

Project Profile: Indiana

Impact Statement

The Indiana IR team and the Indiana Office of Defense Development (IODD) created an economic diversification and risk mitigation strategy, and used this strategy to assist defense firms increase their ability to service defense and commercial markets, and develop an infrastructure that promotes the commercialization of technologies developed by local defense research assets. Activities by the IODD led to the formation of the Indiana Defense Sector Network, the creation of an Aerospace & Defense Supplier Database/Web Portal, an analysis of defense sector assets and suppliers, the provision of assistance services to defense manufacturers, and a technology transfer program between universities, DoD facilities and businesses. These activities increased understanding of defense suppliers in the region, allowing IODD to provide services that support suppliers and increase innovation, strengthening the ability of Indiana defense suppliers to support the resiliency and lethality of DoD operations.

Key Project Takeaways

The Industry Resilience grant enabled the Indiana IR team to assist defense firms diversify into commercial markets, reducing their dependency on DoD contracts. IR funds enabled the Indiana Office of Defense Development (IODD) mission to support the defense-sector by providing support that developed existing assets while also creating an economic diversification and risk mitigation strategy for businesses as the DoD budget continues to experience fluctuations. IODD served as the lead agency for the state's OEA grant. The research outcomes, web tools, and pilot efforts developed over the course of the grant built a foundation for IODD and its partners, in a statewide collaborative, to continue to implement community adjustment and diversification strategies in support of the defense industrial base. Indiana's IR grant increased the capacity and resilience of defense suppliers and businesses across the state, strengthening the resiliency and lethality of the DoD.

Project Description

Rationale

Fluctuations in DoD procurement accounts and overall fluctuations in federal budgets pose an existential threat to the 1,000 small and mid-sized defense manufacturers in Indiana. Further reductions to the DoD budget, if realized, will result in layoffs and negative economic impacts throughout the state's economy, with the state's defense sector heavily dependent on DoD contracts. A lack of stable defense suppliers in the region would impact the operations of the Naval Surface Warfare Center (NSWC) - Crane Indiana Division. Located on the third largest naval installation in the world, NSWC Crane's operations support the Warfighter in three areas: Electronic Warfare, Strategic Missions, and Expeditionary Warfare. The Navy center is one of Indiana's largest high-tech employers with over 2,000 scientists, engineers and technicians. Given the significant number of Indiana businesses and workers reliant on DoD expenditures, IODD reached out for assistance from the Pentagon's Office of Economic Adjustment to help support Indiana's defense industrial base.



Program Activities

With the OEA funds, Indiana supported the DoD's resiliency and lethality. The scope of work for the *Indiana Defense Community Transition Strategy* included both research & analysis and a pilot program that helped Indiana defense suppliers' dependent on DoD contracts diversify into commercial activities, creating the knowledge infrastructure for any future state program. Specific support activities included:

- Defense Sector Network Formation
- Aerospace & Defense Supplier Database/Web Portal
- Defense Sector Asset and Industry Analysis
- Defense Manufacturer Diversification Assistance Services
- Innovation Adoption for Defense Manufacturers

IODD partnered with existing Indiana non-profits and businesses to develop a network to support the diversification of defense contractors. Besides hosting several events to educate and inform defense-related firms about the opportunities to diversify, an online platform was created for defense businesses to explore business-to-business and other contracting opportunities. IODD conducted an analysis of defense suppliers and assets to better understand the state's defense-related supply chain, including innovation, manufacturing, and workforce strengths and challenges. These activities helped determine the level of defense suppliers' dependency on DoD expenditures; relationships between prime contractors and Tier 1-4 suppliers; workforce challenges; identify at-risk businesses within the defense supply chain; and strategies to diversify businesses and mitigate the risk of dependency. Defense-dependent companies received direct assistance to diversify their products and markets. Finally, the team helped develop the state's innovation ecosystem through a pilot initiative that leveraged university-based resources to support technology start-ups and technology adoption by defense manufacturers. The pilot initiative's approach followed a previously successful model that leveraged NSWC Crane intellectual property (IP) and other innovation assets for technology transfer "outside the walls" of Crane.

Resiliency Impacts

Increasing Awareness of the Defense Industrial Base

The State of Indiana, through the Indiana Office of Defense Development (IODD), supported the development of an Indiana statewide defense network by engaging partner groups and making them aware of the OEA grant activities and goals. IODD's partner groups included:

- Indiana Economic Development Corporation (IEDC)
- Conexus Indiana
- Indiana Department of Workforce Development (DWD)
- Procurement Technical Assistance Center (PTAC)
- Indiana Small Business Development Center (ISBDC)
- Purdue Manufacturing Extension Partnership (Purdue MEP)
- Purdue Center for Regional Development (DMAP)



- Northeast Indiana Regional Partnership (NIRP)
- Radius Indiana
- Indiana Aerospace and Defense Council (IADC)
- Indiana Manufactures Association (IMA)
- Ivy Tech
- Regional Opportunities Initiatives (ROI)
- Northeast Indiana Defense Industry Association (NIDIA)
- National Defense Industrial Association (NDIA)
- University of Southern Indiana
- Indiana University

A major initiative resulting from this network building was the creation of a supply chain database for the defense industry to access business-to-business opportunities. Conexus ICON, a free platform, enables Hoosier businesses to filter searches to the exact industry capability or service they are looking for (e.g., business types, manufacturing capability, diversity classifications, etc.) and view a businesses' certifications. The supplier database links Hoosier suppliers with procurement opportunities and supports growth not only in Indiana's advanced manufacturing and logistics industries supporting the DoD, but every B2B sector in Indiana.

Conexus ICON, in partnership with the Indiana Aerospace & Defense Council, used OEA funds to create a specific web portal to connect Indiana's diverse pool of aerospace and defense companies and capabilities. Defense contractors can register and update their company profile on the website; including product and/or service capabilities, diversity and quality certifications, and other business demographic information, such as size and served industries. The search tool allows users to find suppliers by capability, and the opportunity posting tool automatically matches and broadcasts relevant opportunities to users. Registered users also regularly receive requests for supplier listings from various entities such as the Indiana Economic Development Corporation (IEDC), OEM's, Tier-1's, etc.; receive invitations to special events, including supplier matchmaking, education, networking, and other opportunities; and notifications of procurement opportunities. Increased awareness and understanding of defense suppliers by government and within the defense supply chain creates opportunities for defense suppliers and allows the development of services that address the sectors needs.

Commercial Diversification of Defense Companies to Sustain the Industrial Base

The Indiana IR team launched a second major initiative using grant funds to provide a portfolio of assistance strategies to diversify defense contractors. Specifically, grants were provided for customized business services to assist small and mid-sized companies reduce their dependence on DoD contracts by helping them diversify into new markets. Companies received up to \$50,000 in consulting services in the following four areas: strategic planning, strategic communications, lean product development, and quality certifications. Services were provided at no cost to qualified companies and developed based on information learned about the sector through supply chain mapping. Qualified companies met the

¹ www.conexusicon.com



following four requirements: operated in Indiana for a minimum of one year prior to application; have at least one full-time employee; be a defense contractor or subcontractor to a defense contractor; and have experienced a loss of revenue due to a change in DoD procurement.

IODD engaged kglobal, a strategic communications firm with experience supporting OEA projects in three other states, to spearhead the consulting and diversification efforts under the initiative. The firm worked in collaboration with several other service providers, four of which are Indiana-based companies; Simon Everett, Indiana Strategic Research Group, Maple Hill Engineering, Mary Romeo and Associates, and QAI. Over the course of grant support, more than 28 companies had their technical assistance needs assessed and received services. The grant program achieved the following outcomes for these defense companies:

Communications

- 20+ brand strategies developed
- 15+ digital marketing plans created
- 50+ trade shows identified
- 10+ audience personas created
- 10+ business development strategies revamped

Strategic Planning

- 10+ SWOT assessments developed
- 25+ New Markets assessed
- 10+ Strategic diversification roadmaps developed
- 10+ Competitor Analyses
- 2 Succession plans developed

Lean

- 88 employees trained in lean
- 250+ opportunities identified to reduce waste
- \$500,000+ in savings through layout redesigns
- 5 new product ideas developed

Certifications

- 9 ISO 9001 processes and procedures class trainees
- 4 ISO 9001 Auditor trainees
- 2 AS9100 trainees

The grants and services provided helped these companies increase economic activities and create jobs in Indiana. With increased capacity to serve defense and commercial markets, these defense suppliers can persist through any fluctuations in defense procurement and continue to supply the DoD.



Lethality Impacts

Innovation through the Development of New Intellectual Property or New Technologies

A third major initiative spurred by the OEA grant was the development of an Indiana Entrepreneurial Ecosystem. Using OEA funds, Purdue University and the University of Southern Indiana (USI) partnered with the Naval Surface Warfare Center - Crane Division to help transfer technologies developed at the facility to commercial markets and spur the growth of startup opportunities in the region. Both schools have relationships with the Crane facility, with Purdue using its engineering expertise to market and develop start-ups using technology developed at Crane, including warhead sensors and anti-tampering technologies. OEA funds supported the assessment and commercialization of 130 innovations developed at the Crane facility by Purdue students. USI led four sessions to map and catalogue the resources used by startups and received OEA funds to support the prototyping of defense technologies by start-ups. The Indiana University of Law become a partner as well, allowing the collaboration to access its intellectual law clinic. The Indiana IR team sees this effort as a scalable and sustainable model to build and grow the state's innovation ecosystem to generate more jobs and economic growth through technology-based startups. A strong entrepreneurial and start-up ecosystem based around technologies developed at the NSWC – Crane division facilitates the creation of new technologies that increase the DoD's lethality and serve as a rolling return on investment in technology.