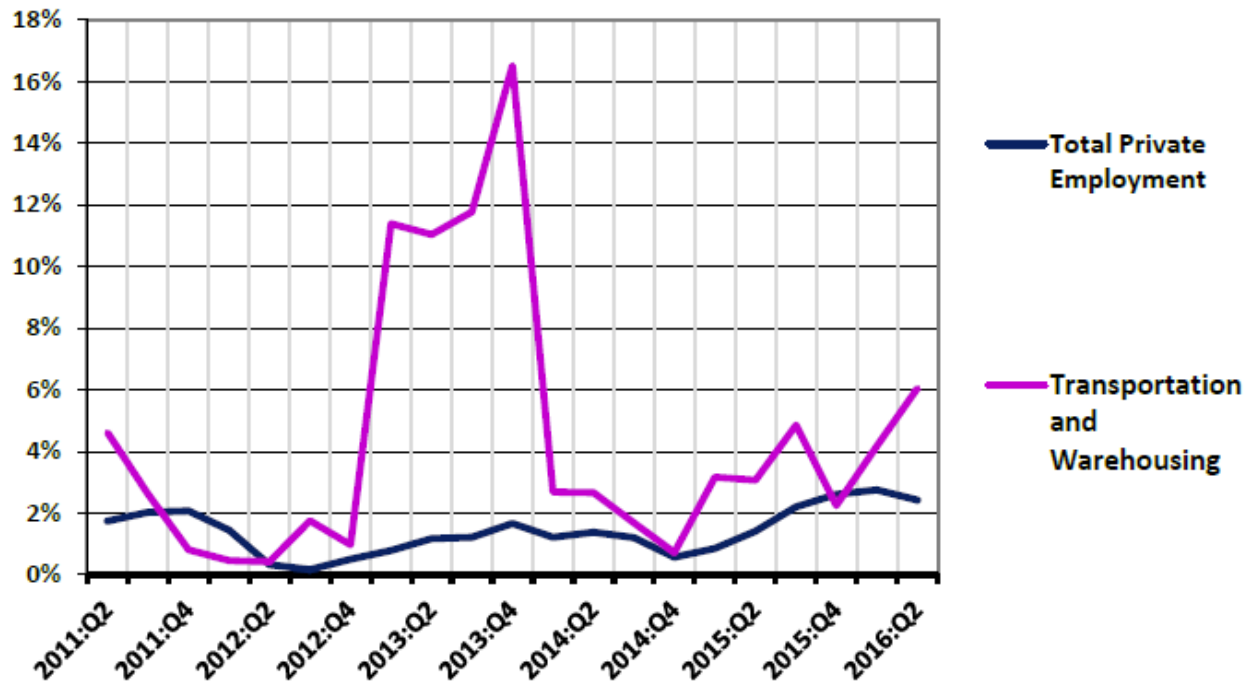


Figure 24: Year-Over-Year Change in Private Employment – 2011:Q2 to 2016:Q2⁴²

Table 9 provides a drilldown of SVWDA’s *Transportation and Warehousing* sector by subsector. As these data indicate, there were six subsectors in SVWDA’s *Transportation and Warehousing* sector in the second quarter of 2016. The largest of which was *Warehousing and Storage* (4,963 jobs) and the highest paying of which was *Pipeline Transportation* (\$1,736 per week).

⁴² Data Source: Virginia Employment Commission, “Quarterly Census of Employment and Wages.”

Table 9: Private Employment in SVWDA's Transportation and Warehousing Sector – 2016:Q2⁴³

Sector and Subsector	Establishments	Employment	Average Weekly Wage
Transportation & Warehousing	441	11,049	\$823
Couriers and Messengers	34	845	\$853
Pipeline Transportation	3	36	\$1,736
Support Activities for Transportation	50	415	\$574
Transit and Ground Passenger Transportation	16	187	\$459
Truck Transportation	279	4,057	\$881
Warehousing and Storage	49	4,963	\$766

In Short

SVWDA staff have identified for key employment sectors within the region. Those four sectors are: *Construction, Health Care, Manufacturing, and Transportation and Warehousing.*

Our analysis of employment performance in these sectors has shown that:

- SVWDA's *Construction* sector experienced a 6.5 percent increase in private employment over the last five years as compared to a 6.9 percent increase across all private sector industries. However, year-over-year employment growth varied widely over the period and since the fourth quarter of 2014 has under-performed the region's overall growth in private sector employment.

⁴³ *Data Source:* Virginia Employment Commission, "Quarterly Census of Employment and Wages."

- SVWDA's *Health Care* sector experienced a 5.5 percent increase in private employment over the last five years as compared to a 6.9 percent increase across all private sector industries. However, year-over-year employment growth in this industry has under- performed the region's overall growth in private sector employment since the fourth quarter of 2013. Although it is important to point out that in recent quarters private employment growth in this sector has once again moved into positive territory.
- SVWDA's *Manufacturing* sector experienced a 2.5 percent decline in private employment over the last five years in contrast to a 6.9 percent increase across all private sector industries. In addition, year-over-year employment growth in this industry has under-performed the region's overall growth in private sector employment throughout the period, although that gap in performance closed substantially starting in late 2013 as employment growth in this sector once again moved into positive territory.
- SVWDA's *Transportation and Warehousing* sector experienced a 25.1 percent increase in private employment over the last five years as compared to a 6.9 percent increase across all private sector industries. In addition, this sector substantially out-performed the region's overall private sector over much of the period.

Industry Performance

In this section, we provide an assessment of the economic performance of each of SVWDA's major industry sectors, as well as the industry sub-sectors associated with the

region's four key employment sectors. That assessment is based on the following performance metrics:

- *1 yr. Employment Growth* refers to the percentage growth in industry employment in the region between the second quarter of 2015 and the second quarter of 2016.⁴⁴
- *Relative to Total Employment Growth in Region* benchmarks the industry's employment growth against the region's total employment growth over the same period (a number above one indicates the industry grew faster than total employment in the region, a number below one indicates that it grew slower than total employment in the region, and n/a indicates that data are not available or one of the "growth" rates was negative)⁴⁵
- *Relative to Industry Employment Growth in State* benchmarks the industry's regional employment growth against employment growth in that industry at the state-wide level over the same period (a number above one indicates that the industry grew faster in the region than at the state-wide level, a number below one indicates that it grew slower in the region than at the state-wide level, and n/a indicates that data are not available or one of the "growth" rates was negative).⁴⁶
- *5 yr. Employment Growth* refers to the percentage growth in industry employment in the region between the second quarter of 2011 and the second quarter of 2016.⁴⁷

⁴⁴ *Data Source:* Virginia Employment Commission, "Quarterly Census of Employment and Wages."

⁴⁵ *Data Source:* Virginia Employment Commission, "Quarterly Census of Employment and Wages."

⁴⁶ *Data Source:* Virginia Employment Commission, "Quarterly Census of Employment and Wages."

⁴⁷ *Data Source:* Virginia Employment Commission, "Quarterly Census of Employment and Wages."

- *Relative to Total Employment Growth in Region* benchmarks the industry's employment growth against the region's total employment growth over the same period (a number above one indicates the industry grew faster than total employment in the region, a number below one indicates that it grew slower than total employment in the region, and n/a indicates that data are not available or one of the "growth" rates was negative).⁴⁸
- *Relative to Industry Employment Growth in State* benchmarks the industry's regional employment growth against employment growth in that industry at the state-wide level over the same period (a number above one indicates that the industry grew faster in the region than at the state-wide level, a number below one indicates that it grew slower in the region than at the state-wide level, and n/a indicates that data are not available or one of the "growth" rates was negative).⁴⁹
- *1 yr. Wage Growth* refers to the percentage growth in industry wage in the region between the first quarter of 2015 and the first quarter of 2016.⁵⁰
- *Relative to Average Wage Growth in Region* benchmarks the industry's wage growth against the region's average wage growth over the same period (a number above one indicates that industry wage grew faster than the average wage in the region, a number below one indicates that it grew slower than the average wage in the region, and n/a indicates that data are not available or one of the "growth" rates was negative).⁵¹

⁴⁸ *Data Source:* Virginia Employment Commission, "Quarterly Census of Employment and Wages."

⁴⁹ *Data Source:* Virginia Employment Commission, "Quarterly Census of Employment and Wages."

⁵⁰ *Data Source:* Virginia Employment Commission, "Quarterly Census of Employment and Wages."

⁵¹ *Data Source:* Virginia Employment Commission, "Quarterly Census of Employment and Wages."

- *Relative to Industry Wage Growth in State* benchmarks the industry's regional wage growth against state-wide wage growth in that industry over the same period (a number above one indicates that industry wage grew faster in the region than at the state-wide level, a number below one indicates that it grew slower in the region than at the state- wide level, and N/A indicates that data are not available or one of the "growth" rates was negative).⁵²
- *5 yr. Wage Growth* refers to the percentage growth in industry wage in the region between the first quarter of 2011 and the first quarter of 2016.
- *Relative to Average Wage Growth in Region* benchmarks the industry's wage growth against the region's average wage growth over the same period (a number above one indicates that industry wage grew faster than the average wage in the region, a number below one indicates that it grew slower than the average wage in the region, and n/a indicates that data are not available or one of the "growth" rates was negative).⁵³
- *Relative to Industry Wage Growth in State* benchmarks the industry's regional wage growth against state-wide wage growth in that industry over the same period (a number above one indicates that industry wage grew faster in the region than at the state-wide level, a number below one indicates that it grew slower in the region than at the state- wide level, and n/a indicates that data are not available or one of the "growth" rates was negative).⁵⁴

⁵² *Data Source:* Virginia Employment Commission, "Quarterly Census of Employment and Wages."

⁵³ *Data Source:* Virginia Employment Commission, "Quarterly Census of Employment and Wages."

⁵⁴ *Data Source:* Virginia Employment Commission, "Quarterly Census of Employment and Wages."

- *Location Quotient – Employment* measures the relative size of an industry’s employment footprint within a region. Specifically, it is calculated as industry employment in the region as a proportion of total regional employment, divided by industry employment in the state as a proportion of total state employment.⁵⁵
- *Location Quotient – Establishments* measures the relative size of an industry’s establishment footprint within a region. Specifically, it is calculated as the number of industry establishments in the region as a proportion of the total number of establishments in the region, divided by the number of industry establishments in the state as a proportion of total number of establishments in the state.⁵⁶
- *Industry Output as a Percentage of Regional Output* measures industry output as a percentage of regional output.⁵⁷
- *Proportion of Industry Output Exported* measures the percentage of an industry’s output that is exported out of the region.⁵⁸
- *Industry Exports as a Percentage of Regional Exports* measures the industry’s exports as a proportion of total regional exports.⁵⁹
- *Type 1 Multiplier Ratio (Multiplier)* measures the economic ripple, or Keynesian multiplier, effects that an industry has on the regional economy.⁶⁰

⁵⁵ *Data Source:* Virginia Employment Commission, “Quarterly Census of Employment and Wages.”

⁵⁶ *Data Source:* Virginia Employment Commission, “Quarterly Census of Employment and Wages.”

⁵⁷ *Data Source:* IMPLAN.

⁵⁸ *Data Source:* IMPLAN.

⁵⁹ *Data Source:* IMPLAN.

⁶⁰ *Data Source:* IMPLAN.

Major Industry Sectors

In this portion of the section, we assess the performance of major industry sectors in SVWDA. Table 10A provides detail on the employment performance of major industry sectors in SVWDA. As these data show, the largest regional short-term (one-year) employment growth occurred in *Transportation and Warehousing* (6.0 percent), *Finance and Insurance* (4.7 percent), and *Educational Services* (3.5 percent). In addition, *Transportation and Warehousing* exhibited regional one-year employment growth that was greater than the regional average across all industries, and *Finance and Insurance* and *Educational Services*, along with *Retail Trade* and *Wholesale Trade*, also exhibited regional one-year employment growth that was greater than the state-wide average for their industries.

With regard to long-term (five-year) employment growth, the largest increases occurred in *Management of Companies and Enterprises* (30.8 percent), *Agriculture* (29.2 percent), and *Transportation and Warehousing* (25.1 percent). In addition, at a regional level these three industries, along with *Finance and Insurance*, exhibited regional five-year employment growth that was greater than the regional average across all industries, and *Agriculture; Professional, Scientific, and Technical Services; Real Estate; Educational Services; and Finance and Insurance* also exhibited regional five-year employment growth that was greater than the state-wide average for their industries.

Table 10A: Employment Performance of Major Industry Sectors in SVWDA

Industry	1 yr. Emp. Growth	Relative to Total Emp. Growth in Region	Relative to Industry Emp. Growth in State	5 yr. Emp. Growth	Relative to Total Emp. Growth in Region	Relative to Industry Emp. Growth in State
Accommodation and Food Services	2.1%	0.86	0.57	8.9%	1.29	0.66
Administrative and Support and Waste Management	0.9%	0.36	0.53	2.8%	0.40	0.21
Agriculture, Forestry, Fishing and Hunting	-0.6%	n/a	n/a	29.2%	4.24	2.67
Arts, Entertainment, and Recreation	-2.9%	n/a	n/a	1.3%	0.19	0.10
Construction	0.8%	0.32	0.53	6.5%	0.95	1.29
Educational Services	3.5%	1.43	2.20	5.8%	0.84	3.01
Finance and Insurance	4.7%	1.93	2.53	25.0%	3.63	2.58
Health Care and Social Assistance	3.0%	1.22	0.89	10.0%	1.46	0.82
Information	0.9%	0.38	n/a	-15.5%	n/a	n/a
Management of Companies and Enterprises	3.2%	1.34	n/a	30.8%	4.48	
Manufacturing	1.7%	0.70	n/a	-2.5%	n/a	n/a
Mining, Quarrying, and Oil and Gas Extraction	-3.1%	n/a	n/a	-4.1%	n/a	n/a
Other Services (except Public Administration)	2.0%	0.84	0.74	4.2%	0.61	0.60
Professional, Scientific, and Technical Services	0.4%	0.17	0.14	24.4%	3.55	4.94
Real Estate and Rental and Leasing	-0.2%	n/a	n/a	14.5%	2.10	3.86

Table 10A: Employment Performance of Major Industry Sectors in SVWDA

Industry	1 yr. Emp. Growth	Relative to Total Emp. Growth in Region	Relative to Industry Emp. Growth in State	5 yr. Emp. Growth	Relative to Total Emp. Growth in Region	Relative to Industry Emp. Growth in State
Retail Trade	2.3%	0.96	2.99	1.3%	0.18	0.31
Transportation and	6.0%	2.49	1.08	25.1%	3.65	1.56
Utilities	-0.2%	n/a	n/a	5.7%	0.83	n/a
Wholesale Trade	2.4%	0.97	7.40	8.2%	1.19	n/a

Table 10B provides similar information on the wage performance of major industry sectors in SVWDA. As these data show, the largest regional short-term (one-year) wage growth occurred in *Real Estate* (7.9 percent), *Arts, Entertainment, and Recreation* (4.9 percent), and *Mining* (4.7 percent). In addition, all three of these industries exhibited regional one-year wage growth that was greater than the regional average across all industries, and *Real Estate*, along with *Transportation and Warehousing*; *Wholesale Trade*; and *Professional, Scientific, and Technical Services* also exhibited regional one-year wage growth that was greater than the state-wide average for their industries.

With regard to long-term (five-year) wage growth, the largest increases occurred in *Management of Companies and Enterprises* (52.4 percent), *Utilities* (24.6 percent), and *Mining* (20.8 percent). In addition, all three of these industries exhibited regional five-year wage growth that was greater than the regional average across all industries, and *Management of Companies and Enterprises*; *Utilities*; *Educational Services*; *Professional, Scientific, and Technical Services*; *Wholesale Trade*; and *Retail Trade* also exhibited regional five-year wage growth that was greater than the state-wide average for their industries.

Table 10B: Wage Performance of Major Industry Sectors in SVWDA

Industry	1 yr. Wage Growth	Relative to Avg. Wage Growth in Region	Relative to Industry Wage Growth in State	5 yr. Wage Growth	Relative to Avg. Wage Growth in Region	Relative to Industry Wage Growth in State
Accommodation and Food	2.6%	1.2	1.1	13.3%	1.1	1.2
Administrative and Support and Waste	4.5%	2.0	1.4	10.2%	0.9	1.3
Agriculture, Forestry, Fishing and	1.3%	0.6	0.5	13.8%	1.2	1.0
Arts, Entertainment, and Recreation	4.9%	2.2	1.4	11.9%	1.0	0.6
Construction	0.2%	0.1	0.2	14.7%	1.2	1.4
Educational Services	1.3%	0.6	0.8	8.7%	0.7	3.2
Finance and Insurance	-2.0%	n/a	n/a	16.4%	1.4	0.8
Health Care and Social	2.6%	1.2	0.7	4.4%	0.4	0.6
Information	-9.3%	n/a	n/a	-1.5%	n/a	n/a
Management of Companies and Enterprises	2.6%	1.1	n/a	52.4%	4.4	7.1
Manufacturing	3.5%	1.6	n/a	14.6%	1.2	2.2
Mining, Quarrying, and Oil and Gas	4.7%	2.1	n/a	20.8%	1.7	n/a
Other Services (except Public Administration)	-1.9%	n/a	n/a	12.7%	1.1	1.1

Table 10B: Wage Performance of Major Industry Sectors in SVWDA

Industry	1 yr. Wage Growth	Relative to Avg. Wage Growth in Region	Relative to Industry Wage Growth in State	5 yr. Wage Growth	Relative to Avg. Wage Growth in Region	Relative to Industry Wage Growth in State
Professional, Scientific, and Technical	2.6%	1.2	2.6	11.3%	0.9	2.6
Real Estate and Rental and	7.9%	3.6	3.2	17.7%	1.5	1.1
Retail Trade	1.5%	0.7	0.5	8.4%	0.7	0.8
Transportation and Warehousing	3.3%	1.5	14.8	2.7%	0.2	0.3
Utilities	2.6%	1.2	n/a	24.6%	2.0	4.7
Wholesale Trade	3.9%	1.8	3.9	16.6%	1.4	2.2

Table 10C provides data on other performance measures for the major industry sectors in SVWDA. As these data show, in regard to:

- Location Quotient for Employment: the major industry sectors with the largest relative employment footprint in SVWDA in the second quarter of 2016 were *Agriculture (2.8)*, *Manufacturing (2.3)*, and *Transportation and Warehousing (1.7)*.
- Location Quotient for Establishments: the major industry sectors with the largest relative establishment footprint in SVWDA in the second quarter of 2016 were *Agriculture (2.8)*, *Manufacturing (1.6)*, and *Transportation and Warehousing and Utilities (1.5)*.
- Industry Output as a Percentage of Regional Output: the major industry sectors that accounted for the largest percentage of regional output in SVWDA in the second quarter of 2016 were *Manufacturing (31.7 percent)*, *Construction (7.0 percent)*, and

Health Care and Social Assistance (6.7 percent).

- Industry Exports as a Percentage of Regional Exports: the major industry sectors that accounted for the largest percentage of regional exports in SVWDA in the second quarter of 2016 were *Manufacturing* (79.2 percent), *Transportation and Warehousing* (4.4 percent), and *Agriculture* (3.3 percent).
- Type 1 Multiplier Ratio (Multiplier): the major industry sectors with the largest relative economic impact on SVWDA in the second quarter of 2016 were *Finance and Insurance* (1.5), *Arts, Entertainment, and Recreation* (1.5), and *Agriculture and Construction* (1.4).

Table 10C: Other Performance of Major Industry Sectors in SVWDA

Industry	LQ Emp.	LQ Est.	% of Regional Output	Industry Output Exported	% of Regional Exports	Type 1 Mult.
Accommodation and Food Services	1.1	1.2	3.2%	23.6%	2.0%	1.3
Administrative and Support and Waste	0.6	0.8	1.5%	9.1%	0.4%	1.2
Agriculture, Forestry, Fishing	2.8	2.4	3.6%	33.8%	3.3%	1.4
Arts, Entertainment, and Recreation	0.8	1.0	0.8%	18.8%	0.4%	1.5
Construction	1.0	1.3	7.0%	3.4%	0.6%	1.4
Educational Services	1.5	0.8	1.1%	27.5%	0.8%	1.3
Finance and Insurance	0.7	1.1	3.6%	13.8%	1.3%	1.5
Health Care and Social Assistance	1.1	1.3	6.7%	8.6%	1.5%	1.2
Information	0.7	0.8	2.8%	18.6%	1.4%	1.3

Table 10C: Other Performance of Major Industry Sectors in SVWDA

Industry	LQ Emp.	LQ Est.	% of Regional Output	Industry Output Exported	% of Regional Exports	Type 1 Mult.
Management of Companies and Enterprises	0.7	0.6	1.2%	4.6%	0.2%	1.3
Manufacturing	2.3	1.6	31.7%	88.7%	75.2%	1.3
Mining, Quarrying, and Oil and Gas	0.8	1.0	0.3%	27.9%	0.2%	1.3
Other Services (except Public	0.7	0.9	1.9%	5.0%	0.3%	1.2
Professional, Scientific, and	0.3	0.5	3.8%	8.6%	0.9%	1.3
Real Estate and Rental and Leasing	0.8	0.9	3.7%	4.4%	0.4%	1.3
Retail Trade	1.1	1.3	5.1%	11.8%	1.6%	1.3
Transportation and Warehousing	1.7	1.5	4.3%	37.7%	4.4%	1.3
Utilities	1.0	1.5	1.6%	16.2%	0.7%	1.3
Wholesale Trade	0.9	0.8	3.6%	0.2%	0.0%	1.3

Key Sectors

In this portion of the section, we assess the performance of subsectors within the four key employment sectors that have been identified by SVWDA personnel. Table 11A provides detail on the employment performance of these subsectors in SVWDA. As these data show, the largest regional short-term (one-year) employment growth were in:

- *Construction*: occurred in the subsector *Specialty Trade Contractors* (3.3 percent) which also exhibited regional one-year employment growth that was greater than the regional

average across all industries, and greater than the state-wide average for this subsector.

- *Health Care*: occurred in the subsector *Nursing and Residential Care Facilities* (6.0 percent) which also exhibited regional one-year employment growth that was greater than the regional average across all industries, and greater than the state-wide average for this subsector.
- *Manufacturing*: occurred in the subsectors *Petroleum and Coal Products Manufacturing* (17.0 percent), *Nonmetallic Mineral Product Manufacturing* (14.9 percent), and *Electrical Equipment, Appliance, and Component Manufacturing* (14.3 percent). All three of these subsectors also exhibited regional one-year employment growth that was greater than the regional average across all industries, and (with the exception of *Petroleum and Coal Products Manufacturing* for which data were not available) greater than the state-wide average for these subsectors.
- *Transportation and Warehousing*: occurred in the subsectors *Support Activities for Transportation and Warehousing and Storage* (11.0 percent). In addition, both of these subsectors also exhibited regional one-year employment growth that was greater than the regional average across all industries.

With regard to long-term (five-year) employment growth, the largest increases in:

- *Construction*: occurred in the subsector *Heavy and Civil Engineering Construction* (8.7 percent) which also exhibited regional five-year employment growth that was greater than the regional average across all industries.
- *Health Care*: occurred in the subsector *Ambulatory Health Care Services* (12.7 percent) which also exhibited regional five-year employment growth that was greater than the

regional average across all industries.

- *Manufacturing*: occurred in the subsectors *Paper Manufacturing* (25.7 percent), and *Nonmetallic Mineral Product Manufacturing* (20.7 percent). In addition, both of these subsectors exhibited regional five-year employment growth that was greater than the regional average across all industries, and greater than the state-wide average for these subsectors.
- *Transportation and Warehousing*: occurred in the subsectors *Warehousing and Storage* (44.6 percent) and *Couriers and Messengers* (24.1 percent). In addition, both of these subsectors also exhibited regional five-year employment growth that was greater than the regional average across all industries, and *Couriers and Messengers* exhibited regional five-year employment growth that was greater than the state-wide average for this subsector.

Table 11A: Employment Performance of Key Industry Subsectors in SVWDA

Industry and Subsector	1 yr. Emp. Growth	Relative to Total Emp. Growth in Region	Relative to Industry Emp. Growth in State	5 yr. Emp. Growth	Relative to Total Emp. Growth in Region	Relative to Industry Emp. Growth in State
Construction						
Construction of Buildings	2.7%	1.1	0.9	5.0%	0.7	0.7
Heavy and Civil Engineering Construction	-22.0%	n/a	n/a	8.7%	1.3	n/a
Specialty Trade Contractors	3.3%	1.4	1.7	6.9%	1.0	1.1
Health Care						
Ambulatory Health Care Services	0.5%	0.2	0.1	12.7%	1.9	0.8

Table 11A: Employment Performance of Key Industry Subsectors in SVWDA

Industry and Subsector	1 yr. Emp. Growth	Relative to Total Emp. Growth in Region	Relative to Industry Emp. Growth in State	5 yr. Emp. Growth	Relative to Total Emp. Growth in Region	Relative to Industry Emp. Growth in State
Hospitals	0.3%	0.1	0.1	-4.9%	n/a	n/a
Nursing and Residential Care Facilities	6.0%	2.5	2.8	12.4%	1.8	1.4
Manufacturing						
Food Manufacturing	0.5%	0.2	0.2	0.7%	0.1	0.4
Beverage and Tobacco Product Manufacturing	10.3%	4.3	1.0	2.9%	0.4	0.1
Wood Product Manufacturing	6.4%	2.6	28.7	-12.6%	n/a	n/a
Paper Manufacturing	5.2%	2.1	4.6	25.7%	3.7	6.1
Printing and Related Support Activities	-2.0%	n/a	n/a	-9.4%	n/a	n/a
Petroleum and Coal Products Manufacturing	17.0%	7.0	n/a	3.8%	0.5	0.9
Chemical Manufacturing	1.0%	0.4	35.4	-8.8%	n/a	n/a
Plastics and Rubber Products Manufacturing	-4.2%	n/a	n/a	1.7%	0.3	0.4
Nonmetallic Mineral Product Manufacturing	14.9%	6.1	15.8	20.7%	3.0	4.9
Primary Metal Manufacturing	0.7%	0.3	0.2	-21.4%	n/a	n/a

Table 11A: Employment Performance of Key Industry Subsectors in SVWDA

Industry and Subsector	1 yr. Emp. Growth	Relative to Total Emp. Growth in Region	Relative to Industry Emp. Growth in State	5 yr. Emp. Growth	Relative to Total Emp. Growth in Region	Relative to Industry Emp. Growth in State
Fabricated Metal Product Manufacturing	3.2%	1.3	n/a	0.1%	0.0	n/a
Machinery Manufacturing	2.9%	1.2	n/a	-5.0%	n/a	n/a
Computer and Electronic Product Manufacturing	-0.3%	n/a	n/a	4.9%	0.7	n/a
Electrical Equipment, Appliance, and Component Manufacturing	14.3%	5.9	20.9	-88.7%	n/a	n/a
Furniture and Related Product Manufacturing	9.6%	4.0	3.3	-11.8%	n/a	n/a
Miscellaneous Manufacturing	0.7%	0.3	0.1	6.8%	1.0	0.4
Transportation and Warehousing						
Truck Transportation	0.0%	0.0	n/a	12.6%	1.8	2.0
Transit and Ground Passenger Transportation	-1.1%	n/a	n/a	12.0%	1.7	0.7
Pipeline Transportation	2.9%	1.2	n/a	5.9%	0.9	0.3
Support Activities for Transportation	11.0%	4.5	n/a	-8.6%	n/a	n/a
Couriers and Messengers	7.5%	3.1	1.5	24.1%	3.5	1.6
Warehousing and Storage	11.0%	4.5	0.5	44.6%	6.5	0.9

Table 11B provides similar information on the wage performance of the subsectors within SVWDA's identified key employment sectors. As these data show, the largest regional short- term (one-year) wage growth in:

- *Construction*: occurred in the subsector *Construction of Buildings* (3.5 percent) which also exhibited regional one-year wage growth that was greater than the regional average across all industries, and greater than the state-wide average for this subsector.
- *Health Care*: occurred in the subsector *Hospitals* (5.4 percent) which also exhibited regional one-year wage growth that was greater than the regional average across all industries.
- *Manufacturing*: occurred in the subsectors *Nonmetallic Mineral Product Manufacturing* (13.7 percent), and *Paper Manufacturing* (11.2 percent). In addition, both subsectors also exhibited regional one-year wage growth that was greater than the regional average across all industries, and greater than the state-wide average for these subsectors.
- *Transportation and Warehousing*: occurred in the subsectors *Transit and Ground Passenger Transportation* (8.3 percent) and *Warehousing and Storage* (6.4 percent). In addition, both of these subsectors also exhibited regional one-year wage growth that was greater than the regional average across all industries, and *Transit and Ground Passenger Transportation* also exhibited regional one-year wage growth greater than the state-wide average for this subsector.

With regard to long-term (five-year) wage growth, the largest increases in:

- *Construction*: occurred in the subsector *Heavy and Civil Engineering Construction* (17.7 percent) which also exhibited regional five-year wage growth that was greater than the regional average across all industries and the state-wide average for this subsector.
- *Health Care*: occurred in the subsector *Nursing and Residential Care Facilities* (13.4 percent) which also exhibited regional five-year wage growth that was greater than the regional average across all industries and the state-wide average for this subsector.
- *Manufacturing*: occurred in the subsectors *Nonmetallic Mineral Product Manufacturing* (23.6 percent), *Food Manufacturing* (23.0 percent), and *Paper Manufacturing* (20.8 percent). In addition, all three of these subsectors exhibited regional five-year wage growth that was greater than the regional average across all industries, and greater than the state-wide average for these subsectors.
- *Transportation and Warehousing*: occurred in the subsectors *Transit and Ground Passenger Transportation* (42.1 percent) and *Pipeline Transportation* (24.6 percent). In addition, both of these subsectors also exhibited regional five-year wage growth that was greater than the regional average across all industries, and greater than the state- wide average for these subsectors.

Table 11B: Wage Performance of Key Industry Subsectors in SVWDA

Industry and Subsector	1 yr. Wage Growth	Relative to Avg. Wage Growth in Region	Relative to Industry Wage Growth in State	5 yr. Wage Growth	Relative to Avg. Wage Growth in Region	Relative to Industry Wage Growth in State
Construction						
Construction of Buildings	3.5%	1.6	2.2	12.8%	1.1	1.2
Heavy and Civil Engineering Construction	-11.1%	n/a	n/a	17.7%	1.5	4.0
Specialty Trade Contractors	1.0%	0.5	0.5	14.9%	1.2	1.2
Health Care						
Ambulatory Health Care Services	3.9%	1.8	1.1	1.4%	0.1	0.2
Hospitals	5.4%	2.4	0.8	13.2%	1.1	1.1
Nursing and Residential Care Facilities	0.9%	0.4	0.4	13.4%	1.1	2.5
Manufacturing						
Food Manufacturing	5.8%	2.6	11.5	23.0%	1.9	2.3
Beverage and Tobacco Product Manufacturing	-14.9%	n/a	n/a	-1.2%	n/a	n/a
Wood Product Manufacturing	6.0%	2.7	1.6	15.9%	1.3	1.1
Paper Manufacturing	11.2%	5.0	7.8	20.8%	1.7	2.8
Printing and Related Support Activities	4.3%	1.9	1.9	12.3%	1.0	1.4

Table 11B: Wage Performance of Key Industry Subsectors in SVWDA

Industry and Subsector	1 yr. Wage Growth	Relative to Avg. Wage Growth in Region	Relative to Industry Wage Growth in State	5 yr. Wage Growth	Relative to Avg. Wage Growth in Region	Relative to Industry Wage Growth in State
Petroleum and Coal Products Manufacturing	2.0%	0.9	0.3	-3.1%	n/a	n/a
Chemical Manufacturing	-1.6%	n/a	n/a	9.5%	0.8	0.8
Plastics and Rubber Products Manufacturing	8.1%	3.7	1.1	10.2%	0.8	1.1
Nonmetallic Mineral Product Manufacturing	13.7%	6.2	8.5	23.6%	2.0	1.7
Primary Metal Manufacturing	-1.1%	n/a	n/a	6.0%	0.5	0.5
Fabricated Metal Product Manufacturing	1.6%	0.7	0.4	11.6%	1.0	0.9
Machinery Manufacturing	0.1%	0.0	n/a	10.7%	0.9	6.4
Computer and Electronic Product Manufacturing	4.2%	1.9	n/a	1.6%	0.1	0.1
Electrical Equipment, Appliance, and Component Manufacturing	-10.2%	n/a	n/a	-7.3%	n/a	n/a
Furniture and Related Product Manufacturing	-6.1%	n/a	n/a	4.1%	0.3	0.5
Miscellaneous Manufacturing	3.3%	1.5	n/a	11.2%	0.9	3.5

Table 11B: Wage Performance of Key Industry Subsectors in SVWDA

Industry and Subsector	1 yr. Wage Growth	Relative to Avg. Wage Growth in Region	Relative to Industry Wage Growth in State	5 yr. Wage Growth	Relative to Avg. Wage Growth in Region	Relative to Industry Wage Growth in State
Transportation and Warehousing						
Truck Transportation	2.0%	0.9	0.8	10.5%	0.9	0.9
Transit and Ground Passenger Transportation	8.3%	3.7	1.9	42.1%	3.5	2.8
Pipeline Transportation	1.9%	0.8	n/a	24.6%	2.1	1.6
Support Activities for Transportation	1.1%	0.5	n/a	-55.2%	n/a	n/a
Couriers and Messengers	-1.0%	n/a	n/a	-0.9%	n/a	n/a
Warehousing and Storage	6.4%	2.9	n/a	15.4%	1.3	1.6

Finally, Table 11C provides data on other performance metrics for the subsectors within SVWDA's identified key employment sectors. As these data show, in regard to:

- Location Quotient for Employment: the industry subsectors with the largest relative employment footprint in SVWDA in the second quarter of 2016 were: *Construction of Buildings* (1.2) in *Construction*; *Nursing and Residential Care Facilities and Hospitals* (1.4) in *Health Care*; *Food Manufacturing* (5.8) and *Printing and Related Support Activities* (4.9) in *Manufacturing*; and *Warehousing and Storage* (3.1) and *Truck Transportation* (2.2) in *Transportation and Warehousing*.

- Location Quotient for Establishments: the industry subsectors with the largest relative establishment footprint in SVWDA in the second quarter of 2016 were: *Construction of Buildings* and *Specialty Trade Contractors* (1.3) in *Construction*; *Nursing and Residential Care Facilities* and *Hospitals* (1.7) in *Health Care*; *Plastics and Rubber Products Manufacturing* (3.0), *Primary Metal Manufacturing* (2.9), and *Petroleum and Coal Products Manufacturing* (2.7) in *Manufacturing*; and *Warehousing and Storage* (2.1) and *Truck Transportation* (1.9) in *Transportation and Warehousing*.
- Industry Output as a Percentage of Regional Output: the industry subsectors that accounted for the largest percentage of regional output in SVWDA in the second quarter of 2016 were: *Construction of Buildings, Heavy and Civil Engineering Construction*, and *Specialty Trade Contractors* (7.0 percent) in *Construction*; *Hospitals* (2.9 percent) in *Health Care*; *Food Manufacturing* (11.7 percent) in *Manufacturing*; and *Truck Transportation* (1.9 percent) in *Transportation and Warehousing*.
- Proportion of Industry Output Exported: the industry subsectors that exported the largest percentage of their output in SVWDA in the second quarter of 2016 were: *Construction of Buildings, Heavy and Civil Engineering Construction*, and *Specialty Trade Contractors* (3.4 percent) in *Construction*; *Nursing and Residential Care Facilities* (17.4 percent) in *Health Care*; *Primary Metal Manufacturing* (98.4 percent), *Furniture and Related Product Manufacturing* (98.1 percent), and *Computer and Electronic Product Manufacturing* (98.0

percent) in *Manufacturing*; and *Warehousing and Storage* (59.9 percent) in *Transportation and Warehousing*.

- Industry Exports as a Percentage of Regional Exports: the industry subsectors that accounted for the largest percentage of regional exports in SVWDA in the second quarter of 2016 were: *Construction of Buildings, Heavy and Civil Engineering Construction*, and *Specialty Trade Contractors* (0.6 percent) in *Construction*; *Hospitals* (0.7 percent) in *Health Care*; *Food Manufacturing* (26.5 percent) in *Manufacturing*; and *Warehousing and Storage* (1.7 percent) in *Transportation and Warehousing*.
- Type 1 Multiplier Ratio (Multiplier): the major industry sectors with the largest relative economic impact on SVWDA in the second quarter of 2016 were: *Construction of Buildings, Heavy and Civil Engineering Construction*, and *Specialty Trade Contractors* (1.4) in *Construction*; *Ambulatory Health Care Services and Hospitals* (1.2) in *Health Care*; *Food Manufacturing* (1.5), and *Wood Product Manufacturing and Nonmetallic Mineral Product Manufacturing* (1.4) in *Manufacturing*; and *Warehousing and Storage* (1.4) in *Transportation and Warehousing*.

Table 11C: Other Performance of Key Industry Subsectors in SVWDA

Industry and Subsector	LQ Emp.	LQ Est.	% of Regional Output	Industry Output Exported	% of Regional Exports	Type 1 Mult.
Construction						
Construction of Buildings	1.2	1.3	7.0%	3.4%	0.6%	1.4
Heavy and Civil Engineering Construction	0.4	0.9	7.0%	3.4%	0.6%	1.4
Specialty Trade Contractors	1.0	1.3	7.0%	3.4%	0.6%	1.4
Health Care						
Ambulatory Health Care Services	0.8	1.0	2.5%	5.3%	0.3%	1.2
Hospitals	1.4	0.7	2.9%	9.5%	0.7%	1.2
Nursing and Residential Care Facilities	1.4	1.7	0.9%	17.4%	0.4%	1.1
Manufacturing						
Food Manufacturing	5.8	2.6	11.7%	85.0%	26.5%	1.5
Beverage and Tobacco Product Manufacturing	1.4	1.3	1.8%	89.4%	4.2%	1.2
Wood Product Manufacturing	1.8	2.1	1.0%	79.1%	2.1%	1.4
Paper Manufacturing	1.9	1.4	1.2%	84.9%	2.8%	1.2
Printing and Related Support Activities	4.9	1.4	1.2%	68.3%	2.2%	1.3
Petroleum and Coal Products Manufacturing	3.2	2.7	0.3%	77.1%	0.6%	1.2
Chemical Manufacturing	2.3	1.2	3.5%	95.7%	9.0%	1.2
Plastics and Rubber Products Manufacturing	4.1	3.0	3.0%	96.3%	7.8%	1.2
Nonmetallic Mineral Product Manufacturing	2.1	1.9	0.6%	65.2%	1.1%	1.4
Primary Metal Manufacturing	2.4	2.9	0.7%	98.4%	2.0%	1.2

Table 11C: Other Performance of Key Industry Subsectors in SVWDA

Industry and Subsector	LQ Emp.	LQ Est.	% of Regional Output	Industry Output Exported	% of Regional Exports	Type 1 Mult.
Fabricated Metal Product Manufacturing	2.4	1.8	1.9%	94.4%	4.8%	1.2
Machinery Manufacturing	1.8	1.5	1.5%	95.7%	3.9%	1.2
Computer and Electronic Product Manufacturing	0.9	0.9	0.4%	98.0%	1.0%	1.2
Electrical Equipment, Appliance, and Component Manufacturing	0.0	0.7	0.2%	90.2%	0.4%	1.2
Furniture and Related Product Manufacturing	1.2	1.9	0.3%	98.1%	0.7%	1.3
Miscellaneous Manufacturing	1.9	1.1	0.6%	95.9%	1.4%	1.3
Transportation and Warehousing						
Truck Transportation	2.2	1.9	1.9%	19.7%	1.0%	1.3
Transit and Ground Passenger Transportation	0.4	0.7	0.1%	17.5%	0.0%	1.3
Pipeline Transportation	1.4	1.0	0.0%	22.6%	0.0%	1.3
Support Activities for Transportation	0.4	1.0	n/a	n/a	n/a	n/a
Couriers and Messengers	1.2	1.4	0.3%	10.9%	0.1%	1.3
Warehousing and Storage	3.1	2.1	1.1%	59.9%	1.7%	1.4

In Short

Our analysis of the economic performance of each of SVWDA's major industry sectors has shown that the *Transportation and Warehousing* sector is a high growth industry in terms of both employment and wages, and an industry that has a disproportionately large

employment and establishment footprint within the region and is one of the region's significant export industries. In addition, the *Management of Companies and Enterprises* sector is a high growth industry within the region in terms of both employment and wages. While the region's *Manufacturing* sector has a disproportionately large employment and establishment footprint within the region and is the region's most significant export industry.

While our analysis of the industry subsectors within SVWDA's identified four key employment sectors has shown that several subsectors within the region's *Manufacturing* sector (i.e., *Petroleum and Coal Products Manufacturing; Nonmetallic Mineral Product Manufacturing; Electrical Equipment, Appliance, and Component Manufacturing; Food Manufacturing*, and *Paper Manufacturing*) are high growth industries in terms of employment and/or wages. In addition, several have disproportionately large employment and establishment footprints within the region and are very significant export industries.

All subsectors in the region's *Health Care* sector (i.e., *Nursing and Residential Care Facilities, Hospitals*, and *Ambulatory Health Care Services*) have also been shown to be high growth industries in terms of employment and/or wages. Finally, the majority of subsectors in the region's *Transportation and Warehousing* sector (i.e., *Couriers and Messengers, Pipeline Transportation, Support Activities for Transportation, Transit and Ground Passenger Transportation*, and *Warehousing and Storage*) have also been shown to be high growth industries in terms of employment and/or wages, have disproportionately large employment and establishment footprints within the region, and in some cases (e.g., *Warehousing and Storage*) are among the region's significant export industries.

Gaps Analysis

In this section, we compare the occupation-driven demand for graduates in SVWDA with the pipeline of graduates from regional postsecondary education institutions to identify areas of potential unmet need. The method used to accomplish this analysis is not new and has been successfully employed in earlier studies conducted in several states.⁶¹

Demand for Trained Workers

To project the occupation-driven demand for graduates we start with projections of occupational employment. According to the most recent sub-state occupational employment projections from the Virginia Employment Commission, between 2012 and 2022 SVWDA will experience approximately 7,947 job openings each year.⁶² Breaking this number down according to major occupational group shows that, the largest numbers of annual openings are projected to occur in: 1) *Food Preparation and Serving* occupations (1,099 per year), 2) *Sales and Related* occupations (931 per year), 3) *Office and Administrative Support* occupations (914 per year), 4) *Transportation and Material Moving* occupations (601 per year), and 5) *Education, Training, and Library* occupations (560 per year). The numbers for these major occupation groups and all others are graphically displayed in Figure 25.

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⁶¹ Similar methods are used in at least nine states (California, Georgia, Idaho, Illinois, New Jersey, Tennessee, Texas, Utah, and Virginia) to project anticipated education and training demands. For an excellent exposition of this method see, William J. Drummond and Jan L Youtie, "Occupational Employment, Demand for College Graduates, and Migration: A Statewide View," a report to the Board of Regents, University System of Georgia, 1999. For an example of how this method has been used previously in Virginia see, A. Fletcher Mangum, "System-Wide Needs Assessment for Virginia Education," State Council of Higher Education for Virginia, March 28, 2002, p.90.

⁶² *Data Source:* Virginia Employment Commission, "2012 to 2022 Substate Occupational Employment Projections."

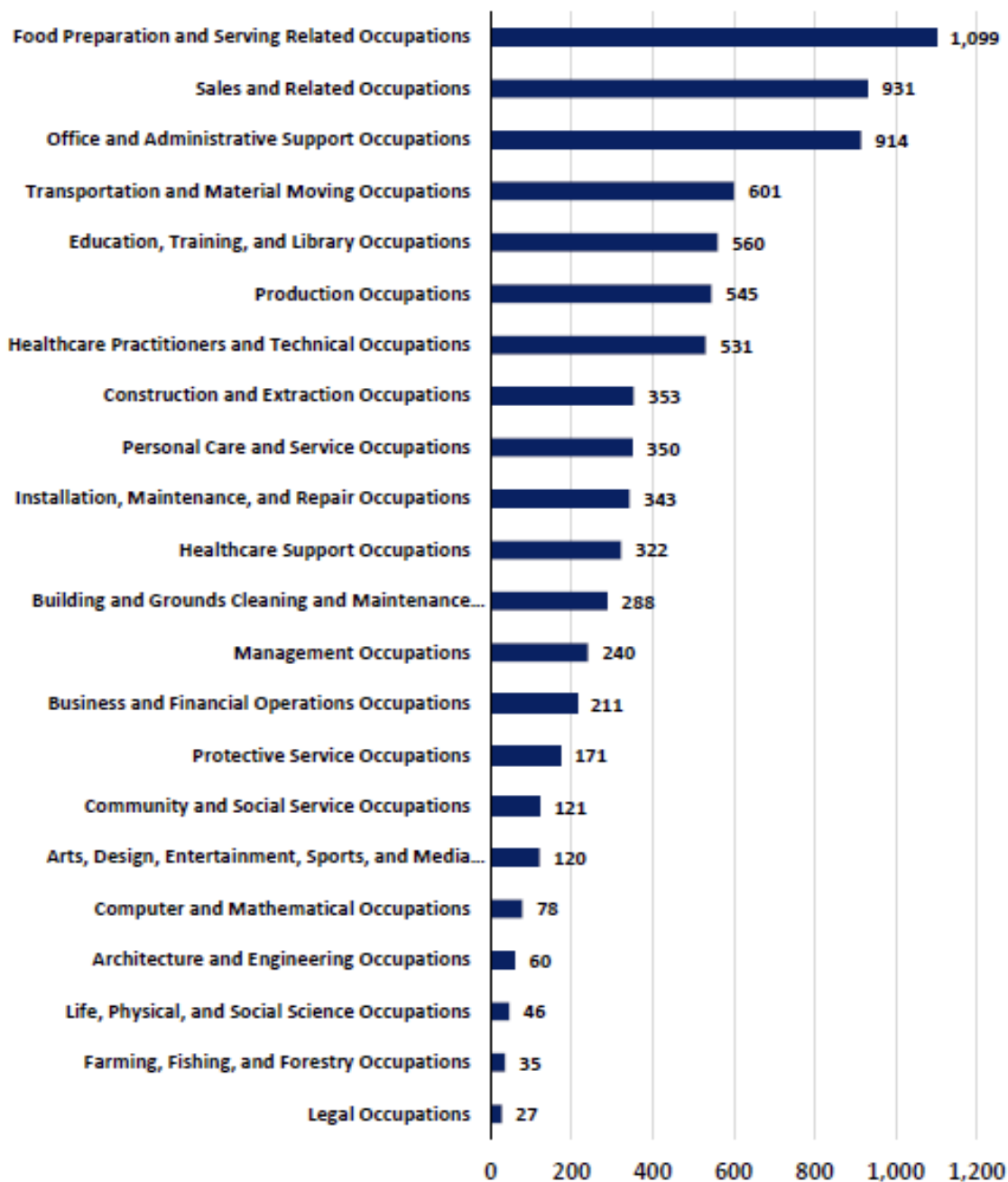


Figure 25: Projected Average Annual Openings in SVWDA by Major Occupation Category – 2012 to 2022⁶³

⁶³ Data Source: Virginia Employment Commission, “2012 to 2022 Substate Occupational Employment Projections.”

In the next step of the process, we use a crosswalk developed by the National Crosswalk Service Center to “map” occupations into the specific education and training program(s) necessary for entry into that occupation.⁶⁴ Through this process, we are able to use the occupational projections for SVWDA to estimate the occupation-driven demand for postsecondary education graduates within SVWDA.⁶⁵

Supply of Graduates

To estimate the likely supply of graduates within those education and training programs identified in the demand analysis, we use 2014-15 completions data from the National Center for Education Statistics’ IPEDS Data Center for all colleges and universities within SVWDA’s service area.⁶⁶

⁶⁴ The National Crosswalk Service Center (NCSC) is funded by the U.S. Department of Labor, Employment and Training Administration. The specific NCSC crosswalk used in this analysis is the *2010 Standard Occupational Classification Crosswalk to 2010 Classification of Instructional Programs*. This crosswalk identifies the prerequisite instructional programs (classified according to the National Center for Educational Statistics’ *2010 Classification of Instructional Program*, or *CIP*, code) necessary for employment in 1,364 specific occupations (classified according to the Bureau of Labor Statistics’ *2010 Standard Occupational Classification*, or *SOC*, code). Often, these are many-to-many relationships where a given instructional program can serve as an avenue into one of many jobs, or one of several instructional programs can serve as a prerequisite for a given job.

⁶⁵ More formally, the demand for education and training programs is calculated as:

$$DCIP_i = \sum Dcip_{ji}$$

Where,

$$Dcip_{ji} = (SOC_j)(GCIP_i / \sum Gcip_{ij})$$

and,

$DCIP_i$ = the annual demand for instructional program i

$\sum Dcip_{ji}$ = the annual demand for instructional program i across all occupation(s) j

SOC_j = the projected annual openings for occupation j

$GCIP_i$ = SVWDA graduates from instructional program i

$\sum Gcip_{ij}$ = SVWDA graduates from all instructional program(s) i related to occupation j

⁶⁶ More specifically, these data capture degree and certificate completions in 2014-15 from Blue Ridge Community College, Bridgewater College, Eastern Mennonite University, James Madison University, Lord Fairfax Community College, Mary Baldwin College, Shenandoah University, Southern Virginia University, Virginia Military Institute, Washington and Lee University, and the Wilson Workforce and Rehabilitation Center.

Caveats

In interpreting the results of this analysis, it is important to keep the following caveats in mind:

- Some multi-campus postsecondary education institutions report enrollment and completion data to the IPEDS Data Center through their main campus only. As a practical matter, this means that all enrollments and completions from all of the institution's campuses are reported "as if" they were at the main campus. As a result, completers from the satellite campuses of postsecondary institutions that do not have their main campus in the SVWDA service area may not be included in the assessment of the pipeline of regional graduates.
- Postsecondary institutions do not report completions from non-credit or specialized workforce training classes to the IPEDS Data Center. As a result, completers from these classes may not be included in the assessment of the pipeline of regional graduates.
- For these reasons, the training "gaps" identified in Tables 12 through 17 are correctly viewed as potential shortfalls in the regional pipeline of trained workers. They identify areas where there may be an insufficient supply of programs and program graduates within the region, and where further conversations with businesses and education/training providers may be necessary.

Percentage of Regional Need Met

Table 12 details the results obtained from a comparison of the occupation-driven demand for graduates in SVWDA with the pipeline of completers from regional postsecondary

education institutions, for those occupations exhibiting the largest absolute gaps between demand and supply. These estimates take into account the fact that the relationship between occupations and their associated training programs can often be a many-to-many relationship. As these data show, the largest gaps were shown to be for: Nursing Assistants; Teacher Assistants; Industrial Machinery Mechanics; Licensed Practical and Licensed Vocational Nurses; Medical Assistants; Electricians; Child Care Workers; First-Line Supervisors of Construction Trades and Extraction; Dental Assistants; and Real Estate Sales Agents.

In this Table:

- Occupation – is the title of the selected occupation
- Avg. Annual Open. – is the estimated number of average annual openings in this occupation in SVWDA between 2012 and 2022.
- Degree Req. – is the most commonly associated degree level for individuals employed in the selected occupation.
- Cert. – is the number of individuals who completed a certificate program in SVWDA in the 2014-15 academic year that is necessary for entry into the selected occupation.
- Assoc. – is the number of individuals who completed a two-year Associate’s program in SVWDA in the 2014-15 academic year that is necessary for entry into the selected occupation.
- BA – is the number of individuals who completed a four-year Bachelor’s program in SVWDA in the 2014-15 academic year that is necessary for entry into the selected occupation.
- MA – is the number of individuals who completed a Master’s program in SVWDA in the

2014-15 academic year that is necessary for entry into the selected occupation.

- Doc – is the number of individuals who completed a doctoral (Ph.D.) or first professional program (*e.g.*, J.D.) in SVWDA in the 2014-15 academic year that is necessary for entry into the selected occupation.
- Total – is the total pipeline of individuals who completed postsecondary programs that are necessary for entry into the selected occupation in SVWDA in the 2014-15 academic year.
- Gap – is the difference between the number of annual openings, and the pipeline of qualified regional graduates, associated with the selected occupation.
- % of Need Met – is the percentage of the annual demand for qualified workers in the selected occupation that is met by graduates from associated regional postsecondary education programs.

Table 12: Top Areas of Unmet Regional Need⁶⁷

Occupation	Avg. Annual Open.	Degree Req.	Cert.	Assoc	BA	MA	Doc	Total	Gap	% of Need Met
Nursing Assistants	126	HS	10					10	116	8%
Teacher Assistants	60	Some College						0	60	0%
Industrial Machinery Mechanics	45	Cert						0	45	0%
Licensed Practical and Licensed Vocational Nurses	76	Cert	34					34	42	45%
Medical Assistants	32	Cert						0	32	0%
Electricians	32	Cert	3					3	29	10%
Childcare Workers	49	HS	16	5				21	28	43%
First-Line Supervisors of Construction Trades and Extraction	35	HS	8					8	27	22%
Dental Assistants	24	Cert						0	24	0%
Real Estate Sales Agents	21	HS	1					1	20	5%

⁶⁷ These estimates take into account the fact that the relationship between occupations and their associated training programs can often be a many-to-many relationship. As a result, to avoid double counting it is sometimes necessary to “allocate” graduates across the multiple occupations associated with a given training program. The method we use to do this is to apportion graduates based on the relative number of annual openings associated with each occupation.

Table 12: Top Areas of Unmet Regional Need⁶⁸

Occupation	Avg. Annual Open.	Degree Req.	Cert.	Assoc	BA	MA	Doc	Total	Gap	% of Need Met
Middle School Teachers, Except Special and Career/Technical	48	BA	2		17	9	2	29	19	60%
Machinists	19	Cert						0	19	0%
Medical Secretaries	19	Some College						0	19	0%
Computer User Support Specialists	18	BA						0	18	0%
Insurance Sales Agents	17	BA						0	17	0%
Library Technicians	15	BA						0	15	0%
Preschool Teachers, Except Special Education	15	Some College						0	15	0%
Dental Hygienists	14	Assoc						0	14	0%
Hairdressers, Hairstylists, and Cosmetologists	30	Cert	16					16	14	53%
First-Line Supervisors of Personal Service Workers	13	BA						0	13	0%
Electronic Home Entertainment Equipment Installers and Repairers	13	Cert						0	13	0%

Table 12: Top Areas of Unmet Regional Need⁷

	Avg.							% of		
	Annual	Degree	Cert.	Assoc	BA	MA	Doc	Total	Gap	Need
Veterinarians	13	Doc						0	13	0%
Rehabilitation Counselors	13	MA						0	13	0%
Radiologic Technologists	12	Assoc						0	12	0%
Physical Therapist Assistants	11	Assoc						0	11	0%
Massage Therapists	11	Cert						0	11	0%
Librarians	11	MA						0	11	0%
Industrial Engineers	10	BA						0	10	0%
Social and Human Service Assistants	10	BA						0	10	0%
Medical and Clinical Laboratory Technologists	9	BA						0	9	0%

In Short

Our assessment of potential gaps between the occupation-driven demand for graduates in SVWDA, and the pipeline of graduates from regional postsecondary education institutions, shows that the largest shortfalls of trained workers are likely to occur in the following occupations: Nursing Assistants; Teacher Assistants; Industrial Machinery Mechanics; Licensed Practical and Licensed Vocational Nurses; Medical Assistants; Electricians; Child Care Workers; First-Line Supervisors of Construction Trades and Extraction; Dental Assistants; and Real Estate Sales Agents.

Conclusion

This report has provided an assessment of the state of the workforce in the Shenandoah Valley Workforce Development Area (SVWDA). That assessment has shown that SVWDA has enjoyed steadily rising employment over the last five years and almost all of that growth was driven by the private sector. More specifically, the largest increases in private sector employment over this period occurred in the *Health Care and Social Assistance* (up 2,513 jobs), *Transportation and Warehousing* (up 2,217 jobs), and *Accommodation and Food Services* (up 1,889 jobs) sectors.

With regard to the structure of the regional economy, our analysis has shown that SVWDA is heavily dependent on the *Manufacturing* sector. At 31,718 jobs in the second quarter of 2016, *Manufacturing* was SVWDA's largest employment sector that quarter and its 5th highest paying at \$963 per week. The region's second largest employment sector was *Healthcare and Social Assistance* (27,532 jobs and 9th highest paying at \$858 per week), and *Retail Trade* was the region's third largest employment sector (26,741 jobs and 17th highest

paying at \$488 per week).

From a demographic perspective, our analysis has shown that overall population growth in SVWDA between 2000 and 2015 was comparable to the statewide norm. And, just as at the statewide level, that population growth was driven by increases the region's 65 and older population. Moreover, in SVWDA that population shift was further exacerbated by absolute losses in the regions 19 and under population. In addition, population growth in SVWDA between 2000 and 2015 was disproportionately driven by the region's Hispanic and Asian populations.

As part of our assessment, we also evaluated the economic performance of each of SVWDA's major industry sectors. That evaluation showed that SVWDA's *Transportation and Warehousing* sector is high growth industry in terms of both employment and wages, and an industry that has a disproportionately large employment and establishment footprint within the region and is one of the region's significant export industries. In addition, the *Management of Companies and Enterprises* sector is also high growth industry within the region in terms of both employment and wages. While SVWDA's *Manufacturing* sector has a disproportionately large employment and establishment footprint within the region and is the region's most significant export industry.

In addition to evaluating the performance of SVWDA's major industry sectors, we also evaluated the economic performance of subsectors within four key industry sectors – *Construction, Health Care, Manufacturing, and Transportation and Warehousing* – that have been identified by SVWDA personnel as key regional employment sectors. That evaluation showed that several subsectors within the region's *Manufacturing* sector (*i.e., Petroleum and*

Coal Products Manufacturing; Nonmetallic Mineral Product Manufacturing; Electrical Equipment, Appliance, and Component Manufacturing; Food Manufacturing, and Paper Manufacturing) are high growth industries in terms of employment and/or wages. In addition, several of these subsectors also have disproportionately large employment and establishment footprints within the region and are very significant export industries.

Our evaluation also showed that all subsectors in the region's *Health Care* sector (*i.e., Nursing and Residential Care Facilities, Hospitals, and Ambulatory Health Care Services*) qualify as high growth industries in terms of employment and/or wages. While the majority of subsectors in the region's *Transportation and Warehousing* sector (*i.e., Couriers and Messengers, Pipeline Transportation, Support Activities for Transportation, Transit and Ground Passenger Transportation, and Warehousing and Storage*) also qualify as high growth industries in terms of employment and/or wages, have disproportionately large employment and establishment footprints within the region, and in some cases (*e.g., Warehousing and Storage*) are among the region's most significant export industries.

Finally, our assessment of potential gaps between the occupation-driven demand for graduates in SVWDA, and the pipeline of graduates from regional postsecondary education institutions, has shown that the largest shortfalls of trained workers are likely to occur in the following occupations: Nursing Assistants; Teacher Assistants; Industrial Machinery Mechanics; Licensed Practical and Licensed Vocational Nurses; Medical Assistants; Electricians; Child Care Workers; First-Line Supervisors of Construction Trades and Extraction; Dental Assistants; and Real Estate Sales Agents.

In sum, SVWDA is a region that has experienced steady employment growth, remains heavily dependent upon its *Manufacturing* sector, but is also experiencing significant employment and wage growth in other key areas such as *Transportation and Warehousing* and *Health Care*.

SWOT Analysis

The SWOT analysis was conducted at a joint meeting of the Board of Directors and Chief Elected Officials Consortium Meeting. The thirty-eight individuals represent a cross-section of workforce services delivery agencies, community college administrators (presidents, vice-presidents for workforce development), chief elected officials, economic developers, and business representatives. The VWL 16-01, Revised, requests a SWOT Analysis of: 1) education and training in the region, 2) strengths and weaknesses of workforce development activities, and 3) the capacity to provide workforce development activities to address the education and skill needs of the workforce, including individuals with barriers to employment, and the employment needs of employers.

The analysis may not be complete in the manner one might expect from a full regional analysis conducted over a period of months by subject matter experts; however, the SWOT which follows represents the strengths, weaknesses, opportunities, and threats as perceived by those who live and work in the region. The decision to provide the SWOT analysis as a narrative was made to ensure fullness could be brought to the analysis in a way that is not possible when providing bulleted, unannotated lists of the strengths, weaknesses, opportunities, and threats.

Education and Training

SVWDB is fortunate to have a host of nationally recognized public and private colleges and universities, including Bridgewater College, Christendom College, Eastern Mennonite University, James Madison University, Mary Baldwin University, Shenandoah University, Southern Virginia University, Virginia Military Institute, and Washington & Lee University. Three community colleges serve the region: Blue Ridge Community College, Dabney S. Lancaster

Community College, and Lord Fairfax Community College. The Shenandoah Valley also counts among its resources the presence of Wilson Workforce and Rehabilitation Center, which offers highly innovative career-technical training and broadly shares the knowledge and skills of its faculty. The region is also served by several post-secondary career and technical institutes including Massanutten Technical Center and Valley Career and Technical Center. The Valley has sixteen separate school systems overseeing the individual K-12 school systems in each locality.

Among the strengths in education and training, the Shenandoah Valley's career/technical schools, community colleges, and post-secondary four year colleges and universities are widely accessible to residents of the Valley. The curricular offering is broad and students can, generally, pace their educational pursuit to match their needs. Businesses benefit from the presence of these institutions, borrowing on faculty expertise and institutional responsiveness. When a business identifies a training need, educators in the Valley respond with education and training solutions. Businesses in the region are aware that affordable education and training not only exists here, but that the solutions can be provided on a campus, via internet, or at a business's work-site. All the identified institutions employ guidance counselors and/or career coaches to help provide direction to students and prospective students.

While the Valley enjoys the strong educational/training presence of the broad array of institutions, the Valley continues to have a shortage of technically skilled individuals (as also noted in the State of the SVWDB Workforce analysis appearing earlier in this document). Too few of our students and high-school graduates have hands-on training in career/technical skills. There remains a lack of a widespread or universal understanding of career pathways and

apprenticeship opportunities—a lack which is shared by students, recent graduates, teachers, guidance counselors, and parents. This may be attributed, in part, by the challenges presented in balancing classroom time with curriculum demands—too much to be taught in too little time. It may also be attributed to what is being called “the image gap,” where students, parents, and educators view technical careers with an eye to what those careers entailed prior to technological advancements—including digitalization and robotics. The outdated “factory model” has been replaced by high tech production, but the reality has not been fully disseminated. Whatever the reason, there is general agreement among those engaged in our SWOT analysis, in mass media, and in academic publications that businesses find our emerging labor force lacks technical skills as well as the soft skills, such as initiative and motivation, necessary for career success. In sum, strong training opportunities exist but those opportunities are not fully utilized by all individuals who are or will be seeking work.

In addition to students attempting to enter the workforce with inadequate knowledge and soft skills, we note the additional challenges faced by individuals who need to earn an income now and are challenged by the length of time training requires or by the conflict presented when training dates and times conflict with an existing work schedule. Some businesses have tried importing labor rather than develop individuals in the existing workforce. While this approach addresses an individual business’ pressing labor needs, it doesn’t improve the overall economy. None of these challenges rise to the level of a “threat,” but they do impact businesses and the workforce. Perhaps the greatest threat to the region’s businesses and its workforce is the rapidity of technology growth—businesses will need to invest capital to purchase the machines that are increasingly productive and efficient. The workforce will need

to continue to invest in training, re-training, and re-training yet again as business needs change. The threat to the region would be a failure to make the investments on both sides and to keep both sides in balance.

Opportunities exist, primarily in training and education. These include, but are not limited to:

- Developing training programs and selling the programs to businesses.
- Developing career pathway maps and models to distribute to middle and high school teachers, counselors, parents, and career coaches. The maps and models would allow all to more fully inform students of local career opportunities and pathways.
- Developing soft skills and customer service training to be delivered in high schools, career/technical centers, community colleges, in business settings, and through open enrollment.
- Bundling foundational skills education with occupational training.
- Educating employers to understand they can increase employee recruitment and retention through a commitment to long-term education and training.
- Expanding summer workplace and after school programs to offer hands-on experience to students.

In summary, the Valley has a strong educational network, both for the academic and the career/technical sides of workforce preparation. There are opportunities to continue partnering with K-12 school systems to engage teachers, counselors, career coaches, parents, and students

in better understanding the needs of business (soft skills, career/technical skills) and the career opportunities these businesses offer. Virginia's Department of Education's focus on career-technical education and the requirement, beginning in 2017, that high school students prepare in one of the career-technical clusters should address many of the weaknesses and threats identified here.

Workforce Development Activities

SVWDB is proud of the initiatives, partnerships, and collaborations that have characterized it for the past five years. We have been successful in receiving federal grants for OJT and apprenticeship initiatives. Local K-12 school systems are beginning to recognize that career readiness includes technical knowledge and skills that align to employer needs and are beginning to offer innovative responses to that recognition, such as creating credit apprenticeship programs. Training programs can be layered and used to leverage additional programming and funding opportunities. We have an abundance of diverse workforce programs available through the SVWDB, our three community colleges, our technical schools, and our colleges and universities. Our service providers—both at the individual and at the agency level—are responsive and committed to elevating our workforce and our economy. We are fortunate to have a strong presence from Virginia Jobs Investment Program, a program of the Virginia Economic Development Partnership. Finally, SVWDB has a long history of collaboration with the Shenandoah Valley Partnership, our region's economic development organization, and the other economic development authorities housed in each locality. The strength of workforce development activities continues to grow.

While we take pride in what has been accomplished, we acknowledge that there are weaknesses throughout the Valley. Too many of our high school graduates lack the technical knowledge and skills as well as the soft skills necessary for career success. Too few in the K-12 school systems are participating in career-technical education or know about SVWDB and the workforce systems. Guidance counselors lack sufficient information on career-technical opportunities and, therefore, fail to educate students and parents on the full range of career opportunities, focusing, instead, on the bachelor's degree path for most students. Guidance counselors and middle and high school teachers lack sufficient knowledge about and access to available non-degree programs. There also exist a misconception about in-demand career opportunities, education, and the training required for career-technical careers.

Beyond workforce activities in K-12, workforce partners have not fully mastered information sharing among partner organizations. And, there is confusion. With so many organization engaged in workforce development, it can be confusing as to who has the most appropriate training available. Community colleges and technical centers are not communicating with one another on program development, resulting in some duplication of effort and confusion over options. Virginia's policy of administering federal workforce funding through the community college systems isn't well understood among Chief Elected Officials.

Though these weaknesses can and will be overcome, there are threats which could be more challenging. We continue to see the potential for reduction in future federal and state grant opportunities. That, coupled with a continued increase in the technical skills gap along with a continued exodus of area youth as they move from the area because of a lack of jobs

would leave the Valley struggling to compete for economic investments due to lack of a skilled workforce.

All of this leaves us with opportunities to continue to develop strengths, shore up weaknesses, and bridge gaps. We envision outreach to guidance counselors, enhancing knowledge of career opportunities among students and high school graduates, developing a one page summary of available programs for distribution in middle schools, high schools, career/technical schools, and to workforce partners. In addition, we will consider developing additional marketing material to promote workforce development and engage more youth. As we develop new initiatives, we will continue to engage other stakeholders who are not currently at the table.

Finally, we see additional opportunities to serve businesses in different ways, such as assisting companies who are lagging in preparing for the retirement of baby boomers with succession planning and assisting companies in building a pipeline for talent development. We will also seek ways to develop an “intersection” for workforce development and those with entrepreneurial mindsets to grow the number of businesses in our region.

Capacity to address education and skill needs of the workforce, including individuals with barriers to employment, and employment needs of employers

The Valley has a broad array of organizations that support workforce development in the region. These include SVWDB, SVP, Wilson Workforce and Rehabilitation Center, our community colleges, technical schools, state agencies and service providers, non-profit entities such as Goodwill Industries of the Valley, and faith-based organization that provide training and services. In each of our stakeholder organizations we find a willingness and the ability to

collaborate as well as working to develop innovative initiatives to address existing challenges and opportunities. Examples include grants that were successfully pursued to provide funding for apprenticeships, Central Shenandoah Planning District Commission's expanding transportation initiative, and Rockbridge County Public School's entrepreneur's program for middle school students. Another such example is the collaboration involving SVWDB, the Department for Aging and Rehabilitative Services (DARS), and WWRC in the Career Pathways for Individuals with Disabilities (CPID) initiative. CPID is focused, in the Shenandoah Valley, on mapping Career Pathways in advanced manufacturing. Once the mapping is complete, DARS staff will identify means for making the entry points accessible for individuals with barriers with the goal of improving access to higher wages for this population. While we are developing greater capacity in addressing education and skill needs of the workforce, including individuals with barriers to employment, and addressing the employment needs of employers, we recognize that we have areas yet to be addressed.

As we broaden the definition of "barriers to employment", we find that we do not yet have a complete working definition of barriers. As we work to develop that, we also recognize that the lack of a clearinghouse for data about this population, a population not fully defined or counted, constrains decision making for employers, educators, workforce service providers, and agencies alike. Lacking a data clearinghouse compounds the challenges; an integrated resource team that includes employers to address barriers to employment can't be formed or utilized until we have a firmer foundation. The demographic changes also add new challenges to defining barriers to employment; for example, there has been a swell of immigrants who want to work but who don't have adequate command of English to make gainful employment

feasible. There has also been an upsurge in immigrants with technical, four year, and post-baccalaureate degrees who, lacking a command of English and/or lacking access to an affordable credential verifying/validating service find themselves eligible for only low-level employment.

Simultaneously, there are constraints caused by insufficient human resources to implement programs (grants often don't include funding for staffing) and by funding restrictions. These areas present as weaknesses in overcoming education/skill needs and barriers; however, recognition of challenges may be viewed as welcome insight that precedes change.

There are greater challenges facing the Shenandoah Valley that call for insight and innovation to balance needs, realities, and propel progress. Technological advancement is changing business needs and "traditional" jobs are being eliminated. We have an aging workforce that, in their retirement, leaves behind a loss of institutional knowledge while creating vacancies for a workforce that isn't large enough to fill existing jobs or trained to meet current technical needs. The decades-old conundrum still exists for the remaining workforce—employers want experience workers but workers lacking experience lack the opportunity to develop experience. This could, in part, be addressed by increasing the number of OJT and Registered Apprenticeship opportunities, but funding is limited.

In some cases, we find that underemployed workers who would like a pathway to better employment opportunities can't access those opportunities because training opportunities conflict with their current work situation. The Shenandoah Valley, as have other regions, is experiencing an increase in substance abuse that results in positions remaining vacant as

employers search for candidates who both have the requisite skills and the ability to pass a drug screen. Finally, one threat that continues to loom is the unknown, unpredictable long-term status of funding; it is difficult to plan for the longer term when no one knows what a budget shortfall for the Commonwealth or changing political dynamics at the Federal level will bring.

Despite the weaknesses and threats confronting workforce development, opportunities do exist. We will continue building on our strengths as we look to develop initiatives such as tapping into our bilingual college student population for assistance in overcoming language barriers, expanding apprenticeship programs to other occupations, expanding education and training opportunities in rural areas through distance learning, and broadening communication strategies to educate the workforce about skilled trade opportunities. We also see value in looking to other regions, states, and countries for strategies and successful workforce development models to adapt here.

Vision & Goals: Regional Economic Growth and Economic Self-sufficiency and Strategy and Partnerships

The Commonwealth's vision is "...a Virginia where every business has access to a qualified, job-ready workforce and every Virginian has [access to attain] the skills needed to connect with meaningful employment and advance in a career." The SVWBD, in its aligned vision, "...seeks to lead Virginia in ensuring a highly skilled and engaged workforce...integrating workforce development and economic development activities to produce a vibrant economy with unparalleled quality of life."

The Commonwealth's mission is to "...help drive Virginia's economic growth by implementing an effective and efficient workforce ecosystem that delivers innovative, integrated, data-driven products and services designed and aligned to meet the needs of businesses and job seekers. We hold ourselves accountable to the system's goals and support high-impact outcomes." SVWDB aligned and supporting mission is to "Build... partnerships to create workforce opportunities that cultivate business, grow jobs, develop people, and build community."

SVWDB has been partnering closely with both regional economic development efforts (Shenandoah Valley Partnership [SVP]) and individual locality economic developers for more than five years. The Executive Director of SVWDB attends SVP Board meetings and works closely with the Executive Director of SVP to ensure the industry sector targets identified at both regional and locality levels are workforce development's sector targets, thereby ensuring training and skills development for the workforce are in alignment with careers that offer growth pathways to middle income levels. Furthermore, SVWDB serves as the point of contact when local economic developers, working with prospective businesses or existing business expansions, have businesses that need to secure a skilled workforce in a contracted timeframe. In such cases, an ad hoc response team is formed to advertise positions, review resumes/applications, interview applicants, and make recommendations for hiring decisions.

The supporting goals, provided earlier in this document are designed to ensure we continue to prepare an educated and skilled workforce, including youth and individuals with barriers to employment.

Performance Accountability Measures

The following is a summary of the Final Negotiated Performance Goals for Virginia and Local Workforce Development Area IV (LWDA) as approved by the State WIOA Team on November 30, 2016 for Program Years 2016 and 2017.

	Virginia Negotiated	LWDA 4
Adults	Level	Negotiated Level
Employment 2nd Quarter after Exit	77.0	72.2
Employment 4th Quarter after Exit	85 .0	70.1
Median Earnings 2nd Quarter after Exit	\$5,500	\$2,700
Credential Attainment within Four Quarters after Exit	61.0	65 .0
Dislocated Workers		
Employment 2nd Quarter after Exit	83.0	78.2
Employment 4th Quarter after E x i t	85 .0	74.6
Median Earnings 2nd Quarter after Exit	\$7,600	\$3,915
Credential Attainment within Four Quarters after Exit	64.0	80.0
Youth		
Employment 2nd Quarter after Exit	63.0	63.0
Employment 4th Quarter after Exit	60.0	70.0
Credential Attainment within Four Quarters after Exit	68.0	70.0

Strategy & Partnerships

SVWDB employs several strategies to work with required and non-required partners to align resources available to the local area to achieve the strategic vision and goals described above. A primary strategy is the partnership the SVWDB has with its contracted operator, Goodwill Industries of the Valley.

The following is an excerpt from the “Scope of Work and Contract Provisions” between SVWDB and Goodwill Industries of the Valley and describes some of the strategies currently addressing the strategic vision and goals:

I. Statement of Work

- A. GOODWILL will provide Workforce Investment Act (WIOA) Title I Adult and Dislocated Worker and Youth services (WIOA services) in the Shenandoah Valley Workforce Development Board service region, (LWIOA IV). GOODWILL will provide these services in accordance with the WIOA; the federal regulations that govern the WIOA program; applicable law, regulations and policies and procedures of the Commonwealth of Virginia; applicable policies and procedures of the Virginia Community College System (VCCS); Shenandoah Valley Workforce Development Board's (SVWDB) Mission Statement, Policies, and Procedures; SVWDB's Strategic Plan, Operation Policies and Procedures; the Local Workforce Plan; and all other applicable Commonwealth and Federal laws.
- B. GOODWILL will meet or exceed the annual participant service levels for the WIOA services and activities listed in GOODWILL's Performance Summary. Additionally, GOODWILL will submit a monthly performance report by the 15th day of the month which includes the WIOA participants' names, services, referrals, and activities GOODWILL provided to those participants in the preceding month, and any other information requested. GOODWILL will record the WIOA services provided to its participants in Virginia Online Services (VOS), the system of record for WIOA programs in Virginia. SVWDB staff will verify the accuracy of these reports through monitoring of a randomly selected participant sample.
- C. GOODWILL will be the employer for all eligible work experience participants. GOODWILL is responsible for payment of these stipends, and must carry

appropriate insurance.

- D. GOODWILL will recruit eligible WIOA participants in sufficient numbers and types to ensure that a sufficient level of local WIOA expenditures is maintained and performance levels are met. If a sufficient number of participants are not recruited and enrolled, GOODWILL and SVWDB will work together to develop an action plan to expand outreach and increase enrollment. As a last resort, the contract funding levels may be re-negotiated to adjust staffing levels funded by this contract. GOODWILL is solely responsible for determining eligibility and providing the appropriate WIOA Adult, Dislocated Worker and Youth services in accordance with WIOA requirements. GOODWILL will maintain client files that enable monitors or auditors to determine if program and client eligibility guidelines have been met.

GOODWILL will initially employ and assign to work on the services to be provided by GOODWILL pursuant to this contract a total of 13 full-time-equivalent employees ("FTE") to serve as career specialists and administrative data support, to be positioned throughout the SVWDB service area, as agreed upon by GOODWILL and SVWDB. GOODWILL will also provide 1 FTE Coordinator to serve in the northern SVWDB area, and 1 FTE Coordinator to serve the Central and Southern SVWDB areas, as well as allocated additional corporate administrative support that includes an Administrative Director, Senior Director of Workforce Services, and Senior Director of Workforce Development. Direct career specialist staff will work solely within the SVWDB area. SVWDB and GOODWILL agree to

periodically assess staffing needs based on demand patterns and to make adjustments accordingly through contract modifications. GOODWILL and SVWDB will work to ensure staff resources are available in an equitable manner considering the need of individual areas.

E. In addition, GOODWILL's staff is responsible for:

1. Coordinating their actions with the SVWDB's staff to ensure the SVWDB's mission and vision for the workforce development system are implemented;
2. Utilizing staff effectively to increase the placement opportunities for jobseekers;
3. Maintaining an effective system for tracking direct client expenditures;
4. Utilizing staff effectively to increase the number of jobseekers placed in employment; and
5. Working with SVWDB staff to develop new service delivery strategies for customers to promote talent improvement, increased job and occupational skills and improved outcomes.

F. SVWDB is moving towards a more fully integrated Comprehensive One-Stop delivery system. As this system is developed, GOODWILL will provide integrated services and/or services being delivered in a functional delivery system. GOODWILL staff will be responsible for the implementation and oversight of the certification process for One- Stop certification with the Virginia Community College System.

In addition to the work with Goodwill Industries of the Valley, the SVWDB convenes WIOA partner meetings to exchange information and to move concepts such as “affirmative

referral” and “co-enrollment” to reality. WIOA partners, including Adult, Dislocated, and Youth program service providers, Adult Education, Virginia Employment Commission staff, representatives for the Department for Aging and Rehabilitative Services (DARS) and the Department for Blind and Vision Impaired (DVBI), career-technical educators, community college workforce partners, and representatives from community-based organizations have met multiple times and continue to meet to achieve “systems alignment” as described by the Center for Legal and Social Policy (CLASP). While each entity works to achieve individual organization performance goals and standards, there is a concerted effort in the Valley to collaborate and ensure the regional economy has an educated and skilled workforce which includes our youth and individuals with barriers to employment.

Additional Strategic Elements

The SVWDB is pleased to be well underway with executing strategies designed to combine public and private resources to support sector strategies, career pathways, and career readiness skills in accordance with the Code of Virginia Title 2.2, Chapter 24, §2.2-2472(F).

Regional Vision for Workforce Development

The SVWDB’s regional vision for workforce development “...seeks to lead Virginia in ensuring a highly skilled and engaged workforce...integrating workforce development and economic development activities to produce a vibrant economy with unparalleled quality of life.” Realizing this vision requires that all workforce services partner, all locality leadership (chief appointed administrators and chief elected officials), all economic development officers, and all senior workforce education administrators collaborate to ensure a growing economy and a means for workforce participants to have access to careers with wage growth

opportunities. The Valley is skilled at working locally, working sub-regionally, and working regionally to achieve the region's vision.

Protocols for Planning Workforce Strategies that Anticipate Industry Needs

SVWDB recognizes the importance of the sector strategy targets of each of its sixteen local jurisdictions as well as that of the region's economic development entity, the Shenandoah Valley Partnership (SVP). With limited resources, the SVWDB cannot programmatically support every sector target and has, instead, chosen to begin with a sector target that crosses through nearly all the jurisdictions and that of the region: advanced manufacturing. Working with Chmura Analytics, SVWDB contracted for an analysis of advanced manufacturing in the Valley. The study, [*The Changing Manufacturing Workforce in the Shenandoah Valley*](#), includes an assessment of the current climate and needs, forecasts growing needs and trends, and pinpoints deficiencies in workforce skills, providing a guide for skilling the workforce to meet current and future needs.

While the Chmura study will inform a future course of strategy and action, the Department for Aging and Rehabilitative Services is engaged in the Shenandoah Valley in piloting its Career Pathway for Individuals with Disabilities (CPID), a grant-funded program that targets four sites in Virginia. SVWDB's CPID is in Advanced Manufacturing and aligns with a sector focus of our economic developers. SVWDB convened career and technical educators to identify pathways in advanced manufacturing, the credentials conferred in areas supporting advanced manufacturing, and the stackability of those credentials. Following their work, the draft document was reviewed by Wilson Workforce Center's Advanced Manufacturing Advisory Committee and the region's Career-Technical Educators steering committee. DARS is taking the

lead in converting the template to an Info-graphic of a pathway along with wages ranges for each of the levels on the pathway. Once the Info-graphic is completed, DARS Assistive Technology Specialists will identify technology and adaptive mechanisms which will enable individual with barriers to employment access to careers in advanced manufacturing. Additionally, the Info-graphic will be used in an educational campaign targeting students, parents, guidance counselors, and educators on career possibilities within advanced manufacturing to close the “image gap” on the field.

Concurrent to the work of Chmura Economics and Analytics and DARS, Mangum Economics has been engaged to provide a broader, Valley-wide analysis of our workforce demand and supply and a forecast of industry sector trends. The initial results of this work are featured earlier in this Local Plan.

All strategies are data driven and created in concert with local and regional economic developers. As SVWDB disseminates information on the advanced manufacturing career pathway, planning will begin for the next sector target using a similar wide-ranging, inclusive, partner-engaged approach.

Needs of Incumbent and Underemployed Workers in the Region, Development of Partnerships and Guidelines, and Standards and Metrics for Operational Delivery

Experience has demonstrated that employers in the Valley consistently gravitate toward work-based learning for incumbent workers. The community colleges, regional consultants and trainers have found the greatest success in delivering on-site training at area businesses as employers work to keep their incumbent workers’ skills current; this proves an asset in ensuring that jobs don’t “outgrow” their incumbents as well as serving as a draw to economic

development prospects. The Valley has the capacity to deliver, on-site, everything from SIX Sigma training and certification to programming in mechatronics. In general, businesses find it more economical and more effective to train on-site to a specific skill set requisite for task completion. Businesses and the Valley's workforce would benefit tremendously if more funding for incumbent worker training were made readily available.

Further evidence of the desire business has for work-based learning is the embrace given to the Valley On-the-Job-Training (OJT) initiative and opportunities created by the SVWDB's OJT grant and its Registered Apprenticeship (RA) Program. Both OJT and Registered Apprenticeship Programs are targeted at industry sectors that have a strong current demand for workforce and a forecast for continued growth along with wage opportunities that lead to middle class employment. To continue these programs and initiate new pathways using OJT and RA requires the collaborative engagement of our community college partners, career-technical institutes, our One Stop Comprehensive Centers, and regional businesses.

The guidelines, standards and metrics for OJT and Registered Apprenticeship Programs are unique to each; however, the following can be found in both:

- Minimum requirements to apply for consideration for a position in the program
- Minimum hours of instruction
- Number of on-the-job hours required for completion
- Standards of evaluation for successful completion

- Ratio of instructor to trainee or apprenticeships (e.g., an OJT program may have 2 – 3 trainees per instructor with a ratio of as much as 1:3 while a registered apprenticeship requires a 1:1 ratio)
- Instructor or Master qualifications

It is easier, by far, to fill OJT and Registered Apprenticeship Programs and graduate individuals from those programs into fulltime careers than to identify a single program or a series of linked programs that overcomes underemployment in the Valley.

As Virginia and the Valley's economy continues to recover from the Great Recession, it is likely that some percentage of our underemployed workforce will find new career opportunities that more closely match their education and training. That said, the presence of the colleges and universities creates an on-going challenge of underemployment. These institutions recruit highly qualified faculty and administrators who often move to the region with "trailing spouses" who are equally qualified in their respective fields but for whom there are no available positions commensurate with their qualifications. The choices for trailing spouses are generally limited to: 1) assume underemployment as a cost of relocation, 2) disengage from the workforce awaiting better opportunity, 3) commute outside the Valley (e.g., to Charlottesville or Washington DC) to positions that offer better fit, or 4) engage in entrepreneurial activities and start a business.

An on-going challenge of underemployed individuals is the difficulty inherent in both needing to work to sustain self and family while wanting to retrain for a career where ample opportunities for employment in the valley exist. Those who, for example, work 8 a.m. to 5 p.m. often find the coursework that would enable them to change careers is offered only during

those same hours. They can't both work to support themselves and be absent from the workplace to upskill. While distance learning may lower barriers for some, for many the barriers are too challenging to overcome.

The Central Shenandoah Planning District Commission (CSPDC) has produced several summaries of the Valley's underemployment situation, out-commuter patterns, and related trends; however, our large geographic footprint, our population's residential pattern which has large numbers of individuals living in remote rural areas, and the wide-ranging sets of career skills that our underemployed workers bring with them means there is no easy solution that could resolve underemployment for even a fraction of those so situated. Given the demographics, it is unlikely that any measurable positive return on investment of programmatic remedies could be achieved.

Alignment of Monetary and Other Resources, Including Private Funds and In-Kind Contributions to Support Workforce Development

SVWDB has been the recipient of several significant grants in support of the region's workforce development. The funding from the Department of Labor in support of these grants has allowed SVWDB to undertake work based learning initiatives in on-the-job training and Registered Apprenticeships, both methods of training are highly valued by the region's businesses. A summary of monetary resources contributing to workforce development in Area IV for the period of FY2012 – FY2016 follows:

Grants Awarded to SVWDB 2012-2016

Name	Awarding Agency	Total Awarded
Shenandoah Valley Energy Partnership	USDOL	4,951,991.00
Board Study	VCCS	28,146.00
Shenandoah Mfg. Study (CCAM)	VCCS	150,000.00
H-1B Technical Skills: OJT Grant	USDOL	5,000,000.00
BRCC Advanced Mfg. Study	BRCC	50,000.00
Business Services Capacity Building Initiative	VCCS	50,000.00
Dislocated Worker National Emergency Grant	VCCS	207,547.35
Disability Employment Initiative Round IV	DARS	20,000.00
Job Driven National Emergency Grant	VCCS	1,833,080.00
Community Development Block Grant	City of Harrisonburg	13,691.24
H-1B Technical Skills: American Apprenticeship Initiative	USDOL	4,000,000.00
Career Pathways for Individuals with Disabilities (CPID)	DARS	160,000.00
Total		\$16,464,455.59

Generation of New Sources of Funding to Support Workforce Development in the Region

Resource Diversification – Resource Diversification Planning, Asset Mapping, and Grant

Seeking

To remain a successful non-profit business and to continue growing, the SVWDB must wisely expend existing resources, efficiently leverage regional resources, and successfully acquire additional resources. To effectively use and leverage resources, the SVWDB needs to

develop and expand partnerships, understand what regional resources exist, understand the social network environment, and aggressively pursue additional funding. Resource diversification planning is an important component of workforce development for the SVWDB and includes asset mapping, development planning, and grant seeking. The SVWDB intends to develop a plan with funding diversification goals to secure and generate financial resources beyond WIOA formula funds, and leverage current funds and resources while seeking cost-sharing opportunities with partners and other stakeholders.

One component of the resource diversification plan will be a development plan, which will include a plan for grant seeking. The plan will include foundation or government grants, private contributions, fee-for-service funds, and public, private, and nongovernmental resources. It is anticipated that monies for skill and credential attainment through OJTs, registered apprenticeships, customized training and occupational skills development will be available primarily at the federal level (Department of Labor, e.g.) and the state level (Virginia Community College Systems, GO Virginia, e.g.). At the local level, the SVWDB may pursue funding from target industry sector coalitions, but believes there is little or no money available from the localities themselves. As with previous initiative design and grant proposal development, the SVWDB will seek partners and resources that complement the funding announcement, address the needs of the initiative design, ensure a competitive proposal, and position the initiative for implementation success.

In addition, through asset mapping the SVWDB will seek opportunities to share costs by leveraging existing funds and resources with the funding and resources from other partners or stakeholders. Resource examples include infrastructure, technology, social capital, and human

capital assets. Asset mapping is a form of economic analysis, focusing on the positives or assets instead of the needs or deficiencies of a region; it is a process used to identify and provide information about a region's assets. Focusing on the positives, asset mapping seeks to create efficiencies, builds interdependencies among partners, and identifies ways organizations and people can share their talents and resources.

Using an asset based model the SVWDB region views itself and partners as possessing a wide range of resources. The perspective is outward focused and considers not only what can the region do for constituencies like customers, partners, and stakeholders, but what can constituencies do for the region. Asset mapping is a way to understand and leverage existing work, programs, and resources; to reduce or eliminate duplication of efforts; to build partner and stakeholder engagement and buy-in; and to assess gaps, strengths, challenges, and opportunities that may impact workforce initiative implementation and operations within the region. SVWDB, regional workforce partner, and stakeholder assets are identified, making the connections of resources to other resources and devising a plan to mobilize the leveraged resources. The most critical steps of asset sharing are building the partnerships among asset owners, and identifying and linking assets to create synergies among the partners. Building an asset sharing support system is critical and an appropriate role for the SVWDB as regional workforce convener.

The development of a resource diversification plan, mapping assets, and grant seeking allows the SVWDB to establish diversification goals, measure progress against goals, and modify goals by devising different strategies. The resource diversification plan and SVWDB strategic plan will align and the diversification plan will support the strategic plan; both plans will be

reviewed and modified to maintain plan alignment. To align partners and integrate systems in support of resource leveraging requires qualitative data collection methods to convene regional partners, facilitate a process of resource discovery, and lead the discussion of resource sharing and leveraging.

Local Workforce Development System Elements: Programs/Partners Overview

Programs Included in the System

SVWDB includes in its workforce development system: Title I WIOA Adult, Dislocated Worker, and Youth Programs, Title II Adult Education and Literacy Programs, Title III Wagner-Peyser Programs, and Title IV Rehabilitation Programs for both Vocational Rehabilitation and for the Blind and Vision Impaired. Additional programs and partnerships are offered through Goodwill Industries of the Valley (serving as operator and sponsor of the GoodCare Training Program and Tech Hire Initiative), the career-technical institutions, the three community colleges, the Department of Social Services, and nonprofit community based organizations supporting English language learners and adult education and literacy.

SVWDB Will Support the Strategy Identified in the State Plan Under §676.105

§676.105 specifically addresses how the six core programs can collaborate to achieve strategic alignment, service integration, industry relevance, the economic needs of the state, and a match between an area's employers and a skilled workforce. SVWDB's program partners are engaged in work sessions to share information, develop strategies for affirmative referral and co-enrollment, and work to achieve system alignment and service integration. To date, three "system alignment" meetings have been held. Initial meetings focused on what each Title

program offers; subsequent meetings have focused on how well the partners are working together to achieve integrated career pathways that yield a skilled workforce for area employers. The work is designed to reach the “Sustained” level on each of the indicators in the following guidelines.

Strategic Alignment and System Integration: Career Pathways Regional Systems Alignment

Self-Evaluation for WIOA Partners

Using a 5 point Likert scale, please rate the following areas of inquiry.

1=No Action. This area is not in discussion.

2=Planning/Emerging. This area is being discussed.

3=Capacity Building: We are building our capacity to implement it in full.

4=Implementation: Fully implemented in our partnership.

5=Sustained: This area is part of regular business for our partnership and will be sustained.

The areas are:

- 1. Multiple entry points:** Are there multiple entry points along the pathway? Is there consensus on what actions or events constitute entry at each of these points (i.e., entry triggers)?
- 2. Overcoming Barriers:** Identify the types of support and availability of that support to individuals facing barriers to career pathways. How are individuals with needs to overcome barriers identified? What measure are captured? Reported? What net exists to ensure an individual with a barrier to a career receives appropriate assistance enabling the individual to access a career pathway?

3. **Multiple exit points:** Are there multiple exit points along the pathway? Is there consensus on these exit points and the credential(s) to be attained at each point?
4. **Career pathway participant:** Are data currently collected to enable the observation of when an individual has enrolled in and is attending specific courses or activities or is receiving services (or combinations thereof) that have been designated as specific entry points for the career pathway? Is this the case at each entry point along the career pathway? If not, what data are missing? What are the plans to capture this information?
5. **Knowledge of next step on the pathway:** Is there a routinized system for ensuring participants nearing an exit point know about the next step on the pathway and how to access entry?
6. **Skills gains:** How are skills gains measured? Captured? Reported? If data are missing what are the plans to capture this information?
7. **Co-enrollment and Affirmative Referral:** What are the known strategies for affirmative referral (sending an eligible/interested career seeker to a partner agency and that agency affirmatively acknowledged that they received the referral and met with the client)? Are there gaps? How do we bridge the gaps? What are the known strategies for co-enrollment? Where are there gaps for potential co-enrollment? How do we bridge the gaps?
8. **Career pathway leaver:** Are data currently collected to enable the observation of when a career pathway participant is no longer enrolled in pathway courses, services, or activities? Is it possible with currently collected data and reporting procedures to know

when a participant ceased to be enrolled? If not, what data are missing? What are the plans to capture this information?

9. Career pathway credential completer: Are data currently collected to enable the observation of when a career pathway participant has attained one or more of the pathway education and training outcomes attainable in the career pathway prior to leaving the pathway? Is this the case for each of the credentials available along the career pathway? If not, what data are missing? What are the plans to capture this information?

10. Pathway Evolution: How frequently are target sectors analyzed to ensure the right career pathways are mapped and current with economic developer's emerging focus? What is the process for updating/upgrading pathways as technology, providers, and new credentials emerge? How do business demands drive the career pathway mapping process? How is the supply (prepared workforce) measured against evolving demand (career openings)? What does the Continuous Improvement Process (CIP) in career pathway mapping look like? How has the process been routinized?

11. Business Engagement: How engaged are target sector area businesses in providing access to exposure and training to career seekers in learning opportunities such as On-the-Job Training (OJT), Registered Apprenticeships, mentorships, internships, job shadowing?

The systems alignment work is using the career pathway as impetus to uncover redundancies, identify opportunities for alignment and service integration, and reduce system duplication. By focusing on a career pathway (for 2016-17 the target sector is advanced

manufacturing), SVWDB is ensuring there is a match between a ready, skilled workforce and regional employers as well as meeting the economic needs of the Commonwealth. In targeting advanced manufacturing, SVWDB is helping to drive what has been identified by the region's economic developers as a key target industry. The work continues to be augmented by the analysis of data by Chmura Economics and Analytics and Mangum Economics.

Strategic Alignment and System Integration: Human Centered Design for Workforce Centers

In addition to partner alignment and system integration for the development and successful implementation of regional career pathways; the partnering, location, and design of the three workforce centers is changing. Three workforce center moves are in process or planned; the Harrisonburg Valley Workforce Center acquired additional space and almost tripled its footprint, the Winchester Valley Workforce Center is moving from a small temporary space to a new building, and the Staunton Valley Workforce Center moved from a standalone space to the Fishersville VEC. The lease and license agreements will be finalized, the cost allocation plans will be finalized, partners will get used to the new space and working together, the partner agreement will be developed and implemented, the one stop operator will be competitively procured, and regularly scheduled management team meetings will be held. When the basic center components are in place, the center will begin the process of evolving the customer approach and experience through a human centered design (HCD) approach. The intent is to use HCD as a collaborative and creative process to solve problems starting with the customer's perspective and ending with customized solutions to meet the specific needs of the customer.

**SVWDB Works with Entities Carrying out Workforce Development Including Programs of
Study Under the Carl D. Perkins Career and Technical Act of 2006 to Support Service**

Alignment

SVWDB's ongoing partnerships have established a career pathway that brings together secondary, postsecondary, the workforce board, economic development and business/industry to connect education, workforce development, and economic development. By connecting efforts to the economy, programs focus on high-skill, high-wage, and high-demand occupations. This approach will ensure the workforce and the business climate remains competitive and supports the growth of the region and of the Commonwealth. The continued emphasis on stackable, portable credentials will help create pathways to middle-class for the workforce.

SVWDB Collaborates with the Community Colleges

SVWDB maintains close, collaborative relationships with Blue Ridge Community College (BRCC), Dabney S. Lancaster Community College (DSLCC), and Lord Fairfax Community College (LFCC). Either the president or the vice-president for workforce services from each of these three sit on our Board and SVWDB currently has one community college president and one vice-president for workforce services sitting on the executive committee.

All three community colleges participate in training the region's workforce and work closely with the region's businesses to ensure that career-technical training is directed at meeting business needs. Beyond their work with businesses, the community colleges and SVWDB enjoy fluid collaboration with the colleges participating in co-designing and implementation support based on initiative design of grants awarded to the region for workforce development. SVWDB has one FTE located on the LFCC campus to conduct outreach

and serve businesses and job seekers in the northern part of the service region. The LFCC grant specialist has been funded by the SVWDB since 2009 and has supported the successful implementation of three DOL grants.

A more detailed description is contained in the section responding to the request for a description of “how the Local WDB will collaborate local workforce investment activities with the community colleges in their area in the planning and delivery of workforce and training services” (Item 2.k, VWL-#16-01 Revised).

SVWDB Coordinates and Interacts with its Chief Elected Officials (CEO)

The Chief Elected Officials serve as a consortium offering oversight of SVWDB activities and policies. In 2012, the CEOs were convened by SVWDB. At that meeting, a vote was taken to formalize the consortium with the creation of a [CEO Consortium Agreement](#). A simple majority of the sixteen jurisdictions constitutes a quorum and is represented at meetings by either the jurisdiction’s CEO or his/her designee. The CEOs are invited to attend all SVWDB meetings and meet two times per year as the CEO Consortium. They receive updates and newsletters, and, when there is a matter requiring CEO approval, the consortium is convened to address the matter at hand. The CEO Consortium appoints members to the Board, selects one locality to serve as grant recipient, and shares responsibility for budget and local compliance and strategic plan approval.

SVWDB Meets its Responsibilities for Oversight, Monitoring, and Corrective Action for WIOA Title Programs

Through regular oversight and monitoring of WIOA sub-recipients and contractors, the SVWDB assesses compliance with regulations and policies established by the WIOA, the VBWD,

the VCCS, and the SVWDB, as well as compliance with the terms and conditions of contracts with Program Operators. Monitoring activities are conducted at least once per year, and appropriate corrective action is administered when required. The major systems of compliance review include, but are not limited to: administrative, financial, and programmatic.

Compliance monitoring is conducted through records review for each program or contract, by conducting onsite reviews and desk reviews of procedures, records, and documents maintained by the contractor or program operations staff. The general monitoring procedure includes:

- A written monitoring checklist to ensure all standards of accountability are reviewed.
- Reports, records, and documents maintained by the SVWDB on each contract or program are reviewed for completeness, accuracy, and timeliness of submission. Reports, records, and documents include but are not limited to: approved contracts and modifications and/or program specifications, correspondence and reports maintained by the contracting officer in the contract file, transmittal of individual participant records, previous monitoring reports, and applicable corrective plans.
- Each contract or program is monitored at the site of operation. On-site monitoring may include but is not limited to: a preliminary interview with the Program Operator's designated representative, a review of applicable written policies and procedures, staff and participant interviews, a review of participant records, a review of financial procedures/records/documentation, a review of

performance and follow up procedures/records/documentation, and an exit interview with the Program Operator's designated representative. Technical assistance may also be provided to ensure continuous improvement. A draft monitoring report is generated within 30 days of the on-site monitoring visit for the Program Operator to review. Upon completion of the draft report review, a final report is generated within seven days for the Program Operators to respond too.

- A written monitoring report is completed on each monitored contract or program and submitted to the Chief Executive Officer, who subsequently will distribute the report to the Program Operator. The written report includes: "Findings and Recommendations" on identified deficiencies as well as administrative concerns regarding program operations. The Chief Executive Officer will request a response from Program Operators. Program Operators respond with all corrections within 30 days.
- Oral reports may be made to the Chief Executive Officer when apparent deficiencies are identified which may need immediate action. Such deficiencies include: Inaccurate or insufficient financial management procedures, inaccurate or insufficient participant eligibility determinations, child labor law violations, or non-compliance with the terms and conditions of the contract or other applicable federal, state, board, or WIOA requirements.
- The Operations and Workforce Coordinator will review the Program Operator's responses to the monitoring report and determines if action taken by the Program

Operator is sufficient to satisfy the recommendations contained in the monitoring report. Once it has been determined that deficiencies have been corrected, the Program Operator will be notified that no additional action is necessary.

Desk reviews are conducted by SVWDB staff to ensure that the performance objectives are attained within reasonable limits. These performance reviews are used to determine whether program design is adequate to meet the needs of the eligible population and whether program design is adequate to attain planned objectives. Performance reviews are conducted at regular intervals on each contract or program. Participant and financial status reports completed and submitted monthly by Program Operators are reviewed on the basis of actual cumulative data versus planned data, actual performance rates versus planned rates, and actual performance relative to performance standards criteria. In addition, reports generated from the Virginia Workforce Connection are used to monitor program performance.

Fiscal monitoring of the service provider is conducted annually at the service provider location, if within driving distance. Monitoring is conducted by the SVWDB Chief Financial Officer and supported by the Operations and Workforce Coordinator. Desk reviews are completed before and after on-site reviews as appropriate. If warranted, an annual review may result in quarterly reviews until problems are addressed by the service provider.

SVWDB Conducts Business in Accordance with the Sunshine Provisions of WIOA

Staffing Plans for SVWDB

All vacancies are posted online through the Virginia Employment Commission's website to ensure a broad audience will be reached. Additionally, positions are posted through job search sites, associations, distributed to partners and local directors, and noticed in area

newspapers in the Classified section. The complete position profile is posted on the Valley Workforce website. Notice of vacancies are posted until the application deadline is attained and all periods for filing an application are of such length to ensure a broad range of candidates can view the notice and apply for the position. The SVWDB subscribes to the “Equal Employment Opportunity” provision of law and does not discriminate on the basis of race, ethnicity, gender, age, or any other protected category. A compendium of each search is retained by SVWDB for a period of two years.

**Collaborative Strategies Expanding Access to Employment, Training, and Supportive Services
for Eligible Individuals, Particularly Individuals with Barriers to Employment**

Technology will continue to be a common thread in expanding access to workforce services, particularly for individuals with barriers to employment. In addition to the adaptive technology made available through the Department for Aging and Rehabilitative Services (DARS) and the services offered by the Department for the Blind and Vision Impaired (DBVI), we envision partnering with localities in Area IV who are installing broadband internet access. This would allow rural and remote users to access workforce services. It will also provide some job seekers opportunities to create home-based, small businesses because of increased access to the internet. But for those who do not yet have access to computers or the internet, the SVWDB hopes to begin the discussion surrounding the creation of a “mobile workforce lab” that would allow a staff member to set up remote or distance temporary workforce service centers in partnership with community and faith-based organizations.

The collaborative work SVWDB is doing with DARS in Career Pathways for Individuals with Disabilities (CPID) in mapping careers in advanced manufacturing will culminate in DARS

specialists identifying access ramps and adaptive technology/techniques to ensure individuals with vocational rehabilitation barriers have access to these wage growth paths. Additionally, the info-graphic developed through the CPID initiative will provide collateral print and digital material that will enable SVWDB to create an educational campaign for middle, secondary, and post-secondary educational and training institutions to close the “image gap” where career-technical pathways are not seen as viable life-long career opportunities.

How SVWDB Facilitates the Development of Career Pathways and Co-enrollment in Core Programs

All workforce development partners in Area IV have been involved in systems alignment discussions to uncover opportunities for increased co-location, co-enrollment, common screening and assessment, and affirmative referral. SVWDB will continue convening these sessions in the foreseeable future with the understanding that change takes time and partnerships are based on mutual understanding and meaningful interaction for the mutual benefit of partners, job seekers and incumbent workers, businesses, and the economy. The SVWDB is nearing completion of the development of the first regional career pathway in advanced manufacturing and that work, coupled with the systems alignment discussions, and coupled with SVWDB’s commitment to efficiencies and higher return-on-investment will continue to produce results.

Efforts the Commonwealth makes and the success it has in creating a state workforce client intake and data sharing system will go considerable distances to ensuring co-enrollment opportunities are maximized.

How SVWDB Improves Access to Activities Leading to a Post-Secondary Credential (including a credential that is an industry-recognized certificate/certification that is portable and stackable)

Improved access will be the result of continued collaboration with all workforce development partners, education and training partners, and community-based partners. The SVWDB will continue to convene meetings, work toward greater information dissemination, pursue system alignment, provide collaboration opportunities, and develop career pathways. The SVWDB will measure—because, as the expression goes, “what gets measured, gets done.” The SVWDB in collaboration with the community colleges and career-technical centers is in the early phases of career pathway mapping, credential identification, and exploring credential portability and stackability. As the SVWDB moves farther into this process and learns from best practices developed by other localities, both in Virginia and in other states, the SVWDB is confident they will identify myriad ways to improve access to activities which lead to post-secondary credentialing.

Business Services

Sector strategies is the foundation for Business Services within the SVWDB service region. Business Services in the region is evolving and implementation is based on a Sector Strategies approach and related concepts. As defined by the National Governor’s Association (NGA), “Sector strategies are partnerships within one industry that bring government, education, training, economic development, labor, and community organizations together to focus on the workforce needs of an industry within a regional labor market.” Sector strategies

focuses on the business needs of critical, growth industries and the workers with the required education, training, and skills required to fill the needed occupations within those industries.

The sector strategies model addresses three regional workforce challenges: (1) current and emerging skills gaps, (2) business engagement across traditional boundaries, and (3) predetermined service regions, and alignment of regional programs and resources serving businesses and workers. The first challenge uses sector strategies as an approach to focus resources on industries that are the primary job providers in the region and to comprehensively address the entry to advanced worker skills as required by the industries driving the regional economy. The second challenge uses sector strategies to work across geographic, program, and service boundaries to identify and address specific workforce needs of the industries driving regional economic growth. The third challenge uses sector strategies to align programs and resources to reduce inefficiencies and streamline the delivery of regional services to businesses and workers. The coupling of resource diversification and sector strategies yields the greatest impact on the efficient use of regional resources for addressing the needs of businesses and workers.

In 2015, LWDA IV workforce partners and stakeholders held a series of facilitated sessions to define the Business Services vision statement, mission statement, and guiding principles. The Business Services vision statement for LWDA IV is “fostering regional economic prosperity through collaborative efforts to achieve workforce excellence.” The Business Services mission statement for LWDA IV is “The Business Services Team is responsible for integrating resources and delivering services to ensure a highly-skilled workforce for sustainable economic growth.” The Business Services guiding principles are listed below.

1. Our primary customer is business.
2. We use an integrated resource and service delivery model with no wrong point of entry.
3. Our team supports the work of economic development to retain and recruit businesses.
4. Working in collaboration, we continue to grow our region's economy.
5. Our work promotes diversity.
6. Our efforts create an evolving workforce to meet business needs.

The SVWDB believes full adoption of sector strategy partnerships is needed to organize, develop, and implement resources and services that will have a sustained impact on the region. Full adoption of this approach requires changes and in many cases, a transformation of the workforce ecosystem in the region and in Virginia. The SVWDB fully supports and will participate in the sector strategies and career pathways initiatives to be developed and implemented in Virginia to “effectively convene and marshal talent and resources to stand up successful workforce pipelines and close regional skills gaps in industry sectors and fields vital to regional economic development.” Full implementation of the sector strategies approach will support and evolve the service delivery model for Business Services in LWDA IV. Sector strategies supports the current approach of business-driven, demand side needs, is strategic in nature, and requires alignment that is more streamlined across regional workforce partners.

The SVWDB Business Services function physically resides at the SVWDB staff corporate offices located at 217 S. Liberty Street, Harrisonburg, Virginia; the Rapid Response Coordinator resides at the same location and is an integral member of the Business Services team. The

SVWDB Business Services team consists of three full time staff members located at the corporate office and one full time staff member located at LFCC. In an effort to move from sector strategy planning to implementation, the SVWDB has completed the activities listed below.

1. Commissioned studies to identify target industry sectors in the region.
2. Commissioned studies to drill-down in the identified industry sector of manufacturing to conduct employer focus groups, administer employer surveys, produce a State of Manufacturing Report, analyze manufacturing occupation gaps, and gather employer practices and needs regarding workforce upskilling.
3. Identify businesses in the target sector and develop long-term strategic relationships that are based on consultative problem solving and not transactional quick fixes.
4. Provide comprehensive work based learning solutions for talent pipeline development and worker upskilling as Tier I services and include registered apprenticeships, on-the-job training, incumbent worker training, and customized training. Traditional job posting and hiring services also provided through the VEC.
5. Translate labor market data into industry intelligence and deliver information to businesses through individual business meetings or Employer Workforce Forums.

Economic Development Collaboration

SVWDB works with economic development in each locality as well as with the regional collaborative of economic developers from all the jurisdictions, the Shenandoah Valley Partnership (SVP). The range of services and support provided by SVWDB to economic development is broad. Some are small but critical, such as helping the City of Lexington determine why unemployment rates are above the state average but local businesses have to curtail services because vacant positions cannot be filled. Other efforts are concentrated, such as the large collaborative effort of putting together a response team to advertise, vet, interview, and select candidates to recommend for employment for a large business prospect. Yet others have broad-reaching, long-term implications, such as working at the regional level with economic developers to identify target sectors for the development of sector strategies and career pathways. As noted several times in this document, in the latter case, advanced manufacturing is a sector that has a solid presence in all sixteen jurisdictions, has the potential for career advancement, contains a high number of recognized, portable and stackable credentials, and provides access to middle-class income. All economic development officers in Area IV endorse this target sector.

The collaboration between SVWDB and regional economic developers exists because of a shared vision for a prosperous region and the understanding that business attraction and retention is based primarily on the region's workforce and the ability to develop a talent pipeline of existing workers or to access skilled workers. Through this shared vision and collaboration, the SVWDB works with economic development to meet with business prospects or on business expansion opportunities; to prepare letters of support or provide information for

economic development proposals; to discuss, gather input, and garner support for grant opportunities; share workforce data from SVWDB commissioned studies; and to act as the umbrella licensee for an economic development jobs database. In addition, the SVWDB works to maintain a strong presence of economic developers on the Board of Directors, Executive Committee, and Finance Committee; and SVWDB staff are active members of the SVP Marketing and Education and Workforce Committees. Through continued interaction and relationship building, economic development and the SVWDB find collaborative opportunities that, in turn, benefit the workforce and region's businesses.

Entrepreneurial skills training is conducted at the community college, through workshops provided by the Service Core of Retired Executives (SCORE) housed at James Madison University, and through workshops hosted by the various Chambers of Commerce in Area IV. Similar support is provided by these same entities for microenterprises, which also enjoy the regional surge in "maker space" which is a movement to provide opportunities for microenterprises to create ventures in space dedicated to their efforts. As with other WDAs, a significant portion of new Business and Professional Occupation Licensing in Area IV is from independent, start-ups as entrepreneurs.

One-Stop System: Continuous Improvement, Use of Technology, ADA Compliance, Roles and Resource Contributions, Workforce Center Operator, Physical Locations, Virginia Workforce Network Affiliates, and Professional Development

Training in continuous process improvement occurs within each of the individual partner agencies and within Valley Workforce Centers. The steps used in continuous process improvement include: a) select the process to be examined, b) study the process, c) plan for

revisions and improvements, d) implement revisions and improvements, and e) repeat the process. Additionally, all WIOA partners are engaged in information exchanges to identify best practices that have demonstrated strong results in other areas. This happens through the state WIOA-focused work groups, Virginia Association of Workforce Directors (VAWD), Fiscal Peer Work Group from the local areas; and through membership and conferences through the National Association of Workforce Boards (NAWB), Southeastern Employment and Training Association (SETA), and National Association of Workforce Development Professionals (NAWDP). In addition, the annual HIRE Education and Workforce Professionals conferences and monthly state facilitated One-Stop Center Manager meetings (when scheduled), are other venues, which promote information exchange.

Continuous improvement in the Valley Workforce Centers includes monthly partner meetings, dashboard and program reports, and job seeker surveys. Monthly center partner meetings are conducted by the One Stop Operator as an ongoing opportunity for partners to provide input, discuss services, brainstorm solutions, develop better ideas, build awareness among partners, and educate partners. Monthly WIOA dashboard and program reports are provided for staff and Board member review and analysis and include WIOA program enrollment, center traffic, month to date performance metrics, referrals, residency, and unemployment information. The monthly program report provides information regarding center operations, outreach activities, classes conducted, customer satisfaction ratings and comments, success stories, and training program enrollments. Job seeker surveys report participant customer satisfaction and include overall satisfaction, staff rating, quality of information received, wait time, source of referral, and comments. Job seeker success and

eligible training provider metrics will be tracked and evaluated as part of the ongoing improvement of the services training providers offer.

Technology continues to be an important component in delivering services both within Valley Workforce Centers and in the more remote areas served in Area IV. Outreach efforts ensure customers are aware of services from many different sources, including on-line access to information and training by WIOA, DARS, SCSEP, VEC, and community based organizations. The SVWDB'S concern with access extends beyond access for individual in remote areas to access for individuals with barriers to employment. The Department for Aging and Rehabilitative Services conducted an accessibility audit on the Harrisonburg Valley Workforce Center. The review was based on the Americans with Disabilities Act of 1990 (ADA) requirements and subsequent amendments. The recommendations from the DARS reviewers were implemented and a subsequent review was conducted to ensure full compliance. The SVWDB will continue to partner with DARS to ensure on-going ADA compliance. The Valley Workforce Centers are equipped with software that enables individuals with disabilities to access job seeker information and the staff has received training in the use of JAWS and MAGic software that is available on computers in the Center. All staff receive training on assisting clients with disabilities. Staff will continue to receive training on issues of accessibility.

SVWDB Valley Workforce Center Partners in Harrisonburg include the following:

- Workforce Innovation and Opportunity Act (WIOA) —For eligible participants, WIOA assists job seekers in finding a job, determining a career path, paying for training and education, providing help with internships and on-the-job training,

obtaining in-demand credentials, connecting individuals to resources, and providing training and employment prep, guidance and support.

- Department for Aging and Rehabilitative Services (DARS) —The Consumer Vocational Rehabilitation (VR) program helps people with disabilities get ready for, find, and keep a job. The Consumer VR program works with individuals with every type of disability. VR services include, but are not limited to, vocational counseling, training, and job placement.
- Virginia Employment Commission (VEC) —The VEC is the public employment service to assist workers in finding suitable jobs and to assist employers in finding qualified workers. VEC staff assist with unemployment insurance (UI) benefits claims. Job seekers can find employment using the Virginia Workforce Connection. VEC assists employers with UI taxes and with recruitment, screening, and referrals of candidates. The VEC also provides extensive labor market information valuable to both job seekers and employers.
- Senior Community Service Employment Program—The Senior Community Service Employment Program (SCSEP) provides subsidized, service-based training for income-eligible persons 55 or older to help them re-enter the workforce and earn a paycheck.
- Skyline Literacy Services (SLS) —SLS serves adult learners ages 18 and up, providing Basic Literacy training. In addition to paid staff, volunteer tutors work one-on-one with adults reading at or below a 5th grade level. Curriculum is individualized and

based on the learner's specific goals. Additionally, volunteer tutors work on-on-one with adults reading at or above a 6th grade level who are preparing for the GED exam. The curriculum for GED preparation includes reading comprehension, writing, science, mathematics, and social studies. Volunteer tutors also teach small groups of learners speaking, listening, reading, writing, and survival skills in the English Language Literacy training and work to improve their communication skills in the English language. For this training, groups are organized by level, ranging from literacy to high intermediate. One-on-one instruction is available for learners with specific needs. Volunteer tutors also teach small groups of learners preparing to take their citizenship examination. The course includes U.S. history and government, reading, writing, and interview skills. One-on-one instruction is available for learners with specific needs. For participation in any of the citizenship programs, learners must be legal permanent residents who are eligible to apply for U.S. Naturalization. Volunteer tutors assist learners in Skyline's computer lab where learners use Rosetta Stone language-learning software and GED, citizenship, and reading practice programs.

- Region Six Adult Education —The Adult Education program provides services in English as a Second Language Program (ESL), remedial reading and mathematics programs, an adult education program and a career education program.
- GoodCare —Sponsored by Goodwill Industries of the Valleys, GoodCare provides a healthcare training program through partnerships with community colleges, adult education, and literacy programs. Participants benefit from supportive services, life

skills training, education, and assistance in obtaining employment in the healthcare industry. Individuals can grow and advance their career in healthcare pathways, which are in-demand occupations. GoodCare serves individuals who are TANF recipients, as well as other low-income individuals.

- Career Connection — Sponsored by Goodwill Industries of the Valleys, a representative from the Goodwill Career Connection program works onsite to provide one-on-one intensive job seeker services for resume and cover letter development, assistance with job applications, and interviewing tips and mock interviews.
- Tech Hire – Sponsored by Goodwill Industries of the Valleys, Tech Hire supports participants ages 17 – 29, with barriers to training and employment, to develop skills through innovative approaches to rapidly train and connect participants to well-paying, high growth jobs in information technology and health care.
- Massanutten Technical Center – A representative from MTC provides information and assists participants regarding adult training options in trade and industrial areas such as nursing, dental, and computer technology. As the regional center for apprenticeship training, they work with the SVWDB’s American Apprenticeship Initiative (AAI), Valley to Virginia (V2V) and businesses to sponsor apprenticeship training.
- Business Services –The Harrisonburg Rapid Response Coordinator (sponsored by VCCS) and in collaboration with the SVWDB, has implemented a new model of

service delivery by housing the Rapid Response Coordinator at the SVWDB staff office in Harrisonburg. The Rapid Response Coordinator works closely with the Business Services representatives at the SVWDB office and with the One Stop Operator at the Valley Workforce Center in Harrisonburg. Together they work with economic development to respond to WARN notices and provide layoff aversion services. They work to identify mechanisms to assist existing businesses as needs change and to identify growth areas for business expansions and prospects.

The roles of each partner, provided above, are fluid as individuals work to ensure job seekers have access to careers with pathways to the middle class and businesses have a trained, qualified, and ready workforce. Partner resources bring intellectual capital, experience, and commitment to workforce and economic development.

The SVWDB, through a competitive procurement process in 2014, awarded Goodwill Industries of the Valleys as the One Stop Operator. The main office of Goodwill Industries of the Valley is 2502 Melrose Avenue NW, Roanoke VA 24017.

The Harrisonburg Valley Workforce Center is the comprehensive One Stop Center located at 160 North Mason Street, Harrisonburg VA 22801. Affiliated Valley Workforce Center sites are at: 334 North Hawksbill Street, Luray VA 22835; 411 North Cameron Street, Winchester VA 22601; 35 Vista Links Drive, Buena Vista VA 24416; and 1076 Jefferson Highway, Staunton VA 24401.

Staff development for all locations includes initial training by the service provider, Goodwill Industries of the Valleys, orientation to the Valley Workforce Center, and a short training session at each staff meeting. In collaboration with Goodwill, the SVWDB Workforce

and Operations Coordinator provides additional training. These training sessions are designed based on the results of local SVWDB monitoring and site visits. Additional training opportunities are announced through email, and staff meeting announcements. The One Stop Operator and/or the Center Managers also provide information about professional development activities.

The biggest challenges to ensuring a fully trained staff is the cost of training and certification, staff turnover, and the time away from working with participants without working overtime. To achieve NAWDP and Virginia Certification is costly. The SVWDB enthusiastically supports frontline staff certification, if certification could be made available at a minimal cost. The SVWDB considers certifications to be a solid investment in staff and recognize job seekers and businesses alike benefit from working with certified staff. Any role the VCCS and the Commonwealth might play in making certification more cost accessible, would be greatly appreciated. The SVWDB supports the National Association of Workforce Development Professional's (NAWDP) Certified Workforce Development Professional (CWDP) certification competencies as listed below. However, the SVWDB will support other more cost effective certification options if provided and approved by Virginia.

Certified Workforce Development Professional Competency Areas

Business and Economic Development Intelligence

- Fosters interagency relationships in local/state government.
- Maintains continuous awareness of the political climate, community planning, and existing business/industry base and how they impact initiatives.
- Speaks the language of business and the marketplace.
- Understands recruitment and retention of workers.
- Understands the role of workforce development in economic development.
- Understands that business and employers are key customers of the workforce development system.

Career Development Principles

- Administers and interprets a variety of assessment tools.
- Delivers and applies knowledge of modern job search strategies.
- Develops training plans that address employer needs and job-seeker capabilities.
- Displays empathy and caring.
- Identifies the kinds of information individuals need, including assessment, to make realistic career decisions, and where that information can be found.
- Knows what skills are needed to search for, obtain, retain, and change employment.
- Listens to customer concerns and protects customer confidentiality.
- Makes appropriate referrals.
- Provides customer with career exploration and job development skills.
- Understands modern recruitment and retention strategies.
- Understands the process by which individuals build skills, advance, and change employment.
- Understands the process by which individuals identify goals, as well as prepare for, search for, and retain employment.

Collaboration and Problem Solving

- Defines problems clearly and concisely.
- Engages customers, colleagues, agencies, and partner associates in a positive, professional manner.
- Is knowledgeable about the range of services in the community, and develops and maintains relationships with partners to deliver a comprehensive array of services to customers.
- Leverages resources from both internal and external customers.
- Possesses analytical and observation skills that coupled with knowledge and information can lead to effective problem solving assistance.
- Seeks additional resources when needed for problem resolution.
- Takes action required to prevent problem reoccurrence.
- Takes personal responsibility for solving problems.
- Understands the basic principles of teamwork and actively participates in team activities.
- Uses communication skills and teamwork to maximize opportunities.
- Values the development of professional networks.

Customer Service Methodology

- Identifies customer needs and expectations to create positive customer satisfaction.
- Listens to customer concerns and solicits feedback.
- Places appropriate emphasis on “excellence” and “speed of response” in work performance.
- Positions workforce development programs as a primary community partner in the service area.
- Responds quickly to customer requests.

- Understands the essential elements of a helping relationship, including rapport, trust, and mutual respect.
- Understands who the principal customers of the workforce development system are and treats all with respect.
- Works with customers, colleagues, agencies, and partner associates in a positive, courteous, and professional manner.

Diversity in Workforce Development

- Adapts materials and services to address diverse needs of customers.
- Creates an environment that enables all individuals to contribute to their fullest potential.
- Demonstrates sensitivity to cultural and individual differences.
- Identifies and implements innovative methods for delivering services to diverse or special populations.
- Respects diverse populations and treats every customer of the workforce development system as the most valued customer.
- Understands the special employment needs of diverse groups.

Labor Market Information and Intelligence

- Accesses, analyzes, and uses local, state, and national labor market information delivery systems and databases.
- Identifies the kinds of information individuals need, including assessment, to make realistic career decisions, and where that information can be found.
- Provides updated labor market information to employers, job seekers, and staff to develop opportunities.
- Understands basic computer technology used in workforce development.
- Understands the types of labor market information available and the uses of such information.

Principles of Communication

- Asks questions for clarification.
- Communicates with internal and external customers.
- Demonstrates strong teamwork skills.
- Demonstrates the skill, ability, and willingness to conduct employment-related workshops.
- Demonstrates strong listening skills.
- Speaks to single individuals or large groups to teach, inform, or persuade.
- Seeks input/feedback from employers and job seekers.
- Shares information in a timely manner.
- Understands the language used by business and employers.
- Values and demonstrates public relations skills and marketing skills.
- Writes case notes, memos, reports, and other correspondence using appropriate grammar, spelling, and punctuation.

Program Implementation Principles and Strategies

- Accepts suggestions for performance improvement from consultants and supervisors.

- Anticipates and prepares for organizational change.
- Applies principles of caseload management to successfully work with large numbers of people.
- Demonstrates innovation and creativity in implementing needs assessment, program design, operation, and problem solving.
- Develops, packages, and delivers customer solutions.
- Establishes and communicates a shared vision, values, strategic goals, priorities, parameters, and accountability standards for the organization.
- Fosters team environment internally and throughout the organization.
- Plays a variety of task and relationship roles.
- Understands how career programs are designed to use appropriate service strategies to meet program goals.
- Understands the importance of accountability and record maintenance.
- Uses indicators and established instruments to evaluate and document program performance and outcomes.

Workforce Development Structure, Policies and Programs

- Demonstrates knowledge of federal, state, and local workforce development programs, funding guidelines, and workforce development codes.
- Interprets current laws and structure to deliver appropriate services, and understands how their own work impacts the system's goals.
- Relates public workforce development policy, initiatives, and funding sources with the current system.
- Understands how the personal role and responsibility of the workforce professional strengthens the larger workforce development system.
- Understands who the principal customers of the workforce development system are.

An important job requirement for career specialists is the timely entry of data into the VaWC system as the official workforce system of record for Virginia. As part of career specialist training and their job requirements, WIOA career specialists are required to enter the data in a timely manner. The Valley Workforce Center Manager and SVWDB Workforce and Operations Coordinator jointly monitor compliance locally. The Center Manager runs and reviews VaWC career specialist reports weekly, so timely corrective action is taken to ensure compliance and provide additional training and mentoring. Regarding high-quality customer service, staff is trained by the contracted service provider with support from the

SVWDB Workforce and Operations Coordinator to deliver high-quality customer service. A Customer Service Satisfaction Survey is provided to each Valley Workforce Center visitor; surveys are aggregated and results are reported monthly to the Board. As customer concerns are identified through survey responses, the SVWDB's Workforce and Operations Coordinator works with the Valley Workforce Center Manager to resolve process, personnel, customer flow, or partner issues.

The SVWDB and partners focus on the six quality benchmarks and the supporting minimum service standards checklist:

1. Partners agree on a shared vision for a customer driven service delivery system.
2. The physical layout of the Virginia Workforce Center reflects an integrated approach to customer services.
3. Operational decisions are designed with customer needs in mind and centers track customer satisfaction.
4. Each Virginia Workforce Center will be a high-performance work place with staff that has a visible passion for quality of service.
5. Each Local Workforce Development Board will adopt a common outreach strategy that reflects an integrated approach to customer service.
6. Virginia Workforce Centers will be driven by customer needs and customer feedback, and continually look for ways to "raise the bar" to keep the center as a leader in customer satisfaction.

Adult and Dislocated Worker Services (Universal Access to Employment, Training and Supportive Services; Definition of Self-sufficiency Hard-to-serve Populations)

Title I adult and dislocated worker information and services are accessible to all customers through on-site visits to the Valley Workforce comprehensive and affiliate centers, partner agencies, technology utilizing the website and social media, and by affirmative and traditional referrals from partners and centers to the SVWDB contracted service provider.

The SVWDB ensures through procurement processes and requirements, contract provisions and certifications, and staff monitoring of centers and activities; that universal access is available for Title I services in the local area. Universal access means that all individuals shall have equal access to WIOA services and that no individual shall be at a disadvantage or shall encounter unnecessary difficulty in gaining access to those services. The SVWDB follows the provision of universal access to services and considers issues such as: 1) eliminating architectural and programmatic barriers to individuals with disabilities; 2) facilitating access for individuals with poor computer skills to computer based information and services; 3) excluding place of residence as an eligibility criteria for receiving services, and 4) furnishing access to a physical location with minimal transportation barriers and flexible hours of operation.

Through WIOA career services, Goodwill as the contracted service provider, offers basic career services, individualized career services, and participant follow up services. Basic career services are offered and include: client intake, orientation to workforce systems services, initial needs assessment, evaluation of work history, evaluation of educational attainment, registration in the Virginia Workforce Connection (VaWC), job search and job placement assistance, assistance with resume writing and interview skills, labor market information, information on available supportive services, assistance with filing unemployment compensation claims, resource room assistance, and referrals to other programs and services.

Individualized career services are also offered and include: comprehensive and specialized assessments of skill levels and service needs, development of an individual employment plan and information on available training and training providers, assistance in establishing eligibility on non-WIOA financial aid for employment and training programs, group and individual career search counseling, career planning assistance, short-term pre-vocational services, internships and work experience linked to careers, financial literacy services, out-of-area job search assistance and relocation assistance, and English language acquisition and integrated education and training programs.

Follow-up services include counseling regarding the workplace for participants in adult or dislocated worker workforce investment activities who are placed in unsubsidized employment, for up to 12 months after the first day of employment.

For incumbent workers who are employed in jobs that do not produce a living wage, training may be provided in conjunction with their current employment to upgrade current skills or develop new and marketable skills to enable the incumbent worker to secure employment at a higher wage. Referral to supportive services such as transportation, child care and emergency assistance will be made to clients to enhance their ability to complete training and find suitable employment. As funds permit, direct support services may be provided. Supportive services are not an entitlement but are based on needs of individual clients. The examples listed above are not all inclusive. Documentation is maintained in the client file of need for supportive services, supportive services provided, and results of the supportive services provided.

The SVWDB's self-sufficiency definition used to determine eligibility for career and training services for employed adults is 150 percent of the Lower Living Standard Income Level (LLSIL) index updated annually by the U.S. DOL, based on family size and income the last six months annualized. In addition, the SVWDB defines underemployed as working part-time but seeking full-time or working fulltime and earning less than 100 percent of the LLSIL.

The SVWDB's definition of hard-to-serve populations with additional barriers to employment continues to evolve as more barriers become recognized. The SVWDB recognizes and accepts the key provisions of WIOA, Appendix A, §3(24), which defines members as populating one or more of the categories listed below.

(A) Displaced homemakers

(B) Low-income individuals

(C) Indians, Alaska Natives, and Native Hawaiians, as such terms are defined in section 166.

(D) Individuals with disabilities, including youth who are individuals with disabilities

(E) Older individuals

(F) Ex-offenders

(G) Homeless individuals (as defined in section 41403(6) of the Violence Against Women Act of 1994 (42 U.S.C. 14043e–2(6))), or homeless children and youths (as H. R. 803—10 defined in section 725(2) of the McKinney-Vento Homeless Assistance Act (42 U.S.C. 11434a(2)))

(H) Youth who are in or have aged out of the foster care system

- (I) Individuals who are English language learners, individuals who have low levels of literacy, and individuals facing substantial cultural barriers
- (J) Eligible migrant and seasonal farmworkers, as defined in section 167(i)
- (K) Individuals within 2 years of exhausting lifetime eligibility under part A of title IV of the Social Security Act (42 U.S.C. 601 et seq.)
- (L) Single parents (including single pregnant women)
- (M) Long-term unemployed individuals
- (N) Such other groups as the Governor determines to have barriers to employment

Rapid Response Coordination

The Rapid Response Coordinator is housed with SVWDB staff, is part of the Business Services Team, and works collaboratively with the Valley Workforce Center management, staff, and regional workforce partners. Rapid Response services are available for layoffs which involve 25 or more workers. Workers affected by layoffs of under 25 individuals, which do not receive Rapid Response services through the State, may access WIOA services directly through the Valley Workforce Centers and regional workforce system.

The SVWDB business services team, Valley Workforce Center staff, and regional workforce partners, work with the Rapid Response Coordinator to avert layoffs using strategies that help retain or save jobs. The aim of the aversion is to help the company make changes so that layoffs are reduced or completely avoided. As a partner with other programs and organizations, Rapid Response has access to layoff aversion options that may be utilized in a layoff aversion plan.

The SVWDB supports Rapid Response activities and assumes any role as necessary and as directed by the Rapid Response Coordinator and partner team, based on the needs of the business and employees. Rapid Response responsibilities include a Management Briefing with the employer to 1) obtain information about reduction-in-force plans, 2) provide an overview of service options, and 3) customize services according to workforce needs. The first meeting with the employees is the Employee Briefing. The focus of the Employee Briefing is to provide information to the employees who will be dislocated and includes information about 1) the Rapid Response process and assistance with employee transition, 2) job search and unemployment insurance guidelines and benefits (provided by the VEC), 3) training opportunities under WIOA, and 4) resources available in the community.

The Rapid Response Coordinator for the SVWDB is developing working relationships with area employers and area economic development officers since economic development may be the first to learn of a downsizing.

The SVWDB supports and leverages Rapid Response services as provided by regional workforce partners in collaboration with the Rapid Response Coordinator. Rapid Response provides the following services in a group format; job search assistance, training in how to access community resources, job application and resume preparation, assessing accomplishments and skills, resume development lab, interviewing skills, effective interviewing techniques, practice interviewing lab, and coping with job loss. Assistance is also provided in coordinating the mass filing of unemployment insurance claims and registration for Job Services. Labor market information is furnished to all registrants, including data about emerging and demand Occupations. Job Postings are made available through the VaWC website

(www.vawc.com). Consultation is provided regarding additional dislocated worker resources from the Valley Workforce Centers and other regional workforce partner resources. The SVWDB works with the Rapid Response Coordinator to tailor services offered to any company and its employees based on the needs of the affected employees; services are at no cost to the employer or the affected workers.

Youth Services

Pursuant to WIOA, out-of-school youth must be aged 16-24, not attending any school, and meet one or more additional conditions, which could include: 1) school dropout; 2) within age of compulsory attendance, but has not attended for at least the most recent complete school year calendar quarter; 3) holds a secondary school diploma or recognized equivalent and is low-income and is basic skills deficient or an English language learner; 4) subject to the juvenile or adult justice system; 5) homeless, runaway, in foster care or aged out of the foster care system, eligible for assistance under Section 477, Social Security Act, or in out-of-home placement; 6) pregnant or parenting; 7) an individual with a disability; and 8) low income person who requires additional assistance to enter or complete an educational program or to secure and hold employment.

In-school youth must be aged 14-21, attending school, low income, and meet one or more additional conditions, which include: 1) basic skills deficient; 2) English language learner; 3) an offender; 4) homeless, runaway, in foster care or aged out of the foster care system; 5) pregnant or parenting; 6) an individual with a disability; and 7) person who requires additional assistance to enter or complete an educational program or to secure and hold employment.

The SVWDB youth program includes WIOA's five program elements: 1) financial literacy, 2) entrepreneurial skills training, 3) services that provide labor market and employment information in the local area, 4) activities to support youth transition to postsecondary education and training, and 5) education offered concurrently with and in the same context as workforce preparation activities and training for a specific occupation or occupational cluster.

SVWDB comprehensive services for youth meet the WIOA requirements for youth program design. Youth are screened to determine eligibility to receive WIOA Youth Services. All eligibility requirements as contained in state policy are adhered to, and documentation of individual program eligibility is maintained in each client's file. Once eligibility determination has been completed, the client receives an in-depth objective assessment to measure aptitudes, abilities, interests, and educational levels. Once the objective assessment process has been completed, the career specialist, working in conjunction with the client, develops an Individual Service Strategy (ISS). The ISS is designed to capture client data such as work history, educational history, barriers, assessment results, etc. and is used to develop a comprehensive plan of action and program goals for the client utilizing all available and allowable Title I Youth Services. Once completed, the ISS serves as a map of the sequence of youth activities that the client will participate in and a projected duration of time for each activity to achieve planned program goals that have been developed for each client. The career specialist has frequent contact with the client as he/she progresses through program activities. Any assistance needed by the client to achieve program goals is provided by the career specialist.

Delivery of Youth Services includes preparation for postsecondary educational opportunities, as well as connections for youth to such opportunities. Participants are offered tutoring and GED preparation through the SVWDB's partnerships with the local school systems, adult learning centers, and workforce centers. A strong component of the programs is the linkages between academic and occupational learning. SVWDB contractors and partners work collaboratively to provide educational opportunity and labor market information to participants.

Additionally, youth contractors provide work readiness training to prepare participants for employment including placement into meaningful summer employment with both paid and unpaid work experiences. Youth contractors provide opportunities for alternative secondary school services, including programs targeted to GED attainment where appropriate, with Youth contractors coordinating efforts with area alternative education schools and adult learning centers.

Qualified older youth may receive, as appropriate, occupational skills training through SVWDB service provider partners.

Leadership development opportunities are available and include community service and peer-centered activities encouraging responsibility and other positive social behaviors.

Comprehensive guidance and counseling are provided as needed and may include drug and alcohol abuse counseling; referrals are provided through area DSS offices, area mental health offices, Valley Mental Health, and local school systems' guidance counselors.

As funds permit, supportive services such as transportation, child care and emergency assistance may be made available to participants to enhance their ability to complete training

and/or find suitable employment. Supportive services are not an entitlement but are based on needs of individual clients. The examples listed above are not all inclusive. Documentation must be maintained in the client file of need for supportive services, other agencies contacted, supportive services provided, and results of the supportive services provided.

Follow-up services are provided to all youth participants after termination, for up to twelve (12) months to measure progress, assess additional needs, and provide additional supportive services if needed.

SVWDB issues a RFP for youth services detailing the fourteen youth program elements required under WIOA. The successful proposer must demonstrate the ability to recruit youth, provide services, provide case management, provide employment and training opportunities, and offer the fourteen youth program elements described above and enumerated below:

1. Tutoring, study skills training and evidence based dropout prevention strategies that lead to completion of secondary school diploma or its recognized equivalent or for a postsecondary credential.
2. Alternative secondary school offerings.
3. Summer employment opportunities directly linked to academic and occupational learning.
4. Paid and unpaid work experience, including summer employment opportunities, internships, Pre-apprenticeship programs, job shadowing and on the job training opportunities.

5. Occupational skill training which shall include priority consideration for training programs that lead to recognized postsecondary credentials that are aligned with in demand industry sectors and occupations.
6. Leadership development opportunities, which may include such activities as positive social behavioral and soft skills, decision making, team work and other activities.
7. Supportive Services.
8. Adult mentoring for a duration of at least (12) months, that may occur both during and after program participation.
9. Follow-up Services for a minimum 12- month period.
10. Comprehensive guidance and counseling, including drug and alcohol abuse counseling, mental health counseling, as well as referrals to counseling, as appropriate to the needs of individual youth.
11. Financial literacy education
12. Entrepreneurial skills training
13. Services that provide labor market and employment information about in-demand industry sectors and occupations.
14. Activities that help youth prepare for and transition to post-secondary education and training.

Individual youth assessments coupled with opportunities for paid and unpaid employment, community service, educational pursuits, and other of the fourteen elements provide a robust opportunity for integration into Youth service strategies. The results can be

found in the success of the many active programs in Area IV, including Youth Tool Kit, a Blue Ridge Community College program that takes Youth cohorts through welding training.

Currently, the SVWDB contracted service provider has in-school youth enrolled for up to three years and sometimes longer and are not recruiting new in-school youth enrollees. Out-of-school youth programming incorporates successful practices from other WDB youth programs. Strategies to recruit out-of-school youth include promoting job training and employment opportunities through social media, holding youth job fairs at workforce centers, working with high school principals and counselors to: 1) identify graduating youth with no plans to further their education after high school, 2) establish a referral process for youth dropping out of high school, 3) hold events at high schools to increase awareness of services offered and build relationships, 4) create a Work Readiness “bring a friend” Class, and 5) meet with the Head Start Program to recruit parents who are 18 -24 years of age. Additional strategies to create awareness of out-of-school youth programs are working closely with community college financial aid departments and through community college registration events, seeking local newspaper publicity to reach parents and grandparents, and distributing informational flyers in communities served. A Youth Advisory Committee at each of the Workforce Centers provides an opportunity for partners such as the Department of Juvenile Justice, DARS, VEC, Adult Education, Job Corp, registered apprenticeship, local colleges, local offices on youth and local businesses to aid in program and training development, recruitment, and co-enrollment opportunities. A Job Corp representative from the Richmond office currently visits the Harrisonburg Workforce Center once a month to meet with potential clients. SVWDB will continue to define strategies to identify, recruit and retain out-of-school youth and seek new

partners, programming and service delivery models for the advancement of youth programming in the local area.

An eligible youth who requires additional assistance to complete an educational program, or to attain and retain employment, is an individual who meets one or both criteria listed below.

- Enrolled in an eligible education program, but also requires additional assistance beyond that offered by the service provider to complete the activity or program.
- An eligible youth who is nearing employment but requires additional assistance under Title I to attain or retain a job.

Up to 5 percent of youth participants served by youth programs in LWDA IV may be individuals who do not meet the income criterion for eligible youth, provided that they otherwise meet the eligibility requirements for the specific youth program in which they are enrolled. Prior to using the 5 percent exception, participant enrollment must be approved by the SVWDB Operations Officer or CEO. The priority of service remains low income individuals.

If a youth does not meet the eligibility guidelines, they will be referred to the appropriate partner depending on need. Those who are desiring training will be referred to the Community College and told about the variety of financial assistance that is available that could help them further their education. For those who are interested in employment, they will be referred to the VEC for assistance. They will also be informed about the resource room and workshops available at One-Stop Centers that can aid in their job search.

Compliance with applicable safety and child labor laws is a SVWDB contractual requirement of entities awarded a contract to deliver services under Title I WIOA Youth Programs. SVWDB staff verifies compliance of all requirements of this policy as a part of the local compliance monitoring review conducted at least annually.

The SVWDB does not have a pay-for-performance policy in force; however, the Board remains open to pursuing pay-for-performance as an option in future funding cycles. The biggest challenge to pursuing a pay-for-performance model is finding an experienced service provider willing to work in a rural area and partner on the development of a pay-for performance program, performance metrics, and contract.

Supportive Services

In LWDA IV, an individual is eligible for supportive services as a WIOA program participant, if the participant is unable to obtain supportive services through other workforce programs or partners, and if direct supportive services funding is available. Supportive services may include travel allowance, childcare, assistance with training or work related items (uniforms, work attire, books, tools, etc), and other services required to allow a participant to remain in training and to successfully complete training. The “other” services are determined on a case-by-case basis based on need and the participant’s situation. Supportive services are not an entitlement but are based on needs of individual participants for temporary assistance and are not provided as long term support. Information provided on the Supportive Services Needs Determination Form includes: (1) justification for the need for supportive service; (2) description of service provided; (3) list of organizations contacted and why services could not be obtained, and (4) an itemized and dated invoice or receipt for payment of services.

Documentation is maintained in the client file of need for supportive services, supportive services provided, and results of the supportive services provided. Funding of training and supportive services may not exceed a total of \$9,250 per fiscal year, July 1 to June 30.

The SVWDB is investigating a pilot program in south central Connecticut which started Summer 2016 connecting the ride sharing services of Uber to provide supportive services for travel to WIOA job seeker participants. The goal of the Workforce Alliance and Uber pilot partnership is to provide 500 rides by July 31, 2017 to individuals enrolled in Workforce Alliance programs and seeking transportation to employment interviews, jobs, or workforce training. The pilot is designed as an innovative approach to meet the complex transportation needs of WIOA participant job seekers in the Connecticut areas of New Haven and Meriden.

SVWDB is supportive of a collaborative effort, led by the Central Shenandoah Planning District Commission, to evaluate transportation needs from the region's rural areas to more urbanized localities, and to develop and promote potential strategies including carpools, vanpools, and shuttles. These strategies should primarily focus on providing access to employment opportunities for those lacking transportation options.

Training Services

Each participant is provided with a listing of approved training providers for the type of training requested and meeting the in demand occupations as identified by the SVWDB. The Individual Training Account (ITA) is a specified amount of funding, contingent upon available funding, WIOA regulations, VBWD policy, WIOA Administrator guidelines, and SVWDB policy. ITA training is for the sole purpose of facilitating transition into the workforce. All training is

for occupations in demand in the SVWDB labor market and determined to be priority by the SVWDB. All training must be supported by local labor market data. The participant is asked to make their own choice of training providers. Participants are provided, upon request, information relative to training provider performance, length of training, curriculum location, etc. to assist the participant in making an informed choice of training providers.

Under the Board's strategic Goal 3 *Fill jobs in demand-occupations that show promise for long-term growth in industries that are strategic to and strengthen the Shenandoah Valley's economy*; is the objective to review the current ITA policy and have a strategic discussion with the Board regarding the different philosophies supporting the different strategies for awarding training funds to participants. The strategic discussion will lead to a review and possible modification of the policy and process for awarding ITAs.

The SVWDB does utilize training contracts other than ITAs for on-the-job training, registered apprenticeships, customized training, incumbent worker training, and transitional employment. Participants may be enrolled solely in WIOA or grant programs or may be co-enrolled as a participant in both programs with leveraged funding resources. The OJT application and contracting process are jointly developed with the new hire, employer, and SVWDB business services staff, and as appropriate, service provider staff. The primary customer for incumbent worker training and registered apprenticeships is the employer, who works jointly with the SVWDB business services staff and service provider staff. Registered apprenticeship contracts are jointly developed working with the employer and the Virginia Department of Labor and Industry (VDOLI). To date the SVWDB has not worked directly to contract for customized training or with transitional employment training, but is willing to

enter into these contracts as needed. The SVWDB is eager to investigate and consider pay-for-performance contracts. Through initial investigation, the biggest challenge appears to be finding a provider who is willing to enter into a pay-for-performance contract in a rural area. The SVWDB is most interested in pursuing pay-for-performance contracts for initiatives with out-of-school or opportunity youth and/or under-resourced populations such as ex-offenders and older workers.

Collaboration with Community Colleges

In LWDA IV, collaboration with and among the three community colleges, Blue Ridge Community College (BRCC), Dabney S. Lancaster Community College (DSLCC), and Lord Fairfax Community College (LFCC), SVWDB, and SVP have resulted in a myriad of programs and services benefiting both job seekers and businesses. The SVWDB collaborates with community colleges in the planning and delivery of workforce and training services based on the activities as listed below.

- **Representation on the Board:** The three community colleges are represented on the Board and include the President of BRCC, the Chief Workforce Officer (CWO) for LFCC, and the CWO for DSLCC. The BRCC President and LFCC CWO also serve on the Executive Committee and the LFCC CWO serves on the Operations and Workforce Policies Committee and on the RFP Service Provider Commission.
- **Workforce Initiative Design and Implementation:** Through the CWOs, the three community colleges serve on the workforce initiative design team for the development of proposals for discretionary grants. Community colleges are actively involved in workforce initiative design, supporting the proposal through meaningful letters of

commitment and partnership, and work to develop and deliver training programs to successfully implement the workforce initiatives when awarded. For example, the SVWDB funds one FTE at LFCC as a Grant Specialist to provide outreach to job seekers and businesses in the Northern Shenandoah Valley and to enroll participants and work with businesses for the successful implementation of four grants awarded to the SVWDB. This relationship has been in place for eight years.

- **Eligible Training Providers:** Community colleges and technical centers provide the majority of training programs for job seekers. The SVWDB works closely with the community colleges on a local ETP process to address program application submission and approval. The SVWDB will also work with the community colleges regarding program performance tracking and submission.
- **Business Input:** In addition to the input received from the SVWDB business services work with employers, the SVWDB receives and shares employer information with the community colleges based on their sub-region perspective.
- **Participant Referrals:** The SVWDB refers individuals to the community colleges for the Workforce Credentials Grant (WCG) when they are not eligible for WIOA services or would prefer the WCG funding opportunity. In addition, through the JD NEG grant, individuals are dual enrolled with WIOA services, working with a grant funded career coach at the community college. As a primary training provider and through orientation sessions, individuals seeking WIOA services are provided information regarding community colleges training programs and the connection of the community colleges as workforce system partners.

- **Credentials:** The SVWDB depends on community colleges for the development of training programs and the preparation of participants leading to and obtaining credentials that matter to employers. The SVWDB depends on and works with the community colleges on the development of a regional credentials list. This is the Board's Strategic Goal 2, *Achieve measurable skills development in job seekers in the form of workforce credentials that matter to businesses*. With the strategic objective of *maintaining a regional workforce credentials inventory working with community colleges, technical centers, businesses, and economic development*.

Collaboration with Education

The SVWDB collaborates with relevant secondary education programs and activities to coordinate strategies, enhance services, and avoid duplication of services based on the activities listed below.

- **Eligible Training Providers:** In the central part of the service region, technical centers provide much of the occupational skills training and related instruction for registered apprenticeships. Technical centers are part of the secondary school system. The SVWDB works closely with the technical centers on a local ETP process to address program application submission and approval. The SVWDB will also work with the technical centers regarding program performance tracking and submission.
- **Workforce Initiative Design Team:** Technical Center representatives are members of the workforce initiative design team for the development of grant proposals.

- **Program Alignment and System Integration:** Both technical center and CTE representatives have been involved with the WIOA and Career Pathways for Individuals with Disabilities (CPID) working sessions to discuss workforce program alignment and system integration among regional partners.
- **Adult Education and Literacy Contract Holder:** In LWDA IV, the secondary school system (Waynesboro City Schools) holds the contract for adult education in the southern and central part of the service region and LFCC holds the contract for the northern part of the service region. There is collaboration at the secondary and post-secondary systems through adult education.
- **Precision/CNC Advanced Manufacturing Academy:** The technical center will be piloting a new academy for older youth and adults starting summer 2017. This initiative is in collaboration with and funded by the CPID grant.
- **CTE Councils:** The SVWDB participate on the CTE Councils for the Blue Ridge Career Pathways Consortium and the LFCC CTE Council to receive and provide pertinent workforce related information and to identify connection points.

Collaboration with Adult Education and Literacy

The SVWDB collaborates and coordinates WIOA Title I activities with Title II adult education and literacy activities based on the activities listed below.

- **Representation on the Board:** The two adult education and literacy providers, Waynesboro High School and LFCC have program managers that serve on the Board. One representative also serves on the Finance Committee and on the RFP Commission.

- **SVWDB Local Plan Development:** Because adult education representatives serve on the SVWDB, they have been involved in the development of the SVWDB local plan, the review of the plan drafts, and participated in the SWOT analysis and other facilitated sessions.
- **Adult Education Plan Development:** The adult education representatives and SVWDB staff met to discuss, review, and cross walk the adult education local application with the SVWDB local plan.
- **Program Alignment and System Integration:** Adult education and literacy representatives have participated in the WIOA and CPID working sessions to discuss workforce program alignment and system integration among regional partners.
- **One-Stop Partners:** The SVWDB and service provider works with both the adult education and literacy local application awardees and also with their tier two literacy providers, Skyline Literacy and Literacy Volunteers. In the Harrisonburg comprehensive Valley Workforce Center, Skyline Literacy is located in the Center. In the new Winchester Valley Workforce Center, space has been designed to include training and testing/assessment rooms for adult education and literacy through LFCC. In addition, Literacy Volunteers is located on the same non-profit campus.
- **Adult Education Advisory Group:** SVWDB participates on the advisory group for the central and southern adult education provider.

Priority of Service

SVWDB has not had to implement “Priority of Service” in response to reduced funding; however, should that become a need, the narrative that follows describes the priority of service for individuals served in the WIOA Adult Program based on the requirements in WIOA §134(c)(3)(E) and §680.600. (1) First priority is given to covered persons (veterans and eligible spouses) who are: low income [as defined by WIOA Sec. 3(36)], or recipients of public assistance, or who are basic skills deficient. (2) Second priority is given to individuals (non-covered persons) who are: low income [as defined by WIOA Sec. 3(36)], or recipients of public assistance, or who are basic skills deficient. (3) Third priority is given to veterans and eligible spouses who are: not low income, and not recipients of public assistance, and not basic skills deficient. (4) Fourth priority is given to individuals (non-covered persons) who do not meet the above priorities. They may be enrolled on a case by case basis with documented managerial approval.

Incorporation of Technology

As noted in the Virginia Combined State Plan, technology has the potential to transform the way workforce development is done in Virginia. The state has made important investments in data systems that manage client information, track interventions and services delivered, and report outcomes. Historically, the posture towards workforce client management systems has been to protect privacy and limit cross agency access to data. Also, the reporting systems have been designed to evaluate programs against a prescribed list of performance measures, specific to each program and/or funding agency. This has limited the

system's ability to manage individual client needs holistically, manage system performance in real time, and evaluate which interventions make an impact.

As for business clients, Virginia has limited experience with using technology to improve, track and measure business engagement. While the federal regulations are not yet out, the governor has clearly stated a goal of business engagement.

Virginia can benefit from the experience in data security and sharing protocols gained during the development of the Virginia Longitudinal Data System (VLDS). To support the coordinated service-delivery envisioned for Virginia and be nimble to make data -driven decisions, the state partners must fully explore these opportunities to make shared system investments and integrate data to benefit the clients and improve system outcomes.

Applying the collective impact model to the data systems and information pathways in the ecosystem, the integration of data through technology and integrated systems is where shared measures and feedback loops become actualized and inform continuous improvements across workforce system partners. Metrics based on real-time data in integrated systems boost transparency and make the ecosystem robust; the outcomes can be realized in how the customer's experience is transformed. Productivity gains and newfound efficiencies will guide workforce system partners to a new level of effectiveness that engenders new standards for performance.

The SVWDB stands ready to follow the Commonwealth's lead in technology implementation.

Efficient and Effective Service Delivery

The SVWDB is committed to efficient and effective service delivery under an aligned systems protocol. Under this protocol, partners have developed and implemented operational policies that reflect an integrated system of performance, communication, and case management, and use technology to achieve integration and expanded service offerings where possible. Partners also use common performance indicators to ensure that federal investments in employment and training programs are evidence-based and market driven.

The One-stop center staff are engaged in a continuous learning process to provide outstanding customer service to job seekers, including those with barriers to employment, and businesses in an integrated, regionally-focused framework of service delivery. Staff are cross-trained, as appropriate, to increase staff capacity and efficiency. Cross- training allows staff from differing programs to understand every program and to share expertise about the needs of specific populations so that all staff can better serve all customers.

In the process of working toward a sustained, aligned system, partners are uncovering redundancies, opportunities for affirmative referral and co-enrollment; all of which increases efficiencies and effectiveness. Through program alignment and system integration meetings and the review process, the partners will continue to identify and eliminate duplication. A formal asset mapping process will also identify duplication and highlight asset connections and sharing points. Asset mapping is one of the components for resource diversification presented in the earlier section f.vii pertaining to the generation of additional resources. As more technology is introduced and as processes become more sophisticated and prevalent, the SVWDB believes greater efficiencies can be had through common intake forms and shared data.

It may be a lengthy process to achieve these economies of scale; however, the overall savings of resources through elimination of duplicated efforts will have a significant return on investment.

Fiscal Agent

The fiscal agent for LWDA IV is the SVWDB, Inc. as designated by the Chief Elected Official Consortium.

Annually, the fiscal staff prepares a budget to determine the allocation of the funding to the service provider, the amount of funding expected to be carried into the fiscal year from the prior year and the amount of carryover funds to reserve to carry into the subsequent fiscal year. The annual budget is reviewed by staff and submitted to the Finance Committee for review, upon the Finance Committee's acceptance the annual budget is submitted to the Executive Committee or Board of Directors and to the CEO Consortium. Once approved, the service provider contract is established or amended to set forth the amounts to be utilized from each funding stream, once the contract is in place the service provider submits a detailed line-by-line budget for approval.

The Chief Financial Officer works with staff to disburse funds on the 15th and the last day of each month. All WIOA expenditures relating to the contract(s) with the service provider(s) are on a cost reimbursement basis; the service provider is required to submit detailed invoices (predetermined format) along with all substantiating documents monthly (with predetermined dates) to ensure timely staff review. Upon receipt of the monthly service provider invoices, staff reviews the year-to-date expenditures in conjunction with the previously approved budget to ensure the service provider is on target to expend 100% of the

funds they have been allocated for the fiscal year and that no unusual trends are indicated; budget modifications to the contract may take place at the discretion of the SVWDB.

Fiscal staff reviews the monthly income and expenditure budget to actual reports for each funding stream and contract, prior to payment of invoices, to identify any potential variances that could be indicative of overspending, underspending, incorrect allocations or incorrect coding. The Finance Committee meets bimonthly to review month end financial statements and budget to actual reports; the reports are accepted by the Finance Committee and submitted to the Executive Committee or Board of Directors. Periodically, the CEO Consortium meets to review month end and year-end financial statements and budget to actual reports.

All local contracts for activities under WIOA Title I and the selection of the Comprehensive Workforce Center Operator are awarded using a procurement by competitive proposals. Requests for Proposals (RFP) must be publicized and identify all evaluation factors and their relative importance. Any response to publicized requests for proposals must be considered to the maximum extent practical, proposals must be solicited from an adequate number of qualified sources, the SVWDB has a written method for conducting technical evaluations of the proposals received and for selecting recipients and contracts must be awarded to the responsible entity whose proposal is most advantageous to the program, with price and other factors considered.

Prior to the expiry of the contract with the service provider, the RFP process and philosophical underpinnings are presented to the Board of Directors for discussion and approval. The Board of Directors selects and nominates a RFP Commission comprised of

representatives covering the geographical sections of the service region, education, economic development, private sector, partner organizations, the CEO Consortium or grant recipient (the County of Page), the Executive Committee and the Finance Committee. The RFP document contains information regarding the proposal evaluation, timeline, submission details, and finalist packet information for interviews, references and site visits. The contract is awarded for a three-year period of performance with the initial year serving as a probationary period; upon successful completion of year one, another review is completed at the end of year two. Continuation of the contract is contingent on the SVWDB Board of Directors approval, which is based upon contract performance, program performance results, ongoing monitoring and general oversight results, audit results, and availability of funds.

The SVWDB leverages resources through applying for discretionary grants that align with the vision, mission and values of the organization. In the past four years, over \$10.5M has been leveraged by the Shenandoah Valley regional workforce network, educational institutions, other partners and employers to expand the impact of regional workforce funds. Specifically, leveraged resources have been used to co-enroll participants across multiple programs, through both WIOA formula and discretionary grant initiatives to coordinate the resources ensuring the maximization of available resources to clients.

Procurement

To ensure the SVWDB obtains high quality services, supplies and equipment at a reasonable cost and to ensure reasonable competitiveness among potential providers, purchases made by the SVWDB will be in accordance with OMB Uniform Guidance at 2 CFR 200.317-326. In addition to adherence to those regulations, any additional regulations and

requirements established by the VCCS, U.S. DOL grant funder, as well as the grant recipient will be followed for any funds provided from or through those agencies/entities.

In accordance with WIOA regulations (20 CFR 683.250(a)(4)) the SVWDB may not make an award, sub award or contract at any tier to any party which is debarred or suspended or is otherwise excluded from or ineligible for participation in Federal assistance programs in accordance with the Department of Labor Regulations at 29 CFR Part 98. The Federal Debarment list shall be consulted prior to awarding a contract or doing business with a new vendor.

All local contracts for activities under WIOA Title I and the selection of the Comprehensive Workforce Center Operator are awarded using procurement by competitive proposals. Requests for Proposals (RFP) must be publicized and identify all evaluation factors and the relative importance of each factor (weighted evaluation). Any response to publicized requests for proposals must be considered to the maximum extent practical. Proposals must be solicited from an adequate number of qualified sources. SVWDB has a written method for conducting technical evaluations of the proposals received and for selecting recipients. Contracts must be awarded to the responsible entity whose proposal is most advantageous to the program, with price and other factors considered.

As noted above in the Fiscal Services section, prior to the expiry of a contract for recurring services, the RFP process and philosophical underpinnings are presented to the Board of Directors for discussion and approval. The Board of Directors selects and nominates a RFP Commission comprised of representatives covering the geographical sections of the service region, education, economic development, private sector, partner organizations, the CEO

Consortium or grant recipient (the County of Page), the Executive Committee and the Finance Committee. The RFP document contains information regarding the proposal evaluation, timeline, submission details, and finalist packet information for interviews, references and site visits. The contract is awarded for a three-year period of performance with the initial year serving as a probationary period; upon successful completion of year one, another review is completed at the end of year two. Continuation of the contract is contingent on the SVWDB Board of Directors approval, which is based upon contract performance, program performance results, ongoing monitoring and general oversight results, audit results, and availability of funds.

Performance

The following is a summary of the Final Negotiated Performance Goals for Virginia and Local Workforce Development Area IV (LWDA) as approved by the State WIOA Team on November 30, 2016 for Program Years 2016 and 2017.

Adults	Virginia	LWDA 4
	Negotiated Level	Negotiated Level
Employment 2nd Quarter after Exit	77.0	72.2
Employment 4th Quarter after Exit	85 .0	70.1
Median Earnings 2nd Quarter after Exit	\$5,500	\$2,700
Credential Attainment within Four Quarters after Exit	61.0	65 .0
Dislocated Workers		
Employment 2nd Quarter after Exit	83.0	78.2
Employment 4th Quarter after E x i t	85 .0	74.6
Median Earnings 2nd Quarter after Exit	\$7,600	\$3,915
Credential Attainment within Four Quarters after Exit	64.0	80.0
Youth		
Employment 2nd Quarter after Exit	63.0	63.0
Employment 4th Quarter after Exit	60.0	70.0
Credential Attainment within Four Quarters after Exit	68.0	70.0

Quality Assurance

SVWDB strives to be a leading, high-performing workforce development board and began the evolution process in 2012 by setting a vision that is inspirational, aspirational, and concise. The Board's priority actions are designed and implemented to realize its vision and to align resources in support of priorities. The SVWDB continues to stay true to its mission. The Board builds on this by pursuing and hiring professional, highly educated and credentialed, passionate staff and works to contract with a like-minded, highly experienced, successful service provider, who will employ customer-focused, well-trained staff committed to job seekers, businesses, and the regional economy. The SVWDB complies with WIOA regulations, VBWD policies, and VCCS WIOA Administration workforce guidance. The SVWDB seeks to exceed state negotiated performance metrics, develop and measure meaningful regional metrics, and to continuously improve customer feedback measures. The SVWDB follows workforce development best practices as it strives to establish new promising best practices.

The SVWDB will take actions to evolve into a higher-performing local workforce development board (LWDB). The SVWDB will engage in four areas of development, which includes: (1) development of SVWDB members and the Board, (2) a movement to formal sub-regionalization, (3) partnership expansion through systems thinking, and (4) workforce design and modification through workforce prototyping and human centered design.

The development of SVWDB members and evolution of the Board is intended to increase LWDB effectiveness by becoming a more strategic Board and creating opportunities for Board member engagement. Strategic objectives, which translate into activities for Board development include the items listed below.

1. Investigate board member orientation models and delivery methods. Develop and implement board member orientation and plan for ongoing board member training.
2. Conduct an annual Board retreat.
3. Evaluate the Board meeting components and structure and focus meetings on a balance of work related issues and on-going learning and strategic goal discussions that result in guidance. Build board member networking time into the Board meeting schedule.
4. Develop a Board leadership succession plan.
5. Work with CLEOs to advance intentional board member appointments based on the Board's strategic plan and priorities.
6. Provide a process and mechanism for board member internal feedback.
7. Assess the relevance of the Board to board members and take appropriate action as needed based on responses.
8. Investigate the different types of committee structures and determine the structures which align best with the Board's strategic plan and goals. Include non-board members on committees to provide specific expertise and resources as needed

The SVWDB includes 16 localities each with a City Manager, Mayor, and City Council or a County Administrator, Board Chair, and Board of Supervisors. The geographic area is approximately 5,000 square miles and includes rural to urban localities. The locality workforce challenges, needs, solutions, partners, and culture vary greatly across the region. To date, the

SVWDB has addressed these differences through an informal sub-region process for the development of workforce initiatives, grant proposals, and commissioned workforce studies. The sub-regions include the southern, central, and northern parts of the SVWDB service region. The time has come for a more formal and intentional sub-regionalization plan to more effectively serve the entire SVWDB service region. A sub-regional plan needs to address communications; Board, committee, and Chief Elected Official meetings; Board governance; workforce needs assessments; workforce center service delivery and management; workforce initiative development; and partnership development.

The SVWDB seeks to expand existing partnerships and develop new partnerships based on a systems thinking approach to partnership development. The SVWDB recognizes the traditional approach to partnership development takes time and that partnerships are based on mutual understanding and meaningful day-to-day interaction for both mutual benefit and for the benefit of each of our mission's related to job seekers, incumbent workers, businesses, and the regional economy. The SVWDB embraces WIOA and the expanded partnerships it expects; WIOA is not just an iterative change from WIA, but a true transformation of workforce and economic development listening and working with businesses as key drivers to regional and state growth. An advanced and timely approach to partnership development for workforce partners applies systems theory and related concepts to systems thinking to consider part-to-whole and whole-to-part thinking, with an emphasis on the connectivity between the various parts that fit together to form a whole, and the relationship of systems to the overall environment. LWDBs and Board staff work with public and private sector partners to design, develop, and implement business driven workforce solutions; these solutions

require an understanding of complex, interconnected systems such as housing systems, transportation systems, secondary and post-secondary educational systems, and federal, state, and local governance systems. Because of the complexity and interconnectivity of the many business, workforce, and community systems, a systems view is required to successfully address the challenges within a multi-faceted regional labor market. As workforce conveners, partnership brokers, and resource leveragers, LWDBs and Board staff are in the center of business, workforce, and community systems and expected to understand the complexities of the system, to host community conversations to better align resources, to leverage regional and partner expertise and assets, and to make sure the regional workforce ecosystem supports growing industry markets while supporting regional and community development.

The SVWDB seeks new methods for advanced workforce initiative design and the modification of current delivery processes. Two methods considered are workforce prototyping and human centered design, which provides an innovative process, with partner immersion in the problem and the solution. These methods are based on an understanding there will be many mistakes, which will be quickly resolved through an accelerated learning process.

Workforce prototyping involves the design and successful implementation of small, local workforce initiatives supported each step of the way by engaged businesses, education and training providers, and workforce partners working to develop a customized solution to address a specific workforce challenge. The engaged partners enter into a commitment to learn each step of the way; to identify, capture, and retain promising practices and to disregard and replace what does not work. Learning and benefiting from these experiences, the successful

workforce prototype can be scaled to a much larger environment to change business, education, and workforce practices. The objective of workforce prototyping is to initiate discussions and create new practices leading to bold, systemic changes in workforce development practices by business, education, and workforce. Prototyping is not intended for small, one-off workforce challenges, but for changes that will be embedded into systems and last over time. The workforce prototyping approach is experimental in nature and conducted at a faster pace than workforce program pilots or demonstration projects. A traditional pilot program is conducted numerous times and as the pilots end, they are evaluated using standard assessment methodologies. To be successful, workforce prototyping requires all partners to have an entrepreneurial, fast-paced, can-do attitude; encouraging creativity, quick turnaround, and real-time evaluation of effectiveness.

Human centered design is a collaborative, creative process to solve customer related problems. The creative approach starts with the customer's perspective and ends with customized solutions to meet the specific needs of the customer. As a design thinking concept, it is a practical and repeatable process to identify new solutions for customers by putting customers at the center of the design process. The human centered design approach is rooted in building empathy for the customer, generating many ideas, building prototypes, sharing ideas and thoughts with the customers, and implementing the new solutions. Five skills are used for building insights to better understand the customer: (1) observing, (2) learning from extremes, (3) interviewing, (4) immersive empathy, and (5) sharing insights.

The human centered design philosophy to problem solving requires a different mindset in order to derive at impactful solutions. Designers enter the process knowing they will learn

from failure, thinking of the design experiments as learning opportunities. Designers believe in the power of tangibility and make the idea real in order to think through the details of the entire process. Impactful solutions require ideas working in the real world and not only in theory. Designers have creative confidence and believe they have big ideas and the ability to act on those ideas. Designers can empathize and solve problems from the perspective of other people; it is having the other perspective that provides the innovative solution. Designers start the problem solving process knowing they do not have the answer; by embracing ambiguity there is permission to be highly creative. Designers are optimistic and open to possibilities. Designers know the human centered design approach is an iterative process and requires feedback loops from the customer population being served. The ongoing process of iterating, refining, and improving is a quicker way of arriving at impactful solutions.

In summary, SVWDB has set and communicated a workforce vision that is aligned with the Commonwealth's vision, creating and maintaining strategic partnerships at all levels to achieve the vision, and using data to ensure system accountability to the vision. All the while, the SVWDB remains mindful of the need to continually improve processes. In the final analysis, the SVWDB measures success by how well the needs of businesses, job seekers, and incumbent workers are met.

Public Comment Period

SVWDB followed public rules and guidelines consistent with WIOA sec. 108(d) in developing the Local Plan. Meetings were held with Chief Elected Officials, the Executive Committee, Board of Directors, and workforce system partners to collaborate on plan development and provide review and feedback.

On January 31, 2017 members of the Chief Elected Officials Consortium met to discuss Area IV's Local Plan. The Local Plan was affirmed and adopted on this date (draft meeting minutes attached). Further, each member committed to sending a link to the plan to his/her jurisdiction's governing body, chief appointed administrator, and community/economic development officers with the request for review of the plan and comment.

SVWDB's Local Plan has been noticed and made available to the public for review and comment for a period of twenty-one days from February 1 through February 21, 2017. The Local Plan draft is located on [SVWDB's website](#).

The Local Plan draft was distributed for review and comment to SVWDB stakeholders including local government, businesses, education, agency and labor representatives, news outlets and social media as follows:

- **Board of Directors** – 40 people representing geographic, industry and leadership diversity.
- **Chief Elected Officials/Alternates** - 48 people representing local government and economic development officials from the region's 16 jurisdictions.
- **Workforce Partners** – 75 people representing agency, education, industry, community partners and workforce staff including the Department for Aging and Rehabilitative Services, Department for Blind and Vision Impaired, Department of Veterans Services, Department of Social Services, Virginia Employment Commission, Lord Fairfax Community College, Blue Ridge Community College, Dabney S. Lancaster Community College, Virginia Rapid Response, Goodwill of the Valleys, K-12 Adult Education, Wilson

Workforce and Rehabilitation Center, Massanutten Technical Center, Valley Technical Center, and Church World Services Global.

- **Press Release Distribution** – 21 news outlets, 8 freelance reporters, 3 chambers of commerce, 3 economic development and planning districts, 8 tourism organizations, 9 associations, 6 local initiatives, 12 federal and state representatives, and posted online at www.valleyworkforce.com.
- **Social Media Distribution** - Posted on [Facebook](#) 2/3/17, Posted on [Twitter](#) 2/3/17, and Posted on [LinkedIn](#) 2/3/17

Public Comments Received

COMMENT 1: 2/3/17 from Spencer Suter, County Administrator, Rockbridge County, Virginia

I think there should be a little more emphasis on cooperative efforts with higher education in the goals summary near the beginning of the document. There is good discussion on this starting around page 108, but I didn't feel that the emphasis translated to the goals. One thing that I noticed was that while some of the 4 year universities were mentioned in the body of the document, it looked like only the community colleges were discussed in the goals summary.

Some great information in there. While it was tough to see BV [Buena Vista] anchoring the poverty rate and some other negative factors, it was good to see that the employment rate climb for them was near the top.

Additionally, Mr. Suter commented.

One reason that I mention the 4 year schools – I think we need to encompass all our actual/potential needs and resources. While it is true that the major employer in the region is manufacturing, there is a parallel need for advanced services support for industry. A good example is JMU. I know JMU is a great community partner and feeds a lot of employees into the region in many areas, ranging from nursing to business administration, HR, accounting, and many others. In addition I think there is opportunity to partner with all of the schools (2,4,6 year programs) for very specific jobs. We would love to have a closer business-model relationship with VMI, to potentially partner/feed/support high tech engineering, etc.

One more comment – Serving the entire region is tough to accomplish in one catch-all document. The “climate” is different across this wide region. Future looks at this could possibly benefit from a breakdown of “mini-region” needs. (i.e. Harrisonburg/Rockingham/Augusta have slightly differing overall needs than Rockbridge/Bath/Highland) (Don’t get me wrong – I think this is a fine piece of work!!)

RESPONSE: This comment was addressed in the Quality Assurance section of the local plan beginning on page 187.

COMMENT 2: 2/21/17 from Josh Umar, Youth & Business Resource Coordinator, The Highland Center, Monterey, VA (Highland County)

I am the Youth & Business Resource Coordinator for the Highland Center. Because the head of our local DSS, Sarah Rexrode, knows we do workforce development--including work with many WIOA clients and service providers like Goodwill and Valley Workforce--she passed us the draft of your Area IV plan for comment. We appreciate you putting the plan together for review, and we do have a few thoughts.

Objective 3.3

We hope that as you outline your philosophy/strategy for awarding training funds, you take into consideration that in many rural economies the biggest employers (schools, county govt, etc) are sometimes the only employers/fit available to students, and also the best hopes for a career for those who wish to stay in the area. We mention this because we have seen some resistance to place students who would otherwise be a good fit for WIOA programs at our local school, etc, for fear of the program being seen as a labor program for county entities. However, in many cases other placements are not immediately available

We will continue to cultivate relationships with private sector worksites so as to make as many options available for our/your clients as we can. However, we are not the valley proper, and do not have the manufacturing base other counties in your service area may have. We ask that you bear this in mind and that the final plan reflect the needs smaller counties in your service area

Objective 5.5

We hope that if a move to a "pay for performance" model for delivery of services is under consideration, we can be part of the conversation on what that model looks like because we are a statistical outlier with regard to our demographics (population size, age distribution, etc) this approach could--depending on how it was designed--result in a disincentive to serve us going ahead

Objective 6.4

We would like to voice our strong support for increasing "the use of technology to help with service delivery in remote areas." If instead of trips to Highland a service provider can use

direct deposit, Skype, pre-approved webinars, etc, to make it easier to serve us--and thereby make it more likely they will do so--we are all for it.

Objective 6.7

We have had some recent successes and would be happy to help provide client testimonials for your marketing efforts. We hope you will note that the Center is happy (to continue) to be a partner in all the training/education opportunities listed on page 111. Many of our youth programs are focused on this list, and are aimed at helping young people in our part of your service area develop precisely the "soft skills" mentioned elsewhere in the plan. We would also like it noted that we would be an ideal "remote or distance temporary workforce service Center" (pg. 139) should staff wish to work with us to set one up. We currently have an MOU with Goodwill Industries according to which we provide them with meeting rooms and access to office equipment, etc. We are open to revisiting that MOU and perhaps expanding it in this way.

On page 150 you list some providers of business counseling & entrepreneurial skills training in your service area. We, too, partner with SCORE and have counselors in each month. We are hoping that we, too, can be recognized as a provider in the final version of the plan. On the next page (151), you mention that WIOA staff have "partnered with other organizations to train non-WIOA staff to assist job seekers in remote areas of Area IV." We regularly do that work (job seeker assistance), and we are certainly remote!

Who should we contact about meeting formal WIOA training requirements so as to be a better partner to SVWDB and Valley Workforce? Again, perhaps this is an area under which our

MOU with Goodwill could be amended, thereby alleviating some of the burden of servicing our remote area. Let us know how best to proceed.

We hope these comments are useful to you in putting together your final plan for the area, and that our attention to the draft plan is taken as an indication of the value we place on our partnership with SVWDB and Valley Workforce. Please let us know if you have questions.

RESPONSE: This comment was addressed in the Quality Assurance section of the Local Plan beginning on page 187 where SVWDB outlines four goals to evolve into a higher performing local workforce development board and through the use of asset mapping (pages 130-131) as a way to understand and leverage existing work, programs, and resources; to reduce or eliminate duplication of efforts; to build partner and stakeholder engagement and buy-in; and to assess gaps, strengths, challenges, and opportunities that may impact workforce initiative implementation and operations within the region.

Attachments

The following documents are hyperlinked for reference.

a. [Current CEO Consortium Agreement](#)

b. Current CEO Local WDB Agreement

The Shenandoah Valley Chief Elected Officials Consortium Agreement (Attachment a.) formalizes the creation of the Shenandoah Valley Workforce Development Area, the Shenandoah Valley Chief Elected Officials Consortium, and the Shenandoah Valley Workforce Development Board. The Shenandoah Valley Chief Elected Officials Consortium Agreement specifies the process for identifying the fiscal and administrative agent and defines the roles of the Chief Elected Officials in regard to Local Board nominations and appointments and carrying out all other responsibilities assigned to the Chief Elected Officials.

The Shenandoah Valley Workforce Development Board adopted the Chief Elected Officials Agreement thereby consenting to perform duties and responsibilities in accordance with the Consortium agreement for the governance and oversight of LWDA 4 activities under the WIOA. The Chief Elected Officials Consortium Agreement combines both the Consortium and the Board agreements as outlined in VBWD Policy 200-03 page 2 and 3. SVWDB received verbal technical assistance from Richmond in 2012 that a single agreement for the Chief Elected Officials Consortium and Board requirements was acceptable as long as the agreement was developed by the Chief Elected Officials.

- c. [SVWDB Organization and Communications Chart](#)
- d. [Partner MOU Harrisonburg Center 7.13.18](#)
- e. [Eligible Training Provider Policy OP 17-01](#)
- f. [Individual Training Account Policy OP 12-07](#)
- g. [OJT Training Policy 7.13rev OP 12-09](#)
- h. [Customized Training Policy OP 12-02](#)
- i. [Priority of Services Policy OP 13-02](#)
- j. [Monitoring Policy OP 13-04](#)
- k. [EEO and Non-Discrimination Policy OP 12-04](#)
- l. [Grievance Policy OP 12-05](#)
- m. [Attachment A Statement of Compliance, Plan Signatures & Fiscal Agent Designation](#)

Supporting Documents:

[Chief Elected Officials Consortium meeting 1/31/17 minutes](#)

[SVWDB Performance Data](#)

[SVWDB SWOT Analysis November 2016](#)

[*The Changing Manufacturing Workforce in the Shenandoah Valley: 2016 Update*](#)
(Chmura Economics and Analytics)

ADDENDUM: 2 Year Local Plan Modification

Strategic Plan and Policy Emphasis (page 7)

Work is ongoing in the Shenandoah Valley Workforce Development Board region toward goals identified in the Local Workforce Development Area IV Strategic Plan: 2016-2020. The following are highlights of progress toward identified goals.

- The region has completed transition to the Virginia Career Works brand at all workforce centers and developed a new web site that mirrors the state Virginia Career Works web site. www.vcwvalley.com (New)
- Changes have occurred at workforce service locations in LWDA IV. The Virginia Career Works – Winchester Center has completed relocation to 419 Cameron Street, Winchester, VA. The Winchester Center is co-located with the Virginia Employment Commission and Adult Education and has achieved full certification. Due to fiscal challenges, the Rockbridge Workforce Center was closed and services are now provided through outreach from the Virginia Career Works – Fishersville Center. Fishersville Center staff provides outreach services to the Rockbridge area at a complementary location at Byers Technical Institute in Rockbridge County. The Luray Center’s name was changed during the Virginia Career Works rebranding to Virginia Career Works – Page Center to more fully represent the Page County service area. Workforce services are being provided in Page County through outreach from the Virginia Career Works – Harrisonburg Center.
- Co-location of workforce service agencies has been completed at the Virginia Career Works centers and the process of functionally aligning services and resources to a

human centered design is taking place. A customer centered partner MOU has been fully executed and expires June 30, 2020. However, regardless of the expiration date of the local partner MOU, the current partner agreement will be replaced with a state developed partner agreement template effective July 1, 2019. The Cost Allocation Plan (CAP) is still under negotiation. The drafted CAP was recently rendered obsolete when one of the larger partners experienced financial problems. A revised CAP is under development. Various partner meetings are convened on a regular basis. Management Team meetings are held monthly for management staff of the agencies collocated in the Center. Workforce Partner meetings are held quarterly for all local workforce partners to meet, whether collocated inside the center or not, to discuss the services they offer, make connections on how to work together, connect and follow up on referrals, and to improve networking and communication. Cross-agency frontline staff meetings are held monthly and Youth Council meetings are scheduled bi-monthly. (Goal 5, pages 9-10; Additional Strategic Elements, page 121)

- A Business Services Team has been formed in the northern and southern regions of LWDA 4. The teams meet monthly and include agency and organization partners. A sector strategies approach is used to engage employers with the Business Services Teams. Employers are invited to attend meetings to present workforce challenges and the Business Services Teams provide a collective response to employer needs. (Goal 1, page 7; Business Services, page 142)
- The Rapid Response Coordinator is no longer located in the SVWDB headquarters. The Virginia Community College System and the Virginia Employment Commission (VEC)

now share statewide oversight of Rapid Response in Virginia. Rapid Response Coordinators are now located in Virginia Career Works Centers through the VEC. The Rapid Response Coordinator continues to be a member of the Business Services Team and all partners and local coordinators work closely with the Rapid Response State Coordinator. (Goal 1, Objective 1.7, page 1; Rapid Response, page 162)

- All centers and staff are reporting state identified business engagement metrics to the VCCS quarterly. (Goal 1, Objective 1.4, page 1)
- The region continues to offer work based learning opportunities through successful models such as Registered Apprenticeship through the American Apprenticeship Initiative, on-the-job training, and incumbent worker training. SVWDB is seeking additional resources to expand work based learning opportunities. (Goal 1.6, page 7)
- The SVWDB, in partnership with the Virginia Department of Aging and Rehabilitative Services, developed and implemented a Manufacturing Career Pathways initiative. The initiative created boot camps in conjunction with a local company to introduce manufacturing technologies to students with disabilities. The objective was to create a sustainable boot camp model that could be replicated in any growth sector for students with and without disability. SVWDB is seeking additional resources to expand career pathway initiatives. (Goal 1.6, page 7)
- SVWDB is coordinating an *InDemand Jobs Campaign* in partnership with the Shenandoah Valley Partnership, a regional economic development organization, and WHSV, a local television station. The intent of the campaign is to inform parents,

students, and job seekers about in demand occupations that pay well and do not necessarily require a 4-year college degree. The first segment featured a veteran that became a mechatronics apprentice with a local company. The 26-segment television campaign will run for one year. Interviews with people working in high demand occupations can be viewed at www.whsv.com/indemand. (Objective 3.1, page 8)

- A V3 Certification Workshop was held for Valley employers in partnership with the Virginia Values Veterans Program (V3). The SVWDB has completed the requirements for V3 Certification. (Objective 4.5, page 9)
- SVWDB Board meetings include ongoing education about the workforce system through presentations by SVWDB staff and regional employers. Internal feedback is gathered from Board members through surveys to evaluate the Board's perception and interest in the meeting format and content, and to gain an understanding of Board member interest and focus regarding regional workforce topics and concerns. An annual Board Retreat was held and the board formalized an initiative to form sub-regional task forces to implement sector strategies. (Goal 6, page 10)
- Work is being conducted to identify resources for sustainable implementation of sector strategies in the region with a focus on generating a quality return on investment to Virginia and the customers we serve. (Objective 6.3, page 11)
- Work is ongoing with Chief Elected Officials to educate them about their roles and responsibilities as outlined in the Workforce Innovation and Opportunity Act. SVWDB

staff is currently working with Chief Elected Officials to update the Chief Elected Officials Consortium Agreement. (Objective 6.6, page 11)

- A Fiscal Agent Agreement between the SVWDB Chief Elected Officials, County of Page (grant recipient) and Shenandoah Valley Workforce Development Board, Inc. (fiscal agent) was developed and executed to define the scope of services and responsibilities of the parties responsible for receiving and managing WIOA funding. (New)

State of the Workforce Update: LWDB Area IV (page 13)

In support of on-going planning efforts in the Shenandoah Valley Workforce Development Area (SVWDA), this Addendum provides an update to the region's state of the workforce. Principal findings based on data available at the time of this reassessment follows:

- 1) The Shenandoah Valley local workforce development area (LWDA 4) continues to experience increased employment.
 - LWDA 4 experienced a 5.8 percent employment increase between the second quarter of 2011 and the second quarter of 2016. Employment increased 10.59 percent or 23,085 jobs between the second quarter 2016 and the third quarter 2018. (Source: JobsEQ 1. LWDA 4 Industry Snapshot, 2018Q3)
 - The largest increase in private sector employment between the second quarter of 2016 and the third quarter of 2018 occurred in Health Care and Social Assistance (up 5,185 jobs), Transportation and Warehousing (up 2,381 jobs) and Accommodation and Food Service (up 700 jobs). (Source: JobsEQ 1. LWDA 4 Industry Snapshot, 2018Q3)

2) The Shenandoah Valley LWDA 4 remains heavily dependent on Manufacturing.

- Manufacturing employment grew to 33,434 by the third quarter of 2018, an increase of 1,716 jobs and was the region's 8th highest paying employment sector. (Source: JobsEQ 1. LWDA 4 Industry Snapshot, 2018Q3)
- Subsectors within the region's manufacturing sector identified as high growth areas in terms of employment and/or wages and which are significant export industries, have the following forecasted employment growth or loss potential over the next five years: Petroleum and Coal Products Manufacturing (.05%), Nonmetallic Mineral Product Manufacturing (-0.1%), Electrical Equipment, Appliance and Component Manufacturing (0.6%), Food Manufacturing (up 0.1%) and Paper Manufacturing (-1.0%). (Source: JobsEQ 2. LWDA 4 Industry Snapshot of Manufacturing, 2018Q3)
- The majority of subsectors in the region's Transportation and Warehousing sector identified as high growth industries in terms of employment/and or wages, continue to have disproportionately large employment and establishment footprints and significant export impact. The following shows forecasted employment growth or loss potential over the next five years: Couriers and Messengers (0.7%), Pipeline Transportation (-0.4%), Support Activities for Transportation (1.0%), Transit and Ground Passenger Transportation (0.5%), and Warehousing and Storage (2.2%). (Source: JobsEQ 1. LWDA 4 Industry Snapshot, 2018Q3)

- All subsectors in LWDA 4's Health Care sector continue to qualify as high growth industries in terms of employment and/or wages. The following employment growth is forecasted over the next five years: Nursing and Residential Care Facilities (1.7%), Hospitals (0%), Ambulatory Health Care Services (2.3%). Social Assistance (2.4%) was forecast to have the highest growth rate in the Health Care Sector. (Source: JobsEQ 7. LWDA 4 Employment Growth Health Care and Social Assistance)

3) The Shenandoah Valley LWDA 4 faces potential gaps in its pipeline of trained workers:

- Occupations identified as having gaps in the pipeline of trained workers show continued annual demand for identified occupations: Nursing Assistants (355), Teacher Assistants (206), Industrial Machinery Mechanics (30), Licensed Practical and Licensed Vocational Nurses (99), Medical Assistants (98), Electricians (100), Child Care Workers (238), First-Line Supervisors of Construction Trades and Extraction (119), Dental Assistants (61), and Real Estate Sales Agents (52).
(Source: JobsEQ 3. LWDA4 Award Gaps by Occupation)
- Award Gaps in Shenandoah Valley LWDA 4 are provided in the Addendum References for all industry sectors by 2 digit SOC further identifying award gaps toward annual demand. (Source: Jobs EQ 4. LWDA 4 Award Gaps 2 digit SOC)

4) The Shenandoah Valley LWDA 4 faces demographic challenges in terms of an aging population:

- The current average annual population growth rate (based on population estimates) of LWDA 4 (.07%) remains consistent with Virginia (.09%) and the U.S. (.08%). (Source: JobsEQ 5. LWDA 4 Demographics)
- The percentage of the population age 65 and older remains higher than the state and national levels, while the percentage of the population 25 to 44 years old remains slightly below the state and national levels. (Source: JobsEQ 5. LWDA 4 Demographics)

5) In summary, the Shenandoah Valley LWDA continues to experience steady employment growth, remains heavily dependent upon its Manufacturing Sector, and has experienced significant employment and wage growth in other key areas such as Transportation and Warehousing and Health Care.

- An evaluation of Transportation and Warehousing employment shows that in the five years preceding 2018Q3, sector employment grew 2.7%. Five year projected growth in Transportation and Warehousing shows a 1.0% growth, indicating that this sector has potential to level off or decline in employment growth. (Source: JobsEQ 1. LWDA 4 Industry Snapshot)
- Preliminary data for Health Care and Social Assistance for 2018 Q2 and 2018 Q3 shows continued employment growth of 3.3% and 3.6% respectively. (Source: JobsEQ 7. LWDA 4 Employment Growth Healthcare and Social Assistance).

6) The GO Virginia Region 8 Economic Growth and Diversification Plan adds an additional resource for identifying economic opportunities, needs, and challenges. GO Virginia

Region 8 has the same geographic footprint as the Shenandoah Valley Workforce Development Board region. The GO Virginia Region 8 Economic Growth and Diversification Plan identifies five targeted industries that support the creation of higher paying jobs, new investments, and enhanced competitiveness. Those target industry sectors are: Health Care, IT/Communications, Transportation and Logistics, Finance and Business Services, and Light Manufacturing. These sectors align with the SVWDB target sectors of Manufacturing, Health Care, Transportation and Warehousing, and expands identified regional growth sectors to include IT/Communications and Finance and Business Services. (Source: [GO Virginia Region 8 Growth and Diversification Plan](#))

- 7) The Shenandoah Valley LWDA's not seasonally adjusted unemployment rate fell to 2.6% in November 2018 as compared to a 3.9% unemployment rate in November 2016. The current 2.6% unemployment rate continues the trend of a slow and steady decline in regional unemployment. (Source: VEC Local Area Employment Statistics – Not Seasonally Adjusted for November 2018)

Priority of Service (page 180)

SVWDB Policy OP-13-03, Priority of Service, was updated and approved by the Board on August 22, 2018. Updates were made to define the priority for receipt of individualized career services and training services and to include the MIT Living Wage Calculator Tool, and Economically Disadvantaged Income Guidelines.

Fiscal Agent (page 184)

A Fiscal Agent Agreement between the Shenandoah Valley Chief Elected Officials, County of Page (grant recipient), and the Shenandoah Valley Workforce Development Board (fiscal agent) was developed and executed pursuant to section 107 (d) (12) (B) (II) of the Workforce Innovation and Opportunity Act of 2014. The Consortium has designated the Shenandoah Valley Workforce Development Board, Inc. to serve as Fiscal Agent for the Shenandoah Valley Workforce Development Area. The agreement outlines the duties and responsibilities of the fiscal agent in accordance with applicable federal and state regulations.

Performance Accountability Measures PY 2016-2017 (page 117, 185)

The SVWDB uses state negotiated performance goals for all workforce programs. The following are performance outcomes for PY 2017 Q4.

LWDA 04 PY 2017 - FINAL			
Adult	Negotiated Level	Actual Performance	% of Negotiated Level
Employment 2nd Quarter after Exit	72.2	82.4	114.13%
Employment 4th Quarter after Exit	70.1	81.0	115.55%
Median Earnings 2nd Quarter after Exit	\$2,700	\$4,892	181.19%
Credential Attainment within 1 year	65.0	87.8	135.08%
Measurable Skills Gain	Baseline	43.3	
Dislocated Workers			
Employment 2nd Quarter after Exit	78.2	90.0	115.09%
Employment 4th Quarter after Exit	74.6	86.7	116.22%
Median Earnings 2nd Quarter after Exit	\$3,915	\$6,412	163.78%
Credential Attainment within 1 year	80.0	79.2	99.00%
Measurable Skills Gain	Baseline	43.8	
Youth			
Employment 2nd Quarter after Exit	63.0	78.4	124.44%
Employment 4th Quarter after Exit	70.0	79.5	113.57%

Median Earnings 2nd Quarter after Exit	Baseline	\$3,664	
Credential Attainment within 1 year	62.0	70.0	112.90%
Measurable Skills Gain	Baseline	50.0	

The following performance goals have been set for PY 2018 and PY 2019.

LWDA 04 PY 2018 - Negotiated Performance Metrics		
Adult	Virginia Negotiated Level	LWDB 4 Negotiated Level
Employment 2nd Quarter after Exit	77.0	77.0
Employment 4th Quarter after Exit	85.0	82.0
Median Earnings 2nd Quarter after Exit	\$6,000	\$6,000
Credential Attainment within Four Quarters after Exit	70.0	70.0
Dislocated Workers		
Employment 2nd Quarter after Exit	85.0	85.0
Employment 4th Quarter after Exit	90.0	86.0
Median Earnings 2nd Quarter after Exit	\$8,700	\$8,400
Credential Attainment within Four Quarters after Exit	70.0	70.0
Youth		
Employment 2nd Quarter after Exit	66.0	66.0
Employment 4th Quarter after Exit	62.8	62.8
Credential Attainment within Four Quarters after Exit	70.0	70.0

Rapid Response in Cases of Natural Disaster (New)

State policies and procedures to provide Rapid Response in cases of natural disasters include coordination with FEMA and other entities. The SVWDB coordinates with the state Regional Rapid Response Team, under the direction of the Rapid Response State Coordinator (VCCS) and Regional Rapid Response Coordinator (VEC), to provide assistance to local areas experiencing disasters.

The SVWDB has a protocol of communication and activities in place for preparation and response in case of natural disasters. The SVWDB CEO coordinates communications between the center managers, center property managers, state Rapid Response Team, and local

governments. Natural disaster preparation activities at centers includes coordination with center property managers on safeguarding property, steps to secure center equipment and files, and communications of closures. Disaster recovery processes use the same communication channels and focus on re-establishing services to assist those impacted by natural disaster.

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Empirical Analysis prepared by
Dr. Fletcher Mangum, Mangum Economics

Facilitation and 1st Draft Document prepared by
Dr. Camille Wright Miller, The Virginia Group

Final Document prepared by
Dr. Sharon Johnson, CEO
Shenandoah Valley Workforce Development Board, Inc.

Addendum – 2 Year Local Plan Modifications prepared by
Dr. Sharon Johnson, CEO, Shenandoah Valley Workforce Development Board, Inc.
In partnership with Chief Elected Officials



Shenandoah Valley Workforce Development Board, Inc.
127 W. Liberty Street, Suite 203
Harrisonburg, Virginia 22801
540-442-7134
www.vcwvalley.com

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