

Ohio's Manufacturing Workforce System - Immediate Impact on a Statewide Scale

Section 1: Project Description and Overview

Section 1a: Executive Summary.

Project Title: Ohio's Manufacturing Workforce System - Immediate Impact on a Statewide Scale
Applicant and System Lead: Ohio Manufacturers' Association

Ohio is the third largest manufacturing state in the nation in terms of jobs and economic output. The industry provides 700,000 jobs, \$120 billion in GDP, and an annual payroll of \$40 billion featuring average annual earnings above \$60,000.¹ Fueled by a longstanding industrial legacy, the industry is becoming more efficient, productive, and greener than ever. Ohio is a national leader in emerging technologies including the industrial Internet of Things, automation, electrical vehicles, and cyber/physical systems that are revolutionizing the industry. Workforce development is a rate-determining step in this transformation. Throughout the state, manufacturers have extreme demand for skilled workers, compounded by a groundbreaking investment of \$100 billion by Intel Corp in Ohio anticipated to create 4,000 jobs.

Since 2016, lead applicant and system lead entity Ohio Manufacturers' Association has established and enhanced 16 employer-led industry sector partnerships (ISPs) in all regions of Ohio. Via this proposal, OMA will achieve immediate statewide scale and impact by leading manufacturing ISPs to engage 1,000+ employers and 6,000+ individuals in earn-and-learn and incumbent upskilling programs for high-demand positions. This includes central focus on underserved groups including Appalachian coal communities, people of color, and women. OMA leverages unprecedented state-level support, including over \$100,000,000 from the Ohio Department of Development, Ohio Governor's Office of Workforce Transformation, JobsOhio, industry sector partnerships, and others committed to solving manufacturing's workforce challenges.

Section 1b: System Lead Entity. The Ohio Manufacturers' Association (OMA) will serve as the System Lead Entity cooperating with the Ohio Governor's Office of Workforce Transformation (See Attachment H) and numerous public partners. Founded in 1910 in Columbus, Ohio, OMA is a member-funded organization whose mission is to protect and grow Ohio manufacturing. The Ohio Manufacturing Workforce System grant will be managed by OMA's 501c3 workforce development subsidiary, the OMA Educational and Industrial Development Institute (OMAEIDI).

OMA's 1,300+ members collaborate with public and private partners to create a globally competitive manufacturing industry. Since 2016, OMA has worked across Ohio to establish and enhance a network of manufacturing industry sector partnerships (ISPs). To date, OMA has helped to create, expand, and connect 16 ISPs reaching all regions of the state. Our work, which has been identified as a national best practice by the National Association of Manufacturers and Manufacturing Institute, represents an unparalleled capacity in the U.S. to reach manufacturers and impact workforce development immediately and on a statewide scale. Ohio's Governor and his administration have embraced ISPs as a key workforce strategy, codifying state-level funding for the partnerships through the ODOD-led Ohio Industry Sector Partnership Grant in 2019.

¹ Ohio Manufacturers' Association. Ohio Manufacturing Counts: Facts About the Economic Impact of the Ohio Manufacturing Industry. https://www.ohiomfg.com/OMA_Manufacturing_Counts_2018-19.pdf

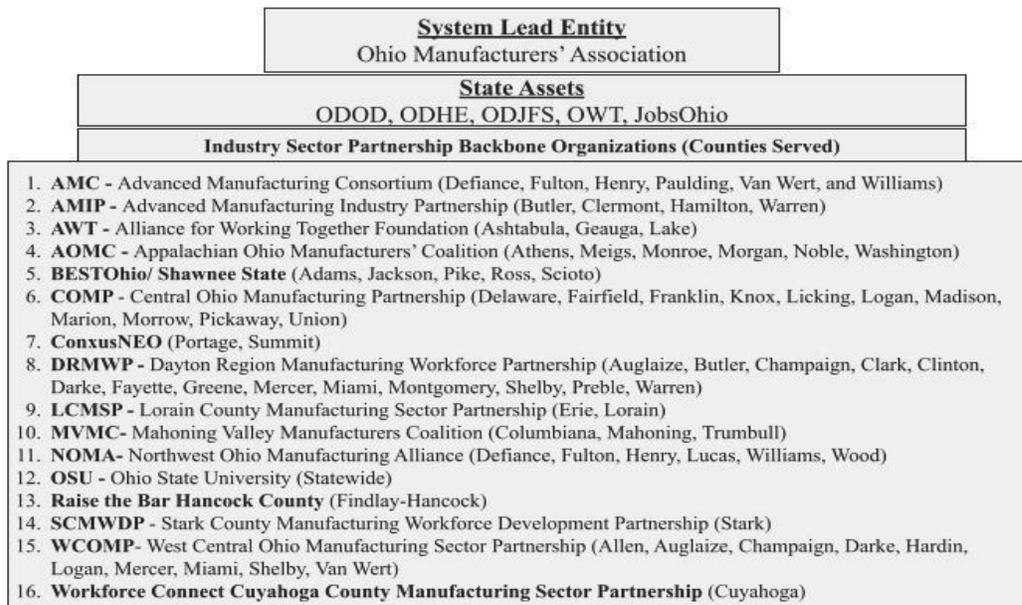
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OMA helped spearhead the development of the ISP grant program and worked to ensure its funding through the state operating budget.²

OMA has a ready-made, proven infrastructure for scaling existing ISPs and standing up impactful new ones. GJC funding will accelerate these efforts and enable us to quickly deploy resources to every corner of the state. This funding will also allow OMA and its economic development partners within the state government to replicate the system built by and for manufacturers to strengthen other key industries, most notably broadband and 5G—a vital enabling technology to Industry 4.0 adoption.

This application builds on OMA’s strategic plan “2021 Workforce Roadmap: Manufacturers’ Priorities in Workforce Development”³ (included as Attachment A). In support of this plan, OMA is joined in this proposal by strategic partners Ohio Department of Development (ODOD), the Governor’s Office of Workforce Transformation (OWT), and JobsOhio. ODOD is the state’s public sector agency that oversees and coordinates economic development in Ohio. JobsOhio is a private, nonprofit organization designed to drive job creation and new capital investment in Ohio through business attraction, retention, and expansion efforts in conjunction with regional partners. ODOD works with JobsOhio to evaluate return on investment of publicly-funded initiatives. OWT is a cross-agency gubernatorial initiative to connect Ohio’s business, training, and education communities to build a dynamically skilled, productive, and purposeful workforce. Additionally, OMA’s project has the committed support of state-level agencies the Ohio Department of Jobs and Family Services (ODJFS) and the Ohio Department of Higher Education (ODHE). Shown in Figure 1, 16 ISP backbone organizations are participating in this application and represent the state’s manufacturing-focused workforce development capacity.

Figure 1: System Chart



² OMA Press Release: [Industry Sector Partnerships Awarded Funds to Enhance Ohio's Manufacturing Workforce](#)

³ OMA 2021 Workforce Roadmap: Manufacturers’ Priorities in Workforce Development: https://www.ohiomfg.com/wp-content/uploads/OMA_2021WorkforceRoadmapFINAL.pdf

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Section 2a: Employer Leadership and Commitments. In total, 120 employers have submitted letters of commitment (Attachment B), including commitments to collaborate with OMA and partners to source new hires. In total, these employers have indicated in their letters a total demand for **25,000+** hires in the next five years at an average wage of \$17.60/hr which reflects the prevailing wages for the targeted occupations. Additionally, labor market research projects annual job openings over 50,000 annually or 250,000 in the next five years in a set of targeted occupations. Resulting from these commitments and labor market research, OMA's ISPs will recruit and train 6,000 individuals, contributing to an expanding pool of manufacturing workers.

Our ISP network's collective membership includes 1,654 manufacturers. All OMA-endorsed ISPs are employer-led and demand-driven, prioritizing manufacturers' buy-in, validation, and participation. Examples of employer leadership include the **OMA Workforce Leadership Committee**, made up of influential manufacturers committed to the ISP model, which drives OMA's statewide workforce agenda and ISP strategy; local **ISP Employer Leadership Committees**, which convene key employers in each ISP region to help set strategy for the partnership; and **Volunteer Leadership**, through which employers lead strategic committees and action teams to design, validate, and deploy programs/initiatives on topics such as Industry 4.0 adoption and Diversity, Equity, and Inclusion.

OMA's project design directly reflects the needs expressed by our employer network. Employers will play an essential role in implementing the project, directly shaping and continuously improving entry-level learn and earn and upskilling training opportunities. During the 36-month grant period, OMA will continue to engage employers and identify new employer partners through established communication and relationship channels, including our weekly Leadership Briefing emails, distributed to 6,000 manufacturing stakeholders; our ISP network's collective membership; the robust connections of OMA board members; and participation in the Ohio Manufacturing Extension Partnership (MEP) network. Finally, via this proposal, OMA will endorse up to five additional manufacturing ISPs in new counties/geographies, expanding our employer network—and our statewide footprint.

Section 2b: Other Stakeholders and Partnerships.

Backbone Organizations' Roles & Capacity.

OMA has an established ISP formation and "endorsement" process wherein ISPs submit a detailed application⁴, including a supply/demand analysis and strategic plan, and apply for renewal every other year. Shown in Figure 2, eleven of the Sector Partnership backbone organizations in this application are OMA-endorsed ISPs. Five of the ISPs (AMC, AMIP, BESTOhio, WCOMP, and the Ohio State University/OSU) are emerging and/or in the process of obtaining endorsement.

Figure 2: Backbone Org. Map



⁴ Ohio Manufacturers' Association. Sector Partnership Endorsement Application. <https://www.ohiomfg.com/wp-content/uploads/SectorPartnershipEndorsementApplication.pdf>

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OMA shepherds ISPs through stages from start-up to endorsement through maturation with robust technical assistance, toolkits, and resources such as (1) *Industry Sector Partnerships: What They Are and Why They Work*, (2) *Sector Partnership Launch Tasks*, and (3) *Priority Action Plan Template* (Attachment C). ISPs participate in OMA's learning community and receive support from our Workforce Services team via coaching and professional development, including an annual Manufacturing Workforce Summit attended by 2,000+ people to date.

Each OMA-endorsed ISP is facilitated and coordinated by a Backbone Organization that collaborates closely with OMA. In support of these Backbone Organizations, 90 implementation partners—organizations in workforce/economic development, social services, training, and education—are collaborating in this application (See Attachment B: Letters of Commitment). Brief descriptions and geographies of each of the 16 ISPs are included in Attachment D.

State Assets & Other Key Partners: OMA's ISP network is one-half of the Ohio Manufacturing Workforce Partnership (OMWP), a collaboration with Ohio's higher education providers led by Ohio TechNet. OMWP is bolstered by a \$15M USDOL grant to improve training capacity at community colleges, a \$12M USDOL Scaling Apprenticeship grant to expand apprenticeships statewide, and 15 grants from the ODOD's ISP grant program totalling over \$5M to establish new ISPs regionally. Through years of dedicated partnership building and following proven expertise, we have achieved stronger alignment with partners and state-level leaders than ever before in our 100+ year history. We leverage deep commitments from the following state government agencies, each of which participates on OMA's Statewide Workforce Alignment Committee, which convenes Ohio stakeholders to align efforts and shape policy:

- *ODOD* will leverage half of its \$51M TechCred program to pay for industry recognized credential training; and a \$5.7M ISP Grant Program to lead ISP expansion into the Broadband/5G and Electrical Vehicle spaces. ODOD will also engage and align state-level agencies to lay the groundwork for a unified state-wide ISP model.
- *Ohio MEP*, the state's Manufacturing Extension Partnership Network, will recruit manufacturers pursuing tech adoption projects to participate in ISPs and also leverage a \$5M Department of Defense Ohio Defense Manufacturing Community (ODMC) grant focusing on workforce development in the defense manufacturing supply chain.
- *OWT* will collaborate closely with OMA and the Ohio State University to steward a statewide Broadband/5G ISP.
- *JobsOhio* will leverage the \$30M Ohio To Work initiative, which helps displaced workers connect to training and jobs with a focus on underserved communities.
- *The Ohio Department of Higher Education (ODHE)* will support publicity and training recruitment and help align post-secondary programs and industry-recognized credentials with GJC task force and employer needs. ODHE will leverage \$3M in support of the OSU/5G ISP and help codify findings emerging from Industry 4.0 task forces.
- *Ohio Department of Job and Family Services (ODJFS)* will support project equity by leveraging its Navigator program, which improves career and training access for underserved communities.

Other Key Partners: *Lorain County Community College (LCCC)* via its Ohio TechNet initiative will leverage the above-described \$12M U.S. DOL OMWP grant in support of the GJC, as well as the AGS PRIME data system. LCCC will also support OMA's Automation & Robotics Replication process; leverage the Ohio TechNet infrastructure to support implementation of

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training cohorts; and recruit education providers to facilitate training. *The Manufacturing Institute (MI)*, a nonprofit workforce development/education partner of the National Association of Manufacturers will advise OMA on best practices to reach underserved populations and help OMA plan for the project's long-term sustainability. MI will also support the replication of the ACCESS to Careers Model across Ohio, which focuses on recruitment and retention of returning citizens; and guide employer messaging around diversity, equity, and inclusion. Finally, OMA has also budgeted funds to enlist consultants/contracted organizations with the expertise to support key project competencies, including: manufacturer professional development, program design and sustainability, management team coaching, data and evaluation, outreach and communications, underserved population engagement, and tech-based economic development.

Section 3: Regional Description

Key Industry, Location, and Region: OMA's application prioritizes manufacturing. Via the network of ISPs and state-level partnerships, this project serves the entire State of Ohio. Our region includes 32 Appalachian counties with significant coal economies, where since 2010 eight coal-fired power plants have closed⁵ and an additional closure has been announced for 2022.⁶ Ohio's 32-county Appalachian area has a collective poverty rate of 17.6%; nine of the 10 counties with the highest poverty rates in Ohio are Appalachian.⁷ Our project also prioritizes implementation in the state's most populous urban counties: Cuyahoga (Cleveland), Franklin (Columbus), Hamilton (Cincinnati), Lucas (Toledo), Mahoning (Youngstown), Montgomery (Dayton), Summit (Akron), and Stark (Canton). Poverty rates exceed 25% in all of these cities.⁸

Most Significant and Difficult-to-Meet Skills: In OMA's 2021 Manufacturers' Economic Survey, the most significantly reported challenges among manufacturers are: (1) the recruitment of entry-level workers, and (2) the upskilling of existing entry-level workers into middle-skilled jobs.⁹ Extensive labor market research, including surveys, direct employer engagement, and data analytics, have identified critical occupations and skill sets that are most in-demand among manufacturers. These include 25+ entry-level and middle-skilled occupations in *Machining, Production, Welding, Industrial Maintenance, and Automation*. See Attachment E for the list of targeted occupation and labor market information, including growth projections, annual openings, and prevailing wages. In total, the targeted occupations are projected to have 50,000+ annual openings and 150,000 openings in the next 36 months in Ohio. Collectively, these occupations pay an average prevailing wage of \$23.92/hr.

Notably, the demand for manufacturing workers will sky-rocket in Ohio in the next few years. Intel Corp's historic announcement of plans to invest \$100 billion into a world-class chip-making complex in New Albany, Ohio¹⁰ is projected to create 3,000 jobs within 5 years. Intel's announcement is already driving growth in the supply chain: for example, in the weeks following

⁵ Brittany Patterson. "Powering Down: Ohio Community Reckons with Coal Plant Closure." Ohio Valley Resource. May 31, 2019.

⁶ Yahoo Finance. "Vistra Accelerates Closure of Ohio Coal Plant to Mid-2022, Earlier than Planned." July 19, 2021.

⁷ Ohio Department of Job and Family Services. Ohio's Combined WIOA State Plan PY 2022-2023.

⁸ US Census Bureau. Quickfacts.

⁹ Schneider Downs and The Ohio Manufacturers' Association. 2021 Economic Survey.

¹⁰ Shepardson, D. and Lanhee Lee J. *Intel's \$20 bln Ohio factory could become world's largest chip plant*. Reuters. January 21, 2022.

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Intel’s announcement, Hyperion announced a relocation to central Ohio, which will result in 700 new manufacturing jobs.¹¹ Both new factories are served by OMA-endorsed ISPs.

Identification of Regional Needs & Target Participants: OMA proposes to serve 6,000 participants, prioritizing Appalachian coal communities, people of color, and women. Unique regional needs drive an OMA system design that accommodates regions’ varied challenges. For example, urban areas contend with high distress and labor market inequities along racial lines. In Ohio, Black poverty (28.7%) and unemployment (12.0%) rates are triple that of white’s (9.7% and 3.8%, respectively). There are areas of extreme urban distress in the region, especially in predominantly Black places. For example, poverty rates in Canton (30.8%), Cleveland (32.7%), and Youngstown (36.8%) are very high. Within these cities, there are areas such as Cleveland’s Central neighborhood (68.8%), Canton’s Southeast neighborhood (67.3%), and Youngstown’s Brier Hill neighborhood (65.2%) where poverty rates are even more dire.

Rural areas contend with distressed conditions, as well. Thirty-two counties in Ohio, representing about one-third of the state’s counties, are part of Appalachia. As mentioned above, the region contends with shuttered coal-fired power plants and depleted mines. In total the Appalachian region has a 17.6% poverty rate with pockets of dire poverty in towns like Portsmouth (36.5%) and Zanesville (30.1%).¹²

This proposal builds on existing assets to enhance regional systems and program models, and reach and serve intended target populations impactfully. Table 1, below, lists the key needs and sets the stage for what this application proposes to accomplish.

Table 1: Needs

System Development Needs
<p>OMA has built a statewide workforce training system of endorsed ISPs throughout Ohio. As we continue to strengthen our system, the following needs have emerged as priorities:</p> <ul style="list-style-type: none"> • ISPs must influence the way that manufacturers approach hiring and retention by helping them recognize that they cannot solve their problems in isolation but must collaborate with partners and competitors to address labor shortages as a community. • There is an ongoing need for identifying and validating skill needs related to emerging technologies—e.g., Industry 4.0—and to align ISP and partner activities in response, producing a pipeline of workers credentialed for the jobs of the future.
Program Development Needs
<p>Programs must respond to the most significant and difficult-to-meet skills among employers:</p> <ul style="list-style-type: none"> • A persistent recruitment challenge, particularly women and people of color who are underrepresented in the industry, requires robust investment in communications and outreach to change perceptions of the industry and engage new talent. • In response to the needs expressed by employers, OMA has developed an Entry-Level Learn and Earn (ELLE) program that has been piloted successfully, but not scaled. ISPs

¹¹ Weiker, J. *Hyperion to Open Largest Columbus Factory in a Decade*. Columbus Dispatch. February 1, 2022.

¹² US Census Bureau. Quickfacts.

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<p>and partners need resources and technical assistance to adopt and scale the program.</p> <ul style="list-style-type: none"> • Employers need to upskill incumbent workers to ensure their companies remain competitive—and to incentivize retention—but are constrained in doing so due to lack of entry-level and backfill talent.
<p>Participant Needs</p>
<p>The most disconnected members of our communities are time- and resource-constrained, have limited awareness of programs/career opportunities, have basic/occupational skills gaps, and have a steep need for supportive services, including transportation, childcare, legal support, and healthcare. Participants must receive targeted recruitment and ongoing supportive services to ensure they persist in training and obtain and retain good jobs.</p>

CEDS Alignment: The proposed project aligns with the priorities of Ohio CEDS and CEDS-equivalents, as demonstrated in the chart below, which lists all of the CEDS in Ohio and select CEDS-equivalents. Each of these organizations has provided a Letter of Commitment.

Table 2: CEDS and CEDS-Equivalent Plans

CEDS	Alignment with GJC Proposal
Buckeye Hills-Hocking Valley Regional Development District ¹³	Prioritizes resilience and workforce development in Appalachia, including for coal workers.
Eastgate Regional Council of Governments ¹⁴	Prioritizes industry sector partnerships, manufacturing and promoting social equity.
Northeast Ohio Areawide Coordinating Agency	NOACA is currently developing a CEDS. Letter indicates alignment with emerging priorities.
Northeast Ohio Four County Regional Planning and Development Organization ¹⁵	Prioritizes manufacturing and collaboration to address regional economic needs.
Ohio Mid-Eastern Governments Association ¹⁶	Prioritizes regional resiliency, workforce development, and manufacturing
Ohio Valley Regional Development Commission ¹⁷	Prioritizes improving education and workforce conditions and job training availability.
CEDS Equivalent	Alignment with GJC Proposal
OMA’s 2021 Workforce Roadmap: Manufacturers’ Priorities in Workforce	Prioritizes increasing ISP capacity and # of counties served by ISPs, and the implementation of earn-and-learn.

¹³Buckeye Hills Regional Council. Comprehensive Economic Development Strategy 2020 - 2022.

¹⁴ Eastgate Regional Council of Governments. Comprehensive Economic Development Strategy 2020 - 2022.

¹⁵ Northeast Ohio Four County Regional Planning and Development Organization. 2018 Comprehensive Economic Development Strategy.

¹⁶ Ohio Mid-Eastern Governments Association. CEDS 2020 Update.

¹⁷ Ohio Valley Regional Development Commission CEDS 2021 Update.

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Development ¹⁸	
OWT’s “Strengthening Ohio’s Broadband & 5G Workforce” Strategy ¹⁹	Calls for a broadband/5G sector partnership to build talent in support of industrial transformation.

Section 4: Impacts of the Regional Workforce Training System

Section 4a: Project Components. OMA proposes to make investments at the System Development, Program Design, and Program Implementation levels that respond to the Regional Needs noted above in Section 3.

System Development

Table 3: System Development Plan

<p><u>Existing Statewide System and Problem to Be Solved:</u> OMA’s governance structure comprises three stakeholder committees: (1) Workforce Leadership Committee (manufacturers), (2) Intermediary Committee (ISP backbone organizations), and (3) Statewide Workforce Alignment Committee (strategic partners and state assets). Together, they enable OMA to communicate and collaborate with diverse stakeholders and serve as our primary infrastructure for sharing information, building consensus, and creating efficiencies of scale. Additionally, OMA supports ISPs with robust research, communication assets, grant and project management infrastructure, and capacity-building technical assistance/ coaching.</p> <p>Even with this collaboration, the System Needs described in Table 1 still remain. Thus, OMA seeks to implement an enhanced system that engages these regional assets to facilitate the Proposed Impacts.</p>
<p><u>Proposed Impacts:</u> Specifically, this proposal will invest in an enhanced governance structure that cultivates systems for:</p> <ol style="list-style-type: none"> (1) <u>Employer Change Management.</u> OMA will lead an employer-focused change management process to transform the way manufacturers approach recruiting, hiring, and retaining entry-level workers. This will include employer-centered Technical Assistance resources, project management capacity focused on engaging target underserved populations, and an operationalized Community of Practice that convenes ISP Backbones and their employer partners to share best practices, learnings, and resources and tackle hiring challenges collectively. (2) <u>Emerging Technology Strategy.</u> Across the grant period, OMA and ODOD will convene and lead a statewide Task Force that brings together key industry leaders to identify hiring and skill needs in Industry 4.0-aligned occupations, beginning with Electrical Vehicle manufacturing and Broadband/5G. Task forces will identify hiring and skill needs, and OMA and ISPs will align activities and training initiatives around sourcing these needs.

¹⁸ OMA 2021 Workforce Roadmap: Manufacturers’ Priorities in Workforce Development: https://www.ohiomfg.com/wp-content/uploads/OMA_2021WorkforceRoadmapFINAL.pdf

¹⁹ Governor’s Office of Workforce Transformation. Strengthening Ohio’s 5G and Broadband Workforce. 2021.

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Program Design: In response to regional needs and the needs of the target populations, OMA is leading ISPs to coordinate earn-and-learn pathways. Earn-and-learn strategies combine instruction with on-the-job training to increase relevance, accelerate learning, and ensure skill mastery. Earn-and-learn strategies give employers the opportunity to build a workforce trained to their specific needs.

OMA will also support the upskilling of incumbent workers via this proposal. Through our work on the OMWP and ODMC grants, among others, we have identified a range of upskilling needs and will support upskilling training via the GJC, leveraging the aforementioned grants.

OMA has developed an evidence-based Entry-Level Learn-and-Earn (ELLE) model, shown in the figure below, designed to help manufacturers with immediate hiring needs recruit, pre-screen, prepare, train prior to employment, onboard, and support entry-level employees with no prior manufacturing experience. An associated toolkit²⁰ (Attachment F) outlines a step-by-step process that ISPs and their manufacturing partners can undertake to successfully deploy the model.

Figure 3: ELLE Model



Table 4: Program Design Plan

Existing Program Assets and Problem to Be Solved: OMA has begun to develop TA capability to support ISPs to adopt earn-and-learn programs including the ELLE program.

Toolkits and TA assets we have developed for ISP use include:

- Innovative Earn-and-Learn Strategies for Building Ohio’s Manufacturing Workforce
- About Nationally Portable Manufacturing Credentials
- Mentor, instructor, and incumbent worker earn-and-learn program models and promotional materials

The ELLE program has been successfully piloted and is ready for ISP deployment.

Proposed Impacts: Ultimately, the Good Jobs Challenge grant will lay the groundwork for exponential, ongoing impacts beyond the 36-month grant period by operationalizing sustainable new training programs, formalizing referral partnerships, accelerating ISPs’ momentum, and building underrepresented communities’ interest in manufacturing career

²⁰ Ohio Manufacturers’ Association. Entry Level Learn and Earn Toolkit for Implementation. Toolkit https://www.ohiomfg.com/wp-content/uploads/ELLE_Toolkit_Final.pdf

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paths. OMA is proposing the following outcomes within the grant period:

- Entry-Level Learn and Earn (ELLE). Deployment and customization of the ELLE program across 14 ISPs (11 ISPs will design and implement new ELLE training programs and 3 will expand existing programs), leading to a total of 2,000 program participants across the 36-month grant period.
- Entry-Level Upskilling. Deployment of regionally-tailored upskilling programs across 14 ISPs to support the upskilling of 4,000 participants over the grant period. Upskilling will support incumbent worker advancement from entry-level to middle-skill roles, with a focus on preparing workers for Industry 4.0-aligned careers and the activation of new automation and robotics training programs developed as a result of OMA's Emerging Technology task force and toolkit.
- Expanded Communication and Recruitment Capacity: Including enhanced digital marketing; deepened grassroots outreach via partnerships with local organizations that have trusted relationships with the underserved populations; and TA support from state-level Project Managers focused on targeting underserved communities (e.g., assistance with messaging, help identifying CBOs well-positioned for grassroots outreach).

Program Implementation:

Table 5: Program Implementation Plan

Existing Implementation Assets: Each ISP collaborates with implementation partners, listed in Attachment C of this proposal, to facilitate individual participation in programs. Partners were selected for their capabilities to: 1) recruit and engage underserved individuals in manufacturing pathways, and 2) recruit participants, deliver ELLE and upskilling programming, or provide supportive services.

Proposed Impacts and Investments: Per the proposed budget, implementation partners will use grant funds for recruitment and engagement, ELLE and upskilling programming, and supportive services for the target populations. These investments will drive the outcomes proposed in the projected participant outcomes/demographics provided on p.11-12.

Section 4b: EDA Investment Priorities. OMA's GJC supports EDA's Recovery and Resilience investment priority by promoting immediate recovery from COVID-19 and long term resilience against future economic shocks. We will build a pipeline of credentialed workers equipped with the most in-demand skills in Ohio's manufacturing field, as well as the emerging skills to support the industry's ongoing transformation including EV, 5G/Broadband, and other Industry 4.0 technologies. Via a dedicated communications and outreach campaign, OMA will also transform Ohioans' perceptions of manufacturing as a waning industry that is only welcoming to those who are white and male, leading to a generational shift and increasing uptake in manufacturing careers by currently underrepresented populations.

OMA's project aligns with many other EDA priorities. Equity: One of our key project goals is to improve diversity in Ohio's manufacturing workforce, increasing manufacturing employment in Appalachian coal communities, and improving engagement of people of color, women, veterans, and returning citizens via the ELLE program and targeted outreach strategies described

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throughout this proposal. Workforce Development: OMA-endorsed ISPs will deploy employer-informed training to prepare Ohioans for quality jobs and career advancement. In response to employer demands, OMA has developed a toolkit that ISPs can use to implement a regional automation and robotics workforce plan. During the project period, OMA will replicate this resource and process for other emerging Industry 4.0 skills needs (e.g., electrical vehicles, 5G, cloud computing, and cybersecurity). Tech-Based Economic Development: Ohio is a pioneer in the creation of statewide public/private partnerships to enhance business growth. Recently, Ohio invested \$3 billion to launch world-class innovation districts in Cincinnati, Cleveland, and Columbus that are expected to produce 45,000 new STEM graduates, fuel 60,000 in-demand jobs, and generate up to \$9 billion in annual economic impact over 10 years. OMA will leverage this infrastructure as a foundation for GJC initiatives. Environmentally Sustainable Development: This proposal supports workforce development in the Electric Vehicle industry. Currently, no national, standardized sustainable energy credentials exist that are specifically designed for manufacturing employees. OMA will partner with the National Institute of Manufacturing Standards (NIMS) to produce the industry’s first nationally recognized, smart training solution to equip manufacturing employees with sustainable energy skills. Exports & FDI: Our project contributes to bringing manufacturing, services, and jobs back to the U.S. and supporting U.S. export growth. For example, this project will serve as an important workforce resource for Intel’s reshoring of microchip manufacturing in the U.S.

Section 4c: Number and Type of Jobs. Proposed metrics and demographic outcomes are presented in Table 6. OMA’s project will also lead to sustained, exponential benefits for Ohio beyond the grant period by aligning manufacturing stakeholders and workforce strategy at the state level, recruiting a new generation of entry-level workers and upskilling incumbent workers to fulfill the jobs of the future, and bolstering existing ISPs while stewarding new ones.

Table 6: Workers Served and Job Placements Expected

Program Implementation Metrics	Projected
Total # of Individuals Recruited/ Enrolled in Training <ul style="list-style-type: none"> ● Unemployed/ Underemployed ● Incumbent Workers ● Member of an Underserved Group* 	6,000 33% 67% 50%
Total # of Individuals Completed Training <ul style="list-style-type: none"> ● Unemployed/ Underemployed ● Incumbent Workers ● Member of an Underserved Group* 	4,500 (75% of Recruited/ Enrolled) 33% 67% 50%
Total # of Individuals Placed in Quality Jobs <ul style="list-style-type: none"> ● Unemployed/ Underemployed ● Incumbent (Retained or Promoted) ● Member of an Underserved Group* 	3,600 (80% of Completed Training) 33% 67% 50%
Projected number of quality job placements committed by employers - based on Letters of Commitment* *Best to think of this as an incredibly (!) strong demand signal from employers. The ISP’s capacity to deliver trained	25,000+

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workers is reflected in the Total #'s served listed above.	
Average projected wages for jobs	\$17.60
Size of credibly-projected income gains for workers	+\$4/ hour
Projected training cost per worker (inclusive of provision of wrap-around services)	\$3,445
Total # of employers that engage in hiring, retaining, or advancing a participant that is served by this initiative	800

*Underserved groups include Appalachian coal communities, people of color, women, veterans, and returning citizens.

Feasibility of Estimates: Estimates were derived based on: (1) Letters of Commitment provided by employers; (2) Analysis of labor market data and regional job demand in targeted occupations; and (3) Engagement of ISPs in detailed planning processes that included examining existing programs and participant throughput, partner capacity capabilities, and estimates from on-the-ground service provider partners for incremental capacity increases from EDA funding.

Leveraged Resources: A total of **\$100,953,595** in leveraged resources are identified. See Attachment G: Leveraged Resources for a detailed breakdown; each is further specified in a Letter of Commitment. Prominent sources include those listed in the table below.

Table 7: Description of Leveraged Resources

Amount	Source and Description
\$30 million	JobsOhio's Ohio To Work Initiative - a state-funded pandemic re-employment initiative that was designed and delivered in collaboration with OMA and several of OMA's endorsed ISPs.
\$17 million	Lorain County Community College's USDOL Scaling Apprenticeship and USDOD Manufacturing Engineering Education Program grants. These are \$12,000,000 and \$5,000,000 grants, respectively, that train technical workers in manufacturing in collaboration with ISPs and community colleges throughout Ohio.
\$49.3 million	Initiatives of the Ohio Department of Development (ODOD) and the Governor's Office of Workforce Transformation (OWT), including: <ul style="list-style-type: none"> ● Ohio's Industry Sector Partnership grant program (\$5,000,000); ● U.S. DOD Defense Manufacturing Community grant (\$5,000,000); ● The Ohio MEP network (\$8,000,000); ● Ohio's TechCred program (\$25,500,000); and ● Various grants supporting Ohio's broadband and 5G workforce strategy (\$5,770,000).

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Plan for data collection to validate estimates: Leveraged from existing projects, the data tracking system AGS Prime will be used by all organizations engaged in this project's ecosystem. AGS Prime provides a web-based platform for data collection, validation, management, and analysis across an unlimited number of partners with sophisticated capabilities for data segmentation and privacy compliance. The tool has been used successfully in the region to track performance in similarly complex, grant-funded workforce development initiatives involving dozens of organizations. The utilization of the tool will be managed by OMA.

Section 4d: Why the Partnership or System is Achievable. The system is achievable because there is broad alignment and support for this effort across Ohio, as demonstrated by the attached letters of commitment and funding leveraged. OMA is ideally positioned to serve as the System Lead Entity. We are the convener and leader of Ohio's ISPs with deep technical knowledge of sector partnerships, a robust communication infrastructure, a track record of mobilizing stakeholders to successful action, and strong, complementary relationships with other strategic initiatives and resources. OMA's team is experienced in leading large-scale, statewide, grant-funded initiatives. The core project team will include OMA's President Emeritus; Managing Director, Workforce Services; Director, Workforce Services; two Project Managers and a Workforce Communications Manager (to be hired); and our Managing Director, Financial and Administrative Services (see staffing plan for full list of personnel and responsibilities).

Key project leaders are: Sara Tracey, PhD, Managing Director, Workforce Services, who will serve as the Project Director and Jessica Borza, MBA, leader of consulting group Jessica and JB, LLC and Executive Director of MVMC, a participating ISP. Dr. Tracey has managed numerous statewide and regional, multi-stakeholder projects and initiatives. She works with local, regional, and national partners to develop innovative solutions to workforce challenges, with the goal of building evidence of what works, driving systemic improvements, and advancing equitable outcomes. Ms. Borza has 20 years' experience in workforce development with a deep focus on earn and learn solutions. She spearheaded MVMC's strategic planning process to convene, educate, and mobilize key stakeholders to prepare, recruit, and retain a skilled manufacturing workforce—a process that OMA has replicated with ISPs statewide.

Prominent examples of OMA initiatives with similar scope/complexity include:

- **Ohio Manufacturing Workforce Partnership (OMWP):** OMA plays a leading role in the OMWP/Scaling Apprenticeship Program, a \$12,000,000 USDOL-funded, statewide collaboration. Through this four-year effort, launched in 2019, OMA and partners are engaging 500+ employers and upskilling 5,000 Ohioans through apprenticeship programs in advanced manufacturing. OMA ISPs are implementing 25 new and 45 expanded apprenticeship programs in machining, production, welding, and industrial maintenance.
- **Ohio Defense Manufacturing Community:** In 2020, the U.S. Department of Defense designated Ohio a Defense Manufacturing Community, and granted the state \$5M to improve defense manufacturing processes and develop a pipeline of workers for next-generation jobs. OMA leads the project's workforce development efforts, and will help Ohioans obtain at least 400 new credentials over the grant period.²¹

Section 4e: Target Demographics and Specific Stakeholder Groups

²¹ <https://imr.osu.edu/ohio-defense-manufacturing-community/>

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OMA proposes to serve 6,000 individuals in this initiative with as many as 50% being a member of a historically underserved population (previously defined). The organizations engaged in this initiative include: 16 ISP Backbone Organizations; 80 implementation partners to deliver a service aligned with the service model; 120 Employers that have provided Letters of Commitment to hire, retain, or advance individuals; and an estimated 800 employers that will hire, retain, or advance individuals by the end of the project’s period of performance.

Section 5: Funding Request and Program Design and Implementation

Section 5a: Estimated Funding Request

The proposed funding request is reflected in the chart below. A detailed breakdown is provided in the Budget Narrative. OMA’s request is \$24,992,808 over a 36-month performance period with allocations 16% for System Development, 16% for Program Design, and 68% for Program Implementation. A detailed breakdown is provided in the Budget Narrative.

Table 8: Budget Overview

Organization	Role	Budget
System Development		
Ohio Manufacturers’ Association (OMA)	Lead applicant and grant recipient, System Lead Entity, and governance lead coordinating 16 Sectoral Partnership backbone organizations serving regions throughout the state	\$1,726,007
Various subawards and contracts	Support for system development including communications, consulting, technical expertise, and data and evaluation	\$2,358,801
Subtotal		\$4,084,808
Program Design		
ISP Backbone Organizations	Subaward support for ELLE and upskilling program development	\$4,160,000
Subtotal		\$4,160,000
Program Implementation		
ISP Backbone Organizations	Subaward supporting collaboration with local partners to design and implement ELLE and upskilling programs	\$12,508,000
Emerging ISPs	Launch support for four emerging ISPs in underserved Ohio regions	\$4,240,000
Subtotal		\$16,748,000
Total		\$24,992,808

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Section 5b. Describe Anticipated Projects. This application proposes to implement the projects in Tables 3-5 to deliver the outcomes listed in Table 6. A high level timeline follows:

Table 9: High Level Timeline

Task	Timeline
Fiscal and legal start up tasks, contracting and subaward processes, and hiring processes complete.	NLT 90 days from award notification
Program Design and Implementation. Following the conclusion of contracting and subaward processes; projects begin engaging participants within 120 days of award notification. Projects maintain operation for the remainder of the performance period delivering the Table 6 outcomes.	NLT 120 days from award notification
System development. System Development activities begin immediately upon award notification and occur concurrently with program implementation. The Employer Change Management and Emerging Technology Strategy teams convene within 30 days of award.	NLT 30 days from award notification.

Recruitment Plans/ Communications: Outreach and recruitment to employers occurs through the networks represented by ISP backbone organizations, OMA, and state-level strategic partners. In total, these organizations engage 15,000+ businesses. Extensive communication capacity is represented in the leveraged resources committed by these partners. Similarly, outreach and recruitment of participants, including plans to reach underserved communities, occurs through the 80 implementation partners committed to the GJC. These organizations will be resourced through the Program Implementation budget to provide bolstered communication and outreach capacity in support of the proposed scope of work. Finally, OMA’s budget includes targeted investments in augmented communication plans/campaigns (web, print, and social media) for use by the ISP backbone organizations and implementation partners.

Section 5c. Anticipated Barriers. We anticipate that lack of access to transportation and to quality, affordable childcare; tradeoffs between earning income and pursuing training and education; previous justice system involvement; and lack of workplace experience will be common barriers to employment among target populations. Low levels of literacy and educational attainment also prevent many Ohioans from obtaining high-quality jobs. To prepare a future-ready workforce, we will invest in ELLE training that prepares participants with lower levels of literacy, employment readiness, or technical readiness for career success. OMA will invest in the capacity of our experienced implementation partners to deploy supportive services via a career coaching model wherein implementation partners provide wraparound services and advancement support extending for one-year post job placement. Services will include: direct provision, referrals, and linkages to benefits/services (e.g., SNAP, health insurance, childcare, and mental health resources), transportation assistance, and coaching on soft skills such as conflict resolution, time management, and communication.