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RE: Delaware and High-Tech Innovation

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In its recent report on “Growth Centers” the Brooking Institute declares that “the future of America’s economy lies in its high-tech innovation sector.”

Brookings identifies a cohort of 13 innovation industries where R&D expenditures exceed $20,000 per worker and have a STEM-worker share of 45%. These industries range from computer equipment manufacturing to scientific research and development services.

Brookings goes on to track the change in innovation employment from 2005-17 for the 100 largest metropolitan areas in the nation. The top five winners include: San Francisco, Seattle, San Jose, Boston and San Diego. These “super stars” accounted for more than 90% of the nation’s innovation-sector growth. Only 11 more metropolitan areas recorded growth in innovation employment over this time period.

The Philadelphia-Camden-Wilmington metropolitan area ranked 97th in growth with a net loss of 9,178 innovation jobs.

The winners in the innovation job fight enjoy the benefit of what economists call cumulative causation, as critical thresholds of talented workers, startups, and investment create agglomeration economies. The agglomeration economies lower backward and forward costs and provide a critical flow of creative intellectual capital.

Over the period 2005-17 total innovation-sector employment throughout the state of Delaware dropped almost 19%, a loss of over 2,000 jobs. The largest losses were in scientific research and development and in data processing. The largest gain was in electromedical instruments manufacturing.

While Delaware and other states should pursue high-tech innovation sector jobs, this should obviously not be the cornerstone of their economic development strategy.

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