Summary

Testimony of
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Associate Director, Economic Innovation &
Partnerships at University of Delaware
President/CEO Delaware Technology Park, Inc.
State Director, Delaware Small Business Development Center

Hearing on "Examining Programs at the Economic Development Administration"

Before the U.S. Senate Committee on Environment and Public Works

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Good morning. Senator Carper, Senator Capito and members of the Committee, thank you for inviting me to participate today. I'm Mike Bowman, Associate Director of Economic, Innovation and Partnerships (OEIP) at the University of Delaware (UD). OEIP is UD's unit responsible for technology transfer and is host to Delaware's Small Business Development Center and the Procurement Technical Assistance Center that helps companies with government contracting. My responsibilities include President/CEO of Delaware Technology Park (DTP) where I have enjoyed twenty years engagement with EDA. DTP is a 501.c.3 non-profit partnership between UD, State, and private sector.

My remarks begin with a metaphor. The Greek mathematician and physicist Archimedes defined the principle of the lever. He said, "Give me a place to stand, and I will move the Earth."

EDA is the lever for economic development across the United States. EDA's grant challenge programs are a lever to grow clusters of innovation and economic impact. I strongly support Reauthorization of EDA but with enhancements that make it more relevant to today's global economy. Think about the enormous changes in technology since EDA's last authorization in 2004.

EDA programs are usually of two kinds. One is dedicated to capital for infrastructure improvement or expansion. The second is focused on fostering early-stage innovation. In Delaware we have experienced the benefits of both, which I'll discuss as examples.

Delaware Technology Park transformed high bay space in a former Chrysler Assembly plant building into a laboratory incubator for start-ups in life sciences and advanced materials. In just five years, 20 companies started, shared common areas and took advantage of access to UD assets to create 200 new jobs. They raised nearly \$1 billion of funding with the two companies going public through IPO.

In addition, the Incubator offers an experiential student learning program called SpinIn®. Teams of UD students work with small companies requesting help on a business project. The project work is mentored and lasts for at least a semester. Over 15 projects have been successfully completed by 90 students, all coming from different college disciplines. New products have been created, new markets uncovered and the students often hired after graduation.

The Incubator and SpinIn® programs each received \$500,000 over five years to leverage with other resources. The outcomes from the EDA fostering innovation grants have already been extraordinary.

As incubated small laboratory companies grow, they need to move to larger space in the community. This frees up the incubated space to accept new start-ups.

An EDA infrastructure grant helped modify space in a DuPont corporate lab building for multi-tenant growth innovative companies. The building is now called the Delaware Innovation Space, a non-profit collaboration of UD, State, and DuPont. A few companies there have already begun plans for their own building as next expansion steps.

EDA's support has been crucial to Delaware's economy and replicated across the country to spur successful innovation clusters.

With EDA's recent increased funding capability, numerous but diverse high impact community outcomes should be expected across the country. The nature of these innovation clusters will and should be quite different. They vary depending on local resource capacity, the existing and growth potential of the current industrial base and the leadership to execute and sustain. It is much more prudent to utilize or transition existing infrastructure assets and programs than begin a new greenfield site. Greenfield projects are often fraught with complex zoning and other approval regulations that drag on for years.

Many successful urban clusters already exist that benefited from EDA support such as University City in Philadelphia, an area they call Eds and Meds. There are diverse National Network of Manufacturing Institutes dispersed across the country. Delaware was awarded one focused on biopharma manufacturing so critical to producing new medicines and vaccines. Rural clusters are important for cutting edge technology transforming agriculture. Recently I visited

that in Ames, Iowa. There is a large John Deere center in Iowa State's research park developing precision farming using artificial intelligence.

You are all keenly aware of the global competition for markets using new technology innovations. Now is an important time for the USA to act boldly to be sure we excel. It is worrisome that China greatly exceeds US technology funding and recently passed us in annual patents.

In closing, I would like to make three observations with suggestions for consideration to enhance EDA and their role in our economy.

First

The model that has shown to produce the greatest sustainable results requires a commitment by State or local government, a credible academic institution, and private sector participation.

EDA's newest Challenge grant competition embodies that model but there are some potential barriers to full participation. Some rural areas may not have an academic partner or access to sufficient broadband to be effective. Fortunately, many mid-west states are not limited because of their large land grant universities with good community networks.

Another major constraint to many regions is the required 50% cost match. For many promising applicants 50% is a non-starter.

Second

EDA should use its role for better collaboration with other federal agencies engaged in economic development. Many federal agencies have valuable complementary innovation programs that could be linked.

Examples might be SBA's SBIR/STTR programs, patent office help, NIH funding, national lab intellectual property and Department of Labor workforce development. The coordination and recognition of the many siloed agency programs and funding could produce better outcomes.

Third

Finally, the application process and subsequent managing process for winners are very challenging. The concern is HBCU's, minority serving institutions, and some rural areas will have serious difficulty and may not even try to apply. Many of the requirements are Congressionally mandated and are not very flexible. EDA prides itself on inclusivity and diverse financial equity. However, there are some systemic issues that could be improved.

In conclusion, I believe EDA is an extremely important lever to stimulate needed innovation across the USA. EDA Reauthorization with enhancements can help the USA get on a better track to global competitiveness.

Thank you for allowing me to comment today. I would be pleased to take your questions or comments.