

## Summary of Workforce Development Needs Assessment Findings and Next Steps

### Background

In the fall of 2020, the Building Performance Association (BPA), with funding from the U.S. Department of Energy (DOE) and Pacific Northwest National Laboratory (PNNL), embarked on a workforce development (WFD) needs assessment. This assessment was designed to elicit feedback from BPA members and industry stakeholders on gaps, barriers, and challenges to developing and maintaining a vibrant home performance workforce. With the restrictions on travel and in-person gatherings due to the COVID-19 pandemic, BPA shifted the approach for the needs assessment to the utilization of virtual tactics, including issuing an industry-wide online questionnaire, four online polls during live conference sessions, five focus group meetings, and fifteen individual interviews. Additionally, BPA conducted a quick literature review to gather recently published reports by industry organizations, including WFD assessments and investigations by DOE and the national laboratories, State weatherization agencies, HVAC trade organizations, and news articles.

BPA will use and incorporate the information gathered from this outreach in a forthcoming WFD Strategic Plan. This multi-year plan is intended to tactically pursue transformative resources and activities that increase the flow of new workers, as well as retain and upskill current workers in the residential retrofit home performance industry. Through this outreach, BPA engaged over 800 members and other stakeholders in discussion of the industry's WFD challenges. This summary report provides an overview of these WFD needs assessment meetings, interviews, and survey results conducted from September 2020 through July 2021.<sup>1</sup>

### WFD Needs Assessment Approach

BPA's initial outreach methods included an online survey issued via Survey Monkey to BPA's members. The online survey was also promoted as a prompt to industry stakeholders when they visited the Association's website homepage.<sup>2</sup> Additionally, BPA hosted five focus group sessions where, after short presentations, participants discussed specific WFD topics including career pathways and awareness, the hiring pipeline, employee retention, training methods, and training content. The one-on-one interviews were conducted via conference call and/or videoconferencing. Lastly, BPA conducted participant polling during four virtual live conference event sessions. These participants also engaged in an open question-and-answer dialogue pertaining to the presented WFD-related content. The table below summarizes the organizations, outreach methods, and topics covered during the WFD needs assessment engagement.

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<sup>1</sup> BPA anticipates ongoing feedback and input to continue coming in from BPA members and industry stakeholders. This information, as appropriate, will be folded into the forthcoming WFD Strategic Plan. BPA members can join the discussion on the BPA Connections [community page for Training and Careers](#).

<sup>2</sup> To see the results from the survey, visit: <https://bpa.connectedcommunity.org/viewdocument/results-from-the-workforce-developm?CommunityKey=b44f222d-b3d7-4279-ad38-ed00fd4d7ac7&tab=librarydocuments>

## Summary of Outreach and Engagement

Organizations/Event	Outreach Method	Number Reached <sup>3</sup>	Main Topics				
			Career Pathway/Awareness	Hiring Pipeline	Retention	Training Methods	Training Content
<b>BPA Members and Industry Stakeholders:</b> contractors, trainers, vendors, consultants	Online Survey	415	●	●	●	●	●
<b>NASCSP Workforce Work Group:</b> weatherization CAP agencies (met several times)	Focus Group	12		●	●		
<b>WFD Advisory Committee:</b> trainers, vendors, consultants, state energy offices, utilities, DOE, PNNL, community colleges, weatherization	Focus Group	10	●	●	●	●	●
<b>State Energy Offices, Contractors, Trainers, Manufacturers, and Industry Subject Matter Experts (SMEs)</b>	One-on-one Interviews	15	●	●	●	●	●
<b>BPA Board of Director's WFD Task Force:</b> contractors, trainers, vendors, consultants, community colleges, weatherization agencies. (met several times)	Focus Group	12	●	●	●	●	●
<b>Midwest Town Hall:</b> contractors, program implementers, trainers, vendors, consultants	Live Session	100+	●	●	●	●	●
<b>Finding &amp; Attracting Session:</b> contractors, trainers, vendors, consultants, program implementers	Live Session	172	●	●			
<b>Retention Session:</b> contractors, trainers, vendors, consultants, program implementers contractors, trainers, vendors, consultants	Live Session	153	●	●	●		
<b>Career Pathways Session:</b> contractors, trainers, vendors, consultants, program implementers contractors, trainers, vendors, consultants	Live Session	287	●	●	●		

## WFD Needs Assessment Summary of Findings

BPA's WFD needs assessment indicates **top concerns are awareness of career paths, finding and attracting people for jobs and for training, and addressing the costs of attrition.** The table below presents a summary of findings as a result of the needs assessment investigation, organized by the topic areas of inquiry. Information provided is a consolidation of comments and responses to questions.

<sup>3</sup> Some groups met more than once; numbers listed represent the count of individuals present/participating.

## WFD Issues and Needs Identified

Awareness of Building Performance Industry Career Opportunities
<p><b>Lack of awareness:</b> new entrants to the building performance industry, and society, in general, do not understand the depth and breadth of the career opportunities available; there is a need for:</p> <ul style="list-style-type: none"> <li>• specific building performance-defined paths for progression that show core skill competencies, the interoperability of trades, earning potential, and growth opportunities;</li> <li>• engagement of other, new stakeholders reaching beyond typical building performance audiences to involve environmental justice communities, veterans, formerly incarcerated individuals, youth, women, minorities, immigrants, and others who are hard-to-reach</li> </ul>
<p><b>Poor perception:</b> industry stakeholders and workers often indicate that home performance work is dirty, dangerous, and demanding</p>
<p><b>High impact of poor-quality services:</b> there is a need for quality assurance practices to strengthen the value of services delivered, as well as perception of the industry</p>
<p><b>Inconsistent demand:</b> the home performance industry is subject not only to seasonality swings, but also to boom/bust programs from the government and utilities</p>
<p><b>Constrained capacity:</b> the home performance industry is characterized by fragmented trade services and small businesses with limited proficiency in human resources and business operations skills; there is a need to expand the types of trades and businesses involved in selling/installing building performance services and products</p>
<p><b>Poor understanding of skills enhancement needs to progress in career:</b> workers and employers struggle with knowing which certificates and/or skills are needed and when</p>
Ability to Find, Hire, and Retain Workers
<p><b>Difficulty finding and attracting workers and trainees:</b> contractors and training organizations struggle with the proper outreach tools to attract people to enroll in training or apply for job openings</p>
<p><b>Job requirements limit applicant pools:</b> the industry needs inclusive job requirements (e.g., eliminate degree requirements, do not rely solely on experience, reward ambition/intention, etc.); there is a need to expand the reach of applicant pools to veterans, formerly incarcerated, youth, women, minorities, immigrants, and others who are hard-to-reach</p>
<p><b>Wage concerns:</b> the cost of entry into industry is high (e.g., technical training requirements) and remuneration is low</p>
<p><b>Poor connection linking trainees and jobs:</b> training programs need to be connected to active employment opportunities</p>
<p><b>Cost of hiring and attrition:</b> employers spend time and money hiring and training new workers only to lose them to other organizations</p>
<p><b>Lack of owner commitment:</b> business owners need to understand the value proposition of investing people for retention; this includes investing in career development and other employee benefits</p>
<p><b>Lack of hiring processes and/or the understanding of them:</b> many small businesses lack skills in vetting/assessing applicants; they need:</p> <ul style="list-style-type: none"> <li>• better understanding of desired core competencies</li> <li>• removal of unconscious biases to provide equal access</li> <li>• better skills in interviewing for emotional intelligence and attitude (e.g., motivation, self-awareness, self-regulation, empathy)</li> </ul>
<p><b>Regional complexities:</b> building performance companies and weatherization agencies need to understand regional differences in finding, attracting, and maintaining workers, particularly for rural vs. urban/suburban locations</p>

<b>Poor awareness of, and access to, WFD resources:</b> building performance companies and agencies, especially small companies, need a centralized resource for recruiting and vetting candidates
<b>Challenges with Access to and Training Delivery Methods</b>
<b>High cost of training:</b> small businesses struggle with offsetting the lost revenue and cost of training new employees; new entrants struggle with accessibility barriers to participating in training, including cost, time, and transportation
<b>Difficulty on-boarding new employees:</b> need for connecting new entrants and recent trainees to on-the-job (OJT)/internship opportunities, particularly for hands-on learning; additionally, employers need support in accessing OJT services
<b>Poor awareness of training curricula resources:</b> building performance organizations, particularly small contractors, express interest in a centralized resource to connect individuals and businesses to WFD resources; there is a desire for a “one-stop shop” that points to jobs, career resources, business tools, and on-demand training
<b>Need for coordination with unions:</b> there is interest in finding a mutual path forward between union and non-union stakeholders that enables collaboration among weatherization, energy efficiency, and building performance services
<b>Cost-effectiveness challenges:</b> there is poor valuation of the impact of training and WFD initiatives, including the estimation of benefits from building performance training; additionally, there is poor estimation of costs due to stop/start cycles of incentive programs for energy efficiency measures
<b>Poor understanding of building performance career paths and required skills:</b> some training organizations, such as community colleges, do not understand the needs of the building performance industry; for example, there is confusion with renewable energy/clean energy and competition with construction industry
<b>Lack of coordination/connection between contractors and education organizations:</b> there is a need for updated curricula design to match with industry requirements, as well as a need to address differences in regionality issues
<b>Need for Augmentation of Training Content</b>
<b>Minimal organizational change management support:</b> businesses need training on business model innovation and growth strategies, automation procedures, and best practices in integrating across trades (renewables with home performance; HVAC and weatherization, etc.); within weatherization assistance programs, training needs include crew leader skills, especially related to delivery of hands-on training for crews, subcontractor procurement, delivery of and use of quality improvement plans (QIPs), succession planning, and leadership/management skills
<b>Minimal skills and capacity for business operations and human resource (HR) functions:</b> with much of the industry characterized by small businesses, these organizations need a roadmap to develop their capabilities for core business functions (e.g., HR operations, accounting, business planning, leadership, and management, etc.)
<b>Need for simplified and lower cost of entry for new employees:</b> employers need training and certifications specifically designed to bring new entrants to the field; new entrants need basic job skill curricula (e.g., showing up on time, effective communication, being properly dressed, etc.)
<b>Need to teach new skills and new technologies to existing workforce:</b> with continued advancement of building performance technologies (e.g., heat pumps, shading attachments, connected/smart devices, etc.) and emerging policies (e.g., advanced building codes, decarbonization, electrification, etc.), there is a need for updated training content and guidance

## Actions to Address Identified WFD Challenges

With the information gathered from the WFD needs assessment, BPA will develop a WFD Strategic Plan focused on three primary challenges:

1. Supporting the representation and voice of the building performance industry by improving awareness of the various meaningful and well-paying career pathways in the building performance trades;
2. Expanding the building performance workforce by enhancing tactics to find and attract a diverse and inclusive representation of applicants; and
3. Strengthening building performance organizations' ability to retain and train new and existing workers by improving access to WFD resources.

Central to implementation of the WFD Strategic Plan will be BPA's continued expansion of the online Training and Careers Hub, which is designed to connect the industry to curated training curricula, training providers, job postings, and career development. Going forward, BPA will continue augmentation and build-out of these resources with the following core components:

- Professional Development Center – In conjunction with the Green Buildings Career Map, BPA will add tools specific to building performance on standard job descriptions, qualifications, and career pathways.
- Training Exchange – BPA will accelerate partnerships with individual trainers, training organizations, and educators to co-deliver curated content on technical training, soft-skills training, best practices, and more. The resource collection will continually grow and will be showcased in conjunction with local, regional, and national training events.
- Business Academy – Central to BPA's WFD efforts is supporting building performance organizations in finding, attracting, and retaining workers while also developing business operations to deliver high quality projects, products, and services. The Business Academy will offer access to curated business operations curricula packages on human resources functions, quality management systems, accounting, management leadership, and more.

In closing, BPA appreciates the time and attention many of the Association's members and industry stakeholders provided to support the input, feedback, and analysis of findings of the WFD needs assessment and the candor with which they replied to our inquiries. It is very apparent from these conversations that WFD is regarded as an issue critical to the survival of our members, and this has only been exacerbated by the Pandemic. The Association invites the community's continued ideas and feedback on WFD challenges and opportunities. BPA's objective is to continue to build, strengthen, and amplify the voice of the industry while improving building performance businesses and organizations' delivery of high-quality services.