



## Project Profile: Wisconsin

### Impact Statement

The DoD Office of Economic Adjustment's (OEA's) Industry Resilience (IR) funding strengthened the resiliency, lethality, and readiness of the Wisconsin defense industrial base and the DoD through outreach activities, entrepreneurial assistance programs, and tools to coordinate the delivery of services to defense suppliers and to facilitate connections in the defense ecosystem. Outreach to businesses and to stakeholders increased understanding of and resources delivered to Wisconsin's defense industrial base. Entrepreneurial assistance programming facilitated the delivery of services to start-ups and grew the start-up ecosystem in Wisconsin, benefitting the lethality of the DoD by facilitating the development and commercialization of new technologies. Succession-planning services delivered to small to mid-sized defense suppliers plays a crucial role in continuing the operation of these firms across generations, ensuring the readiness of the DoD through the continued ability to support operations supplied by these firms. Overall, activities funded by the IR grant in Wisconsin benefitted the DoD by addressing crucial segments of the state's defense industrial base, including the support of economic development stakeholders, entrepreneurial assistance programming, workforce development efforts, and support programs to ensure the continued operation of small defense suppliers.

### Key Project Takeaways

Through support from the OEA Industry Resilience grant program, the Wisconsin I-41 Team, led by the Wisconsin Economic Development Corporation (WEDC) with support from the East Central Wisconsin Regional Planning Commission (ECWRPC), increased the resiliency, lethality, and readiness of the local defense industrial base through entrepreneurial assistance, workforce training, and ecosystem development programs. The IR Team hosted a variety of cluster development and outreach activities that convened both suppliers and OEMs in the regional aerospace and defense cluster, increasing awareness of the local defense industrial base. The team additionally created a supply chain mapping tool to connect OEMs with suppliers and new technologies. These activities benefit DoD resiliency by strengthening local supply chains and increasing local support to address challenges facing defense suppliers. The IR Team supported the growth and development of entrepreneurial and start-up assistance programs, accelerators, and incubators, increasing the readiness of businesses in the region able to support the aerospace and defense supply chain and the lethality of goods and services supplied to the DoD. This benefits the lethality of the DoD by supplying increasingly lethal technology to the warfighter. Programs to increase businesses' ability to successfully succession-plan increase the readiness of the DoD, by maintaining the number of suppliers able to support the DoD mission.

The I-41 Team developed numerous tools, including an asset map and entrepreneurial-activity tracking system, to improve coordination and engagement to facilitate connections between defense suppliers and resources, as well as hosted numerous industry engagement events and a talent initiative to develop manufacturing talent to the region. The IR team's efforts to develop and attract entrepreneurial assistance programs grew a more vibrant ecosystem for the entrepreneurial and startup community through three accelerator programs: AeroInnovate Accelerator Program, gBeta, and the Growth



Management Academy. In addition, the IR team developed a mentor match program to connect start-up companies to expert advisors and a succession planning toolkit to facilitate the adoption of succession planning strategies by small family-owned businesses to continue operations.

## Project Description

### Rationale

In the aftermath of massive layoffs by the Oshkosh Corporation in response to the 2012 budget sequestration, it became apparent that Wisconsin manufacturers and the entire state's economy is heavily dependent on DoD contracts. The multiple rounds of layoffs at the Oshkosh Corporation brought to light the dire need for a broad, state-level effort to coordinate stakeholders and provide resources to assist various localities across Wisconsin to mitigate the negative effects of reduced defense spending.

In 2015, the DoD contracted the Oshkosh Corporation, located in the I-41 Corridor, to produce the Joint Light Tactical Vehicle (JLTV) with an initial contract value of \$6.7 billion for a production of 17,000 vehicles. Despite the recent increase in contract expenditures in the region, there is a general sense both in Wisconsin and among the Initiative 41 partners in the overriding need to strengthen regional economic resiliency and reduce dependency on defense contracts. This required efforts both to retool and grow the capacity of local DoD manufacturers and their workforce.

The I-41 program initiative demonstrated the effectiveness of direct supplier assistance, and how state-level coordination can ease the impact of reductions in defense spending by enabling defense-impacted firms to enter markets in adjacent sectors and support a broader range of DoD contracts. The objective of this project is to support regional study recommendations that further regional economic resiliency.

### Program Activities

In Phase I of OEA-grant support the I-41 Initiative performed the following program activities:

- Supply Chain Marketplace: To diversify DoD suppliers into new markets, the supply chain directory website highlights the potential capacity of local suppliers, facilitates new connections between businesses and OEMs. More than 1,800 businesses were identified as being in the defense supply chain with 494 companies profiled. ([www.wisupplychainmarketplace.com/](http://www.wisupplychainmarketplace.com/))
- Supply Chain Playbooks: The Wisconsin Supply Chain Playbook acts as a toolkit for economic development organizations and manufacturing firms to strengthen and serve DoD suppliers diversifying into new markets and defense opportunities. The toolkit provides recommendations for strategies and action items that can be adapted to individual environments and situations.

In Phase II, the I-41 Corridor team implemented various initiatives to promote commercial and contract diversification of defense companies to sustain the industrial base:

- Developed a regional economic development strategy designed to build a more resilient and diversified manufacturing base in the five-county I-41 Corridor Region. The following activities stem from the recommendations of this report.



- Conducted education and training seminars to inform regional stakeholders on the value of developing regional corridors.
- Developed an interactive tool to define the economic development landscape and ecosystem in the 18-county region. The tool maps 329 economic development entities and resources for manufacturers and defense suppliers.
- Created the Regional Entrepreneurial Development System to track entrepreneurial activity within the I-41 Corridor region to meet the needs of entrepreneurs through the collaboration of partner agencies working together as one.
- Conducted two manufacturing roundtables, two aerospace supplier forums, and two additive manufacturing symposiums to increase engagement among aerospace & defense (A&D) manufacturers and suppliers.
- Launched the Talent TakeOff Initiative to increase awareness of careers and opportunities in aerospace manufacturing and maintenance and match students with manufacturers.
- Initiated an additive manufacturing and maintenance, repair, overhaul (MRO) clusters in Northeast Wisconsin.
- Developed three programs to assist early stage and second stage companies: the AeroInnovate Accelerator Program, gBeta, and the Growth Management Academy.
- Developed a high-impact planning process and toolkit to assist companies undergo the succession planning process in a shorter time-period with less resources. The team assisted 10 defense industry suppliers develop succession plans through hands-on workshops focused on Agile Strategy systematic approaches.
- Developed a Mentor Match online platform to connect Northeast Wisconsin startup companies with expert advisors.

## Resiliency Impacts

### Increasing Awareness of the Defense Industrial Base

As part of an overall effort to build more a resilient and diversified industrial base along the I-41 Corridor, the East Central Wisconsin Regional Planning Commission (ECWRPC) collaborated with a number of stakeholders to prepare the first ever I-41 Corridor Economic Development Strategy. The ECWRPC engaged TIP Strategies, an Austin-based economic development consulting firm, to prepare a regional economic development strategy designed to build a more resilient and diversified manufacturing base in the five-county region. This regional approach to economic development builds upon a skilled workforce, strong-manufacturing base, and favorable quality of life assets already present in Northeastern Wisconsin. The region's goals include but are not limited to 1) fostering business growth, innovation and entrepreneurship 2) improving the region's ability to attract the necessary talent (workforce) to the corridor, and 3) increase collaboration in a coordinated manner to maximize the impact of economic development opportunities in support of the defense industrial base.

To strengthen capacity building in the region, ECWRPC held two education and training seminars for regional partners that raised challenges and opportunities for the defense industrial base. The first of the two Partner Education sessions was held on February 21, 2018 with 110 participants attending to



learn about the I-41 Corridor regional economic development strategy, a University of Wisconsin-Extension study on how to gain and maintain young talent in rural communities, and insights on how to engage Millennials and the next generation in manufacturing opportunities. The second of the two Partner Education sessions was held on November 15, 2018 47 participants attending to learn about the principals of smart communities, collaborating on Smart Cities projects, and wiring the broadband network along the I-41 Corridor. Attendees included elected officials, non-profits, public and private sector representatives, K-12 school districts, and institutions of higher education.

To better define the economic development landscape and ecosystem, the ECWRPC and WEDC created a GIS-based, interactive web portal through ESRI StoryMap technology ([bit.ly//ecwrpc\\_assetmap](http://bit.ly//ecwrpc_assetmap)) to improve collaboration in the region using data on regional challenges and assets. The tool provides a basic narrative that explains what the practice of “economic development” is, and why it is important, including a discussion on the various types of entities and general economic development activities. The map also serves as an inventory of all known public, private, and non-profit institutions, as well as special districts or entities that play a role in economic development within the 18 county New North region. A total of 329 entities and resources were identified and included in the inventory.

During Phase I of the DoD-OEA grant, it was clear that aerospace industry manufacturers and suppliers needed more opportunities to engage with each other and suppliers. To provide opportunities for engagement, ECWRPC hired Wisconsin Aerospace Partners (WAP), a non-profit that supports organizations engaged with the aerospace industry in the State of Wisconsin, to deliver six events: two manufacturing roundtables, two aerospace supplier forums, and two additive manufacturing symposiums. Notably, the second aerospace supplier forum focused on how local manufacturers can enter the drone supply chain, a necessary expansion of the industrial base to meet the needs of the DoD. By entering new DoD contracting opportunities, DoD suppliers can increase their resiliency and reduce reliance on a single contract supply chain. These events were attended by aerospace companies, economic development organizations, municipalities, airport representatives, and higher education institutions. WAP conducted surveys at these events to inform cluster development and collect feedback on value of the events. WAP and WEDC will lead the aerospace cluster framework beyond OEA support.

The Greater Oshkosh Economic Development Corporation (GO-EDC) led the efforts to offer education sessions on best practices in the aerospace and aviation industry, recruit talent, and develop regional additive manufacturing and maintenance, repair, and overhaul (MRO) clusters. GO-EDC hosted eight Lunch n’ Learn best practices seminar series to educate manufacturing companies and economic development organizations about the advancements in the production of additive manufacturing and MRO in the aviation and aerospace sector as well as assist employers in sharing best practices in the talent recruitment and development. Over 230 individuals attended these sessions.

To bridge the skills-gap in the aerospace and aviation industry, GO-EDC launched the Talent TakeOff Initiative to increase awareness of aviation careers and opportunities, and foster workforce development initiatives. GO-EDC partnered with 15 local universities, colleges, two-year institutions, and trade schools to promote job and career opportunities with local aviation and aerospace businesses as



well as regional K-12 schools to foster young talent initiatives. GO-EDC hosted two talent recruitment events where over 28 companies and 300 guests participated.

Lastly, GO-EDC initiated the additive manufacturing and MRO clusters to help increase capacity for regional networking among businesses, airports, aerospace manufacturers and aviation-based corporations, and engage business development efforts. With a region more aware of the needs of and challenges facing the defense industrial base, it ensures a greater level of community support for DoD suppliers. This benefits the resiliency of the DoD by ensuring a stronger contracting base with support from its region to retool and grow capacity to meet the evolving needs of the DoD.

### Enhancing Force Multipliers to Support the Defense Industrial Base

The IR Team played a significant role in organizing regional support and leveraging existing assets in support of the defense industrial base. Building on an existing Fond du Lac County entrepreneurial resource network, IGNITE! Business Success, the IR team tasked Envision Greater Fond du Lac with creating the Regional Entrepreneurial Development System (REDS). The REDS is an information-management system for tracking entrepreneurial activity within the I-41 Corridor region seamlessly and ensuring the needs of the entrepreneurs are met through the collaboration of partner agencies working together as one. The REDS includes a variety of tools to assist entrepreneurs, including: a sustainable resource matrix, an online assessment and tracking tool, an interactive web toolkit, training and coaching opportunities for regional partners and active users, , and an outreach tool, the Regional Innovation Network (RIN), to increase awareness of entrepreneurial events. Envision Greater Fond Du Lac developed the tool with feedback from regional entrepreneurial partners across the I-41 Corridor area. The tool provides a valuable resource to grow the capacity of entrepreneurs and connect them with opportunities and regional innovation and support assets. Tools that connect potential defense suppliers with regional support assets and contracting opportunities grow the stable of businesses able to support DoD operations. With a larger contractor base, both OEMs and the DoD develop a more reliable supply chain, reducing the number of single-source suppliers.

### Lethality Impacts

#### Innovation through the Development of New Intellectual Property or New Technologies

The University of Wisconsin Oshkosh, in partnership with the I-41 Corridor Program Steering Committee, developed three programs to assist early stage and second stage companies: the AeroInnovate Accelerator Program, gBeta, and the Growth Management Academy (GMA). The OEA grant supported the university to continue the operations of each of these programs, as well as add programming elements and strengthen the long-term sustainability by providing training to program staff and gaining support for the programs through networking. Expanded entrepreneurial assistance programming can grow Wisconsin's stable of DoD suppliers and provide new technologies and technological improvements to increase the lethality of the warfighter in the field of operations.

AeroInnovate, an eight-week virtual accelerator program, assists entrepreneurs in aerospace and aviation commercialize technologies. The program connects cohort participants with mentors and resources to help them refine their product, research customer validation, and develop investor



presentations. Over the past two years, AeroInnovate assisted 8 aerospace and aviation companies, exposing them to previously inaccessible resources and funding. Additionally, AeroInnovate conducted 6 regional roadshows and 8 webinars to educate aviation and aerospace entrepreneurs, recruit entrepreneurs, mentors, and sponsors, and expand its network.

Through networking opportunities enabled by the AeroInnovate and EAA AirVenture programs, a F16 mechanic from the Air National Guard made valuable connections with consumers, manufacturers, and distributors for his product, the Grypmat. The Grypmat is a multi-purpose tool tray made from silicon polymer, that can withstand heat up to 500 or 600 degrees. The tray has dual application in both commercial and defense specific production environments. The high friction surface allows technicians to safely place tools around heated surfaces and helps reduce foreign object debris and overall maintenance time while increasing aircraft longevity. This material holds tools up to a seventy-degree angle with no magnets while protecting surfaces and tools alike. The flexible material allows for it to contour on curved surfaces and it can be used for servicing and production for a variety of land-based vehicles and aircraft. With the investment opportunity from an American Broadcasting Company (ABC) television show "Shark Tank", Grypmat can build up its inventory and continue creating new and innovative products and accessories to introduce new process efficiencies in vehicle production.

Using support from the OEA IR Grant and by leveraging funds from several project partners and Microsoft, Gener8tor, a nationally acclaimed business accelerator program, expanded its gBETA program to Northeast Wisconsin. gBETA (<https://www.gbetastartups.com/northeast-wisconsin>) is a free seven-week accelerator for local early-stage companies to gain early customer traction on their product or idea and identify and track metrics that can make them competitive applicants for full-time, equity-based accelerators or seed investment. Participants receive intensive and individualized coaching and access to Gener8tor's national network of mentors, customers, corporate partners and investors. Over the past two years, gBeta assisted 15 startup companies, raised \$24,000 in non-dilutive funds through contest earnings and non-equity-based program acceptances, and \$1,250,000 in dilutive investment funds raised by program participants since completion. The program allowed Wisconsin to maintain their resiliency and provide entrepreneurs to diversify into other markets.

The Growth Management Academy (GMA) is a comprehensive program that mobilizes second stage companies to seek growth opportunities that drive business value and growth through learning, sharing and creating effective scalable strategies. The program includes general training sessions with follow-up tailored one-on-one meetings. GMA provides three educational sessions targeting key growth topics as a foundation to the individual and customized portions of the program, focusing on how to manage growth and diversify into new markets. Over the past two years, GMA assisted 10 companies through 2 academies. Additionally, GMA has researched, managed, and maintained a database of approximately 300 second stages companies in the New North region. The database provided GMA a means to identify potential recruits and track program graduates.



## Readiness Impacts

### Training and People Support

Drawing from prior planning activities, ECWRPC discovered Northeast Wisconsin defense firms, particularly small and medium sized, family-owned businesses severely impacted by budget cuts lacked the capacity for succession planning and required assistance to develop succession planning strategies. To directly meet these needs, Agile Strategy, led by a team from the University of Wisconsin Oshkosh, developed a high-impact planning process and toolkit to empower companies to strategically undergo the succession planning process in a shorter time-period with less resources. The toolkit trains participants in a set of feasible actions to achieve their strategic succession planning objectives and how to adapt their plan if circumstances changed. The program helped 10 defense industry suppliers develop succession plans through hands-on workshops focused on Agile Strategy systematic approaches. Further, Agile Strategy conducted three succession planning awareness presentations, held succession planning summits, and produced a list of resources to assist family businesses with growing their business (<http://wfbf.uwosh.edu>). Successful succession planning ensures the continued operation of defense suppliers across generations, and their continued ability to support the DoD. This increases the readiness of DoD operations by ensuring that high-quality suppliers undergo the training and planning necessary to continue to support current and evolving DoD missions.

A regional study found that a top need for startups are connections to experienced entrepreneurs and business leaders. To connect Northeast Wisconsin startup companies and expert advisors, the University of Wisconsin Oshkosh developed a Mentor Match online platform (<http://newfinn.com>). The platform allows entrepreneurs to link with mentors to work towards successfully commercializing their innovations. The program specifically targets the Oshkosh supply chain and provides resources to facilitate the development of startups while remaining in the I-41 corridor. The team successfully recruited approximately 100 users through outreach efforts. The program trained these entrepreneurs in commercializing their technology, managing their start-up, and obtaining financing. The university intends to continue support for the platform beyond the OEA grant with a possibility of expanding to a statewide entrepreneurial support platform. Entrepreneurial support organizations including FiNN, the Commons, Fox Valley Technical College Venture Center, Kinnektor, StartUp Wisconsin, Rise and Grind, and T2 Accelerator already support the platform and are encouraging engagement. Training in entrepreneurship both increases the readiness of the local defense ecosystem through the growth and adoption of new technologies in the supply chain and inputs new lethal technologies into DoD technologies. A larger stable of DoD suppliers further increases the readiness of the DoD by introducing new innovative technologies into the DoD supply chain that can support both current and new DoD missions.

## Other Community Benefits

### Amenities and Infrastructure Developed

The entrepreneurial ecosystem efforts made by the OEA grant helped establish the Angels on the Water Fund II (AoW), the first angel-investment fund in Oshkosh, Wisconsin. AoW II, in partnership with the City of Oshkosh, serves as a regional investment fund to provide seed and early-stage funding and



mentorship to aerospace and defense startups. The angel investment firm is a not-for-profit evergreen fund, where capital gains refinance the fund, with an internal goal of \$4,000,000 by the end of 2019, build with the combined support of public and private participation. There is approximately \$1M either committed to actively considering commitment. The fund's goal is to be a dedicated permanent source of capital for A&D startups in the region. Additionally, AOW designed a regional network of investment funds to support A&D cluster activity and developed a template to create other funds in other I-41 communities in support of the A&D cluster. The template is available for others to use to save time and resources to prevent the need to reinvent the wheel.