



# Collaborations

# Indiana Regions

Community foundations, universities,  
industries and other partners work together  
to build regional prosperity

SOUTH BEND, IND.

Students and faculty from around the world make their way to the University of Notre Dame, drawn to northern Indiana because of the university's reputation as one of the most prestigious universities in the United States.



While it has long focused on undergraduate education, Notre Dame in recent years has transformed itself into a major research institution that during the last decade doubled its annual investment in research to more than \$220 million.

Now, Notre Dame is putting its resources to work to help drive greater economic growth and prosperity for the South Bend-Elkhart region. With support from a \$42 million grant from Lilly Endowment in 2019, Notre Dame, along with the South Bend-Elkhart Regional Partnership, has created the Labs for Industry Futures and Transformation (LIFT) Network. The collaborative effort is bringing together community foundations in St. Joseph, Elkhart and Marshall counties, local businesses and other educational institutions to:

- help companies in the area—particularly manufacturers—be more innovative and globally competitive.
- broaden the region's economic base by encouraging the development of newer sectors, such as information technology and data analytics.
- educate and train more people to be successful in 21st-century careers.

LIFT is the latest collaboration to be funded through the Endowment's Strategic Community Advancement Initiatives, a series of efforts across Indiana focused on strengthening regional prosperity.

### Strengthening Region's Economy

The Notre Dame campus is surrounded by a region whose economy is driven in large measure by manufacturing. For more than a century, this has been a place where people work in factories, making, among other things, cars, tractors and other vehicles and the parts that go into them. Today, the most prominent illustration is the recreational vehicle industry. RV companies in the region, which are primarily located in Elkhart County, produce 80 percent of the RVs sold in the United States and employ nearly 25,000 people. Many of these workers earn wages far above the national average.

Yet, the RV industry and related companies face significant threats to their economic health, including intense global competition and the disruptive forces of automation and other technological changes. Further, the performance of these industries can be volatile: when an economic recession hits, the South Bend-Elkhart region feels the adverse effects more than most areas in the country.

- Workers on the factory floor of manufacturing company ITAMCO in Marshall County, which has joined the LIFT Network (opposite).
- The University of Notre Dame (above).
- A farmer in Tippecanoe County tests new digital agriculture equipment as part the Wabash Heartland Innovation Network (below).





## LABS FOR INDUSTRY FUTURES AND TRANSFORMATION (LIFT) NETWORK

### Region/Countries:

South Bend-Elkhart/Elkhart, Marshall and St. Joseph counties

### Funded:

April 2019

### Grant:

\$42,431,066

### Grantee:

University of Notre Dame

### Goals:

- Increase productivity by 5 percent for regional industry partners engaged with LIFT Network through technological advancement, operational efficiencies, new product lines and access to broader markets.
- Increase economic resilience by broadening the region's economic base by supporting growth in emerging, high-potential economic sectors, such as IT/data analytics, healthcare technology, aerospace and defense.
- Strengthen the region's talent base by expanding post-secondary credential offerings in advanced industry and STEM-related areas; developing best-in-class K-12 apprenticeship program in the region; and launching a new regional effort to engage students at regional colleges and universities with hands-on experiential learning and capstone projects with regional industry partners.

Community leaders in St. Joseph County and neighboring Elkhart and Marshall counties have been working together during the last several years to strengthen the three-county region, including taking steps to make their economy less vulnerable to inevitable economic downturns. The LIFT grant is designed to strengthen these efforts, with Notre Dame directing increasing levels of research and entrepreneurial activities to help the South Bend-Elkhart region diversify its economy by growing sectors such as IT and advanced data analytics and helping to make existing industries more resilient and productive.

Notre Dame and partners in the South Bend-Elkhart region are augmenting the Endowment grant with \$126.4 million from varied sources during the next five years, investing a total of nearly \$170 million to help the region prosper in the years ahead.

“This generous grant will allow us to help transform the region’s cyclical manufacturing economy,” says Notre Dame’s provost, Thomas G. Burish (above). “The Endowment wasn’t in this for the splash. They were in this for the long-term vitality of the community.”



## Collaboration and Training

**LIFT is the sixth Strategic Community Advancement Initiative the Endowment has helped launch since 2007.**

These initiatives are designed to encourage collaboration among community foundations, educational institutions and other local and regional partners to improve quality of place and, ultimately, prosperity within regions across Indiana. The primary aim of the initiatives is to better connect and build on regional assets in ways that expand opportunities in so-called “traded sectors,” where products and services produced locally are sold outside their home regions. And the

initiatives are helping communities align education and job training with employer needs so that their communities are more attractive places to live and invest.



## WABASH HEARTLAND INNOVATION NETWORK (WHIN)

### Region/Counties:

Northwest Central Indiana/Benton,  
Carroll, Cass, Clinton, Fountain,  
Montgomery, Pulaski, Tippecanoe,  
Warren and White

### Funded:

September 2017

### Grant:

\$38,943,732

### Grantee:

Wabash Heartland Innovation Network

### Goals:

- **Digital agriculture:** Engage farmers and agriculture technology companies to innovate through collaboration with Purdue University and Ivy Tech; develop career-ready certificates and digital training; adopt sensors in agriculture sector.
- **Next-generation manufacturing:** Analyze processes and delivery systems in real time; develop content to help employees use IoT-empowered tools; develop supply chain network model to be used by manufacturers in the region to manage procurement.
- **Quality of life:** Invest in innovative place-making projects that increase education, vitality and prosperity in the region.



## Agriculture Embraces Technology

The **Wabash Heartland Innovation Network**, or WHIN, is an initiative launched in 2017 to help a 10-county region around Purdue University become a global center for “Internet of Things” in digital agriculture and advanced manufacturing. Internet of Things (IoT) enables everyday objects as varied as lamps and cars to exchange information through the Internet and is commonly thought to be one of the most important frontiers in technology. The \$38.9 million Endowment grant to Northwest Central Indiana Community Partnerships, Inc. to fund the development of WHIN was designed to encourage collaboration among agriculture companies, community foundations and Purdue and other educational institutions in the region.

Claims of uniqueness can be audacious, but WHIN CEO Johnny Park uses the term confidently. Nowhere in the world, Park asserts, is there a collaboration that includes:

- a university (Purdue) with national top-10 rankings in agriculture and industrial engineering;
- a community college (Ivy Tech) willing to train students in IoT; and
- networks of farmers and of manufacturers willing to test IoT equipment and share what they learn.

**“The combination will be alluring to companies needing a leg up on the future,”**

says Park, who holds bachelor’s, master’s and doctorate degrees from Purdue in electrical and computer engineering. One such company, Brazil-headquartered ag tech firm Solinftec, established its North American headquarters in Purdue Research Park in late 2018. The \$50 million expansion is projected to create more than 334 jobs by 2022. Solinftec then announced in late 2019 that it was moving its global headquarters from Brazil to West Lafayette. The company cited the deep capabilities of Purdue and WHIN as reasons for the comprehensive relocation to West Lafayette.

“A lot of people are saying data is the new oil of the 21st century,” Park explains. “Ag and manufacturing will be transformed. Our ambitious goal is to leverage our strong assets and develop this region into a global epicenter of digital agriculture and next-generation manufacturing by harnessing the power of Internet of Things technology. We want to lead the charge.”

■ LIFT Network efforts include career and job exploration programs for young people (opposite top) and collaborations to upgrade manufacturing, technology and tools (opposite bottom). ■ WHIN is working to connect farmers with innovation in agriculture and technology (above).

Already, WHIN has organized 20 farmers in the region representing 80,000 acres to vet devices that track soil metrics—including temperature and moisture—in real time. Next up are plans to have manufacturers add sensors to factory floor equipment to predict failures and better inform maintenance schedules and electricity management. And Purdue’s Krannert School of Management is building a database of the hundreds of manufacturers in the region to encourage them to do more business with each other and reduce purchases of parts from outside the state.

Recognizing that quality of life is critical to attracting and retaining companies and talent, WHIN also is funding projects throughout the region that will enhance community vitality. For example, WHIN is helping to fund the development of a 90-mile bike and pedestrian trail near the Wabash River.

## A Plan for the Bloomington Region

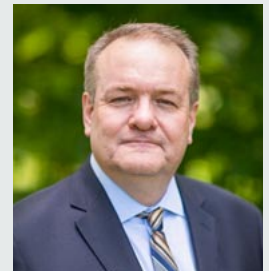
One hundred miles south of the Lafayette area, another Strategic Community Advancement Initiative is producing results in eleven counties in and around Bloomington. Kicked off in 2015 with three grants totaling \$42.2 million, Indiana Uplands is an initiative that has:

- **implemented an education and workforce plan and a regional opportunity fund for quality-of-place investments funded by a \$25.87 million grant to Regional Opportunity Initiatives, Inc. (ROI). ROI is a charitable organization focused on enhancing prosperity in the eleven-county region. Led by a regional board of directors, ROI is affiliated with the Community Foundation of Bloomington and Monroe County.**
- **launched the Indiana Innovation Institute (IN3) with a \$16.2 million grant to the CICP Foundation. IN3 is working to drive new regional economic opportunities near the Naval Surface Warfare Center, Crane Division (NSWC Crane). Indiana University, Purdue University, other academic institutions and private industry are working together to commercialize technology invented at the federal research facility. The goal: create businesses and jobs.**
- **helped Indiana University to explore the potential development of a Rural Center at Indiana University to study and address societal challenges found in rural communities.**

## Universities Provide Leadership

As Indiana University and Purdue University are important anchors for the work in their respective regions, Notre Dame is a catalyst in the South Bend-Elkhart region. But the university cannot do it alone. Much of the job training and outreach to companies will be conducted through the South Bend-Elkhart Regional Partnership. Ivy Tech is an important partner that will help employees in existing manufacturing companies upgrade their skills to meet the demands of new technologies.

“Cooperation with industry wouldn’t have been as effective prior to Notre Dame’s relatively recent emphasis on research,” says Tom Fuja (above), the dean of Notre Dame’s College of Engineering and faculty director of industry labs, which is the center of LIFT efforts on campus. LIFT is organizing its engagement into an easily accessible program offering use of sophisticated research equipment, such as electron microscopes. And Notre Dame students will fan out across the region to connect with businesses through a variety of experiences, including internships.



“We want this to be the front door to local companies,” Fuja says. “A lot of these kinds of arrangements tend to be one-offs now, word-of-mouth. We want to make this standardized.”

Notre Dame has ambitious goals for LIFT during its first five years. Among them: help launch 24 start-up businesses; assist 40 companies to improve productivity; develop nearly 1,400 new internships connecting undergraduate students to meaningful work in the region; and help at least 75 Notre Dame graduates in science, technology, engineering and mathematics launch their careers in the region.



## INDIANA UPLANDS

### Region/Counties:

Southwest Central Indiana/Brown, Crawford, Daviess, Greene, Dubois, Lawrence, Martin, Monroe, Orange, Owen and Washington

### Funded:

December 2015

### Grants:

\$42,217,600 (total of three grants)

### Grantees:

CICP Foundation  
Indiana University Foundation  
Regional Opportunity Initiatives

### Goals:

- Incubate and develop the Applied Research Institute at WestGate@Crane Technology Park (renamed Indiana Innovation Institute – IN3—in 2018)
- Develop the Center for Rural Engagement
- Support Regional Opportunity Initiative's Advancing Education and Workforce Through Career Immersion programs



## Formidable Headwinds

**The work of LIFT will need to be significant.** While the region has important assets, it also faces critical challenges. In South Bend, it has been nearly 60 years since Studebaker made its last automobile in the iconic factory on South Lafayette Boulevard. And in 1966, the company closed for good. Even though the factory and nearby Studebaker headquarters building are being repurposed into spaces for entrepreneurs, South Bend has not rebounded from the loss of Studebaker and the subsequent closure of other heavy manufacturing plants in the area. In Elkhart, manufactured housing, a close cousin of recreational vehicles, has shrunk, and Conn-Selmer, a major musical instrument maker, has shifted much of its production out of the United States.

As if to sharpen the point, Brookings Institution issued a landmark report in early 2019 ranking Elkhart-Goshen third among 381 metropolitan statistical areas in vulnerability to automation and artificial intelligence. The prominent think tank also assigned Indiana an ominous crimson color on a national map of vulnerable states. Taken together, the report paints the Elkhart area as top-heavy with an industry that is among the least prepared for the future in a state highly susceptible to technological disruption.

Fortunately, leaders in the region already were thinking collaboratively. In 2015, four years before Notre Dame launched the LIFT Network, the South Bend-Elkhart Regional Partnership received a \$42 million Indiana Regional Cities grant from the Indiana Economic Development Corp., an arm of the state. The funding has sparked 40 regional development projects totaling \$736 million in investment.

Perhaps more important than the projects, the Regional Cities grant helped establish a new frame of mind, that has been strengthened by the development of LIFT, according to Pete McCown, president of the Community Foundation of Elkhart County. Leaders are realizing that the best chances for their communities to succeed depend on their working together.

“We’re excited about the momentum we have and feel like our region is poised to thrive in the 21st century,” McCown says.

Notre Dame is committed to LIFT for the long term. Burish, the provost, recalls the Endowment asking Notre Dame how it could sustain the initiative beyond its initial five years. Burish responded that the university is committed to raising money needed to ensure that LIFT continues to have an impact for many years to come. To encourage the effort, the Endowment’s grant to Notre Dame is providing a \$4 million match for funds Notre Dame raises to sustain LIFT.

Burish was especially grateful for the way the Endowment engaged Notre Dame and other organizations in the region in the development of the project. “The Endowment provided insights that helped us refine our approach, encouraged us to think long-term,” Burish says, “and to put collaboration at the center of it all.”

■ A student at Vincennes University's Jasper campus works in a lab at the university's Center for Technology, Innovation, and Manufacturing (opposite). Vincennes University is collaborating with Indiana Uplands. ■ Networking events for businesses, educators and innovators (above) are hallmarks of the South Bend-Elkhart region's LIFT Network.