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Shenandoah County, Virginia

**2019 STRATEGIC ECONOMIC DEVELOPMENT
PLAN UPDATE**

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1 EXECUTIVE SUMMARY

A. INTRODUCTION

This executive summary chapter highlights the most important findings of the County's Strategic Economic Development Plan update process. The process included empirical and anecdotal analyses, community and stakeholder input, and substantial engagement intended to meet three primary objectives: [1] clearly define a unified economic development vision for Shenandoah County; [2] provide the community with the information necessary to make informed legacy decisions that will shape short-term and long-term economic development opportunities; and [3] provide a detailed strategic action plan to guide the County from vision to implementation.

It is important to note that implementing a strategic economic development plan requires substantial outreach and education. Equally important to proactively marketing the community to existing and prospective business, is the role of marketing and outreach within our own community. This includes outreach towards the public, partnering organizations, and to local decision makers. Simply put, RKG Associates and the Working Group want to make sure the County is properly engaging its economic development effort in the most effective and efficient way.

- Implementation is a process and not an event
One of the more common challenges communities have when implementing a strategic plan is to establish unrealistic expectations in terms of the timing and scale of results. **In truth, much of the initial actions will be focused on adopting and changing policies, establishing new programs and initiatives, and collecting and tabulating the data necessary to be successful.** Providing the education on how these efforts unfold is critical to being able to stay the course as many of these efforts may take time before their impact can be fully realized.
- Be creative and flexible when implementing
The strategic economic development plan is not intended to be a literal guide for the County to follow. The concepts and strategies provided by RKG Associates are best practices at achieving the vision defined by the Working Group. Given the long-term timeframe of several of these recommendations, several factors relevant to Shenandoah County may (and most likely will) change over time. Market conditions and access to resources will adjust over time, requiring the County to find an alternative approach to reach the stated vision. To this point, this document should be viewed as guidelines and not prescriptive edicts.
- Being proactive can provide greater opportunities
Some communities consider economic development implementation as a reaction to demands from the marketplace and not proactively pursuing the vision established by processes such as these. Getting ahead of the investment market provides several benefits. Most notably, engaging with business prospects or property owners before there is an established plan can lead to more creative solutions that meet the needs of both the public and private partners. This is particularly critical for Shenandoah County, as many opportunity sites are located within local municipalities, that have land use controls. **At the very least, the coordination effort will provide all partners with a greater understanding of the economic development vision and can create strategies to enact that vision prior to finalizing any investments.**



- **Coordination is critical**
Shenandoah County has limited staff and financial resources to achieve all the goals laid out in this document. However, there are several key implementation and investment partners that already focus on many of these opportunities (i.e. Shenandoah Valley Partnership, Lord Fairfax Community College...). **The County needs build the relationships with each of those partners to leverage their expertise and resources to assist the community in obtaining its goals. In other words, there is no reason for Shenandoah County to ‘reinvent the wheel.’** More long-term, the County should also consider how to better leverage a public-public (i.e. with the Towns) or public-public-private partnership (with the Towns and private entities), where these strategic partners co-invest and co-manage implementation, further leveraging county resources.

B. MAJOR FINDINGS

The impact of the recession has been more severe on Shenandoah County than the surrounding area in terms of population and household growth. Though the 2007 recession hit the broader Shenandoah Valley region, which is reflected in the declined growth rates of population and households in both Shenandoah County and the surrounding area, the County has not experienced the same recovery. This is particularly true for the central and southern parts of the County.

The net out-migration of the younger workforce combined with the high concentration of the retirees adversely impacts the economic potential for the County. The decrease of the population within the 35- to 54-year-old cohort substantially reduced the County’s experienced labor force, which would otherwise provide a solid foundation for the economy. Additionally, the County has the highest concentration of the retiree population aged 65 and older within the broader Shenandoah Valley region, most likely due to relatively affordable living costs and abundant outdoor recreational options.

The County has not been capturing its ‘fair share’ of non-residential growth. Regional development activity indicate that Shenandoah County has not captured a proportional share of growth occurring in the Shenandoah Valley. Most notably, there have been over 5.2M square feet of industrial building space delivered regionally since 2015. Shenandoah County has only captured 75,000 square feet of this development.

Shenandoah County properties need to be more competitive to attract investment. RKG Associates’ observation of current land asking prices reveal there is a disconnect between Shenandoah’s competitive position within the region and property owners’ expectations. Simply put, land assets elsewhere in the Valley are more development-ready and priced such that prospects likely will be able to get to market more quickly and see better value at those locations (particularly around Winchester and Harrisonburg. Owner engagement will be necessary for the County to increase is potential success.

Shenandoah County has seen a substantial growth in small farms and a slight increase in larger farms. Farmers under 10 acres saw a 135% increase in the past 15 years. This growth comes from a growing trend of retirees purchasing agricultural land to build estate homes and the subdivision of farms as they are passed down to children. This trend has been met with opposition from some portions of the farming community, seeking to preserve agricultural land. However, others within the farming community want to preserve this option, enjoying the higher land valuation that estate development provides when they chose to stop farming. Also, there are more farms that are 500 acres or larger in year 2017 than existed in 2002. Presumably some mid-size farmers left farming and leased or sold their land to larger farmers.

Agritourism has continued to grow as an economic engine for Shenandoah County. The Census data indicate that agritourism revenues have increased approximately 1,000% since 2002. Much of this increase results from the County’s growth in fermented and distilled beverage manufacturing.



However, other farmers are seeking ways to increase revenues through direct marketing and creating recreational experiences on their farms to take advantage of consumers being willing to travel and spend for experienced based agricultural retail offerings (i.e. pick-your-own). The County should continue to develop and assist these types of ventures.

Collaborate with the towns to set policy/regulation. Building upon the previous point, almost all these Opportunity Sites are located within town municipal boundaries. Further, any development on parcels outside the towns will require access to their water and sewer service or that of the County's sanitary districts. Coordination and collaboration with the towns on the economic development potential of the identified sites (and any other sites to be considered in the future) should be a short-term action. Simply put, the respective town leadership needs to share in the County's vision for these sites and establish the policies and regulations to enable economic development activity to occur. This process may require a public engagement effort, particularly for those Opportunity Sites that will require a rezoning.

Building and site-readiness should be a priority. The Virginia Economic Development Partnership has a site certification process called the Virginia Business Ready Sites Program (VBRSP). This program lets prospective businesses know the current development state of large economic development sites throughout the Commonwealth, scoring them from Tier 1 (marketed, but little to no due diligence has been done) to Tier 5 (all permits are in place and ready for site disturbance). Naturally, sites that achieve a higher score, in general, are going to be more desirable as the time needed to begin construction will be much less than those on the lower end of the scoring scale. Currently, the County highest rated sites are Tier 3 (three properties within the Northern Shenandoah Business Park). Further, none of the identified Opportunity Sites include any of the existing vacant industrial or commercial buildings. Based on RKG Associates' assessment, many of these buildings are non-competitive based several factors, not the least of which being location, condition, and physical dimensions. Simply put, most of County's existing vacant building stock has similar challenges as its raw land inventory... being less desirable than available supply elsewhere in the Shenandoah Valley. To these points, Shenandoah County should focus on having a stronger supply of sites and buildings to meet today's just-in-time demands of businesses seeking to expand/relocate.

C. TARGET INDUSTRIES

This analysis "casts a wide net" in determining potential target industries. Taking a more aggressive approach to identifying possible industry targets for Shenandoah County can help the County's economic development office refine its proactive marketing and recruitment outreach efforts. In this context, aggressive means that the screening process was inclusive rather than exclusive relative to potential opportunities that may appear marginal considering historical economic trends. Being inclusive at this phase ensures any potentially viable options can be tested before being eliminated.

Furthermore, the target industry lists move beyond just static targets. They identify vertical (supply-chain) and horizontal (market) relationships within the primary target markets. By using this methodology Shenandoah County can apply a comprehensive approach to building upon existing industry clusters and developing new ones. This is particularly important when targeting industries that already have a relationship with an existing regional industry and/or business.

The following section discusses the rationale used to describe how the above findings were incorporated into the industry screening process. Based on the assets and constraints summarized earlier, the Consultant initiated a review of primary and secondary source materials to identify a broad range of potential industries that appear to be either compatible with the county's location/labor assets or marginally affected by known constraints. This process has several purposes when undertaken as part of an economic development strategy including:



- Establishing a framework for matching Shenandoah County’s available “product” (land, utilities, intangibles, etc.) to potential markets;
- Identifying a receptive “audience” for a focused marketing campaign;
- Understanding the characteristics, size and long-term growth potential of compatible markets;
- Establishing priorities for the allocation of marketing resources; and
- Identifying prospect industries for further consideration.

In analyzing possible target industries beyond the area’s historical economy or previous efforts, the screening process ensured that any potentially-viable targets could be tested and analyzed before being eliminated in favor of more promising options. The analysis revealed there are five industry clusters that Shenandoah County would be competitive in pursuing an active recruitment strategy:

- Manufacturing & Production
- IT & Communications
- Hospitality & Tourism
- Agribusiness
- Healthcare

As noted throughout the SEDP document, these business sectors are by no means the only ones that can or should grow in Shenandoah County in coming years. Instead, these represent the best chances for the Tourism and Economic Development Departments and its partners to use their limited economic development resources to have the greatest positive effect upon the local economy. A more detailed description of these clusters is in Chapter 7.

D. IMPLEMENTATION

Before any community can formulate a strategic action plan, it must first agree upon its desired outcomes. As part of the SEDP process, RKG and County staff collaborated with several members of the Shenandoah County community through a Working Group to discuss and define goals for economic development within Shenandoah County. Feedback gathered at the Working Group meetings—combined with input provided by the County’s Board of Supervisors, dozens of interviews with municipal leaders, business owners, citizens, and implementation partners—helped define the vision that underpins every recommendation included in the SEDP Implementation Matrix:

A comprehensive and collaborative partnership among all public and private local, regional, and statewide economic development entities to provide current and future Shenandoah County businesses an environment to thrive and grow; and to ensure current and future County residents with the opportunity to benefit from economic growth through personal gain and enhanced quality of life.

1. Goals

The economic development goals detailed in this section reflect the input and engagement of the Working Group, County staff, the Board of Supervisors, and dozens of county residents, municipal leaders, and business owners. These goals were parsed into three categories: Process Goals, Implementation Goals, and Outcome Goals. The process goals reflect the Working Group’s desire to ensure that all specific recommendations included in this plan have been well thought, are consistent with the vision, and provide a ‘road map’ that maximize the effectiveness and efficiency of the County’s investments in economic development. The implementation goals detail the general outcomes that the Working Group believes all economic development efforts should target. The outcome goals reflect the



Working Group's desired results from the pursuit of the process and implementation goals and/or the execution of the implementation strategies. The following goals are presented in no particular order, as the Working Group did not specify any single goal was more important than the others.

Process Goals

- Provide the community with a better understanding of Economic Development processes and information so that they can make informed economic development decisions
- 'Right-size' economic development efforts based on reasonable market, financial and capacity levels
- Prioritize community investments over time to achieve objectives
- Identify specific economic development growth areas and define the type of growth envisioned

Implementation Goal

- Improve the county's competitiveness to retain and attract new business investment
- Improve the county's fiscal position through new investment
- Create the workforce that supports existing and targeted industries
- Define a balance between jobs and housing to accommodate job growth
- Preserve the quality of life for current and future residents
- Enhance collaboration with regional/statewide economic development partners

Outcome Goals

- Increased median income
- Diversify and expand tax base
- Improve business and employment opportunities

2. Implementation Matrix

Chapter 8 of this report details the implementation matrix, providing a full range of objectives and corresponding action items for the County's consideration. As noted, this matrix should serve as a reference document as the economic development staff craft their annual business plan. The time lines, estimated costing, and implementation partners for each action item identified in the matrix reflects RKG Associates professional recommendation guided by input from County staff and the Working Group. The Tourism and Economic Development Department's annual business plan should be structured to advance the vision and goals established through this effort but prioritized and scaled based on the available staffing and capital resources available at that time. The final timing, focus, and potential costs for each action item should be refined by staff and/or the responsible implementation partner when implementation occurs.

E. NEXT STEPS

The SEDP planning process has provided Shenandoah County with an aspirational, but achievable, course of action to better position the community for economic growth and vitality. Now the County leadership, staff, and implementation partners must finish what they have started. The Next steps include: [1] adopting this plan as the County economic development strategy, [2] continue the formal stakeholder and partner outreach to build a sustainable economic development council to work with County staff to define specific priorities and implement the plan, and [3] establish a 12-month business plan that synthesizes the County's priorities with available staff and resources to advance the goals and objectives identified herein. From there, Shenandoah County leadership, administration, implementation partners, and the general community need to continue to engage collaboratively and productively to achieve the defined goals and adapt specific strategies based on changing markets, community desires, and available resources.



2 INTRODUCTION

Shenandoah County is located on Interstate 81 in the Shenandoah Valley region of Virginia. The County is situated between the regional employment centers of Winchester to the north and Harrisonburg to the south. The County has long been an agricultural center for Virginia, ranked as the fifth largest agricultural producing county in the Commonwealth. Almost 40% of the County's land area is actively being farmed. Additionally, the County has been a part of the region's success in production-based businesses and logistics operations. The I-81 corridor is dotted with small and mid-sized manufacturing facilities, warehouses, and distribution centers.

Recent economic shifts created a development anomaly for the County, as the aggressive real estate rush of the late 1990s and early 2000s had Shenandoah County experience substantial residential speculation, particularly for households seeking a more pastoral lifestyle while working in the Northern Virginia marketplace. Substantial new housing projects were started, primarily in Strasburg, Woodstock, and the portions of northern Shenandoah County. The National Recession impacted Shenandoah County similarly to the rest of the country, but also brought this exurban development activity to a stop.

While the County has had an economic chapter as part of its Comprehensive Plan, it had not developed a Strategic Economic Development Plan (SEDP) until 2013. This initial SEDP laid the foundation for the economic development vision and goals for the County. In 2018, the County's Tourism and Economic Development Department sought to contract an update to this plan, addressing any changes in the marketplace and refining the goals and vision for the County's economic development efforts through a stakeholder and elected official engagement process.

This report is the culmination of the work and input provided by the County's Board of Supervisors; the County's Tourism and Economic Development Department; the County's Office of Community Development; representatives from each of the County's six Towns (Edinburg, Mount Jackson, New Market, Strasburg, Toms Brook, and Woodstock), Fort Valley, and Basye; dozens of community stakeholders that were engaged through direct interviews and focus groups; and the SEDP Working Group assembled by the County to represent the various economic development interests in Shenandoah County. The affiliations of the individual members of the Working Group are listed to show the diversity of input that helped create the plan. This should not, however, be interpreted as an endorsement by the affiliate group's full constituents. The table on the following page show the members of the SEDP Working Group.

Data used to complete this analysis was the most current available at the time of the analysis. As new data becomes available, the Tourism and Economic Development Department should use this information to update the strategies and approaches as necessary.

The intent of this updated Strategic Economic Development Plan is to provide the County, its municipalities, and current and prospective business residents with a detailed, action-oriented implementation plan that codifies the County's economic development vision and goals through achievable policy and investment recommendations. Ultimately, this SEDP document should provide guidance to the County Board of Supervisors and its Tourism and Economic Development Department to make informed, sound decisions on how to advance the County's economic and fiscal health over the next five to ten years.



STRATEGIC ECONOMIC DEVELOPMENT PLAN WORKING GROUP MEMBERS

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Jay Langston	Shenandoah Valley Partnership
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Kim Woodwell	Local Resident, Alliance for the Shenandoah Valley
Kip Brannon	Industry Leader; Shenandoah Valley Workforce Development Board
Mandy Belyea	Town of Woodstock
Michelle Bixler	Town of Strasburg
Peggy Boston	Citizen's Advisory Group
Seth Coffman	Citizen's Advisory Group; Trout Unlimited
Todd Lynn	Shenandoah County Public Schools; Triplett Tech

The Strategic Economic Development Plan includes the following chapters:

- Chapter 1: Executive Summary
- Chapter 2: Introduction
- Chapter 3: Socioeconomic Analysis
- Chapter 4: Real Estate Market Analysis
- Chapter 5: Agriculture Analysis
- Chapter 6: Site Analysis
- Chapter 7: Target Industry Analysis
- Chapter 8: Implementation Strategy



3 SOCIOECONOMIC ANALYSIS

A. INTRODUCTION

In this chapter, RKG analyzed the demographic characteristics and economic base of Shenandoah County, including the population growth trends, age distribution, racial composition, household formation and sizes, household incomes, labor force characteristics, unemployment, education attainment levels of residents, workforce occupational skill levels, the employment base and its shift by industry, and labor force dynamics. The socioeconomic analysis is crucial for the County to understand its existing labor force and employment assets, as well as its comparative economic competitiveness and opportunities within the regional economy. This chapter also lays a foundation for RKG's economic development strategies which acknowledge and incorporate the findings from the socioeconomic discussion.

B. MAJOR FINDINGS

The impact of the recession has been more severe on Shenandoah County than the surrounding area in terms of population and household growth. Though the 2007 recession hit the broader Shenandoah Valley region, which is reflected in the declined growth rates of population and households in both Shenandoah County and the surrounding area, the County has not experienced the same recovery. This is particularly true for the central and southern parts of the County.

The net out-migration of the younger workforce combined with the high concentration of the retirees adversely impacts the economic potential for the County. The decrease of the population within the 35- to 54-year-old cohort substantially reduced the County's experienced labor force, which would otherwise provide a solid foundation for the economy. Additionally, the County has the highest concentration of the retiree population aged 65 and older within the broader Shenandoah Valley region, most likely due to relatively affordable living costs and abundant outdoor recreational options.

The median household income of the County is lower than the surrounding region, and it is projected to remain so. The median household income of the County in 2018 is lower than the surrounding areas including the Central Shenandoah Planning District, and the Northern Shenandoah Valley Regional Commission. Lower earnings can be attractive to new businesses seeking to reduce their labor costs. At the same time, the County is surrounded by other lower earning areas which can cause competition for resources and businesses.

The County's labor force is proportionally less educated with lower occupational skills, primarily employed in semi-skilled white-collar and low-skilled blue-collar jobs. Compared to the surrounding region and to the U.S., the County has a smaller share of its total population that have higher degrees and proportionally more residents employed in low-skilled blue-collar jobs. This finding corresponds with the County's low median household income within the region. From an economic development perspective, strong workforce development programs would bolster the County's recruitment effort by providing the infrastructure for residents to build skills.

Food Services, Food Manufacturing, and Specialty Trade Contractors are the County's major employment sectors. In 2018, the Food Services, Food Manufacturing, and Specialty Trade Contractors provided the highest numbers of jobs in the County. This reveals that the County's current employment

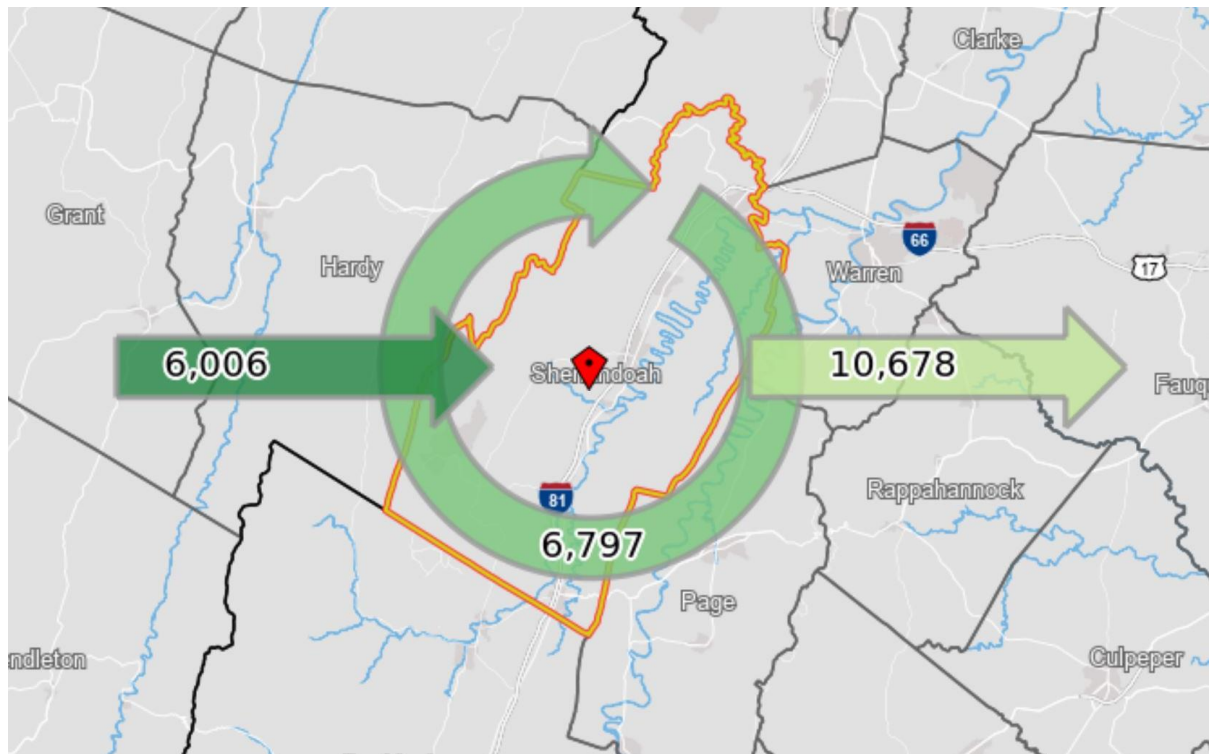


base largely consists of semi-to-low-skilled jobs. In particular, the food manufacturing industry experienced significant growth within the County over recent years. With the high propensity of semi-to-low skilled workers in the County, this finding further points to the need for a strong, comprehensive workforce development effort to attract higher skilled jobs to the County.

Opportunities exist in semi- to high-skilled white-collar sectors as the County has not been fully capturing the regional growth of employment opportunities in these industries. As of 2018, high-skilled white-collar sectors such as Educational Services, Credit Intermediation and Related Activities, and Management of Companies and Enterprises are among the major employment industries in the Shenandoah Valley region. In addition, Other Information Services is one of the fastest-growing sectors in the region between 2010 and 2018. However, this is not the case for Shenandoah County. Therefore, opportunities exist for the County to promote its economic development if it chooses to tap in these regional growth sectors using strategies such as marketing and improving its labor force, in addition to supporting company recruitment and training. Though it should be noted that sectors like Educational Services, are heavily dependent on population trends and the growth of nearby universities located in surrounding cities.

The County is a net exporter of workers to surrounding employment centers, especially along I-81. Proportionally there are more people who live in Shenandoah County and commute to jobs elsewhere especially along I-81 than people who live, work and spend their wages locally within the County (Map 3-1), most likely indicating that there are not as many diverse job opportunities in the County. The County does attract a small percentage of its works from West Virginia. In addition, the jobs within the County are largely filled by local citizens other than outside residents, suggesting that these jobs are most likely low-skilled based with modest wages not attractive enough to draw additional workers commuting from elsewhere. In other words, Shenandoah County is not a major employment center that can attract people to work and contribute to the local economy by consuming goods and services within the County.

Map 3-1 – Shenandoah County Employment Migration



Source: OnTheMap, U.S.Census Bureau, Center for Economic Studies and RKG Associates, Inc., 2019



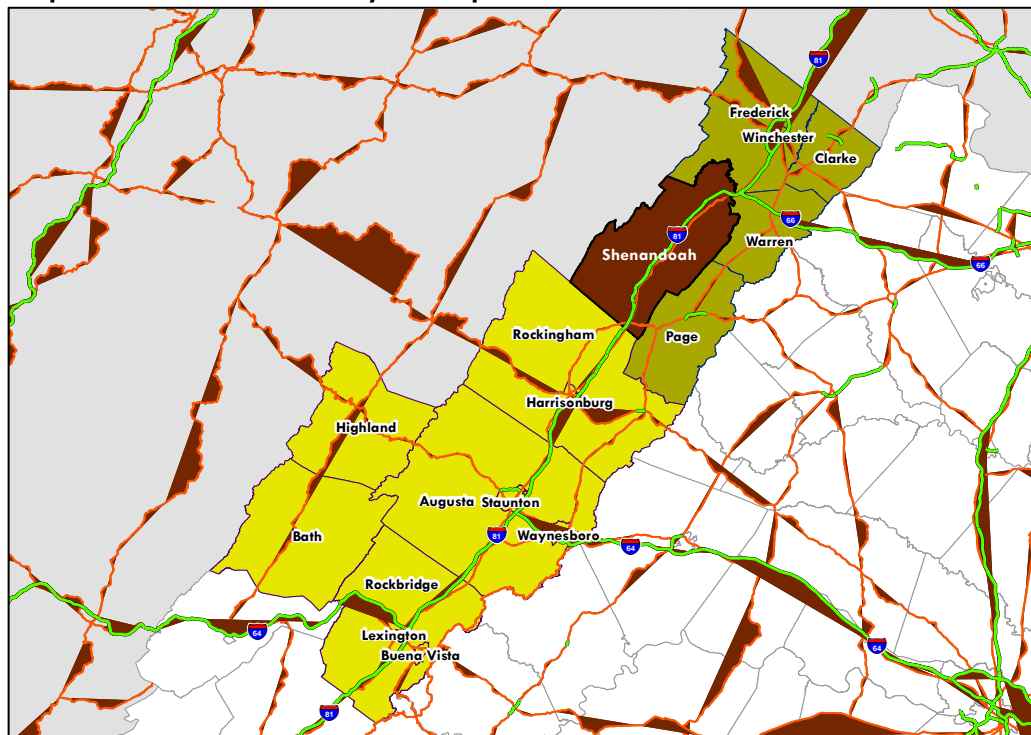
C. METHODOLOGY

1. Geographic Focus of Analysis

Shenandoah County is part of the Northern Shenandoah Valley Regional Commission, which is one of the 23 designated Virginia Planning District Commissions. However, the County has associated itself more with the Central Shenandoah Planning District Commission (CSPSC) in terms of economic development, which is located to the south. Also, Shenandoah County is part of the Shenandoah Valley Partnership which is made up of localities within the CSPSC. In addition, the Central Shenandoah Planning District Commission and Northern Shenandoah Valley Regional Commission are both located within Region 8, which is designated by the Virginia Growth and Opportunity Board in 2016 as part of a regional economic development effort. Therefore, in order to paint a clearer picture of the demographic characteristics and economic base of the County in the context of the Shenandoah Valley region, the analysts examined Shenandoah County, Central Shenandoah Planning District, and the rest of the Northern Shenandoah Valley Regional Commission excluding Shenandoah County (referred in this study as “Northern Shenandoah Valley Regional Commission”). As seen on Map 3-2, the Central Shenandoah Planning District consists of Augusta County, Rockingham County, Harrisonburg City, Staunton City, Rockbridge County, Waynesboro City, Lexington City, Buena Vista City, Bath County, and Highland County. The Northern Shenandoah Valley Regional Commission is comprised of Frederick County, Warren County, Page County, City of Winchester, and Clarke County.

RKG also looked at the five Study Areas (SA) within the County to add more details to the analysis, including SA1-Strasburg/Northern Area, SA2-Woodstock-Edinburg-Central Area, SA3-Fort Valley-Eastern Area, SA4-Basye-Orkney Springs Area, and SA5-Mount Jackson-New Market-Southern Area (Map 3-3).

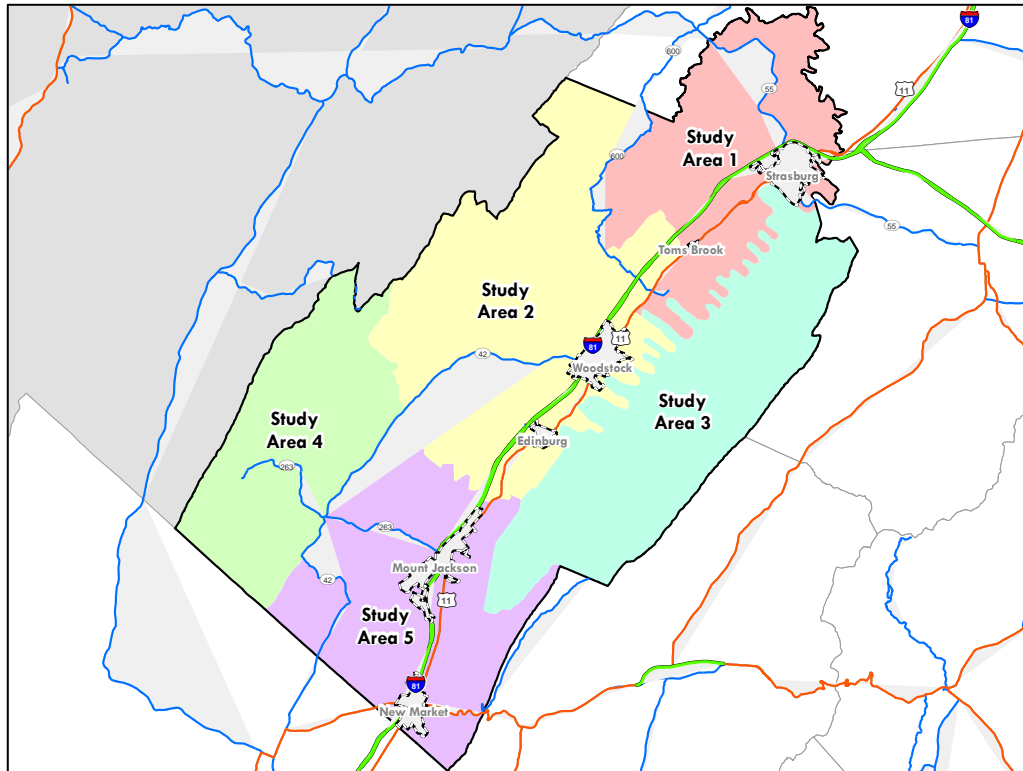
Map 3-2 – Shenandoah Valley Municipalities



Source: RKG Associates, Inc., 2019



Map 3-3 – Shenandoah County Study Areas



Source: RKG Associates, Inc., 2019

2. Data Sources

The socioeconomic study for the Strategic Economic Development Plan Update includes an analysis of the demographics, workforce and economic metrics. The demographic data came from a third-party data provider ESRI, which projected the 2018 and 2023 data based on the American Community Survey (ACS) 2017 Estimates as well as 2000 U.S. Census records on a variety of population and household topics. The workforce characteristics data came from the U.S. Bureau of Labor Statistics and its Standard Occupation Classifications (SOC) system. Data related to employment industries and workforce dynamics came from the third-party data provider EMSI, Labor Market Analytics, The Quarterly Workforce Indicators (QWI) obtained from the U.S. Census Bureau, as well as *OnTheMap*, an analysis tool provided by the U.S. Census Bureau and the U.S. Department of Commerce with data collected for the Longitudinal Employer-Household Dynamics Program (LEHD).



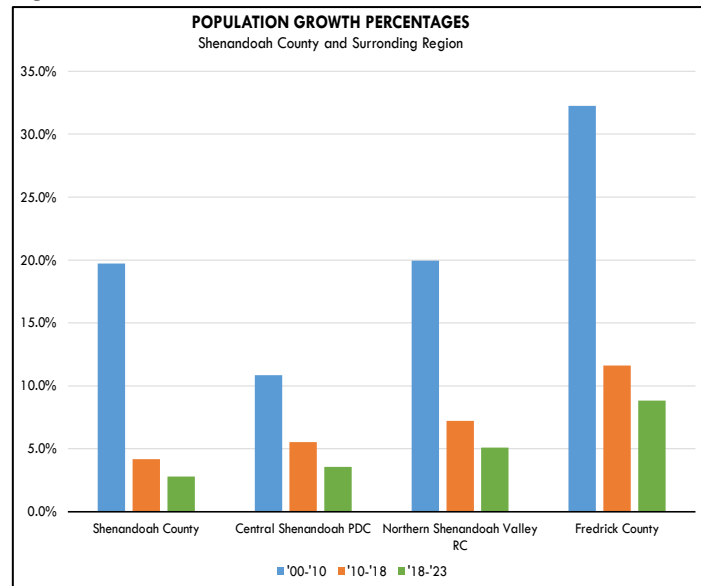
D. DEMOGRAPHIC ANALYSIS

1. Population

- Since 2000, similar to the surrounding region, Shenandoah County has experienced slowing population growth, falling behind the surrounding region after 2010. Shenandoah County gained 6,918 persons between 2000 and 2010 at a rate of 19.7%, faster than the Central Shenandoah Planning District and almost the same pace as the North Shenandoah Regional Commission. However, the County's population growth speed has fallen behind the surrounding areas since 2010 (Figure 3-1) even though the entire region has been experiencing slowing population gains.

The strong population growth pre-Recession in the region largely was driven by investors from the Washington DC and Baltimore markets, particularly near-retirees and retirees. Local real estate professionals reported that The Shenandoah Valley region has been attracting these urban households seeking to find a more pastoral lifestyle while remaining close to the cities. The local commuting pattern data corroborate this, as a large proportion of the County's and the Valley's labor force commute east on I-66 to Loudoun and Fairfax counties.

Figure 3-1



Source: ESRI and RKG Associates, Inc., 2019

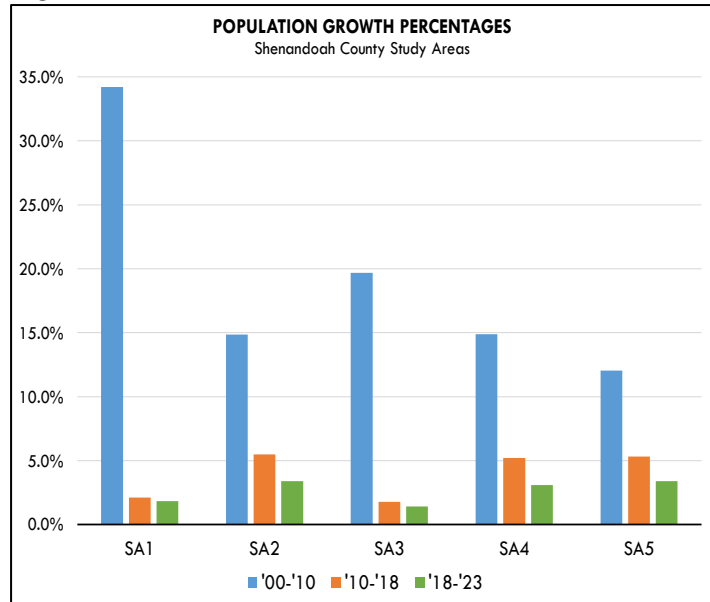
That said, Shenandoah County did not experience the same population growth as the rest of the region post-Recession. The overall decline in population growth rate regionally indicates the impact of the exurban migration from the larger markets. However, Shenandoah County also has not experienced the local employment growth as many of its neighbors (especially Harrisonburg/Rockingham and Winchester/Frederick). Simply put, these other areas offer closer proximity to the region's job centers and offer more conveniences and amenities than Shenandoah County.

- Within the County, population growth concentrated in SA1, but it is shifting to SA2, SA4, and SA5 since 2010. Between 2000 and 2018, SA1 has seen the most rapid growth of population, with a speed higher than the County average, especially before 2010. This is most likely because SA1 is in closer proximity to the Washington D.C. metro area and its employment opportunities, and thus is more ideal for out-commuters to live there. However, SA2, SA4, and SA5 have experienced accelerated population growth rates, exceeding the County average during the same period (Figure 3-2).



The shift in growth concentration further reflects the impacts of the out-migration from Washington D.C. and other large metro areas, and how that slow-down impacted the County. That said, the relatively stronger growth rates for the central and southern part of the County since the Recession reveals that there remains a contingent of households that are either working locally or at retirement age that prefer the more rural feel of central and southern Shenandoah County while remaining well connected to local and regional conveniences.

Figure 3-2



Source: ESRI and RKG Associates, Inc., 2019

2. Age

- Similar to the surrounding region, Shenandoah County is getting older, with the highest share of the 65+ population compared to the surrounding areas

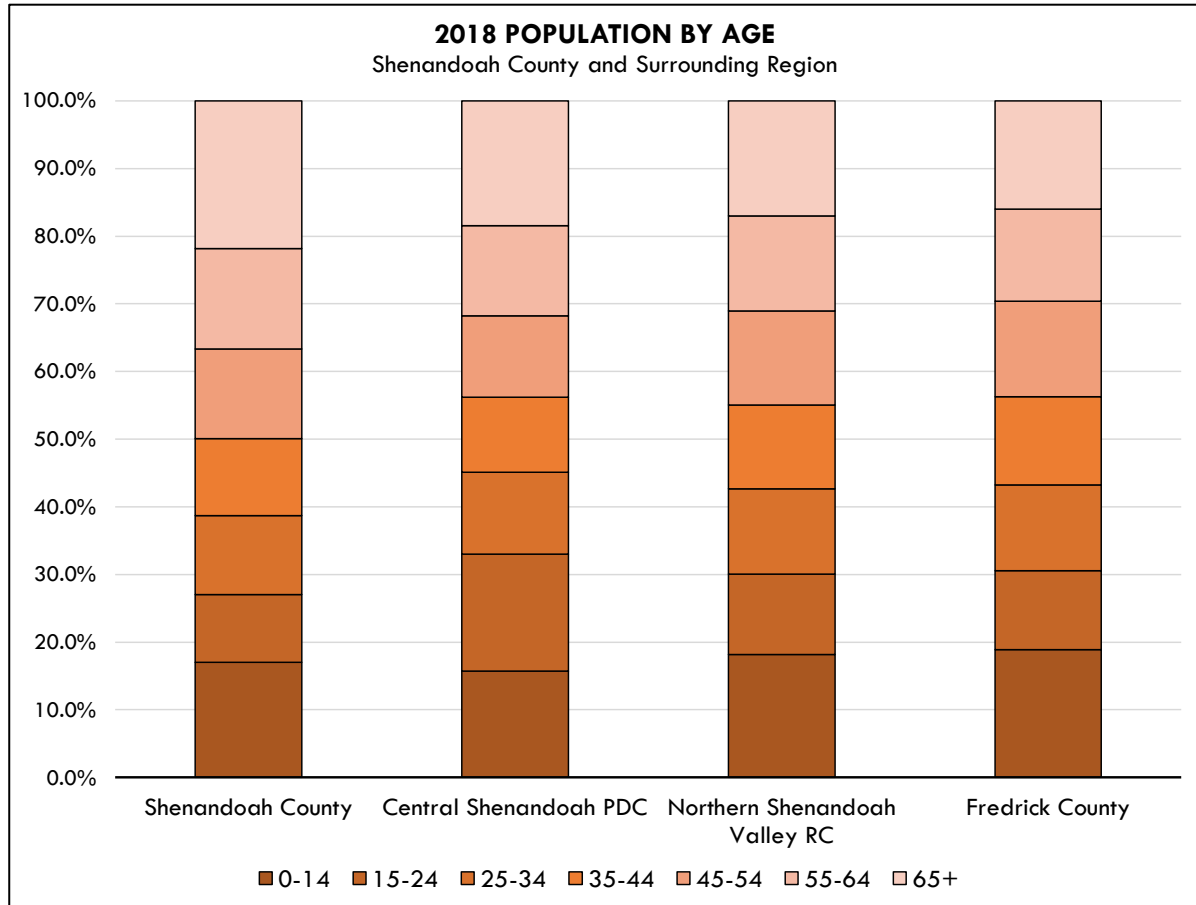
Like surrounding region, Shenandoah County has experienced the largest gain of its population who are 65 years old and above. The 21.8% of County residents that are over 65 years old constitute a larger proportion of the County's residents than both the Central Shenandoah Planning District and Northern Shenandoah Valley Regional Commission (Figure 3-3 and Figure 3-4). The data indicate that the region is aging, and this is even more representative in Shenandoah County. The high concentration of the County's retiree population is likely due to the relatively affordable costs of living (compared to the surrounding communities), abundant and high-quality natural scenery and outdoor recreational resources (for example, national forests and parks, including the Shenandoah National Park) and the suburban/rural lifestyle in the County that many retirees prefer.
- Since 2010, Shenandoah County has been losing its younger workforce and young families, counter to the surrounding cities

Contrary to the gain of the population aged 65 and above between 2010 and 2018, the County has lost its population aged 24 years old and below as well as its Generation X population aged between 35 and 54. The loss of persons 35-54 is impactful from an economic development perspective, as this age cohort comprises a substantial portion of the U.S. workforce. Combining the loss of this mid-career population with a growing retiree base could adversely impact the County's potential to attract labor-intensive industries.

In contrast, the surrounding cities including Harrisonburg City, Staunton City, Waynesboro City, Lexington City, Buena Vista City, and Winchester City have experienced a sizable increase of the population aged between 25 and 44, in addition to the population of young children under 15 years old. When this trend is considered with regional job growth (detailed in the Target Industry Cluster chapter), the data indicate workers within the Shenandoah Valley region prefer communities with greater concentrations of services and amenities.



Figure 3-3



Source: ESRI and RKG Associates, Inc., 2019

3. Racial Composition

- Most Shenandoah County's residents are White, while the Hispanic population has been increasing rapidly

Though the majority (over 90%) of the population in Shenandoah County is White and the Hispanic population only accounts for a small proportion (less than 10%) in 2018, the population of Hispanic Origin has been increasing rapidly. In fact, the Hispanic population accounts for almost half of the new population growth between 2010 and 2018 in the County. The surrounding areas especially the adjacent cities have seen a similar trend. (Figure 3-5 and Table 3-1).

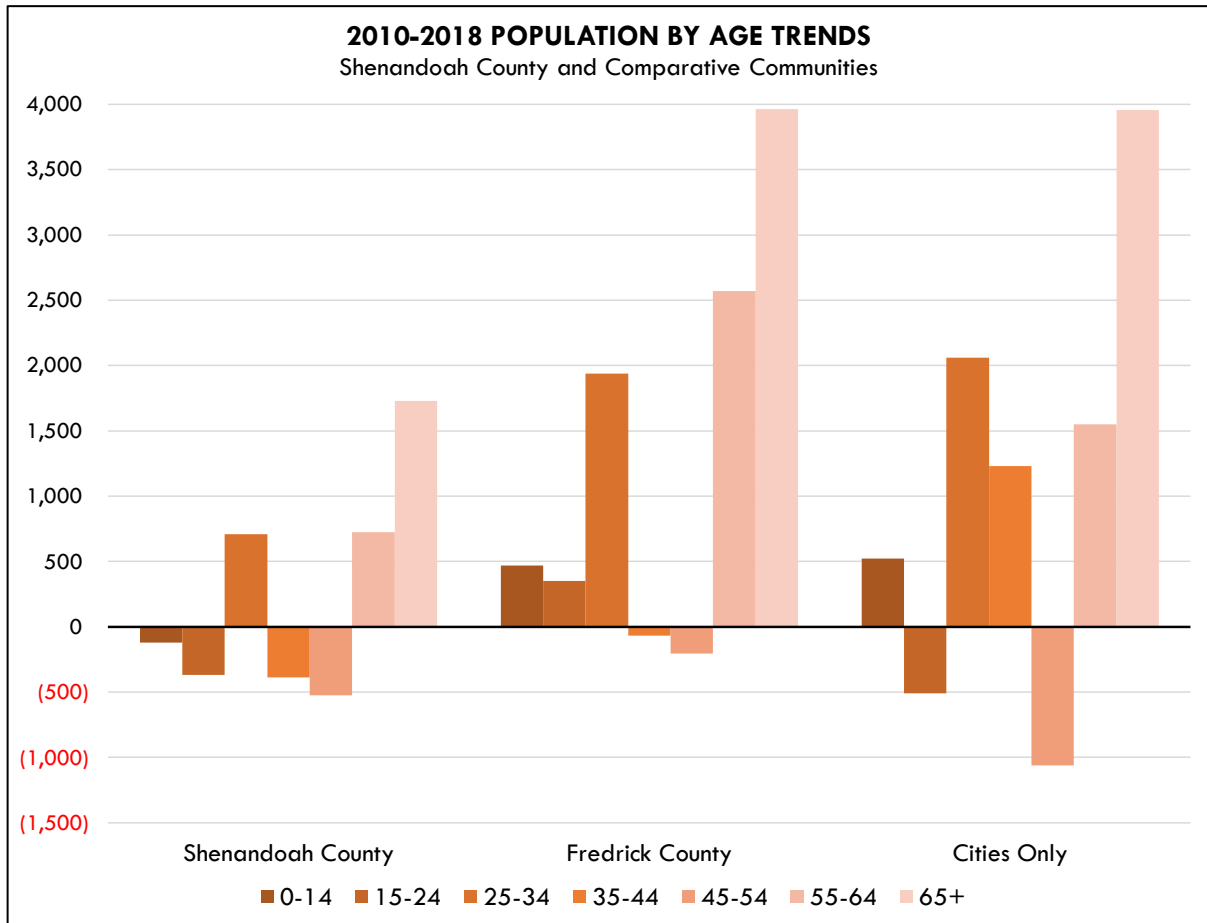
Table 3-1
Distribution by Racial/Ethnic Group (2010 - 2023)
Shenandoah County, Virginia

	Shenandoah County		
	2010	2018	2023
White	93.0%	90.5%	88.5%
Black	1.7%	2.5%	3.2%
American Indian	0.2%	0.3%	0.4%
Asian	0.5%	1.0%	1.2%
Pacific Islander	0.0%	0.0%	0.0%
Some Other Race	2.8%	3.5%	4.1%
Two or More Races	1.6%	2.2%	2.7%
Hispanic Origin	6.1%	7.5%	8.7%

Source: ESRI and RKG Associates, Inc., 2019



Figure 3-4

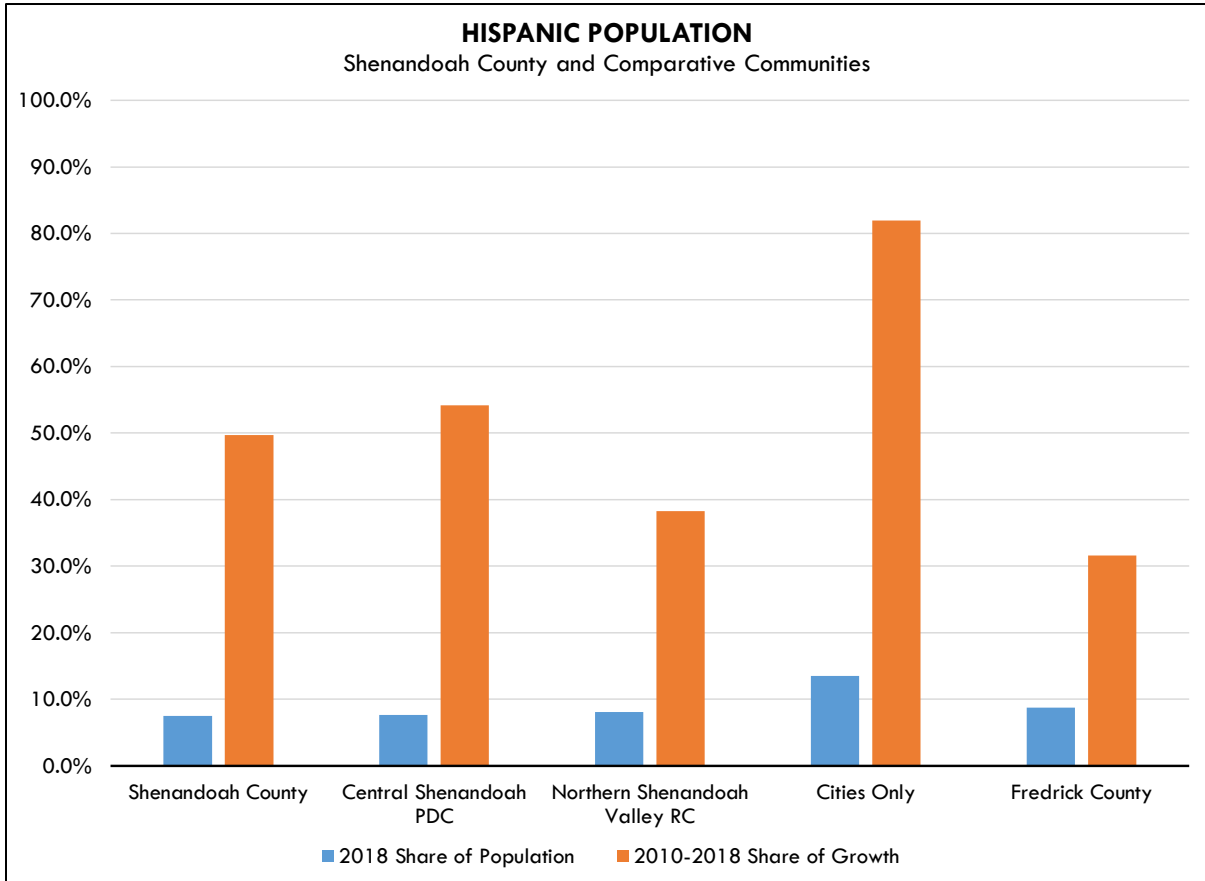


Source: ESRI and RKG Associates, Inc., 2019

At a base level, the data indicate that Hispanic workers are moving into the Shenandoah Valley—and Shenandoah County—to take advantage of the types of jobs being created locally (predominantly production-based jobs). Given the substantial increase in Hispanic population and workers, there also most likely are new business opportunities in the County to respond to this new population trend. Opportunities exist to develop new entrepreneurs within the County as well as develop businesses that cater to Hispanic consumers. Finally, the data support anecdotal information from local employers, that there is a growing need for English literacy training in Shenandoah County. Local employers reported that Hispanic workers are comprising larger portions of their employment base. However, they have had challenges promoting some of their Hispanic workers due to language and literacy barriers. A stronger workforce development program around language learning could help strengthen the Shenandoah County workforce.



Figure 3-5



Source: ESRI and RKG Associates, Inc., 2019

4. Households and Household Size

4.1 Households

- Like the population trend, households in Shenandoah County have been expanding slower than the surrounding region. Shenandoah County has also seen slower household formations than the surrounding region after 2010 compared to the previous decade (Table 3-2). This corroborates the findings from the population analysis, as households are seeking to locate in more amenity-rich communities within the Shenandoah Valley.



- Within Shenandoah County, the Central (SA2) and Southern (SA5) portions of the County have experienced the fastest household formations since 2010

Household formation data within the County follows population growth data (Table 3-3). The areas of Woodstock, Mount Jackson, and Basye have experienced the highest percentage increases in Shenandoah County within the last decade. Strasburg has experienced the largest absolute increase of any study area during the study period. This resonates with the previous finding that SA2, SA4, and SA5 are becoming the new growth destinations especially after 2010, though historically the economic and population growths in the County concentrated in SA1 due to its proximity to the Washington D.C. metro area. A possible factor that contributed to this new shift is the relative housing affordability in SA2, SA4, and SA5, as SA1 is a comparatively well-established residential community and has comparably higher housing values due to its regional location advantages.

Table 3-3
Demographic Characteristics - Household Formation Trends
Shenandoah County Submarket Areas (2000 - 2023)

					Change '00 - '23			Change '00 - '10		Change '10 - '18		Change '18 - '23	
	2000	2010	2018	2023	Count	% of Tot. Chge	Ann % Chge	Count	Percent	Count	Percent	Count	Percent
Shenandoah County	14,296	17,076	17,539	17,950	3,654	25.6%	1.1%	2,780	19.4%	463	2.7%	411	2.3%
SA1 Strasburg/Northern Area	3,922	5,161	5,195	5,266	1,344	34.3%	1.5%	1,239	31.6%	34	0.7%	71	1.4%
SA2 Woodstock-Edinburg-Central Area	5,319	6,149	6,398	6,585	1,266	23.8%	1.0%	830	15.6%	249	4.0%	187	2.9%
SA3 Fort Valley-Eastern Area	843	998	1,001	1,011	168	19.9%	0.9%	155	18.4%	3	0.3%	10	1.0%
SA4 Basye-Orkney Springs Area	969	1,141	1,181	1,213	244	25.2%	1.1%	172	17.8%	40	3.5%	32	2.7%
SA5 Mt. Jackson-New Market-Southern Area	3,243	3,627	3,764	3,875	632	19.5%	0.8%	384	11.8%	137	3.8%	111	2.9%

Source: ESRI and RKG Associates, Inc., 2019

4.2 Household Size

- Shenandoah County household size has been growing, but at a slower pace than the surrounding cities

Between 2000 and 2023, the average household size in Shenandoah County has been steadily rising from 2.42 in 2000 to a projected 2.48 in 2023. Compared to the surrounding areas, the average household size of the County has remained in the middle throughout the two decades. In comparison, the surrounding cities such as Harrisonburg City and the City of Winchester have experienced a rapid increase in the average household size during the same period of time (Table 3-4 and Table 3-5).

The data echo the previous discussion that the surrounding cities have been attracting more family households than Shenandoah County, most likely due to housing affordability, access to services and amenities, and the more urban lifestyles.
- SA4 average household size has reversed course and surpassed the remaining study areas after 2010, indicating the growth of new family households

Within Shenandoah County, the average household size in SA4 shrank between 2000 and 2010, possibly indicating a loss of family households. In comparison, the average household size in SA1 increased the most (1.7%), exceeding the County average growth rate (0.4%) during the same period of time. However, since 2010, the average household size in SA4 has grown by 1.8%, surpassing the remaining study areas and the County average (1.6%) (Table 3-6).

This suggests that the majority of the new family households in the County concentrated in SA1 during the last decade due to its proximity to employment centers. However, since 2010, SA4 has instead been attracting larger households within the County. This finding resonates with the previous discussion that SA4, along with SA2 and SA5 has been emerging as the new growth



destination for living, most likely due to its relative housing affordability, particularly for residents that are working in Harrisonburg/Rockingham County.

Table 3-4
Demographic Characteristics - Average Household Size
Shenandoah County vs Central Shenandoah Planning District (2000 - 2023)

	2000	2010	2018	2023	Change '00 - '23	
					Actual Chge.	% of Tot. Change
Shenandoah County	2.42	2.43	2.47	2.48	0.06	2.5%
Augusta County	2.56	2.49	2.49	2.50	(0.06)	-2.3%
Rockingham County	2.61	2.57	2.57	2.57	(0.04)	-1.5%
Harrisonburg City	2.53	2.59	2.60	2.61	0.08	3.2%
Staunton City	2.19	2.15	2.15	2.15	(0.04)	-1.8%
Rockbridge County	2.43	2.32	2.32	2.32	(0.11)	-4.5%
Waynesboro City	2.31	2.34	2.35	2.35	0.04	1.7%
Lexington City	2.06	2.00	2.00	1.99	(0.07)	-3.4%
Buena Vista City	2.38	2.40	2.41	2.42	0.04	1.7%
Bath County	2.34	2.16	2.14	2.12	(0.22)	-9.4%
Highland County	2.24	2.15	2.16	2.16	(0.08)	-3.6%

Source: ESRI and RKG Associates, Inc., 2019

Table 3-5
Demographic Characteristics - Average Household Size
Shenandoah County vs Northern Shenandoah Valley Regional Commission (2000 - 2023)

	2000	2010	2018	2023	Change '00 - '23	
					Actual Chge.	% of Tot. Change
Shenandoah County	2.42	2.43	2.47	2.48	0.06	2.5%
Frederick County	2.64	2.68	2.69	2.70	0.06	2.3%
Warren County	2.57	2.62	2.64	2.65	0.08	3.1%
Page County	2.46	2.45	2.46	2.47	0.01	0.4%
City of Winchester	2.28	2.38	2.41	2.42	0.14	6.1%
Clarke County	2.50	2.50	2.52	2.53	0.03	1.2%

Source: ESRI and RKG Associates, Inc., 2019

Table 3-6
Demographic Characteristics - Average Household Size
Shenandoah County Submarket Areas (2000 - 2023)

	2000	2010	2018	2023	Change '00 - '23		Change '00 - '10		Change '10 - '18		Change '18 - '23	
					Actual Chge.	% Chge.	Count	Percent	Count	Percent	Count	Percent
Shenandoah County	2.42	2.43	2.47	2.48	0.06	2.5%	0.01	0.4%	0.04	1.6%	0.01	0.4%
SA1 Strasburg/Northern Area	2.42	2.46	2.50	2.51	0.09	3.7%	0.04	1.7%	0.04	1.6%	0.01	0.4%
SA2 Woodstock-Edinburg-Central Area	2.44	2.44	2.48	2.49	0.05	2.0%	0.00	0.0%	0.04	1.6%	0.01	0.4%
SA3 Fort Valley-Eastern Area	2.41	2.43	2.47	2.48	0.07	2.9%	0.02	0.8%	0.04	1.6%	0.01	0.4%
SA4 Basye-Orkney Springs Area	2.32	2.26	2.30	2.31	(0.01)	-0.4%	(0.06)	-2.6%	0.04	1.8%	0.01	0.4%
SA5 Mt. Jackson-New Market-Southern Area	2.42	2.43	2.47	2.48	0.06	2.5%	0.01	0.4%	0.04	1.6%	0.01	0.4%

Source: ESRI and RKG Associates, Inc., 2019



5. Household Income

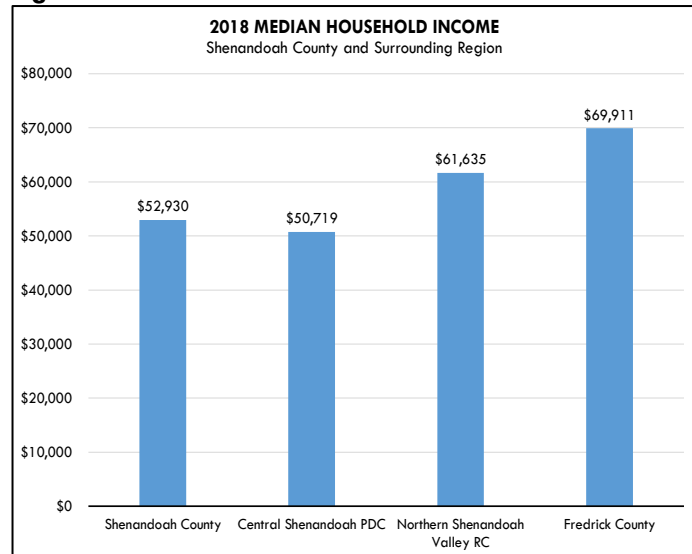
- Household incomes are relatively lower in Shenandoah County compared to the surrounding region and are projected to remain so

The median household income of the County in 2018 is \$52,930, slightly higher than the Central Shenandoah Planning District, but much lower than the Northern Shenandoah Valley Regional Commission (\$61,635) and Fredrick County (\$69,911). In addition, the median household income in 2023 in the County is projected to remain almost the same as 2018, while the surrounding region is poised to see noticeable median household income gains, especially in the Northern Shenandoah Valley Regional Commission (Figure 3-6 and Figure 3-7).

The data suggest that households in Shenandoah County are earning less compared to the surrounding region, and this situation is projected to continue through 2023. Given the correlation between education attainment (discussed in the next section of this chapter) and income, is it consistent to see lower wage rates as well.

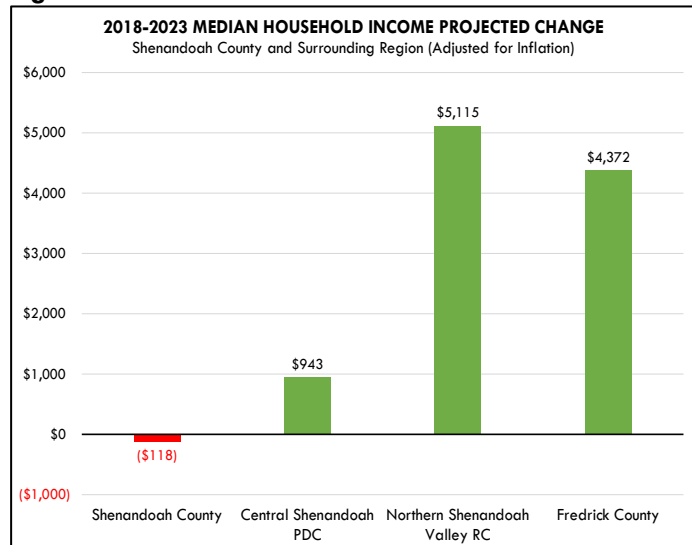
The Northern Shenandoah Valley Regional Commission and Fredrick County have higher median household incomes most likely because they are closer to the Washington D.C. metro area and have been attracting long-distance commuters to the Northern Virginia area for years. However, this regional advantage has not been captured by Shenandoah County fully as it is located further away from the major employment base. The disparity in income levels also reflects the likely employment growth for the region. Other parts of Shenandoah Valley have had greater success attracting mid-level and higher-paying jobs (both production and service-based) since 2010.

Figure 3-6



Source: ESRI and RKG Associates, Inc., 2019

Figure 3-7

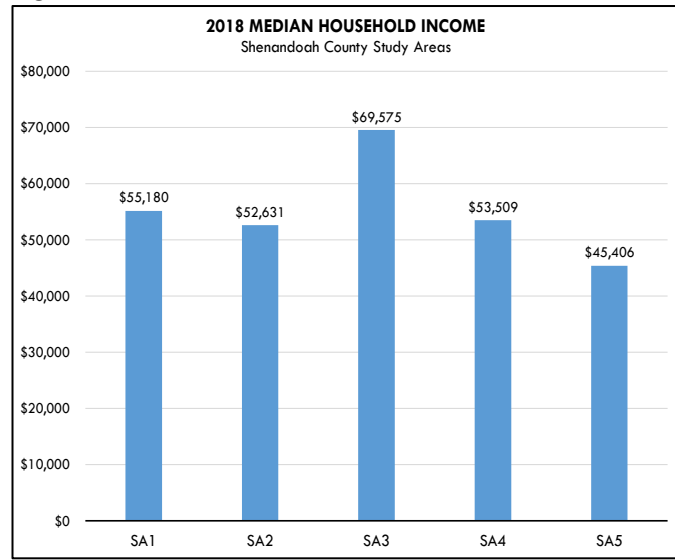


Source: ESRI and RKG Associates, Inc., 2019



- Within the County, SA3 has the highest median household income SA3, which comprises the Fort Valley Area, historically has been a high-income area. The area offers a unique lifestyle and has attracted more affluent residents seeking that lifestyle. Development in this part of Shenandoah County also is more challenging due to zoning regulations and community preference, keeping the amount of development below other areas of Shenandoah County. Thus, SA3 has the highest median household income of \$69,575 within the County in 2018, which is higher than the County average and almost the same as the Fredrick County level (Figure 3-8).

Figure 3-8



Source: ESRI and RKG Associates, Inc., 2019

In comparison, SA5 has the lowest median household income of \$45,406 in 2018, which is lower than the Central Shenandoah Planning District figure. This suggests that even though SA5 is among the several study areas that have been attracting new growth in recent years, currently it is still behind the rest of the County in terms of household wealth. As mentioned, this area has become attractive as a less expensive alternative to living in Harrisonburg/Rockingham County while maintaining a more rural lifestyle.

E. ECONOMIC BASE ANALYSIS

Demographic characteristics such as age cohort distribution and household incomes can have a substantial impact on a local economy, particularly as they relate to spending patterns and available labor force – both are major economic drivers. However, further analysis of the economic base of Shenandoah County, including characteristics of its labor force and the existing industries can provide a greater understanding of the County’s economy. The analysis that follows sets the foundation for the target industry analysis chapter in this report.

1. Labor Force Participation

- The Shenandoah County labor force has grown, but at a slower rate than the surrounding region The County’s labor force increased between 2007 and 2017 like the rest of Shenandoah Valley, but at a slower pace. The County gained 825 people in its labor force between 2007 and 2012, increasing by 4.1%, and added another 193 between 2012 and 2017. In comparison, Frederick County and the Northern Shenandoah Valley Regional Commission have experienced escalating growth rates of their labor force, and the growth rates are higher than the Shenandoah County average especially after 2012 (Table 3-7). This finding corroborates the previous demographic analysis.



Table 3-7
Labor Force Analysis
Shenandoah County vs Surrounding Region (2007 - 2017)

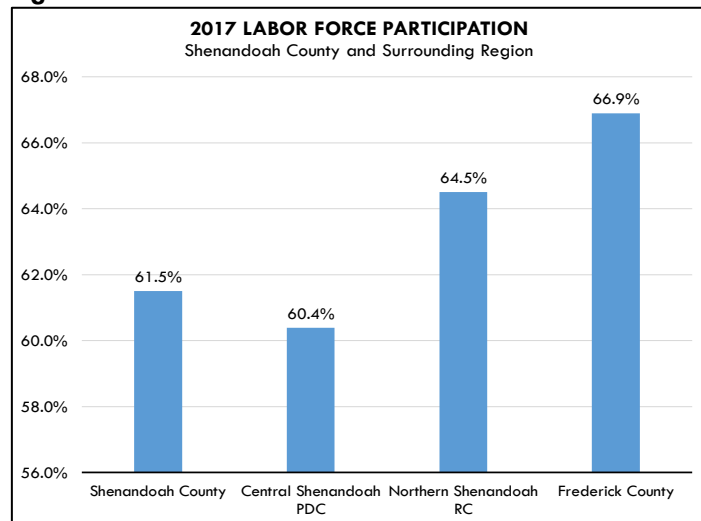
	Year	Labor Force	Employment	Unemployment	Unemployment Rate
Shenandoah County	2007	20,009	19,372	637	3.2
	2012	20,834	19,508	1,326	6.4
	2017	21,027	20,282	745	3.5
Frederick County	2007	41,122	39,905	1,217	3.0
	2012	43,479	40,967	2,512	5.8
	2017	46,296	44,818	1,478	3.2
PDC	2007	144,214	140,145	4,069	2.8
	2012	144,271	135,232	9,039	6.3
	2017	144,222	138,841	5,381	3.7
RC	2007	101,455	98,094	3,361	3.3
	2012	103,294	96,245	7,049	6.8
	2017	105,886	101,974	3,912	3.7
Actual Change & Percent Change					
Shenandoah County	'07 - '12	825	136	689	N/A
	% '07 - '12	4.1%	0.7%	108.2%	N/A
	'12 - '17	193	774	(581)	N/A
	% '12 - '17	0.9%	4.0%	-43.8%	N/A
Frederick County	'07 - '12	2,357	1,062	1,295	N/A
	% '07 - '12	5.7%	2.7%	106.4%	N/A
	'12 - '17	2,817	3,851	(1,034)	N/A
	% '12 - '17	6.5%	9.4%	-41.2%	N/A
PDC	'07 - '12	57	(4,913)	4,970	N/A
	% '07 - '12	0.0%	-3.5%	122.1%	N/A
	'12 - '17	(49)	3,609	(3,658)	N/A
	% '12 - '17	0.0%	2.7%	-40.5%	N/A
RC	'07 - '12	1,839	(1,849)	3,688	N/A
	% '07 - '12	1.8%	-1.9%	109.7%	N/A
	'12 - '17	2,592	5,729	(3,137)	N/A
	% '12 - '17	2.5%	6.0%	-44.5%	N/A

Source: U.S. Bureau of Labor Statistics and RKG Associates, Inc., 2019

- Despite the growth in the labor force, the County's labor force participation is low
Though the labor force in Shenandoah County has expanded after the recession, the labor force participation rate of 61.5% is comparatively lower than most of the surrounding areas (Figure 3-9).

The data suggest that though the number of people who have a job or are currently looking for a job has increased in the County, around 40% of the total population do not have a job

Figure 3-9



Source: U.S. Bureau of Labor Statistics and RKG Associates, Inc., 2019



or are not seeking employment opportunities. This percentage is higher than the Frederick County and the Northern Shenandoah Valley Regional Commission levels, echoing the fact that Shenandoah County has a high concentration of the retiree population who are not counted in the labor force. This data further exemplifies the impact of the County's loss of the primary working-aged cohort, Generation X (those generally born between 1965 and 1982).

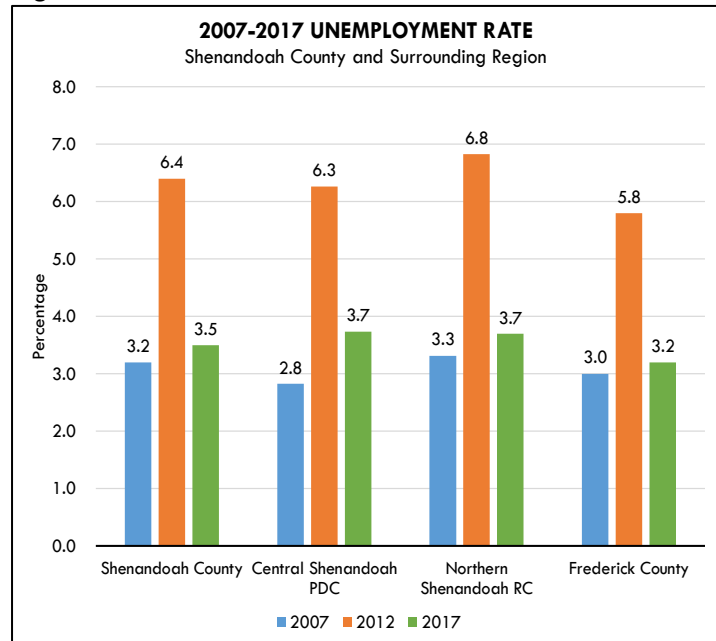
2. Unemployment Rates

- Shenandoah County unemployment levels have paralleled the regional performance

Unemployment in Shenandoah County has remained on the higher end of the other Shenandoah Valley communities but has followed similar patterns. The County has had the second-highest unemployment rate regionally since 2007 (Figure 3-10). The County's workforce experienced similar spikes in unemployment due to the National Recession as well.

This finding reveals how connected the Shenandoah economy is amongst all its communities. The economic downturn has similar effects on workers despite the differing size and focus of the individual counties' and cities' economies. Simply put, the Shenandoah Valley workforce is interlinked regardless of which jurisdiction a worker lives or works.

Figure 3-10



Source: U.S. Bureau of Labor Statistics and RKG Associates, Inc., 2019

- None of the regional study areas have returned to pre-Recession levels
The National Recession negatively impacted Shenandoah County and the entire Valley marketplace between 2007 and 2012. The County's unemployment rate doubled from 3.2% in 2007 to 6.4% in 2012. Since the Recession, the unemployment rate of the County and its surrounding jurisdictions have fallen as the market has reversed. As of August 2019, according to the Federal Reserve Economic Data, Shenandoah County has a 2.4% unemployment rate.

All that said, the overall size of the Shenandoah County (21,027 people) and the greater Valley region (250,108 people) labor force reveals there are not many unemployed people locally (745 people) or throughout the Valley (9,293 people). From an economic development perspective, the lack of available labor force could be concerning for a labor-intensive business/industry, particularly one that has specialized labor force needs.

3. Education Attainment

A highly educated workforce can be an advantage for a community looking to attract new businesses and bolster economic growth. While education attainment requirements vary by industry, an educated and skilled workforce is attractive to semi/highly-skilled and professional service sectors. An educated



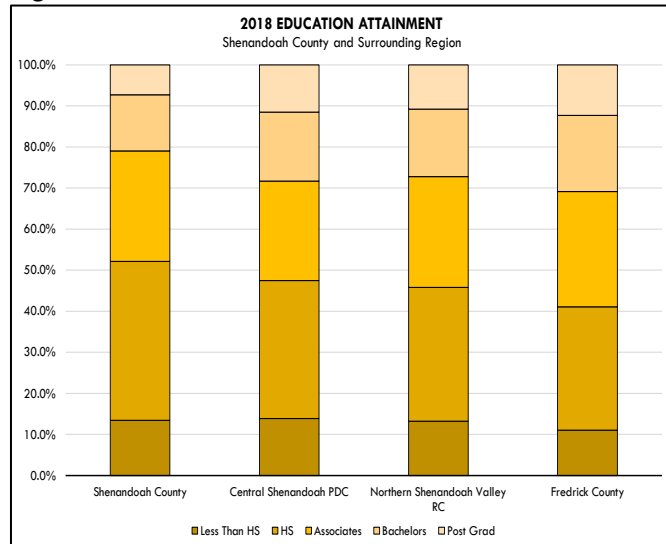
workforce also typically correlates with higher-paying jobs which can ultimately increase spending within the local economy.

- Education attainment levels for adults over 25-years old are comparatively lower in Shenandoah County than the surrounding region

Similar to median household incomes (discussed earlier), education attainment levels for adult residents in Shenandoah County are comparatively lower than the surrounding region. Over 50% of the County’s adult population has a high school degree or less, and this percentage is higher than the Central Shenandoah Planning District, Northern Shenandoah Valley Regional Commission, and Fredrick County. The County also has less than 10% of its total adult population who has a post-graduate degree, below than the surrounding region (Figure 3-11).

The data resonate with the previous discussion that there are more people with lower education attainment levels employed in lower-paying and lower-skilled jobs living in Shenandoah County compared to the surrounding region. Thus, there is an opportunity for more robust workforce training programs to build the labor force in jobs being sought by existing businesses and prospects. This finding was corroborated through interviews with local employers, who noted that finding entry-level workers locally is relatively easier than mid-level and executive workers. It should be mentioned that due to the low unemployment rate environment, it is still challenging to find qualified entry level workers as well.

Figure 3-11



Source: ESRI and RKG Associates, Inc., 2019

4. Occupational Skill Level

In addition to the educational attainment level, the occupation skill level of a workforce is also important for a community seeking to attract new businesses and promote economic development, as a workforce with high occupation skill levels is crucial to a local economy and attractive to company opportunities. This is because a well-educated worker that lacks the appropriate skills for a particular job is as ineffective as a less educated worker that lacks the appropriate skills. RKG Associates examined the skill levels of the labor force in Shenandoah County, Central Shenandoah Planning District, Northern Shenandoah Valley Regional Commission, and the U.S. as a whole using U.S. Bureau of Labor Statistics Standard Occupation Classifications (SOC) data. These groupings were derived from the consultant’s knowledge regarding the skill and educational requirements of general occupational categories. Although it is difficult to group occupational categories in this manner with great precision, the results provide some indication of the distribution and diversity of skills available within the labor force. The occupational categories and their descriptions are as follows:

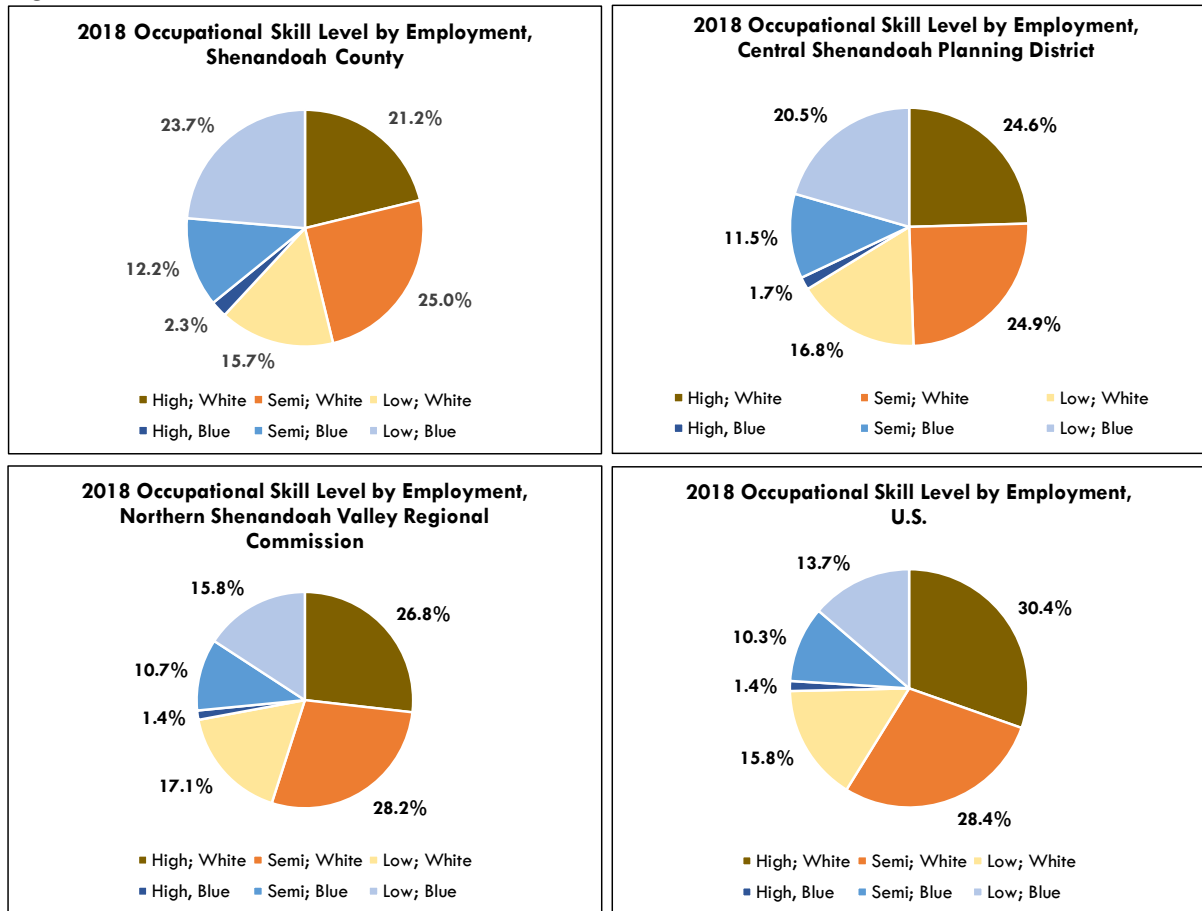


- 1) Highly-Skilled White Collar (HSWC) – a professional position requiring a college degree, with supervisory/ management responsibility or specialized training while working within a white-collar work environment. EXAMPLES: lawyers, registered nurses, school teachers
 - 2) Highly-Skilled Blue Collar (HSBC) – a trade or non-professional position requiring less than an advanced degree, but some post-secondary education, a certificate, or specialized training or skill while working within a blue-collar work environment. EXAMPLES: production supervisors, carpenters
 - 3) Semi-Skilled White Collar (SSWC) – a professional position requiring less than an advanced degree, but some post-secondary education, a certificate, or specialized training or skill while working within a white-collar work environment. EXAMPLES: administrative assistants, correctional officers
 - 4) Semi-Skilled Blue Collar (SSBC) – a trade position requiring less than an advanced or trade school degree but requiring some specialized training or skill, while working within a blue-collar environment. EXAMPLES: tool setters and operators, machinists
 - 5) Low-Skilled White Collar (LSWC) – a position within a white-collar work environment requiring no degree or formal schooling beyond high school but requiring some on-the-job training. EXAMPLES: food preparation, retail sales
 - 6) Low-Skilled Blue Collar (LSBC) – a position within a trade profession requiring no advanced degree or formal schooling but requiring some on-the-job training. EXAMPLES: truck/delivery service drivers, laborers
- Occupational skill levels in the County are lower than regional and national levels
In addition to lower educational attainment levels, the jobs in Shenandoah County also require lower occupational skill levels compared to the surrounding region. The County has the highest share of low-skilled blue-collar occupations (23.7%), and the lowest share of high-skilled white-collar occupations (21.2%) when compared to the Central Shenandoah Planning District, Northern Shenandoah Valley Regional Commission, and the U.S. (Figure 3-12). These low-skilled blue-collar jobs usually require low educational attainment levels, offer lower pays, creating less household wealth, and are more vulnerable to economic declines.
 - White-collar jobs have been increasing at a slower pace than the surrounding region and the U.S.
Despite a decrease of blue-collar jobs of all skill levels in the County, high-skilled white-collar jobs have been increasing only at 14.9% between 2001 and 2018, compared to 20.6% in the Central Shenandoah Planning District, 50.1% in the Northern Shenandoah Valley Regional Commission, and 29.9% on a national level. In addition, opposite to the growth of semi-skilled white-collar jobs in the surrounding region and in the U.S. as a whole, the County has seen a 3.8% loss of such jobs (Figure 3-13).

The data indicate that though the County's employment base and economic structure have been slowly shifting towards sectors that have more value addition, higher skill requirements, and higher pays, the County still has proportionally more lower-skilled jobs compared to the surrounding region and the U.S. as a whole, which has limited the economic growth in the County.



Figure 3-12



Source: U.S. Bureau of Labor Statistics Standard Occupation Classifications and RKG Associates, Inc., 2019

5. Employment Shift by Industry

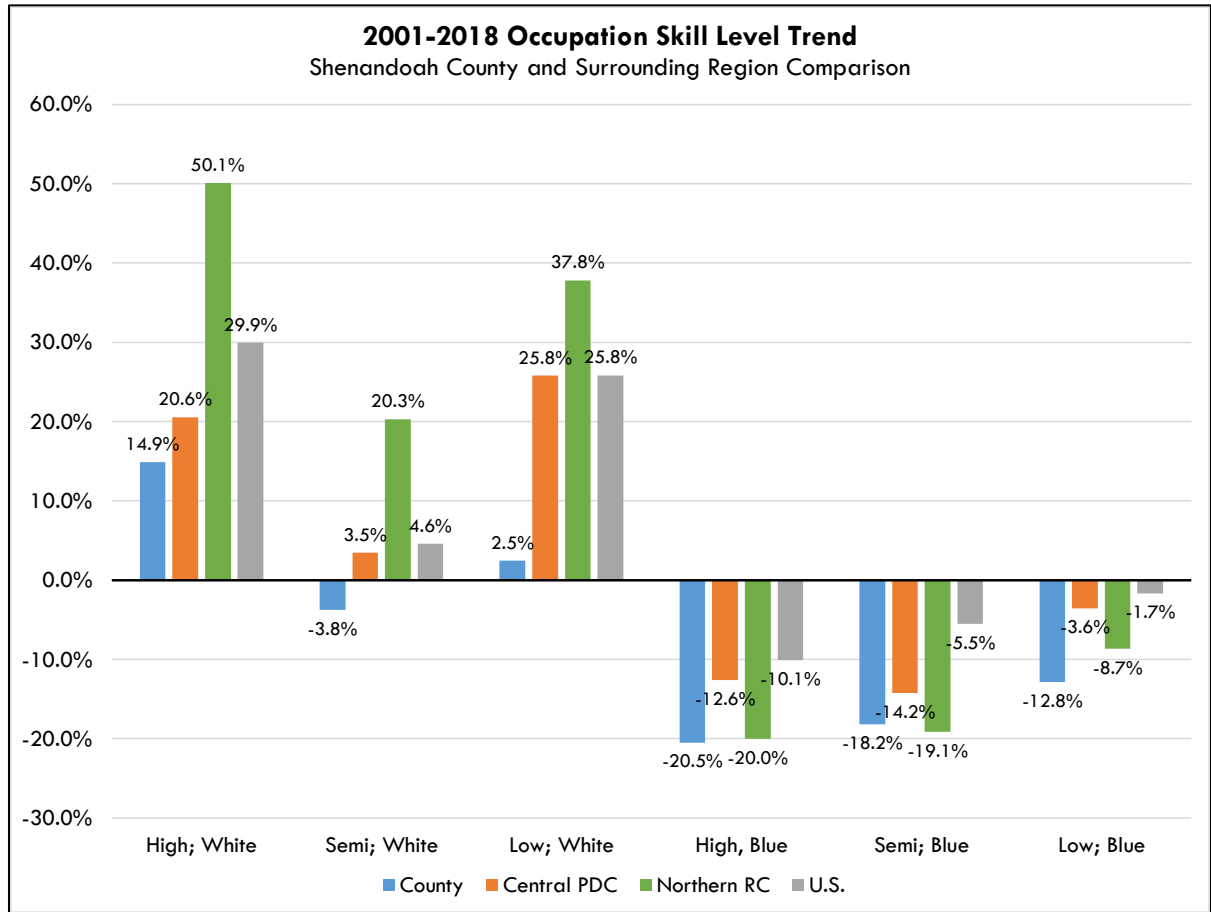
RKG utilized the employment data by NAICS industry sector from The Quarterly Workforce Indicators (QWI) obtained from the U.S. Census Bureau for the employment shift analysis. The analysts compared the changes in employment by industry between 2010 and 2017 in Shenandoah County, Central Shenandoah Planning District, and Northern Shenandoah Valley Regional Commission. The purpose is to gain a more in-depth understanding of how the 2007 recession impacted the County’s economy by industry, the health of the various industry sectors in the County, and how well they have recovered from the recession, as employment is an important indicator for such study.

- More industries in the County have been hit by the recession compared to the surrounding region
 9 out of 20 NAICS industry sectors have experienced a loss of employment in the County between 2010 and 2017. These sectors include Construction, Manufacturing, Transportation & Warehousing, Professional Services, Administrative & Waste Management, Health Care & Social Assistance, Arts & Entertainment, and Other Services. This is compared to only one industry sector in Northern Shenandoah Valley Regional Commission and five in Central Shenandoah Planning District during the same period. The data indicate that almost half of the industry sectors in Shenandoah County have been negatively impacted by the recession, which is more severe than the impact on the surrounding region. In addition, the recession impact on the County’s employment has continued for a long time, even ten years after the recession (Table 3-8),



meaning it takes the County longer to recover from the economic recession due to its vulnerable economic base.

Figure 3-13



Source: U.S. Bureau of Labor Statistics Standard Occupation Classifications and RKG Associates, Inc., 2019

- Low-skilled industry sectors have been impacted the most by the recession in the County
 Low-skilled industry sectors, especially the Retail Trade, Accommodation and Food Service, and Agriculture, Forestry, Fishing, and Hunting have experienced the greatest employment percentage losses among all NAICS industries in the County. In contrast, these sectors have grown in the surrounding marketplace. Most specifically, agriculture, forestry, fishing, and hunting employment is down in Shenandoah County for this time period, while growing in the surrounding jurisdictions. It should be noted, that these numbers come from a different source than the numbers referenced in Chapter 5. The number displayed in this chapter are accounting for multiple sectors outside of just agriculture.



Table 3-8
Employment Shifts by Industry
Shenandoah County, Virginia, 2010-2017

Industry	2010	2017	Chg. 10'-17'	% Chg.
All NAICS Sectors	11,979	12,060	81	0.7%
Agriculture, Forestry, Fishing and Hunting	148	84	(64)	-43.2%
Mining, Quarrying, and Oil and Gas Extraction	0	0	0	0.0%
Utilities	80	70	(10)	-12.5%
Construction	566	602	36	6.4%
Manufacturing	3,036	3,069	33	1.1%
Wholesale Trade	290	269	(21)	-7.2%
Retail Trade	1,432	1,293	(139)	-9.7%
Transportation and Warehousing	382	483	101	26.4%
Information	359	257	(102)	-28.4%
Finance and Insurance	241	224	(17)	-7.1%
Real Estate and Rental and Leasing	106	103	(3)	-2.8%
Professional, Scientific, and Technical Services	234	296	62	26.5%
Management of Companies and Enterprises	231	263	32	13.9%
Administrative and Support and Waste Management and Remediation Services	224	230	6	2.7%
Educational Services	1,595	1,426	(169)	-10.6%
Health Care and Social Assistance	1,117	1,321	204	18.3%
Arts, Entertainment, and Recreation	58	116	58	100.0%
Accommodation and Food Services	1,061	982	(79)	-7.4%
Other Services (except Public Administration)	328	427	99	30.2%
Public Administration	492	534	42	8.5%

Northern Shenandoah Valley Regional Commission, Virginia, 2010-2017

Industry	2010	2017	Chg. 10'-17'	% Chg.
All NAICS Sectors	54,197	66,156	11,959	22.1%
Agriculture, Forestry, Fishing and Hunting	336	367	31	9.2%
Mining, Quarrying, and Oil and Gas Extraction	0	0	0	0.0%
Utilities	155	209	54	34.8%
Construction	2,975	3,413	438	14.7%
Manufacturing	7,658	9,311	1,653	21.6%
Wholesale Trade	1,585	1,805	220	13.9%
Retail Trade	8,038	8,435	397	4.9%
Transportation and Warehousing	2,622	3,143	521	19.9%
Information	548	493	(55)	-10.0%
Finance and Insurance	1,557	2,490	933	59.9%
Real Estate and Rental and Leasing	518	595	77	14.9%
Professional, Scientific, and Technical Services	1,820	2,477	657	36.1%
Management of Companies and Enterprises	487	1,403	916	188.1%
Administrative and Support and Waste Management and Remediation Services	2,549	2,915	366	14.4%
Educational Services	4,661	8,089	3,428	73.5%
Health Care and Social Assistance	8,765	10,316	1,551	17.7%
Arts, Entertainment, and Recreation	1,018	1,154	136	13.4%
Accommodation and Food Services	4,888	5,234	346	7.1%
Other Services (except Public Administration)	1,740	1,872	132	7.6%
Public Administration	1,996	2,181	185	9.3%

Central Shenandoah Planning District Commission, Virginia, 2010-2017

Industry	2010	2017	Chg. 10'-17'	% Chg.
All NAICS Sectors	105,402	114,798	9,396	8.9%
Agriculture, Forestry, Fishing and Hunting	862	1,646	784	91.0%
Utilities	116	76	(40)	-34.5%
Construction	419	498	79	18.9%
Manufacturing	5,324	6,559	1,235	23.2%
Wholesale Trade	20,053	18,105	(1,948)	-9.7%
Retail Trade	3,393	4,153	760	22.4%
Transportation and Warehousing	12,900	12,131	(769)	-6.0%
Information	4,657	6,367	1,710	36.7%
Finance and Insurance	2,343	1,595	(748)	-31.9%
Real Estate and Rental and Leasing	1,780	1,928	148	8.3%
Professional, Scientific, and Technical Services	1,083	1,195	112	10.3%
Management of Companies and Enterprises	2,370	3,308	938	39.6%
Administrative and Support and Waste Management and Remediation Services	1,206	1,315	109	9.0%
Educational Services	2,488	3,247	759	30.5%
Health Care and Social Assistance	14,302	16,221	1,919	13.4%
Arts, Entertainment, and Recreation	14,783	16,156	1,373	9.3%
Accommodation and Food Services	1,306	1,216	(90)	-6.9%
Other Services (except Public Administration)	9,516	11,724	2,208	23.2%
Public Administration	2,468	2,933	465	18.8%

Source: QWI & RKG Associates, Inc., 2019



The net employment growth data further reinforces the demographic findings about population and household growth. While Shenandoah County has experienced a net job increase, the pace of growth remains behind the rest of the region. That said, the employment data indicate the County has experienced better growth in mid- and higher-wage jobs (i.e. manufacturing) but has not experienced the same income growth as other communities. This indicates that Shenandoah County has not been successful at having higher-wage workers live in the County over the more developed areas of the Valley (i.e. Harrisonburg and Winchester). From an economic development perspective, creating the critical mass of residential development that will warrant greater services locally could help the County capture more of these local workers.

6. Unemployment by Industry

Though the employment shift data reflect how the 2007 economic downturn impacted the different industry sectors in the County, they do not reveal current labor force availability in the County and in the surrounding region. As mentioned, the number of unemployed residents of Shenandoah County and the region are comparatively low, making recruitment in some labor dependent industries a challenge. RKG used the 2018 unemployment data by industry sector obtained from EMSI, Labor Market Analytics to analyze the currently available labor force and employment demands by industry sector.

Understanding the depth of existing labor availability is valuable information for existing and potential employers interested in expansion in Shenandoah County. Similarly, industry sectors that plan to enter the County without immediately available trained labor will need additional resources including skill training and employee recruitment to support their local growth. Based on the analysis results, the low unemployment and small labor force, Shenandoah County will need to provide robust job training services to attract medium and large-scale companies to the county.

- Employment opportunity demand is the highest for the Manufacturing sector, followed by Retail Trade and Health Care, and Social Assistance
Within the greater Shenandoah Valley marketplace, the Manufacturing sector has the most unemployed labor force totaling 1,209 currently unemployed workers (Table 3-9). The Retail Trade sector has the second-highest total unemployment in the County and the surrounding region. Currently, the County and the surrounding region combined can immediately support Retail Trade employers with 739 available workers. Health Care and Social Assistance comes in third place, with 669 unemployed workers in the labor force who can readily support new Health Care and Social Assistance employers.

Locally, Shenandoah County has fewer than 500 persons unemployed that are actively seeking jobs. While a low unemployment is a positive for the community as a whole, it creates challenges for business growth and recruitment. The three largest unemployment sectors for the region are Manufacturing (159 unemployed residents), Retail Trade (58 unemployed residents), and Health Care and Social Assistance (54 unemployed residents). Ultimately, this data indicates that job growth within the County will require a combination of existing labor, workforce training for residents to 'cross over', and attracting workers from other areas. Given the concentrations elsewhere in the region, the County will have to be competitive to draw companies over sites closer to the population centers of Harrisonburg and Winchester.



Table 3-9
2018 Unemployment by Industry Sector
Shenandoah County & Surrounding Region, Virginia

Sector	Shenandoah	Central	Northern	TOTAL
	County	Shenandoah PDC	Shenandoah RC	
Agriculture, Forestry, Fishing and Hunting	5	54	23	82
Mining, Quarrying, and Oil and Gas Extraction	1	10	6	17
Utilities	2	7	5	14
Construction	38	305	196	539
Manufacturing	159	666	384	1,209
Wholesale Trade	18	177	92	287
Retail Trade	58	402	279	739
Transportation and Warehousing	29	263	165	457
Information	27	68	26	121
Finance and Insurance	13	90	127	230
Real Estate and Rental and Leasing	6	59	26	91
Professional, Scientific, and Technical Services	13	135	106	254
Management of Companies and Enterprises	3	21	17	41
Administrative and Support and Waste Management and Remediation Services	28	268	274	570
Educational Services	6	188	126	320
Health Care and Social Assistance	54	376	239	669
Arts, Entertainment, and Recreation	3	15	25	43
Accommodation and Food Services	24	192	98	314
Other Services (except Public Administration)	20	115	78	213
Government	29	207	138	374
No Previous Work Experience/Unspecified	55	299	239	593

Source: EMSI, Labor Market Analytics and RKG Associates, Inc., 2019

7. Regional Employment by Industry

In addition to identifying the local employment trends within Shenandoah County, it is also crucial to understand the existing major employment industries and the fastest-growing employment sectors in the regional economy. As the surrounding region has stronger economic performances and more employment opportunities, the County can tap into these regional strengths to propel its economic development by sharing some of the employment opportunities in the region. RKG Associates assessed the specific industries (3-digit NAICS) within the larger industry sectors (2-digit NAICS) to better understand the local-regional economic relationship.

- The County's economy has several consistencies with the regional market
In the broader region including Shenandoah County, Central Shenandoah Planning District and Northern Shenandoah Valley Regional Commission, Food Services and Drinking Places, Food Manufacturing, and Specialty Trade Contractors are the top three major employment industry sectors, contributing over 38,000 jobs in total. Within Shenandoah County, these sectors are also the second, first and fifth largest employment industries respectively (Table 3-10).
- Food Manufacturing is strong locally and regionally.
In addition to being a high growth sector regionally, Manufacturing also has a large presence in the Shenandoah Valley. The Food Manufacturing industry constitutes a large portion of that in both Shenandoah County (i.e. Andros) and within the surrounding marketplace. Preserving and expanding this industry should be a priority for Shenandoah County.
- Potential opportunities exist in Educational Services, Ambulatory Health Care, Hospitals, and Professional, Scientific and Technical Services
In addition to Food Services, Manufacturing and Specialty Trade Contractors, sectors such as Educational Services, Ambulatory Health Care Services, Hospitals, and Professional, Scientific and Technical Services are also the major regional employment sectors. These sectors usually



provide higher-skilled and higher-pay jobs creating more wealth and requiring higher educational attainment levels. However, most of them are ranked only between the 10th and the 20th place in terms of their existing presence and scale in the County.

This suggests that opportunities exist for the County to tap into higher-skilled and higher-paying employment sectors to bolster its economic base. In addition, Health Care and Social Assistance is one of the several industries that have the largest unemployment in the County as discussed. This can be an opportunity for the County to introduce more Ambulatory Health Care, potential to expand Hospital services in partnership with Valley Health, and other Health Care and Social Assistance employment opportunities. Moreover, the high concentration of the retiree population in the County also need more health care services and facilities to meet the increasing demands.

Table 3-10
2018 Largest Regional Employment Industries
Shenandoah County, Central Shenandoah PDC & Northern Shenandoah RC

Industry	Jobs	SC Rank
Food Services and Drinking Places	18,471	2
Food Manufacturing	10,540	1
Specialty Trade Contractors	9,655	5
Educational Services	9,417	25
Ambulatory Health Care Services	9,359	16
Administrative and Support Services	9,120	8
Hospitals	8,465	10
Professional, Scientific, and Technical Services	7,788	12
General Merchandise Stores	6,378	15
Nursing and Residential Care Facilities	6,050	4
Warehousing and Storage	5,547	38
Social Assistance	5,328	9
Accommodation	4,948	17
Religious, Grantmaking, Civic, and Professional Organizations	4,708	11
Food and Beverage Stores	4,455	18

Source: EMSI and RKG Associates, Inc. 2019

- Credit Intermediation and Related Activities and Management of Companies and Enterprises experienced major growth in the region behind
Industry sectors including Credit Intermediation and Related Activities, and Management of Companies and Enterprises are among the sectors that have seen the largest employment growth between 2010 and 2018 in the Shenandoah Valley region after the recession. This was supported by the Navy Federal Credit Union call center opening in Frederick County. However, they are ranked after the 30th place within the County in terms of employment growth during the same period (Table 3-11).

Given Shenandoah County's quality of life amenities and existing technology infrastructure in the towns along I-81, there is potential for the County to tap into smaller, niche firms within these industries. Growth in these industries would bring more semi-/high-skilled white-collar jobs that can contribute more to the local economy. The County can consider promoting the presence of these industries as part of its economic development strategy.



Table 3-11
2010-2018 Largest Growth Regional Employment Industries
Shenandoah County, Central Shenandoah PDC & Northern Shenandoah RC

Industry	Growth	SC Rank
Food Services and Drinking Places	3,161	33
Educational Services	2,433	80
Warehousing and Storage	2,018	12
Ambulatory Health Care Services	1,953	13
Professional, Scientific, and Technical Services	1,751	19
Credit Intermediation and Related Activities	1,267	83
Administrative and Support Services	1,170	7
Social Assistance	1,163	3
Food Manufacturing	846	2
Nursing and Residential Care Facilities	681	10
Management of Companies and Enterprises	643	62
Support Activities for Agriculture and Forestry	583	23
Plastics and Rubber Products Manufacturing	426	1
Crop Production	412	67
Beverage and Tobacco Product Manufacturing	403	17

Source: EMSI and RKG Associates, Inc. 2019

- Beverage Manufacturing is growing quickly locally and regionally
Shenandoah County has been successful at attracting tourism-related production in spirit production locally (Table 3-13). The County has attracted wineries, breweries and a distillery. This economic growth trend has long been established regionally, particularly with wineries in the I-66 and I-81 corridor. Continued efforts to grow this production sector will enhance employment opportunities, preserve some agricultural land, and continue to grow the County's tourism market.

8. Inflow/Outflow and Labor Force Efficiency

As seen on Map 3-3, Shenandoah County is a net exporter of workers, as 6,006 workers living elsewhere commute to the County for work compared to 10,678 County residents commuting to jobs elsewhere every day. At a base level, this finding is not surprising given Winchester/Frederick County and Harrisonburg/Rockingham County are the regional economic centers for Shenandoah Valley. These areas of 'critical mass' are attractive to companies that seek access to larger labor pools and locations that are convenient to their vertical and horizontal supply chains. Thus, it is reasonable that Shenandoah County will have more working residents leaving the County than persons from outside the County coming to work locally.

At a more strategic level, there may be opportunities for local businesses to tap into this outflow of workers by offering competitive employment opportunities closer to home. As noted in the previous section, there are several industries that are growing faster regionally than locally. The County's economic development effort should include focused engagement with companies in these industries to determine the potential to recruit similar operations to Shenandoah County.



Table 3-12
2010-2018 Fastest Growth Regional Employment Industries
Shenandoah County, Central Shenandoah PDC & Northern Shenandoah RC

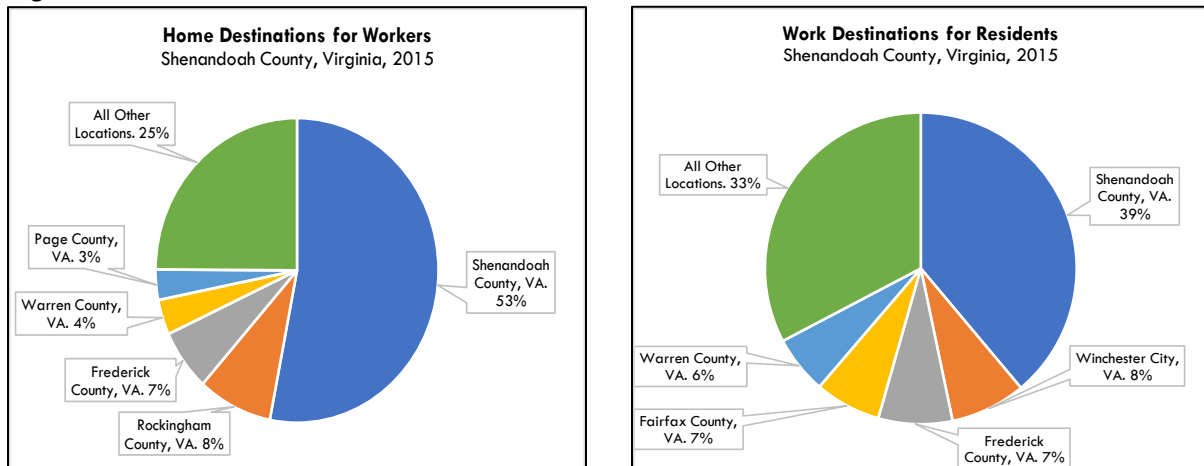
Industry	% Change	SC Rank
Air Transportation	133.2%	76
Support Activities for Agriculture and Forestry	94.9%	12
Beverage and Tobacco Product Manufacturing	89.2%	3
Motion Picture and Sound Recording Industries	75.2%	39
Apparel Manufacturing	71.9%	76
Warehousing and Storage	57.2%	8
Transit and Ground Passenger Transportation	54.3%	37
Other Information Services	49.8%	76
Credit Intermediation and Related Activities	44.0%	53
Crop Production	40.0%	60
Educational Services	34.8%	50
Nonmetallic Mineral Product Manufacturing	29.4%	32
Professional, Scientific, and Technical Services	29.0%	29
Management of Companies and Enterprises	28.7%	42
Social Assistance	27.9%	7

Source: EMSI and RKG Associates, Inc. 2019

9. Employee and Employer Location

The amount of time spent commuting to and from work can impact the overall quality of life of a household, as well as have an economic impact on a community if dollars spent during the day are not spent in the local economy. 53.1% of the workers employed in Shenandoah County are local residents that live in the County, 8.5% come from Rockingham County, followed by 6.5% commuting from Frederick County. Warren County (3.7%), Page County (3.2%), Harrisonburg City (2.7%) and Winchester City (2.3%) are also among the top six home destinations for people working within the County (Figure 3-14). Additionally, many workers from West Virginia come to Shenandoah County for work. In 2015, Hardy County, WV and Berkeley County, WV made up 1.5% and 1.0% respectively, of

Figure 3-14



Source: OnTheMap, U.S.Census Bureau, Center for Economic Studies and RKG Associates, Inc., 2019



all employees within Shenandoah County. Therefore, businesses seeking to relocate part of their operations in Shenandoah County will be utilizing a relatively local labor force to fill their positions.

As noted, only 38.9% of the County residents work locally. The work destinations of the County residents who work elsewhere include Winchester City (7.8%), Frederick County (7.7%), Fairfax County (6.9%), Warren County (6.0%), Loudoun County (3.9%), Rockingham County (3.5%), Prince William County (2.3%), Harrisonburg City (1.7%), Henrico County (1.3%) and all other locations (19.9%) (Figure 3-14). This finding corroborates the observation that Shenandoah County is part of a larger market economy. I-81 bridges the surrounding communities including Winchester City and Harrisonburg City, and connects to I-66 and further east to the Washington D.C. metro area. These two arterials connect major regional labor force and employment center, and it explains why the employment locations for the County's residents who work elsewhere spread along these two economic lifelines in the region. Therefore, it is not surprising that parcels closer to I-81 will be more attractive to potential companies and institutions that plan to locate to Shenandoah County.



4 REAL ESTATE MARKET ANALYSIS

A. INTRODUCTION

In this section, RKG examined the existing types of development, development geographic distribution, property value, historical development patterns, development trends, and the market performance and development opportunities of the industrial, office, retail and hotel sectors. This analysis enables RKG to understand the existing real estate market environment, market supply/demand trends, and the gaps/limitations and opportunities in the various real estate market sectors in the context of the County's economic development goals. The results provide substantial technical evidence for RKG's economic development strategies and recommendations.

B. MAJOR FINDINGS

The Washington DC Metro growth expansion of the late 1990s and early 2000s temporarily shifted the County's real estate market. Development data show that new real estate development activity, particularly single family detached residential, reached unprecedented levels within Shenandoah County. The County's housing supply increased by approximately 10% in seven years. Further, this development reportedly targeted commuter households from the Metro DC area, most of the development occurring along I-81 from Woodstock north. Once the National Recession hit, development activity returned to more traditional levels.

Interest in semi-retirement and retirement estate homes has remained strong. Local real estate professionals indicated that the demand for estate-style houses (larger homes on larger tracts of land) remain in demand due to the County's proximity to the Washington DC and Baltimore markets and the high quality of life. From an economic development perspective, this growth does not benefit the County's vision of increased job creation and accommodation of the new workers it will attract.

Non-residential development has been slow, but steady in the County. The net new commercial and industrial development did not keep pace with residential development since 2000, with less than 800,000 square feet of new development over the 18-year period. Growth has been split between industrial uses and commercial development, concentrated in smaller projects. The largest development was the 410,000 square foot Mercury Paper in the Northern Shenandoah Business Park in Strasburg followed by the 66,000 square foot Hampton Inn in Woodstock. The next largest development was the 24,000 square foot Route 11 Chips factory.

The County has not been capturing its 'fair share' of non-residential growth. Regional development activity indicate that Shenandoah County has not captured a proportional share of growth occurring in the Shenandoah Valley. Most notably, there have been over 5.2M square feet of industrial building space delivered regionally since 2015. Shenandoah County has only captured 75,000 square feet of this development.

Shenandoah County properties need to be more competitive to attract investment. RKG Associates' observation of current land asking prices reveal there is a disconnect between Shenandoah's competitive position within the region and property owners' expectations. Simply put, land assets elsewhere in the Valley are more development-ready and priced such that prospects likely will be able to get to market



more quickly and see better value at those locations (particularly around Winchester and Harrisonburg). Owner engagement will be necessary for the County to increase is potential success.

C. METHODOLOGY

The analysts utilized a variety of data sources including the County property assessment data, Shenandoah Valley Partnership data, Colliers International, CoStar Group, a third-party hotel data provider Smith Travel Research, as well as online property listing websites including LoopNet and Zillow.com. RKG looked at the industrial, office, retail, hotel, ownership residential and rental residential sectors in the County, and compared the current conditions and future trends in these sectors with the County's economic development goals to identify gaps and opportunities that would either constrain or support the County's economic plan.

D. REAL ESTATE MARKET CONDITIONS

Understanding the current development pattern and how development has occurred in the recent past is foundational to understanding market dynamics and opportunities. Simply put, the private sector is going to invest in development projects that meet risk-reward thresholds required by equity partners and debt providers. In other words, the market will only build projects that are going to be profitable within a reasonable risk tolerance. While development patterns do not provide the entire picture of market potential, they do give insight into how current land use policies are shaping real estate investment.

It is important to note that this section does not include tax exempt or active agricultural land. Tax exempt properties are commonly omitted from a real estate development trends analysis due to the nature of those developments (i.e. public buildings, parks, religious facilities). These investments are more reactive to the market and do not have very much influence on the location decisions for businesses. The active agricultural land is addressed in detail within the agricultural section. This section highlights the key findings.

1. Development Profile

Agricultural uses account for more than 35% of the County's total land area. Of those private uses outside of agriculture, Shenandoah County is mostly residential, with single-family homes being the major residential property type. Approximately 80% of the housing in Shenandoah County is single family detached houses. Apartment units (both traditional complexes as well as traditional ownership housing being used as rental) constitutes the second largest housing type, comprising less than 8% of the County's inventory. The lack of housing diversity has been reported to affect local workers from moving into Shenandoah County. The anecdotal data indicate that there is a portion of the workforce that is seeking more urban environments/housing types than currently offered in the County. This is particularly true in the Towns, where there are 'walkable' areas that can integrate housing and commercial activity.

The distribution of single-family homes is balanced throughout the County. Each subarea has a high concentration of these houses. However, the higher density housing is concentrated in Strasburg (SA1), Woodstock (SA2), and Basye (SA4) areas. The Strasburg and Woodstock townhomes/apartments are more traditional living units. The Basye area townhomes and multifamily units are almost exclusively vacation and second homes for owners who frequent Bryce Resort. Having this supply benefits the resort but does not help bolster housing choice for the County's other economic development sectors.

Not surprisingly, the I-81 corridor has a higher concentration of residential development than the eastern and western portions of the County. Strasburg and Woodstock have the highest proportion of non-



agricultural, private sector development, taking advantage of the interstate connectivity and proximity to the I-66 connection to Washington DC.

However, nonresidential development almost exclusively exists along the I-81 corridor. With few exceptions, the I-81 and Route 11 corridors serve the nonresidential activity. This finding is not surprising, as transportation access and visibility are critical for the County's retail/service and industrial sectors. Also, public water and sewer services provided by both the towns and the County are primarily concentrated along I-81 and Route 11. Running this infrastructure to the less developed areas of the County has not been supported by the County's residents and would not be a financially savvy investment without major land use changes.

2. Development Trends 2000-2006

Like the rest of the country, Shenandoah County experienced substantial development between 2000 and 2006. The County experienced a 10% increase in housing units and an 6% increase in non-residential square footage during this seven-year period (Table 4-1). Single family detached housing constitutes most of the new residential development, remaining approximately 80% of all new units developed since 2000. While there was a slight uptick in other housing type development since 2012, the lack of housing diversity has been identified as a challenge to labor recruitment efforts, particularly for entry-level positions and fields that are more popular with younger workers.

Most of the new development occurred within the County's six municipalities along Route 11 and Interstate 81. Strasburg (Submarket 1) and Woodstock (Submarket 2) accounted for 1,081 of the 1,480 single family units and 136,769 of the 165,657 non-residential square feet constructed during this time period. Mount Jackson/New Market, Bayse, and Fort Valley constituted approximately 33% of residential development and 10% of non-residential development during this time period. Based on feedback from local real estate professionals, much of the residential development was targeted to Northern Virginia commuters seeking a more pastoral lifestyle with convenient transportation access (I-81 to I-66). Maps 4-1 to 4-3 show where all commercial and industrial development occurred within the County since 2000.

3. Development Trends 2007-2018

Similarly, residential development activity slowed down substantially since 2006 due to the National Recession. Shenandoah County experienced a net increase of 471 new single family detached housing development in the 12 years since 2006, less than 33% of the total built during the previous 7 years. The distribution of residential development was similar post-Recession within the County.

However, non-residential development since the Recession was more robust. The County experienced a net increase of 638,654 square feet of new non-residential space since 2007. This finding is not surprising, as commercial activity typically follows residential cycles. Thus, strong residential growth from 2000 to 2006 would create commercial interest from 2003-2009. The County's property assessment data reveal that most of the commercial development (i.e. 100 Founders Way in Strasburg and 225 E. Lee Highway occurred by 2010). Commercial development has waned since 2012, reflecting the slow-down in residential development since 2006. Furthermore, much of this new development has been industrial in nature, which is less impacted by swings in residential development. The Mercury Paper facility, the largest industrial development since 2007, occurred in 2008.

Almost all new non-residential development since 2000 is located along I-81 in Submarkets 1, 2, and 5. All new non-residential development constructed between 2000 and 2018, except for 1618 Orkney Grade, is located along the I-81 and Route 11 corridors. This finding is consistent with traditional non-residential market economics, as businesses seek the advantages of being in proximity to major highways, having access to infrastructure, and require visibility (particularly commercial development)

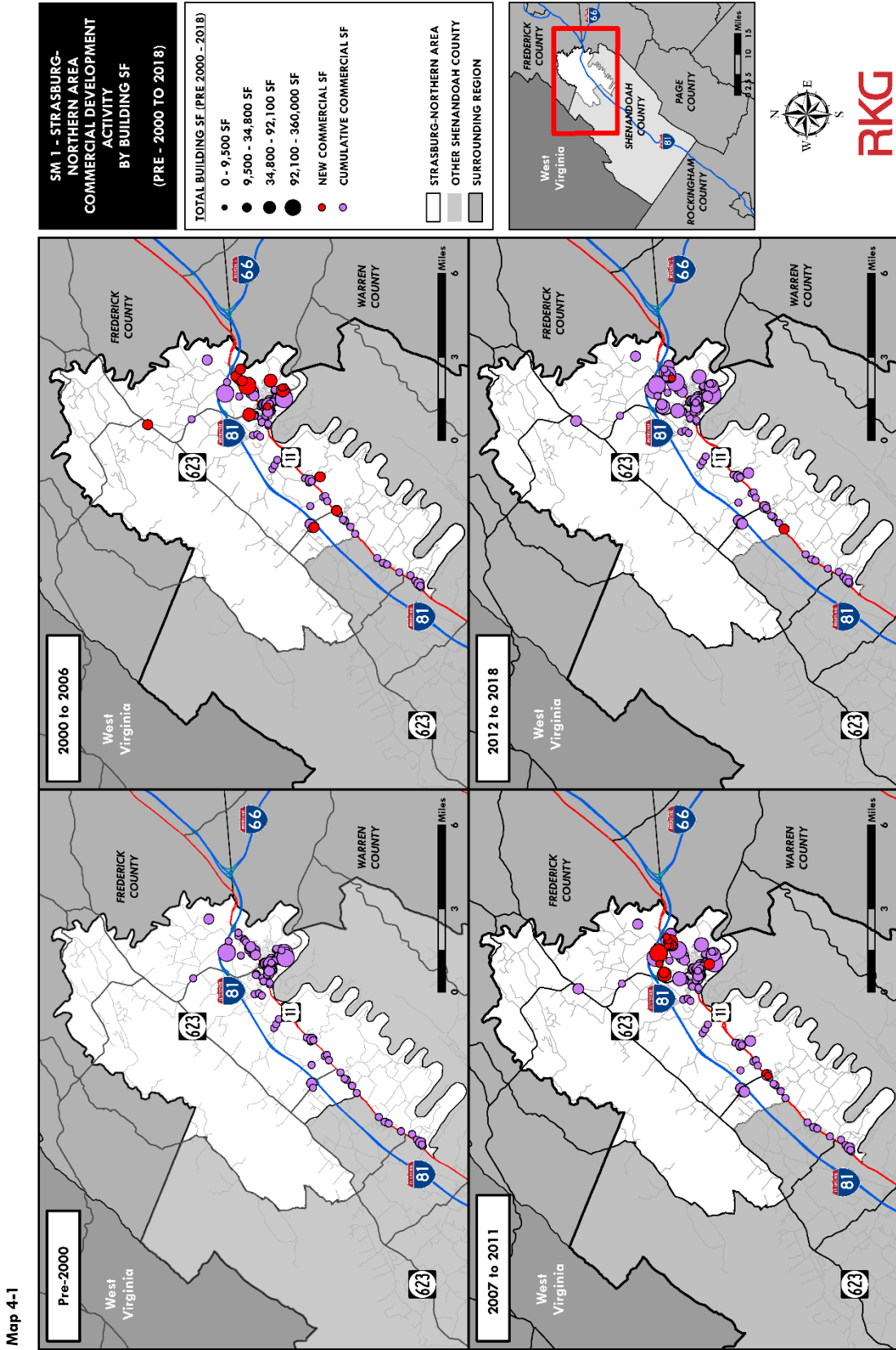


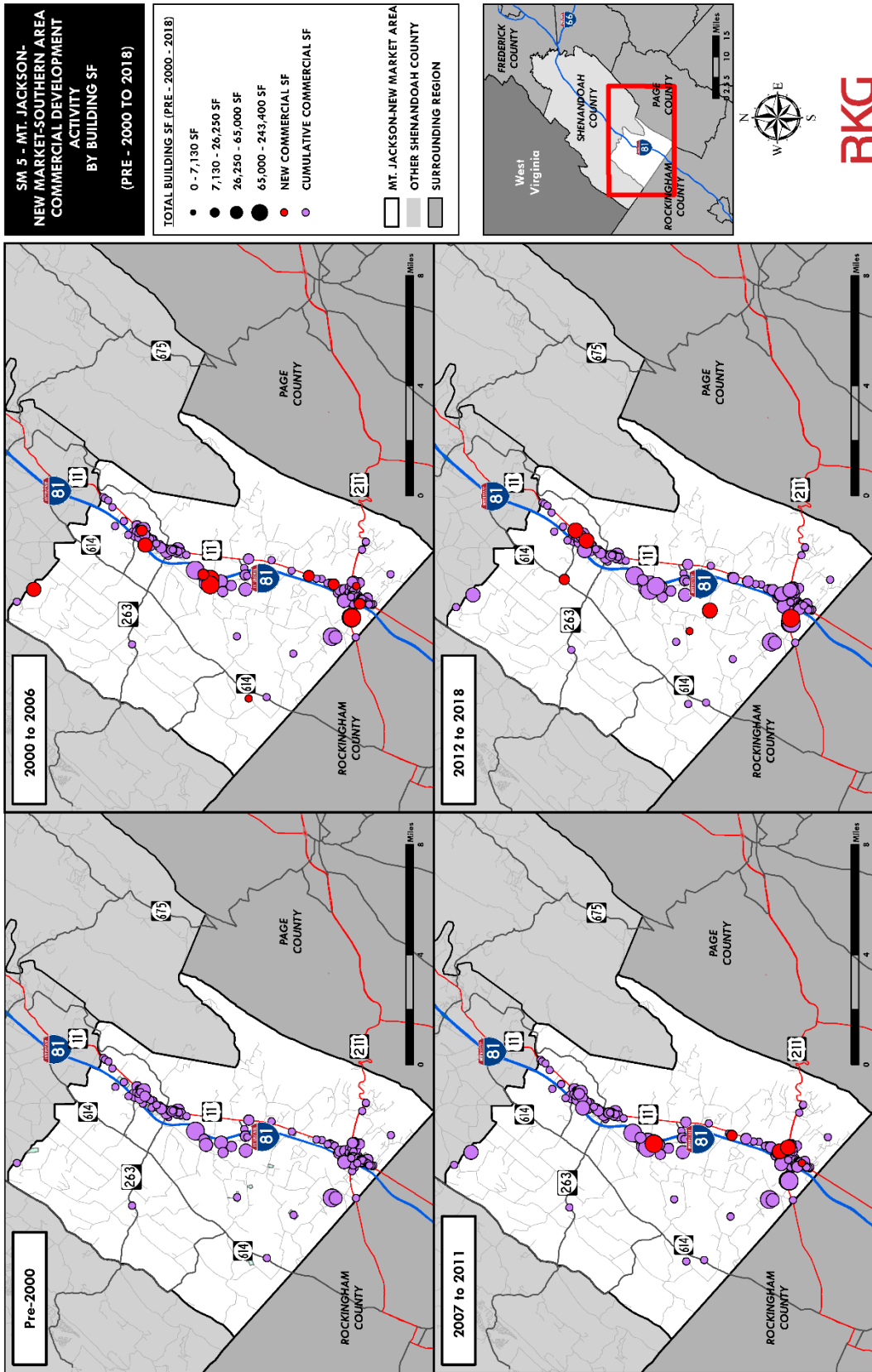
of major transportation routes. Route 11 and I-81 are the only commercial corridors that offer all three benefits.

Table 4-1
Development Trends
Shenandoah County; 2000-2018

SHENANDOAH COUNTY													
	Units/ Properties	% of All Units/ Properties	Acreage	% of All Land Area	Total Bldg SF	% of Building SF	Avg. Bldg SF	Land Assessed Value	Building Assessed Value	Total Assessed Value	Avg. Land AV/Acre	Avg. Bldg AV/SF	FAR
PRE 2000													
RESIDENTIAL													
Single Family	14,397	80.7%	108,711.00	86.4%	15,958,057	87.4%	1,108	\$1,282,745,300	\$980,332,800	\$2,263,078,100	\$11,800	\$61.43	0.00
Condominium	456	2.6%	2,063.55	1.6%	224,085	1.2%	491	\$21,067,000	\$19,528,500	\$40,595,500	\$10,209	\$87.15	0.00
Townhouse	905	5.1%	6,662.57	5.3%	1,088,114	6.0%	1,202	\$99,528,300	\$64,639,600	\$164,167,900	\$14,938	\$59.41	0.00
Duplex	347	1.9%	3,048.43	2.4%	307,614	1.7%	886	\$21,373,400	\$21,652,300	\$43,025,700	\$7,011	\$70.39	0.00
Triplex	16	0.1%	54.94	0.0%	16,617	0.1%	1,039	\$1,125,500	\$881,300	\$2,006,800	\$20,488	\$53.04	0.01
Apartment	1,291	7.2%	2,254.42	1.8%	302,056	1.7%	234	\$20,430,400	\$18,387,900	\$38,818,300	\$9,062	\$60.88	0.00
Mobile Home	428	2.4%	2,999.21	2.4%	368,439	2.0%	861	\$27,800,100	\$24,103,300	\$51,903,400	\$9,269	\$65.42	0.00
TOTAL	17,840	88.3%	125,794.11	92.9%	18,264,981	78.4%	1,024	\$1,474,070,000	\$1,129,525,700	\$2,603,595,700	\$11,718	\$61.84	0.00
NONRESIDENTIAL													
Commercial	249	100.0%	1,408.69	100.0%	2,637,449	100.0%	10,592	\$134,778,500	\$45,395,300	\$180,173,800	\$95,677	\$17.21	0.04
TOTAL	249	85.9%	1,408.69	84.9%	2,637,449	76.8%	10,592	\$134,778,500	\$45,395,300	\$180,173,800	\$95,677	\$17.21	0.04
2000 TO 2006													
RESIDENTIAL													
Single Family	1,480	84.0%	5,794.32	91.1%	3,111,286	88.7%	2,102	\$299,438,600	\$100,868,200	\$400,306,800	\$51,678	\$32.42	0.01
Condominium	12	0.7%	135.75	2.1%	29,603	0.8%	2,467	\$3,158,600	\$1,608,900	\$4,767,500	\$23,267	\$54.35	0.01
Townhouse	66	3.7%	97.86	1.5%	128,937	3.7%	1,954	\$12,096,500	\$3,772,000	\$15,868,500	\$123,608	\$29.25	0.03
Duplex	23	1.3%	57.69	0.9%	48,582	1.4%	2,112	\$5,178,200	\$1,771,000	\$6,949,200	\$89,764	\$36.45	0.02
Triplex	2	0.1%	0.58	0.0%	2,708	0.1%	1,354	\$92,900	\$92,000	\$184,900	\$508,507	\$33.97	0.11
Apartment	137	7.8%	167.15	2.6%	65,951	1.9%	481	\$6,237,800	\$2,104,700	\$8,342,500	\$37,318	\$31.91	0.01
Mobile Home	41	2.3%	106.79	1.7%	122,450	3.5%	2,987	\$11,541,200	\$2,413,200	\$13,954,400	\$108,072	\$19.71	0.03
TOTAL	1,761	8.7%	6,360.14	4.7%	3,509,516	15.1%	1,993	\$337,943,800	\$112,630,000	\$450,573,800	\$53,135	\$32.09	0.01
NONRESIDENTIAL													
Commercial	18	100.0%	152.41	100.0%	165,657	100.0%	9,203	\$19,599,000	\$11,105,200	\$30,704,200	\$128,593	\$67.04	0.02
TOTAL	18	6.2%	152.41	9.2%	165,657	4.8%	9,203	\$19,599,000	\$11,105,200	\$30,704,200	\$128,593	\$67.04	0.02
2007 TO 2012													
RESIDENTIAL													
Single Family	313	81.7%	1,412.63	75.3%	810,461	82.1%	2,589	\$77,514,400	\$24,432,000	\$101,946,400	\$54,872	\$30.15	0.01
Condominium	3	0.8%	41.42	2.2%	16,360	1.7%	5,453	\$1,397,600	\$454,800	\$1,852,400	\$33,743	\$27.80	0.01
Townhouse	22	5.7%	102.98	5.5%	109,847	11.1%	4,993	\$10,162,100	\$2,516,800	\$12,678,900	\$98,683	\$22.91	0.02
Duplex	5	1.3%	31.41	1.7%	15,205	1.5%	3,041	\$1,435,800	\$396,100	\$1,831,900	\$45,710	\$26.05	0.01
Triplex	0	0.0%	0.00	0.0%	0	0.0%	0	\$0	\$0	\$0	\$0	\$0.00	0.00
Apartment	28	7.3%	6.93	0.4%	11,083	1.1%	396	\$1,096,000	\$315,800	\$1,411,800	\$158,176	\$28.49	0.04
Mobile Home	12	3.1%	280.23	14.9%	23,751	2.4%	1,979	\$2,505,500	\$1,591,000	\$4,096,500	\$8,941	\$66.99	0.00
TOTAL	383	1.9%	1,875.61	1.4%	986,707	4.2%	2,576	\$94,111,400	\$29,706,500	\$123,817,900	\$50,177	\$30.11	0.01
NONRESIDENTIAL													
Commercial	19	100.0%	77.56	100.0%	605,764	100.0%	31,882	\$37,200,600	\$8,991,400	\$46,192,000	\$479,614	\$14.84	0.18
TOTAL	19	6.6%	77.56	4.7%	605,764	17.6%	31,882	\$37,200,600	\$8,991,400	\$46,192,000	\$479,614	\$14.84	0.18
2012 OR LATER													
RESIDENTIAL													
Single Family	158	68.4%	1,014.29	77.1%	414,887	79.0%	2,626	\$42,263,300	\$13,932,700	\$56,196,000	\$41,668	\$33.58	0.01
Condominium	1	0.4%	17.24	1.3%	9,680	1.8%	9,680	\$1,048,900	\$313,800	\$1,362,700	\$60,827	\$32.42	0.01
Townhouse	10	4.3%	94.67	7.2%	43,494	8.3%	4,349	\$4,465,700	\$1,557,700	\$6,023,400	\$47,170	\$35.81	0.01
Duplex	2	0.9%	48.86	3.7%	13,002	2.5%	6,501	\$1,334,400	\$408,200	\$1,742,600	\$27,310	\$31.40	0.01
Triplex	0	0.0%	0.00	0.0%	0	0.0%	0	\$0	\$0	\$0	\$0	\$0.00	0.00
Apartment	52	22.5%	76.90	5.8%	21,950	4.2%	422	\$2,105,300	\$756,300	\$2,861,600	\$27,376	\$34.46	0.01
Mobile Home	8	3.5%	62.97	4.8%	21,988	4.2%	2,748	\$2,118,800	\$693,600	\$2,812,400	\$33,648	\$31.54	0.01
TOTAL	231	1.1%	1,314.95	1.0%	525,001	2.3%	2,273	\$53,336,400	\$17,662,300	\$70,998,700	\$40,562	\$33.64	0.01
NONRESIDENTIAL													
Commercial	4	100.0%	20.16	100.0%	26,747	100.0%	6,687	\$2,326,200	\$754,800	\$3,081,000	\$115,393	\$28.22	0.03
TOTAL	4	1.4%	20.16	1.2%	26,747	0.8%	6,687	\$2,326,200	\$754,800	\$3,081,000	\$115,393	\$28.22	0.03
TOTAL INVENTORY (PRE 2000 - 2018)													
RESIDENTIAL													
Single Family	16,348	80.9%	116,932.25	86.4%	20,294,691	87.2%	1,241	\$1,701,961,600	\$1,119,565,700	\$2,821,527,300	\$14,555	\$55.17	0.00
Condominium	472	2.3%	2,257.96	1.7%	279,727	1.2%	593	\$26,672,100	\$21,906,000	\$48,578,100	\$11,812	\$78.31	0.00
Townhouse	1,003	5.0%	6,958.08	5.1%	1,370,392	5.9%	1,366	\$126,252,600	\$72,486,100	\$198,738,700	\$18,145	\$52.89	0.00
Duplex	377	1.9%	3,186.39	2.4%	384,402	1.7%	1,020	\$29,321,800	\$24,227,600	\$53,549,400	\$9,202	\$63.03	0.00
Triplex	18	0.1%	55.51	0.0%	19,325	0.1%	1,074	\$1,418,400	\$973,300	\$2,391,700	\$25,552	\$50.37	0.01
Apartment	1,508	7.5%	2,505.41	1.9%	401,040	1.7%	266	\$29,869,500	\$21,564,700	\$51,434,200	\$11,922	\$53.77	0.00
Mobile Home	489	2.4%	3,449.21	2.5%	536,628	2.3%	1,097	\$43,965,600	\$28,801,100	\$72,766,700	\$12,747	\$53.67	0.00
TOTAL	20,215	98.6%	135,344.80	98.8%	23,286,204	87.1%	1,152	\$1,959,461,600	\$1,289,524,500	\$3,248,986,100	\$14,478	\$55.38	0.00
NONRESIDENTIAL													
Commercial	290	100.0%	1,658.82	100.0%	3,435,617	100.0%	11,847	\$193,904,300	\$66,246,700	\$260,151,000	\$116,893	\$19.28	0.05
TOTAL	290	1.4%	1,658.82	1.2%	3,435,617	12.9%	11,847	\$193,904,300	\$66,246,700	\$260,151,000	\$116,893	\$19.28	0.05
SHENANDOAH COUNTY TOTAL	20,505	100.0%	137,003.63	100.0%	26,721,821	100.0%	1,303	\$2,153,365,900	\$1,355,771,200	\$3,509,137,100	\$15,718	\$50.74	0.00

Source: Shenandoah County and RKG Associates, Inc., 2019







E. RESIDENTIAL ANALYSIS

1. Introduction

As RKG understands, Shenandoah County aims to attract additional employment. However, the feasibility and effects of this strategy are largely dependent on whether the County has the resources and amenities, such as housing, to accommodate the new growth and to retain new workers' spending within the County. Therefore, RKG analyzed the existing housing market and recent trends of residential development in the County to understand whether the housing supply can match the future demand as the County attracts new companies.

2. Methodology

RKG obtained the data of 2018 average earning of \$48,376/year per Manufacturing job from the third-party data provider EMSI, Labor Market Analytics. The analysts then back-calculated the maximum affordable home value for this wage level to be around \$190,000 under the assumption that the buyer will be using FHA 30-year fixed-term loan with an interest rate of 3.75% (as of August 15, 2019, from Bankrate.com, 0 points, lowest allowed credit score is 580-619) and a 3.5% down payment. The County's real estate tax rate is \$0.64 per a hundred assessed value (Virginia assesses the value of properties based on 100% of the fair market price, meaning the assessed value equals the fair market price). The MIP FHA required insurance rate is 0.85%, and the average annual insurance premium rate is 1.2%. As the majority of the residential properties in the County is single-family detached home (Single Family) and single-family attached home (including Townhouse, Duplex, and Triplex), the above assumptions are based on the scenario of purchasing single-family homes.

3. Current Housing Inventory

Based on RKG Associates' analysis, most homes are assessed to be affordable for the average Manufacturing salary. More than 75% of the Single-Family homes, Townhouses, Duplexes and Triplexes in the County are valued under \$200,000 according to the property assessment data (Table 4-2). Since the assessed home value is meant to approximate the market price, this means most of the existing single-family homes in the County are affordable for an average local Manufacturing salary of 48,376/year.

Table 4-2
Residential Value Distribution by Property Type
Shenandoah County (2018)

SHENANDOAH COUNTY								
	Single Family	Condo	Townhouse	Duplex	Triplex	Apartment	Mobile Home	TOTAL
<\$100,000	7,332	86	470	202	6	126	242	8,464
\$100,000 - \$199,999	5,801	81	362	110	10	121	163	6,648
\$200,000 - \$299,999	2,399	31	165	43	1	40	67	2,746
\$300,000 - \$500,000	1,162	17	85	27	1	24	23	1,339
\$500,000 - \$749,999	265	7	15	9	0	8	6	310
\$750,000 - \$999,999	82	4	3	2	0	1	5	97
>\$1,000,000	146	5	7	2	0	2	5	167
Total	17,187	231	1,107	395	18	322	511	19,771
PERCENT DISTRIBUTION								
<\$100,000	42.7%	37.2%	42.5%	51.1%	33.3%	39.1%	47.4%	42.8%
\$100,000 - \$199,999	33.8%	35.1%	32.7%	27.8%	55.6%	37.6%	31.9%	33.6%
\$200,000 - \$299,999	14.0%	13.4%	14.9%	10.9%	5.6%	12.4%	13.1%	13.9%
\$300,000 - \$500,000	6.8%	7.4%	7.7%	6.8%	5.6%	7.5%	4.5%	6.8%
\$500,000 - \$749,999	1.5%	3.0%	1.4%	2.3%	0.0%	2.5%	1.2%	1.6%
\$750,000 - \$999,999	0.5%	1.7%	0.3%	0.5%	0.0%	0.3%	1.0%	0.5%
>\$1,000,000	0.8%	2.2%	0.6%	0.5%	0.0%	0.6%	1.0%	0.8%
% Total	86.9%	1.2%	5.6%	2.0%	0.1%	1.6%	2.6%	100.0%

Source: Shenandoah County and RKG Associates, Inc., 2019

However, the Submarkets where economic development has been most robust have the fewest price-appropriate housing options. As noted, SM1 has experienced the most amount of residential and non-residential development since 2000. However, only a small proportion (16.9%) of the County's most



affordable residential properties are in SM1, and there are proportionally housing units valued below \$100,000 in SM1 compared to the rest of the County. While not an absolute deal breaker, the overall need for a large workforce (detailed in the last chapter) combined with the fewest price-appropriate choices in the areas with greatest access to jobs and amenities could be a challenge for Shenandoah County's long-term employment growth. As also detailed in Chapter 3, the cities in the Shenandoah Valley have experienced the greatest working-age population growth. Part of this trend is due to housing availability, part is due to proximity and access to amenities and services (i.e. shopping choice).

4. Recent Development Valuation 2012-2018

While the County does have price-appropriate housing, most of that housing stock is older. RKG Associates analyzed housing values for units built since 2012. In contrast to the overall 76% of traditional ownership units being valued below \$200,000, only 43% of units built in the past seven years are valued similarly. There have been as many housing units built that are valued between \$200,000 and \$500,000 as there have been for the most affordable units (Table 4-3). Further, only 15 of the 260 units developed in the past seven years are valued below \$100,000, a price point necessary for entry-level and part-time workers.

Table 4-3
Residential Value Distribution by Property Type (Built Since 2012)
Shenandoah County & Surrounding Submarket Areas

	Shenandoah County							Total Inventory
	Single Family	Condominium	Townhouse	Duplex	Triplex	Apartment	Mobile Home	
<\$100,000	14	0	0	0	0	0	1	15
\$100,000 - \$199,999	81	1	6	1	0	3	4	96
\$200,000 - \$299,999	72	1	8	0	0	3	3	87
\$300,000 - \$500,000	29	1	7	0	0	3	3	43
\$500,000 - \$749,999	6	1	1	1	0	1	0	10
\$750,000 - \$999,999	3	0	0	0	0	0	0	3
>\$1,000,000	5	0	0	1	0	0	0	6
Total	210	4	22	3	0	10	11	260
PERCENT DISTRIBUTION								
<\$100,000	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%	5.8%
\$100,000 - \$199,999	38.6%	25.0%	27.3%	33.3%	0.0%	30.0%	36.4%	36.9%
\$200,000 - \$299,999	34.3%	25.0%	36.4%	0.0%	0.0%	30.0%	27.3%	33.5%
\$300,000 - \$500,000	13.8%	25.0%	31.8%	0.0%	0.0%	30.0%	27.3%	16.5%
\$500,000 - \$749,999	2.9%	25.0%	4.5%	33.3%	0.0%	10.0%	0.0%	3.8%
\$750,000 - \$999,999	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%
>\$1,000,000	2.4%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	2.3%
% Total	80.8%	1.5%	8.5%	1.2%	0.0%	3.8%	4.2%	100.0%

Source: Shenandoah County and RKG Associates, Inc., 2019

5. Residential Sales Activity and Annual Turnover (2014-2018)

In order to paint a more realistic picture of the current housing availability and the actual sales prices in the County, RKG looked at residential properties sold between 2014 and 2018 using the property assessment database. The sales analysis enables the analysts to better understand the housing market demand. RKG also obtained current sales listings from Zillow.com, a national residential real estate listing website. As of August 16, 2019, there are 280 residential properties listed for sale and 19 units for rent actively listed within Shenandoah County.

The annual turnover rate based on all the residential sales occurred between 2014 and 2018 in the County is 4.0% according to the property assessment data, which indicates Shenandoah County is a relatively healthy housing market. Typical 'healthy' housing markets experience turnover ratios between 3% and 5%. The data also indicate Shenandoah County is less transient compared to urban metropolitan areas. In other words, people tend to stay in their current places of residence in the County for a long time, and it is not likely that many currently occupied housing units, especially those affordable ones will become available to accommodate new workers.



The sales data also reveal that most of the residential properties sold in the recent five years were built prior to 2000 (Table 4-4). This further supports the discussion that there has been very limited newly-built housing supply in the marketplace, making it even more infeasible for the type of employment companies that the County wishes to attract to enter the County with hundreds of new workers looking for housing.

The sales listings reveal there are few existing housing units priced below \$190,000 available. In total, only 92 of the 280 (32.9%) properties listed on Zillow.com are priced below \$190,000. Though Zillow likely is not an exhaustive list, this one-time snapshot provides an insight into the relationship between the number of housing options affordable to a salary level that will be prevalent in many of the target industry jobs (see Chapter 7 for more detail). The result further confirms the previous finding that there is only a small proportion of the for-sale housing supply that is affordable to the average Manufacturing sector wage earner. As noted, this could inhibit job/labor force attraction if no additional measure is adopted to address this mismatch between housing supply and new demand.

Rental options are very scant, further limiting the affordable options for modest-wage workers. While the analysis to this point has focused on ownership units, there are very few traditional and non-traditional rental housing options. At a base level, the property assessment data identifies fewer than 500 traditional apartment units. According to the Zillow search result, there are only 19 units currently listed for rent within the County. The average Manufacturing wage rate of \$48,376/year can afford a maximum monthly rent of \$1,200 (assuming the HUD threshold of spending 30% of gross income on housing). While 16 out of the 19 rental listings are price at or below \$1,200 on Zillow, the total affordable rental options are scant.

6. Implications

Housing availability and appropriateness is an economic development issue. Within Shenandoah County, the diversity and availability of price-appropriate housing should be taken into consideration as part of the County's economic development efforts. This is because a lack of available housing options that are affordable to the new workers added by the economic development activities could only limit the potential success of the County's economic development efforts. The data analysis conducted by RKG

Table 4-4
Residential Sales Analysis by Property Type
Shenandoah County (2014 - 2018)

SHENANDOAH COUNTY				
	Arms Length Sales	Average Assessed Value	Average Sales Price	Sale-To-Value Ratio
BUILT PRIOR TO 2000				
Single Family	2,849	\$133,919	\$126,866	94.7%
Condominium	43	\$141,700	\$323,138	228.0%
Townhouse	192	\$148,089	\$158,810	107.2%
Duplex	76	\$150,137	\$192,736	128.4%
Triplex	5	\$180,900	\$126,600	70.0%
Mobile Home	89	\$120,999	\$112,083	92.6%
Total	3,254	\$875,744	\$1,040,233	n/a
BUILT BETWEEN 2000 & 2006				
Single Family	436	\$223,903	\$175,101	78.2%
Condominium	2	\$179,950	\$131,500	73.1%
Townhouse	21	\$218,786	\$193,329	88.4%
Duplex	4	\$218,250	\$209,875	96.2%
Triplex	0	\$0	\$0	0.0%
Mobile Home	9	\$200,344	\$204,989	102.3%
Total	472	\$1,041,233	\$914,794	n/a
BUILT BETWEEN 2007 & 2012				
Single Family	113	\$243,289	\$230,933	94.9%
Condominium	1	\$313,900	\$340,000	108.3%
Townhouse	17	\$263,459	\$211,276	80.2%
Duplex	2	\$174,300	\$172,115	98.7%
Triplex	0	\$0	\$0	0.0%
Mobile Home	3	\$192,000	\$211,633	110.2%
Total	136	\$1,186,948	\$1,165,958	n/a
BUILT SINCE 2012				
Single Family	120	\$242,017	\$201,547	83.3%
Condominium	1	\$287,700	\$0	0.0%
Townhouse	15	\$300,560	\$210,224	69.9%
Duplex	2	\$812,800	\$684,627	84.2%
Triplex	0	\$0	\$0	0.0%
Mobile Home	5	\$306,420	\$60,980	19.9%
Total	143	\$1,949,497	\$1,157,378	n/a
TOTAL INVENTORY				
Single Family	3,518	\$843,128	\$734,448	87.1%
Condominium	47	\$923,250	\$794,638	86.1%
Townhouse	245	\$930,893	\$773,640	83.1%
Duplex	84	\$1,355,487	\$1,259,352	92.9%
Triplex	5	\$180,900	\$126,600	70.0%
Mobile Home	106	\$819,763	\$589,686	71.9%
SHENANDOAH COUNTY TOTAL	4,005	5,053,421	4,278,363	n/a

Source: Shenandoah County and RKG Associates, Inc. 2019



indicates that there likely is a mismatch between the potential incomes of the types of jobs most likely to locate in Shenandoah County and the pricing/availability of the County's existing housing stock.

At a base level, Shenandoah County does not have a diverse housing supply. With more than 80% of all housing units being single family detached, this limits those existing employees and potential future employees not seeking an ownership opportunity or a housing unit requiring relatively higher property maintenance. More strategically, the regional growth data indicate working-aged households are clustering in the cities within Shenandoah Valley. This most likely is due to several factors, of which housing choice, housing availability, housing pricing, and access to services/amenities are important.

While these other communities can (and already do) house many of Shenandoah's existing labor force, it creates an incentive to prospective businesses to find locations closer to these labor force concentrations away from Shenandoah County.

F. INDUSTRIAL MARKET ANALYSIS

1. Introduction

RKG also examined the non-residential real estate market performance and sales/leasing activities in Shenandoah County to study the existing market environment, supply/demand and opportunities for future growth especially for commercial and industrial uses. This study enables RKG to compare the market reality with the County's economic development goals and to identify gaps and strategies to tap into existing opportunities to boost the County's economic health.

2. Methodology

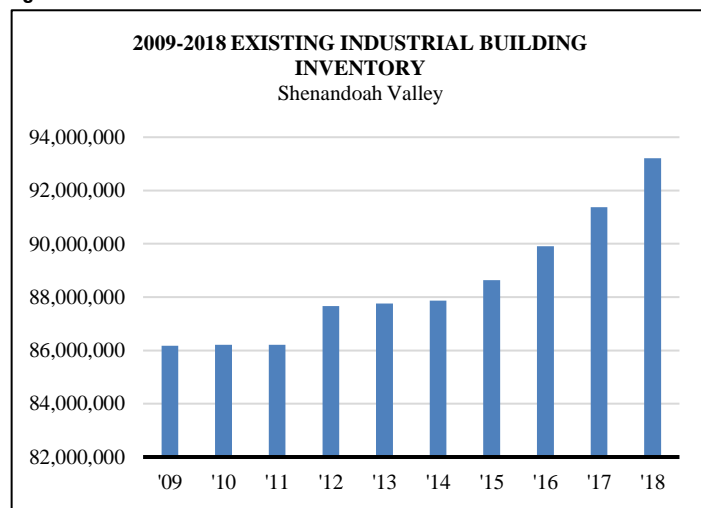
The RKG team utilized the data provided by Shenandoah Valley Partnership, Colliers International and CoStar Group. Data types include existing inventory, new delivery, the volume under construction, vacancy rate and absorption of the industrial sector. It should be noted that the industrial data from Colliers International and CoStar Group target a broader geographic area of Shenandoah Valley/I-81 Corridor, as this is the level of details available.

3. Market Performance

The industrial real estate market has been successful within the Shenandoah Valley. Since 2009, more than 7M square feet of industrial space has been built within Go Virginia Region 8, increasing from 86,000,000 square feet in 2009 to over 93,000,000 square feet in 2018 (Figure 4-1).

Based on industry market data, this new development has been split between traditional production space and warehouse/distribution space. According to the data from Colliers International and CoStar Group, in both the last quarter of 2017 and the last quarter of 2018, the new constructions split equally between

Figure 4-1



Source: Colliers International, CoStar Group and RKG Associates, Inc., 2019



Industrial/Manufacturing and Warehouse/Distribution uses in terms of square footage. This is also true for the square footage under construction. This indicates that the development interest in these two use types is mostly equal in the Shenandoah Valley region (Table 4-5). This finding is not surprising as the Shenandoah Valley offers a comparatively large, well-trained workforce and is well situated on a major goods transit route (I-81) with the intersections of I-81 with I-66 (to Northern Virginia/Washington DC) and I-70 (to Baltimore and Pittsburgh).

**Table 4-5
Shenandoah Valley Industrial Market Summary (Q3 2017 vs Q3 2018)**

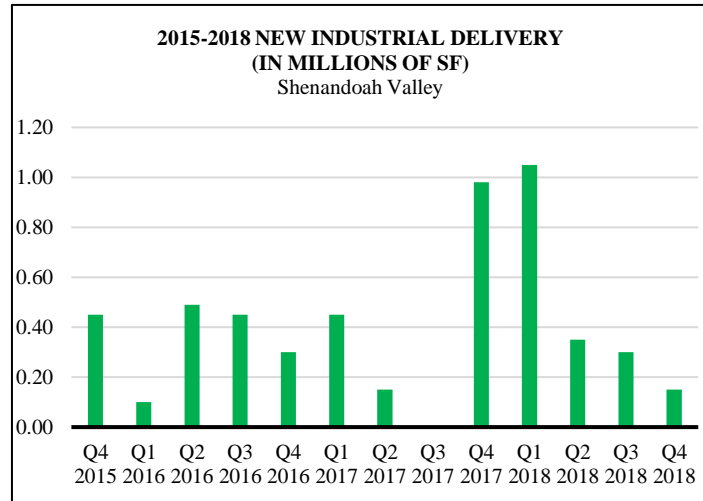
	Industrial	Warehouse	Flex
Q3 2017			
Vacancy Rate	6.5%	6.5%	6.5%
Absorption	35,126	(23,307)	58,433
New Construction (SF)	--	--	--
Under Construction (Million SF)	2.7	2.7	--
ASKING RENTS PER SF/YR			
Direct Asking Rates	\$4.08	\$3.95	\$5.76
Change From Q2 2017	(\$0.04)	(\$0.07)	\$0.32
Q3 2018			
Vacancy Rate	4.3%	4.2%	7.4%
Absorption	1,082,795	1,052,825	29,970
New Construction (SF)	287,000	287,000	--
Under Construction (Million SF)	2.23	2.23	--
ASKING RENTS PER SF/YR			
Direct Asking Rates	\$4.23	\$4.15	\$5.04
Change From Q2 2018	-0.7%	1.0%	0.9%

Source: Colliers International, CoStar Group and RKG Associates, Inc., 2019

The industrial development pipeline has remained strong, suggesting continued development interest and positive market outlook. The new industrial delivery and industrial square footage under construction by quarter have been fluctuating since the last quarter of 2015. However, in general, new industrial development in the pipeline remains active since 2015, delivering between 1M and 3M square feet annually since 2015 (Figure 4-2). The development pipeline also has remained strong, with as much as 3.7M square feet (3rd quarter 2017) being developed at any given time (Figure 4-3). Despite this strong development activity, building absorption has been positive in 12 of the last 13 quarters (Figure 4-4). In total, approximately 5.2M square feet of industrial space has been delivered in the Shenandoah Valley region since 2015.

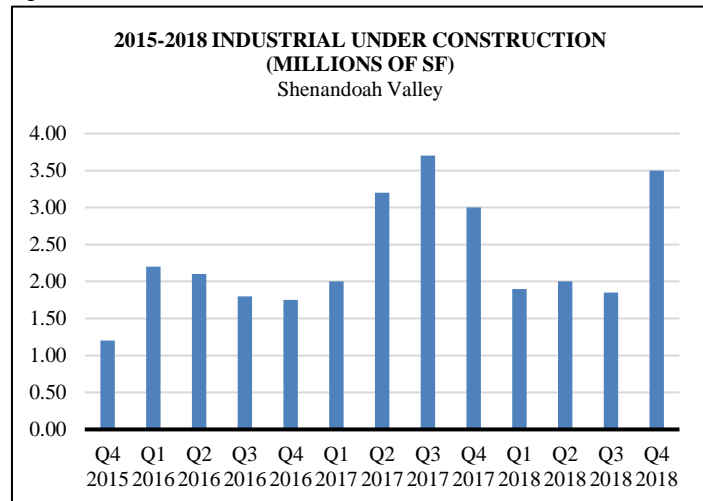
Development activity is concentrated around Winchester and Harrisonburg. Harrisonburg/Rockingham County and Winchester/Frederick County have captured most of the region's industrial development. As discussed earlier in this chapter, there are several mitigating factors that have created this disparity. Public and private investment are the primary drivers. However, access to services, amenities,

Figure 4-2



Source: Colliers International, CoStar Group and RKG Associates, Inc., 2019

Figure 4-3



Source: Colliers International, CoStar Group and RKG Associates, Inc., 2019



and labor force also have played a substantial role. In contrast, delivery in Shenandoah County has been substantially less. Based on the County assessment data, less than 610,000 square feet of industrial space has been delivered in the County since 2000. Since 2015, less than 75,000 square feet (of the region's 5,200,000 square feet) were delivered locally.

4. Leasing Dynamics

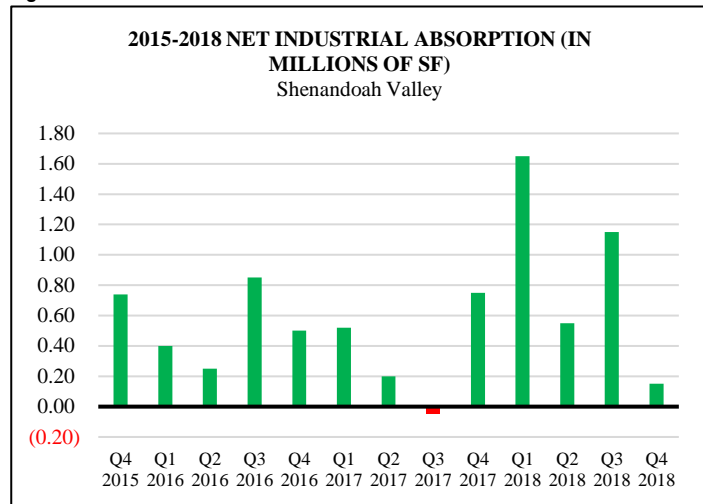
Despite the strong development activity and continued investment in new space, occupancy rates have declined and average asking rent has increased. The vacancy rate of the industrial sector declined from around 12% in 2009 to around 4% in 2018, indicating a fast recovery from the recession (Figure 4-5). Accordingly, the asking triple net rental rate/SF has been steadily rising during the same period, a good example that the leasing activities and demand in the industrial sector have been increasing after the recession as people are willing to pay more.

5. Implications

The industrial market (both production and warehouse/distribution) have rebounded since the 2006 Recession. The Shenandoah Valley has proven it is a highly competitive and desirable market for the manufacturing and logistics sectors. Unfortunately, Shenandoah County has not experienced its 'fair share' of this investment despite being centrally located in the region. On one hand, the County's central location works against it, as Winchester (to the north) and Harrisonburg (to the south) are the economic poles of the linear I-81 marketplace. Shenandoah County, by choice, has not welcomed the level and type of development that has occurred elsewhere along I-81. On the other hand, land assets are still plentiful around these to cities, making it challenging for Shenandoah County to equally compete.

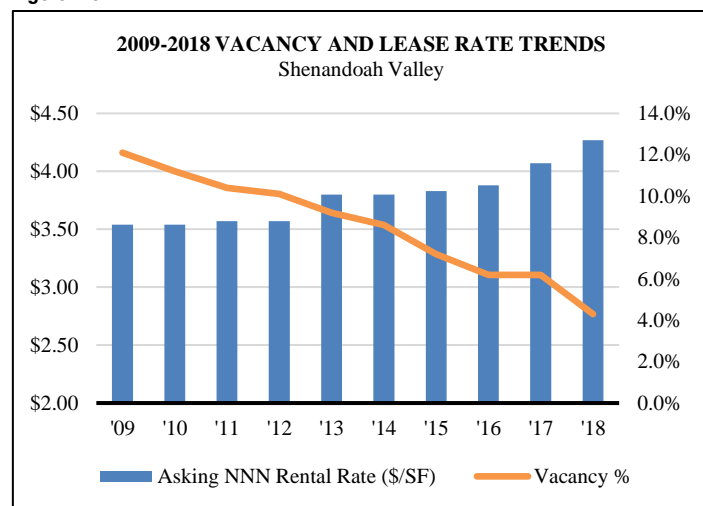
To these points, there is potential for the County to capture more of the region's dynamic industrial sector. However, the County will have to be strategic in creating competitive assets and opportunities. Not the least of which is working with property owners to get pad-ready sites in Shenandoah County priced competitively to similarly prepared sites around Winchester and Harrisonburg.

Figure 4-4



Source: Colliers International, CoStar Group and RKG Associates, Inc., 2019

Figure 4-5



Source: Colliers International, CoStar Group and RKG Associates, Inc., 2019



G. HOTEL MARKET ANALYSIS

1. Methodology

RKG Associates used Smith Travel Research, a U.S. third-party hotel data provider, to obtain the County's hotel industry data including occupancy rates, hotel room rates and revenue per available room (RevPAR).

2. Market Performance

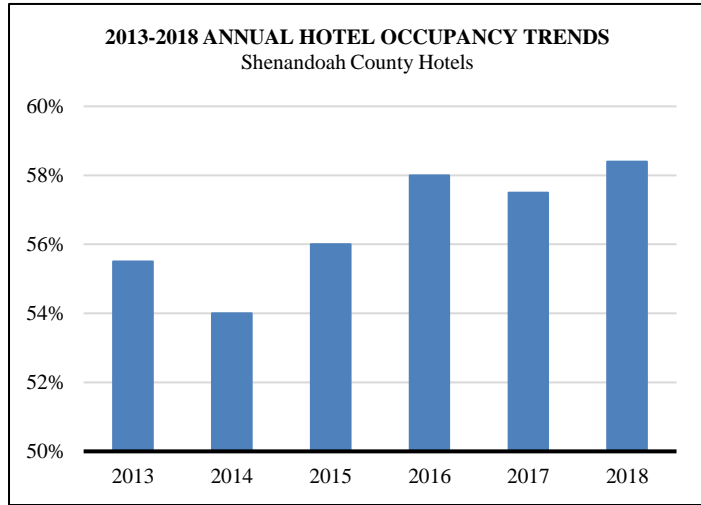
The occupancy rate has been on the rise, indicating improving hotel market performance. The hotel occupancy rate in Shenandoah County has been steadily increasing between 2013 and 2018. It rose from the lowest point in 2014 at 54% to over 58% in 2018 (Figure 4-6). The data indicate that the traditional hotel market in Shenandoah County has been improving over the past five years as more visitors choose to stay in the County overnight. While this corroborates the tourism data showing spending in the County has been increasing over the past decade, a 58% occupancy rate is below the traditional investment threshold of 65% to 70% typically sought by new hotel developers. It should be noted, that with the rise of rental home websites such as Airbnb and VRBO, hotel occupancy rates in the area have been impacted.

In addition, RKG Associates analyzed trends in Revenue per available room, or RevPAR. RevPAR is a measure of operating efficiency that compares occupancy and ADR. In short, RevPAR multiplies the ADR by occupancy to get the result. RevPAR is a better indicator of market health than occupancy and ADR alone because it tracks the impacts of changing room rates on market demand. Hotels in Shenandoah County have experienced an increase in both average daily rate and RevPAR. RevPAR increased from \$42.35 in 2013 to \$54.29 in 2018 (Figure 4-7). The growth in RevPAR further proves the positive economic growth in the County's tourism market.

3. Market Characteristics

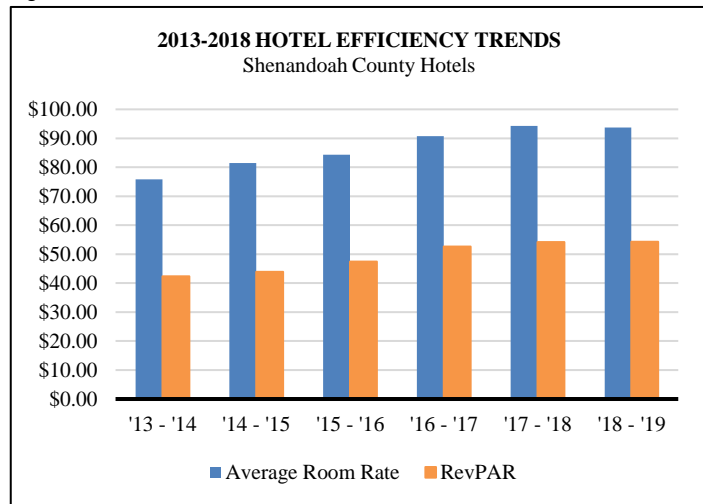
Part of the reason that occupancy rates have remained below 60% is that Shenandoah County appears to be a 'two-season' market. STR occupancy rate by month between 2013 and 2018 indicate that

Figure 4-6



Source: Colliers International, CoStar Group and RKG Associates, Inc., 2019

Figure 4-7



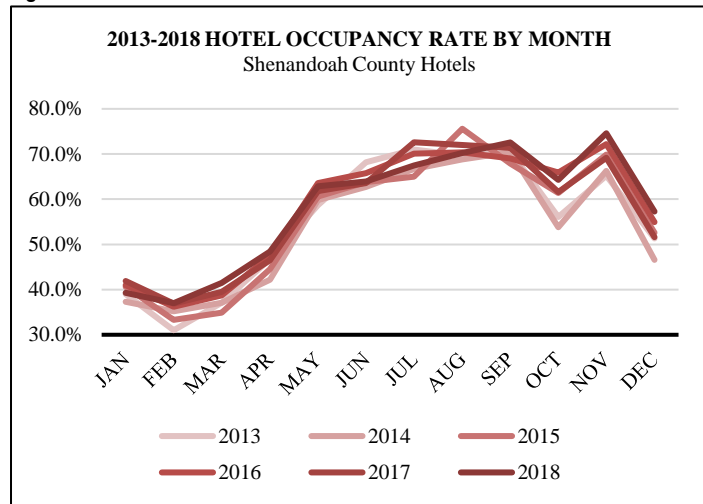
Source: Colliers International, CoStar Group and RKG Associates, Inc., 2019



occupancy rates escalate in March and reaches a peak during the summer months of June, July and August. It then slides down before reaching another peak during the fall in November (Figure 4-8). This suggests that the hotel market in Shenandoah County generally depends on the demand during the summer and the fall, as the natural scenery (e.g. Shenandoah National Park) and related activities during these two seasons in the County are most attractive to tourists.

Anecdotally, RKG learned that much of Bryce Resort’s seasonal demand is captured by the weekly condominium rental market that has been built around the resort. These individually-owned units accommodate week-long and overnight demand during the spring and summer for those seeking to enjoy the County’s natural beauty and during the winter season as the Resort attracts skiers and other winter enthusiasts. These transaction are not captured in the STR Data.

Figure 4-8



Source: Colliers International, CoStar Group and RKG Associates, Inc., 2019

4. Implications

The Shenandoah County hotel marketplace offers opportunities for the County’s continued tourism and economic development efforts. Though the hotel occupancy rate has been improving over the past five years as noted, the average occupancy remains under 60%. This indicates there are opportunities to partner with hoteliers, particularly in the low-occupancy months, to expand the County’s tourism events and partnerships. That said, the 58% occupancy level is below the level typically found in more sought-after hotel markets. Further, the growth in RevPAR indicates profitability of the hotel market in the County has been improving, although not to support additional new hotel developments in the short term. Further development of the County’s tourism and business operations (through economic development efforts) will be necessary to attract further larger-scale accommodations.

It is important to note that the market performance data does not include new accommodation types such as Airbnb units. These units operate outside the ‘traditional’ data collection methods like those used by STR. To this point, the current regulatory environment makes it challenging for the County to truly track the impact these individual properties are having on the marketplace. That said, any increase in supply will consume a portion of market demand. Thus, impacting investment decisions for new larger-scale accommodation venues.

H. OFFICE MARKET CLIMATE

As the office market in Shenandoah County is limited with very few existing and new developments, the analysts relied on active sales and leasing data retrieved from online listing sources including LoopNet and CoStar Group to analyze the trends of the supply and demand in these two sectors. The sections below detail RKG’s analysis results by sector.

Active office listings for lease are scant, and there has been no new office development recently. According to the data from LoopNet and CoStar Group, currently there are only two office properties that are actively listed for lease, and both of them were built in the 2000s. One property is a storefront retail/office building with 14,400 gross leasable square footage, and the other is a Class B medical



building with 28,800 gross leasable square footage (Table 4-6). The County’s property assessment data indicate less than 10,000 square feet of office space has been delivered Countywide since 2007. This indicates that the office leasing and development market in the County is stable, but with very low activity. It is also worth noting that there is additional office space found in non-traditional buildings such as converted homes on Main Street that are often listed for sale or lease by owner.

Anecdotally, local real estate professionals have indicated that the office market typically has been for locally-serving uses (i.e. tax accountants, financial advisors...). It was reported that these businesses typically have occupied traditional retail space in existing strip centers or been established as home-based businesses. Some have created live-work opportunities in the downtown areas of the Towns. However, these are reported to be less common.

Table 4-6
Active Office Market Supply Listings (Leasing)
Shenandoah County, VA (2019)

	Property 1	Property 2
OFFICE PROPERTY FOR LEASE		
Address	100 Founders Way	105 Stony Pointe Way
Area	Strasburg	Strasburg
Rental Rate	\$8.00/SF/YR	\$7.00 - \$37.50/SF/Yr
Property Type	Retail	Office
Property Sub-type	Store Front Retail/Office	Medical (Building Class B)
Gross Leasable Area SF	14,400	28,800 (4.08 AC)
Year Built	2008	2004

Source: LoopNet, CoStar Group and RKG Associates, Inc., 2019

Any office development most likely will be build-to-suit for a specific end user, and more than likely smaller space. From an economic development perspective, the County’s strongest potential for new office use would be working with the Towns to strengthen their regulations and incentives to promote further live-work opportunities in traditional houses located in their respective downtowns. Further, it demonstrates that any office-based economic development recruitment should focus on small (under 20) employees, as there is little available in the market and speculative development is infeasible.



5 AGRICULTURE ANALYSIS

A. INTRODUCTION

Shenandoah County has long-standing tradition of being an agriculture-focused community. The land use patterns reflect this tradition, with 39% of all land in the County dedicated to farm operations. In 2017, the County ranked as the fifth largest agricultural producing county in Virginia, totaling \$142 million in market value of products sold. RKG analyzed the U.S. Census of Agriculture data from 2002 to 2017 both at the state and county level to provide insight into Shenandoah County's agricultural sector. This section will look at farm size and types, sales trends, and operational trends that have happened in the study period in Shenandoah County. Additionally, RKG has performed a SWOT (Strength, Weakness, Opportunities, and Threats) Analysis regarding the agriculture economy within the County.

B. MAJOR FINDINGS

Shenandoah County has seen a substantial growth in small farms and a slight increase in larger farms. Farmers under 10 acres saw a 135% increase in the past 15 years. This growth comes from a growing trend of retirees purchasing agricultural land to build estate homes and the subdivision of farms as they are passed down to children. This trend has been met with opposition from some portions of the farming community, seeking to preserve agricultural land. However, others within the farming community want to preserve this option, enjoying the higher land valuation that estate development provides when they chose to stop farming. Also, there are more farms that are 500 acres or larger in year 2017 than existed in 2002. Presumably some mid-size farmers left farming and leased or sold their land to larger farmers.

Poultry is the primary agriculture industry in Shenandoah, and it is growing stronger. According to the 2017 Census for Agriculture data, 81.3% of all animal sales from Shenandoah County are poultry-related. Poultry (including eggs) revenue has increased by 117% since 2002. There has been a noteworthy increase in the number of small scale (or small farm) layer and broiler operations since 2002. The number of layer operations has grown from 28 in year 2002 to 124 in year 2012. All these operations are small farm operations with inventory of less than 400 head. There are an additional 22 small scale farmers selling broilers, with a slight increase in the number of larger scale broiler producers (and resulting number of broilers sold) and a slight decrease in the number of larger scale turkey producers. This coincides consumer consumption shifting towards low fat proteins over the past twenty years. Industry research indicate the growth in chicken consumption will continue into the near future.

Acreage dedicated to Corn and Soybean production has steadily increased in the County. A portion of the increase in corn acreage is due to farmers shifting from hay to corn due to better profitability of corn production. The loss of land in apple orchards (from 2,497 acres in 2002 to 998 acres in 2017) due to poor profitability of orchard production also contributed to this increase. New federal regulations encouraging corn production for energy usages also may have played a role in this transition.

Shenandoah County farmers have invested heavily in machinery since 2002. The agricultural community invested heavily in machinery, increasing total value of machinery in the County by \$62.5



million between 2002 and 2017. This increase is disproportional to machinery investment statewide. The increase in machinery use likely has contributed to the corresponding increase in sales yield.

Agritourism has continued to grow as an economic engine for Shenandoah County. The Census data indicate that agritourism revenues have increased approximately 1,000% since 2002. Much of this increase results from the County's growth in fermented and distilled beverage manufacturing. However, other farmers are seeking ways to increase revenues through direct marketing and creating recreational experiences on their farms to take advantage of consumers being willing to travel and spend for experienced based agricultural retail offerings (i.e. pick-your-own). The County should continue to develop and assist these types of ventures.

Other noteworthy changes in Agriculture since 2002:

- Goat production has increased in Shenandoah County. The expanding ethnic population in the region has improved the market for goats. As a result, there has been an increase in goat production.
- The number of bee producers has increased, with most of these are small-scale producers.
- The number of vineyards, wineries and acreage under grape production has grown substantially.

C. METHODOLOGY

The agricultural study for the Strategic Economic Development Plan Update includes an analysis of the land use, sales trends, and operational trends. The agricultural data came from the United States Agricultural Census. This analysis included the Agricultural Census for 2002, 2007, 2012, and 2017. Also, this analysis used the Virginia Agricultural Statistics 2017 Annual Bulletin, which is compiled by the United States Department of Agriculture's Virginia Field Office. Additionally, RKG utilized reports from IBISWorld market intelligence reports from all the major agricultural sectors within the County.

D. LAND USE ANALYSIS

1. Farmland Use

The total amount of farmland is an important indicator of where the agricultural industry is trending in a market. The State of Virginia saw a loss of both total farms and total farms acres over the past 15 years, whereas Shenandoah County experienced slightly less loss of both values. Between 2002 and 2017, the State of Virginia saw the total number of farms dropped by 9.2% (or 4,381 farms). Shenandoah County saw its farm count decline by 2.4%, or 24 farms. The Agriculture Census indicates there are 965 farms in Shenandoah County. Overall, acres dedicated to agriculture throughout the state declined 9.6%, or 826,850 acres. The implementation of the ag/forestral district within Shenandoah County have helped the county only experience a 1.8% loss, or 2,373 acres in agriculture land. All farms over ten acres, saw a decrease in the total amount of operations over the past five years. Shenandoah did not experience such a significant drop in acres compared to the state.

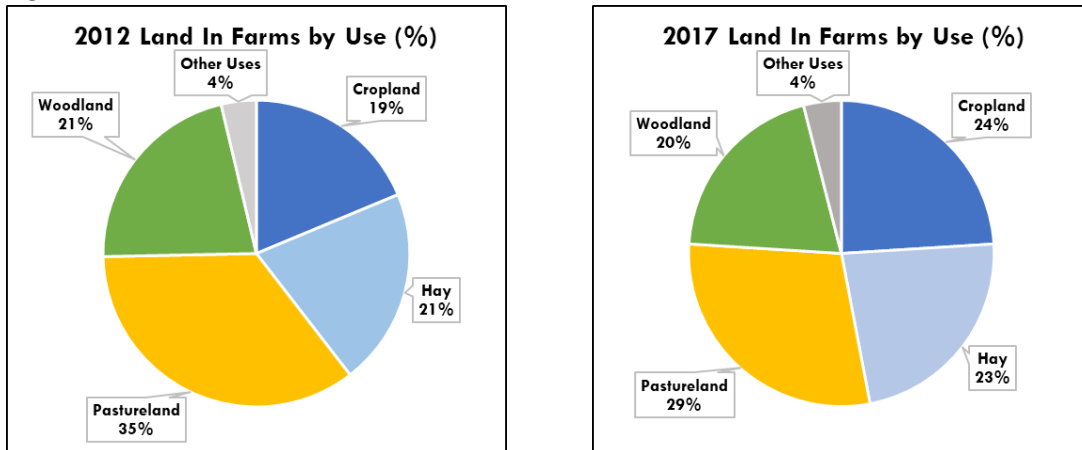
Poultry farming saw an increase from 95 farms in 2002 to 180 in 2017. Much of this growth has come from poultry farms with up to 400 total heads. This shift reflects the significantly lower cost for both consumers and producers of poultry compared to other direct protein competitors. The poultry industry has benefited from Americans changing their eating habits to more health-conscious protein choices.

Farms under ten acres saw a 135% increase over the study period, now totaling 139 farms. Local real estate professionals indicated this growth in small farms is the result of retired farmers (or their heirs) breaking their farms into smaller tracts to be sold as estate homes. Market data indicate there is steady



demand from Baby Boomers seeking to purchase a picturesque lot to build a large estate home within close-proximity to I-66 and the Washington DC market. RKG learned that these estate developments are owned by retirees or near-retirees that build their home on the lot and lease the rest of their property to active farmers.

Figures 5-1 and 5-2



Source: U.S.Census of Agriculture and RKG Associates, Inc., 2019

2. Agriculture Land Use

Within Shenandoah County agricultural land is split into four main groups. As shown in Figures 5-1 and 5-2, pasture and hay land constitute the highest percentage of agricultural land within the County. Between 2002 and 2017, Shenandoah County saw an 52.2% rise in land used for Agronomic Crops, while at the same time pastureland and land in orchards decreased. This type of land use now accounts for 15% of total farmland. This shift towards cropland follows the growing trend of farmers selling their land to residential developments. As cattle rearing is not financially viable on smaller plots of land and non-farmers do not want poultry houses near their homes, the non-residential portions of these former farms are more likely being used for small-scale goat/horse rearing and crop production.

3. Pastureland Use

As mentioned previously, as total pastureland has fallen over the study period. Between 2002 and 2017, Shenandoah County lost approximately 7,000 acres in pasture. Based on other agricultural trends, some of this acreage went into cropland, some of it was converted for residential use, and some of it probably is sitting fallow or is back in timber.

That said, those lands continued being used for pasture has experienced some transition. Poultry farming has continued to dominate pastureland use in Shenandoah County. Poultry is a large piece of the entire Virginia economy, making up 3% of all poultry production in the country. Over the past 15 years, Shenandoah County experienced an 89.5% increase in poultry farms totaling 180 farms. In addition, other pasture uses have increased including horses and goats.

Conversely, cattle pasture land experienced a 22.9% decrease in total acres over the study period, with the number of head of cattle in Shenandoah County declining by approximately 3,000 between 2002 and 2017. At a base level, the economics of cattle ranching has become less profitable versus other pasture uses (particularly poultry). Furthermore, the recent trends of farms being subdivided into



estate home developments (at 10-20 acres per lot) makes cattle ranching on those sites infeasible due to their smaller size. This transition is not just locally-driven, as this decline also follows a two-decade trend in lower beef consumption in this United States. This 20-year consumption decline has been largely attributed to medical studies suggesting a link between red meat consumption and heart disease and cancer. Furthermore, heavy levels of volatility in cattle pricing markets have led some farmers to leave the industry.

The County does have many incentive programs to encourage growth in pastureland related operations. These incentives include conservation districts and easements. These policies help restrict non-agricultural development while at the same time provide tax

benefits to landowners. Additionally, Shenandoah County does not charge a tax on farm related machinery, which encourages farmers to invest in their operations. Also, the Ag Extension Program provides farmers with local experts to help them with any issues or questions they have.

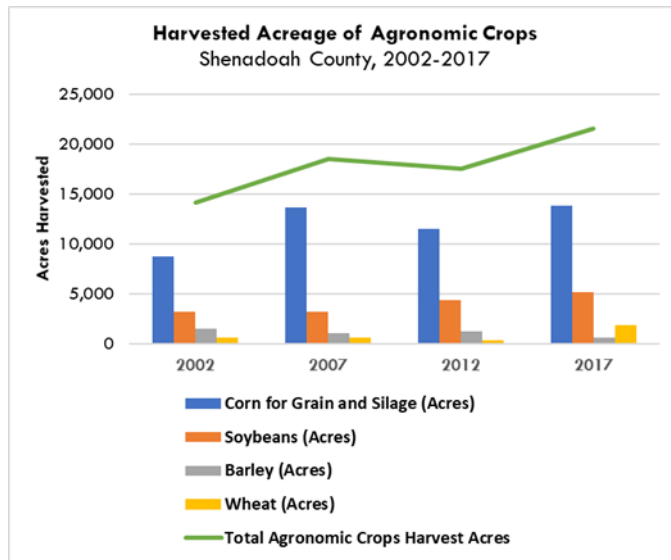
Shenandoah County does have many opportunities and options to continue to encourage growth in its pasture related industries. The County should look at restricting the allowable uses of current agricultural land to slow the trend of farmland converting to residential land. Additionally, Shenandoah County could encourage landowners to join its Conservation Easement Program by providing financial incentives to make up for the market value loss of joining the program. Also, Shenandoah should encourage Value-Added processing production facilities to locate within the county. These production facilities would allow for additional jobs and investment to occur within the County. Lastly, Shenandoah County should expand its agricultural entrepreneurship programming to further assist young farmers starting their farming careers.

4. Cropland Use

While cropland has grown in land use over this decade, it has seen a 15.7% drop in total farms over the study period. As previously mentioned, this decline in total farms reflects the growing trend of estate developments leasing portions of their newly acquired land to existing farmers. This has created a consolidation environment where Shenandoah has less crop farmers operating a larger total amount of acres. These leased plots are typically smaller in land size, making them more suitable for crop production.

As shown in Figure 5-3, Corn (for both grain and silage) saw its total acreage harvested increase from 9,452 in 2002 to 13,166 in 2017. This is part of a national trend of corn being used for biofuel uses due to new federal regulations. Because of these regulations, 44.8% of all corn produced is now used in biofuel production. Also, wheat saw its acreage increased substantially in this period, while total wheat amount of wheat operators dropped from 26 to 21. This increase in wheat acreage is almost exclusively due to increased interest in using wheat as a feed in turkey feed.

Figure 5-3



Source: U.S. Census of Agriculture and RKG Associates, Inc., 2019



Conversely, barley experienced significant declines in total acreage used between 2002 and 2017. Even with these declines in barley acres used, Shenandoah County still ranks as the second largest producer of barley in the state. With the rise of breweries and distilleries within the County, this could become a potential opportunity to increase barley production.

5. Agricultural Sales Trends

Agricultural sales data helps explain what products are growing in production and value compared to others. The total agricultural sales for both the state and the county increased over the past 15 years by 68% and 105%, respectively. This increase for both the state and county is attributed to growth in crop and animal sales. Shenandoah County in 2017 accounted for \$142 million in agricultural sales, which made up 4% of all Virginia agricultural sales. Within the County, livestock and poultry attribute to 86% of all sales.

6. Crop Sales

While cropland farms have decreased, many crops have seen their production levels increase in during the study period. Within the County, total crop sales have increased by 215.2% or \$13.8 million over the past 15 years. With crop sales now totaling \$20 million per year, this significant growth has come from Corn, Fruit & Nuts, and Field Crops. These three categories make up 78% of all sales within the county.

As mentioned above, Corn production nationally has grown due to many factors, including federal regulations that encouraged corn production for ethanol usages. Nationally, after five years of declining revenues due to falling prices, corn has experienced increased revenues as corn prices have stabilized. Within the County, Corn sales have increased by 34% over the study period.

Over the past ten years, Fruits and Nuts sales in Shenandoah County have ranked in the top five within the state of Virginia. Sales data for fruits and nuts products show that a 22% increase over the study period, totaling \$4.4 million in sales in 2017. These numbers were supported by the Andros Foods NA expansion within the County, which sources Virginia grown products.

Field and Grass crops which in Shenandoah County is mainly hay, experienced an increase of 21.9% in sales over the study period. In 2017, Shenandoah County's hay sales were \$4.4 million making it the sixth-largest producing county in Virginia.

7. Poultry Sales

Both the State and Shenandoah County animals' sales, increased within the study period increasing by 94% and 58%, respectively. As Shenandoah County is heavily invested in poultry, 81.3% of all animal sales are poultry-related. Poultry farming has continued to grow within the County, increasing net revenues by 94% within the study period. As mentioned previously, this growth follows the national trend of more consumption of poultry over the past 15 years. Unsurprisingly, some of the largest employers in the County is a poultry company.

8. Cattle Sales

Though Cattle sales make up a smaller portion of overall animal sales, they experienced a dramatic 117% increase. Cattle farmers did this while at the same time seeing their total amount of cattle farms decrease by 23%. This shift can be explained by the rise of large 200+ head farms within the county. These bigger farms have increased by 59%, while smaller farms (less than 200 head) have declined by 27%.



E. OPERATIONAL TRENDS

Understanding the operational trends that farmers are experiencing within a market give insight into the current conditions within that industry. These operational conditions direct effect the profitability of farms.

1. Labor

Since 2002, Shenandoah County has seen a decrease in total farms, but experienced a 5.3% increase in the amount of hired workers on farms. This bucks the state trend, which has seen a 17.4% decrease in hired workers. Additionally, labor costs in the past 15 years have increased by 160.9% within the county. These labor costs are significantly higher than the state averages, which could reflect potential shortages of qualified labor in the County. Also, during the study period, the average age of farmers within the County increased from 57.2 to 60 years old. In 2017, Shenandoah had 547 farmers over the age of 65. The increased hiring and labor costs coupled with the aging farming population, reflects older farmers paying outside labor to manage portions of their farms.

2. Machinery

During this same period, farmers invested in their operations by increasing the value of their machinery inventory by 184% or adding \$62.5 million. It should be noted, that agricultural machinery is not taxed in Shenandoah County. This encourages farmers to invest in their farms and provides them the ability to see a faster return on their investments, compared to their peers in other areas.

3. AgriTourism

Also, Shenandoah County began to diversify its agricultural industry by investing in sectors like agriculture tourism. Between 2002 and 2017, the County added 10 “ag tourism” operations according to the Census. This number does not reflect all the growth within this industry, as many farms have continued their farming operations while adding tourism components to their farms. Additionally, between these years cash receipts for Agritourism operations increased from \$9,000 to \$1,009,000. Currently, the County boasts 5 breweries, 9 vineyards and 1 distillery that people from all over the region frequently travel too. Additionally, tourists can now enjoy the “Shenandoah Spirits Trail”. This tour showcases the venues listed above along with the other vineyards, breweries, cideries and distilleries within the entire Northern Shenandoah Valley.

F. SWOT ANALYSIS

1. Strengths

Shenandoah County has many strengths that benefit the agriculture industry.

- Community Support – The County has always had a commitment to the agricultural community. This tradition of agricultural success has created a desire to maintain the agricultural industry as a key part of the county’s economic future. Additionally, because of this long-standing commitment to the farming industry, pro-agriculture policies and programs have been championed by the County’s leadership.
- Existing Pro-Agriculture Policies– As discussed in a previous section, another strength is the already existing pro-agriculture policies that have been established. Programs like the ag/forestall district and conservation easement program protect open lands and protect key



- natural resources. The conservation easement program gives landowners can reap significant income tax and estate tax benefits by donating an easement.
- No Taxes on Machinery– As stated above, another pro-growth policy within the County is the zero-tax rate on farm machinery. This policy encourages the expansion of farm operations while making it more financially feasible to operate a farm in this county.
 - Relationship with School Districts– Additionally, the County has worked with the school districts to have agricultural-related education programs. These programs allow for much-needed workforce training opportunities. Furthermore, the agricultural community has established a local agricultural purchasing program for school lunches and events. This program is advantageous to farmers as the school districts provide them with a buyer that is large, established, and local.
 - Agriculture Extension Program – As cited previously, Shenandoah County farmers are part of the State of Virginia’s Agriculture Extension Program. This program provides farmers with local experts in many different parts of the agricultural industry. Individuals involved in this program have mentioned that the program is filled with passionate and proactive members.

2. Weaknesses

The County does have weaknesses it can work to improve on to provide a more business-friendly environment.

- Messaging – One weakness is the disjointed messaging from the agriculture community in terms of future land use. Segments of the agricultural community do not want to see the continued trend of farmland being purchased and changed into residential development. While farmers are upset about this trend, other farmers demand that property rights and zoning do not change so they can maintain their ability to sell their land to any buyer upon retirement. This trend creates a divide between farmers which makes it hard to both build consensus and plan for the future.
- Lack of Direction – Another flaw is the unclear direction and messaging from the Shenandoah County government to the agricultural community. The County has often developed strategies that are reactive instead of proactive to the needs of the agricultural industry. This unclear strategy allows for rumors and fear to spread throughout the County. The SEDP provides some structure and long-term planning recommendations to the economic development vision for the County.
- Lack of Staffing – The agriculture community has expressed their frustration with the lack of staffing in support agencies that work directly with their industry. Not staffing enough people in both economic development and Agriculture Extension roles has slowed down potential progress and development within the County.

3. Opportunities

Shenandoah County has many potential opportunities to expand its agriculture industry.

- Redefining Allowable Uses on Agricultural Land – As mentioned before, one potential opportunity is to change the allowable uses on agricultural land. On one hand, allowing ag-based manufacturing (i.e. greenhouses) could increase yield (and value) on agriculturally zoned land with compatible uses. On the other hand, removing residential uses (or expanding the minimum acres per unit) would reduce the pressure to convert for residential use and reduce the erosion



- of agricultural land for estate development. It should be noted that this restricting acceptable uses on farm land could adversely impact immediate land value within the County.
- Value-Add Facilities – As discussed previously, the County should explore and diversify its value-add production facility offerings to expand its economic base. These facilities could include livestock (beef, goat, sheep swine) processing, milk (cheese, yogurt, ice cream, fluid milk), vegetable/fruit processing, commercial kitchens, and timber mills. These value-add facilities would provide investment and jobs into the County.
 - Agritourism – As consumers have continued to put importance on experienced-based retail offering, agritourism has become a significant part of any agricultural community. Shenandoah County should continue to develop this type of tourism through promoting beverage manufacturing, seasonal attractions, and on-site hospitality.
 - Financial Incentives to Conservation Easements – As mentioned above, the County could increase the financial incentives for conservation up to the loss from market value allowing for farmers to maximize the value of their land through preservation. However, it would have financial impacts on the County, in terms of further reduced revenues and direct costs.
 - Business Assistance – As discussed in a previous section, Shenandoah should expand its business assistance offerings to allow to attract new business development within the County. This could include an entrepreneurship development program to help new agriculture entrepreneurs start their own businesses. Programs like these will become increasingly important as the average age of farmers within the County continues to rise.

4. Threats

Any industry or community has threats that it must address to maintain its competitiveness and to plan for the future.

- Current Zoning – One threat that is the agriculture community of Shenandoah County has to face is the current zoning allowing estate development in agricultural areas. As retired farmers are receiving superior offers from estate developers than neighboring farmers, this has caused farmland acreage to decrease.
- Taxation – The Census data indicate that the farming community within Shenandoah County has made substantial staffing and capital investments over the past 15 years to remain competitive and increase the viability of these respective farms. Any abrupt changes in how the County taxes these businesses could have an unintended, but substantial, impact to the agriculture industry.
- Tax Base – As the County has not been proactive in its efforts to increase its tax base, it could find itself unable to provide the same level of services needed to stay competitive.
- Inputs and Regulations – The agriculture industry is highly dependent on many inputs to maintain profitability and competitiveness. These inputs include the price of oil, feed, and other key inputs. Also, additional state or federal regulations and tariffs could dramatically affect Shenandoah farmers.



6 SITE ASSESSMENT

A. INTRODUCTION

While opportunities for meaningful economic development exist in every corner of Shenandoah County, some high-potential properties stand to play a larger role in the county's economic growth than others. Proximity to highways and major roads, appropriate zoning, accessible infrastructure, and a property's size and scale are just a few of the factors that can make one parcel more potentially catalytic than another. Identifying these important, high-potential properties can play a key role in directing the County's limited economic development resources to the places where they can have the largest positive effect.

This chapter presents the results of an analysis of every Shenandoah County parcel's economic development potential, based upon a number of variables. In addition to hard factors like a given parcel's distance from highways and its access to water, sewer, and other infrastructure, the analysis accounts for certain owners' stated interest in developing their respective properties, according to County staff and local real estate professionals.

B. METHODOLOGY

Staff conducted a review of Shenandoah County's parcels within ESRI ArcGIS, a geospatial analysis software, coupled with assessment data from the County's Commissioner of Revenue. Each parcel was evaluated against five criteria: its zoning, size, proximity to major highways, access to water and sewer, and County knowledge of its owner's willingness to engage in economic development activity. This last criterion is not comprehensive of *all* of the county's properties; many property owners would surely welcome development opportunities, despite not having engaged County officials to express an interest. Still, local knowledge of key parcels with interested and involved owners helped to identify those parcels about which conversations are already underway.

Each property was assigned a point value between zero and five points for each of the five criteria (with opportunities for bonus points), summing to a total score of up to 28 points. Those with scores over 20 are considered to be the county's most development-ready, high-potential sites (Map 6-1 and Section C of this chapter).

Zoning

While residential and other land uses have an important role to play in a community's economic development, this analysis awards points to parcels that are currently zoned for commercial or industrial development. Parcels that do not require rezoning or use variances are less likely to face the uncertainty and delays that often accompany these processes. These factors can increase development costs and deter investment. Parcel scores for zoning were awarded on a binary basis, with those zoned for commercial and industrial uses receiving five points, and those zoned for other uses receiving zero.

Parcel Size

A property's size is a key factor in any development proposal's financial feasibility. Small acreage sites can be difficult to develop, especially in areas with low-density zoning. In line with the County's stated goals for economic growth and job creation, this analysis awards two points



to any parcel greater than one acre, and five points to those larger than five acres. Parcels smaller than one acre, while still able to play a role in Shenandoah County's economic development, are not awarded any points due to the low likelihood of supporting large-scale, catalytic development. It should be noted that the Commonwealth has placed an emphasis on developing sites over 25 acres. For this reason, state funding will only be available to develop sites over 25 acres in size.

Proximity to Major Highways

Given the rural nature of much of Shenandoah County, proximity to the area's two major highways is a major determinant of a parcel's economic potential. Interstate 81 and the adjacent Route 11 are the county's main arterials for the delivery of goods and materials. Easy access to these critical pieces of infrastructure is likely among the first qualifications a prospective firm would check when evaluating parcels in Shenandoah County. Parcels within one mile of either Route 11 or I-81 received five points in this analysis, with an additional five points awarded to the most immediately adjacent parcels, located within a quarter mile.

Access to Water and Sewer Services

Parcels located within one of Shenandoah County's towns or within the Maurertown-Toms Brook Sanitary District have an inherent advantage in that they are provided with sewer and water infrastructure by the towns themselves. Properties in unincorporated sections of the county must arrange for their own water and sewer treatment services on site. To account for this advantage, parcels located within a municipality were awarded three points.

Ownership

Conversations with County staff and local real estate professionals revealed a number of parcels that had either been involved in active discussions regarding economic development opportunities, or that had been identified by staff as likely candidates for future development. This criterion also accounted for sites that feature multiple parcels owned by the same owner, which can ease the development process and add to the potential scale (and therefore financial feasibility) of certain prospective projects.

The awarding of points to account for this local knowledge ranged from zero to five, with scores of five reflecting those sites that County staff helped identify as the most likely to host catalytic economic development.

After identifying a number of high-potential properties, analysis of the existing conditions on each parcel was used to determine the very best, "Primary" and "Secondary" opportunity sites. Vacancies, existing structures, geographic and topographical encumbrances, and other factors were examined to filter out those parcels least likely to host new development. While the selected Primary sites meet most if not all relevant criteria, the Secondary sites may require additional steps to become development-ready.

Some of these sites may qualify for State incentives, including The Commonwealth's Development Opportunity Fund, The Economic Development Access (EDA) program, Commercial and Industrial Sales and Use Tax Exemptions, the Major Business Facility Job Tax Credit, and The Virginia Jobs Investment Program (VJIP). These programs may help to reduce development costs for prospective investors and should be considered as part of any more detailed feasibility studies. However, it should also be noted that many of these programs are based on job creation, wages and total investment in order to qualify.

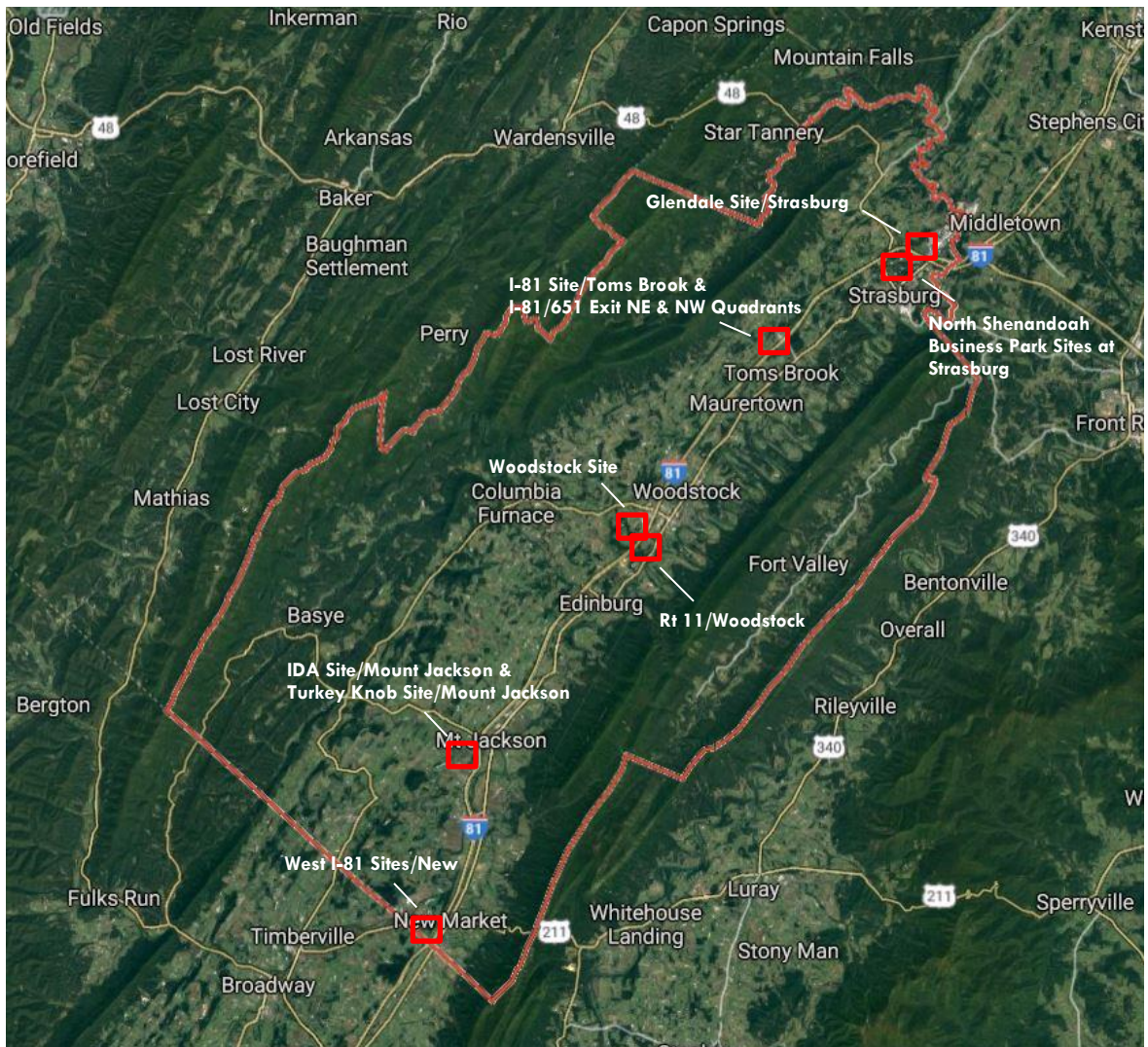


C. OPPORTUNITY SITES

1. Primary Opportunity Sites

Five sites have been identified as the Shenandoah County's Primary Opportunity Sites. Each received high suitability scores, driven in part by their existing commercial or industrial zoning and ownership groups that have expressed interest in exploring development options. These may be considered the county's "lowest-hanging fruit" for site selection opportunities related to economic development and job creation (Map 6-1).

Map 6-1 – Primary Opportunity Sites



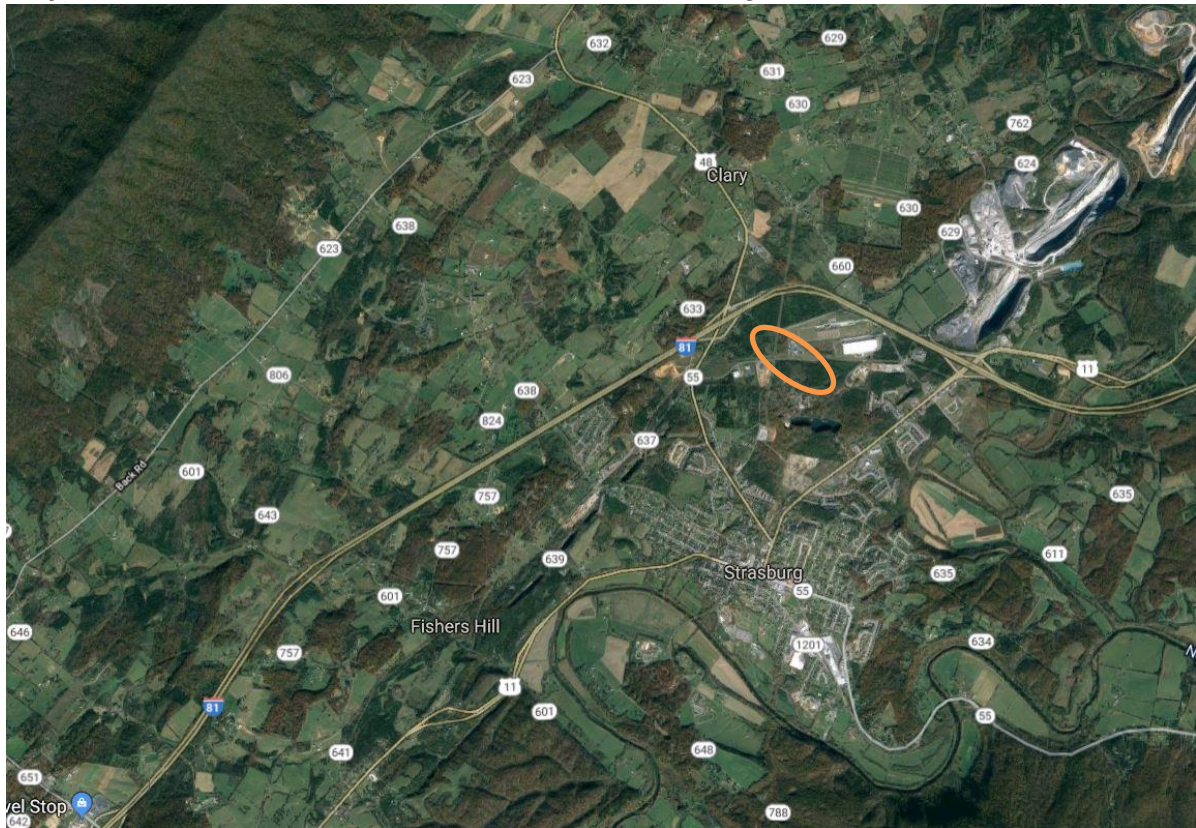
Source: RKG Associates, Inc., 2019



1.1 North Shenandoah Business Park Sites at Strasburg

Three vacant parcels owned by The Shenandoah County Industrial Development Authority (IDA) along Borden Mowery Drive in the North Shenandoah Business Park (NSBP) are certified by the Virginia Economic Development Partnership's (VEDP) Virginia Business Ready Sites Program as Tier 3 sites, the highest in the County. They enjoy direct access to State Route 55 and proximity to I-81 (Map 6-2). In addition to appropriate zoning and access to water and sewer services, the public ownership of these parcels can help facilitate and accelerate the development preparation process. The location of these parcels which have a combined size of over 40 acres within the business park also benefits potential developments in terms of marketing and branding (Map 6-3). In addition to the sites owned by the IDA, there are several privately owned sites which should be considered in the overall development of the NSBP sites.

Map 6-2 - North Shenandoah Business Park Sites at Strasburg Aerial

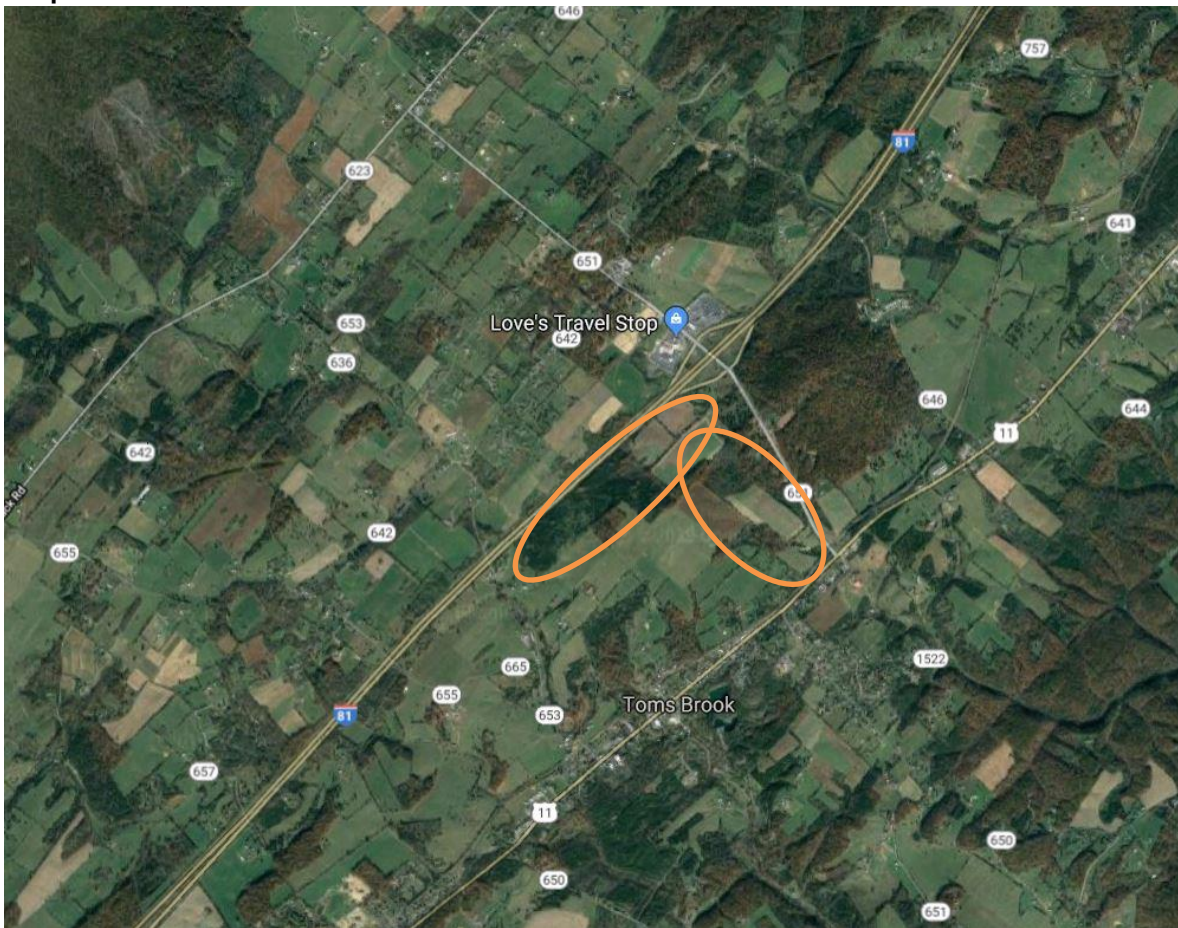


Source: Google Maps & RKG Associates, Inc., 2019

1.2 I-81 at Toms Brook: Southeast Quadrant

A collection of several high-score parcels is located adjacent to I-81 at the Route 651/Mt. Olive Road exit near the Town of Toms Brook (Map 6-4). Under the ownership of one individual, six undeveloped parcels (Map 6-5) are considered as one contiguous Primary Opportunity Site. Each is currently being marketed for industrial uses, and together they have a combined size of around 230 acres. The owner, 7K Investments LLC, has reportedly expressed interest in developing the property, which enjoys frontage on Mount Olive Road and extends roughly a mile south, nearly to Brook Creek Road and southeast to Route 11.

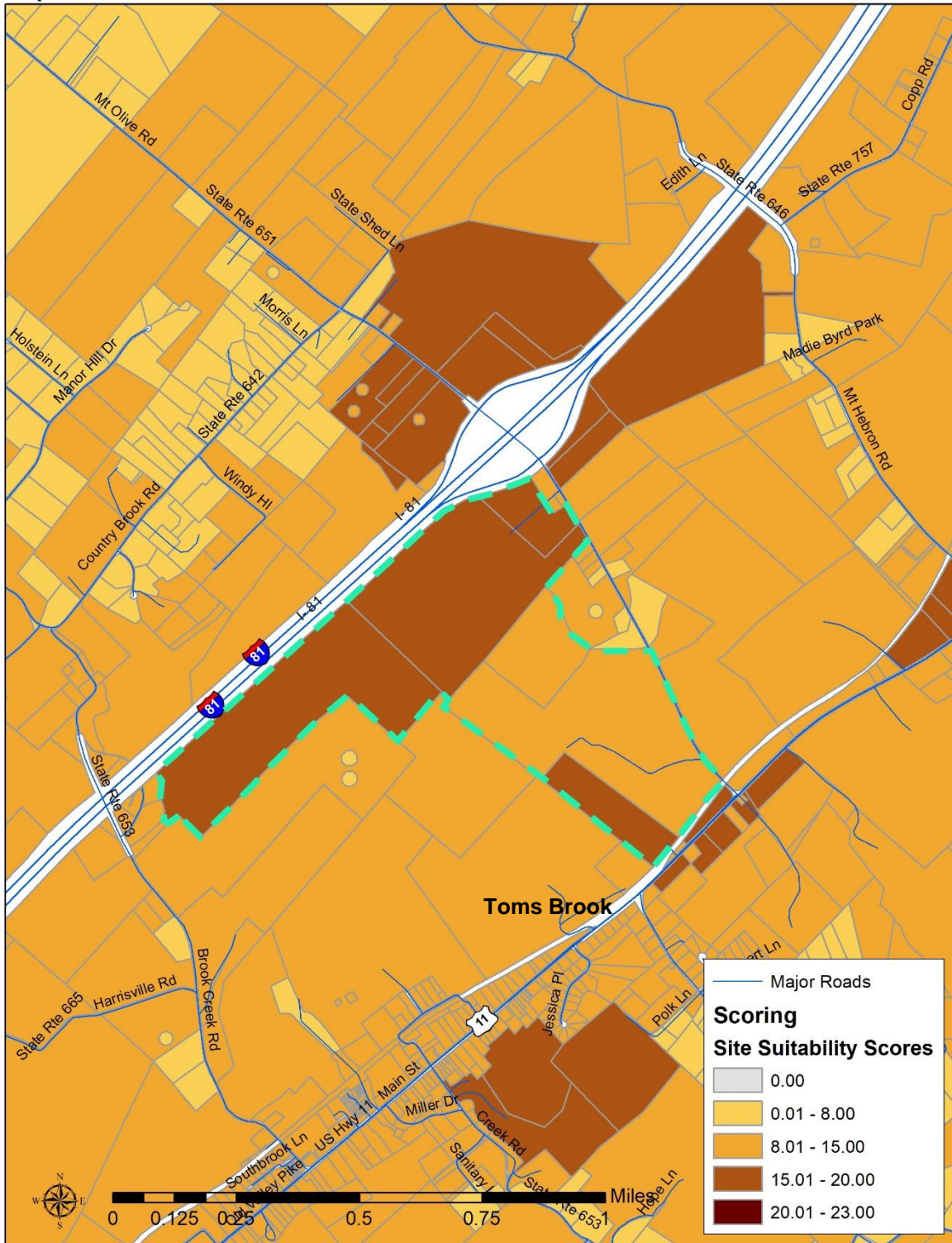
Map 6-4 – I-81 Toms Brook Site Aerial



Source: Google Maps & RKG Associates, Inc., 2019



Map 6-5 – I-81 Toms Brook Site Parcels

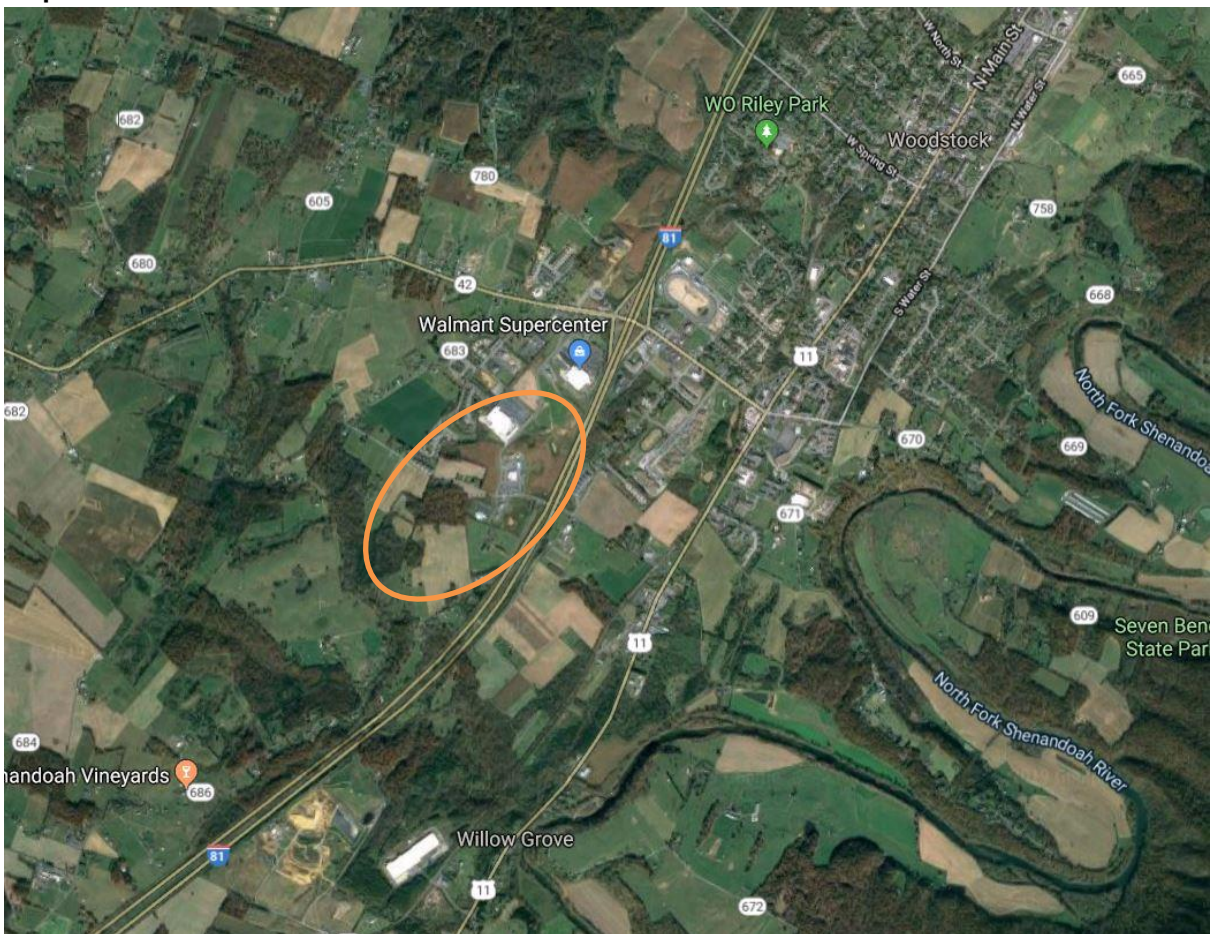




1.3 Woodstock Henry Ford Drive Site

Woodstock, the County seat, is one of Shenandoah County's more developed towns, and is home to many established businesses. However, large, undeveloped parcels still exist in highly-connected spaces near the town's population center. Four contiguous commercial parcels on Henry Ford Drive are identified as a Primary Opportunity Site (Map 6-7). Owned by Interstate Investment Property LLC, the parcels are completely undeveloped, zoned for commercial use, and received bonus points for being located within a quarter mile of the I-81 Woodstock exit at Reservoir Road (Exit 283). Water and sewer services are provided by the Town of Woodstock. The site is directly adjacent to a Walmart Supercenter and a Lowe's Home Improvement big box outlet.

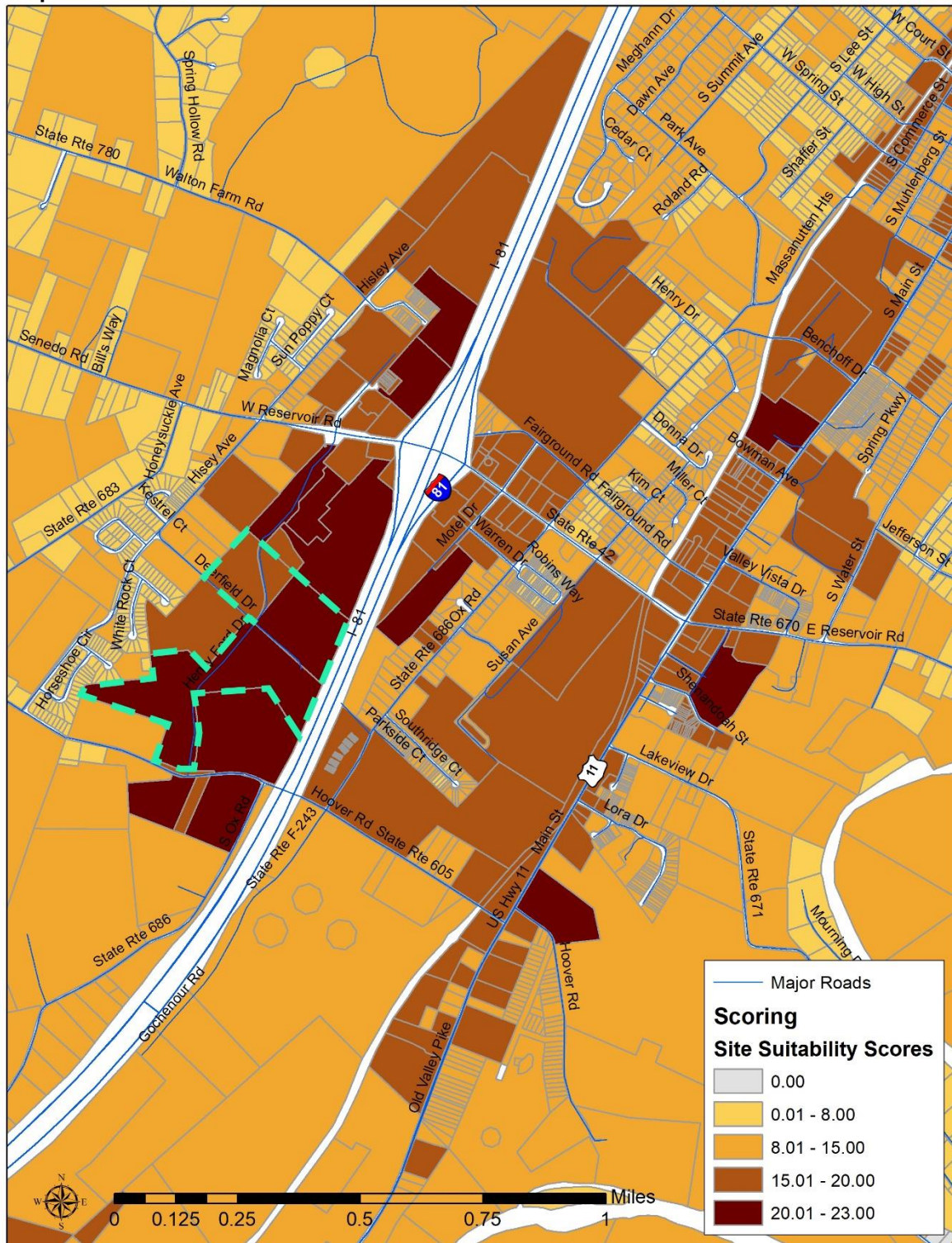
Map 6-6 – Woodstock Site Aerial



Source: Shenandoah County Property Assessment Data & RKG Associates, Inc., 2019



Map 6-7 – Woodstock Site Parcels

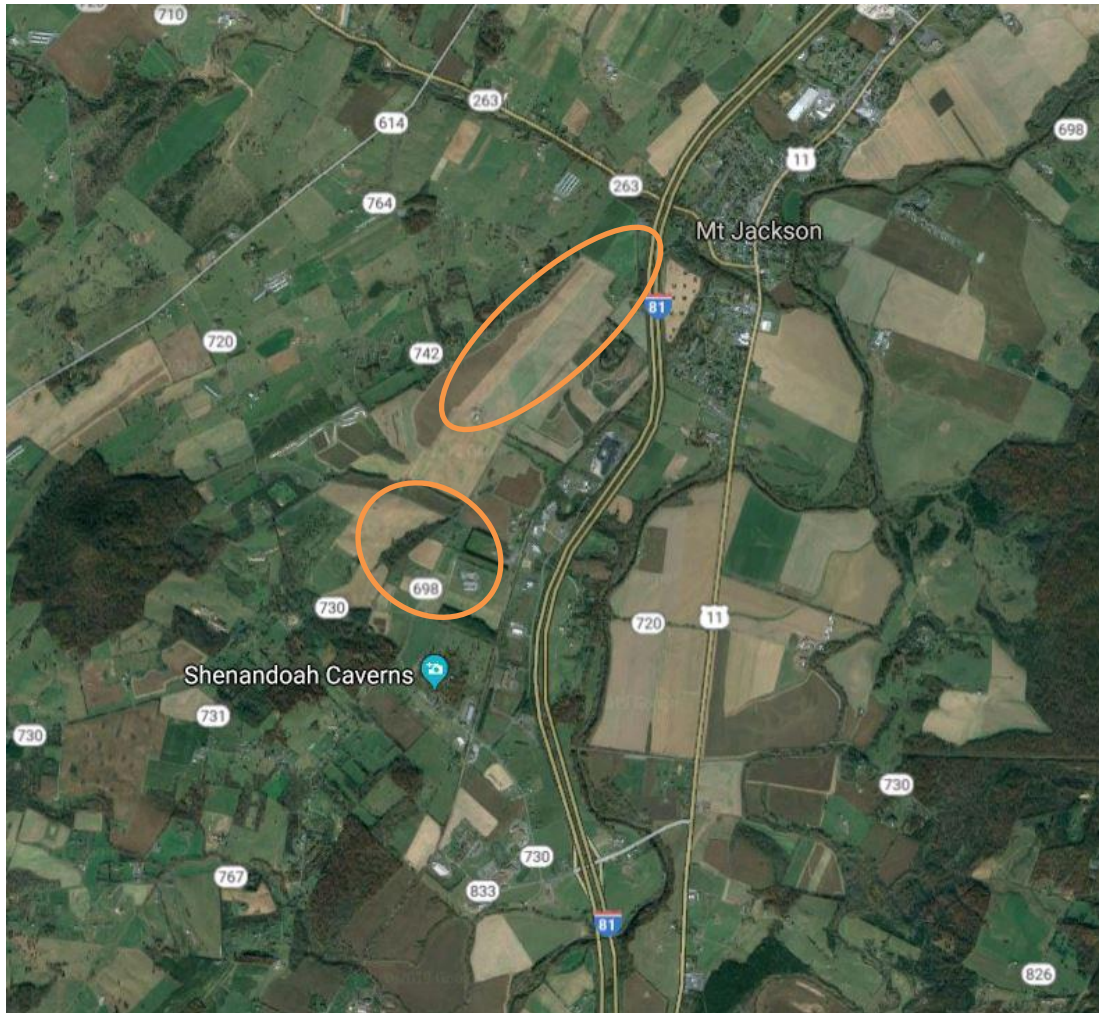




1.5 Turkey Knob Site/Mount Jackson

Just north of the IDA-owned parcels, a collection of undeveloped parcels along Turkey Knob Road (labeled as “2” on Map 6-9) form another Primary economic development site. These parcels are zoned as commercial lands and are mostly flat, with an area of over 136 acres combined. The site, like the IDA-owned site, is certified by the VEDP for its Virginia Business Ready Sites Program. Four of the five parcels included in the Opportunity Zone are owned by Whitehurst Development LLC. The other, 3126 Turkey Knob Road, is home to a single-family residential structure.

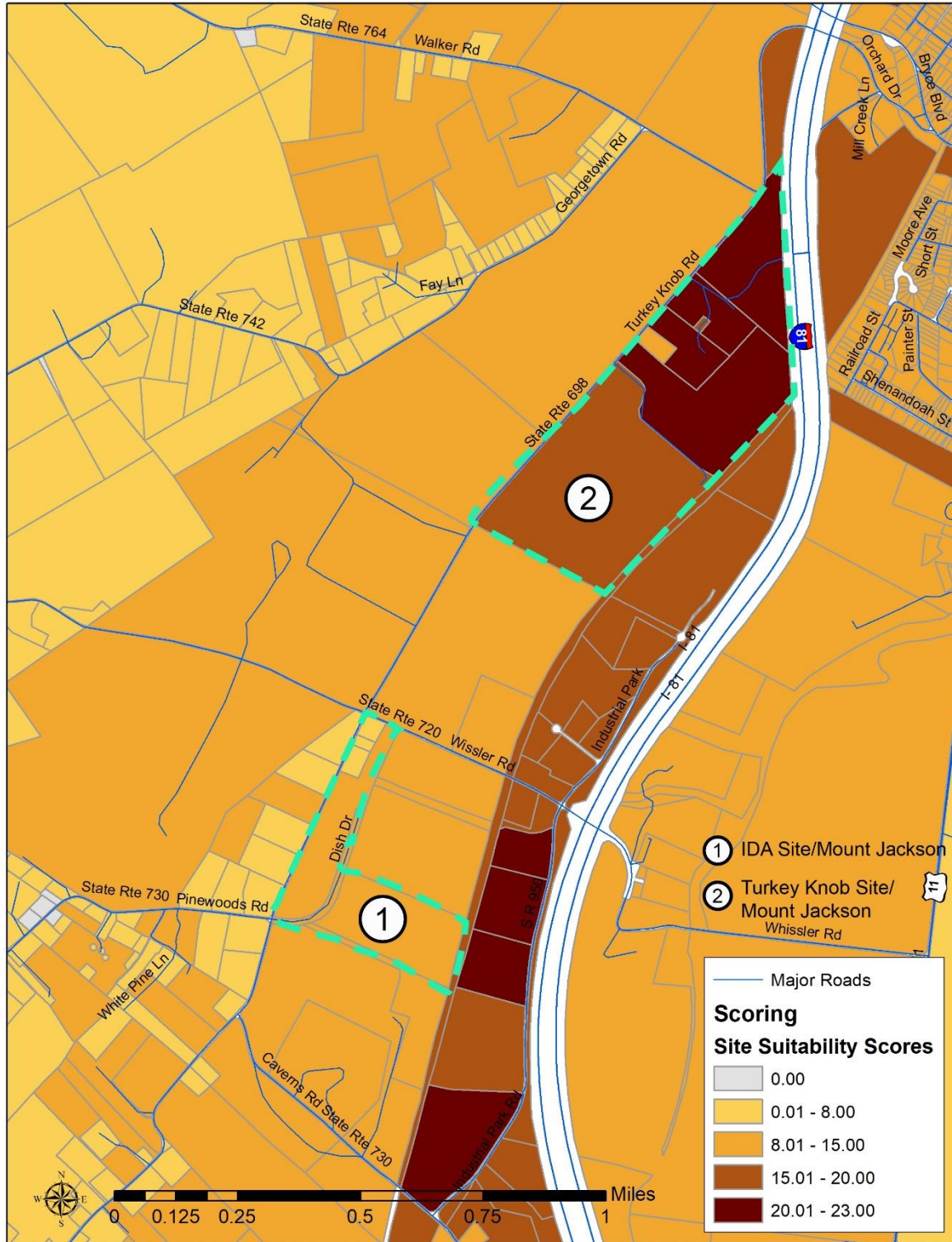
Map 6-8 – IDA Site/Mount Jackson and Turkey Knob Site/Mount Jackson Aerial



Source: Shenandoah County Property Assessment Data & RKG Associates, Inc., 2019



Map 6-9 – IDA Site/Mount Jackson and Turkey Knob Site/Mount Jackson Parcels





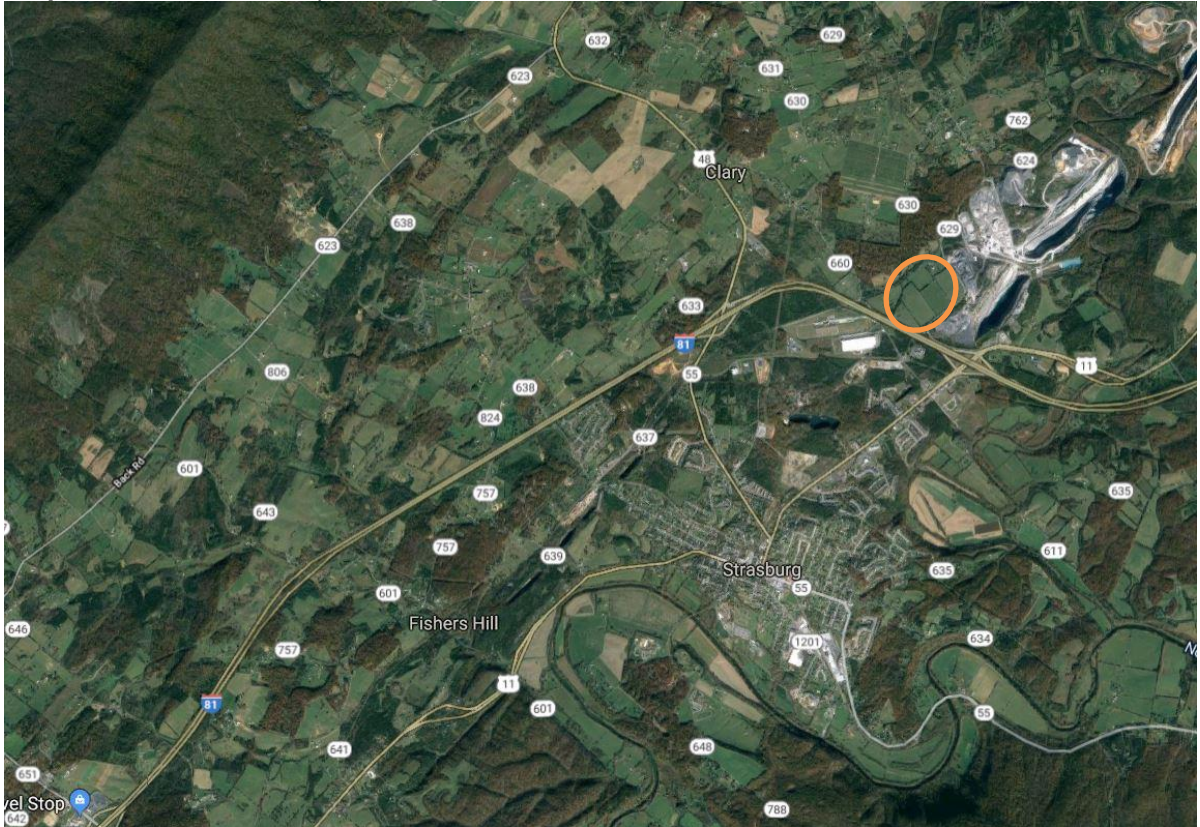
2. Secondary Opportunity Sites

Four additional locations were identified as Secondary Opportunity Sites. These meet most of the evaluation criteria, except that their current owners have not expressed development interest, and some of them require zoning changes. While these sites are potential future destinations for new economic development activities, additional steps will be needed to ensure their development-readiness.

2.1 Glendale Site/Strasburg

A 90 acre parcel exists along Oranda Road just north of I-81 and The Town of Strasburg off I-81 exit 298 (Map 6-10 and Map 6-11). The owner has expressed an interest in development and the Town and County have discussed possible annexation as the property is not currently served by public water and sewer and would need to be brought into town limits to do so.

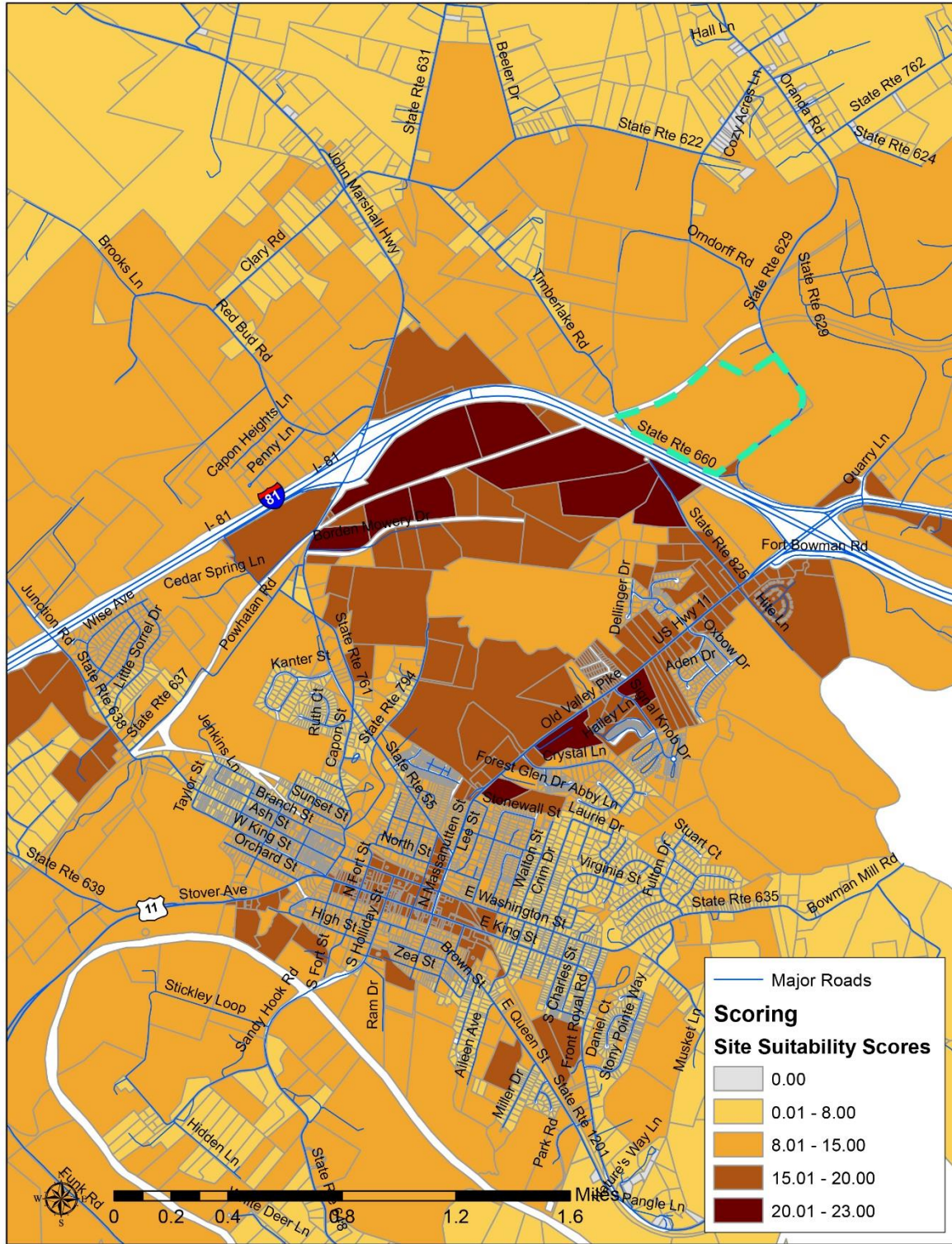
Map 6-10 – Glendale Site/Strasburg Aerial



Source: Google Maps & RKG Associates, Inc., 2019



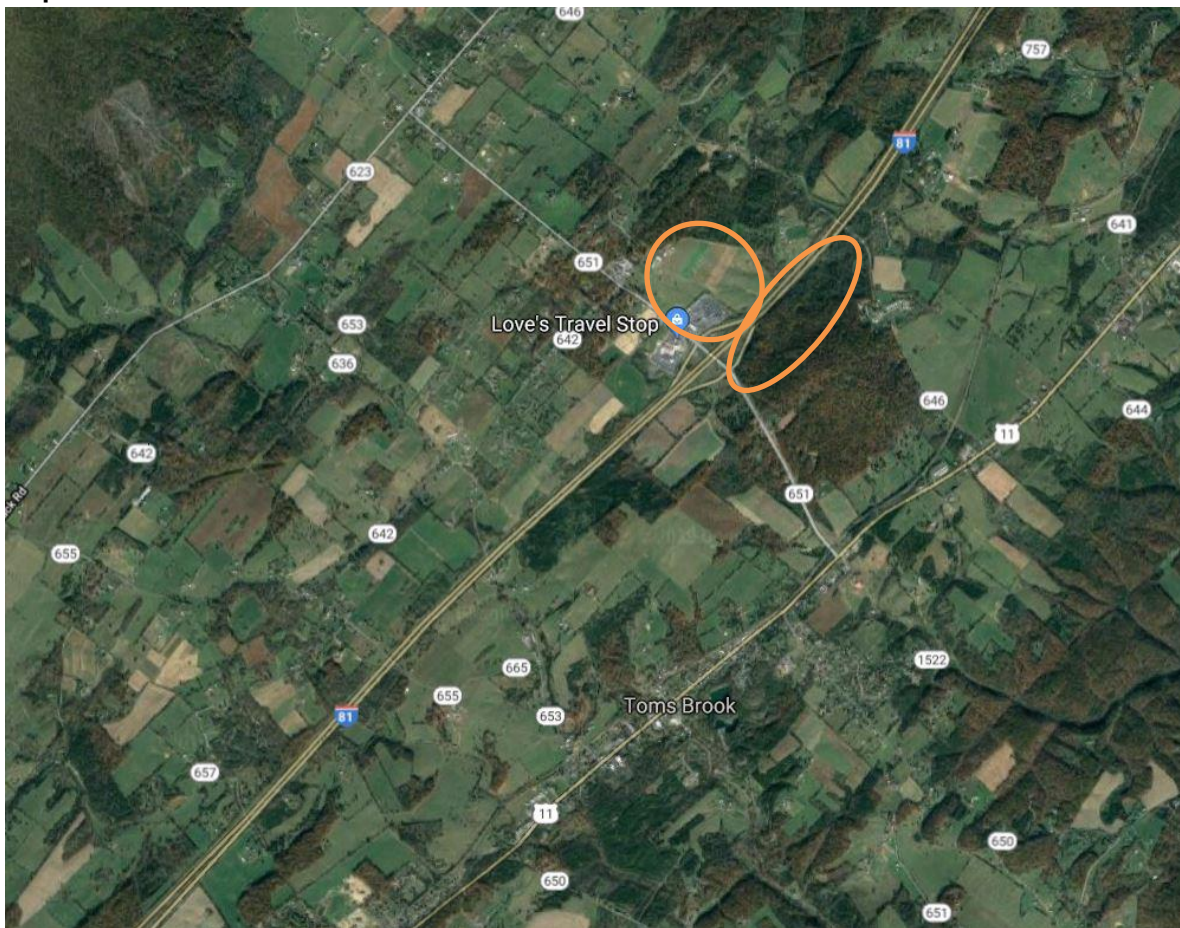
Map 6-11 – Glendale Site/Strasburg Parcels



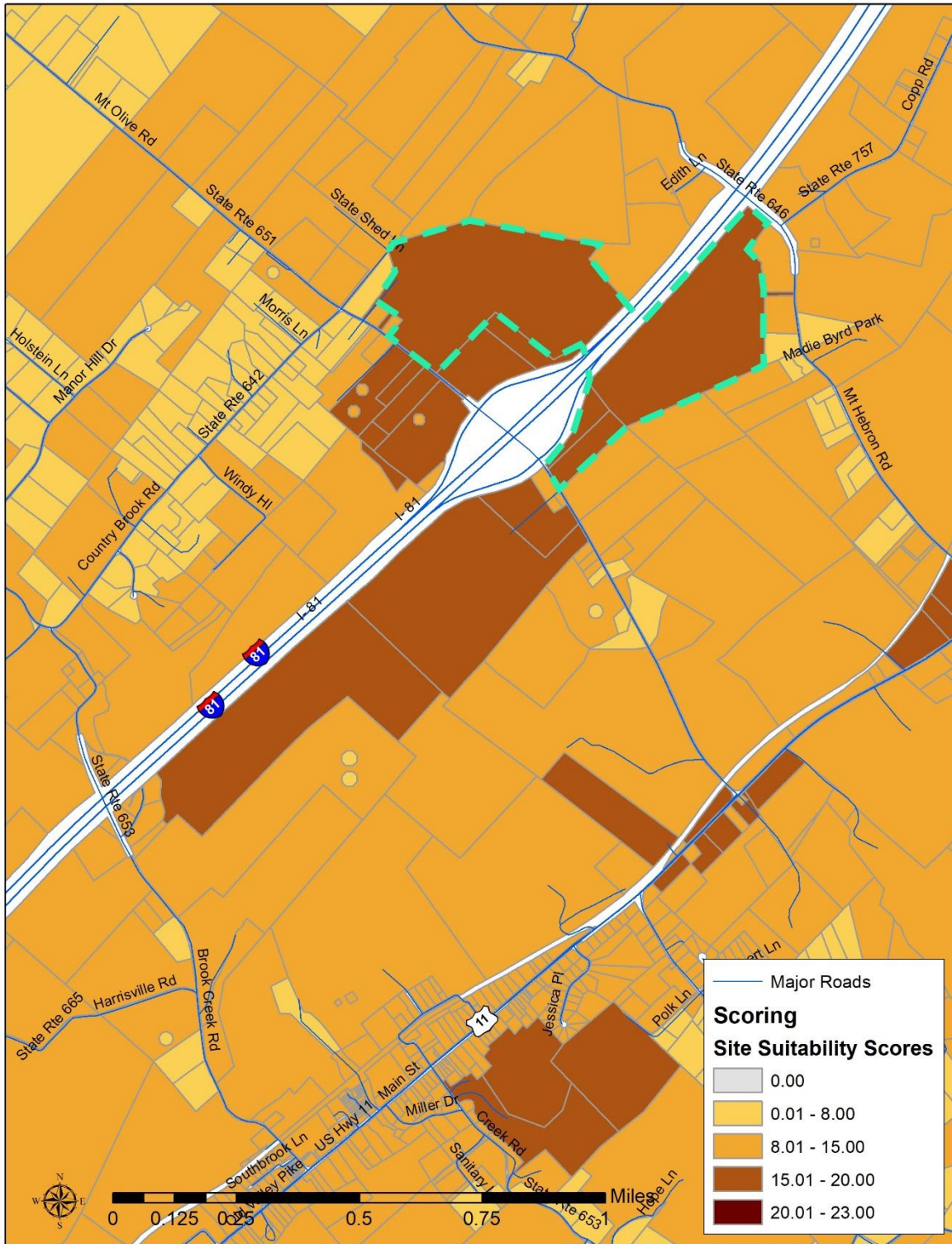
2.2 I-81 at Toms Brook: Northeast and Northwest Quadrants

Near the Primary Opportunity Site at Toms Brook, two additional areas are together identified as a Secondary Opportunity Site (Map 6-12). Comprising over 120 developable acres, the sites are the northeast and northwest quadrants of the I-81 interchange with State Route 651/Mt. Olive Road (Map 6-13). The parcels to the west of I-81 currently house a working farm, and the portion east of the highway is mostly wooded, undeveloped land owned by a private company. These two large parcels enjoy direct access to I-81, but as their owners have not expressed interest in development/redevelopment, they are classified as only a Secondary Opportunity Site.

Map 6-12 – I-81 at Toms Brook: Northeast and Northwest Quadrants Aerial



Source: Google Maps & RKG Associates, Inc., 2019

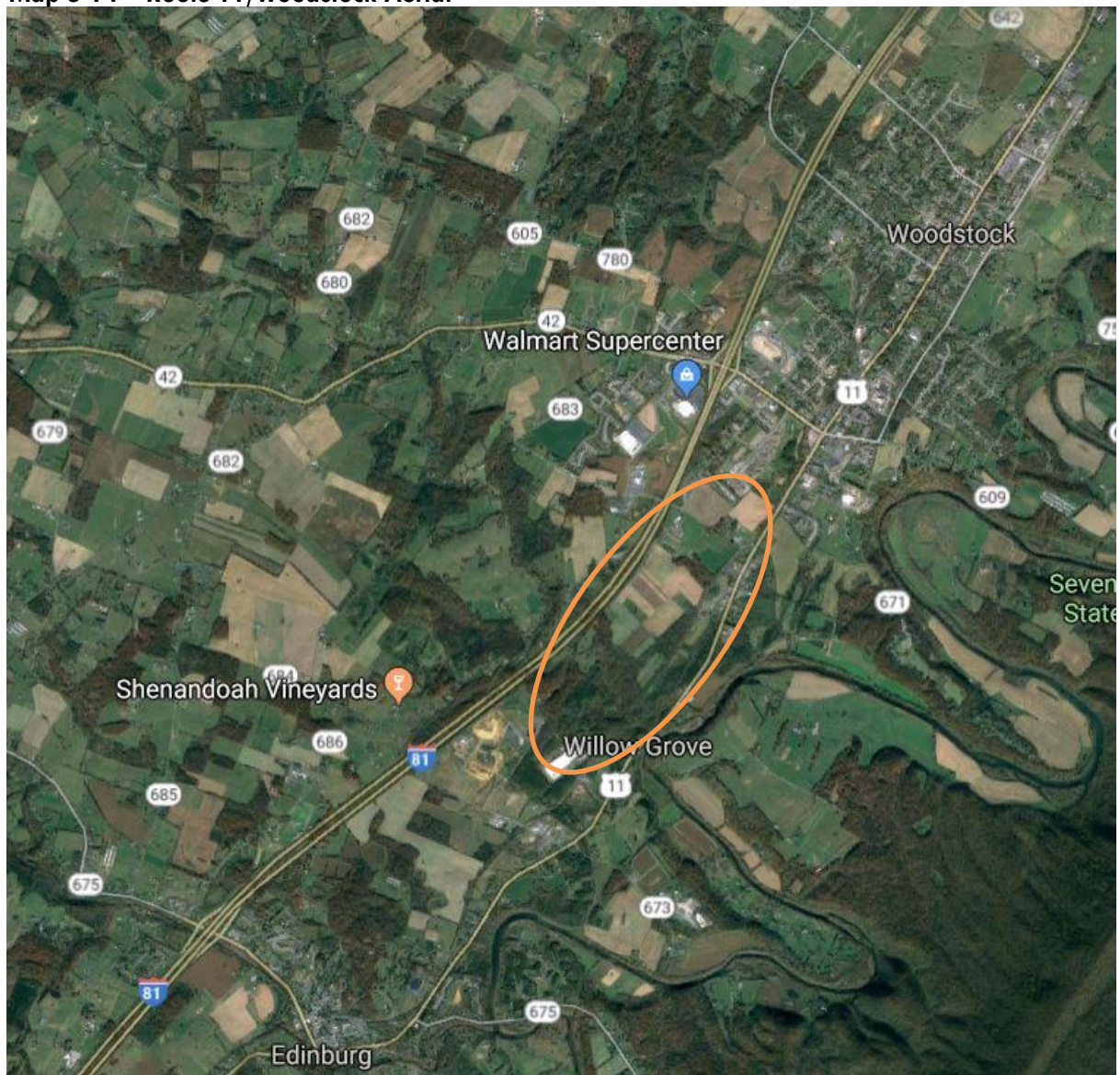




2.3 Route 11/Woodstock

Several hundred acres of developable land immediately south of the Town of Woodstock represent a significant opportunity to locate employers near one of the county's population centers. Parcels located between I-81 and Route 11 present especially significant opportunities (labeled as "1" on Map 6-15). Despite being comprised of over a dozen parcels with disparate ownership and varied zoning, the area offers the scale, accessibility, and proximity to workers that could enable the small-scale, production-based businesses the County seeks. As planned by County officials, relocating existing production businesses to these parcels could allow for the repurposing of other spaces for higher-value development. This process would, however, likely be a long-term one given the zoning changes and parcel consolidation that would be necessary. For these reasons, the site is classified as a Secondary Opportunity Site.

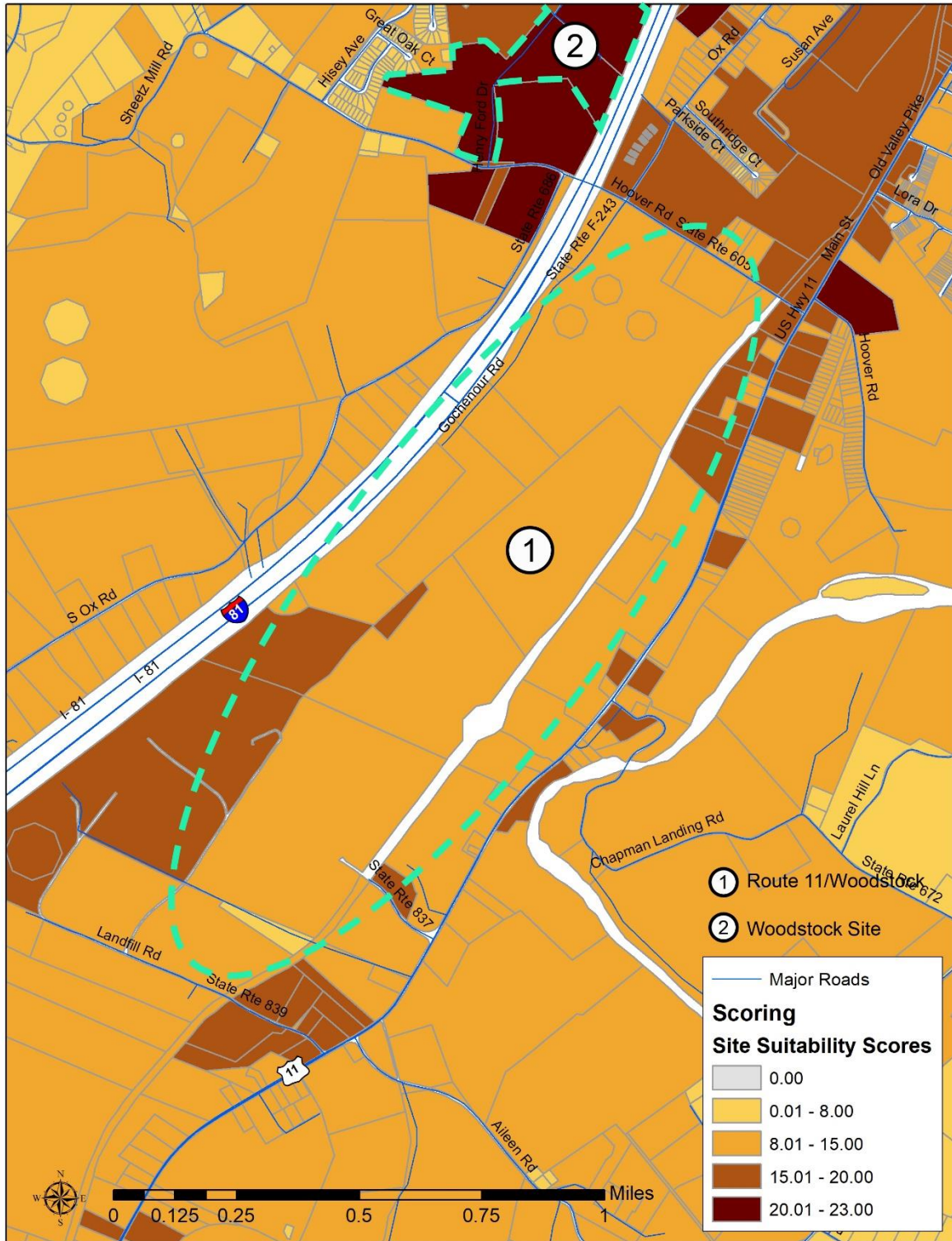
Map 6-14 – Route 11/Woodstock Aerial



Source: Google Maps & RKG Associates, Inc., 2019



Map 6-15 – Route 11/Woodstock Parcels

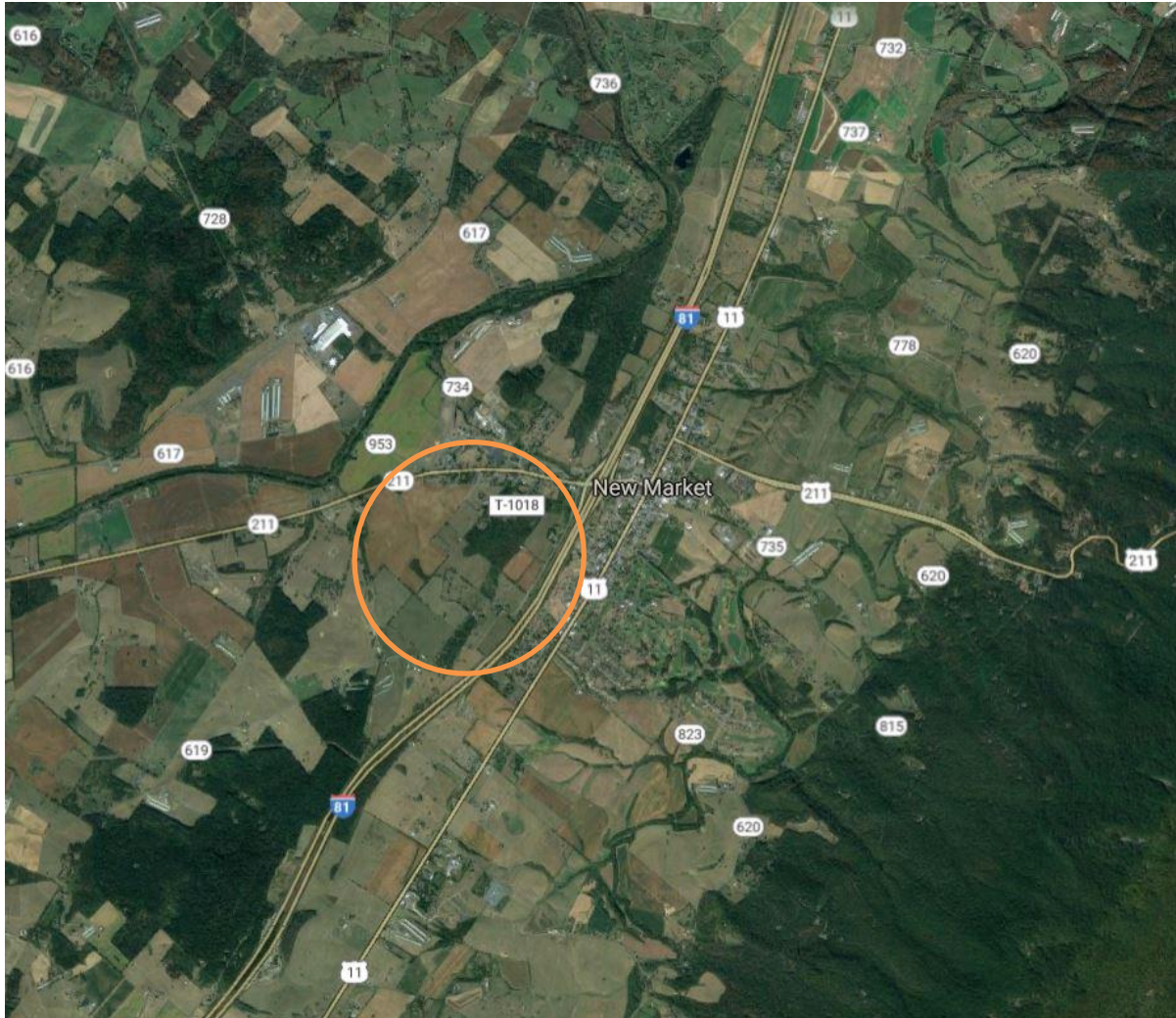




2.4 West I-81 Sites/New Market

At Shenandoah County's southern edge, a collection of farm and undeveloped parcels just outside the Town of New Market present another economic development opportunity (Map 6-16). The properties boast nearly 300 acres combined, and enjoy not only direct highway access but also close proximity to the existing businesses and residents in New Market (Map 6-17). The parcels are not currently zoned for commercial or industrial uses, despite their immediate adjacency to I-81's Exit 264. Similar to other Secondary Opportunity Sites, any medium- or large-scale development on the site would require County involvement to ensure that zoning changes and any needed parcel assemblage are made as quickly and seamlessly as possible.

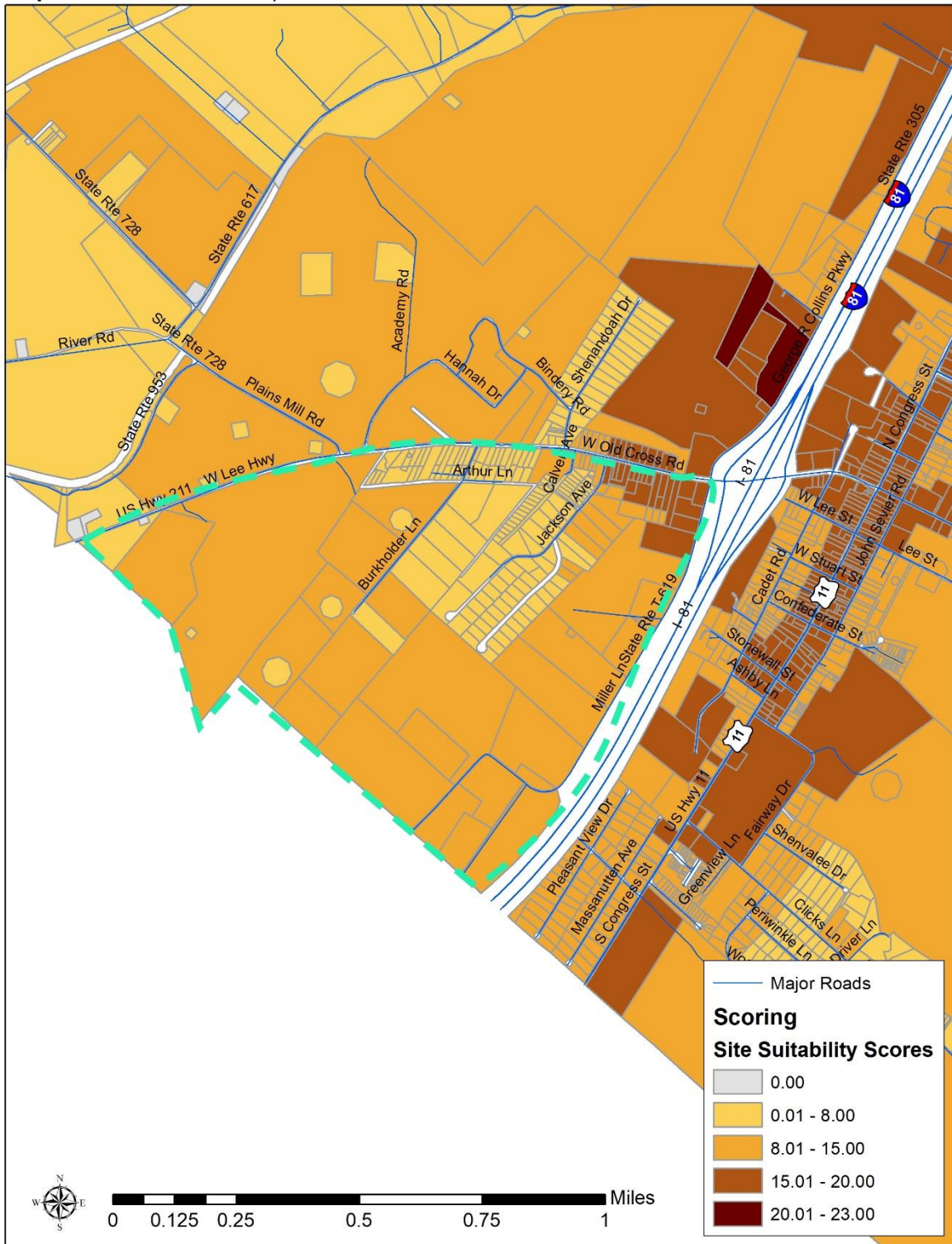
Map 6-16 – West I-81 Sites/New Market Aerial



Source: Google Maps & RKG Associates, Inc., 2019



Map 6-17 – West I-81 Sites/New Market Parcels





D. OBSERVATIONS

The following section provides observations from RKG Associates about both the Primary and Secondary economic development opportunity sites. These observations combine our professional judgement and experience with information provided by local real estate brokers, regional and state economic development professionals, and local property owners. The information presented here directly influenced the recommendations presented in the Implementation Strategy section later in this report.

Site-readiness should be a priority. The Virginia Economic Development Partnership has a site certification process called the Virginia Business Ready Sites Program (VBRSP). This program lets prospective businesses know the current development state of large economic development sites throughout the Commonwealth, scoring them from Tier 1 (marketed, but little to no due diligence has been done) to Tier 5 (all permits are in place and ready for site disturbance). Naturally, sites that achieve a higher score, in general, are going to be more desirable as the time needed to begin construction will be much less than those on the lower end of the scoring scale. The County commissioned a study by Draper Aden Associates that completed in May 2018 to assess several of the Primary Opportunity Sites identified above. The study concluded that none of the Shenandoah County sites would qualify above a Tier 2 level in the VBRSP program. Since that time, the IDA has invested in the due diligence work necessary to bring its three properties within the Northern Shenandoah Business Park to a Tier 3 level.

This finding does not mean these sites are non-competitive, but rather they are less competitive because of the time that would be necessary to prepare them for new development. Further, many of the Secondary Opportunity Sites are not zoned for commercial or industrial development, making them more challenging to attract interest since nonresidential development would require a rezoning process. Thus, the County should consider a site readiness program to partner with the towns and land owners to enhance the readiness of these sites for economic development purposes.

Collaborate with the towns to set policy/regulation. Building upon the previous point, almost all these Opportunity Sites are located within town municipal boundaries. Further, any development on parcels outside the towns will require access to their water and sewer service or that of the County's sanitary districts. Coordination and collaboration with the towns on the economic development potential of the identified sites (and any other sites to be considered in the future) should be a short-term action. Simply put, the respective town leadership needs to share in the County's vision for these sites and establish the policies and regulations to enable economic development activity to occur. This process may require a public engagement effort, particularly for those Opportunity Sites that will require a rezoning.

Property owner engagement should be immediate and frequent. In parallel with the township engagement, the County's economic development team should be engaging with the property owners of the Primary and Secondary Opportunity Sites. At a base level, the County should eliminate any sites that do not want to be marketed for economic development. RKG did not outreach to every property owner on behalf of the County as part of this effort. Thus, some of these sites may not have willing owner participants. More strategically, property owner outreach is essential to understand short- and long-term investment strategy, identify priorities or preferences of the owner, enable the economic development team to discuss competitive pricing levels, and gauge the potential for public-private partnership opportunities. Ultimately, it may take several inquiries over years to get some property owners willing to even engage with the County's economic development team. The town and owner engagements efforts will refine this Opportunity Site list based on the interest and willingness of these partners to enhance site readiness and market these (or other) sites.

Consider joint investment/revenue strategies. As mentioned, the engagement efforts should help identify the potential for the County, towns, and property owners to enter into public-private partnerships (PPP) to enhance site readiness. There are examples nationwide where property owners and public bodies enter into a cost-revenue sharing agreement to perform site preparation and



infrastructure development to enhance economic development efforts. Fundamentally, the County leadership must first determine its economic development priorities and define its investment parameters so that the economic development team can negotiate agreements that will garner official support. Discussion points should include risk/reward thresholds and expectations, formulaic policies on repayment of public investment based on performance of the new business (i.e. job creation, capital investment...).

Continually review opportunity sites. This analysis was a point-in-time assessment based on current development patterns, market climate, and knowledge of the local real estate professionals. Individual property owner's investment strategies change, markets change, and economic development priorities change. The County's economic development team should be reassessing this list annually or biannually to ensure its marketing efforts reflect the best opportunity sites in the County, within context of current vision, property owner interest, and community support.

Encourage the redevelopment of obsolete building stock. None of the Primary or Secondary Opportunity Sites include any of the existing vacant industrial or commercial buildings. Based on RKG Associates' assessment, many of these buildings are non-competitive based several factors, not the least of which being location, condition, and physical dimensions. Simply put, most of County's existing vacant building stock has similar challenges as its raw land inventory... being less desirable than available supply elsewhere in the Shenandoah Valley. The County's economic development team should engage with these property owners to determine their investment strategies, and work with those actively seeking to attract investment/business. In certain instances, existing vacant commercial and industrial building sites are better suited for use outside of business retention, expansion, and attraction.

Plan for "the long haul." Economic development is a process. Success oftentimes takes years and not months or weeks. The County and individual town elected leadership should be prepared that any economic development investment—particularly in land development—may take a long time to materialize in a new business or capital investment. The implementation strategy provides several recommendations on outreach and education to both elected leaders as well as the public. Awareness and understanding of the risks involved in PPPs should be disclosed immediately. Making uninformed decisions in the short-term could cripple the County's economic development efforts in the long-term if community support for business retention, expansion, and attraction wanes due to concerns over public investment. From a strategic standpoint, it is better to not invest and accept the impacts of having less competitive assets than investing with unrealistic (or uninformed) expectations.



7 TARGET INDUSTRY ANALYSIS

A. INTRODUCTION

The primary purpose of the target industry analysis is to identify industry areas to focus recruitment and expansion efforts for Shenandoah County. This analysis can also be helpful in further defining appropriate land uses for redevelopment projects and the type of building best suited for these industries. While the target industry analysis itself combines metrics such as employment change, location quotient and local preference, the first step in this process is understanding what the county currently offers existing and new businesses by assessing quality of life and site selection metrics. The industries recommended in this chapter should not limit the County from targeting other businesses interested in the County.

B. METHODOLOGY & DATA SOURCES

The Target Industry Analysis section identified sectors that represent the best chance for Shenandoah County to use its limited economic development resources to have the greatest positive effect upon the local economy. These sectors were selected based upon a review of dozens of quantitative and qualitative factors. The analysis considered factors such as:

- The county's existing employment and growth trends (via Economic Modeling, Inc, aka "EMSI")
- Industry growth projections (EMSI)
- Area land use, building inventory, and land availability (Loopnet and local assessors' databases)
- Highway and transit access
- Real estate costs (including for employee housing) (via Zillow, Trulia, and others)
- Local fit factors such as education attainment, workforce skills, and perceived safety (American Community Survey and others)
- Conversations with local business leaders, real estate professionals, economic development officials, and the public
- Previous studies and plans including the 2013 Shenandoah County Strategic Economic Development Plan, Region 8 Economic Growth & Diversification Plan (2016), and the Shenandoah Partnership Economic Development Strategy (2019 draft).

C. QUALITY OF LIFE AND BUSINESS DEVELOPMENT ANALYSIS

Most communities focus their target industry assessment on issues such as asset availability, existing/past business trends, and regional/statewide targeting. However, business relocation and expansion decisions are not made solely on economic and market-based issues. Quality of life metrics and business climate at a local, regional, and state level also play a role in site selection decision-making. This is particularly true for smaller (under 250 companies, where the corporate leadership oftentimes relocate with the business. The following section assesses the quality of life assets and constraints for Shenandoah County.



1. Public Schools

The primary and secondary public education system in Shenandoah County is within one school district of Shenandoah County Public Schools. RKG utilized the 2020 Best Public School ranking from a school rating website Niche.com to understand the relative quality of public schools in the County and in its surrounding region. Niche produced the ranking using the academic and student life data from the U.S. Department of Education along with test scores, college data, and ratings collected from Niche users.

Factors considered by Niche.com include academics, culture and diversity, overall experience, teachers, clubs and activities, health and safety, resources and facilities, and sports. Niche.com assigned different multipliers or weights to these factors based on their importance to calculate the overall Niche rating for each school. It should be noted that this rating system is not meant to be definite nor exhaustive and the results are limited to the available data collected and utilized by Niche. In addition to Niche, Shenandoah County Public Schools utilize additional data published by the Virginia Department of Education and the Virginia School Quality Profile dataset which can be found in Appendix A. That said, the Niche.com data provide the perspective of looking at the relative performance of public education in the study area (Table 7-1).

Table 7-1
Niche Scoring System Dynamics

Factor	Description	Source	Weight
Academics Grade	Based on state assessment proficiency, SAT/ACT scores, and survey responses on academics from students and parents.	Multiple Sources	60.0%
Culture & Diversity Grade	Based on racial and economic diversity and survey responses on school culture and diversity from students and parents.	Multiple Sources	10.0%
Parent/Student Surveys on Overall Experience	Niche survey responses scored on a 1-5 scale regarding the overall experience of students and parents from the school.	Self-reported by Niche users	10.0%
Teachers Grade	Based on teacher salary, teacher absenteeism, state test results, and survey responses on teachers from students and parents.	Multiple Sources	10.0%
Clubs & Activities Grade	Based on expenses per student and survey responses on clubs and activities from students and parents.	Multiple Sources	2.5%
Health & Safety Grade	Based on chronic student absenteeism, suspensions/expulsions, and survey responses on the school environment from students and parents.	Multiple Sources	2.5%
Resources & Facilities Grade	Based on expenses per student, staffing, and survey responses on facilities from students and parents.	Multiple Sources	2.5%
Sports Grade	Based on the number of sports, participation, and survey responses on athletics and athletic facilities from students and parents.	Multiple Sources	2.5%

Source: Niche.com, 2019

Out of the 11 public schools within Shenandoah County, two of them are rated B and B+ respectively, and the remaining ones are rated C+ and below, except for two which are not rated by Niche (Massanutten Regional Governor's School and Triplett Tech). The school with the highest Niche grade (B+) is Stonewall Jackson High School located in Quicksburg along I-81 in Study Area 5. The school with the second highest rating (B) in the County according to Niche.com is Central High School located in Woodstock in Study Area 2. From an economic development perspective, the highly-scoring Stonewall Jackson High School will appeal to workers and business executives relocating to Study Area 5. However, Study Area 2 currently has the highest concentration of housing development in the County.



The lack of housing supply in Study Area 5 could create a mismatch between housing supply and demand (Table 7-2).

Table 7-2
Public Schools by Niche Rating (Pre-K to High School)
Shenandoah County, VA

School	Rating	Location	Study Area	Grade
Stonewall Jackson High School	B+	Quicksburg	5	9-12
Central High School	B	Woodstock	2	9-12
North Fork Middle School	C+	Quicksburg	5	6-8
Signal Knob Middle School	C+	Strasburg	1	6-8
Peter Muhlenberg Middle School	C+	Woodstock	2	6-8
Ashby Lee Elementary School	C	Quicksburg	5	PK, K-5
Sandy Hook Elementary School	C	Strasburg	1	PK, K-5
Strasburg High School	C	Strasburg	1	9-12
W.W. Robinson Elementary School	C-	Woodstock	2	PK, K-5
Massanutten Regional Governor's School	N/A	Mt. Jackson	5	11-12
Triplett Tech	N/A	Mt. Jackson	5	9-12

Source: Niche.com, RKG Associates, Inc., 2019

In comparison, two schools in Harrisonburg City, one school in Rockbridge County, two schools in Lexington City, and one school in Winchester City achieved A ratings. All other public schools in surrounding region (excluding Shenandoah County) received ratings between B+ and C-. Based on these ratings, public school quality in Shenandoah County falls within the average range within its region. The County should include improving public school quality into its economic development strategy to further increase the quality of life in the County if it wishes to attract high-skilled, highly-educated workers who most likely value the high quality of public schools for their children (Table 7-3).

Table 7-3
Number of Public Schools by Niche Rating (Pre-K to High School)
Shenandoah County, VA & Surrounding Region

Jurisdiction	Total No.	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	No Rating
Shenandoah County, VA	11	0	0	1	1	0	3	3	1	0	0	0	2
Central Shenandoah Planning District Commission													
Augusta County, VA	20	0	0	2	8	5	4	1	0	0	0	0	0
Staunton City, VA	8	0	0	2	1	0	1	1	0	0	0	0	3
Waynesboro City, VA	7	0	0	0	1	2	1	2	0	0	0	0	1
Rockingham County, VA	8	0	0	1	0	2	5	0	0	0	0	0	0
Harrisonburg City, VA	10	1	1	1	0	2	5	0	0	0	0	0	0
Rockbridge County, VA	6	0	1	1	3	1	0	0	0	0	0	0	0
Buena Vista City, VA	4	0	0	0	1	0	1	2	0	0	0	0	0
Lexington City, VA	5	1	1	1	1	1	0	0	0	0	0	0	0
Bath County, VA	3	0	0	1	1	1	0	0	0	0	0	0	0
Highland County, VA	2	0	0	0	1	1	0	0	0	0	0	0	0
Northern Shenandoah Valley Regional Commission													
Clarke County, VA	4	0	0	1	0	0	2	1	0	0	0	0	0
Frederick County, VA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Page County, VA	9	0	0	1	1	3	1	2	0	0	0	0	1
Warren County, VA	8	0	0	0	0	1	1	4	2	0	0	0	0
Winchester City, VA	7	0	1	0	0	4	2	0	0	0	0	0	0

Source: Niche.com, RKG Associates, Inc., 2019

2. Business Climate

The business climate at a State level can also impact site selection decisions. To better understand how the Commonwealth of Virginia ranks in terms of business climate and how that might impact Shenandoah County, the Consultant analyzed the Assets and Opportunities Scorecard published and maintained by



ProsperityNow¹. This scorecard ranks each state on a variety of metrics from resident characteristics and quality of life to existing business statistics. While Shenandoah County is not representative of Virginia in all aspects, the State provides the competitive context for future business recruitment efforts, particularly those targeting out-of-state businesses. For the purposes of this analysis, RKG Associates compared Virginia's performance against its most competitive neighboring states: Maryland, North Carolina, and Tennessee. These states were chosen because they are the most common competitors for recruitment prospects interested in Virginia.

The general scoring provided by ProsperityNow indicates that Virginia is competitive in certain areas, and less competitive in others. While this seems overly general, it reflects the fact that none of these states have a clear competitive advantage in business recruitment. On a national level, Virginia fares well in financial assets & income, education, businesses and jobs, but below average in homeownership, and health care. Within these categories, there are several individual metrics on which Virginia performed well and poorly. The higher the ranking (1st, 2nd, 3rd...), the better/more competitive Virginia is compared to other states. Conversely, low scores (48th, 49th, 50th...) show attributes where Virginia is less competitive. Those metrics that are relevant to the County's economic development efforts are presented below (Table 7-4).

Competitive State Assets

As noted, Virginia scores highly in Financial Assets and Income categories compared to the rest of the nation. Virginia ranks 9th in the percentage of households with income below the poverty threshold. In the category of liquid asset poverty rate, Virginia ranks 8th nationally. The liquid asset poverty rate is the percentage of households without enough liquid assets to subsist at the poverty level for three months in absence of income. Having savings can help families remain financially stable during economic downturns or setbacks. With a low percentage of households below the poverty line, Virginia ranks 13th in households with saving accounts. Regionally, Virginia has higher rates of savings and credit scores compares to its neighbors. These numbers reflect a state that has many of the necessary habits of households looking to climb the economic ladder and can weather economic slowdowns. This displays a vibrant and strong economy that does not show signs of large inequalities. As mentioned above, Shenandoah County does not always reflect Virginia, but these numbers help provide a glimpse into how other parts of the broader region perform against key metrics.

In the 21st century, a skilled and educated labor force has become one of the most important assets for any business. Virginia offers one of the nation's highest college degree graduation rates (6th). Also, the state ranks high in high-school graduation rates at 20th. Additionally, Virginia ranks high in Math Proficiency (7th), which bodes well for the labor force as many of the growing sectors in U.S. economy are STEM based. Simply put, having a high school diploma and proficiency in math is the minimum requirement for job qualifications. Virginia's focus on engaging primary and secondary education students through awareness and workforce programs has provided the community with a competitive advantage within many of its target industries. Though Maryland is the regional leader in education, Virginia outperforms both North Carolina and Tennessee in most education metrics. Virginia skilled workforce allows it to attract businesses from all over the country and world.

From a businesses and jobs perspective, Virginia's labor market typically outperforming most states. Virginia has a low unemployment rate (10th), coupled with a low underemployment rate (15th). Additionally, Virginia employers offer health insurance at the 8th highest rate in the country. Conversely, Virginia lags the rest of the nation in microenterprise ownership rates (36th) and business ownership by gender (27th) rate. From an economic development perspective, Virginia has an opportunity to capture a relatively untapped market by creating specific entrepreneurial development programs for small businesses, particularly minority and women owned businesses.

¹<https://scorecard.prosperitynow.org/>



Table 7-4
Assets & Opportunities Scorecard, 2019
Virginia and Comparison Markets

	Virginia Data	Virginia Rank	Maryland Rank	North Carolina Rank	Tennessee Rank	US Average
FINANCIAL ASSETS & INCOME						
Income Poverty Rate	10.2%	9	2	39	31	13.0%
Asset Poverty Rate	21.4%	3	2	15	16	25.3%
Liquid Asset Poverty Rate	36.6%	8	2	22	27	40.0%
Income Inequality	4.7x as high for top 20%	31	21	32	29	4.9x as high for top 20%
Unbanked Households	3%	10	4	26	41	6.5%
Underbanked Households	20.6%	39	36	25	41	18.7%
Households with Savings Accounts	78.5%	13	4	19	40	71.4%
Consumers with Prime Credit	54.1%	29	33	37	40	51.9%
Fell Behind on Bills	11.4%	11	20	13	39	13.2%
Access to Revolving Credit	76.4%	17	13	34	44	73.1%
Bankruptcy Rate (per 1,000 people)	2.6	11	38	13	39	2.3
BUSINESSES & JOBS						
Microenterprise Ownership Rate	16.6%	36	15	22	15	18.2%
Business Ownership by Gender	1.3x as high for men	27	21	28	21	1.3x as high for men
Business Value by Gender	2.7x as high for men	47	45	40	32	3x as high for men
Unemployment Rate	3.1%	10	39	24	19	4%
Underemployment Rate	6.7%	15	36	25	20	7.8%
Low-Wage Jobs	21.80%	25	18	43	38	22.5%
Average Annual Pay	\$55,233	15	19	21	20	\$55,390
Employers Offering Health Insurance	52.9%	8	5	42	11	46.9%
HOUSING & HOMEOWNERSHIP						
Homeownership Rate	66.6%	23	21	32	31	63.9%
Affordability of Homes (value/income)	3.9x higher than median income	32	33	22	23	3.6x higher than median income
Housing Cost Burden - Renters	476.9%	24	40	22	15	49.5%
Housing Cost Burden - Homeowners	26.1%	27	32	20	16	27.5%
Delinquent Mortgage Loans	0.9%	19	44	29	36	1.3%
Foreclosure Rate	0.5%	9	37	18	15	1.1%
High-Cost Mortgage Loans	3.7%	13	22	26	30	7.6%
HEALTH CARE						
Uninsured Rate	10.2%	34	17	42	39	10.2%
Uninsured Low-Income Children	8.4%	39	24	30	25	6.9%
Employer-Provided Insurance Coverage	63.4%	19	12	38	32	27.9%
Employee Share of Premium	34.1%	50	43	45	39	59.1%
Forgoing Doctor Visit Due to Cost	13.5%	31	10	42	39	13.5%
Poor to Fair Health Status	16.4%	20	14	36	43	18.4%
EDUCATION						
Early Childhood Education Enrollment	48.1%	18	12	41	45	48.0%
Math Proficiency - 8th Grade	40.3%	7	29	24	35	34.3%
Reading Proficiency - 8th Grade	37.2%	20	18	33	37	36.1%
High School Graduation Rate	86.7%	20	12	22	8	84.1%
Four-Year College Degree	38.7%	6	50	25	40	32.0%
Disconnected Youth	8.9%	11	21	34	37	11.6%
Borrowers with Student Debt	21.6%	19	29	13	11	21.9%
Median Student Loan Debt	\$20,539	48	50	38	28	\$18,366
Severely Delinquent Student Loan Debt	13.6%	19	25	32	42	15.2%

Source: PropensityNow, U.S. Department of Labor, 2019

State Constraints

While Virginia scores well on many qualities of life and job preparedness metrics, it is less competitive in homeownership and housing. Virginia ranks in the bottom half for affordability of homes (32nd), and housing cost burden for homeowners (27th). Additionally, the homeownership rate ranks at 23rd in the country. The rental housing market is also expensive, ranking 24th nationally in terms of housing cost burden for renters. These numbers show that it is difficult for households in Virginia to afford housing. As people look to relocate to new areas, housing and housing cost is often a major deciding factor. Shenandoah County should actively advertise its affordable housing market compared to other parts of Virginia.

As noted earlier, Virginia scores poorly nationwide and amongst the competitive states for the provision of healthcare. Most notably, Virginia ranks 39th in the rate of uninsured low-income children, well below the regional competitors. Additionally, Virginia ranks 34th in the rate of uninsured people. These low insured rates are likely due to the nation's 50th ranked employee share of premium. Having healthcare currently is one of the more important issues for workers. While there is uncertainty in the future of



healthcare provision and how that will impact individuals and businesses, being unable to offer affordable healthcare is a competitive disadvantage for Virginia, and therefore Shenandoah County.

3. Site Selection

The national publication Area Development Magazine annually surveys site selectors and companies across the country to understand the relative importance of a variety of factors ranging from quality of life to available labor when making site selection decisions for businesses on a national level. All figures are percentages and are the total of the “very important” and “important” ratings of the Area Development Corporate Survey. The results presented here are rounded to the nearest tenth of a percent. Table 7-5 shows all the factors and Table 7-6 shows the ten most important based on the 2018 survey results. The most important factor for national site selectors is Availability of Skilled Labor. Other top ten factors that are recognized as most important for site selection nationwide in 2018 include Labor costs, Highway Accessibility, Corporate Tax Rate, Tax Exemptions, Quality of Life, State and Local Incentives, Energy Availability and Costs, Available Buildings, and Occupancy or Construction Costs.

Compared to 2000 and 2010, national site selectors are more concerned with several factors in 2018 including Availability of Skilled Labor, Corporate Tax Rate and Quality of Life. Several factors are seen more important over the past three years, including Labor costs, Corporate Tax Rate, Tax Exemptions, State and Local Incentives, and Energy Availability and Costs. This result indicates that a new trend of valuing higher labor quality, government/tax support and quality of life has been escalating over the past 18 years for business site selection throughout the U.S.

At the state level, the magazine also ranked the Top State for Doing Business based on feedback from the annual survey and a variety of other factors that are similar to the site selection factors. In 2019, Virginia is ranked the 10th best state for doing business overall and is competitive among seven of the twelve individual categories identified by well-respected site/location consultants and specialists. These include:

- Access to Capital & Project Funding (Virginia is ranked 9th)
- Competitive Labor Environment (Virginia is ranked 9th)
- Leading Workforce Development Programs (Virginia is ranked 7th)
- Shovel-Ready Sites Program (Virginia is ranked 9th)
- Cooperative & Responsive State Government (Virginia is ranked 7th)
- Most Improved Economic Development Policies (Virginia is ranked 6th)
- Speed of Permitting (Virginia is ranked 9th)

This means that Virginia has many assets that can help make Shenandoah County more competitive in its economic development efforts. In addition, from the County’s perspective, Shenandoah County boasts a high quality of life including natural scenery and rich outdoor recreational resources; lower crime rates than more urban environments; comparatively affordable housing options and access to healthcare facilities. In addition, Shenandoah County has comparatively good transportation access via the state’s highway system that connects to adjacent capital and labor centers, including Washington D.C. The County enjoys strong economic development support from Virginia and incentives from the local community. Efforts such as Virginia Economic Development Partnership’s Virginia Business Ready Sites Program and Virginia Initiative for Growth and Opportunity in Each Region (GO Virginia). In short,



Shenandoah County also enjoys a variety of resources that it can utilize to bolster its' economic competitiveness.

Table 7-5
National Site Selection Factor Ratings
Corporate Survey, Area Development Magazine

	2018	2015	2010	2005	2000
Labor					
Availability of Skilled Labor	90.5	92.9	85.9	87.2	87.7
Availability of Unskilled Labor	59.4	47.8	45.4	50.6	65.5
Training Programs	69.9	68.7	56.7	59.6	57.2
Labor costs	89.1	80.8	91.0	87.9	91.6
Low Union Profile	74.4	66.3	75.4	77.0	79.7
Right-To-Work State	70.2	67.7	67.9	69.7	72.9
Transportation/Telecommunications					
Highway Accessibility	87.2	88.0	97.3	91.4	95.9
Railroad Service	46.6	32.4	36.0	28.9	29.8
Accessibility to Major Airport	62.7	58.6	50.0	50.0	53.2
Waterway or Ocean Port Accessibility	34.1	24.0	21.9	20.2	21.0
Inbound/outbound Shipping Costs	69.2	64.6	84.0	N/A	N/A
Availability of Telecommunications Services	N/A	N/A	N/A	79.8	77.1
Availability of Advanced ICT Services	50.0	53.6	72.9	85.7	N/A
Finance					
Availability of Long-Term Financing	60.5	67.7	58.5	56.5	58.4
Corporate Tax Rate	86.7	78.8	86.3	85.0	84.7
Tax Exemptions	83.0	74.7	90.9	83.6	81.6
State and Local Incentives	82.5	75.8	89.3	86.0	83.6
Other					
Available Buildings	76.7	83.7	81.0	N/A	N/A
Cost of Land	N/A	N/A	N/A	79.1	75.8
Available Land	75.6	73.9	73.4	75.0	75.5
Occupancy or Construction Costs	76.1	85.4	89.8	83.7	83.0
Expedited or Fast-Track Permitting	64.9	74.2	68.2	N/A	N/A
Raw Materials Availability	55.6	52.6	61.5	62.3	56.1
Energy Availability and Costs	77.8	75.3	82.1	82.8	77.7
Environmental Regulations	69.9	69.8	74.8	71.1	80.9
Proximity to Major Markets	71.8	76.3	66.4	83.2	76.8
Proximity to Suppliers	72.8	64.3	63.6	66.7	63.8
Water Availability	51.6	54.6	N/A	N/A	N/A
Quality of Life*	82.8	87.6	62.1	54.7	58.8

Source: Area Development Magazine Corporate Survey, 2019

*Rating for prior years' surveys reflects the average rating of nine factors.

However, based on analysts' knowledge and study, Shenandoah County is not currently competitive for some of the top site selection factors that are highly valued by site selectors nationwide. These include:

- Availability of Skilled Labor
- Energy Availability and Costs
- Available Buildings



Table 7-6
National Top Site Selection Factors, 2000 - 2018
Corporate Survey, Area Development Magazine

Rank	Factor	2018	2015	2010	2005	2000
1	Availability of Skilled Labor	90.5	92.9 (1)*	85.9	87.2	87.7
2	Labor costs	89.1	80.8 (6)	91.0	87.9	91.6
3	Highway Accessibility	87.2	88.0 (2)	97.3	91.4	95.9
4	Corporate Tax Rate	86.7	78.8 (7)	86.3	85.0	84.7
5	Tax Exemptions	83.0	74.7	90.9	83.6	81.6
6	Quality of Life	82.8	87.6 (3)	62.1	54.7	58.8
7	State and Local Incentives	82.5	75.8 (9)	89.3	86.0	83.6
8	Energy Availability and Costs	77.8	75.3 (10)	82.1	82.8	77.7
9	Available Buildings	76.7	83.7 (5)	81.0	N/A	N/A
10	Occupancy or Construction Costs	76.1	85.4 (4)	89.8	83.7	83.0

* (2015 Ranking)

Shenandoah County's labor force has comparatively lower skill and education attainment levels as discussed in previous chapters. Not having a highly-skilled, readily available labor force can impact recruitment efforts for higher-value industries such as healthcare and information technology. The County also faces the challenge of water and sewer service provision which is limited to areas within town boundaries and select areas along Route 11. Therefore, as mentioned in the County's comprehensive plan business site selection is largely limited to areas within the towns along I-81 though there are large vacant land areas in the rest of the County. Also, the availability of buildings is a challenge within the County. Simply put, there are not many commercial and industrial buildings available for new prospects. Those that are available are generally not competitive due to the age, condition, and size of the available space.

4. Local/Regional Incentives

Shenandoah County offers some economic development incentives for new and existing businesses. These incentives seem to be similar to other incentives offered locally and regionally. As mentioned, the County is within Region 8 which is served by the Central Virginia Partnership for Economic Development under the GO Virginia initiative. As mentioned in Chapter 6, the Virginia Economic Development Partnership identifies and certifies sites within the County as part of its Virginia Business Ready Sites Program to help market readily available sites for economic development. Three sites in Shenandoah County recently were upgraded to Tier 3, showing some property owners are making the investments to increase the competitiveness of their assets. There are also State programs providing funding and tax abatements in place that business developments in the County can enjoy based on qualifications, including the Commonwealth's Development Opportunity Fund, the Economic Development Access (EDA) program, Commercial and Industrial Sales and Use Tax Exemption, Major Business Facility Job Tax Credit, and the Virginia Jobs Investment Program (VJIP). That said, these incentives are available everywhere in Virginia. In addition, Shenandoah County is in the process of developing Tourism Zone incentives which will help to encourage investment by tourism-related businesses within the county and currently offers a small business loan program through the IDA.

E. TARGET INDUSTRY ANALYSIS

1. Overview

This analysis "casts a wide net" in determining potential target industries. Taking a more aggressive approach to identifying possible industry targets for Shenandoah County can help the County's economic development office refine its proactive marketing and recruitment outreach efforts. In this context, aggressive means that the screening process was inclusive rather than exclusive relative to potential



opportunities that may appear marginal considering historical economic trends. Being inclusive at this phase ensures any potentially viable options can be tested before being eliminated.

Furthermore, the target industry lists move beyond just static targets. They identify vertical (supply-chain) and horizontal (market) relationships within the primary target markets. By using this methodology Shenandoah County can apply a comprehensive approach to building upon existing industry clusters and developing new ones. This is particularly important when targeting industries that already have a relationship with an existing regional industry and/or business.

The following section discusses the rationale used to describe how the above findings were incorporated into the industry screening process. Based on the assets and constraints summarized earlier, the Consultant initiated a review of primary and secondary source materials to identify a broad range of potential industries that appear to be either compatible with the county's location/labor assets or marginally affected by known constraints. This process has several purposes when undertaken as part of an economic development strategy including:

- Establishing a framework for matching Shenandoah County's available "product" (land, utilities, intangibles, etc.) to potential markets;
- Identifying a receptive "audience" for a focused marketing campaign;
- Understanding the characteristics, size and long-term growth potential of compatible markets;
- Establishing priorities for the allocation of marketing resources; and
- Identifying prospect industries for further consideration.

2. Industry Screening

Industry cluster analyses involve examining the economic relationships among commercial and industrial sectors. From the cluster analysis, RKG Associates identified those industries that may enjoy a competitive advantage within the greater Shenandoah region, but would also benefit from Shenandoah County's strategic assets/location. The underlying assumption of the cluster analysis is that companies concentrate in areas where they enjoy some competitive advantage. These advantages, whether related to location, natural resources, vendor relationships or other factors, allow companies to compete more successfully.

An industry cluster is a group of companies in industries that are related in one of three ways:

- Buyers and Suppliers – the most common relationship
- Competitors – producers of same or similar goods and service, usually firms in the same or similar industries
- Shared Resources – companies that rely on the same location- specific resources such as labor and raw materials

Industry cluster analysis provides a method for determining local competitive advantage – which in turn is crucial in attracting investment, be it through attracting firms or expanding existing firms. The industry cluster analysis will rely on a statistical cluster identification process designed to incorporate and assimilate local (county), and regional economic data. The fundamental criteria analyzed in the process include:

- Industry Growth – Industries with growth over the past four years (2010-2018) and those that are most likely to grow both locally and regionally.
- Industry Size – Component industries of an industry cluster must have sufficient size in terms of total employment, number of establishments and total sales to justify their inclusion in the cluster.



- **Industry Concentration** – RKG Associates examined current concentrations of each industry in Shenandoah County. Low concentrations of employment and establishments suggest that a given industry may not be well suited for a given region.
- **Local Fit** – Local fit includes both quantitative analysis and considerable professional judgment, based on community characteristics, industry preferences, specific industry composition and location-based activity. Local infrastructure was analyzed including the presence of highways, utility costs, telecommunications service level, and the match of the region’s labor force profile with industry needs. Special attention was paid to target industries already identified by the Commonwealth of Virginia and/or the region.
- **Other Criteria** – Includes skilled and professional workforce requirements by industry, tendency of given industries to concentrate in Shenandoah County, job training resources, and other quantitative and qualitative measures identified through this analysis.

Focusing development efforts on space that is suitable to businesses in these industry clusters will likely enhance the County’s chances for economic success. However, the industry targeting analysis was not restricted to only known industry clusters. A broad range of industry categories was analyzed from manufacturing, distribution and transportation, to high-end services. The result is a full range of options for Shenandoah County to consider and will be highlighted in the opportunity sites discussion in the Implementation Strategy when appropriate.

3. Largest Employment Sectors

A common metric used to evaluate and understand a local economy is to look at the largest and fastest growing employment sectors within a region. Using EMSI data, RKG analyzed employment trends within both Shenandoah County and Virginia Region 8 between 2010 and 2018.

Shenandoah County employment base grew by 3.7% (excluding public sector) from 2010 to 2018. That resulted in an increase of 586 new jobs during the study period (Table 7-7). The largest employment sector within the Shenandoah economy remained manufacturing which totals 22% (3,518 jobs) of all jobs within the county and experienced 9% growth since 2010.

The health care sector, the second largest employment segment, grew over the study period from 1,320 jobs to 1,675 jobs, for a growth rate of 26.9%. Lower wage sectors such as retail saw declines in employment.

Recent employment growth has clustered in specific sectors since 2010. Information technology grew by the highest rate. Most of the growth for this sector was

Table 7-7
Shenandoah County
Largest Employment Industry Sectors

Industry Sector	2018 Employment	2010-2018 % Growth
Shenandoah County Total	15,800	3.7%
Information	3,518	9.0%
Transportation and Warehousing	1,675	26.9%
Health Care and Social Assistance	1,665	-0.6%
Administrative Services	1,319	-9.3%
Other Services	952	-4.4%

Source: EMSI and RKG Associates, Inc., 2019

Table 7-8
Shenandoah County
Fastest Growth Sectors (more than 100 jobs)

Industry Sector	2010-2018 % Growth
Shenandoah County Total	3.7%
Information	38.8%
Transportation and Warehousing	26.9%
Health Care and Social Assistance	26.9%
Administrative Services	16.2%
Other Services	15.0%

Source: EMSI and RKG Associates, Inc., 2019

Table 7-9
Region 8 Industry Sectors
Fastest Growth Sectors (more than 1,000 jobs)

Industry Sector	2010-2018 % Growth
Region 8 Total	8.9%
Agriculture, Forestry, Fishing and Hunting	38.0%
Educational Services	36.3%
Transportation and Warehousing	31.6%
Management of Companies and Enterprises	30.6%
Professional, Scientific, and Technical Services	30.5%

Source: EMSI and RKG Associates, Inc., 2019



centralized in low-to-median waged information technology jobs. Also, transportation and warehousing saw dramatic increases likely due to Shenandoah's central location to many population centers and quality infrastructure. The health care sector which grew by 355 jobs, follows a national trend of health care employment growing over this study period.

At the regional level, total employment grew by 8.9% between 2010 and 2018. The growth came from agriculture and education services, which added 1,135 and 2,467 jobs, respectively. Additionally, high and median wage sectors such as transportation & warehousing, management of companies, and professional science & technology services experienced over 30% employment growth. Comparing Table 7-8 to Table 7-9, it is apparent that Shenandoah County has a different employment mix compared to the rest of the region.

These results show that Shenandoah County has followed many of the national trends over the past eight years. Sectors such as Health Care, Transportation and Warehousing, and Information Technology all grew significantly between 2010 and 2018 nationally.

4. Wage Growth

RKG Associates examined the health of the economy and the wealth created by its economic base based on changes in wage levels. RKG obtained the annual wage data by sector between 2010 and 2017 from U.S. Census Bureau's Quarterly Workforce Indicators (QWI) and used it to identify the industry sectors that experienced the strongest growth of annual wages in the County since 2010. The analysts also looked at the wage growth between 2010 and 2017 for Shenandoah County and its surrounding region to evaluate the County's economic performance within the region in terms of wealth creation.

a. Wage Growth by Sector

Among all the 20 industry sectors within Shenandoah County, 16 sectors have experienced wage growth between 2010 and 2017 and four sectors have experienced declines. The average annual wage for all sectors in the County increased by 9.0% to \$38,484 during those seven years. Several sectors that have more prominence in Shenandoah County and relevance to this study have seen a robust wage increase, such as Professional, Scientific, and Technical Services; Information; Manufacturing; Public Administration; Retail Trade; and Accommodations and Food Services (Table 7-9).

However, the overall wage growth of 9.0% in the County is lagging the inflation rate of 12.4% (based on Consumer Price Index of 2010 and 2017 for all urban consumers) during the same period. This reveals that though the economic base in Shenandoah County economy has increased the wealth of County's residents, the increase has not been substantial enough to out-pace inflationary increases in retail goods and services. Simply put, the buying power of the County's residents has decreased slightly, and thus local quality of life is incrementally reduced because the local economic base is not strong enough to produce wealth gains that out-pace inflation.

This results also suggests that the County should consider strategies for growing employment in sectors that have shown strong wage growth - such as Information and Professional, Scientific, and Technical Services. While difficult to achieve, strengthening the economic base in certain industry segments will bolster the overall wealth and yield economic benefits to the County and its residents. Additionally, for these sectors to grow in Shenandoah County it will require investment in education and workforce development programs from the County to be successful.



Table 7-10
Annual Wages by Sector, 2010-2017
Shenandoah County, Virginia

	2010	2017	% Growth
All Fields	\$35,304	\$38,484	9.0%
Accommodation and Food Services	\$14,040	\$15,384	9.6%
Administrative and Support and Waste Management and Remediation Services	\$24,576	\$31,176	26.9%
Agriculture, Forestry, Fishing and Hunting	\$31,620	\$30,180	-4.6%
Arts, Entertainment, and Recreation	\$21,180	\$18,828	-11.1%
Construction	\$33,768	\$42,384	25.5%
Educational Services	\$38,964	\$42,276	8.5%
Finance and Insurance	\$43,872	\$60,396	37.7%
Health Care and Social Assistance	\$34,092	\$34,824	2.1%
Information	\$47,988	\$54,984	14.6%
Management of Companies and Enterprises	\$64,404	\$65,508	1.7%
Manufacturing	\$38,820	\$41,664	7.3%
Mining, Quarrying, and Oil and Gas Extraction	N/A	\$54,648	N/A
Other Services (except Public Administration)	\$26,316	\$27,000	2.6%
Professional, Scientific, and Technical Services	\$60,684	\$80,532	32.7%
Public Administration	\$33,096	\$37,836	14.3%
Real Estate and Rental and Leasing	\$18,744	\$26,292	40.3%
Retail Trade	\$24,756	\$28,500	15.1%
Transportation and Warehousing	\$40,752	\$47,136	15.7%
Utilities	\$48,252	\$64,680	34.0%
Wholesale Trade	\$78,288	\$41,244	-47.3%

Annual Wages for Selected Sectors, 2010-2017
Shenandoah County, Virginia

	2010	2017	% Growth
All Fields	\$35,304	\$38,484	9.0%
Professional, Scientific, and Technical Services	\$60,684	\$80,532	32.7%
Information	\$47,988	\$54,984	14.6%
Manufacturing	\$38,820	\$41,664	7.3%
Public Administration	\$33,096	\$37,836	14.3%
Health Care and Social Assistance	\$34,092	\$34,824	2.1%
Retail Trade	\$24,756	\$28,500	15.1%
Accommodation and Food Services	\$14,040	\$15,384	9.6%

Source: U.S. Bureau of Census Quarterly Workforce Indicators (QWI), RKG Associates, Inc., 2019

b. Wage Growth by Jurisdiction

The analysts also analyzed the County's wage growth in comparison to its surrounding region and the Commonwealth of Virginia as a whole. The wage level of Shenandoah County households roughly 35% below the Commonwealth of Virginia and 12% to 15% below the surrounding region (Table 7-10). However, it should be noted that the wage level in the County has been rising, but not as fast as the surrounding region such as the Central Shenandoah Planning District Commission and the Northern Shenandoah Valley Regional Commission (excluding Shenandoah County). Over the past 7-year period, the County has continued to lose ground against the region and the state. This result reinforces previous analyses showing that the County's economic base is heavily weighted toward lower-skilled, lower-paying jobs.



5. Projected Employment Growth

As Shenandoah County and the region looks to the next five years, it's important for the community to understand which employment sectors will grow and decline over this period. Using EMSI data, RKG performed an analysis of the projected employment trends between 2018 and 2023 for both Shenandoah County and the Region 8.

Within Shenandoah County total employment is expected to grow by 4.0% over the next five years totaling 16,430 employees (Table 7-11). The Information Technology sector is projected to experience a steady 28% growth rate within the study period. Shenandoah's distribution-friendly location will continue to benefit the county with a projected 12.8% growth rate over the next five years. Additionally, the second largest employment sector, Health Care will see total jobs go from 1,675 to 1,920.

Table 7-11
Annual Wages by Jurisdiction, 2010-2017
Shenandoah County, VA and Surrounding Region

	2010	2017	% Growth
Virginia Total	\$53,328	\$58,416	9.5%
Shenandoah County, VA	\$35,304	\$38,484	9.0%
Central Shenandoah Planning District Commission	\$38,367	\$43,475	13.3%
Augusta County, VA	\$39,300	\$45,672	16.2%
Staunton City, VA	\$32,844	\$36,288	10.5%
Waynesboro City, VA	\$35,148	\$45,888	30.6%
Rockingham County, VA	\$41,124	\$47,964	16.6%
Harrisonburg City, VA	\$40,452	\$42,324	4.6%
Rockbridge County, VA	\$30,768	\$34,692	12.8%
Buena Vista City, VA	\$29,724	\$34,080	14.7%
Lexington City, VA	\$38,640	\$42,828	10.8%
Bath County, VA	\$35,724	\$38,832	8.7%
Highland County, VA	\$24,840	\$32,832	32.2%
Northern Shenandoah Valley Regional Commission	\$40,788	\$45,529	11.6%
Clarke County, VA	\$43,380	\$48,372	11.5%
Frederick County, VA	\$41,400	\$48,072	16.1%
Page County, VA	\$29,232	\$34,740	18.8%
Warren County, VA	\$37,320	\$40,836	9.4%
Winchester City, VA	\$44,256	\$46,668	5.5%

Source: U.S. Bureau of Census Quarterly Workforce Indicators (QWI), RKG Associates, Inc., 2019

As shown in Table 7-12, the rest of Region 8 is projected to grow their employment base at a higher rate than Shenandoah County. Information Technology does stand out as one employment sector that Shenandoah County is projected to show growth compared to the rest of the region.

Looking in more in-depth at the 3-Digit NAICS Code Subsectors, Table 7-13 shows that Shenandoah County's existing strength in food manufacturing, telecommunications, hospitals are projected to continue to grow into 2023. Region 8 projected new jobs are projected to be in similar subsectors such as health care, transportation, and professional services. Educational Services, which is the largest net increase within Region 8, contributes no new jobs in Shenandoah county.



Shenandoah County should continue to gain a better understanding of the needs of these growth sectors to help facilitate their growth in the coming years. As the employment has grown since 2010, it is important that the County continues to invest time and effort to maintain a positive economic environment.

Table 7-12
Shenandoah County
Largest Projected Growth Sectors 2018-2023

	Shenandoah County	Rest of Region 8
Total Job Growth	4.0%	8.9%
Information	28.0%	-3.5%
Professional, Scientific, & Tech Services	22.8%	15.5%
Health Care & Social Assistance	14.6%	11.3%
Transportation & Warehousing	0.1%	7.5%
Other Services	9.0%	8.5%

Source: EMSI and RKG Associates, Inc., 2019

6. Industry Strength

A relative measure of how a local economy is performing can be estimated by comparing employment growth for specific industry sectors to that of a larger economy. This measurement, which is represented as a ratio, is referred to as a Location Quotient (LQ). If the LQ is near 1.0, it indicates that the study area has a comparable proportion of its employment base in each sector to that of the larger area, which in this case, is the United States. If the ratio is less than 1.0, then the study area is under-performing in that industry sector relative to the country. Conversely, an LQ greater than 1.0 indicates a stronger performance by the study area overall. In this analysis, the LQ's and their respective growth rates, were developed based on employment changes between 2010 and 2018, and the analysis was conducted for both Shenandoah and the eight-county Surrounding Market using information from the U.S. Census Bureau and EMSI.

Table 7-13
Shenandoah County and Region 8
Projected New Jobs 2018-2023, 3-Digit NAICS Code Subjectors

Shenandoah County	Net New Jobs	Region 8	Net New Jobs
Shenandoah County Total	+690	Region 8 Total	+15,300
Telecommunications	+130	Educational Services	+1,820
Local Government	+110	Ambulatory Health Care Services	+1,790
Food Manufacturing	+100	Food Services & Drinking Places	+1,250
Professional, Scientific & Tech Services	+80	Professional, Scientific & Tech Services	+1,150
Hospitals	+80	Admin & Support Services	+850
Social Assistance	+70	Nursing and Residential Care Facilities	+680
Private Household Services	+60	Warehousing & Storage	+640
Ambulatory Health Care Services	+60	Credit Intermediation & Related	+590
Truck Transportation	+60	Social Assistance	+520
Religious, Civic, and Other Organizations	+50	Chemical Manufacturing	+400
All Other	-100	All Other	+5,310

Source: EMSI and RKG Associates, Inc., 2019

The Location Quotients for Shenandoah County (Figure 7-1) and the Surrounding Market (Figure 7-2) are current as of 2018. The size of the bubbles in these figures represents total employment. Their position from left to right indicates their LQ for 2018, and their position from top to bottom indicates growth rate between 2010 and 2018. Not all sectors are visible in each of the figures. Those that represent relatively small components of the economy, those with very low or very high LQs or those that were positioned behind larger sectors within the figure have been included within the inset. Unclassified positions were not included in this analysis.

Notable findings from the analysis of industry strength are as follows:

- The healthcare industry has experienced significant growth in Shenandoah and the Surrounding Market (LQ of 0.24). In comparison, the Surrounding Market has an LQ of 0.95, approximately average compared to the rest of the nation.

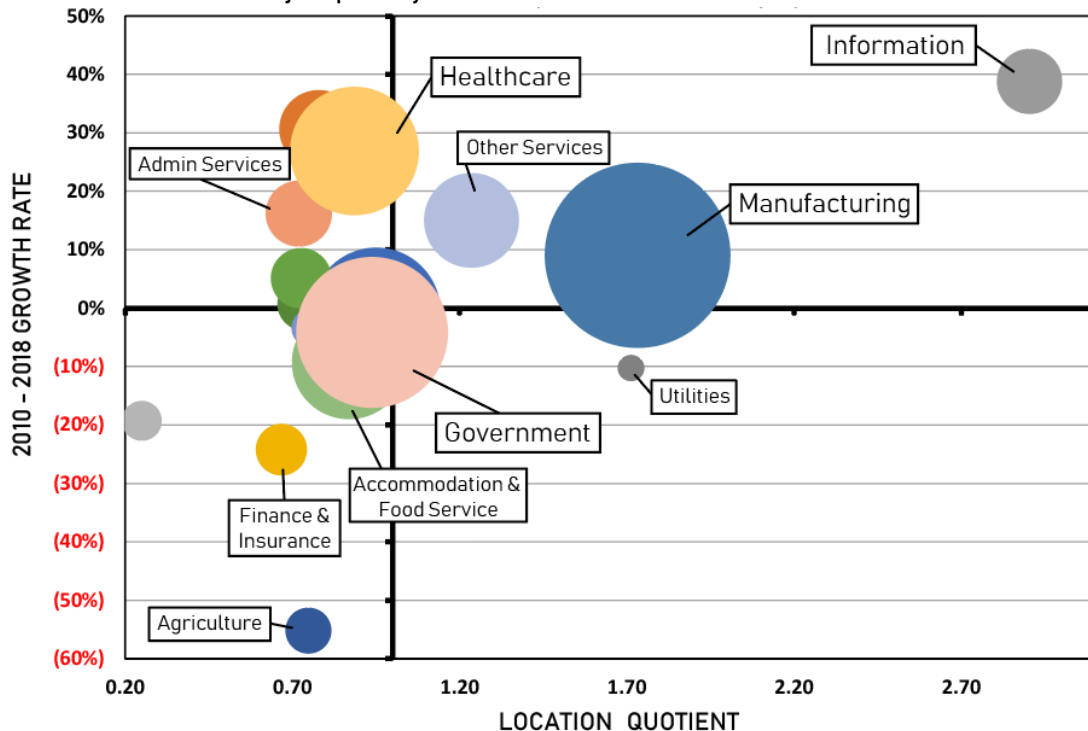


- Manufacturing remains a substantial component of the Shenandoah County economy. Overall, both Shenandoah (2.82 LQ) and the Surrounding Market (1.63 LQ) have high concentrations of manufacturing employment. Combined, Shenandoah and the Surrounding Market experienced a net gain of almost 402 manufacturing jobs between 2010 and 2018.
- The lodging and dining sector also are a substantial part of the Shenandoah employment base, having a location quotient just under 1.00, this sector experienced a small decline in jobs 2010 and 2018. The pending opening of the Simply Shenandoah Wellness Nature Retreat will add 100 new jobs to the county. Empirical and anecdotal research indicate the tourism, entertainment, and leisure market sector still has untapped potential within the County.
- The retail trade sector is a substantial component of the Shenandoah and Region 8 economy. However, national retailing trends have impacted the local community as well, with both study Areas experiencing little to no growth in employment from 2010 to 2018.
- The information technology sector is well represented in Shenandoah County. Shenandoah County LQ in this sector is 1.48, adding 120 jobs in the study period. This is not a regional trend as the region has an LQ of 0.51.

Figure 7-1

Industry Strength, 2010-2018

Shenandoah County vs. Region 8
Bubble size reflects 2018 job quantity



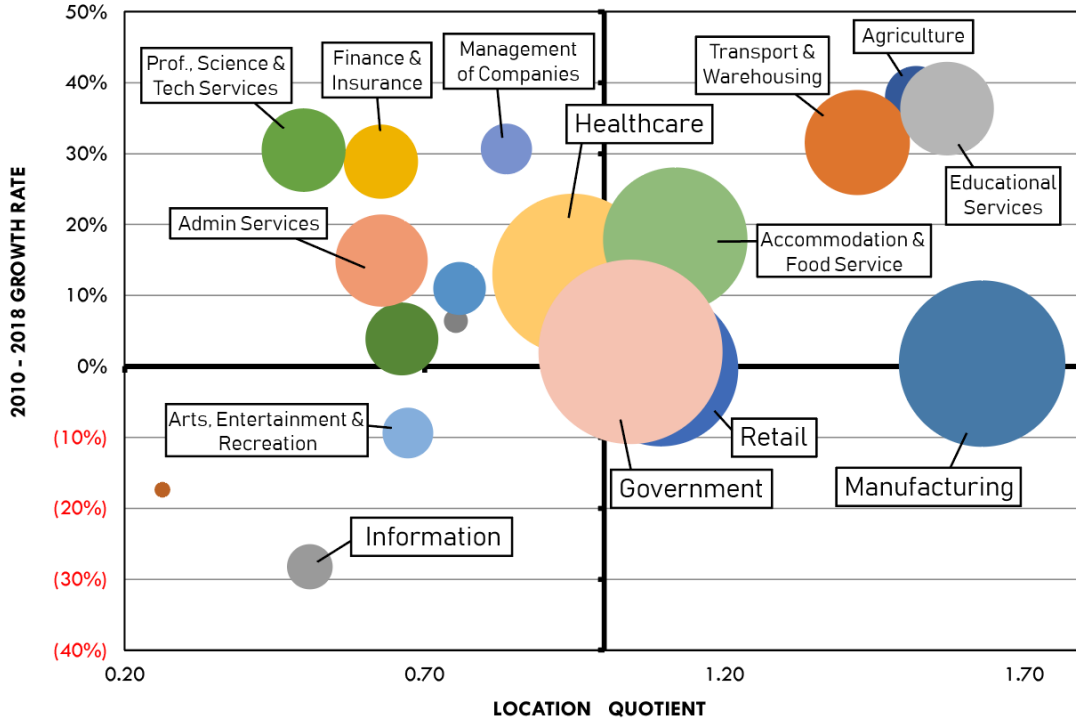
Source: EMSI, U.S. Bureau of Labor Statistics, 2019



Figure 7-2

Regional Industry Strength, 2010-2018

Region 8 vs. United States
Bubble size reflects 2018 job quantity



Source: EMSI, U.S. Bureau of Labor Statistics, 2019

7. Analysis Findings and Recommended Actions

The target industry analysis in this SEDP “cast a wide net” regarding the potential for different potential business sectors to spark economic development. In analyzing possible target industries beyond the area’s historical economy or previous efforts, the screening process ensured that any potentially-viable targets could be tested and analyzed before being eliminated in favor of more promising options. The following section provides analysis and justification of the five selected target industries for Shenandoah County to pursue over the next five years. They are:

- Manufacturing & Production
- IT & Communications
- Hospitality & Tourism
- Agribusiness
- Healthcare

As noted elsewhere in this SEDP, these business sectors are by no means the only ones that can or should grow in Shenandoah County in coming years. Instead, these represent the best chances for the Tourism and Economic Development Departments and its partners to use their limited economic development resources to have the greatest positive effect upon the local economy.



Manufacturing & Production

Shenandoah County, and all Region 8 communities, have large and active manufacturing sectors. Within the County, Manufacturing has a long-established, successful history almost rivaling the County's Agricultural sector. In 2018, Manufacturing jobs constitute the largest number of private-sector jobs in Shenandoah County, increasing by 9.3% between 2010 and 2018 (exceeding regional and national trends). The Shenandoah County manufacturing sector is led by large employers like George's Inc., Andros Foods NA, and Mercury Paper, Inc. Food manufacturing is particularly strong in Shenandoah County, with a projected increase of 100 jobs over the next five years.

Taking a broader market look, the Manufacturing sector is projected to continue to grow domestically due to the national efforts to retain and grow the country's production economy. From a local perspective, the growth prospect of food manufacturing is particularly bullish, as restaurant visits are projected to continue to rise in the near future. With the strong regional and national push to grow the "Farm-to-Table" concepts in dining, the County's existing food manufacturing efforts and proximity to the Washington DC and Baltimore metropolitan areas can help the County continue to grow this sector. The value-add food processing (i.e. canning, meat processing) is a logical cross-industry strategy between manufacturing and the agricultural sector.

In the short-term, the County may be most successful focusing on those industry sectors that do not rely on large labor force needs, as there is comparatively low immediately available labor force. There is an immediate opportunity for the County to explore 'cottage producers,' or (typically) home-based businesses that produce products (often foods or crafts) on a smaller scale. More strategically, the County—through Shenandoah County Public Schools and its relationships with regional post-secondary institutions—could build upon being a regional leader in manufacturing retention and recruitment through expanding coordinated workforce development programs, specifically in production-based jobs (i.e. CNC machinists).

MANUFACTURING Top Potential Industry Sectors

- Food and Beverage Manufacturing (NAICS 311)
- Basic Chemical Manufacturing (3251)
- Pharmaceutical and Medicine Manufacturing (3254)
- Medical Equipment and Supplies Manufacturing (3391)
- Hardware Manufacturing (3325)
- Machine Shops (332710)
- Fabricated Metal Product Manufacturing (3329)
- Metalworking Machinery Manufacturing (3335)
- Computer & Peripheral Equipment Manufacturing (3341)

One of the potential limiting factors is available water and sewer infrastructure capacity. Simply put, certain manufacturing industry sectors are heavy water and sewer users. This is particularly true for food manufacturing. To this point, strategic relationships between the County, Towns, and the local authorities will be necessary as the County continues to expand its production-based economy.

IT & Communication

Shenandoah County is home to Shenandoah Telecommunications Co., or ShenTel, the primary telecommunications provider in the Shenandoah Valley and much of the I-81 corridor. ShenTel's presence alone has created a high location quotient (2.8) for the County. This is borne out as the Region8 cluster of communities has a LQ below 1. Regardless, the County's information and communication sector constitutes a small, but growing, component of the local marketplace. This is supported by the existing fiber optic and high-speed internet infrastructure throughout the County, particularly along I-81 and within the various municipalities.



While the information and communication sectors are projected to have a modest increase nationally due to the surge in mobile technology and the lack of transformative technological shifts in recent years, Shenandoah County is positioned to take advantage of some specific opportunities. Most notably, logistics technology (particularly in information collection, sharing, and communication) continues to evolve and is projected to grow into the near future. Given the County's proximity to the region's strong logistics and distribution sector as well as the recent Amazon 2.0 headquarters announcement for Northern Virginia, Shenandoah County can become a value location that ties the County's existing cluster with these emerging opportunities.

**INFORMATION & COMMUNICATION
Top Potential Industry Sectors**

- Wired and Wireless Telecommunications Carriers (NAICS 5173)
- Software Publishers (5112)
- Data Processing, Hosting, and Related Services (5182)
- Electrical Contractors and Wiring Installation Contractors (237130)
- Office Administrative Services (561110)

Other assets that can be marketed by the County are relative real estate costs, existing and potential workforce development programs through Lord Fairfax Community College and the public schools, and the relative high quality of life in Shenandoah County and the Valley as a whole. Having ShenTel in the County is a strategic asset, as the County has direct connection to decisionmakers on the availability potential for expansion of the existing infrastructure network.

Hospitality & Tourism

As discussed in Chapter 5 – Agriculture Analysis, the County has experienced a 1,000% increase in agritourism based revenue. In addition to Bryce Resort, the National Forest and Park Service assets, and the long-standing presence of the Cavern tourist attractions in the region, Shenandoah County and the entire Valley are experiencing growth in more experiential tourism activities. This is particularly evident through the growth of wineries, breweries, and distilleries. The Tourism and Economic Development Department already has begun creating multi-venue and cross-branded marketing packages bringing the existing assets together with restaurants and hospitality venues. Further expansion of both the beverage manufacturing sector and the coordinated tourism potential between the County's/Region's historic and natural destinations and the agritourism venues should be pursued.

Beyond that opportunity, the County's Tourism and Economic Development Department should continue to develop and promote the event and festival venues within the County. These events not only strengthen the quality of life for residents, they attract visitors from outside the region who spend money at local shops, restaurants and hotels. Multi-day events (i.e. bike weekends, ATV weekends, beverage tours, etc.) create substantially more revenue due to increased dining and hotel stays.

**INFORMATION & COMMUNICATION
Top Potential Industry Sectors**

- Museums, Historical Sites, and Similar (NAICS 7121)
- Amusement Parks and arcades (7131)
- Other amusement and recreation industries (7139)
- Traveler Accommodations (7211)
- RV Parks and Recreational Camps (7212)
- Restaurants (722)



Agribusiness

Chapter 5 details several opportunities for agribusiness within Shenandoah County. The County has a long and rich history of both animal and crop production. Creating the environment to support existing agriculture businesses while creating opportunities for future farmers and ranchers is a key component to the County's economic development plan. From the perspective, creating an environment where both agricultural and non-agricultural economic development can occur is critical. The following narrative was pulled from Chapter 5.

- Potential Rezoning Plan – One potential opportunity is to rezone agriculture land to forbid it to be developed into anything other than its current uses. This would reduce the demand for land and preserve agricultural land. It should be noted that this rezoning strategy would adversely impact immediate land value within the County.
- Value-Add Facilities – The County should explore and diversify its value-add production facility offerings to expand its economic base. These facilities could include livestock (beef, goat, sheep swine) processing, milk (cheese, yogurt, ice cream, fluid milk), vegetable/fruit processing, commercial kitchens, and timber mills. These value-add facilities would provide investment and jobs into the County.
- Agritourism – As consumers have continued to put importance on experienced-based retail offering, agritourism has become a significant part of any agricultural community. Shenandoah County should continue to develop this type of tourism through promoting beverage manufacturing, seasonal attractions, and on-site hospitality.
- Financial Incentives to Conservation – Increases the financial incentives for conservation up to the loss from market value would allow for farmers to maximize the value of their land through preservation. However, it would have financial impacts on the County, in terms of further reduced revenues and direct costs.
- Business Assistance – Shenandoah should expand its business assistance offerings to allow to attract new business development within the County. This could include an entrepreneurship development program to help new agriculture entrepreneurs start their own businesses. Programs like these will become increasingly important as the average age of farmers within the County continues to rise.

Healthcare

Shenandoah County healthcare and social assistance employment sector is the second-largest in the County (behind manufacturing) and one of the fastest growing (27%) since 2010. This trend follows regional and national growth as healthcare needs continue to expand as the Baby Boomer generation continues to enter their Golden Years. Further, the County's strong growth in persons 65 years old and above contributes to this increase in healthcare employment locally. Local healthcare provision is largely driven by Shenandoah Memorial Hospital (SMH) located in Woodstock. However, there are several other smaller providers and specialty social assistance venues (i.e. the Skyline Terrace Nursing Home).



Given patient care follows demand and does not lead the market, healthcare and social assistance is more a secondary target industry. That said, there are opportunities for the County to pursue greater healthcare provision and ancillary industries that would benefit from being located near a regional hospital. In the short-term, the County should engage with SMH to understand the market and growth strategies (likely will require a strong non-disclosure agreement). Helping the hospital expand its services (either at the Woodstock campus or elsewhere in the County) can build new specialties that would benefit existing residents and increase the attractiveness of the community as a place to live. For example, the hospital no longer has a birthing center, which could deter young families from locating in the County. More strategically, there are several ancillary healthcare industries that could benefit from associating with the hospital and/or locating in a more cost-effective environment while serving the Northern Virginia market. Medical and diagnostics laboratories that service Northern Virginia healthcare businesses may have interest in a lower-cost environment.

HEALTHCARE Top Potential Industry Sectors

- General Medical and Surgical Hospitals (NAICS 6221)
- Offices of Physicians (6211)
- Offices of Dentists (6212)
- Nursing Care Facilities (6231)
- Outpatient Care Centers (6214)
- Medical and Diagnostic Laboratories (6215)
- Home Health Care Services (6216)
- Ambulatory Health Care Services (6219)



8 IMPLEMENTATION STRATEGY

A. INTRODUCTION

The Implementation Strategy Chapter is the culmination of the work presented in the previous analyses. Ultimately, the following narrative details recommendations for Shenandoah County and its public and private implementation partners to consider as it advances county-wide economic development efforts. This work comes from the comprehensive engagement and outreach effort defined by the current economic development staff, which included a community outreach effort, the stakeholder engagement effort, the empirical analysis, and collaboration with County staff and the Working Group. It is RKG Associates' position that the vision, goals, and subsequent implementation recommendations accurately reflect the aspirations and input provided by the community, the realistic opportunities to advance the County's economic development goals, and the efforts necessary to maximize the effectiveness and efficiency of the County's invested resources.

This chapter is not intended to supplant continued discussion, engagement, and analysis by—and on behalf of—the County to establish annual economic development business plans. Rather, this document is a guide that future decisions should reference to ensure consistency and compatibility. The contents of this chapter should lay the foundation for the County's leadership and professional staff to guide economic development efforts and investments over the next 5 to 10 years. Some of the actions included are recommended to be acted upon immediately. Others will require these early items to be realized and/or require greater staffing/funding to be realized. Regardless, the overarching intent of this chapter is to inform current and future implementation efforts on both HOW they could possibly be implemented and WHY those recommendations have been made.

RKG Associates encourages the Shenandoah County Board of Supervisors to accept and adopt this plan.

B. BUILDING FOR SUCCESS

It is important to note that implementing a strategic economic development plan requires substantial outreach and education. Equally important to proactively marketing the community to existing and prospective business, is the role of marketing and outreach within our own community. This includes outreach towards the public, partnering organizations, and to local decision makers. Simply put, RKG Associates and the Working Group want to make sure the County is properly engaging its economic development effort in the most effective and efficient way.

- *Implementation is a process and not an event*
One of the more common challenges communities have when implementing a strategic plan is to establish unrealistic expectations in terms of the timing and scale of results. In truth, much of the initial actions will be focused on adopting and changing policies, establishing new programs and initiatives, and collecting and tabulating the data necessary to be successful. Providing the education on how these efforts unfold is critical to being able to stay the course as many of these efforts may take time before their impact can be fully realized.



- **Be creative and flexible when implementing**
The strategic economic development plan is not intended to be a literal guide for the County to follow. The concepts and strategies provided by RKG Associates are best practices at achieving the vision defined by the Working Group. Given the long-term timeframe of several of these recommendations, several factors relevant to Shenandoah County may (and most likely will) change over time. Market conditions and access to resources will adjust over time, requiring the County to find an alternative approach to reach the stated vision. To this point, this document should be viewed as guidelines and not prescriptive edicts.

- **Being proactive can provide greater opportunities**
Some communities consider economic development implementation as a reaction to demands from the marketplace and not proactively pursuing the vision established by processes such as these. Getting ahead of the investment market provides several benefits. Most notably, engaging with business prospects or property owners before there is an established plan can lead to more creative solutions that meet the needs of both the public and private partners. This is particularly critical for Shenandoah County, as many opportunity sites are located within local municipalities, that have land use controls. At the very least, the coordination effort will provide all partners with a greater understanding of the economic development vision and can create strategies to enact that vision prior to finalizing any investments.

- **Coordination is critical**
Shenandoah County has limited staff and financial resources to achieve all the goals laid out in this document. However, there are several key implementation and investment partners that already focus on many of these opportunities (i.e. Shenandoah Valley Partnership, Lord Fairfax Community College...). The County needs build the relationships with each of those partners to leverage their expertise and resources to assist the community in obtaining its goals. In other words, there is no reason for Shenandoah County to ‘reinvent the wheel.’ More long-term, the County should also consider how to better leverage a public-public (i.e. with the Towns) or public-public-private partnership (with the Towns and private entities), where these strategic partners co-invest and co-manage implementation, further leveraging county resources.

C. MISSION STATEMENT

Before any community can formulate a strategic action plan, it must first agree upon its desired outcomes. As part of the SEDP process, RKG and County staff collaborated with several members of the Shenandoah County community through a Working Group to discuss and define goals for economic development within Shenandoah County. Feedback gathered at the Working Group meetings—combined with input provided by the County’s Board of Supervisors, dozens of interviews with municipal leaders, business owners, citizens, and implementation partners—helped define the vision that underpins every recommendation included in the SEDP Implementation Matrix:

A comprehensive and collaborative partnership among all public and private local, regional, and statewide economic development entities to provide current and future Shenandoah County businesses an environment to thrive and grow; and to ensure current and future County residents with the opportunity to benefit from economic growth through personal gain and enhanced quality of life.

D. GOALS

The economic development goals detailed in this section reflect the input and engagement of the Working Group, County staff, the Board of Supervisors, and dozens of county residents, municipal



leaders, and business owners. These goals were parsed into three categories: Process Goals, Implementation Goals, and Outcome Goals. The process goals reflect the Working Group's desire to ensure that all specific recommendations included in this plan have been well thought, are consistent with the vision, and provide a 'road map' that maximize the effectiveness and efficiency of the County's investments in economic development. The implementation goals detail the general outcomes that the Working Group believes all economic development efforts should target. The outcome goals reflect the Working Group's desired results from the pursuit of the process and implementation goals and/or the execution of the implementation strategies. The following goals are presented in no particular order, as the Working Group did not specify any single goal was more important than the others.

1. Process Goals

- Provide the community with a better understanding of Economic Development processes and information so that they can make informed economic development decisions
At a base level, the Working Group wanted to ensure that any decisions that the County makes to pursue economic development are based in fact. The previous chapters in this strategic plan are intended to provide the "business case" for the recommendations in this implementation strategy.
- 'Right-size' economic development efforts based on reasonable market, financial and capacity levels
The Working Group noted early in this process that the vision and goals that Shenandoah County has for economic development exceed the capacity of the resources committed to pursuing economic development. Simply put, the County is not providing enough technical capacity and financial support for the County to achieve high levels of success in each of the action areas. This SEDP provides guidance on what efforts can be reasonably undertaken with the current staffing and financial investments and is broken into recommendations for future efforts based on incremental budgeting and staffing.
- Prioritize community investments over time to achieve objectives
Like the previous goal, the Working Group recognizes the need to prioritize those efforts to be undertaken as well as phasing efforts based on resource investment and availability. The Working Group has provided a recommendation on where the County's economic efforts should be focused until additional staff and resources are committed to expand the County's efforts. This prioritization is confirmed in the proposed timeline within the companion implementation matrix at the end of this chapter.
- Identify specific economic development growth areas and define the type of growth envisioned
The SEDP process revealed that location-based economic development efforts need to respect current and historic development patterns in Shenandoah County community. Chapter 6-Site Analysis detailed RKG Associates' empirical analysis of all parcels in Shenandoah County for their potential and appropriateness to accommodate new growth. The Working Group used this data to make specific recommendations of where the County's economic development efforts should focus growth/activity.

2. Implementation Goals

- Improve the county's competitiveness to retain and attract new business investment
Business retention, expansion, and recruitment is the foundation of all economic development strategies. The Working Group recognizes that the primary objective for the County's efforts is to create an environment that allows existing businesses to thrive and attracts new companies to benefit from a strong market climate.



- *Improve the county's fiscal position through new investment*
The Working Group recognized that strengthening the County's fiscal position by diversifying its tax base is a goal of practically all residents. Specifically, the Working Group emphasized that a successful economic development initiative will help relieve the financial burden of running the government
- *Create the workforce that supports existing and targeted industries*
The Working Group has identified the need to have a workforce properly trained for the existing and planned jobs in the County. Ultimately, companies (whether existing or new) cannot succeed without a labor force that is capable and competent in their core mission. That said, the Working Group also has established this goal to give existing and future residents of Shenandoah County the opportunity to participate in any new economic growth by having the skills to potentially improve their employment and quality of life.
- *Define a balance between jobs and housing to accommodate job growth*
The analysis revealed that Shenandoah County does not have an abundant, readily-available labor force. The Working Group recognized that part of attracting new jobs and increasing the County's fiscal health will be ensuring there is a sufficient labor force to help existing companies sustain/grow and attract new companies. The economic development plan encourages the County to ensure future growth includes housing development at price points obtainable by the County's working population while also strategizing around workforce attraction and retention.
- *Preserve the quality of life for current and future residents*
The Working Group recognizes that future economic development growth should balance with the community's desire to maintain the existing high quality of life. Recommendations in the implementation matrix were crafted to maximize the community benefits of job creation and investment while minimizing impact on existing resources and adding to the community's quality of life
- *Enhance collaboration with regional/statewide economic development partners*
The Working Group recognizes that several economic development functions (i.e. workforce development) are already being implemented and managed by local and regional partners in both the public and private sectors and encourages the County to maintain its fiscal stewardship by not recreating these efforts. The Implementation Matrix identifies those areas where the County can build its relationships with these partners to strengthen local economic development efforts while minimizing the reliance on additional County staff or financial resources to be committed.

3. Outcome Goals

- *Increased median income*
The Working Group recognizes that economic growth without benefit to existing workers and residents creates a dichotomy in the local marketplace. To this point, the Group recommends the County's economic development efforts seek to increase median incomes within the County. This includes both attracting and retaining jobs that pay above the current median in the County as well as create workforce development and upward mobility opportunities for existing County workers to advance their careers with their existing respective employers.
- *Diversify and expand tax base*
The risks communities face when they are overly dependent on a single industry or small group of industries is well documented. The most popular example is the impact to the City of Detroit after the automotive industry substantially contracted in that region. The Working Group knows



that Shenandoah County's economic base is relatively small, and therefore concentrated in a handful of specific agricultural and industrial sectors. The Group encourages the County to build upon these clusters while seeking to expand the economic activity through attracting new industry sectors to the County.

- *Improve business and employment opportunities*
Economic development is not just about attracting new companies and working with existing companies to stay and grow. It also is about creating a business climate where businesses and the community are partners in sustaining and expanding the profitability of companies and the employment opportunities offered. The Working Group recognizes the efforts the County and the Towns have employed to date to build a positive business climate and has endorsed the recommendations in the Implementation Matrix to expand and enhance these efforts to further improve the local market climate.

RKG Associates used this vision statement and these goals as a guide to formulate the recommendations that are detailed in the following Priority Actions section and the companion Implementation Matrix.

E. PRIORITY EFFORTS

RKG Associates, the County economic development staff, and the Working Group worked together over several meetings to review the draft implementation strategy and framework. The economic development goals were further categorized as 'primary actions' and 'support efforts.' Primary actions focus on direct engagement with businesses, property owners, and implementation partners to further the creation of economic and fiscal growth for the County. **Primary actions include business retention and expansion, workforce development, and site development.** The support efforts involve the actions that Shenandoah County must implement to make the primary actions successful. Support efforts include communication and coordination efforts with implementation partners and enacting the policies and regulations to enhance the local business climate.

RKG, staff, and the Working Group reached consensus that current economic development staffing and investment levels did not allow the County to effectively pursue all the primary actions simultaneously. In short, the recommended strategy is for the County to focus proactive efforts on specific actions; proactively pursuing additional actions as the financial and staff resources are made available. The following prioritization reflects the consensus of the involved parties:

1. Primary Actions

- *[1a] Business Retention and Expansion*
The Working Group prioritized business retention and expansion (BRE) as the most important effort for the County to pursue. At a base level, the Working Group believes that helping businesses that already have made an investment in the County is a strong marketing tool for any prospects considering Shenandoah County. More strategically, the Working Group recognizes that the financial cost to the local community of helping an existing business grow generally is less than the cost of attracting a new company into that local community. Focusing on making existing businesses strong and in a position to expand will benefit the County's fiscal strength while indirectly strengthening the local marketplace for recruitment efforts.
- *[1b] Workforce Development (Partners)*
The Working Group considers workforce development as equally important to BRE efforts. That said, the Working Group also recognizes that several entities within the County and the region actively implement workforce development efforts. Lord Fairfax Community College, through its Workforce Solutions, manages most of the regional workforce and labor force development



programs through various partnerships. The Shenandoah County Public Schools 2018-2024 Strategic Plan identifies several school-to-work initiatives, including the resources offered at Triplett Tech. The Shenandoah Valley Workforce Development Board operates three Virginia Career Works Centers. Finally, the Shenandoah Valley Partnership has recently enhanced its efforts in workforce development. To these points, the Working Group recognizes that the County's economic development staff should focus as a conduit to connect businesses and individuals to existing resource providers, using its BRE efforts and business roundtable engagement to identify needs and connect providers.

▪ [2] Asset Development

Asset development includes the preparation and marketing of development-ready sites and **modern** buildings within the County. The market analysis has shown that communities within the Shenandoah Valley have created a market environment for speculative development that balances risk and reward for investors have seen substantially greater development and investment activity. **The County's current land assets generally are not 'build-ready,' and many of the available existing building assets are not desirable due to functional obsolescence.** The Working Group believes the County should consider the capital investment to improve the development-readiness of the most marketable properties in the County. That said, this effort will require a more substantial capital investment and public-private partnerships for parcels privately owned.

▪ [3] Entrepreneurial Development

Entrepreneurial development includes all efforts related to helping an individual or group of individuals take an idea for a business and action that idea. Currently, the Shenandoah Valley Small Business Development Center (in Harrisonburg) and Lord Fairfax Small Business Development in Middletown are the closest resources for Shenandoah County residents to garner support. **The Working Group recommends the County partner with the Towns to create a coordinated, but locally operated entrepreneurial and small business development program.** Entrepreneurial development was ranked below BRE and workforce development because of its strong potential to attract entrepreneurs and small businesses from the larger regional centers (i.e. Washington DC, Baltimore, Richmond...) that can service their clients from Shenandoah County while taking advantage of the high quality of life and lifestyle amenities the County has to offer.

▪ [4] Business Recruitment

Business recruitment ranked last of the primary actions for two reasons. First, the Shenandoah Valley Partnership has an extensive, proactive business recruitment effort that includes Shenandoah County. The Working Group believes that the County should first focus investment in areas where the County has no representation. Second, Business recruitment will be hindered until the County has stronger assets in place to accommodate new businesses. The County's existing vacant building stock is older and lacks the amenities and scale generally sought in today's marketplace. The County's land assets are generally in an unprepared state, that will require substantial time and financial resources to prepare before new buildings can be built. To this point, the Working Group recommends the County address the asset needs before investing substantial resources in proactive recruitment. In the interim, the County's economic development staff should support the Shenandoah Valley Partnership (and other statewide and regional economic development efforts) as necessary until staffing and resources are made available.



2. Support Efforts

The Working Group recognized that establishing the proper framework for the primary actions to be effective and efficient is a fundamental need. To this point, the Working Group recommends that staff time and funding be made available to prioritize each of the three support efforts:

- [1] Organization and Communication
The organization and communication effort covers all of the necessary internal and partner outreach efforts for the County economic development staff to leverage their time and resources. This includes coordination meetings with the municipalities and regional implementation partners, direct communication with the existing business community, and relationship building with local and regional partners including real estate and site selection efforts. Within economic development, it is imperative to build relationships in order to build partnerships. RKG learned through this effort that some relationships are strong, and others are inconsistent. The relationships with the municipalities may be the most important initial efforts, given their land use and utility control in the most desirable areas.
- [1] Community Outreach
Many economic development decisions require elected leaders to support the use of resources to succeed. Having community support (or at least minimizing community opposition) is a critical component of having a successful economic development effort. The Working Group encourages the County to implement a series of community engagement efforts to increase Shenandoah County residents' understanding of what 'economic development' actually is, why economic development efforts are necessary, and how economic development investment benefits them and the entire community. This effort is particularly important in Shenandoah County around land use issues. It is well documented that there are a diverse set of opinions on land use locally. The Working Group want to ensure community support/opposition to a development initiative is informed by facts, and not misinformation.
- [1] Toolbox Development
The Implementation Matrix includes several recommendations on how Shenandoah County can refine its policies and regulations to create a stronger business and investment climate. These recommendations address both County and municipal opportunities, particularly around land use, financial investment and taxation. Ultimately, the Working Group encourages all jurisdictions in the County to determine their development vision and establish/refine the tools available to meet that vision. Creating a more consistent and predictable investment and business operating climate will improve the County's opportunities to preserve existing business, encourage them to expand, and attract new investment.

3. Interim Activities

It is very important for RKG Associates to note that supportive, reactive efforts will occur in each of the primary actions even if direct funding and staffing are not currently available. As noted above, the County economic development staff will coordinate with the Shenandoah Valley Partnership on recruitment efforts, relying on SVP to represent the County until such time as County staff involvement is appropriate. Similarly, the County staff will assist an entrepreneur who approaches the County with any needs, bringing in the Small Business Development Center for resources not currently offered locally. Finally, many of the support efforts detailed in the Implementation Matrix will be applicable across several and/or all the primary action areas. For example, the creation of target industry marketing collateral will benefit the County's BRE efforts as well as SVP's recruitment efforts.

Conversely, there are recommendations in each of the primary action categories and the support effort categories that will require greater investment/staffing to implement. For example, the business



retention and expansion efforts will be somewhat limited due to available staffing to meet the goal of communicating with every business in the County at least once every three years. Simply put, that goal will require more staff-hours than currently available. Similar situations exist in each of the other categories. The following section will discuss those actions to be undertaken immediately and those that will require greater staff/resources to implement.

F. PRIMARY ACTION PRIORITY TASKS

1. Business Recruitment, Retention, and Expansion

Cosponsor the annual business survey with the Chamber of Commerce - The first step towards improving the County's relationships with existing businesses and building a proactive business retention and expansion (BRE) program should be the creation and implementation of a business needs survey. The survey is a cost-efficient way for the County to gather information on market challenges, opportunities and needs of County businesses quickly. Questions should cover topics such as workforce needs/challenges, market growth opportunities, competition challenges, location/physical needs, etc. The County can use the responses in four primary ways. First, programs and policies can be created to address challenges/opportunities identified by several businesses. Second, trends/issues in a given industry or area can be identified and mitigated through collaboration with key stakeholders. Third, individual responses can be used to ensure site visits are targeted to those businesses that have the greater opportunities to grow/are at risk of downsizing/closing. Finally, survey findings can be tracked over time to identify market trends and fine tune programs based on the current and projected economic climate.

As awareness of the survey grows, it can be expanded to serve as a comprehensive approach to identify workforce, market, regulatory, and growth needs of the County's business base. At that time, the results collected from this effort can guide any changes to existing business outreach approach and help define economic development policy focus for Shenandoah County.

The County could partner with the Chamber of Commerce to market and administer the survey. This collaboration would benefit both the County and the Chamber. The County would get access to the Chamber's business contacts and mitigate some of the costs of the survey while the Chamber can increase awareness of the organization and refine its mission based on documented business needs in Shenandoah County.

Build industry roundtables in several different market areas – An industry "roundtable" should be created for each and any industry group within the County that cares to participate in programs and services offered by the Tourism and Economic Development Department. These informal groups should consist of between eight and twenty representatives from the specific industry group, members of the County staff, and other local/regional implementation partners, as necessary. A few roundtables already exist in Shenandoah County (i.e. tourism) and should be continued in this new focus.

These groups should meet on a regular basis (typically quarterly) to discuss issues related to the ability to do business in Shenandoah County, provide feedback on the results of the business survey and how to action the findings identified therein, and provide feedback on proposed policy/investment strategies that could impact these sectors. The County staff also should use this opportunity to disseminate information about current projects and programs being developed and/or revamped, including how these changes will influence the group.

Simply put, this forum allows local businesses to participate in the economic development process, to learn of current events, and to provide feedback on additional efforts that may be undertaken. While all industries should be encouraged to form roundtables, the Working Group recommends the County prioritize the development of roundtables in the following categories:



- Manufacturing/Production
- Remote Business Services/Telecommuting
- IT & Communication
- Hospitality & Tourism
- Agribusiness

The roundtables are a pivotal step in collecting data outside of the business survey and site visits. These groups should be used to generate initial concept and policy ideas as they relate to workforce and entrepreneurial development programs, financial and regulatory incentives, and market and asset development. The business survey tool should be vetted each year through the relevant focus group to ensure relevance and buy-in.

Enhance Outreach Efforts to Existing Businesses – The County staff already have a modest outreach effort to meet with local businesses. However, current resources have limited this initiative. The Working Group recommends the County provide the resources to enhance this initiative to be more proactive in engaging existing businesses, expand the number and type of businesses engaged, and develop a detailed tracking strategy to inventory responses and identify policy opportunities. As noted, the business survey will provide the County with real-time business needs and challenges based on responses. This information can help the County staff determine a comprehensive outreach strategy. The County should establish a target number of visits to be completed each year, building as more resources become available. Coordination with regional (i.e. Shenandoah County Partnership) and local (i.e. Lord Fairfax Community College) is essential as well. The intent should be to avoid repetitive or duplicative visits to businesses.

2. Workforce Development

Strengthen the relationship between the regional workforce, education providers, and County businesses – The Shenandoah Valley already has very strong education provider engagement in workforce and job skill development. Lord Fairfax Community College (and its various provider offerings), Shenandoah County Public Schools, Shenandoah Valley Region Career Works, and other workforce/training partners have created a strong foundation for Shenandoah County businesses and residents. However, it was reported to RKG Associates that awareness of the depth and breadth of programs is not absolute in the County. Further, there is limited connection between provided programs and actual local business needs.

To this point, the County's Tourism and Economic Development Department should play an advisory and coordination role for workforce development. At a base level, the County staff can raise awareness of existing programs to businesses and residents through a more proactive marketing and outreach campaign (including bringing materials on site visits). More strategically, there is an opportunity for the County to develop into a liaison between County businesses and these providers through their outreach and data collection efforts. Establishing an education/workforce roundtable would provide the platform for regular engagement and progress meetings with business leaders and the provider community.

3. Asset Development

Work with 'priority site' property owners to connect their investment strategies with the County's asset marketing efforts – The Working Group recognizes that to preserve, expand, and grow the business base within Shenandoah County, there needs to be sufficient and price appropriate real estate assets to house those businesses. The initial assessments of the City's real estate market and potential opportunity sites was completed as part of this analysis (chapters 4 and 6). However, more specific data collection and dissemination will be required to maximize the City's potential in attracting new investment into the building supply.



IT is RKG Associates' understanding that the County already maintains a database of all properties currently listed for sale or lease. This information is critical, but only a first step in building a priority-site marketing campaign.

The next step is for the County's economic development staff to initiate (or continue) to reach out to each property owner to determine their ability/willingness to be considered as part of an assemblage/reinvestment effort. Those areas where enough properties are willing to consider being included are then ranked based on several factors, which may include catalytic potential, location, and cost. Chapter 6 details the initial analysis into determining the highest potential opportunity sites in the County. This list should serve as a jump-off point for owner outreach. The initial outreach is only the first step in the process to develop trust and buy-in from property owners. Consistent outreach will be necessary for both those property owners who are engaged in reinvestment efforts (to provide updates and retain their interest) as well as those initially uninterested (to establish trust and track any changes in investment strategy).

From this ongoing effort, the County can create and maintain a property assemblage book. The assemblage book should be the guide that the County uses to engage with prospects and market the County. While the property inventory should include all sites, the assemblage book is the "highlight" properties to be marketed to investors seeking opportunities. The book should provide information on all the properties as well as the development vision for that area. The assemblage book can serve as a "playbook" for any landbank strategy, with the Towns and County working cooperatively to acquire key pieces as they become available on the market.

Create investment strategy to develop two pad-ready sites – The 'just-in-time' concept of manufacturing has become equally relevant in economic development. Most prospects value having land and building assets readily available to minimize relocation timing. As noted earlier in this report, the County has not reached its potential in recruitment due to a lack of ready, high-quality land and building supply. The Working Group recognizes that investing in land and building assets is the most cost-intensive part of economic development. However, it also is a necessity to maximize growth potential and expand the primary employment base. Recommendations to expand inventory include:

The most cost-effective way to reduce build time for a prospect is to maintain 'shovel-ready' pad sites. Simply put, these are development sites where all the earthwork (i.e. grading) and utility installation is complete. These sites effectively are prepared so that building construction can occur immediately. Having available pad sites also benefits those prospects that want to build their own facility to specification. To control costs and minimize the amount of "internal competition" within the County, the Working Group recommends the County consider a public-private or public-public partnership to make two of the Tier 2 or Tier 3 sites meet the Tier 5 requirements under the Virginia Business Ready Sites Program (VBRSP).

4. Entrepreneurial Development

Implement a more proactive entrepreneurial development program – There is an opportunity for the County to fund and support additional services for small businesses and entrepreneurs to flourish in Shenandoah County. The Working Group recognizes the value of these services, and recommends that some effort be put into developing relationships with local, regional, and state partners to build a Shenandoah County-focused presence.

One initial opportunity is to create do-it-yourself (DIY) materials for basic entrepreneurial concepts (i.e. how to write a business plan, how to patent your idea...). These materials can be created through collecting data from national organizations such as the Small Business Administration (SBA) and providing them to local entrepreneurs. The County also could sponsor (or co-sponsor) a robust and frequent business startup lecture series for potential entrepreneurs in Shenandoah County. This concept would be to bring in lecturers in specific fields and/or experts on certain aspects of entrepreneurial development



to offer insight to local residents/entrepreneurs. The County also can engage with existing entrepreneurial programs to increase their marketing presence in the County, such as The Gauntlet (www.theadvancementfoundation.org) program for Virginia entrepreneurs.

5. Business Recruitment

Create industry-specific marketing materials – The Working Group encourages the County to create more comprehensive print and digital marketing materials. Most notably, industry-specific materials should be part of this strategy so that targeted recruitment efforts can focus on those programs/offers that are relevant to the prospect. It is important to note that while having marketing materials is a minimum benchmark for disseminating information, keeping those materials current is the true benchmark. This is particularly important for Internet-based materials, as having inaccurate/out-of-date data sources can harm the community's potential for a prospect before ever learning about the opportunity. Specific recommendations include:

- **Quality of Life Sheet** – The quality of life brochure should focus on the intangibles of living and working in Shenandoah County, highlighting the various technology, workforce, cost of living, and social amenities of the area. The content should emphasize factors such as school performance, cultural assets, proximity to road and rail transportation, access to the regional markets, and quality/variety of leisure activities. This material is particularly valuable in the professional services recruitment and entrepreneurial development.
- **Target Industry Materials** – Industry-specific marketing materials for each of the target industries is important for disseminating specific data that is valuable to your target industries. Each document should be customized based on the cluster (see Chapter 7). The documents should highlight information including employment and establishment growth data, regional wage rates, current businesses operating in the area, competitive advantages of operating locally, unique incentives available (where applicable) and local business contacts (ambassadors).
- **Incentive Sheet** – A series of incentive documents should be created that detail all local, state and federal incentive programs available for businesses locating in Shenandoah County. Each incentive sheet should focus on those programs relevant to the industry group being targeted. Prospective businesses can use this document to gauge the financial benefits to doing business, and existing businesses may be alerted to incentive programs they were unaware of, therefore helping to ensure their continued presence. In the Toolbox Development section, providing formulaic incentives (i.e. land costs, tax abatements) will enable prospects to gauge the community's competitiveness.
- **Business Testimonial Book** – RKG Associates' efforts for this analysis has revealed several compelling "success stories" of existing businesses succeeding in Shenandoah County. However, these experiences are not chronicled or readily available to use in marketing. The Working Group recommends crafting a business testimonials book with written statements from existing industry leaders on topics ranging from quality of life, business climate, market performance, and personal preference to do business locally. Getting input from companies that have chosen and thrive locally is valuable to industry recruitment. Individual testimonies of leaders from business in the target industries should also be included in the target industry brochures.
- **Property Assemblage Book** – As noted earlier, a property assemblage book highlights those land assets available for companies to locate/acquire. Creating an assemblage book is recommended to be part of the physical asset inventory detailed earlier in this document. The assemblage book should only highlight those assets where the property owners are engaged and supportive of the County marketing their land. The book should focus on the top (5-10) properties available. The land assets should be ranked based on several factors, which may



include catalytic potential, location, and cost. The book should provide information on all the properties as well as the community's development vision for that area.

Increase Shenandoah County's presence in business recruitment through strategic networking and data collection practices – The County's current investment levels in economic development do not allow existing staff to adequately pursue all the goals identified in this effort simultaneously. Given this limitation, the Working Group recommends that the County's staff focus on working with regional and statewide partners (such as the Shenandoah Valley Partnership) to market the County externally until the assets and finances become available for the County to pursue external recruitment directly.

G. SUPPORT EFFORT PRIORITY TASKS

1. Organization and Communication

Fund economic development commensurate with outcome expectations – The Working Group recognizes that funding is critical to a successful economic development effort. Simply put, the goals detailed in this strategy will require a level of funding above current investments to be able to effectively pursue each action. RKG Associates estimates it will cost between \$400,000 and \$600,000 annually to operate the staff and materials necessary to fully engage this strategy. Without these, the pace and scale of implementation will need to follow the prioritization detailed earlier in this strategy until the full resources are made available.

2. Community Outreach

Activate the Shenandoah County citizens to assist in implementation – One way for the County to augment its financial and staff investment in economic development is to engage its citizens in the process. The County's economic development staff should seek to build volunteer capacity to assist in implementation. More specifically, there are a few strategic areas where citizen volunteers can play important roles in expanding the Tourism and Economic Development Department's capacity. The following recommendations focus on those specific areas.

- **Community advocates** – There has not been much effort in engaging residents about the opportunities/challenges of implementing an economic development program to date. Given the challenge of reaching all the different community groups (and economic development perspectives in Shenandoah County), the Working Group recommends a select group of interested citizens assist in engaging local civic organizations (i.e. homeowner associations, social clubs...). Ideally, the community advocates would be individuals with strong ties and broad recognition within either an area of the County or with a civic group. Individuals selected to be advocates should be familiar with the County's economic development efforts, can discuss and explain economic development concepts, and be well spoken. Most importantly, the advocates must be available to assist in outreach to various community (i.e. congregations) and civic (i.e. neighborhood groups) entities. The advocate effort is intended to build community-wide awareness of the benefits and challenges of implementing an economic development strategy at the local level without requiring a staff large enough to provide individual attention to every citizen.
- **Business ambassadors** – The ambassador program is a collection of business and industry leaders that provide support to the economic development entity's staff for industry recruitment and retention. Although these individuals will have no formal authority within the recruitment process, they provide a 'real life' vantage point for prospects about doing business in Shenandoah County. Their most important function is to provide a business perspective for prospects interested in locating/expanding within the County. Utilizing business leaders in the recruitment



process legitimizes the recruitment effort through testimonials while leveraging the staff's time and effort. It is important that ambassadors be well informed, well-spoken, and respected within their industry. In other words, the most effective ambassadors may not be from the largest businesses. The County should identify ambassadors from each of the major industry sectors to ensure appropriate coverage regardless of the prospect.

- **Mentors** – A business development mentorship program pairs successful entrepreneurs with individuals with a business concept, but limited resources or understanding of starting, operating, and growing a business. These programs provide local entrepreneur's access to someone who has 'been there' within their industry, adding confidence in the advice and direction provided. Having a local mentor also provides stability, as the relationship created can carry forward after the program has served its purpose. The participant typically signs an agreement to operate for a certain period within the boundaries of the program (the county in this case) or pays a mentorship fee. Given the large and growing retirement-age population in Shenandoah County, the County can tap into the local knowledge base to find volunteer mentors. It is recommended that the County utilize a training program for its mentors to ensure consistent and successful efforts (i.e. the Mentor-Protégé Program through the Small Business Administration or SCORE).

Implement a proactive community engagement and education initiative – Community awareness and support is a critical component of implementation. Simply put, the amount of financial and political support for economic development is influenced by the willingness of residents to endorse local action. Past actions (that occurred before initiating this effort) indicate there is not widespread understanding of economic development initiatives in Shenandoah County, why it is important for future sustainability, and what needs to be done to achieve the stated vision. Increased awareness and education about economic development can only benefit the County's implementation in building sustainable and strategic relationships with all local stakeholders.

- **Publish community eNewsletters** –The Working Group recommends County staff create regular eNewsletters that highlight the actions and successes of local economic development effort. This newsletter should vary slightly from one sent to stakeholders, partners, and prospects, presenting the data in less industry-focused language. The Working Group and RKG Associates encourage the inclusion of small educational components/editorials to the newsletter that better explains the more technical content presented. One potential addition could be a "Director's Notes" that highlights a relevant piece of the newsletter within context of why it is important and the benefits created by that effort/success. Creating a method for residents to sign up for this eNewsletter through a dedicated economic development website is recommended.
- **Host community update meetings** – RKG Associates observed that the County has not provided regular community updates beyond Supervisor meetings and workshops. This disconnect enables naysayers to "define the reality" of the County's economic development efforts. The Working Group recommends County engage the Community Advocates to meet with citizen and civic groups to provide annual updates on the actions of the organization and the benefits being generated for the community. This effort can dovetail into a staff-led town hall presentation/discussion to be held at different locations throughout the County, enabling community members to hear about economic development efforts and ask questions/give feedback. The town hall event is more formal, focusing on the "state of economic development" within Shenandoah County.



3. Toolbox Development

Build a more consistent and predictable review and approval process – The development approval process provides predictability and consistency for existing and prospective businesses alike. Given that most of the County’s economic development activity will occur within town boundaries, Shenandoah County has a specific challenge of not controlling the regulatory environment of its primary assets. Further, each Town has its own review processes and requirements. In addition to the regulatory constraints, the process oftentimes is a long and arduous exercise. While the Working Group recognizes the value and importance of the development process in ensuring new investment meets the vision of the community and the sovereignty of each Town to set policies, it has identified some areas where the County and Towns can work together to create greater predictability and consistency for County-based economic development projects.

- ***Maximum Review Periods*** – The Working Group recommends the Towns and County attempt to establish a consistent maximum review period for project submissions. This will ensure each opportunity site has the same potential for attracting investment.
- ***Concurrent Review*** – Similar to review periods, the Working Group recommends all jurisdictions create a concurrent review process for economic development projects. Simply put, concurrent review requires the relevant review entities to address a proposal simultaneously rather than consecutively. This will reduce the overall review process.
- ***Expedited Review*** – Projects that meet a specific scale or goal threshold should be provided with an expedited review process, further reducing the time for approval. The criteria for this incentive needs to be adopted throughout the County to ensure timely delivery.

Hire a development ombudsman to assist prospects through review processes – The development ombudsman position is focused on providing property owners and investors technical and process-oriented assistance when going through the development process. Whether it is a rezoning or variance request, the ombudsman program is intended to assist applicants in effectively and efficiently navigating the relevant County/Town process. The position has two priorities. First, the ombudsman must be familiar with all procedures and expectations in each jurisdiction and be able to advise applicants on how to ensure a complete application package. Second, the ombudsman must be able to collaborate with industry professionals (i.e. engineers) to provide advisory services when it comes to technical needs. It is envisioned that this assistance will be advisory in nature, and not provide technical requirements to the applicant. RKG Associates envisions the ombudsman position be joint funded by the County and the individual Towns.

H. IMPLEMENTATION MATRIX

The following implementation matrix presents the full range of objectives and corresponding action items for the County’s consideration. As noted, this matrix should serve as a reference document as the economic development staff craft their annual business plan. The time lines, estimated costing, and implementation partners for each action item identified in the matrix reflects RKG Associates professional recommendation guided by input from County staff and the Working Group. The Tourism and Economic Development Department’s annual business plan should be structured to advance the vision and goals established through this effort but prioritized and scaled based on the available staffing and capital resources available at that time. The final timing, focus, and potential costs for each action item should be refined by staff and/or the responsible implementation partner when implementation occurs.

SHENANDOAH COUNTY, VIRGINIA Strategic Economic Development Plan Implementation Matrix		Implementation Lead		Implementation Timing (Year)						Estimated Cost
		Public/NP	Private	'19	2020	2021	2022	2023	2024	
BUSINESS RETENTION AND EXPANSION										
Objective #1	Create a more comprehensive business contact list to ensure retention and expansion efforts reach all County businesses									
	Action 1: Work with municipal staff to create a comprehensive business contact list	SC, SM								A
	Action 2: Coordinate with the Chamber of Commerce on their contact list	SC	CC							A
	Action 3: Create a business licensing process for unincorporated Shenandoah County collect information relevant to building a more comprehensive business contact list (i.e. mandatory fill-in items on the application)	SC, SM								B
	Action 4: Coordinate with municipalities to gather contact information for area employers based on current business licenses.	SC, SM								A
	Action 5: Implement volunteer walks, having 5-10 volunteers canvas employment centers and commercial corridors not included in towns to gather contact information. This will require substantial advertisement	SC, SM, CC	N, I							B
Objective #2	Cosponsor the annual business survey with the Chamber of Commerce									
	Action 1: Establish a fixed date (i.e. week) that the survey will be released. This should be consistent year over year. Recommend the Fall or Winter do to agricultural work seasons	SC, CC	I							A
	Action 2: Work with the Chamber and industry roundtables to refine questions and expand awareness of the survey each year	SC, CC	I							A
	Action 3: Invest in marketing and outreach at least 2 months prior to the release of the survey each year	SC, CC								B
	Action 4: Share general results of the survey with roundtables, partner organizations, and the community through the quarterly newsletter	SC, CC								A
	Action 5: Use results of survey to prioritize retention/expansion visits for the year	SC	I							A
	Action 6: Work with respective roundtables about industry-specific findings from survey to determine annual action items	SC,CC	I							A
	Action 7: Retain all survey results to create a longitudinal assessment tool that can help local economic development efforts become more predictive than reactive to changing market climates	SC								A
Objective #3	Build industry roundtables in a number of different market areas									
	Action 1: Create an industry roundtable for every key market sector within the County including [1] Manufacturing/Production; [2] Remote Business Services; [3] IT & Communication; [4] Hospitality & Tourism; [5] Agribusiness;	SC	I							A
	Action 2: Make sure all partner organizations have representation on roundtables that crossover missions	SC, VP, GO								A
	Action 3: Meet each roundtable quarterly or semiannually as necessary, with one meeting targeted immediately after the release of the business survey results	SC	I							B
	Action 4: Use roundtable meeting to discuss: [1] market climate; [2] regulatory issues; [3] growth opportunities; [4] implementation coordination; [5] workforce development	SC, VP, GO	I							A
	Action 5: Use feedback from roundtables to help set annual economic development business plan	SC								A

SHENANDOAH COUNTY, VIRGINIA Strategic Economic Development Plan Implementation Matrix		Implementation Lead		Implementation Timing (Year)						Estimated
		Public/NP	Private	'19	2020	2021	2022	2023	2024	Cost
BUSINESS RETENTION AND EXPANSION										
Objective #4	Enhance outreach efforts to existing businesses									
Action 1:	Use the comprehensive business list to identify new companies to visit and track past visit efforts. Do not concentrate on the same businesses year over year	SC								A
Action 2:	Establish quotas for number of monthly visits, starting with five (5) per month, expanding as more staff is hired. The goal is to reach every business at least once every two years	SC								A
Action 3:	Use business survey results to prioritize outreach efforts	SC	I							A
Action 4:	Maintain database of visited businesses to track frequency and results of the visit	SC								A
Action 5:	Activate ambassadors to assist in outreach, providing them training on questions to ask and how to track the conversation	SC	I, N							A
Action 6:	Engage implementation partners (i.e. Lord Fairfax CC, SCPS, SVP, VEDP, and SVWDB) as necessary depending on the need/responses from the business	SC, PS, VP, LF, WF, GO	I							A
Action 7:	Create a direct "help line" initiative on the economic development website that allows businesses to connect to an economic development staff member for assistance	SC								Included in web design
Objective #5	Expand marketing strategies for tourism-service businesses									
Action 1:	Continue to enhance working relationships with all tourism destinations within Shenandoah County	SC	I							A
Action 2:	Implement the County's branding strategy	SC								C
Action 3:	Finalize and implement the Tourism Zone designations	SC								A
Action 4:	Work with the municipalities to invest more of the local transient occupancy tax revenue to implementing tourism marketing and outreach efforts	SC, SM								A
Action 5:	Build more 'extend your stay' programs around theme-based multi-destination itineraries	SC	I							A
Action 6:	Create strategic cross-marketing efforts connecting tourism destinations, lodging facilities, and dining facilities	SC	I							A
Action 7:	Recruitment of special events to attract groups to the area. Examples include Bike Virginia, BMW Riders Association, etc.	SC	I							A
BUSINESS RECRUITMENT										
Objective #1	Finalize and prioritize target industry clusters									
Action 1:	Adopt prioritized list of target industry clusters. Recommended clusters are [1] Manufacturing/Production; [2] Remote Business Services; [3] IT & Communication; [4] Hospitality & Tourism; [5] Agribusiness; [6] Entrepreneurial Development	SC								A
Action 2:	Create target industry sector-specific website posting all relevant data and recruitment information for each sector	SC								Included in web design
Action 3:	Advertise the County's target industries to local, regional, and statewide partners	SC, VP, GO, VA								A
Action 4:	Reaffirm target industry clusters annually, providing updates to partners as necessary	SC, VP, GO, VA	C							A

SHENANDOAH COUNTY, VIRGINIA Strategic Economic Development Plan Implementation Matrix		Implementation Lead		Implementation Timing (Year)						Estimated	
		Public/NP	Private	'19	2020	2021	2022	2023	2024	Cost	
BUSINESS RECRUITMENT											
Objective #2	Create industry-specific marketing materials										
Action 1:	Create a 'Market Fundamentals' cut sheet that details specific market advantages of Shenandoah County (i.e. proximity to DC, Baltimore for remote service businesses)	SC									C
Action 2:	Create an 'Infrastructure' cut sheet that details the availability and capacity of utilities including (but not limited to) [1] water and sewer; [2] power (electricity, oil, natural gas); and [3] telecommunications	SC, UT									Included in above
Action 3:	Create an 'Incentives' cut sheet that details any local, state, or federal incentives available to businesses in that industry cluster as well as the parameters to access those incentives	SC, SM, VA									Included in above
Action 4:	Create a 'quality of life' cut sheet that details the housing, entertainment, recreation, and other amenities available in and around Shenandoah County	SC, SM									Included in above
Action 5:	Create a 'testimonial' booklet with first-hand experiences of existing business leaders within Shenandoah County, preferably within the target industry cluster	SC	I								Included in above
Action 6:	Develop a target industry cluster component on the economic development website that has digital versions of all marketing collateral	SC	C								Included in web design
Objective #3	Develop a proactive recruitment effort within the Manufacturing and Production industry cluster										
Action 1:	Work with industry roundtable members to identify existing vertical and horizontal supply chain businesses to engage about potential relocation/expansion in Shenandoah County	SC, VP	I								A
Action 2:	Use a business database vendor (i.e. Dun & Bradstreet or EMSI) to identify potential target businesses to actively contact and recruit to Shenandoah County	SC	C								B
Action 3:	Create a 'tip line' for citizens to call/Email/text ideas on business recruitment and any leads they may have on businesses that would relocate to the County	SC	N								A
Action 4:	Attend coordinated meetings with SVP, Go Virginia, and VEDP to discuss opportunities/prospects (SEE OBJECTIVE 4)	SC, VP, GO, VA									A
Action 5:	Join an advanced manufacturing trade organization (i.e. MDMA), exhibiting at an annual trade show and potentially advertising in their national publications	SC									A
Action 6:	Attend at least one (1) target industry business recruitment trip sponsored by a regional or statewide partner in each target industry cluster annually, increasing as budget becomes available	SC, VP, VA									C
Action 7:	Repeat this process for each additional target industry cluster that Shenandoah County invests staff and financial resources to actively pursue	SC, VP, GP, VA	I, C, N								C
Objective #4	Develop a proactive recruitment effort within the Remote Business Services industry cluster										
Action 1:	Work with industry roundtable members to identify existing industry relationships to engage about potential relocation to Shenandoah County	SC, VP	I								A
Action 2:	Use a business database vendor (i.e. Dun & Bradstreet or EMSI) to identify potential target businesses to actively contact and recruit to Shenandoah County	SC, VP	C								B
Action 3:	Create a 'tip line' for citizens to call/Email/text ideas on business recruitment and any leads they may have on businesses that would relocate to the County	SC	N								A
Action 4:	Implement a proactive outreach initiative to 5-10 businesses each quarter, sending marketing materials and implementing follow-up phone calls with economic development staff/ambassadors	SC									A
Action 5:	Work with municipalities to create a county-municipal funded rehabilitation program to convert unused upper-level space in downtowns for office and/or live-work space	SC, SM	O								E

SHENANDOAH COUNTY, VIRGINIA Strategic Economic Development Plan Implementation Matrix			Implementation Lead		Implementation Timing (Year)						Estimated
			Public/NP	Private	'19	2020	2021	2022	2023	2024	Cost
BUSINESS RECRUITMENT											
Objective #5	Implement a more proactive entrepreneurial development program										
	Action 1:	Work with partners to develop DIY materials for basic entrepreneurial concepts (i.e. how to write a business plan, how to patent your idea...)	SC, VP	N							B
	Action 2:	Provide a robust and frequent business startup lecture series for potential entrepreneurs in Shenandoah County	SC, LF	C							B
	Action 3:	Establish an entrepreneur program that enrolls five (5) new businesses each year; expanding as demand and resources allow	SC, SM	I							C
	Action 4:	Establish the local mentorship program that ties local retirees/business leaders to entrepreneurs based on experience and interest using a model similar to SCORE or the SBA mentorship program	SC	N, I							A
	Action 5:	Advertise and participate in entrepreneurial programs such as The Gauntlet (www.theadvancementfoundation.org) program for Virginia entrepreneurs	SC	I, N							A
Objective #6	Increase Shenandoah County's presence in business recruitment through strategic networking and data collecting practices										
	Action 1:	Maintain a database of all prospect interaction, tracking success rates and inventorying noted shortcomings from prospects that locate elsewhere	SC								A
	Action 2:	Add all site selectors to the economic development newsletter distribution list	SC								A
	Action 3:	Work with regional partners to build relationships with site selectors in target industry sectors	SC, VP, GO, VA	I, R							A
	Action 4:	Host semiannual business recruitment summits with Shenandoah municipalities and regional partners to discuss potential opportunities and challenges	SC, VP, GO, VA	C, R, I							B
Objective #7	Co-host regional business recruitment visits with local and regional partners within target industry clusters										
	Action 1:	Coordinate with site selectors, SVP, Go Virginia, and VEDP to identify two (2) to three (3) business prospects that would benefit from seeing Shenandoah County first hand	SC, VP, GO, VA	I							A
	Action 2:	Co-host one (1) 2-3 day marketing trip with SVP/Go Virginia for prospects each year to include a mixture of information sharing, networking and social activities, increasing the frequency as budget becomes available	SC, VA, GO, VP								D
	Action 3:	Give priority to prospects that already have business relationships in Shenandoah Valley, being strategic about which prospects are invited to attend together	SC								A
	Action 4:	Integrate industry ambassadors into the program and activity calendar	SC	I							A
ASSET DEVELOPMENT											
Objective #1	Create investment strategy to develop two (2) pad-ready sites										
	Action 1:	Work with local and state entities to develop a funding plan to create one (1) 10-acre and one (1) 25-acre pad	SC, VA	O, F, I							G
	Action 2:	Consider a cost-revenue agreement between the Towns and County on investment	SC, SB								A
	Action 3:	First option recommended to be a public-public partnership with the Industrial Development Authority (IDA) on their properties in the North Shenandoah Business Park	SC, SB, ID								A
	Action 4:	Other alternatives include the IDA site in Mount Jackson and the parcel located on the southeast quadrant of the Toms Brook interchange on I-81	SC, MJ, ID	O							A

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ASSET DEVELOPMENT											
Objective #2	Enhance and market the County's comprehensive property and asset database										
	Action 1: Inventory all existing vacant commercial and industrial land and buildings	SC	O	█	█	█	█	█	█	█	A
	Action 3: Connect with all property owners to detail price, availability, and vision for those asset; include in online listings	SC	O	█	█	█	█	█	█	█	A
	Action 2: Work with VEDP to feature our sites on the state website and our local website using a web-based database.	SC, VP, VA, GO	C	█							Included in web design
	Action 4: Create an 'open source' database for property owners and brokers to submit new assets and changes to existing listings	SC	C, I, R	█							Included in web design
	Action 5: Update listed properties every 3 months to ensure that listings are current with the latest details.	SC, VP, VA, GO	O, R	█	█	█	█	█	█	█	A
	Action 6: Maintain regular communication with property owners to ensure occupied/developed land is removed	SC	O, R	█	█	█	█	█	█	█	A
Objective #3	Work with 'priority site' property owners to connect their investment strategies with the County's asset marketing efforts										
	Action 1: Priority site recommendation includes [1] Northern Shenandoah Business Park (NSBP); [2] SE quadrant of Toms Brook I-81 interchange; [3] Woodstock Interstate Property 1; [4] IDA Site #1 (Mount Jackson); and [5] Turkey Knob Site	SC	O, R	█							A
	Action 2: Outreach to property owners during planning efforts to understand existing investment priorities	SC	O, R	█	█	█	█	█	█	█	A
	Action 3: Continue dialogue with owners, particularly catalytic parcels, on a regular basis to track changing strategies and create new opportunities	SC, SM	O, R	█	█	█	█	█	█	█	A
	Action 4: Create a catalyst sites prospectus, defining property ownership, implementation concepts, and available incentives to help bring the vision to fruition	SC			█	█	█	█	█	█	B
	Action 5: Consider public-private partnership investment strategy to create additional pad-ready sites once the first two are successful	SC, VA	I, O, F		█	█	█	█	█	█	G
Objective #4	Identify future potential economic development sites										
	Action 1: Utilize implementation plan analysis to score potential future economic development sites; updating as necessary based on ownership changes and/or future infrastructure investments	SC			█						A
	Action 2: Identify future growth areas within the county and towns for potential industrial and commercial zoning.	SC			█						A
	Action 3: Outreach to property owners during planning efforts to understand existing investment priorities	SC	O, R		█	█	█	█	█	█	A
	Action 4: Engage with municipalities on economic development vision for identified sites	SC, SB, WS, MJ, NM			█	█	█	█	█	█	A
	Action 5: Consider zoning and/or regulatory changes to enable economic development investment based on community engagement	SC, SB, WS, MJ, NM	O			█	█	█	█	█	A

SHENANDOAH COUNTY, VIRGINIA Strategic Economic Development Plan Implementation Matrix		Implementation Lead		Implementation Timing (Year)						Estimated Cost	
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ASSET DEVELOPMENT											
Objective #5	Explore economic development opportunities in outlying/remote areas of County										
Action 1:	Engage the greater communities outlying/remote areas of the county in to complete an economic development SWOT analysis for the greater their communities. Community organizations, such as Ruritan Clubs may be of assistance	SC	O, R								A
Action 2:	Develop strategies to pursue opportunities or to address weaknesses/threats for outlying/remote communities	SC, VP	R								A
Action 3:	Explore the potential of a small-scale (approximately 10-25 room) ultra-luxury inn similar to the Salamander or the Inn in Little Washington or other small-scale high-end accommodations in the remote/outlying communities	SC	O, R, C								C
Action 4:	If the "Inn" concept appears to be feasible; work with interested parties to complete feasibility work, find a suitable site and help market to regional investors	SC, VP	R								A
Objective #6	Consider a public-private partnership to develop a speculative manufacturing/production facility or virtual building										
Action 1:	Identify a willing partner to create public-private investment strategy, with priority going to sites already identified	SC, VP	O, I, F								G
Action 2:	Create a joint revenue sharing agreement based on levels of public investment; focused on creating competitive return for the private investor while establishing parameters for return of some/all of the public investment	SC, ID	O, I, F								A
Action 3:	Engage with state; local utilities; and financial institutions to create debt financing strategy	SC, VA, UT	F								A
Objective #7	Establish an Agriculture Development Working Group										
Action 1:	Evaluate the feasibility and community wide benefit of constructing a commercial kitchen to facilitate value added processing of agriculture products	SC, AE	C, O								C
Action 2:	Evaluate the feasibility and community wide benefit of locating food processors in Shenandoah County (or in the region) to improve the markets for agriculture products	SC, AE	C, O								C
Action 3:	Evaluate the feasibility and community wide benefit of creating a investment-focused agribusiness cooperative for the potential ideas from Action #1 and #2 above	SC, AE	C								A
Action 4:	Work with economic development staff to identify appropriate locations for the businesses above	SC	O								A
WORKFORCE DEVELOPMENT											
Objective #1	Strengthen the relationship between the regional workforce, education providers, regional Workforce Development Board and the County's businesses										
Action 1:	Analyze the feedback from the business survey to identify trends/emerging needs	SC	I								A
Action 2:	Engage with the Community Colleges, SCPS, SVWDB and other workforce development entities to share results of survey and strategize on any programmatic changes/additional needs	SC, LF, WF, PS									A
Action 3:	Meet annually with SCPS on the functionality and successes of training programs in the County school system; providing a joint-released progress report	SC, PS									A

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TOOLBOX DEVELOPMENT											
Objective #3	Develop formulaic incentive schedule for County-funded incentive programs										
Action 1:	Create a defined threshold for County financial incentives, focusing on [1] net new jobs created, [2] net new property value, [3] location of investment, [4] industry sector.	SC									G
Action 2:	Provide a sliding scale incentive threshold that increases the County's participation level based on capital investment/net number of jobs, location in priority investment areas, and businesses that fall within the County's target industry sectors	SC									A
Action 3:	Create incentive bonuses for companies that meet minimum performance levels (will require monitoring) including [1] above average wage thresholds (by industry), [2] hiring of County residents, and [3] investment in workforce programs	SC									A
Action 4:	Consider claw back provisions in all incentive packages to ensure compliance with stated agreements	SC									A
Action 5:	Augment statewide incentives (i.e. the job tax credit program) with local resources in target industries and priority investment areas	SC									E
Action 6:	Tie any incentives to businesses with less than five (5) employees to participating in the County's entrepreneurial program	SC									A
Objective #4	Create an Economic Development Investment Fund as a long-term investment strategy for capital project needs										
Action 1:	Define a funding program that brings together County and municipal participation. Recommendation of a dedicated real property tax millage	SC									G
Action 2:	Define the potential uses of the annual contributions to [1] site development; [2] land acquisition; [3] speculative building development; and [4] infrastructure investment costs related to specific economic development projects	SC									A
Action 3:	Enable the use of the resources as either a direct-pay approach or the ability to bond the revenue stream	SC									A
COMMUNITY OUTREACH											
Objective #1	Implement a proactive community engagement and education initiative										
Action 1:	Hold an annual town hall meeting open to the public (and televised) to discuss accomplishments and ongoing efforts for the previous/upcoming year	SC	N								A
Action 2:	Implement the resident survey completed for the SEDP update each year. Use the results to determine panelist discussions/employment center outreach meetings	SC	N								A
Action 3:	Develop a 3-part 'Economic Development 101' series in partnership with SCPS that informs viewers of [1] What is economic development?; [2] How is it implemented; and [3] What are the costs and benefits?	SC, PS									b
Action 4:	Hold a community outreach meeting annually in each municipality (and the Basye area) to engage business leaders and residents on economic development issues, opportunities, and challenges those areas are facing	SC	N								A
Action 5:	Host one (1) to two (2) expert panelist discussions on topics of economic development each year. These discussions should address specific market/location opportunities and challenges facing Shenandoah County businesses	SC	C, I, R								B
Action 6:	Provide an online tool for citizens and groups to submit questions, provide feedback on content, or request meetings	SC	C								A

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COMMUNITY OUTREACH											
Objective #2	Establish a regular monthly newsletter focusing on recent, current, and future economic development activities										
Action 1:	Highlight recent economic development activity and successes, maintaining a 'running tally' dashboard of accomplishments for the year	SC									A
Action 2:	Publish regular opinion editorials from economic development staff, partner organizations, or invited guests focused on topics that influence (or are influenced by) economic development	SC, VP, GO, VA									A
Action 3:	Implement, monitor, and report the results of opinion polls and business surveys through the newsletter	SC									A
Action 4:	Highlight a different County businesses (preferably from the target industries) in each newsletter	SC	I								A
Action 5:	Target writing two (2) or three (3) industry/market white papers each year focused on educating local businesses and residents about current or impending market shifts and how they will impact Shenandoah County	SC	I								A
Objective #3	Create a performance dashboard to better engage County leadership										
Action 1:	Establish a formal economic development dashboard to track performance across each of these topic areas: [1] retention, [2] recruitment, [3] entrepreneurial development, [4] workforce development, [5] fiscal sustainability	SC									A
Action 2:	Retention metrics should include: [1] site visits performed, [2] ombudsman assists, [3] jobs retained/expanded, [4] capital investment, [5] network event attendance, [6] prospect contacts	SC									A
Action 3:	Recruitment metrics should include: [1] number of prospects, [2] successful projects, [3] total jobs created, [4] average annual wage, [5] total capital investment, [6] debrief highlights from lost opportunities	SC									A
Action 4:	Entrepreneurial metrics should include: [1] enrollment inquiries, [2] business enrollment, [3] graduations, [4] jobs created, [5] debrief on businesses leaving the program	SC									A
Action 5:	Workforce metrics should include: [1] programs offered, [2] program applications and enrollment, [3] internships, apprenticeships, and employment placements, [4] businesses assisted, [5] business inquiries	SC									A
Action 6:	Fiscal sustainability metrics should include: [1] number of incentives, [2] value of incentives, [3] jobs created/preserved from incentives, [4] capital investment creates, [5] new tax revenues, [6] other benefits (i.e. infrastructure investments)	SC									A
Action 7:	Provide regular updates to the County elected leadership. Recommend quarterly	SC									A
Objective #4	Improve awareness and relationships with the business and economic development community										
Action 1:	Enhance and expand relationships with site selectors by hosting an annual networking event within Shenandoah County	SC, VP, GO, VA	R								B
Action 2:	Cohost a networking/marketing event annually with the Chamber of Commerce and the Shenandoah Valley Partnership	SC, VP, GO, VA	R, I, C								B
Action 3:	Host quarterly/semi-annual networking event for local business leaders, focusing on specific industry sectors for each event	SC	I								B
Action 4:	Hold one (1) or two (2) lecture/guest speaker events; bringing in regional/national industry leaders to discuss sector/market trends. This can be co-hosted with regional partners	SC	I, C								B
Action 5:	Partner with the Chamber's Economic Development Council to host a "State of the County" event for business leaders to discuss activities over the past year, successes, opportunities, and share the business plan for the next year	SC	I								A
Action 6:	Create a 'Lessons Learned' report every year that details the successes and opportunities to share with the site selector and investor contacts	SC									A

SHENANDOAH COUNTY, VIRGINIA Strategic Economic Development Plan Implementation Matrix		Implementation Lead		Implementation Timing (Year)						Estimated Cost
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COMMUNITY OUTREACH										
Objective #5	Improve electronic and social media presence and activity									
Action 1:	Implement the web-based recommendations laid out in the other sections of this implementation matrix (i.e. locally managed site database) and populate the economic development website accordingly	SC	C	■						C
Action 2:	Ensure all active links and materials are current and functional at least once a month	SC	C	■	■	■	■	■	■	Included in wed design
Action 3:	Create on-site content for new tabs named "What We Do", "How We Do It", and "Why We Do It"	SC	C	■						Included in wed design
Action 4:	Create a citizens section on the website with access to educational information, the annual survey and results information, contact information for the community liaison, and the newsletter registration	SC	C	■						Included in wed design
Action 5:	Increase activity across all social media platforms (i.e. LinkedIn, Instagram...) to no less than once a week	SC		■	■	■	■	■	■	A
Action 6:	Create more consistent press releases, opinion editorials, and local media articles to no less than once per month	SC		■	■	■	■	■	■	A
ORGANIZATION AND COMMUNICATION										
Objective #1	Enhance strategic relationships with local, regional, and statewide implementation partners									
Action 1:	Create an understanding of economic development roles for the County and each municipality for economic development, focusing County efforts on target industry recruitment and retention	SC, SM		■	■	■	■	■	■	A
Action 2:	Hold quarterly meetings with municipal representatives to discuss and update on economic development activity/needs	SC, SM		■	■	■	■	■	■	A
Action 3:	Attend quarterly/semi-annual strategic meeting schedule with regional and statewide partners including: the Shenandoah Valley Partnership; Go Virginia; and the Virginia Economic Development Partnership	SC, VP, GO, VA		■	■	■	■	■	■	A
Action 4:	Create a semiannual coordination meeting schedule with representatives from Frederick County, the City of Winchester, Rockingham County, and the City of Winchester; inviting the state and regional partners	SC, VP, GO, VA		■	■	■	■	■	■	A
Action 5:	Provide semi-annual reports to regional and statewide partners on activity and successes (can also serve as part of communication with the County)	SC, VP, GO, VA		■	■	■	■	■	■	A
Action 6:	Coordinate with the Chamber of Commerce to define their role in economic development efforts as a partner and liaison between the business community and the County's economic development effort	SC, CC		■	■	■	■	■	■	A
Objective #2	Fund economic development commensurate with outcome expectations									
Action 1:	Right-size' implementation expectations to current funding and staffing levels; focusing on [1] retention and expansion efforts, [2] tourism development; [3] workforce liaison; and [4] leverage regional efforts for business recruitment	SC	N, I, O	■						A
Action 2:	Increase funding to accommodate more proactive entrepreneurial development efforts; enabling the hiring of a small business development specialist	SC, SM			■					A
Action 3:	Increase funding to accommodate more proactive asset development; enabling public private partnerships for pad ready site development, speculative building development, and asset management	SC, SM				■				A
Action 4:	Increase funding to accommodate more proactive business recruitment efforts; enabling the hiring of an economic development manager	SC, SM					■			G

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ORGANIZATION AND COMMUNICATION											
Objective #3	Engage with the private sector to explore the potential for a public-private partnership economic development entity										
	Action 1: Increase participation on economic development events and programming	SC	I, O, F, R								A
	Action 2: Build partnerships with businesses/property owners to further economic development projects	SC	I, O, F, R								A
	Action 3: Engage business leaders to invest in the County's economic development efforts	SC	I, O, F, R								A
	Action 4: Establish a public-private economic development organization to jointly lead economic development efforts	SC	I, O, F, R								A
Objective #4	Activate engaged Shenandoah County citizens in community outreach and implementation										
	Action 1: Recruit and train two (2) community advocates each year to be vocal supporters of economic development, having them prepared to lead public discussions on economic development in general or on specific issues	SC	N								A
	Action 2: Identify and train at least one (1) business ambassadors for each of the target industry sectors to assist the economic development staff in retention and recruitment visits	SC	I								A
	Action 3: Develop a formal business mentor program, starting with at least two (2) mentors available in each of the County's commission districts or by business sector using a recognized mentorship training program such as SCORE	SC	I, N								C

LEGEND

Implementation Leaders

Public:

- SC - Shenandoah County
- PS - Shenandoah County Public Schools
- EB - Town of Edinburg
- MJ - Town of Mount Jackson
- NM - Town of New Market
- SB - Town of Strasburg
- TB = Town of Toms Brook
- WS - Town of Woodstock
- SM - All Shenandoah County Municipalities
- VA - Virginia Economic Development Partnership

Partners:

- CC - Shenandoah County Chamber of Commerce
- ED - Virginia Economic Development Partnership
- GO - Go Virginia Region 8
- ID - Industrial Development Authority
- LF - Lord Fairfax Community College
- UT - Local Utilities
- VP - Shenandoah Valley Partnership
- WF - Workforce Partners

Private

- C - Consultant
- F - Financial Institutions
- I - Industry Leaders
- N - Neighborhood Residents
- O - Property Owners
- R - Realtors/Brokers

Cost Estimate Legend:

- A - Under \$1,000
- B - \$1,000 to \$10,000
- C - \$10,000 to \$50,000
- D - \$50,000 to \$100,000
- E - \$100,000 to \$250,000
- F - \$250,000 to \$500,000
- G - Over \$500,000

 Action

 Implementation