Mapping the Opportunities

How Industry-Led Public-Private Partnerships Are Engaging Postsecondary Institutions to Benefit Employers, Postsecondary Institutions, and Students
Contents

Acknowledgments

Executive Summary

Introduction

EXHIBIT 1. RESEARCH QUESTIONS

EXHIBIT 2. MAP OF 23 INDUSTRY-LED POSTSECONDARY INITIATIVES BY STATE

EXHIBIT 3. INDUSTRY OF FOCUS FOR THE POSTSECONDARY INITIATIVE (N=23)

Discussion

Who Is Involved in Industry-Led Public-Private Partnerships’ Postsecondary Initiatives?

EXHIBIT 4. NUMBER OF INDUSTRY PARTNERS INVOLVED IN AN INITIATIVE (N=23)

EXHIBIT 5. INDUSTRY AND POSTSECONDARY PARTNER ENGAGEMENT (N=23)

EXHIBIT 6. NUMBER OF POSTSECONDARY PARTNERS INVOLVED IN AN INITIATIVE (N=23)

EXHIBIT 7. TYPES OF POSTSECONDARY PARTNERS INVOLVED IN AN INITIATIVE (N=23)

What Are the Goals and Activities of These Initiatives?

EXHIBIT 8. INITIATIVE ACTIVITIES (N=23)

How Many Individuals Are Participating in These Initiatives, and What Are Their Populations of Focus?

EXHIBIT 9. NUMBER OF INDIVIDUALS SERVED BY POSTSECONDARY INITIATIVES IN THE PRIOR YEAR (N=16)
How Are These Initiatives Financially Supported?

EXHIBIT 10. FUNDING SOURCES FOR POSTSECONDARY INITIATIVES (N=23)

To What Extent Are Initiatives' Goals Being Met?

EXHIBIT 11. POSTSECONDARY INITIATIVES' PROGRESS ON GOALS (N=23)

What Additional Insights and Lessons Did This Study Yield?

Conclusion

Appendices

Appendix A: Methodology

Appendix B: Directory of Postsecondary Initiatives

References
Acknowledgments

This report’s coauthors are Alexandria Walton Radford, Helen Muhisani, Kathy Hughes, Jasmine Howard, and Lauren Mason. That said, this project could not have been completed without the assistance of numerous colleagues at the American Institutes for Research. Drawing on their own work with and at industry-led public-private postsecondary partnerships, Wendy Brors, Erin Duckett, Chris Herzog, Joe Quick, Gretchen Sullivan, and Stephanie Veck offered great advice and connections as we engaged partnerships. Multiple staff members also shone in their leadership of different aspects of this project’s dissemination activities, including Joanne Blank (report design), Joyce Garcia (editing), Caitlin Deal and Lee Nethercott (interactive map), Anand Kumar and Meghan Rivera (project website), and Emily Loney and Sofia Bowman (webinar and social media campaign).

We also would like to acknowledge the contributions of the American Association of Community Colleges, Business-Higher Education Forum, National Association of Workforce Boards, National Governors Association, National Skills Coalition, and U.S. Chamber of Commerce Foundation. Staff at these organizations provided valuable perspectives on industry-led postsecondary initiatives as well as suggestions of specific initiatives to include in our study.

We want to express our appreciation of the staff who, while leading industry-led postsecondary initiatives, took the time to participate in interviews and/or complete this project’s survey. The information and lessons learned that we are able to provide through this project would not have been possible without your involvement.

A very special thanks to Shannon Rowan of Walmart for her thoughtful suggestions and feedback as we developed this project. We are also grateful to Walmart for its financial support, which made this work possible.

Disclaimer: The research included in this report was made possible through funding by Walmart. The findings, conclusions and recommendations presented in this report are of the American Institutes for Research alone, and do not necessarily reflect the opinions of Walmart.
Executive Summary

To strengthen students’ pathways through postsecondary education and into in-demand careers, employers and colleges must work more closely together. Industry-led public-private partnerships have tremendous potential to build and grow these employer–college relationships, but little information is available on these partnerships and their postsecondary initiatives. This project aims to fill this gap and foster the growth of these initiatives by highlighting the features of industry-led public-private partnerships’ initiatives with postsecondary institutions and providing lessons and opportunities for developing, sustaining, and scaling these initiatives.

Our findings presented in this report stem from our literature review, interviews of key intermediary organizations and industry-led postsecondary partnerships, and a survey of industry-led postsecondary partnerships. Our survey captures the key features of 23 active postsecondary initiatives run by industry-led postsecondary partnerships. These initiatives are in 10 states throughout the United States; there are also two national initiatives. The initiatives covered in the survey began as early as 2004 and as recently as 2023 and encompass a broad range of industries, with manufacturing and healthcare the most common.

INITIATIVE CHARACTERISTICS

Based on AIR’s 2023 survey of industry-led postsecondary initiatives

- 100% involved a public two-year college
- 96% offered career awareness/exploration activities
- 91% provided job training and placement for potential and new employees
- 61% provided activities related to upskilling and retention for current employees
- 43% of initiatives with a population of focus involved this population of focus in developing or maintaining the initiative
- 70% received state funding
- 9% were funded solely by partnership members

1 We define industry-led public-private partnerships’ postsecondary initiatives as including more than one employer and including one or more universities, community or technical colleges, and/or trade or vocational schools.
THIS PROJECT FOCUSED ON SIX RESEARCH QUESTIONS. THOSE QUESTIONS AND KEY FINDINGS ARE AS FOLLOWS:

Who is involved in industry-led public–private partnerships’ postsecondary initiatives?

The majority (86%) of survey respondents representing their industry-led public–private partnership’s postsecondary initiative reported that an intermediary organization facilitated their partnership. Common intermediaries included a local workforce development board or a local economic development agency. Local chambers of commerce, funders of the postsecondary initiative, or an independent entity also served as intermediaries. In interviews, key informants from organizations indicated that the involvement of an intermediary that championed the initiative was central to the success of these postsecondary initiatives. As for postsecondary and employer partners involved, 39% of initiatives had between 11 and 25 participating employers. About 13% had fewer than 10, and 26% had more than 50. Every initiative also had at least one public 2-year community college as a partner, and 74% of initiatives had a public 4-year college as a partner.

What are the goals and activities of these initiatives?

Survey respondents reported that their postsecondary initiatives had multiple goals. Some respondents (39%) referenced educating individuals about industry careers and opportunities as a primary goal of their initiative. About 26% framed their work as focused on creating or expanding the talent pipeline for a particular industry or career. Another 26% noted targeting the skills gap through education, training, and upskilling; 22% described their work as focused on addressing workforce growth challenges. To address these issues and goals, postsecondary initiatives worked with colleges to provide activities that can be categorized into several buckets. Almost all (96%) offered career awareness/exploration activities, and nearly all (91%) provided job training and placement for potential and new employees. Working with colleges to provide activities related to upskilling and retention for current employees was less common, at 61%.

How many individuals are participating in these initiatives, and what are their populations of focus?

The overall number of individuals who participated in partnerships’ postsecondary initiatives in the prior year varied. Of the initiatives that could provide this information, 38% served 49 or fewer individuals, and 19% served more than 600 individuals. All but four initiatives had a specific population of focus. The most common focus populations were K-12 students (32%), people of color (32%), and entry-level or low-skilled workers (21%). A quarter of initiatives only served participants from their populations of focus, whereas other initiatives also engaged other populations. Of the initiatives with a population of focus, 43% also involved this population in the actual work of developing or maintaining the initiative.
How are these initiatives financially supported?

70% received state funding, 57% received funding from the private sector, and 43% received federal funding. Only 9% were funded solely by partnership members. Regarding the cost of the initiatives, 26% of initiatives could not provide that information. Among those that could provide cost information, about a quarter of initiatives listed a yearly cost of less than $30,000, and another quarter reported a yearly cost between $30,000 to $99,999. Many initiatives (78%) also received in-kind support from partners, such as mentoring, coaching, and wraparound services.

To what extent are initiatives’ goals being met?

We asked survey respondents how their initiatives were progressing on their established goals. More than a quarter of respondents said their initiatives were just beginning to meet their goals, 57% said they were meeting some of their goals, and 17% reported they were meeting all of their goals. These percentages did not vary depending on the length of time an initiative had operated.

What additional insights and lessons did this study yield?

Developing and sustaining initiatives can be challenging. Having a strong intermediary who can bring employers and postsecondary institutions together and manage the initiative is helpful. Securing early wins and tracking progress can also assist in maintaining partner engagement and securing more funding.

This investigation also highlighted the need for better documentation of return on investment in order to sustain and scale these programs. Survey respondents often had difficulty reporting the number of individuals participating in initiative activities, the extent to which participants were members of the focus populations that the initiative aimed to support, and initiative costs. Gathering metrics from employers was also a struggle. The full report discusses ways in which an independent evaluator could support growth of partnership initiatives by providing assistance in collecting and analyzing initiative outcomes.
Introduction

IMPORTANCE OF THIS WORK

Most postsecondary students, including those in liberal arts programs, pursue higher education not only to further their personal development but also to prepare for a career. As the U.S. economy and occupations shift more rapidly with advances in technology and artificial intelligence (Advance CTE, 2021), and the costs of postsecondary education continue to increase (Ma & Pender, 2022), students and families want to know the return on investment they can expect when pursuing a given postsecondary credential. Although colleges offer career and job placement services to their students, some argue that we must redesign postsecondary education with careers in mind. This reorientation requires better alignment of majors and degrees—and the skills and competencies learned—to job opportunities. It also requires stronger work-based learning opportunities, which are critical to students’ (especially underrepresented students’) exploration of careers and their acquisition of employability skills and social capital (Chan & Cruzvergara, 2021).
To strengthen the pathways between college and in-demand careers, employers and colleges must work more closely together. Although large employers can independently establish partnerships with postsecondary institutions—Walmart has done this with Southern New Hampshire University, as has Starbucks with Arizona State University—industry-led public-private partnerships are particularly helpful in facilitating the engagement of often more capacity-constrained smaller and mid-sized employers as well as relatively more resource-constrained community colleges. Such partnerships convene multiple employers in an industry along with education, training, labor, and community-based organizations to create the necessary infrastructure for industry-postsecondary collaboration. An organization with industry expertise, capacity, and credibility among partners plays the convener role. Yet information on industry-led postsecondary partnerships is not publicized or widely available, which makes it difficult for partnerships to connect and learn from one another.

**FOCUS OF THIS PROJECT**

This project seeks to fill the gap by identifying industry-led public-private partnerships’ initiatives with postsecondary institutions and sharing information and lessons learned from such initiatives, drawing from interviews and a survey of industry-led postsecondary partnerships and their initiatives. We define industry-led public-private partnerships’ postsecondary initiatives as including more than one employer and one or more universities, community or technical colleges, and/or trade or vocational schools. Exhibit 1 provides this study’s research questions.

We took several approaches to identifying industry-led postsecondary partnerships’ initiatives and lessons learned. We first conducted a review of state workforce board websites, as well as publications and news items using key search terms such as partnerships, industry-led partnerships, public/private industry-led partnerships, sector partnerships, and postsecondary partnerships. We also interviewed six key informants from organizations with strong knowledge of such partnerships (National Association of Workforce Boards, National Governors Association, National Skills Coalition, U.S. Chamber of Commerce Foundation, American

---

**EXHIBIT 1**

1. Who is involved in industry-led public-private partnerships’ postsecondary initiatives?
2. What are the goals and activities of these initiatives?
3. How many individuals are participating in these initiatives and what are their populations of focus?
4. How are these initiatives financially supported?
5. To what extent are initiatives’ goals being met?
6. What additional insights and lessons did this study yield?
Association of Community Colleges, and Business-Higher Education Forum) to further identify partnerships with postsecondary initiatives, learn more about the challenges that initiatives face in their initial development and sustainability, and understand the characteristics of successful initiatives. We then interviewed leads (such as presidents, directors, and industry council leads) at five industry-led postsecondary partnerships representing five states (Michigan, Colorado, Vermont, Kentucky, and Arizona) and diverse industries (healthcare, manufacturing, energy, construction, agriculture, and technology). These interviews allowed us to learn more about these partnerships’ initiatives, hear about other initiatives, and refine our survey questions.

We also conducted a survey to gather information on more partnerships’ postsecondary initiatives. Our efforts helped to identify 40 industry-led postsecondary initiatives that had contact information. These postsecondary initiatives span 20 states (as well as two national initiatives) and 10 industries. We reached out to each partnership, inviting the person most involved in the partnership’s postsecondary initiative(s) (e.g., the president, director, or industry lead) to complete our survey. Through our outreach, we secured completed surveys on 23 current postsecondary initiatives. As Exhibit 2 indicates, these 23 initiatives are in 10 states throughout various regions of the United States.

EXHIBIT 2. MAP OF 23 INDUSTRY-LED POSTSECONDARY INITIATIVES SURVEYED

There are a variety of industry-led postsecondary initiatives across the country. For example, in Vermont there is the Medical Assistants and Mental Health Technicians initiative developed by the Vermont Talent Pipeline partnership. This initiative partners with local public 2-year community colleges to offer career awareness/exploration activities, and activities for prospective and current employees. The goal of the initiative is to create job opportunities for entry-level workers seeking career advancement in healthcare.

Note: Two additional national initiatives are not depicted on the map because they do not reside in one state.

Source: AIR’s 2023 Survey of Industry-Led Postsecondary Initiatives
As Exhibit 3 shows, the surveyed initiatives encompass a broad range of industries, with manufacturing and healthcare being the most common. The surveyed initiatives began as early as 2004 and as recently as 2023.

In the following sections, we provide a current picture of industry-led public-private partnerships’ postsecondary initiatives. We do this by weaving together our data to address our research questions and providing in Appendix B an abbreviated directory of the initiatives surveyed.

It is our goal that this project’s findings will help employers, postsecondary institutions, policy makers, and funders build on and expand industry-led public-private partnerships’ postsecondary initiatives and ultimately better support students in their careers.

**EXHIBIT 3. INDUSTRY OF FOCUS FOR THE POSTSECONDARY INITIATIVE (N=23)**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tech</td>
<td>4%</td>
</tr>
<tr>
<td>Energy</td>
<td>4%</td>
</tr>
<tr>
<td>Construction</td>
<td>9%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>9%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>35%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>39%</td>
</tr>
</tbody>
</table>
Who Is Involved in Industry-Led Public–Private Partnerships’ Postsecondary Initiatives?

THE INTERMEDIARY

The majority of survey respondents (86%) reported that they have an intermediary organization facilitating the partnership. Common intermediaries included a local workforce development board or a local economic development agency. Local chambers of commerce, funders of the postsecondary initiative, or an independent entity also served as an intermediary. Of survey respondents, 14% reported that an employer and/or industry association served as the lead for the partnership.

In interviews, key informants from organizations indicated that the involvement of an intermediary that championed the initiative was central to the success of these postsecondary initiatives. These key informants underscored that the intermediary organization is important in these partnerships because of the significant amount of time and effort required to solicit and convene industry and postsecondary partners and ensure continuous engagement among all parties. Many businesses and postsecondary institutions do not have the time or capacity to do this, and so the absence of an intermediary ultimately limits partnerships’ ability to successfully convene. The intermediary is also helpful in that it can serve as a neutral party between the industry partners and the postsecondary institutions. Incorporating a trusted intermediary that is in the regional or local ecosystem of the initiative also can be beneficial in bringing partners together and diversifying the range of stakeholders engaging in discussions.

INDUSTRY PARTNERS

Our survey found that these partnerships involved large numbers of employers. As Exhibit 4 indicates, 13% of respondents reported having fewer than 10 employers participating; 39% had between 11 and 25 employers as partners; and 26% had more than 50 employers. Another 17% fell in the middle, having between 26 and 50 employers as partners.
Employer partners’ level of involvement with the initiatives varied, with most survey respondents indicating that employers were involved in the partnership in more than one capacity. Exhibit 5 reveals that 91% of the initiatives had at least one employer partner involved in a strategic capacity, meaning that the employer was involved with the design of the initiative, provided resources and/or funding for the initiative, and thought about the sustainability of the initiative. The exhibit also shows that 78% of the initiatives had at least one employer partner that served in an advisory capacity, meaning that the employer met periodically with the organization running the initiative to receive updates and provide feedback. Nearly half (43%) of respondents reported that at least one employer partner participated in a hands-on capacity, meaning that the employer collaborated closely with the initiative (e.g., was involved in day-to-day operations such as overseeing hiring and staffing).

**EXHIBIT 4. NUMBER OF INDUSTRY PARTNERS INVOLVED IN AN INITIATIVE (N=23)**

- **UNKNOWN**: 4%
- **< 10**: 13%
- **11-25**: 39%
- **26-50**: 17%
- **> 50**: 26%

**EXHIBIT 5. INDUSTRY AND POSTSECONDARY PARTNER ENGAGEMENT (N=23)**

- **ADVISORY**
  - Industry: 78%
  - Postsecondary: 87%

- **STRATEGIC**
  - Industry: 91%
  - Postsecondary: 87%

- **HANDS-ON**
  - Industry: 43%
  - Postsecondary: 39%
POSTSECONDARY PARTNERS

The number of postsecondary institutions involved in these initiatives was smaller than the number of employers. As Exhibit 6 shows, 61% of initiatives had between one and four postsecondary institutions as partners, 17% had between five and 10 institutions as partners, and 3% had 11 or more postsecondary institutions as partners.

EXHIBIT 6. NUMBER OF POSTSECONDARY PARTNERS INVOLVED IN AN INITIATIVE (N=23)
As for the types of postsecondary institutions involved, Exhibit 7 reveals that every initiative had at least one public 2-year community college as a partner and 74% of initiatives had a public 4-year college as a partner. About 35% of the initiatives included a less than 2-year college, 22% included a nonprofit private college, and just 13% included a for-profit college.

Survey respondents indicated that postsecondary institutions joined their partnership in a variety of ways. Exhibit 5 highlights that 87% of initiatives had at least one postsecondary institution partner in a strategic capacity. The majority of initiatives (87%) also had at least one of the postsecondary institutions join in an advisory capacity. More than a third (39%) of initiatives had at least one postsecondary partner serve in a hands-on capacity. As Exhibit 5 highlights, initiatives were more likely to report a postsecondary partner participating in an advisory capacity than an employer partner (87% versus 78%, respectively).

Survey respondents also indicated that their initiative included partners other than employers and postsecondary institutions. More than 80% reported a workforce development organization participating, and 64% indicated an economic development organization's involvement. These types of organizations often served as the partnership's intermediary. More than two thirds listed having a K-12 education partner, 40% reported having a state or local government partner, and 40% noted they had a community-based organization partner.
What Are the Goals and Activities of These Initiatives?

Survey respondents were asked to indicate in their own words the major issues or goals that their initiative was trying to solve or achieve. We characterized these goals as follows, with some initiatives stating more than one goal. Of respondents, 39% referenced educating individuals about industry careers and opportunities as a primary goal of their initiative. About 26% framed their work as focused on creating or expanding the talent pipeline for a particular industry or career. Another 26% noted targeting the skills gap through education, training, and upskilling, whereas 22% described their work as focused on addressing workforce growth challenges.

The activities to address these issues and goals, conducted in partnership with postsecondary institutions, fell into three primary areas: career awareness/exploration activities, activities for potential employees and new employees, and activities for current employees. Exhibit 8 reveals that almost all (96%) of postsecondary initiatives offered career awareness/exploration activities, and nearly all (91%) provided job training and placement for potential and new employees. Activities related to upskilling and retention for current employees were less common, at 61%.
How Many Individuals Are Participating in These Initiatives, and What Are Their Populations of Focus?

The overall number of individuals who participated in partnerships’ postsecondary initiatives in the prior year varied. Seven respondents did not or could not provide this information. As Exhibit 9 indicates, of the 16 initiatives that could provide data, 38% served less than 50 individuals in a year, and 19% served more than 600 individuals annually.

The survey also asked respondents to indicate whether their initiative had a specific population of focus. Four initiatives did not have a population of focus; for those that did, the most common were K–12 students (32%), people of color (32%), and entry-level or low-skilled workers (21%). Other populations of focus included women (16%), people living with substance use disorders (16%), postsecondary students (16%), people living with disabilities (11%), and justice-involved/at-risk youth (11%).

The survey also probed deeper into how initiatives with a focus population considered and worked with those populations. Of these initiatives, 25% served only participants from their focus populations, whereas other initiatives also engaged other populations. Of these initiatives, 43% had their populations of focus involved in developing or maintaining the initiative.

EXHIBIT 9. NUMBER OF INDIVIDUALS SERVED BY POSTSECONDARY INITIATIVES IN THE PRIOR YEAR (N=16)

- **38%** served less than 50 individuals.
- **25%** served 50–199 individuals.
- **13%** served 200–399 individuals.
- **6%** served 400–599 individuals.
- **19%** served 600+ individuals.
How Are These Initiatives Financially Supported?

Postsecondary initiatives had various funding sources. As Exhibit 10 highlights, 70% received state funding, 57% received funding from the private sector, and 43% received federal funding. Six respondents could not report an approximate yearly cost for their initiative, but, among those who could, about a quarter (24%) listed a yearly cost of less than $30,000 and another quarter (24%) reported a yearly cost between $30,000 to $99,999. About 29% of initiatives had a yearly cost between $100,000 and $400,000, and 17% had a yearly cost of more than $400,000.

Survey respondents also were asked about partners providing in-kind support. More than a quarter (27%) of initiatives had partners that provided career coaching/mentoring services, and almost a quarter (23%) of initiatives had partners that offered wraparound services such as child care, transportation, and scholarship assistance. Another 23% of initiatives had partners that helped forge connections to industry in the form of referrals, letters of support, and expert advice.

EXHIBIT 10. FUNDING SOURCES FOR POSTSECONDARY INITIATIVES (N=23)

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>70%</td>
</tr>
<tr>
<td>Private Sector</td>
<td>57%</td>
</tr>
<tr>
<td>Federal</td>
<td>43%</td>
</tr>
<tr>
<td>Local</td>
<td>35%</td>
</tr>
<tr>
<td>Postsecondary Institutions</td>
<td>17%</td>
</tr>
<tr>
<td>Private Philanthropy</td>
<td>13%</td>
</tr>
<tr>
<td>Funded Solely by Partnership Members</td>
<td>9%</td>
</tr>
</tbody>
</table>
To What Extent Are Initiatives’ Goals Being Met?

We asked survey respondents how their initiatives were progressing on their established goals. As Exhibit 11 highlights, 26% of initiatives were just beginning to meet their goals, more than half (57%) were meeting some of their goals, and 17% were meeting all their goals. These percentages did not vary depending on the length of time an initiative had been in operation.

Key informants also offered their perspective on what leads to successful implementation and sustainability of partnerships’ postsecondary initiatives. They stressed that, in addition to having an intermediary champion the initiative, it is important to simplify stakeholder engagement. Key informants noted that there is immense value in having employer and postsecondary partners weigh in on what a successful initiative would look like, as well as on deliverables and expectations. One key informant was part of an organization that created a toolkit and practices reflecting what works in such partnerships and noted that this toolkit has been a critical resource for current and potential partnerships.²

² One such toolkit in the field is the U.S. Chamber of Commerce Foundation’s Talent Pipeline Management framework (https://www.uschamberfoundation.org/talent-pipeline-management).
Industry-led public–private partnerships can strengthen student pathways into careers. However, developing, sustaining, and scaling these initiatives can be challenging. Here, we offer insights that can support such initiatives.

When it comes to developing initiatives, there can be a disconnect between employers and postsecondary institutions that prevents them from having a similar understanding of the initiative goals. For partnerships seeking to address employers’ skill needs, employers and institutions should come together early to understand and identify talent needs and determine how institutions can fill those needs and translate them into a curriculum or credential employers recognize as valuable.

Initiative sustainability also is challenging. Partnerships with smaller businesses tend to involve more employers, which sometimes makes it harder to keep participation levels high. Turnover in employer and postsecondary staff involvement is another barrier. Sustainability of initiatives requires longer term sources of funding, which can be hard to secure. These challenges underscore the importance of having a strong intermediary managing the partnership and initiative. Key informants also reported that funding that goes solely toward postsecondary initiatives and not toward developing the partnership can impede the long-term success of the initiative.

To help with maintaining engagement and securing more funding, partnerships and initiatives can demonstrate their progress. Examples of early achievements initiatives can strive for and then point to include: (a) securing the right partners that share the same set of goals, articulating clear program outcomes; (b) putting the proper infrastructure in place that speaks to employers’ needs; (c) obtaining workforce development resources; and (d) incorporating diversity, equity, and inclusion into program design, participation, and outcomes measurement.

To further sustain momentum, initiatives should work to build capacity and supports for employer partners to be actively involved. Broader activities include creating regional leadership coalitions between education and workforce partners; and crafting industry-informed solutions that create shared value for students, workers, postsecondary institutions, and industry to better align the education and workforce systems. Partnerships should prioritize securing a consistent stream of financial support for these coalitions to foster sustainability. Partnerships also should measure key milestones and metrics that track both the success of and employer satisfaction with reaching initiative goals.
To further support sustainability and scaling of industry-led public-private partnerships’ postsecondary initiatives, more attention needs to be devoted to documenting return on investment. This study found that survey respondents often had difficulty reporting the number of individuals participating in initiative activities, the extent to which participants were members of the focus populations that the initiative aimed to support, and initiative costs. Respondents also reported that they struggled to collect metrics from employers since some employers seek to keep this information internal.

To support the growth and scaling of these initiatives, an evaluator should work with the intermediaries leading initiatives to support their data collection efforts and provide models and simple infrastructure for collecting key information that can help them document outcomes. This work also could explore how employers might more comfortably enter into data-sharing agreements that would facilitate their providing some information on their participants to an independent evaluator and/or aggregate through collection by a neutral convener for the purposes of data anonymity. This work could further develop approaches for an evaluator to provide individualized reports to employers on initiative outcomes for the employer’s participants as well as the employer’s return on investment and provide overall initiative outcomes and return on investment with employer information de-identified and aggregated.

Conclusion

It is our goal that this report—and its accompanying resources housed on the project website—will inform employers, postsecondary institutions, policy makers, and funders as they seek to build on industry-led public-private partnerships’ initiatives with postsecondary institutions. More specifically, we hope that our providing a clearer picture of the types of initiatives and activities that exist through our report and initiative directory will spur existing and potential industry-led public-private partnerships to connect and build and create new initiatives. This project also aims to help funders and policy makers think about how they can best advance these initiatives. In addition to providing more opportunities for initiatives to learn from one another, there is a clear need for impact evaluations and return-on-investment analyses. Such work can help articulate the case for these types of initiatives to partners and funders and advance the scaling of such initiatives so that more students experience smooth, successful pathways into careers.
Appendix A: Methodology

Three AIR staff members conducted this project’s literature review search. Team members reviewed state workforce boards as a part of the literature review search. The data collection team also received suggestions from internal AIR advisors who have worked at or with industry-led postsecondary partnerships on key organizations to interview and industry-led postsecondary initiatives. The team also conducted web searches using key terms such as industry-led partnerships, public/private industry-led partnerships, sector partnerships, and postsecondary partnerships.

The first phase of data collection included conducting interviews with six key informants from organizations (National Association of Workforce Boards, National Governors Association, National Skills Coalition, U.S. Chamber of Commerce Foundation, American Association of Community Colleges, and Business-Higher Education Forum), which took place from June to September of 2022. The interview topics included successful partnerships; challenges; lessons learned; characteristics for implementation and sustainability; and recommendations for funders, policy makers, and researchers. Key informants provided additional contacts, website links, and other useful information for our literature review and directory of partnerships. Information gathered from our key informant interviews informed the partnership interview protocols and survey questions.

The second phase of data collection included interviewing representatives from five industry-led public-private partnerships with postsecondary initiatives in October 2022 to learn more about these partnerships’ initiatives and further refine survey questions. We then piloted the survey with two partnerships to ensure the survey questions and response options would make sense to partnerships. From the 70 partnerships we identified through our work, we sent survey invitations to the 40 partnerships that appeared to be current and had contact information. During our survey administration, which took place January 4–February 16, 2023, we conducted six rounds of email outreach and one round of phone call outreach. Through these efforts, we secured survey data on 23 initiatives.

We conducted both quantitative and qualitative analyses for this project. Our survey analysis centers on descriptive statistics that capture the number of postsecondary initiatives by key dimensions in our typology (e.g., goals, types of postsecondary institutions, focus populations). For each multiple-choice question, we ran frequencies and percentages. Open-ended survey responses were examined for common themes and then coded respectively. Through this approach, our team generated 23 tables representing the responses from completed surveys. In analyzing our qualitative interview data, team members conducted a thematic analysis of notes and transcripts, grouping responses by common themes. We then examined survey results alongside key informant and partnership interviews to tease out further themes and provide additional context and lessons learned.
### Appendix B: Directory of Postsecondary Initiatives

<table>
<thead>
<tr>
<th>Name of Initiative</th>
<th>State</th>
<th>Industry of Focus</th>
<th>Career awareness/ exploration activities</th>
<th>Activities for new/ prospective employees</th>
<th>Activities for current employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Manufacturing Technical Education Collaborative</td>
<td>Nat</td>
<td>Manufacturing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discover Manufacturing Scholarship</td>
<td>Nat</td>
<td>Manufacturing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ElevateEdAZ</td>
<td>AZ</td>
<td>Healthcare</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career Pathways in Behavioral Health Exploration</td>
<td>CO</td>
<td>Healthcare</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front Range Community College</td>
<td>CO</td>
<td>Manufacturing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Area Healthcare Partnership</td>
<td>CT</td>
<td>Healthcare</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developing Alternative Workforce Pipelines</td>
<td>GA</td>
<td>Manufacturing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iowa Manufacturing 4.0 Initiative</td>
<td>IA</td>
<td>Manufacturing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CastleBranch Clinical Placement</td>
<td>KY</td>
<td>Healthcare</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The NWLA FAME Advanced Manufacturing Technician Program (AMT)</td>
<td>LA</td>
<td>Manufacturing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career AG-xploration</td>
<td>MI</td>
<td>Agriculture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discover Manufacturing Scholarship</td>
<td>MI</td>
<td>Manufacturing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earn and Learn Web Directory and Career Fair</td>
<td>MI</td>
<td>Manufacturing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand Rapids Community College Construction Apprenticeship Programs</td>
<td>MI</td>
<td>Construction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Care Apprenticeship Development</td>
<td>MI</td>
<td>Healthcare</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lineworker Pre-apprenticeship Training Program</td>
<td>MI</td>
<td>Energy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Michigan Tech Talent</td>
<td>MI</td>
<td>Tech</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Management</td>
<td>PA</td>
<td>Construction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthcare and Social Assistance Industry Partnership</td>
<td>PA</td>
<td>Healthcare</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing Industry Partnership</td>
<td>PA</td>
<td>Manufacturing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA Agricultural Apprenticeship and Pre-Apprenticeships</td>
<td>PA</td>
<td>Agriculture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Assistants, Mental Health Technicians</td>
<td>VT</td>
<td>Healthcare</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nursing Apprenticeship Pipeline</td>
<td>VT</td>
<td>Healthcare</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
References


Chan, A., & Cruzvergara, C. (2021). Outcomes and metrics that matter: Embedding career services at higher education’s core. Handshake. https://go.joinhandshake.com/rs/390-ZTF-353/images/Handshake_Outcomes%20and%20Metrics%20that%20Matter%20WP.pdf?alid=eyJpIjoiWENzSEh1U0tQQXZFUWxJYilsInQiOiJrdlVYWG8wWFVQanhzMnE0Zklxb1hnPT0ifQ%253D%253D


Established in 1946, the American Institutes for Research is an independent, nonpartisan, not-for-profit organization that conducts behavioral and social science research on important social issues and delivers technical assistance, both domestically and internationally, in the areas of education, health, and workforce productivity.