



ACCELERATING OUR IMPACT

STRATEGIC PLAN 2022-2024





Report created by



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▶ LETTER FROM CONEXUS INDIANA



We are bullish on the state of advanced manufacturing and logistics in Indiana. Through the efforts of our networked community, we have seen the realization of the importance of these sectors manifested in action. Conexus' previous 2019-2021 Strategic Plan "Powering Industry 4.0" was

developed at a time when both the need for both digital transformation and talent availability was being realized. This need was heightened once the COVID-19 pandemic struck in early 2020, as production slowed and workers faced an uncertain future. Moreover, the need for creative collaboration became ever so real. Conexus Indiana, CICIP and our other branded initiatives, created for times like these, answered the call.

The last three years have shown what can be accomplished with strong community leadership, knit together with a common cause concerning the health and well-being of industries that are vital to Indiana. In addition to our role in tackling the COVID-19 crisis, Conexus launched talent programs like Catapult, which supports career transitions of formerly under-employed and unemployed adults into entry-level production workers, by working with local communities to ensure immediate hiring opportunities upon program completion. In 2020, during the height of the pandemic, the state of Indiana, with Conexus Indiana as its partner, launched one of the most ambitious and successful initiatives to digitally transform manufacturing. Known as "Manufacturing Readiness Grants", a foundation has been laid across industry for widespread adoption of Industry 4.0 technology.

In early 2021, the results of the GPS study, commissioned by CICIP, indicated how much further we have to go. More importantly, it helped crystalize those areas where Conexus could make the biggest difference and where foundations had already been built – widespread digital adoption and skills alignment. Further, CICIP and its respective initiatives will work more closely than ever before to conduct meaningful research and provide valuable communication to our many stakeholders. Digital transformation is occurring across industry sectors while the needs for talent are pervasive, calling for innovative cross-sector solutions.

Now is the time to accelerate our impact. As our vision states, we are uniting across this great state via many of the initiatives mentioned herein to *Affirm Indiana as the center of innovation and digital transformation for advanced manufacturing and logistics*.

It's my hope that this 2022-2024 Strategic Plan helps to explain why we are so bullish on Indiana's future and why we believe Conexus Indiana's future is so bright.

A handwritten signature in black ink, reading "Fred Cartwright". The signature is stylized and fluid, with the first and last names being more prominent.

Fred Cartwright,
President and CEO



► EXECUTIVE SUMMARY

Conexus is celebrating its 15 year anniversary with a new leader at the helm. As the organization embarks on its next chapter, this strategic plan reflects on the evolution of Conexus since its inception in 2007, and its current position to lead Indiana's advanced manufacturing and logistics (AML) industries toward innovation and digital transformation. The plan offers a guide for how Conexus can benefit the future of the state's economy.

Moving forward, Conexus will leverage its historic success engaging regional industry, academic, philanthropic, and public sector partners to focus on **two strategic areas and three key enablers** of that work as follows:

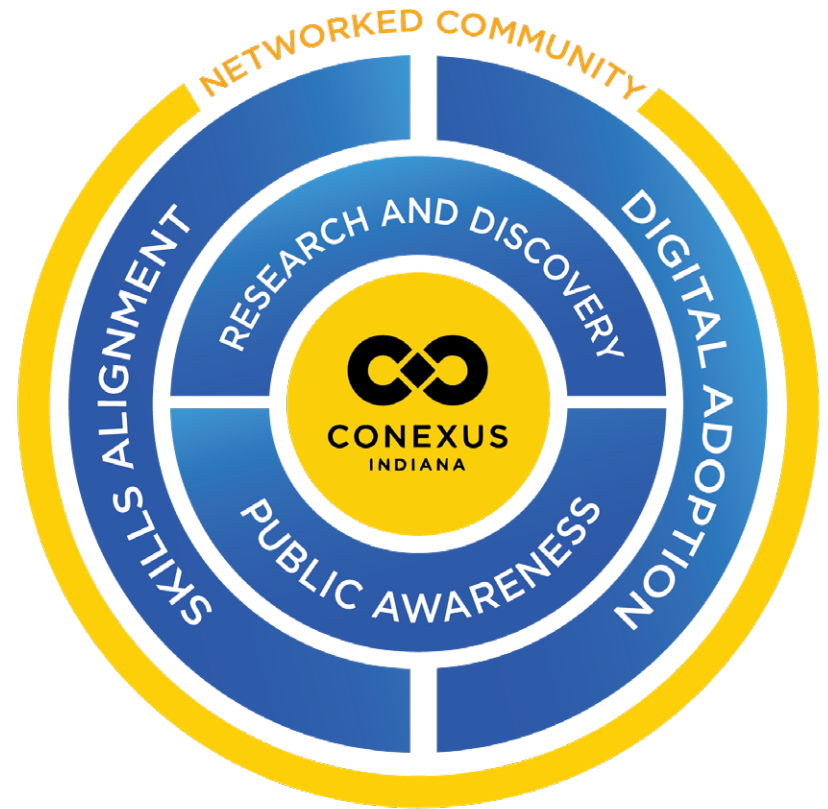
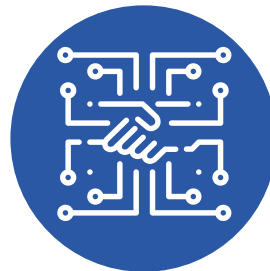
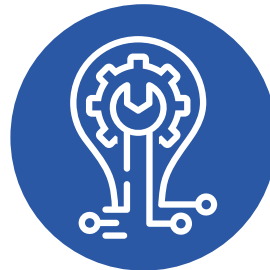
STRATEGIC AREAS

Skills Alignment

Conexus Indiana's skills alignment focus will include retaining the best of its successful talent development programs while creating greater and more impactful access to training and career opportunities in AML for high school and post-secondary students, as well as for under-represented, dislocated, and underemployed adults, all with the aim of meeting industry's workforce needs.

Digital Adoption

Conexus will sharpen its focus by leveraging programs that have proven successful in supporting Indiana AML's ongoing digital adoption and innovation, implementing new programs that will increase Indiana manufacturers' progress along the tech adoption curve toward improved productivity, competitiveness, and profitability, as well as continuing to support ongoing initiatives to boost entrepreneurship in the state's advanced manufacturing and logistics industries.



► EXECUTIVE SUMMARY

KEY ENABLERS

Public Awareness



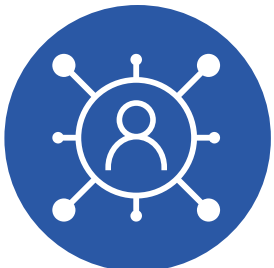
Conexus raises public awareness through community events, thought leadership and earned media, and technology adoption case studies that influence AML companies throughout the state. This content is disseminated through an enhanced digital media presence. Conexus also makes an intentional effort to address outdated stereotypes and educate the community at large about the value of a manufacturing career, both in terms of the availability of good jobs and its societal impact.

Research and Discovery



The organization's research and discovery work will include continuing the studies, surveys, and reports—in partnership with public, private, non-profit, and university partners—that drive its thought leadership in areas like tech adoption in Indiana's AML industries, wages of Indiana workers, and supply chain issues facing Indiana companies.

Networked Communities



Underpinning all of this work is Conexus Indiana's networked communities, which brings together AML industry leaders, company heads, and small and large employers, to learn from each other, create strategies, build platforms, and execute programs for continued growth.

Over the next three years, this strategic focus will help Conexus and the state respond to key challenges reported in the Indiana GPS Project report in 2021, including slipping statewide productivity (specifically in advanced industries), and the relative infancy of digital adoption among the state's manufacturing and logistics companies, lack of qualified workers, and ongoing supply chain issues felt by these industries throughout the state.

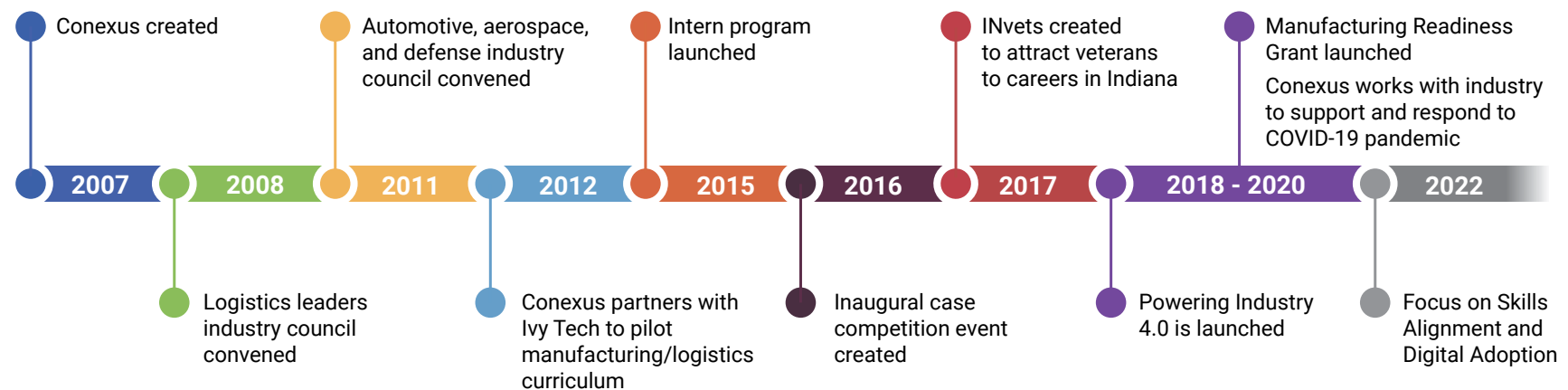
It will also align with statewide priorities of accelerating investments in IT within AML industries, and creating sustainable prosperity for Hoosiers by preparing workers for good jobs within Indiana's manufacturing and logistics economy, raising wages and quality of life throughout the state.

► HISTORY OF CONEXUS

Conexus Indiana was formed in 2007 as an advanced manufacturing and logistics (AML) initiative of the Central Indiana Corporate Partnership (CICP). CICP initiatives bring together leaders of Indiana's prominent corporations, foundations, and universities in a strategic and collaborative effort dedicated to Indiana's continued prosperity and growth. In its first 10 years, Conexus Indiana convened stakeholders in industry councils to address the areas of infrastructure, public policy, workforce development, and public awareness. A primary focus was on filling talent needs through a career awareness campaign called "Dream It. Do It." and the industry-driven development and deployment of the Hire Tech high school curriculum. Conexus Indiana, and the community it built, provided meaningful support to the State of Indiana, resulting in the passage of a historic transportation funding bill in 2017 and demonstrating the impact the organization can have through collective action.

In 2018-2019, Conexus conducted a broad-based environmental scan and strategic planning process to better define industry needs and the organization's opportunity to make an impact. This strategic planning process was conducted against the backdrop of a changing industry that is adopting advanced technologies, automation, and data to increase competitiveness, productivity, and profitability. The Conexus team and board pledged to continue to identify and refine the strategic priorities that most benefit and impact Indiana's industry, employers, and workforce. What was not known at that time was that a global pandemic would suddenly affect the role of manufacturers and logistics companies, disrupt the global supply chain in ways that we are still coming to understand, and transform the way we work.

CONEXUS INDIANA: 2007 - 2022



HISTORY OF CONEXUS

STRATEGIC EVOLUTION

In 2021, the Central Indiana Corporate Partnership released the results of groundbreaking research conducted by the Brookings Institution's Metropolitan Policy Program and the American Enterprise Institute (AEI), under the brand Indiana GPS Project. This research focused on an assessment of the state's advanced industries, which are R&D and STEM-worker intensive and include many manufacturers, service providers, life sciences, and tech companies throughout the state. The research included an evaluation of the health of Indiana's regional labor markets and job quality, as well as an early look at the troubling impact of COVID-19 on Indiana's economy and workforce.

In addition, as Conexus began a leadership change in 2021, it conducted a tactical engagement process to update its strategic plan and respond to the evolving advanced manufacturing and logistics environment in Indiana and beyond. As Conexus looks to 2022 and the organization's fifteenth anniversary, there is a recognition that the role the organization plays is more critical now than ever. The board and staff are committed to making an even greater impact and positioning Indiana as a global leader in advanced manufacturing and logistics.

VISION

Affirm Indiana as the center of innovation and digital transformation for advanced manufacturing and logistics.

MISSION

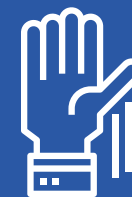
Accelerate Indiana's advanced manufacturing and logistics industry success by engaging a diverse network of industry, academic, philanthropic, and public-sector partners aligned and activated around a unified vision.

VALUES



Think Big

Empower each person to act with confidence



Take Responsibility

Assume accountability for ourselves and others in actions and commitments



Never Settle

Empower each person to act with confidence



Be Collaborative and Inclusive

Empower each person to act with confidence

KEY FINDINGS, CHALLENGES, AND OPPORTUNITIES

The following strategic plan is focused on 2022-2024 and is informed by key findings of challenges and opportunities provided by the GPS Project and Conexus Indiana's own research and analyses. A summary of key findings, challenges, and opportunities includes:

► KEY FINDINGS, CHALLENGES, AND OPPORTUNITIES

A call for more digitization to counter productivity slippage:

Indiana's greatest weakness is that productivity continues to slip. This has drastic consequences for economic wellbeing in the state, given that high productivity and high per capita wages go hand in hand. This is especially true in advanced manufacturing and the advanced industries, which "anchor the state's prosperity because they pay considerably higher wages than most other sectors of the Indiana economy." (GPS Project)

The advanced manufacturing productivity that Indiana has experienced over the last 15 years, reaching a high of 16% above the national average in 2010, has been slipping year over year. By 2015, Indiana's competitive edge had fallen to less than 3%. Some large advanced-manufacturing industries in Indiana—including pharmaceuticals, motor vehicles and parts, and engine manufacturing—have maintained their productivity, but overall, "The underdevelopment of Indiana's advanced-services subsector has meant that the state has largely missed out on the tremendous growth..." that is afforded by having strong advanced industries. To help improve Indiana's ranking in IT investment per employee (37th in the nation) and increase productivity and competitiveness across the AML industries, the GPS Project report proposed "catching and keeping up with broad digitization, as technology accelerates in every realm."

ADVANCED MANUFACTURING SNAPSHOT



Indiana's competitive edge in advanced manufacturing has **slipped from a high of 16%** above the national average to **less than 3% today**.



pharmaceuticals, motor vehicles and parts, and engine manufacturing have maintained their productivity edge, but...

"The underdevelopment of Indiana's advanced-services subsector has meant that the state has **largely missed out on the tremendous growth...**" that is afforded by having strong advanced industries.

▶ KEY FINDINGS, CHALLENGES, AND OPPORTUNITIES

Conexus also utilized the GPS report to inform skills alignment. The report mentioned the undervalue of post-secondary credentialing and low wage growth compared to other states. Conexus is working to address these issues.

A continued and more significant need to focus on workforce development

The manufacturing workforce in Indiana is aging. Since 2000, the share of Indiana manufacturing jobs held by workers 55 and over has doubled, from 13% in 2000 to 26% in 2020. Over the next ten years, 111,022 manufacturing workers will reach retirement age. An additional 25,523 workers already over the age of 65 are also likely to retire. Early indications are that the pace of retirements doubled in 2020 and could continue throughout 2021. As a result, by 2030, the Indiana labor force is expected to decrease by 29,150 workers, according to the Indiana Business Research Center at Indiana University's Kelley School of Business.

According to a 2020 Q2 survey of 600 manufacturers by the National Association of Manufacturing (NAM), more than half of respondents expect to continue having trouble finding talent over the next 12 to 18 months. An informal Conexus survey has noted that Indiana manufacturers are 15% below workforce capacity and are not taking on new clients as a result.

Even as unemployment rates have yet to fully recover to pre-pandemic levels, online job postings for manufacturing production workers in Indiana nearly doubled, increasing by more than 93% since the first quarter of 2020. The NAM report went on to note, "These contradictory data are the result of a well-documented skills gap caused by retiring baby boomers and advances in manufacturing technology that requires entry-level workers to have post-secondary skills." Many secondary students (25-30%) are coming out without a career plan, even though Indiana now has/includes work-based learning as a graduation requirement. Workforce development, continued training for adult workers, and promoting career pathways to encourage greater labor force participation in the AML industries will be critical to filling these gaps.



▶ KEY FINDINGS, CHALLENGES, AND OPPORTUNITIES

A need to increase the state's focus on digital adoption:

Because of this labor shortage, technology adoption is necessary for strengthening and regaining productivity and economic growth. The technology adoption survey Conexus conducted in 2020 with the Kelley School, and its corresponding report, *Charting Indiana's Path from Early Adoption to Widespread Application of Industry 4.0 Technologies*, showed that "Hoosier firms are in various stages of adoption toward smart manufacturing with larger, more established companies more likely to be implementing Industry 4.0 than smaller companies."

Still, Indiana is at its infancy in terms of readiness and adoption. Companies have indicated that transitioning to digital technologies is complex because of legacy systems and lack of skilled talent to make the transition. Business leaders are trying to find ways to reaffirm commitment to employees that allows them to retain employment safely, which creates an opening for i4.0. Technology creates an opportunity to support employees and balance risk, especially for those roles that are labor-intensive or require close-quarter activities. In the end, technology will preserve jobs in Indiana, while companies that don't adopt will struggle and may close.



KEY FINDINGS, CHALLENGES, AND OPPORTUNITIES

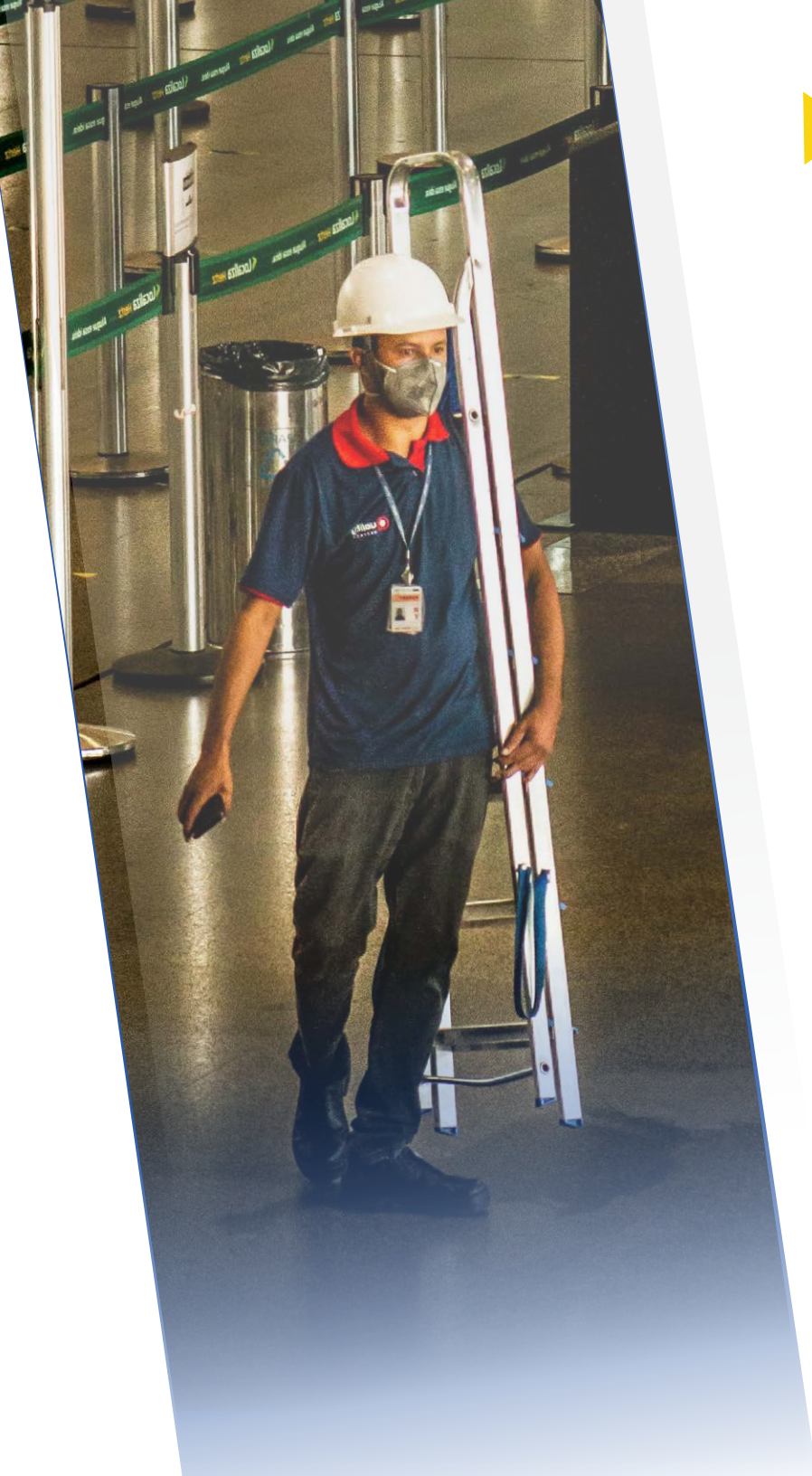
A continued need for intervention to accelerate technology adoption, underscored by recent experiences:

Conexus is tracking the experiences of companies receiving Manufacturing Readiness grants, which match up to \$200,000 for companies “committing to modernizing their operations or integrating smart technologies and processes in order to improve capacity” and ultimately change their business model, creating a significant positive impact for participating companies. Uses of the grant might include investing in sensors, IoT, 3D printing and additive manufacturing, or HR-related software. Feedback on Manufacturing Readiness shows:

- ▶ Conexus has been successful in promoting awareness of Industry 4.0 and providing education around the business case for technology adoption and digital transformation—the challenge now is more about resources and bandwidth. For small companies, the primary hurdle is a relative lack of budgetary funds and a perceived lack of return on investment. This will be easier to overcome if the cost-benefit case is more thoughtfully constructed as it applies to small to medium-size enterprises (SME), and broadly shared.
- ▶ Tracking company success metrics will be key. It will be important to set target goals around digital adoption, GDP, occupations, capital expenditures per employee, success in entering new markets, and launching new manufacturing processes to demonstrate progress and get more companies to follow.

A need to boost entrepreneurship and innovation activity within advanced manufacturing and logistics:

In 2018, Conexus Indiana commissioned Fourth Economy to lead a strategic planning process. As a part of its work to understand the state of advanced manufacturing and logistics in Indiana, Fourth Economy surfaced a startling fact: though Indiana was number one in manufacturing intensity in terms of GDP and workforce, the state came in 47th in new manufacturing start-ups. In 2019, along with Lilly Endowment, Rose-Hulman Institute of Technology, Purdue, and the Indiana Economic Development Corp. (IEDC), Conexus formed a steering committee to understand why Indiana’s manufacturing leadership has not translated into more entrepreneurial activity in the sector. With the steering committee’s support and with funding from Lilly Endowment, Conexus partnered with Fourth Economy again in 2020—this time to explore Indiana’s poor showing in manufacturing startups. Findings from this study, *Assessment of Indiana’s Manufacturing Innovation and Entrepreneurship Ecosystem*, pointed to several factors, including a need for greater education about entrepreneurial opportunities in the manufacturing sector.



▶ KEY FINDINGS, CHALLENGES, AND OPPORTUNITIES

Conexus Indiana's steady hand during the past two years and success as a resource to the state's AML companies

Conexus continues to offer resources uniquely appropriate to deal with the economic after-effects of COVID-19. As Brookings' State of Renewal study for the Indiana GPS Project characterized in February 2021:

"Over the past year, the COVID-19 crisis has evolved from a short-term shock necessitating temporary layoffs into a more uncertain downturn with significant employment reorientation and labor market displacement. Securing favorable worker transitions—say, from a lost job or precarious industry to new or better ones—will remain challenging for months."

The Safe Return to Work for Indiana's Manufacturing, Logistics and Warehousing Sectors playbook, produced by Conexus, was well received and impactful as AML employers navigated the changing landscape of the COVID-19 pandemic.

In general, Conexus Indiana's Networked Community platform "supports knowledge exchange among peers and helps companies make decisions about future operations." Conexus should continue to grow in this capacity as a thought leader. Measuring the pulse of industry and paying attention to national and global trends across the advanced manufacturing and logistics sectors is critical.

CONEXUS INDIANA'S STRATEGIC FOCUS AREAS AND DRIVING ENABLERS

This section describes Conexus Indiana's strategic focus areas—skills alignment and digital adoption—and the driving enablers of that work—research and discovery, public awareness, and networked communities—that will define the organization's actions over the next three years.



STRATEGIC FOCUS AREA: **SKILLS ALIGNMENT**

TALENT DEVELOPMENT IN ADVANCED MANUFACTURING AND LOGISTICS

In Indiana, most sub-baccalaureate workers with a good job, as defined by the Indiana GPS Project, are employed in one of four industries: advanced manufacturing, construction, logistics, and utilities.

Advanced Manufacturing and Logistics are the focus of Conexus Indiana's efforts, with an eye toward manufacturing digitization skills alignment. Conexus Indiana's commitment to CICP's mission—to create sustainable prosperity and quality of life for Hoosiers—dovetails with the AML industry's ongoing and pronounced need for skilled employees.

Over the next several years, Conexus will retain the best of its successful talent development programs while creating greater and more impactful access to training and career opportunities in AML for high school and post-secondary students, as well as for under-represented, dislocated, and underemployed adults, all with an aim of meeting industry's workforce needs.





Data shows that 12 to 18 months post-program completion, Catapult graduates have often received promotions to supervisor or equivalent status—with a commensurate wage increase—and have access to further promotions throughout their industry tenure. Catapult programs are currently in six Indiana communities.

SKILLS ALIGNMENT

UPSKILLING AND TALENT DEVELOPMENT PROGRAM EXAMPLES

Catapult

Over the past few years, Conexus Indiana has been expanding its talent development platform to create more opportunities for graduating high school students and unemployed and underemployed Hoosiers to support the AML industries' growing and immediate needs. For example, Conexus partnered with Ascend Indiana to create Catapult, a 160-hour, full-time, paid training program, which combines work-based learning with classroom work and focuses on problem solving and teamwork while providing critical context for the importance of each production role. Local community college and other educational partners deliver training content while industry partners offset the cost of training equipment, including simulators. In addition to providing a participant stipend, Catapult supports formerly underemployed and unemployed adults during their career transitions to entry-level production workers, by coordinating with local communities to ensure hiring opportunities are immediately available upon program completion. Data shows that 12 to 18 months post-program completion, Catapult graduates have often received promotions

to supervisor or equivalent status—with a commensurate wage increase—and have access to further promotions throughout their industry tenure. Catapult programs are currently in six Indiana communities.

To scale the program for multiple implementations across industry and Indiana geography, Conexus Indiana has adopted a diversified and sustainable funding model. Today, the organization's total philanthropic funding as a percentage of overall funding has decreased, while local industry and community and economic development organizations have increased their investment, with some programs funded exclusively by local industry and community resources and others on a trajectory to transition in that direction.

Modern Apprenticeship

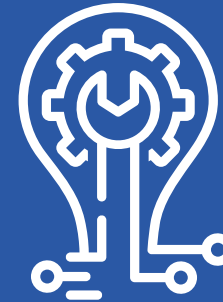
Industry funding and individual school districts that leverage CTE funding support high school implementations of Catapult, designed to address the 25% of graduates who leave high school without a plan. At the high school level, Conexus is partnering with Ascend Indiana, TechPoint, and EmployIndy on a Modern Apprenticeship pilot, supporting student connections to advanced manufacturing coursework, on-the-job experiences, and post-secondary credentials.

SKILLS ALIGNMENT

CATALYZING SYSTEMS CHANGE IN ADVANCED MANUFACTURING AND LOGISTICS TALENT DEVELOPMENT

To further activate opportunities for career and technical education (CTE) students, Conexus has built a vital relationship with the Governor's Workforce Cabinet (GWC). As a frequent partner to the cabinet on CTE and AML-related education and career pathways, Conexus has leveraged its deep industry knowledge, Hire Tech and Conexus Interns experience, and thought leadership to catalyze systems-level change in statewide CTE programming. These efforts have been transformative in better serving Hoosier students as they prepare for good jobs in Indiana's manufacturing economy, as well as filling industry's talent needs. Looking ahead, with the support of the GWC, Indiana's high schools and post-secondary institutions can scale quality AML pathways at a level beyond the reach of the Conexus team.

Conexus is also currently in conversations with the Governor's Workforce Cabinet about the creation and deployment of Education Readiness Grants, which would be available to schools and training providers located near recipients of Indiana's Manufacturing Readiness Grants. The GWC, which receives unspent educational and training funds of between \$1 and \$2 million every year, would partner with Conexus to redeploy those funds to support education and training opportunities aligned to the technologies adopted by local and regional employers through Manufacturing Readiness Grants. These grants will provide the critical talent link between technology adoption and advanced manufacturing and logistics productivity. As with the Manufacturing Readiness Grants program, Conexus will provide subject matter expertise and deep relationships with secondary schools and post-secondary training providers to effectively administer the program and make award recommendations to the Governor's Workforce Cabinet.



SKILLS ALIGNMENT PROGRAMMATIC ACTIVITIES INCLUDE:

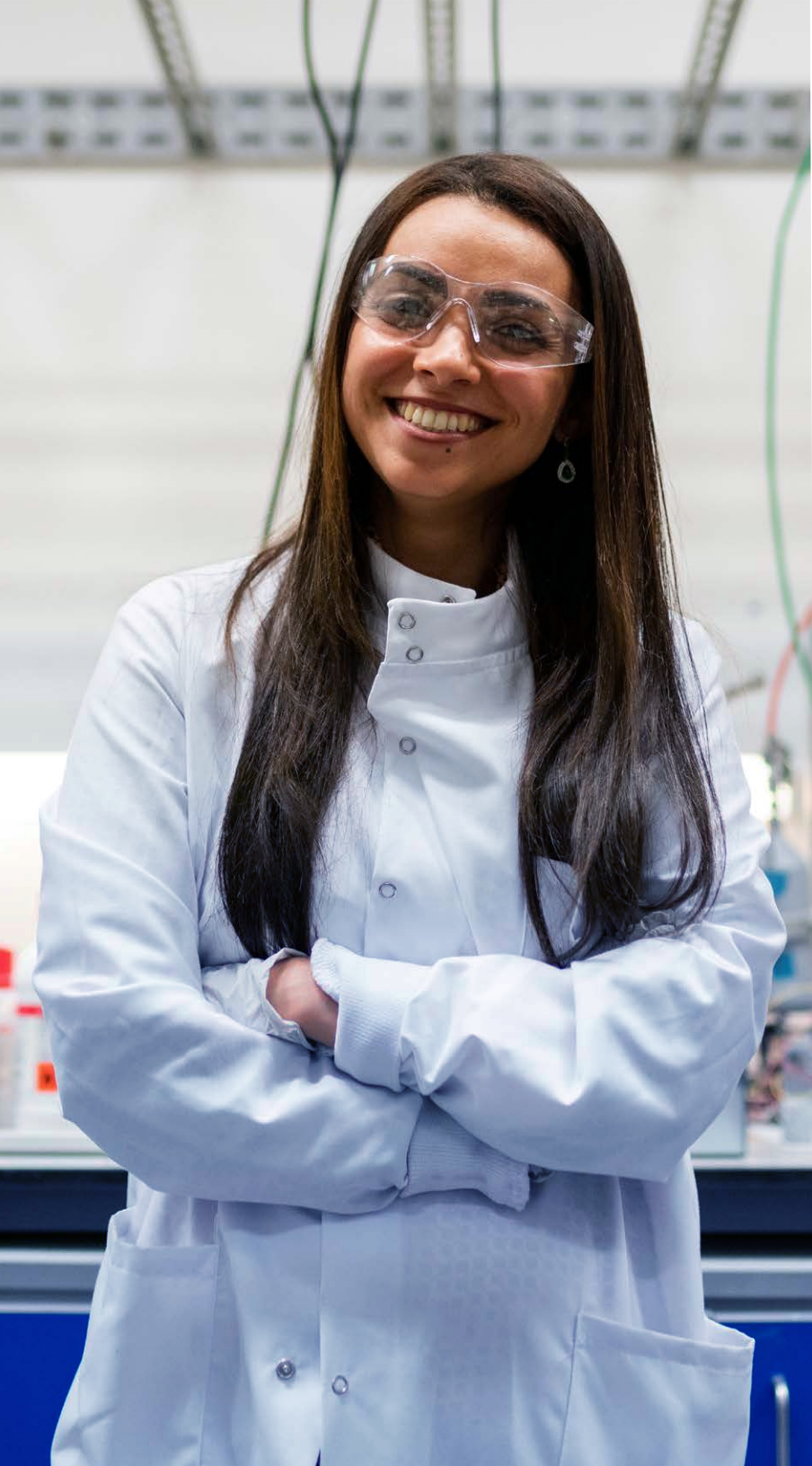
Catapult

MPRO Chair

Work-based Learning

Talent Working Group

Education Readiness Grant (2022)



STRATEGIC FOCUS AREA: **DIGITAL ADOPTION**

ACCELERATING INNOVATION AND DIGITIZATION IN ADVANCED MANUFACTURING AND LOGISTICS

With Indiana ranking 37th in the nation in IT investment per employee and continuing to lose its productivity advantage, Conexus Indiana is sharpening its focus and leveraging technology and digitization programs that have proven successful and gained momentum the last three years. Conexus and its industry partners have also identified new programs that will support digital adoption and innovation, increasing Indiana manufacturers' progress along the tech adoption curve toward improved productivity, competitiveness, and profitability in coming years.

In 2020, the IEDC launched the \$10 million Economic Activity Stabilization and Enhancement (EASE) program, which included a Manufacturing Readiness Grant matching program providing grants of up to \$200,000 per award to help companies modernize their operations or integrate smart technologies and processes to improve capacity. Recognizing Conexus Indiana's subject matter expertise, focus on digitization, and deep network of small, medium and large manufacturers, the IEDC tapped Conexus to implement, launch, and manage the grant program, convene industry leaders to review proposals, and make award recommendations.

DIGITAL ADOPTION

Following oversubscription of the 2020 readiness grant opportunities, in 2021 the Indiana legislature approved another \$20 million in funding for the program over the 2021-2022 two-year period, with Conexus once again serving as program manager and making awards recommendation as part of its publicly funded activities.

In addition to continuing to manage the program through the 2022-2023 Indiana State Budget period, Conexus plans to expand its Readiness Grants work to include the logistics sector, either by launching a new Logistics Readiness Grant program, or by expanding the demographic of companies that qualify for the existing program.

MANUFACTURING READINESS GRANTS: IMPACTS AT-A-GLANCE

202
GRANTS

\$16.5m
TOTAL AWARDED

GRANTS WERE MATCHED BY
MANUFACTURERS TO SUPPORT MORE THAN
\$131,000,000
IN TECH-ENABLED CAPITAL INVESTMENT

PLANNING AND OPERATIONAL IMPACTS

The Manufacturing Readiness Grants have had clear planning and operational impacts.

Between 2020 and 2021:



Budgeting for technology adoption **rose from 16 percent to 29 percent**



Those with a roadmap for adoption **rose from 12 percent to 23 percent**

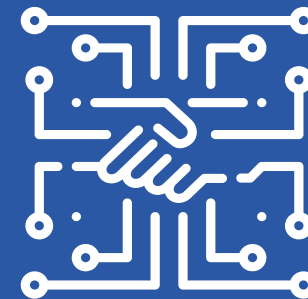
DIGITAL ADOPTION

In addition to readiness grants, Conexus addresses digitization through the Emerging Technology Showcases and Peer-to-Peer events, which introduce vetted and credible technologies just getting a foothold in industry to hundreds of industry partners around the state.

BOOSTING ENTREPRENEURSHIP AND DYNAMISM IN ADVANCED MANUFACTURING AND LOGISTICS

To address Indiana's 47th-place ranking in new manufacturing start-ups nationwide, as well as the statewide need for more widespread awareness and education about entrepreneurial opportunities in the manufacturing sector, Conexus recently launched an online resource with web-based tools and contacts to help innovators and entrepreneurs turn ideas into companies. The resource includes a database of incubators, venture capital firms, nonprofit resources, shared working spaces, collaboratives, prototyping spaces, and innovation hubs. The resource also enhances engagement with companies or programs that provide capital investment or grants and includes pilot project opportunities.

Moving forward, Conexus Indiana will expand its capacity to boost entrepreneurship by working with its CICP and state partners to creating a cross-industry working group of entrepreneurs with representatives from the tech sector, advanced manufacturing, research and development and logistics industry members, and venture capital firms and start-ups. This working group is purposefully designed to be multi-dimensional in its composition and will help uncover opportunities for entrepreneurs in the advanced manufacturing and logistics space. This group will inform the creation of an Entrepreneur Council that will serve as Conexus Indiana's guide to future programming and initiatives important to growing Indiana's entrepreneurial community.



DIGITAL ADOPTION PROGRAMMATIC ACTIVITIES INCLUDE:

Manufacturing Readiness Grant
Emerging Tech Showcases
Industry 4.0 Peer to Peer Events
Logistics Readiness Grant
(2022)
Entrepreneur Council (2022)



DRIVING ENABLER: **PUBLIC AWARENESS**

BUILDING PUBLIC AWARENESS AROUND SKILLS ALIGNMENT

Conexus promotes its Skills Alignment programs, like Catapult and Modern Apprenticeship, with statewide marketing efforts, including Make IN Move (<https://makeinmove.com/>), which raises awareness of a multitude of high-tech careers in the industry. Similar to AgriNovus Indiana's Field Atlas site and TechPoint's JobsinTech101.com, the interactive site includes facts about Indiana's advanced manufacturing and logistics industries, including: pay, job openings, and education requirements; careers and employers; and industry and career resources and toolkits to help audiences understand and move toward a career in advanced manufacturing or logistics. Supporting Conexus Indiana's Make IN Move campaign are digital ad buys, and strategic partnerships with leading employers.

A foundational component of Conexus Indiana's public education and awareness strategy is the initiative's larger digital presence, including ConexusIndiana.com, a pronounced social media presence (@Conexus_IN, @makeINmove, Facebook, LinkedIn, etc.), and Conexus Indiana's electronic newsletter. In the future, all of this will be facilitated in collaboration and coordination with CICP's strategic communications platform.

Other Conexus skills alignment awareness programming includes:

- ▶ The newly launched Rising 30 program, which honors advanced manufacturing and logistics' emerging leaders—building a prestigious community of young professionals influencing the industry, and garnering media placements that highlight the challenging and fulfilling career opportunities available within AML industries. Networking with more seasoned peers at big companies is a benefit for younger professionals in the AML space. Showcasing young professional supply chain leaders is important for exposure and to support their sector leadership growth.
- ▶ Conexus Indiana's college-focused Case Competition, which provides opportunities for students enrolled in two- and four-year degree programs to learn about the industry through authentic, industry-specific challenges as part of a diverse team.
- ▶ Conexus Indiana's Emerging Leaders, an interactive program that inspires post-secondary students to pursue education that leads to an advanced manufacturing and logistics career in Indiana

Through all of this work, Conexus is addressing outdated stereotypes, showing Hoosiers the digital technologies driving manufacturing today, and educating students, parents, and the community at large about the value of a manufacturing career—both in terms of the availability of good jobs, but also in terms of societal impact. Together with Conexus Indiana's Education Readiness Grants and Manufacturing Readiness Grants case studies, Conexus is working to ensure career opportunities are attractively promoted in the newly digital manufacturing and logistics workplaces striving to stay competitive.



PUBLIC AWARENESS OF SKILLS ALIGNMENT INCLUDES:

National recognition of Conexus
as an AML leader

Make IN Move reimagination

Case Competitions

Rising 30 Emerging Leaders

PUBLIC AWARENESS OF DIGITAL ADOPTION INCLUDES:

Manufacturing Readiness Grant
Case Studies

Entrepreneurial Resource Site

Manufacturing Readiness Grants
Trends and Impact Study (2022)

Community Industry Event - Tech
Adoption (2023)

PUBLIC AWARENESS

BUILDING PUBLIC AWARENESS AROUND DIGITAL ADOPTION

Conexus will create and publish Manufacturing Readiness Grant Digitization case studies, which will: 1) Promote digitization across the sector by sharing the stories of Hoosier companies with the broader general public; 2) Support the sector's continued work to update public perceptions of advanced manufacturing to engage and enlarge the potential advanced manufacturing talent pool; and 3) Provide a continuously updated repository of advanced manufacturing technology use cases available to AML curriculum providers and training programs preparing students for careers in manufacturing's newly digitized environment. Case studies will serve as the basis for new public education messaging about Indiana manufacturing's leading-edge digital companies and their importance to local, regional and state-wide economies—and the families who depend on them. Public education assets developed using case study information are expected to raise awareness about digitization and will include videos, social media content, and paid media, with specific grant awards generating industry-specific earned media in local and trade publications.



DRIVING ENABLER:

RESEARCH AND DISCOVERY

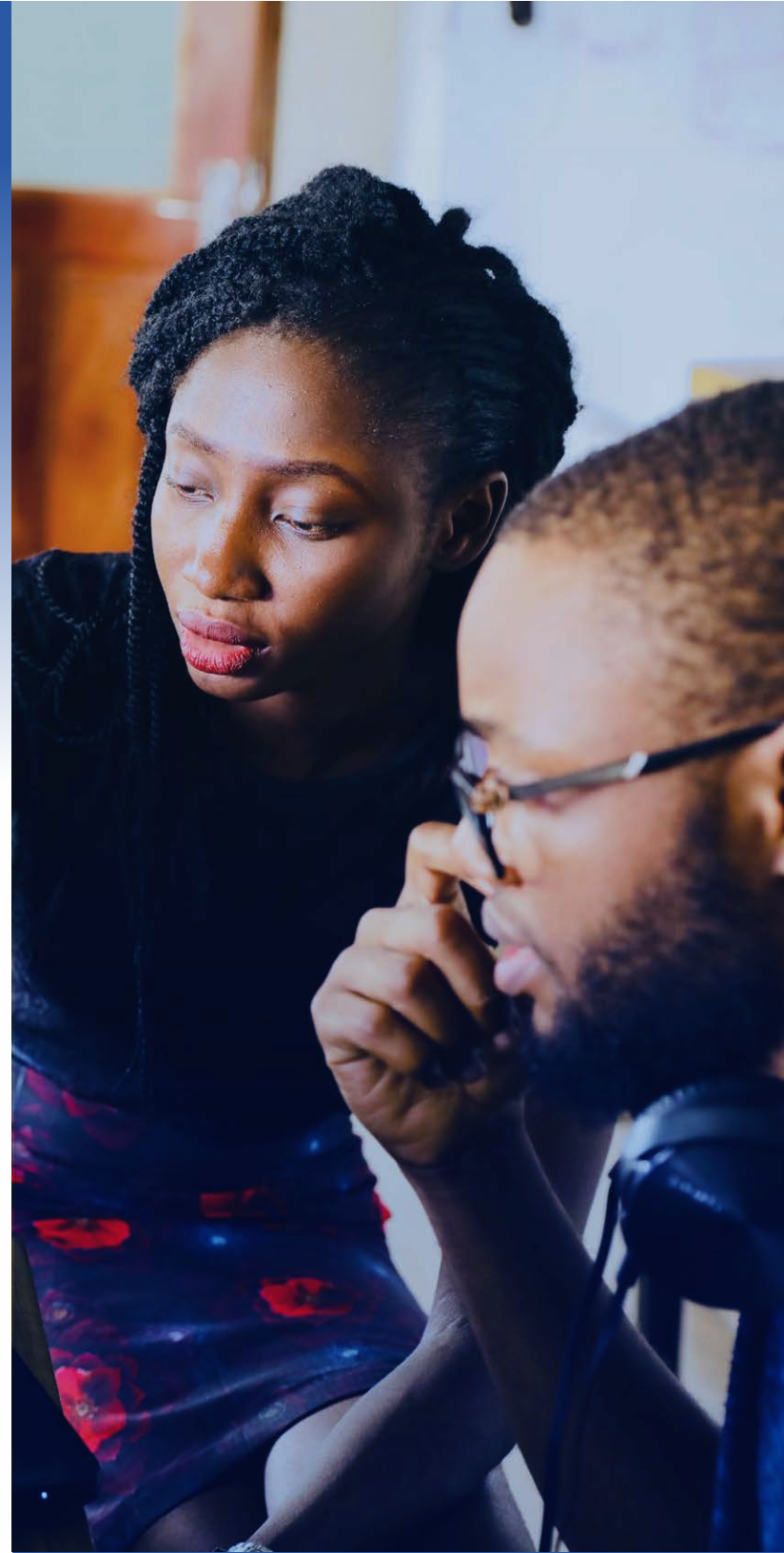
RESEARCH AND DISCOVERY AROUND SKILLS ALIGNMENT

To understand the impact that digitization is having on the wages that support Hoosier workers and their families, Conexus conducts its annual Wage Data Study, which quantifies the value of worker upskilling in support of industry digitization. Additionally, Conexus will conduct a Career and Technical Education Certification Attainment Study to measure the impact of both Education Readiness Grants and Manufacturing Readiness Grants on graduating high school students. As with all Conexus research, the initiative will work with CICP's collaborative research function to scope studies for greatest Conexus utility, keeping in mind opportunities to potentially expand project scope to leverage research across multiple sectors.

RESEARCH AND DISCOVERY AROUND DIGITAL ADOPTION

Industry 4.0 Report

This statewide survey of Indiana manufacturers, which was developed with support from Lilly Endowment and in partnership with Indiana University Kelley School of Business's Center for Manufacturing Excellence, was published in 2020 and found the convergence of digital technology with production to be both the greatest opportunity for and greatest threat to manufacturers' economic sustainability. The study, titled Charting Indiana's Path from Early Adoption to Widespread Application of Industry 4.0 Technologies, also revealed that manufacturers, especially smaller operations, cited access to capital as a major obstacle to technology adoption.



RESEARCH AND DISCOVERY

Tech Adoption Survey

To better understand the industry's digitization challenges, Conexus Indiana recently completed a follow-up study to its 2020 Industry 4.0 report. Preliminary results of the 2021 tech adoption survey, made possible through support from Lilly Endowment, indicate the success of the Manufacturing Readiness Grants program. 202 grants were awarded, totaling \$16.5 million. Manufacturers in 58 Counties received grants matched by 131.1M in tech-enabled capital investment.

The Manufacturing Readiness Grants have had clear planning and operational impacts. Between 2020 and 2021, the number of companies budgeting for tech adoption rose from 16% to 29% and those with a roadmap for adoption rose from 12% to 23%. In addition:

38%

of respondents would not have completed the technology adoption project without the grant

31%

expanded the scope of their digitization project due to funding

27%

accelerated the timeline of their digitization project

Conexus plans to continue its tech adoption survey annually, to understand not just the extent of digitization that has happened in the preceding 12 months, but also the impact of Conexus-led programming, including its pivotal work with the IEDC supporting industry operations' planning and digitization scale through the state's Manufacturing and Logistics Readiness Grants.

Center for Manufacturing Readiness

With the data gleaned from the Manufacturing Readiness Grant program applications, Conexus will augment its knowledge of Indiana's manufacturing economy, supplement survey feedback and other Networked Community connections, and paint a more complete picture of the industry's competitiveness. This provides a unique opportunity for Conexus to understand and begin cataloguing the actual technology needs and deficiencies of manufacturers, which, in turn, will inform the subject matter expertise Conexus needs to have and the other activities they need to undertake to expand the outreach and application of these needed technologies.

RESEARCH AND DISCOVERY

Expanded outreach is expected to include the creation of regional digital adoption leadership teams as on-the-ground support for digital adoption throughout the state among small- and medium-sized manufacturers. In addition, Conexus will research and analyze national benchmarks of AML sector digitization to better understand the state's competitive position relative to the rest of the United States. Historical and geographic baselines will be used to set Conexus Indiana's digitization metrics, which will further motivate action in this important area.

Over the coming years, Conexus Indiana plans to package the breadth of its digital adoption work—including research, case studies, white papers, tech showcases and more—into a “Center for Manufacturing Readiness.” Conexus will aggressively market the center as a definitive resource on digital adoption and raise awareness of the initiative's thought leadership through digital advertising, earned media, videos, and social media.

Supply Chain

In response to the slowdown in economic dynamism triggered by pandemic-related supply chain bottlenecks, Conexus undertook extensive and unprecedented research with Butler University's Lacy School of Business (Butler) into supply chain resiliency and potential near- and on-shoring opportunities. In collaboration with Dr. Jane Siegler, assistant professor of operations accounting, management information systems, and statistics—as well as contributions from other Butler faculty, 38 MBA students, and undergraduate researchers—Conexus is identifying ways to increase supply chain visibility, identify hidden critical suppliers, and grow Indiana's economy while creating additional opportunities for direct investment.

Complementing Conexus and Butler's on-going supply chain resiliency work will be several research projects in collaboration with CICP's strategic research platform, focusing on the supply chains of the future. These projects will address topics ranging from just-in-time manufacturing practices to electrification and autonomous vehicles. The studies will identify opportunities for Conexus to promote a forward-looking posture among Indiana's advanced industry members and subject matter experts, who would be expected to collaborate to determine project scope and ensure cross-sector applicability as possible.



SKILLS ALIGNMENT RESEARCH AND DISCOVERY INCLUDES:

Wage Data Survey and Study
State of the Workforce Report
(2022)
CTE Certification Attainment
Study (2023)
Mapping Curriculum to Industry
4.0 (2023)

DIGITAL ADOPTION RESEARCH AND DISCOVERY INCLUDES:

Annual Tech Adoption Study
National Tech Adoption
Benchmarking
State of Logistics Report
Supply Chains of the Future
Center for Manufacturing
Readiness (2024)



► RESEARCH AND DISCOVERY

FUTURE RESEARCH AND DISCOVERY IN EMERGING AREAS OF FOCUS

Conexus continues to use its applied research platform to define areas of emerging priority for the AML industry and the future focus of the organization.

For example, Conexus has been exploring the emerging field of electric vehicles. Over the next three years, Conexus plans to undertake research and discovery that will guide its future programmatic focus in this area. This includes: understanding the current trends and projected growth of the electric vehicle (EV) marketplace; assessing supply chain risks and opportunities for its network of original equipment manufacturers (OEM) and automotive supplier base that produce components of value to electric vehicles; identifying companies that produce parts that will no longer be used in EV; encouraging entrepreneurs to develop technologies to fill in supply chain gaps and support legacy combustion engine manufacturers to enter the EV supply chain; identifying critical workforce skills needed to manufacture electric vehicles; and collaborating with public-sector partners (Department of Workforce Development and Governor's Workforce Cabinet) and academic leaders to prepare Hoosiers for future career paths in electric vehicles.

EMERGING AREAS RESEARCH AND DISCOVERY INCLUDES:

EV Supply Chain Preparedness
Study

EV Adoption Scenario Planning
Intermodal Connectivity Analysis
EV Federal & State Legislative
Review
Return on Investment Corridor
Analysis



DRIVING ENABLER: **NETWORKED COMMUNITY**

Underpinning nearly all of this work is the network of manufacturing and logistics companies throughout the state that Conexus has built. Conexus is recognized for the strength of its network, which enables it to engage in all of the activities described in this plan.

Conexus Indiana works with industry, education and public-sector leaders to identify challenges and opportunities, develop strategies, and engage in programs that drive industry growth. These leaders make up Conexus Indiana's Networked Community.

The Networked Community is organized into two industry-specific councils and six working groups focused on advanced manufacturing and logistics industry issues such as talent development, infrastructure, and emerging technologies. Together, these groups make a significant impact on Indiana's advanced manufacturing and logistics industries, by conducting research and data analyses important for industry success, providing a platform for collaboration and information exchange, participating in and informing Conexus programs that build a robust talent pipeline, and engaging the public sector on issues that will move the industry sectors forward.

INDUSTRY COUNCILS

Conexus's two industry councils are:

CONEXUS INDIANA ADVANCED MANUFACTURING COUNCIL

A statewide group of advanced manufacturing, education, and public-sector representatives. Industry members are drawn from companies of varying sizes representing a range of industry sectors, including agriculture, aerospace, automotive, defense, industrial, medical device, plastics, RV, and steel.

CONEXUS INDIANA LOGISTICS COUNCIL

A statewide group of logistics, education, and public-sector representatives. Industry members include companies of varying sizes representing all modes of transportation, third-party logistics and warehousing facilities, and supply chain companies.

In 2022 and beyond, the Industry Councils will focus on assisting council members facing challenges within their supply chains through the following topics:

- ▶ Workforce alignment and expanding the labor pool
- ▶ Digital adoption in the logistics and advanced manufacturing industries
- ▶ Supply chain issues at a national level, as well as international shipping and business development
- ▶ Integrating the logistics and advanced manufacturing industries to reorient supply chains

What's more, logistics and manufacturing cross-council interactions are valuable, and companies are looking for more of this to map the future of both sectors and share opportunities and challenges.

► NETWORKED COMMUNITY

WORKING GROUPS

Topic-specific working groups support the work of Conexus Indiana's Advanced Manufacturing Council and Logistics Council. These groups work independently, allowing industry partners to identify and advance projects that are most valuable to the industries' progress.

Over the past three years Conexus has been intentional about the activities it facilitates and the need to grow AML community participation. This includes developing cross-council interactions to drive meaningful information exchange and resource sharing, overall membership growth, attendance and participation increases, and geographic and sector diversity in the companies engaged, and increasing the number of engagements per organization within the Networked Community activities.



Economic Development

Ensure that Indiana businesses have the resources to succeed in a global market.

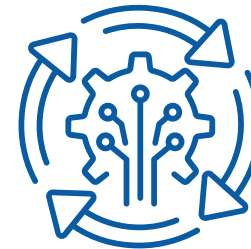
Projects include: Supply Chains of the Future Report, Advanced Mobility Leadership Committee, Healthcare Cost Management Project, Public Policy



Communications/Marketing

Increase awareness of Indiana's advanced manufacturing and logistics industries and their outsized impact on Hoosiers and the nation.

Projects include: Supply Chain 4.0 Conference

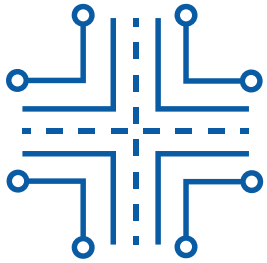


Industry 4.0

Use the strength and diversity of our networked community to identify emerging technologies and share best practices.

Projects include: Industry 4.0 Advisory Committee.

▶ NETWORKED COMMUNITY



Infrastructure

Prepare Indiana's infrastructure to meet the needs of an ever-growing, global supply chain.

Projects include: State Freight Planning Committee, Public Private Partnership Working Group



Talent

Develop a talent pipeline to prepare Hoosiers for meaningful careers in advanced manufacturing and logistics.

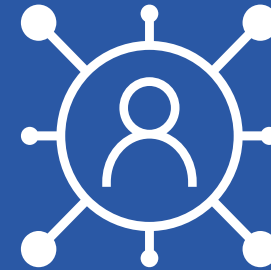
Projects include: Talent Programming Advisory Committee, State of the Workforce Report



Workplace Safety/Environmental Sustainability

Consistently provide Hoosiers with safe careers in advanced manufacturing and logistics and accelerate the industries' efforts to reduce their environmental impacts.

Projects include: Return to Work Peer Group, Peer to Peer Benchmarking



NETWORKED COMMUNITY PROGRAMMATIC ACTIVITIES INCLUDE:

Urban Freight In-Road Charging Pilot

Public Private Partnership Development Group

Infrastructure Preparedness Partnership with INDOT

Supply Chain 4.0 National Conference

Advanced Mobility Leadership Committee (2022)

When successfully implemented, this strategic plan will track the following impacts:

2022



Increase productivity in Indiana's advanced manufacturing and logistics sectors by driving technology-enabled capital investment.

The Manufacturing Readiness Grant program operated by Conexus and funded by the IEDC will achieve the following milestones:

- Capital investment will exceed \$250 million as measured by total budgets of funded projects (assumes anticipated grant funding increases.)
- Total project budgets will contribute at least \$4,000 of investment per employee as measured by employment at funded companies.
- Support 250 companies in two-thirds of Indiana's counties (60 of 92) with grant awards.



Promote digital adoption through the publication of 72 case studies (24 per year), all of which will serve as examples of how small- and medium-sized AML companies are understanding and taking action towards digitization.



Support Butler University in its work in Supply Chain Resilience. Conexus will commission Butler University to produce three different studies on the supply chain resiliency project.

Each study will focus on a different targeted sector (to be determined) and is expected to uncover hidden critical suppliers that represent opportunities for Indiana.

Establish and align Education Readiness Grants with Indiana's Manufacturing and Logistics Readiness Grants.

- Establish Education Readiness Grant in year one.
- Align 20% of Manufacturing Readiness Grant recipients with secondary education partners by the end of year two.
- Align 40% of Manufacturing Readiness Grant recipients with secondary education partners by the end of year three.
- Complete a certification attainment study of year-two Education Readiness Grant recipients by the end of year three.



Increase traffic to Conexus and Make IN Move websites, social media channels and newsletters, and increase attendance at in-person events.

- Increase engagement by 10% (as measured by likes, retweets, clicks and views)
- Increase total event and program attendees to: 6,500 in year one, 7,000 in year two, 7,500 in year three



Increase the public's awareness of the value of advanced manufacturing and logistics careers by 10%.

Baseline public perception will be measured in year one and a follow-up public perception survey will measure an increase in awareness at the end of year three.

2024



CONCLUSION

The advanced manufacturing and logistics industries account for more than 30% of Indiana's GDP and employs more than 600,000 Hoosiers. The AML intensity puts Indiana at an advantage and as pointed out in the Indiana GPS report, at risk. Indiana recognized the advantage in 2010 when productivity was 16% above the national average. However, in five short years the productivity advantage dropped to less than 3% and failed to regain traction. Additionally, Indiana dropped in wage growth/good jobs compared to the national average.

In response to the decline and perceived risk to AML industries and Indiana, Conexus Indiana in partnership with Fourth Economy developed the 2022-2024 strategic plan. The strategic planning process was informed by our key stakeholders, Networked Community, and the Indiana GPS Project report.

As outlined in the plan, Conexus will focus our efforts on two main areas - Skills Alignment and Digital Adoption – with the support of three critical enablers – Public Awareness, Research and Discovery, and Networked Communities – underpinning nearly our entire book of work is the Networked Community. The strategic goal of Conexus is to provide opportunities for underserved Hoosiers and underdeveloped companies to enhance skills and technology adoption need to succeed in Indiana. By offering such programs as Catapult, the Education Readiness Grant, Emerging Tech Showcases, and the Manufacturing Readiness Grant and by intentional public awareness campaigns and research projects, Conexus will support and guide the return of Indiana's competitive edge.

By Thinking Big, Never Settling, Taking Responsibility, and Be Collaborative and Inclusive, Conexus Indiana is ready to "Affirm Indiana as the center for innovation and digital transformation for advanced manufacturing and logistics."



STRATEGIC PLAN BY FOURTH ECONOMY

Fourth Economy is a national community and economic development consulting firm. Powered by a vision for an economy that serves the people, our approach is centered on principles of competitiveness, equity, and resilience. We partner with communities and organizations, public and private, who are ready for change to equip them with tools and innovative solutions to build better communities and stronger economies.

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