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Building a Business Case for West Virginia's New Economy Participation



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James Estep has served as President and Chief Executive Officer of the High Technology Foundation since June of 2000. Estep's efforts were crucial in positioning the I-79 Technology Park as the premier economic diversification effort in the state of West Virginia. Under his leadership, the I-79 Technology Park has expanded to almost 400 acres and over 800,000 square feet of Class A office and laboratory space. Estep is also active in several business and technology efforts around the state and serves as a current Board Member and past Chairman of the Mid-Atlantic Aerospace Complex.

For almost three decades, the mission of the High Technology Foundation has focused on developing a “business case” that can drive the growth of a technology or knowledge sector in North Central West Virginia. The organization’s emphasis on technology comes from the need for better economic diversification. It also comes from West Virginia’s consistently low ranking in “educational attainment.” The low ranking means that West Virginia has too few jobs that require an education past high school. Further, this lack of jobs requiring higher educational attainment means that West Virginia is not adequately participating in the “knowledge sector” or “new economy.” This is concerning because West Virginia will never reach economic parity with the rest of the nation unless it fixes this handicap and aggressively participates in the new economy.

Investopedia defines the new economy as “one that uses technology to create new



doing so because the most important resource needed for participation in the new economy is an educated workforce. Over the decades, the significant lack of career opportunities for West Virginians with higher educational attainment resulted in an exodus of the state’s young, educated workers. Ironically, this steady “brain drain” made the problem worse because it depleted the resources needed for participating in the rapidly expanding new economy opportunities. This certainly represents a challenge for the state, but not an insurmountable one.

The only way to solve this challenge is for the state to develop a business case that is so compelling that it attracts new economy

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products and services at rates that the traditional manufacturing economy cannot match.” It goes on to say that the “companies at the forefront of the new economy have become larger than many of the traditional manufacturing companies in terms of importance.” The importance of building a larger new economy component in West Virginia cannot be overstated. However, the state has a “chicken and egg” challenge in

companies despite the workforce challenges. For example, coal mining companies came to West Virginia because they could make money from mining the state’s coal seams. Natural gas companies came to West Virginia because they could make money from drilling the state’s natural gas reserves. So, what does West Virginia have that can be the “coal seam” or “natural gas reserve” for the new economy industry?

While West Virginia's participation in the new economy is inadequate, some activity does exist. For example, there are new economy companies operating in North Central West Virginia, including Leidos, General Dynamics, and Northrop Grumman. Unfortunately, the economic output surrounding these operations isn't big enough to have the needed impact (yet).

If you were to ask these companies why they are in West Virginia, they would point to the contracting opportunities offered by the federal operations along the I-79 corridor. The contracting activity provides an opportunity for these companies to make money. It creates a business case like the state's coal seams and natural gas reserves did for legacy industry. Importantly, it is clearly compelling enough to mitigate the workforce challenge. As noted, the current economic activity isn't big enough. So, the business case needs to be expanded through the recruitment of additional federal operations.

The High Technology Foundation has been recruiting additional federal operations to the I-79 Technology Park for almost two decades. The most successful recruitment has come from the National Oceanic and Atmospheric Administration (NOAA). Over the last 15 years, the High Technology Foundation has recruited NOAA's primary supercomputing center, its three highest priority satellite

ground stations, and its cybersecurity headquarters operations. The contracting opportunities associated with these operations have exceeded \$650 million in the last five years, adding substantially to the growth of the business case. Both government and commercial organizations are spending billions on climate analysis in support of adaptation and resilience. The primary resource for that analysis is the data collected in Fairmont, West Virginia. Because of the unique co-location of operations recruited by the High Technology Foundation to the I-79 Technology Park, West Virginia has a potentially transformative economic opportunity.

The High Technology Foundation recently launched an initiative to develop an innovation and entrepreneurial ecosystem around the climate and weather data collected by the ground stations. The existing commercial climate and weather industry exceeds \$7 billion and is expected to double. The development of an ecosystem at the I-79 Technology Park will position the state to participate in the multibillion-dollar expansion of this new economy sector. The ecosystem includes a "Cloud Analytics Fellows Program" to cultivate innovation and entrepreneurial potential at colleges and universities. In addition, the High Technology Foundation is actively recruiting the nation's top cloud service providers to the park to leverage their respective platforms as tools for accessing the climate and weather data. ▼

