

ECONOMIC RECOVERY

Building Economic Resiliency after the Pandemic Technology-Based Economic Development Program



- **WHAT:** This proposal would create a Technology-Based Economic Development (TBED) program in Department of Economic Development and in strategic partnership with the University of Vermont's newly created Office of Engagement (OOE). The goal of this program is to strengthen Vermont's economic base by creating a climate where technology-based businesses can thrive. This program would help provide Vermont small businesses engaged in research & development an advantage in applying for federal Small Business Innovation Research (SBIR) grants through technical assistance. It would help accelerate their time to market by providing matching grants to companies awarded federal SBIR grants. The program would also create greater collaboration between industry and higher education in order to keep our existing tech and advanced manufacturing companies relevant in an ever-changing global market. Lastly it would help ensure a healthy pipeline of new technologies coming out of our research institutions and further our goal of seeding more high-tech companies in Vermont by providing grant support to early stage technologies with commercial potential. Program Highlights:
 - SBIR Technical Assistance and Matching Grants.
 - Build and market co-location and science service opportunities at UVM (i.e., mass spectrometry and scanning electron microscope services, etc.) in areas like materials science, aerospace and environmental sensor industries.
 - Provide funding to help Vermont companies offset the cost of research and consulting engagements with UVM which advance the development of a new product.

- **WHY:** The COVID-19 pandemic has shown the devastating effects of over reliance on a tourism and serviced based economy can have on its citizens. The opportunity exists for Vermont to take a long-term view and approach towards strengthening its economic base by creating an environment where technology-based businesses can thrive. Vermont's economy is heavily weight towards service sector jobs with lower than average wages. We have an opportunity to tip the scale towards technology and advanced manufacturing sectors with higher than average wage jobs. Taking a long-term view toward strengthening our economic base will help raise the median wage, lower the overall tax burden, and keep Vermont competitive in the national and global economies.

- **WHO:** The Vermont Department of Economic Development in partnership with the UVM Office of Engagement will help Vermont businesses looking to commercialize new technologies advanced through research and development. It will help existing tech and advanced manufacturing companies in Vermont remain relevant in the market by strengthening collaboration between industry and higher-ed. And in the long-term it will

help Vermonters in all 14 counties who want the opportunity to work at companies on the cutting edge of innovation.

- **Whiteout Solutions, Lyndonville:** Christine Heinrich and Matt Clark, co-founders of a Lyndonville based technology startup were interested in applying for an SBIR grant through the USDA to further development of their custom software and machine learning technologies. Their software combined with remote sensing technologies deployed on UAV's has multiple applications that would be useful to the forestry and wood products industry. Unfortunately, they lacked the experience required to navigate the federal SBIR grant process. They would have greatly benefited from the technical assistance that would be available through our TBED proposal and the matching grants to accelerate their time to market.
 - **Benchmark Space Systems, South Burlington:** Ryan McDevitt co-founded Benchmark Space Systems to provide the most cost-effective propulsion solution for small scale satellites. The technology is based on research the co-founders were working on as researchers at the University of Vermont. Since leaving UVM to found their company, they have been able to successfully apply for a phase I and phase II SBIR grants through the United States Air Force to further development of their satellite propulsion technology. These SBIR awards have brought over 700 thousand dollars to the company, helped them raise over \$2mm in private investment and they have grown the business to 11 employees, several of whom are recent UVM grads and others they've attracted from out of state with significant experience working large aerospace contractors. Vermont is now home to a company on the cutting edge of what's been estimated to be a 20-billion-dollar industry. We hope to help cultivate more companies like benchmark through our TBED proposal.
- **FUNDING:** \$1 million general fund allocation.

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