EXAMINING FUTURE EXPANSION OPPORTUNITIES AT MORGANTOWN INDUSTRIAL PARK
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Examining Future Expansion Opportunities at the Morgantown Industrial Park

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1 Introduction

The Morgantown Industrial Park (MIP) encompasses a wide area between the Monongahela River and Interstate-79, and currently houses approximately 20 companies. A new interchange on Interstate 79 at River Road (approximately mile marker 151) is expected to improve access to the industrial park in a substantial manner, allowing expanded access into the MIP and creating the opportunity to house a variety of new businesses from several sectors.

In this study, we provide a brief look at the North Central West Virginia region’s economic and demographic characteristics as a means of assessing the area’s viability and attractiveness to potential businesses. Measures such as commuting patterns, workforce participation rates, industrial composition, Moreover, we provide a synopsis of the region’s current expectations for growth through 2025 and highlight the performance of several major sectors during the outlook period.

In section three, we examine recent trends in employment and output per worker in the region among sectors that account for the largest share of industrial space demand. Additionally, we highlight selected manufacturing industries that have posted the fastest pace of output growth in recent years and the level of growth expected over the next decade or so, as a general means of identifying potential industries to target for any future expansion plans at the MIP. Since some industries have the potential to outperform or underperform the rate of growth they enjoyed in the recent past, we also close out the third section with a review of selected manufacturing industries anticipated to see the fastest rates of output growth overall in the coming decade. Those industries with the weakest growth prospects are also identified. In section four, we conclude with a brief analysis of the anticipated local tax impacts that could be anticipated from the construction of new businesses and their annual operations.
2 Regional Demographic & Economic Characteristics

North Central West Virginia is a diverse economic region, with Morgantown representing the area’s epicenter and most of the area’s economic activity occurring along the I-79/I-68 corridor between Clarksburg and Morgantown. From a location perspective, Figure 1 illustrates the areas (at census-tract level) located within 30 miles of Morgantown’s municipal boundaries. It includes Monongalia and 7 surrounding counties in West Virginia, four nearby counties in Pennsylvania as well as Garrett County in Maryland. Overall, this market area contains approximately 168,000 households that earned an average household income of roughly $70,000 in 2019, which exceeded West Virginia’s statewide average by nearly 7 percent.

Figure 1: Areas 30-Mile from the City of Morgantown, WV

Figure 2 shows the effective area from which Morgantown draws its labor pool vis-à-vis the commuting patterns of workers who travel to Monongalia County for work. These counties largely reflect those shown above. As one would expect, nearly three-fourths of workers live in Monongalia County, followed by Marion and Preston counties in West Virginia and Fayette County, Pennsylvania. Harrison and Taylor
counties also contribute an appreciable number of workers, as does Greene County, Pennsylvania. For the purposes of this report, due to the availability of sufficient data and to reflect this broader geographic representation of commuting patterns, this report analyzes the four WV counties of Monongalia, Harrison, Marion and Preston counties (unless otherwise noted).

**Figure 2: Workers Commuting into Monongalia County**

North Central West Virginia region has ranked as one of West Virginia’s strongest economic regions over the past decade. Monongalia County represents the North Central region’s primary economic engine with 57 thousand jobs, or nearly 48 percent of total jobs in the region in 2019, followed by Harrison County with 37 thousand jobs. (see Figure 3).
As shown in Figure 4, the public sector plays a key role in North Central West Virginia’s economic landscape, as it represents 22% of jobs that are located within the region. In addition to the presence of higher education institutions, namely WVU and Fairmont State University, several major federal installations can be found in the area, including the FBI’s CJIS facility, Department of Energy’s National Energy Technology Laboratory, Louis A. Johnson VA Medical Center, National Institute for Occupational Safety and Health (NIOSH) and US Bureau of Prisons. The public sector has been especially supportive to regional growth in recent years, due in large part investments at the FBI’s facility since 2016.

The education and health services sector accounts for one-in-five of the region’s employment and has accounted for a substantial share of the area’s job growth over the past decade – with much of this growth led by WVU Medicine’s capacity expansions at JW Ruby Memorial Hospital, one of which continues at this time. Other major sectors include trade, transportation and utilities, leisure and hospitality along with professional and business services. Each of these service sectors have endured uneven performances in recent years due to broader national trends as well as the volatility in the area’s commodities extraction industries and the progression of natural gas pipeline construction activity.

Goods production represents just 12 percent of jobs within the region, but has accounted for the area’s volatility in the past few years. Specifically, the progression of natural gas pipeline construction projects caused the area to gain and lose more than 1,000 jobs between late-2017 and early-2019. Similarly, the natural resources and mining sector, accounts for only 2 percent or so of jobs in the region, has experienced appreciable volatility due to shrinking domestic demand for steam coal and swings in natural gas payrolls connected to production slowdowns in 2015 and massive increases in well productivity over the past few years that have enabled drillers to reach greater depths and distances with fewer workers.
North Central West Virginia consistently has an unemployment rate that comes in well below the statewide average. Prior to pandemic, the four-county region’s jobless rate remained largely in the mid-to low-4 percent range for much of the time between 2017 and 2019, even falling below 4 percent for brief episodes. Overall, the region’s labor market was among the tightest in the state as suggested by the reported unemployment rate. However, closures and maximum capacity restrictions during the COVID-19 pandemic response did cause the four-county area’s jobless rate to increase steeply over the course of March and April, though the rate did peak at a lower reading compared to state and national averages by reaching a reported unemployment rate of 14.4 percent in mid-April 2020.

The reopening process did allow furloughed employees to return to work over the course of May and June in large numbers, which helped to push the jobless rate down more than five percentage points by mid-June. Month-to-month drops in the unemployment rate have slowed considerably as many consumer-based enterprises (restaurants, bars, gyms, etc) are subject to maximum capacity allowances of 25 to 50 percent. Numerous businesses have been forced to close permanently due to sustained revenue losses and those that remain open cannot bring staffing back to pre-pandemic levels due to restrictions and the fact that consumers remain concerned about the risk of COVID-19 spread in these venues.
Figure 5: Unemployment Rate

North Central West Virginia consistently has an unemployment rate that comes below the statewide average. Prior to pandemic, the four-county region’s jobless rate remained largely in the mid- to low-4 percent range for much of the time between 2017 and 2019. For comparison, the unemployment rate in the state was 4.9 percent during 2019. Overall, the region’s labor market was among the tightest in the state as suggested by the reported unemployment rate (see Figure 6).
Among the four counties, Monongalia possesses the lowest rate in the region at roughly 6.8 percent as of the third quarter of 2020, followed closely by Preston County at 7.4 percent. Marion County typically has the region’s highest rate of unemployment and that trend has continued over the course of the pandemic, averaging a seasonally adjusted 9.2 percent during the third quarter of 2020. Even during more periods of ‘normal’ economic conditions such as 2019, Monongalia County has the region’s tightest overall labor market, with a reported jobless rate nearly one full percentage point lower than other counties in the region (see Figure 6).

Figure 6: Unemployment Rate by County (2019)

Unemployment Rate (Percent of Labor Force)

Monongalia: 3.6
Harrison: 4.4
Preston: 4.6
Marion: 5.1

West Virginia: 5.0
North Central: 4.0

Workforce participation tends to exceed statewide averages in North Central West Virginia. Prior to the pandemic, the four-county area’s labor force increased by more than 7,000 between early-2016 and late-2019. This stands in contrast to the rest of West Virginia, where the adult-aged workforce contracted significantly over the same time period. In terms of the share of residents aged 16 and older that actively participate in the workforce, Monongalia County has the highest at nearly 60 percent either holding a job or actively seeking employment. Preston County is the lowest in the region, coming in just below the statewide figure. Each county in the region lags the national average (see Figure 7).
Per capita personal income (not adjusted for inflation) in the North Central West Virginia Region was estimated at about $45,600 during calendar year 2019. This marked a 2.5 percent rate of growth in average income levels from 2018, a slower increase from more than 5 percent average annual gains from the previous two years. Overall, North Central’s per capita income has been consistently above the state average, but well below the national average, since 2000.

Figure 8: Per Capita Personal Income

![Graph showing per capita personal income over time for US, North Central, WV, and Monongalia County.](source)

Many of North Central West Virginia’s underlying demographics offer a noticeable contrast to the rest of the state. However, many of these differences are driven in large part by Monongalia County, since the region’s other three counties resemble the state by most demographic measures. For example, while the region’s overall median age is 38 years, the presence of West Virginia University helps to place nearly 40 percent of Monongalia County’s population under the age of 25.

Finally, rates of educational attainment for the region are noticeably higher versus other parts of the state as nearly 29 percent of residents aged 25 and older possess a college degree, more than 7 percentage points above the statewide figure. Unsurprisingly, Monongalia County contains the state’s highest concentration of college graduates and is the only county in the state to exceed the national average, as more than 41 percent of residents 25 years or older hold bachelor’s degree or higher.
Table 1: Summary of Population Profiles

<table>
<thead>
<tr>
<th></th>
<th>North Central</th>
<th>West Virginia</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population (2019)</td>
<td>262,372</td>
<td>1,792,147</td>
<td>328,239,523</td>
</tr>
<tr>
<td>% Population Under 18 (2019)</td>
<td>18.7%</td>
<td>20.1%</td>
<td>22.3%</td>
</tr>
<tr>
<td>% Population 65 Years + (2019)</td>
<td>17.3%</td>
<td>20.5%</td>
<td>16.5%</td>
</tr>
<tr>
<td>Population with Less than High School Diploma (2018, 25 yrs. +)</td>
<td>10.3%</td>
<td>12.2%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Population with High School Diploma, No College (2018, 25 yrs. +)</td>
<td>36.7%</td>
<td>39.7%</td>
<td>26.9%</td>
</tr>
<tr>
<td>Population with Some College (2018, 25 yrs. +)</td>
<td>24.5%</td>
<td>26.7%</td>
<td>28.9%</td>
</tr>
<tr>
<td>Population with Bachelor’s Degree or Higher (2018, 25 yrs.+)</td>
<td>28.6%</td>
<td>21.3%</td>
<td>32.6%</td>
</tr>
<tr>
<td>Median Age (2019)</td>
<td>38.4</td>
<td>42.9</td>
<td>38.4</td>
</tr>
<tr>
<td>Mean Household Income (2018)</td>
<td>$68,904</td>
<td>$61,707</td>
<td>$87,864</td>
</tr>
<tr>
<td>Average Household Size (2019)</td>
<td>2.58</td>
<td>2.51</td>
<td>2.73</td>
</tr>
</tbody>
</table>

As shown in Figure 9, total employment in the four-county North Central West Virginia is expected to grow at an average annual rate of just over 1.4 percent during the five-year outlook period. While this high rate of growth can be explained in large part by favorable comparisons to pandemic-related job losses and other low levels of economic activity that persisted during parts of the first and second quarters of 2020, employment growth over the 2021 to 2025 period is expected to fall in line with the region’s gains over the 2009 to 2019 time period. Indeed, the region’s employment levels are expected to surpass pre-pandemic levels by early-2022.

After growing 2 percent annually over the last decade or so, the education and healthcare services sector is expected to see job gains come in at a roughly equivalent pace during the outlook period. Most of these gains will occur within the first two years of the forecast horizon, coinciding with the WVU Medicine’s addition of the new children’s hospital facilities within the new Southeast Tower at Ruby Memorial. In addition, WVU Medicine is building a newer Fairmont Regional Medical Center, after the old facility was closed during summer 2020, that is targeted for completion in 2022.

From a longer-term perspective, the region has become a hub for healthcare services for residents across West Virginia. This status will only be reinforced over the longer term as an aging population bids up demand for healthcare services statewide. and some specialized services could be shifted entirely to the North Central Region as cost issues cause parts of West Virginia facing declining and/or highly rural populations to focus on providing basic care. In addition, the completion of the WVU Children’s Hospital will enable the region to provide critical care and research opportunities for pediatric medicine, enabling the area to retain greater amounts of care that was previously transferred to larger hospitals such as UPMC Children or Cleveland Clinic Children’s Hospital.

Even though natural gas production in West Virginia has expanded rapidly over the past several years, the state has remained an outlier compared to the rest of the Eastern US since coal-fired generation remains the predominant form of electricity generated—by a very large margin. However, that is expected to change within the next few years as Longview Power intends to build an advanced combined-cycle natural gas power plant and solar facility in Monongalia County (with a portion located across the border in Pennsylvania). Indeed, Longview plans to construct a 1,200MW natural gas-fired power plant and a 70MW utility-scale solar installation. The project’s permits have been authorized, though it is likely legal challenges could alter the timeline for its anticipated completion in late-2022/early-2023.
After this forecast was published, Viatris announced that it would be closing the Mylan pharmaceuticals production facility in Morgantown by mid-2021. This event was always considered a sizable downside risk to the outlook even prior to Viatris’ decision being rendered, as the plant had struggled with FDA-imposed sanctions due to quality control issues, multiple layoff events and broader structural changes in the pharma industry over the past couple of decades that had increased generic drug competition and relocated production to India and other developing nations. Nonetheless, the closure is expected to lead to the elimination of 1,500 jobs by the summer, many of which pay wages well above the regional average.

At this time it is unclear as to what the facility’s ultimate fate will be in terms of being repurposed to a company in a different industry or if another pharmaceutical company will purchase the facility to produce raw materials to be used in other drugs. In addition, the magnitude of negative downstream impacts will be felt in other segments of the broader regional economy, but especially the Greater Morgantown Area in Monongalia County, remain unclear at this time. Specifically, this closure will affect a range of services industries such as retailers and restaurants, but will have unforeseen implications for the middle- and upper-price tiers of the local housing market. More generally, however, the closure will likely have broader implications on population trends as the plant has not only helped to attract workers, but it also allowed Monongalia County to retain workers in the area to fill jobs in a wide range of occupations and at different levels of skill and education.
The region’s resident population is expected to increase between 0.1 and 0.2 percent per year through 2025, which will lag the rate of growth observed in the most recent decade. Monongalia County will account for virtually all the area’s population growth over the next five years, adding residents at 0.6 to 0.7 percent per year. One potential downside risk to regional population growth, particularly within Monongalia County, could be from smaller numbers of international students and professionals immigrating to the US because of continued changes to federal immigration policy by the Trump Administration. In addition, even with the level of infrastructure development assumed in the forecast, portions of Monongalia County have significant deficiencies in road capacity that will hamper residential and commercial development opportunities.

The region’s other three counties will see varying degrees of population losses during the outlook period, though Harrison does have some potential for population gains that will depend to a great extent on the state’s ability to attract midstream and downstream opportunities for natural gas.
3 Industrial Property Demand

3.1 Regional Characteristics

Demand for new industrial space in a region is driven in large part by projected output growth in goods-producing activities such as manufacturing, construction and mining, as well as services that include wholesale trade, transportation and warehousing, non-store retailers (e.g., electronic and mail-order) and data processing and hosting establishments (e.g. server farms). Total industrial-using employment for the North Central region has declined considerably since 2015, which has been driven in large part by job losses associated with the area’s coal and gas industries—either directly or indirectly. In fact, much of the region’s industrial job losses over the past couple of years can be traced to the completion of several natural gas pipeline construction projects throughout the Northern West Virginia as well as the delay of two major pipeline projects—and mid-2020 cancellation of one of them (Atlantic Coast Pipeline).

Figure 11: North Central WV Industrial Employment and Productivity

At the same time, some factors driving industrial property demand have held up relatively well or shown signs of growth in recent years, most notably, transportation and warehousing activity as well as portions of the region’s aerospace, machinery and food processing industries. Many industries that influence demand for industrial space in North Central West Virginia are the most likely to invest in automation and technology-related capital equipment that increases overall worker productivity, buoying demand for warehousing and logistics facilities, production floor space, etc., despite an overall loss of jobs. In fact, real output per worker in the four-county area has trended higher over the past decade or so, increasing at an average annual rate of roughly 1 percent since 2010. Going forward,
though the level of jobs within sectors using industrial space is anticipated to increase just over 0.1 percent annually through 2025, real output per worker is expected to increase at an appreciably faster rate of roughly 1.4 percent per year.

### 3.2 Potential Target Industries Based on Recent Growth

When identifying potential ways to expand a region’s baseline demand for industrial properties, one source to look toward are industries that have registered rapid output growth in output nationally in recent years, say the past five years. Strong output growth nationally for a manufacturing industry might suggest opportunities are available to attract companies operating within that industry. Of course, there are a range of factors that drive the location decision for any company, land availability, location relative to supply chain, sufficient local public infrastructure, etc, the industries examined here are assessed as potential targets due to how much output has increased at the national level between 2014 and 2019.\(^1\)

Figure 12: Selected Manufacturing Industries with Fastest Output Growth (2014-2019)

Unsurprisingly, tech-related manufacturing paced industrial output growth between 2014 and 2019 as production of computers and a range of IT equipment increased more than 3.4 percent per year. While the geography of tech employment and production has shifted away from Silicon Valley in recent decades, most of this activity remains concentrated in a handful of major US metro areas. Wood products manufacturing has experienced relatively strong output growth in recent years, reflecting

\(^1\) Due to the extremely uneven impacts on many manufacturing industries caused by the COVID-19 pandemic response, 2020 was excluded from the analysis on Figures 12 and 13.
continued recovery in the US housing market. While the state’s timber resources would lend some strength for this industry as a potential target, the industry is expected to have the weakest growth prospects going forward. Agricultural chemicals expanded output by nearly 2.5 percent per year between 2014 and 2019 and has solid growth prospects going forward; however, production has tended to consolidate nationally into larger regional clusters in the Midwest and Gulf Coast while environmental and safety regulations make siting these facilities very difficult.

Household and institutional furniture manufacturing and food processing represent two additional industries registering healthy growth in recent years. Although the US furniture industry is significantly smaller compared to decades ago due to a substantial rise in import competition, the industry has shifted more toward smaller, custom production operations that can still serve a wide geographic footprint. Growth going forward is not expected to be as strong as the past five years or so, but the forecast does call for the industry’s output to expand at a steady pace through the end of the decade.

Expectations are much less positive for the office and institutional market segment. The COVID-19 pandemic has caused a dramatic increase in the share of employers allowing office-based employees to work from home full time, which suggest a weak level of office space demand going forward. Food processing saw production increase 2.3 percent per year over the 2014 to 2019 time period and is expected to register output gains of more than 1.6 percent annually through 2030. Given the industry’s diverse nature both in terms of product and geographic location, plus the fact that US food consumption will continue to rise over time, food (as well as beverage) manufacturing should be a viable industrial target across much of the US, including Monongalia County and the surrounding region.

### 3.3 Potential Target Industries Based on Growth Expectations

Recent historical growth trends can aid in identifying industries that could serve as suitable targets to increase latent demand for industrial space in a region. At the same time, however, the previous section illustrates industries might not necessarily be expected to see the same rate of growth persist into the long term due to a host of reasons – cyclical or structural economic changes or government policy shifts. In this section, we identify 13 industries that are expected to record the fastest rate of output growth regardless of their performance from the past five years.

IHS Markit’s most recent forecast calls for the pharmaceuticals and medicines industry to see the fastest rate of output growth in the US, rising at a rate of 3.3 percent per year over the next decade or so. Some of this corresponds to the backdrop of rising drug demand linked to the aging US population, but domestic production capacity is expected to grow as well going forward. Although significant amounts of pharmaceutical production occurs in other countries, more facilities that produce raw materials – also known as Active Pharmaceutical Ingredients (or APIs) – for the drug supply chain have increasingly located in the US in recent years as companies seek to diversify their global footprint. This latter point is an important one for the North Central region, particularly after the recent announcement by Viatris that it will close the Mylan production facility in Morgantown by mid-2021. The medical and equipment supplies industry is also expected to register output growth in excess of 3 percent annually through 2030, much of it related to rising healthcare demand in the US.

Despite the abundance of shale gas and gas liquids deposits in the Appalachian Basin, downstream natural gas capacity remains relatively limited, with the Shell ethane cracker under construction in Monaca, PA, accounting for the only facility in the region to this date. Nonetheless, the continued development of shale gas resources in the tri-state region is expected to foster new output growth in plastics, resins and other industries that utilize natural gas and natural gas liquids. While larger facilities...
could face regulatory or legal hurdles to locate in the MIP, the park’s geographic location, along with river, rail and highway access could prove potentially attractive to a petrochemical manufacturer seeking to build a ‘smaller’ facility.

**Figure 13: Selected Manufacturing Industries with Fastest Output Growth (2021-2030)**

![Bar chart showing selected manufacturing industries with fastest output growth (2021-2030)]

Source: Federal Reserve Board of Governors; IHS Markit.

Commercial and service industry machinery, which consists of a wide array of equipment manufactured for restaurants, personal care services and other consumer-oriented businesses, and metalworking machinery manufacturers (e.g. industrial molds, die casting and machine tool production) are expected to register healthy output growth just shy of 2 percent per year through 2030. Neither industry tends to be quite as dependent upon large-scale operations nor large geographic centers, since they are a key element in the supply chain for many local businesses. Finally, the forecast calls for aerospace products to see industrial output increase at an average annual rate of nearly 1.8 percent. North Central West Virginia already contains a growing aerospace industry centered in Harrison County, but the potential exists to expand the region’s productive capacity into other locations such as Morgantown, whether it be for facilities involved in testing or research functions.

As a final note, some industries have limited potential for targeting going forward as they deal with major structural changes (regulation-driven or international competition) or grapple with long-lived secular declines in product demand caused by changes in consumer preferences. Tobacco products, apparel and textiles and printing support activities have struggled the most in recent years with significant declines in output and are expected to continue doing so for the foreseeable future, as the forecast calls for production activity in each industry to shrink by at least 1 percent annually between 2021 and 2030.
4 Impacts from Expanding Activity at the Morgantown Industrial Park

In this section, we present estimates of potential tax revenue impacts for Monongalia County associated with new facilities being added at the MIP and new businesses absorbing the industrial and commercial space with their operations. Portions this section are inherently notional, as we do not know with certainty the exact timing regarding construction of businesses already under consideration for the MIP and several enterprises included in the forward-looking portion of the analysis are speculative. Also, most of the data for this section was provided by MIP officials, and were not independently audited. ²

The following subsections will provide a summary of the potential economic impacts from the several new businesses that are expected to be constructed and begin operations over the next six years. Impacts generated from site preparation and building construction are broken down in subsection 4.1 while subsection 4.2 will summarize the impacts flowing from the businesses’ annual operations.

4.1 Construction Impact

The MIP expansion is expected to begin with the site development and construction of a 210,000-sf beverage manufacturing facility at a cost of $125 million. In addition, the facility has the potential to expand its operational footprint to 310,000-sf within its first five years after its opening in 2022. Other manufacturing facilities have also been anticipated to be built during the study period, with a $50 million site expected to open in 2024 and a $25 million manufacturing operation slated for the 2026-time frame.

In addition to the manufacturing facilities, warehousing, distribution and logistics operations are expected to be constructed in the coming years, as MIP officials expect a $25 million distribution facility in 2023 and a trucking/commercial logistics business to enter the park with a $10 million site in 2025. Finally, a $5 million high-technology business services firm is projected to open toward the end of the study period in 2027. Altogether, $240 million in construction costs (approximately $230 million in inflation-adjusted terms) are expected to be needed to build out the industrial park for these facilities.

Table 2: Potential Economic Impact of New Industrial Park Construction

<table>
<thead>
<tr>
<th>Type of Impact</th>
<th>Direct</th>
<th>Indirect and Induced</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output ($, millions)</td>
<td>230.2</td>
<td>141.5</td>
<td>371.7</td>
</tr>
<tr>
<td>Employment (jobs)</td>
<td>1,915.0</td>
<td>869.0</td>
<td>2,784.0</td>
</tr>
<tr>
<td>Employee Compensation ($, millions)</td>
<td>122.0</td>
<td>43.2</td>
<td>165.2</td>
</tr>
<tr>
<td>State and Local Tax Revenue ($, millions)</td>
<td>10.2</td>
<td>4.5</td>
<td>14.7</td>
</tr>
</tbody>
</table>

Notes: Output, compensation, and tax revenue are expressed in 2021 dollars, so numbers will be slightly smaller than nominal expenditures above; tax revenue includes sales, personal income, property, and corporation net income taxes.

² Portions of this section appeared or were adapted from a previous report titled “Economic Impact of Expanding the Morgantown Industrial Park.” See https://researchrepository.wvu.edu/bureau_be/301/ for a more detailed discussion of input-output model assumptions and other relevant information.
We estimate that the $230 million (2021 dollars) in direct construction spending will generate an additional $142 million in secondary economic output, for a total economic impact of $372 million (see Table 2). This spending is expected to support more than 1,910 workers directly with an additional boost of nearly 870 jobs in secondary industries for a total employment impact of more than 2,780 jobs. These jobs are estimated to earn about $165 million, with $122 million coming in direct compensation and $43 million in secondary industries. Ultimately, we estimate this construction activity will generate approximately $10.2 million in state and local taxes, with another $4.5 million in secondary industries for a total tax impact of nearly $15 million.

### 4.2 Annual Operational Impacts

Aside from the beverage manufacturing company, where the initial expenditure and payroll data are relatively concrete, assessing the annual economic impact from potential new business operations is more complicated than estimating the one-time impacts attributed to construction. Since we lack specific details on the businesses expected to locate in the park, we estimate the average direct economic impact of the “typical” establishment in each sector. Manufacturing, for example, is a broad sector that includes a wide array of industries from very large automobile manufacturers operations to textile and apparel companies. Transportation, warehousing and storage is a more narrowly defined sector that covers merchant wholesalers, trucking and logistics as well as self-storage operators. For each sector, we estimate the average economic output for business in the sector within West Virginia.3

Overall, the economic expenditures attributed to the operation of potential businesses is estimated to generate a direct economic impact of $169 million, along with an additional $69 million from additional rounds of economic activity. We estimate that this activity will support approximately 310 jobs directly, with nearly 390 in secondary industries, for a total employment impact of roughly 700 jobs. These jobs are estimated to create $42 million in compensation, with nearly $22 million coming from direct jobs, and another $20 million coming in secondary industries. Furthermore, the results suggest these businesses will pay $4.1 million in state and local taxes, with a roughly equivalent split in tax revenue attributed to direct jobs and secondary industries.

#### Table 3: Potential Annual Economic Impact of New Industrial Park Businesses

<table>
<thead>
<tr>
<th>Type of Impact</th>
<th>Direct</th>
<th>Indirect and Induced</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output ($, millions)</td>
<td>169.2</td>
<td>49.8</td>
<td>238.4</td>
</tr>
<tr>
<td>Employment (jobs)</td>
<td>313.0</td>
<td>388.0</td>
<td>701.0</td>
</tr>
<tr>
<td>Employee Compensation ($, millions)</td>
<td>21.8</td>
<td>19.9</td>
<td>41.7</td>
</tr>
<tr>
<td>State and Local Tax Revenue ($, millions)</td>
<td>2.0</td>
<td>2.0</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Notes: Output, compensation, and tax revenue are expressed in 2021 dollars, so numbers will be slightly smaller than nominal expenditures above; tax revenue includes sales, personal income, property, and corporation net income taxes.

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3 For a more thorough discussion of the process used to derive the average impacts for potential business operations, see “Economic Impact of Expanding the Morgantown Industrial Park.”
5 Conclusions

The expansion of the Morgantown Industrial Park has the potential to provide a substantial economic gain to the Monongalia County and West Virginia economies. While there is some uncertainty over the exact nature of some businesses that might locate in the newly built out portions of park, our estimate indicates that construction of several manufacturing facilities, trucking and warehousing as well as a high-tech service business would produce an overall total of approximately $370 million in additional economic activity during the site development and construction phase. Furthermore, once the proposed businesses become operational, we estimate they would generate an economic impact of $238 million (in 2021 dollars) and 700 jobs for the state’s economy each year, as well as the accrual of more than $4 million to state and local government coffers.

In addition to identifying the economic impacts associated with expanding the Morgantown Industrial Park, this report also provides context on the North Central region’s economic and demographic characteristics both from a historical perspective and how these will evolve over the next five years or so. These data provide a backdrop that would suggest the industrial park could benefit from the region’s economic competitiveness and proximity to other major population centers in the Mid-Atlantic Region. Furthermore, the report also identifies manufacturing industries that have recorded the fastest rates of output growth in recent years as well as those that are expected to enjoy the strongest growth over the next decade. These industries could serve as possible targets for future expansion plans at the industrial park in the future.
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