THE ECONOMIC IMPACT OF EXPANDING THE MORGANTOWN INDUSTRIAL PARK

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West Virginia University

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The Economic Impact of Expanding the Morgantown Industrial Park

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Executive Summary

The Morgantown Industrial Park (MIP) encompasses a broad area between the Monongahela River and Interstate-79, and currently houses approximately 20 companies. Road access to the MIP has been impeded, however, by the closure of River Road in Westover, which has forced trucks servicing the businesses located in the park to drive along DuPont Road and has caused additional traffic congestion through the City of Westover.

A proposal currently under consideration by the Morgantown-Monongalia Metropolitan Planning Organization would support opening a new interchange on Interstate 79 at River Road (approximately mile marker 151), which has the potential to significantly improve access to the industrial park and allow for allow for expansion into new areas along the highway. An engineering study commissioned by MIP officials estimated that as many as nine new businesses in a variety of sectors—including manufacturing, warehousing, and professional services—could be built in the new building pads in the southwest portion of the industrial park.

In this study, we estimate the economic impact of the businesses at the Morgantown Industrial Park on the West Virginia economy. We examine the impact both for existing businesses in the park and the potential impact of new companies locating in the park in areas that would be made accessible due to the proposed I-79 interchange. The latter estimate is inherently speculative, as we do not know which businesses that would locate in these new developable areas or the time frame for development. However, given the engineering study of the area, and the economic growth of the North Central West Virginia region, we believe that our estimates provide a reasonable upper bound on the potential impact of the MIP expansion.

Our primary findings include:

- The economic impact of existing business in the industrial park is **nearly $100 million supporting more than 375 jobs**.
- Construction of nine new building pads and buildings would generate **approximately $310 million in one-time economic impacts in the state, supporting more than 2,300 jobs**.
- Once the new areas of the park were completed, the nine new businesses would generate an annual economic impact of **nearly $165 million and more than 700 jobs**.

Opening these additional building sites would require a considerable investment by the state to build a new interchange at River Road and Interstate 79. To get an idea of the cost of this interchange, we can look to the most recent I-79 interchange built at the University Town Center a few miles north of the proposed exit, which reportedly cost approximately $22 million.
To estimate an upper bound on the first 10 years of economic impact, we can assume that the new businesses will be built within the first five years of the park’s expansion, and then operate continuously for the next five years. These firms would generate more than $1.1 billion in total economic impact in West Virginia. In Figure 1, we compare this expenditure with the road construction spending required to open a new I-79 interchange. The total economic impact of the expansion is estimated to be approximately 50 times the expenditure for the interchange itself.

Figure 1: 10-Year Economic Impact Compared to Road Construction Spending

- **State Road Spending:** $22.0 Million
- **Direct Impact:** $787.3 Million
- **Total Impact:** $1.1 Billion
1 Introduction

The Morgantown Industrial Park (MIP) encompasses a wide area between the Monongahela River and Interstate-79, and currently houses approximately 20 companies. Road access to the MIP has been impeded, however, by the closure of River Road in Westover, which has forced trucks servicing the businesses located in the park to drive along DuPont Road and causes additional traffic congestion through the City of Westover.

A proposal currently under consideration by the Morgantown-Monongalia Metropolitan Planning Organization would support opening a new interchange on Interstate 79 at River Road (approximately mile marker 151), which has the potential to significantly improve access to the industrial park. Backers of the new interchange indicate that it also would allow for expansion of the MIP into new areas along the highway. MIP officials commissioned an engineering study that estimated that as many as nine new businesses in a variety of sectors—including manufacturing, warehousing, and professional services—could be built in the new building pads in the southwest portion of the industrial park.

In this study, we estimate the economic impact of the businesses at the Morgantown Industrial Park on the West Virginia economy. We examine the impact both for existing businesses in the park and the potential impact of new companies locating in the park in areas that would be made accessible due to the proposed I-79 interchange. The latter estimate is inherently speculative, as we do not know which businesses that would locate in these new developable areas or the time frame for development. However, given the findings of an engineering study of the area, and the comparatively rapid economic growth of the North Central West Virginia region,\(^1\) we believe that our estimates provide a reasonable upper bound on the potential impact of the MIP expansion.

2 Methodology

To estimate the economic impact of the companies at the Morgantown Industrial Park, we apply a detailed model of the West Virginia economy that outlines how trade-flows among industries interact with key economic indicators such as employment, income, output, and tax revenue.\(^2\) The expenditures associated with operational spending at the firms located in the park are referred to as the direct economic impact. However, the total economic impact of these activities is not limited to the direct impact, but also includes the secondary economic impacts accrued as those initial direct expenditures are re-spent throughout the rest of the economy.

For example, to support its operations, each company in the park will purchase items such as materials, utilities, office products, professional services, etc., partially from suppliers in West Virginia. Because of the increased demand for these inputs, local suppliers will increase their production correspondingly, and their subsequent suppliers will increase production, etc. This additional economic activity is referred to as indirect impacts. In addition, the companies in the park and their suppliers employ numerous


\(^2\) This study was conducted using the IMPLAN modeling software, an industry-standard input-output model of the economy. More information about IMPLAN can be found at http://www.implan.com.
workers, part of whose income will be spent in the West Virginia economy, which generates additional output, income, and employment. This activity is referred to as induced impacts.

These indirect and induced impacts together form what is known as the “multiplier effect.” The original stimulus to the economy from the companies’ expenditures is re-spent multiple times through the rest of the state’s economy. At each stage, some of the expenditures “leak” out of West Virginia as they are spent outside of the state. The combined direct impact and secondary impacts together constitute the total economic impact of the operational expenditures in the park. These multipliers and leakages are depicted in Figure 2.

**Figure 2: Economic Impact Flow**

For this study, we consider the economic impact of the Morgantown Industrial Park in terms of output, employment, employee compensation, and select state and local tax revenue. For existing businesses, we estimate the impact using what is known as “economic contribution analysis,” which assesses the total value of the businesses in the park to the state’s economy, including the secondary indirect and induced impacts. For this type of analysis, we estimate the economic impact if these businesses were removed from the local economy, with the implicit assumption that the elimination of these businesses would not affect the trade relationships between suppliers. For potential new businesses, we estimate the change in state economic activity associated with the construction and annual operation of these new businesses.
3 Impact of Existing Businesses

The approximately 20 companies in the Morgantown Industrial Park represent a significant economic footprint in the state’s economy. However, we do not have sufficient data on all of the local businesses in the park to calculate the direct impacts of these companies. Instead, we were provided economic data on three of the largest employers in the park, and estimate the economic impact based on these data. Because of this, our economic impact estimate will be smaller than we would expect if we had data on all of the park’s businesses. At the request of the companies, we will publish only total expenditure data. The three companies considered are as follows:

- Addivant USA
- United Linen Services
- Central Supply

In total, we estimate that these three companies had a total sales volume of about $72 million (see Table 1). Total employment is estimated to be approximately 209 jobs, with annual compensation of more than $15 million. We estimate these companies directly paid an estimated $1.5 million in taxes to state and local governments.

We estimate that these expenditures generated an additional $26 million in secondary economic activity for local suppliers and businesses, for a total economic impact of more than $97 million. These expenditures supported approximately 168 jobs in secondary industries, with approximately $8 million in employee compensation. Together these three companies supported more than 377 jobs with nearly $23 million in compensation. Total tax impacts were just over $2 million, with about $1 million coming from secondary impacts.

Table 1: Annual Economic Impact of Existing 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 ($, millions)</td>
<td>71.5</td>
<td>25.8</td>
<td>97.3</td>
</tr>
<tr>
<td>Employment (jobs)</td>
<td>209</td>
<td>168</td>
<td>377</td>
</tr>
<tr>
<td>Employee Compensation ($, millions)</td>
<td>15.3</td>
<td>7.6</td>
<td>22.9</td>
</tr>
<tr>
<td>State and Local Tax Revenue ($, millions)</td>
<td>1.5</td>
<td>0.8</td>
<td>2.3</td>
</tr>
</tbody>
</table>

Notes: Output, Employee Compensation, and Tax Revenue are measured in 2018 dollars. Tax Revenue impact includes sales, personal income, property, and corporation net income taxes.
4 Impact of the Expansion of the Morgantown Industrial Park

In this section, we estimate the potential economic impact on the West Virginia economy of new businesses that would move into the additional space in the industrial park. This section is inherently speculative, as we do not know which businesses would locate in these new developable areas or the timeline for their construction. Also, most of the data for this section was provided by MIP officials, and was not independently audited.

Industrial Park officials indicate that the opening of a new interchange on Interstate-79 would allow for significant expansion of the park. New areas would include approximately 115 acres of developable land southwest of the current park property that could accommodate multiple building sites. An engineering study commissioned by Morgantown Industrial Park officials found that the new areas of the park would most likely create the capacity for nine additional building pads with nearly 1.3 million square feet of building space. The study also identified a potential configuration for companies on these pads as follows:

- Four manufacturing facilities
- Four warehousing and storage facilities
- One office building

In the following subsections, we estimate the potential economic impact of these nine businesses on the West Virginia economy. We examine the impacts in two areas: construction costs for site preparation and building construction (subsection 4.1); and annual operational impacts (subsection 4.2).

4.1 Site Preparation and Construction Impact

Construction for nine new buildings will involve a significant one-time capital investment at the industrial park. MIP officials provided an estimate of the construction costs in two areas: site preparation for the nine building pads and building construction costs for the three type of industries likely to locate in the park. These estimates, shown in Table 2, represent the direct impact of the construction that would be enabled by a new interchange on Interstate 79.

All told, approximately $212 million would be required to fully build out the new areas of the industrial park, according to MIP officials. Of this, $17.4 million would come from earth moving and other site preparation for the building pads. Building construction would cost approximately $195 million, with $107 million going to manufacturing plants, $83 million to warehousing, and nearly $6 million to an office complex.
Table 2: Direct Economic Impact of Construction Activities

<table>
<thead>
<tr>
<th>Construction Type</th>
<th>Square Footage (thousands)</th>
<th>Total Estimated Cost*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Preparation</td>
<td></td>
<td>$17.4 million</td>
</tr>
<tr>
<td>Manufacturing Buildings</td>
<td>710</td>
<td>$106.5 million</td>
</tr>
<tr>
<td>Warehousing and Storage Buildings</td>
<td>550</td>
<td>$82.5 million</td>
</tr>
<tr>
<td>Financial and Professional Services Building</td>
<td>38</td>
<td>$5.7 million</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,298</strong></td>
<td><strong>$212 million</strong></td>
</tr>
</tbody>
</table>

*Construction costs are calculated at $150 per square foot.

Notes: Output is measured in 2018 dollars. Figures may not sum to total due to rounding.

We estimate that the $212 million in direct construction spending will generate an additional $98 million in secondary economic output, for a total economic impact of $310 million (see Table 3). This spending is expected to support more than 1,600 workers directly with an additional 700 jobs in secondary industries for a total employment impact of more than 2,300 jobs. These jobs are estimated to earn about $118 million, with $88 million coming in direct compensation and $30 million in secondary industries. We estimate that construction will generate approximately $8.5 million in state and local taxes, with another $3.2 million in secondary industries for a total tax impact of nearly $12 million.

Table 3: 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 ($, millions)</td>
<td>212.0</td>
<td>98.3</td>
<td>310.4</td>
</tr>
<tr>
<td>Employment (jobs)</td>
<td>1,623</td>
<td>707</td>
<td>2,330</td>
</tr>
<tr>
<td>Employee Compensation ($, millions)</td>
<td>88.1</td>
<td>30.0</td>
<td>118.1</td>
</tr>
<tr>
<td>State and Local Tax Revenue ($, millions)</td>
<td>8.5</td>
<td>3.2</td>
<td>11.7</td>
</tr>
</tbody>
</table>

Notes: Output, Employee Compensation, and Tax Revenue are measured in 2018 dollars. Tax Revenue impact includes sales, personal income, property, and corporation net income taxes.

4.2 Annual Operational Impacts

Assessing the annual economic impact of the nine businesses that we would expect once they are in operation is more complicated than estimating the impact of construction activity. Because we do not know which specific types of businesses will locate in the park, we estimate the average direct economic impact of a generic business in each of these sectors. Manufacturing, for example, is a very broad sector
that includes a wide array of industries from very large automobile manufacturers operations to smaller shoe producers. Warehousing and storage is a narrower sector that covers businesses such as wholesale trade operators and self-storage. Lastly, office buildings can house an array of different types of businesses. For this analysis, we assumed that the office would be occupied by a single firm in the financial and professional services sector, which includes banks, attorneys, and other services.

For each of these sectors, we must estimate the average economic output for businesses in the sector. First we aggregate the total economic output in West Virginia from all of the industries in each sector and divide it by the total number of establishments. This produces the average direct economic impact for a generic business in each of the three sectors. Second, we multiply this average by the number of firms in each sector that are expected to locate in the industrial park. These totals constitute the direct impact for each sector, as shown in Table 4.

Table 4: Annual Direct Economic Impact by Sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>Average Impact</th>
<th>Number of Firms</th>
<th>Total Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>$23.5 million</td>
<td>4</td>
<td>$94.1 million</td>
</tr>
<tr>
<td>Warehousing and Storage</td>
<td>$4.6 million</td>
<td>4</td>
<td>$18.5 million</td>
</tr>
<tr>
<td>Financial and Professional Services</td>
<td>$2.5 million</td>
<td>1</td>
<td>$2.5 million</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$115.1 million</strong></td>
</tr>
</tbody>
</table>

Notes: Output is measured in 2018 dollars.

Using this direct impact as a starting point, we estimate the potential economic impact of the nine new businesses that could locate in the Morgantown Industrial Park after the construction of a new interchange on Interstate 79. We report this economic impact in Table 5.

The annual economic expenditures of these nine businesses are estimated to generate an additional $50 million in economic activity in the state, for a total economic impact of $165 million. We estimate that this activity will support 390 jobs directly, with another 346 in secondary industries, for a total employment impact of 736 jobs. These jobs are estimated to have approximately $35 million in compensation, with nearly $20 coming from direct jobs, and another $15 million coming in secondary
industries. We anticipate that these businesses will pay $2 million in state and local taxes, with another $1.6 million coming in secondary industries, for a total tax impact of $3.6 million.

Table 5: 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 ($, millions)</td>
<td>115.1</td>
<td>49.8</td>
<td>164.8</td>
</tr>
<tr>
<td>Employment (jobs)</td>
<td>390</td>
<td>346</td>
<td>736</td>
</tr>
<tr>
<td>Employee Compensation ($, millions)</td>
<td>19.5</td>
<td>14.9</td>
<td>34.4</td>
</tr>
<tr>
<td>State and Local Tax Revenue ($, millions)</td>
<td>2.0</td>
<td>1.6</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Notes: Output, Employee Compensation, and Tax Revenue are measured in 2018 dollars. Tax Revenue impact includes sales, personal income, property, and corporation net income taxes.

5 Conclusion

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 we do not know for sure what businesses would locate in the new areas of the park, our estimate indicates that construction of nine new building sites would produce approximately $310 million in additional economic activity during the construction period. In addition, once the nine businesses are in operation, we estimate they would generate an annual economic impact of $165 million in the state’s economy.

As an example scenario, if we assume that these nine businesses will be built within the first five years of the park’s expansion, and then operate continuously for the next five years, these firms would generate more than $1.1 billion in total economic impact in the state over 10 years. While it is unknown how quickly these building sites would be built and occupied, this scenario provides an upper bound on the economic impact we could expect in the first 10 years of expansion.

Opening these additional building sites would require a considerable investment by the state to build a new interchange at River Road and Interstate 79. To get an idea of the cost of this interchange, we can look to the most recent I-79 interchange built at the University Town Center a few miles north of the proposed exit. This interchange is reported to have cost approximately $22 million. In Figure 3, we compare this expenditure with the potential economic gains to the state’s economy that could be generated by the industrial park expansion. The total economic impact of the expansion is estimated to be approximately 50 times the expenditure for the interchange itself.

Figure 3: 10-Year Economic Impact Compared to Road Construction Spending

- **State Spending:** $22.4 Million
- **Direct Impact:** $787.3 Million
- **Total Impact:** $1.1 Billion
About the Bureau of Business and Economic Research

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