

Understanding and Advancing the Preservation Trades

NORTHEAST REGIONAL INITIATIVE FOR THE PRESERVATION TRADES



Northeast Regional Initiative for the Preservation Trades

This program is a four-state partnership between the Preservation League of New York State, Preservation Trust of Vermont, the New Hampshire Preservation Alliance, and Maine Preservation.

This research initiative aims to develop recommendations for how these statewide preservation non-profit organizations can work collaboratively to advance the training and placement of workers skilled in the preservation trades. Findings will be used to guide future investments made by the organizations in the most effective and needed training and placement models, aiming to create a more robust, diverse, and sustainable workforce.

Preservation League of New York State

44 Central Ave Albany, NY 12206



preservenys.org

New York's statewide nonprofit focused on investing in people and projects that champion the essential role of preservation in community revitalization, sustainable economic growth, and the protection of our historic buildings and landscapes.

New Hampshire Preservation Alliance

7 Eagle Square PO Box 268 Concord, NH 03302-0268



nhpreservation.org

A statewide non-profit membership organization that helps people protect and revive historic buildings and places to strengthen communities and stimulate local economies.

Preservation Trust of Vermont

104 Church St. Burlington VT 05401

ptvermont.org



Preservation Trust of Vermont

The Preservation Trust of Vermont is a statewide non-profit organization founded in 1980 whose mission is to help communities save and use historic places. Much of our focus is on strengthening downtowns and village centers, supporting local initiatives, and building capacity.

Maine Preservation

P.O. Box 488, Yarmouth, ME, 04096



Maine Preservation is a statewide non-profit organization dedicated to promoting and preserving historic places, buildings, downtowns, and neighborhoods, strengthening the cultural and economic vitality of Maine communities.

Acknowledgements

This research would not have been possible without the many tradespeople, educators, workforce development professionals, preservation advocates, and other stakeholders who volunteered their time to thoughtfully participate in the survey, focus groups, and interviews. We thank each of them for sharing their experiences, insights, and suggestions with our research team.

The initiative is funded in part by grants from The Moe Family Fund for Statewide and Local Partners through the National Trust for Historic Preservation and The 1772 Foundation. Inc.





TABLE OF CONTENTS

- WHY IS THIS TOPIC IMPORTANT?
- **KEY FINDINGS**
- UNH COOPERATIVE EXTENSION RESEARCH TEAM
- RESEARCH METHODS
 - Survey 8
 - **Overview of Survey Respondents**
 - Interviews 10
 - Focus Groups
 - 11 A Note on Research Limitations
- 12 ASSESSING THE NORTHEASTERN PRESERVATION TRADES WORKFORCE
 - 12 Workforce Shortages
 - 14 Preservation Challenges and Opportunities in the Northeast
- 16 PRESERVATION TRADES AS CAREER PATHS
 - 17 Career Appeal
 - **Recommended Career Paths**
 - Perceptions of Preservation Trades Careers
 - Factors for Success in These Careers
- 26 WORKFORCE DEVELOPMENT, TRAINING, AND EDUCATION
 - 26 Hiring Needs and Challenges
 - 28 Training Pathways
 - 28 Training Challenges
 - 31 Training Programs and Workforce Recruitment

- 31 Apprenticeships and Mentoring
 - 31 Apprenticeships
 - 34 Informal Mentoring
- 34 Professional Development and **Continuing Education**
 - 36 Networks and Support
 - 38 Certifications, Credentialing, and Licensure
- 39 Youth Education and Engagement
 - 40 Career and Technical Education (CTE) and Other High School Education
 - 42 Engagement Across Age Groups
- 42 Shifting Narratives for Greater Inclusivity
 - 45 The Roles of Preservation Nonprofits
- 46 RECOMMENDATIONS AND FUTURE ACTIONS
 - 46 A. Building Awareness and Enthusiasm for the Preservation Trades
 - 48 B. Workforce Development and Recruitment
 - 49 C. Expanding and Enhancing Educational
 - 50 D. Workforce Retention and Capacity Building
 - 51 E. Measuring and Monitoring Success
 - 53 F. Recommendations for Future Study and Information Gathering
- 53 DISCUSSION AND CONCLUSION
 - 56 References/For Further Reading

Understanding and Advancing the Preservation Trades

WHY IS THIS TOPIC IMPORTANT?

Across the Northeast region of the United States, property owners, preservation organizations, and employers have noted widespread workforce shortages of trades professionals who have skills and knowledge specific to working on older buildings. This problem has been exacerbated by a variety of factors: the increasing number of buildings at a critical age for repairs, the widespread retirement of existing tradespeople, and recent rural in-migration trends across the Northeast region increasing labor demand. The workforce shortage limits means for historic buildings – whether notable or "everyday" – to be maintained, improved, and adapted to current needs.

Historic preservation is a critical element of community vitality and fostering a strong sense of place and connection to local heritage. Preservation practices also offer important environmental sustainability strategies toward climate change mitigation and resource conservation. Preservation tradespeople are essential to the success of historic preservation more broadly; thus, finding ways to create a stronger workforce throughout the Northeast will help enable preservation practices that are accessible and available to a broader range of property owners and managers, in turn making more older homes in the Northeast livable and safe, especially considering current affordable housing shortages.

This research seeks to build upon previous studies and investigations of preservation trades and workforce development such as the recent labor study from the Campaign for Historic Trades. This study estimated that the rehabilitation of buildings represents an estimated \$85 billion and creates 165,000 jobs annually across the United States.¹ From economic, cultural, and environmental standpoints, preservation trades matter, and sustaining this workforce demands greater attention.

This project employs a multiple-methods research approach including a survey, interviews, and focus groups to understand the experiences and perceptions of current preservation trades professionals in the Northeast, gather information pertaining to training and recruitment gaps and opportunities, analyze why or why not professionals may chose preservation trade careers, and recommend specific courses of action to create a more robust and sustainable workforce.

Definitions

Historic Preservation

The process of identifying, protecting, and enhancing buildings, places, and objects of historical and cultural significance.

Preservation Trades

Skilled jobs requiring training and knowledge specific to the maintenance, restoration, and rehabilitation of historic buildings, places, and objects (i.e. at least 50 years old). Examples of such trades are preservation masonry, preservation carpentry, and window restoration, among many other possible professions.



96%

of survey respondents reported satisfaction in their careers

95%

believe that preservation trades can provide an interesting, fulfilling and profitable career path

77%

of survey respondents stated that informal mentoring had been "very important" to them

KEY FINDINGS

WORKFORCE SHORTAGES

Nearly all preservation trades in the Northeast are currently experiencing moderate to severe workforce shortages, as perceived by survey respondents.

- Plastering, masonry, and carpentry were perceived to have the most acute shortages.
- There were relatively few concerns about job security in these trades, reflecting high current demand and expected future workforce attrition.

WORKER SATISFACTION

Worker satisfaction in preservation trades careers is very high.

- 96% of survey respondents reported satisfaction with their careers.
- 95% believe that preservation trades can provide an interesting, fulfilling, and profitable career path.
- Most respondents would recommend a variety of preservation trades careers to young people.

LACK OF CAREER PATH AWARENESS.

There is a broad lack of awareness of preservation trades as career paths.

- General trades education and recruitment often overlooks preservation specializations, suggesting possible opportunities for curricular development and partnerships.
- Common (mis)perceptions of "historic preservation" may impact who is interested in this work and what people think it entails.
- Many tradespeople do not associate preservation nonprofits with workforce development efforts, thus there is space for deeper on-the-ground engagement.

OVERCOMING STIGMA

Stigma pertaining to the trades as career paths has contributed to decades of workforce deterioration, but trends are shifting.

 There is increasing opportunity to make good pay working in the trades, in part due to workforce shortages and changes in compensation norms.

UNH EXTENSION | 5

¹ Campaign for Historic Trades (prepared by PlaceEconomics). Status of Historic Trades in America. July 2022.

• Preservation trades, in particular, can advantageously engage intellectual curiosities, innovation, and creativity.

WORKFORCE DIVERSIFICATION

While preservation trades in the Northeast have historically been dominated by white men, the workforce is diversifying and there are opportunities to build upon this momentum of change.

• Women, in particular, are increasingly entering the trades and finding both welcoming attitudes and success, although gender biases and discrimination can still occur.

TRAINING

On-the-job training and field-based experience are essential to be prepared for work in the preservation trades.

- New hires often lack basic construction or trades skills, leading to much frustration among existing tradespeople who may have limited time and resources to train new employees.
- For new hires who do have general trades backgrounds, preservation techniques can require a large investment of additional training time and added costs.
- 77% of survey respondents stated that on-the-job training had been "very important" to them.
- Existing training programs tend to play only limited roles in outreach and recruitment, suggesting potential for expanded engagement in workforce development.

APPRENTICESHIPS AND INTERNSHIPS

Apprenticeships and internships can be highly valuable, but participant experiences vary greatly.

- Teaching others can require a large commitment of time and energy, as well as teaching-specific skill sets.
- Nonprofit and agency partnerships may be able to help enhance pedagogical approaches, pay, and participant matching.

EARLY FINANCIAL BURDEN

The financial burden of the learning/training period is substantial for students and new professionals.

- · Preservation advocates, educators, students, and trades professionals alike express a widespread demand for more higher-paying apprenticeships.
- Financial aid is often not available for preservation trades training or is insufficient.

CERTIFICATION & CREDENTIALING PROGRAMS

Many educators and tradespeople are interested in preservation-specific certification and credentialing programs, although there is a lack of consensus about their role and utility.

ONGOING LEARNING

The skills needed for preservation trades are nuanced and require ongoing learning.

- Continuing education opportunities are limited or difficult to reach, especially for certain trades.
- More networking opportunities are needed (both formal and informal).
- · Supplementary knowledge bases such as business, finance, and marketing are highly important but often overlooked.
- Informal mentoring plays an essential role in professional development and career satisfaction.

YOUTH EDUCATION & OUTREACH

Youth education and outreach is crucial for creating interest and excitement about these career paths.

- The loss of shop classes in many Northeast middle and high schools has been detrimental, but there are opportunities to partially ameliorate this via high school Career and Technical Education (CTE) and nonprofit partnerships.
- General trades curricula in high schools and technical schools rarely incorporate preservation-specific knowledge and skills. There is opportunity for more crossover.
- Trades fairs, summer camps, and other youth and family-oriented events and programs can help build interest and awareness across age groups.

UNH COOPERATIVE EXTENSION RESEARCH TEAM

The Community and Economic Development team at the University of New Hampshire Cooperative Extension focuses on programs, research, and education to strengthen local community, economy, and leadership.

Jada Lindblom, Associate Field Specialist

Jada is a Community and Economic Development Field Specialist based in Belknap County, NH. Jada's focus areas include workforce development, historic preservation, downtown revitalization, business retention and expansion, sustainable tourism, and outdoor recreation. Prior to joining UNH Extension, she was a research associate at Arizona State University's Center for Sustainable Tourism and worked as a historic sites manager for a statewide preservation organization. She holds a Ph.D. in Community Resources and Development from Arizona State University, a M.S. in Parks, Recreation and Tourism from the University of Utah, and a B.A. in Environmental Studies from Scripps College.

Molly Donovan, Associate State Specialist

Molly is a NH State Specialist in Community and Economic Development. Her work is focused on community resilience, revitalizing main street, business retention and community engagement. Molly's recent research includes youth retention and workforce issues and trail stewardship as economic development. She has a multi-state background in housing, historic preservation, land conservation and economic development. Molly holds a master's degree in Urban Planning from the University at Buffalo and a B.A. from Canisius College in Political Science and Urban Studies.

Scott Slattery, Associate Field Specialist

Scott is the Community and Economic Development Field Specialist in Hillsborough County, NH where he is working on business retention and local community visioning and leadership. Scott has been a non-profit practitioner and administrator for over 30 years focusing on serving low- and moderate-income families through affordable housing and capacity building initiatives. Scott holds an M.S. in Community Economic Development from Southern New Hampshire University and a B.S. in Geography from Plymouth State College.

Project Lead and Contact

Jada Lindblom University of New Hampshire Cooperative Extension 64 Court St, Laconia, NH 03246 jada.lindblom@unh.edu

Report Design: Sandra Hickey, UNH Cooperative Extension

Production Assistance: Patricia Prescott, UNH Cooperative Extension

Research and Report by University of New Hampshire Cooperative Extension

The University of New Hampshire Cooperative Extension is an equal opportunity educator and employer. UNH, U.S. Dept. of Agriculture, and New Hampshire counties cooperating.

Research, economic engagement and outreach at the University of New Hampshire, a Carnegie doctoral research university with very high research activity, seek to understand and improve the world around us, with high-impact results that transform lives, solve global challenges and drive economic growth. Our research excellence reaches from the depths of our oceans to the edge of our solar system and the Earth and environment in which we all thrive. With research expenditures of more than \$130 million, UNH's research portfolio includes partnerships with NOAA, NASA, NSF and NIH. UNH is one of the top institutions in the country for licensing its intellectual property, and its outreach programs reach thousands of communities, companies, families and students each year.

Photo Right: Barn improvement projects underway at Prescott Farm, Laconia, NH



RESEARCH METHODS

To understand broader trends in perceptions, opinions, and experiences as well as more in-depth insights pertaining to the preservation trades in the Northeast region, this project incorporated a mixed-methods research approach consisting of an online survey, key informant interviews, and topical focus groups. This research plan was approved by the University of New Hampshire Institutional Review Board (IRB-FY2022-320). The team conducted this research in the Summer and Fall of 2022.

Survey

The research team designed the survey following a review of related preservation trades research and materials, along with consultation with the partner organizations. The partners helped to refine the survey instrument following a pilot test. The survey was offered online via Qualtrics. To be eligible, participants were required to be adults who live, work, and/or volunteer in the four-state region (NY, VT, NH or ME), and either work in or are otherwise engaged in preservation and/or the maintenance of historic buildings. The research team used snowball sampling methods to reach participants, beginning with a list of identified eligible participants from the partners' multistate networks, along with additional outreach to relevant companies and organizations. The call for participation was also shared in partner organizations' email newsletters and media outreach. In total, the survey generated 264 valid responses. (Note: some questions allowed multiple responses or had missing answers, so total responses for some items may be more or less than 264).

Basic descriptive characteristics of the survey sample are shown below in the following tables. For a complete description of survey participants, please see the Appendix.



Overview of Survey Respondents

State(s) in which one primarily works or engages in preservation (select all that apply)

	%	Count
New York	26%	57
Vermont	15%	34
New Hampshire	43%	96
Maine	25%	55
Other (please specify)	13%	29
Total		221

In which types of regions do you primarily work? (select all that apply)

	%	Count
Urban	46%	100
Suburban	48%	105
Rural	73%	158
Total		363

Age	%	Count
18-25	1%	2
26-35	6%	13
36-45	16%	35
46-55	17%	37
56-65	28%	62
66-75	26%	56
76 or older	4%	8
Prefer not to say	2%	5
Total	100%	218

Gender	%	Count
Male	55%	119
Female	43%	93
Non-binary/other	0%	0
Prefer not to say	2%	5
Total	100%	217

Race	%	Count
Hispanic/Latinx	1%	2
White	93%	201
Two or more races	1%	2
Race and/or Ethnicity Unknown	1%	1
Prefer not to answer	4%	11
Total	100%	217

Position	%	Count
Current business owner	54%	62
Current employee	18%	21
Independent contractor	17%	19
Retired	4%	5
Student/Apprentice/In training	4%	5
Between employment or looking for work	0%	0
Other	3%	3
Total	100%	115



Role or profession related to preservation trades (select all that apply)	%	Count
Tradesperson (current, retired, or apprentice/in training)	32%	85
Trades instructor/educator	10%	27
Builder/general contractor/restoration professional (not specific to one preservation trade)	27%	70
Historic property owner or manager	40%	106
Preservation professional (nonprofit staff, consultant, etc.)	29%	77
Preservation volunteer/advocate (e.g., for preservation nonprofit, town historic committee, etc.)	27%	71
Economic/workforce development nonprofit staff	2%	5
Historical society/museum staff	10%	26
Government employee (federal, state, county, or local)	7%	19
Real estate professional (broker, agent, developer)	5%	13
Architect	7%	18
Architectural historian	11%	18
Other	13%	33
Total count		578

Trades/specializations (select all that apply):

Trade	%	Count
Carpentry	54%	53
Windows/Glazing	40%	40
Project Management	28%	28
Decorative Finishes	25%	25
Masonry	24%	24
General Contractor	23%	23
Painting	22%	22
Deconstruction	21%	21
Materials Conservation	20%	20
Specialty Trades and Crafts (Stained Glass, Textiles, Stone Carving, etc.)	18%	18
Roofing	18%	18
Plastering	16%	16
Flooring	15%	15
Architectural Design and Planning	14%	14
Energy and Efficiency	13%	13
Insulation	13%	13
Interior Design	13%	13
Electrical	6%	6
Timber Framing	5%	5
Ironwork	5%	5
Landscaping	5%	5
Engineering	3%	3
HVAC	2%	2
Lighting Design	2%	2
Plumbing	2%	2
Other	16%	16
Total		417

Interviews

Following the survey, the research team conducted twelve key informant interviews, targeting preservation and restoration tradespeople and other adults whose professions are tightly connected to preservation trades and their workforces. Many of the interview participants were identified for the in-depth conversations through the initial survey, whereas some others were invited to specifically address topics and curiosities that emerged in the survey responses and merited further attention. Intentionally, a wide range of ages were represented across the interview participants, beginning with professionals in their early twenties through those nearing retirement. Seven men and five women participated, from a variety of locations in the Northeast region (4 NY, 5 NH, and 3 ME). Of the tradespeople interviewed, professions included window restoration, masonry, painting, carpentry, and timber framing. Others interviewed worked for preservation and/or workforce development related organizations.

Interviews ranged from approximately 30 to 90 minutes in duration and were conducted via Zoom video conferencing. All interviews were recorded, transcribed, and coded by the research team to capture key points and themes, noting similarities and differences across participants' responses. The interview protocol is included in the Appendix.

Focus Groups

In tandem with the key informant interviews, the research team held two 1-hour focus groups focused specifically on workforce development initiatives and trades training opportunities in the Northeast region. A total of ten adults participated (5 men and 5 women; 4 from NY, 2 VT, 3 NH, and 2 ME). The two groups included state workforce development employees, trades training program professionals, high school career and technical education instructors and leaders, nonprofit staff, and others affiliated with workforce development and training efforts in the four-state region. The focus groups were conducted via Zoom video conferencing. Both focus group discussions were recorded, transcribed, and coded by the research team to capture key concepts, themes, and ideas. The focus group script is included in the Appendix.

A Note on Research Limitations

The research team acknowledges that this participant sample consists primarily of people who identify as white, with ages skewing toward the older age categories. The majority of the tradesperson survey respondents were male. This is in part reflective of what has long been considered the "typical" preservation trades workforce in the Northeastern region. While the team employed research outreach and recruitment strategies that aimed to reach a more diverse sample, many of these efforts were largely unsuccessful. The findings of this research should be considered with this limitation in mind. However, the demographics of these volunteer research participants should also be considered a notable finding in itself, as this research has sought to explore social networks, demographics, and inclusivity of these career paths. The respondent sample can be considered one indication of how the preservation trades (and preservation move-

ments, more broadly) in the Northeast U.S. region have considerable room to grow in terms of diversity and inclusion.

Additionally, the survey received a higher percentage of responses from individuals who work in rural and suburban areas than urban areas. While the Northeast is well known for its many rural communities, there are also very significant urban regions that may be less represented in this sample. A higher percentage of respondents came from New Hampshire than the other states, although all states were represented with at least 30 respondents. The research team intentionally engaged participants from all four states as well as rural, urban, and suburban areas in the interviews and focus groups.

Suggestion for further study are included in the Recommendations section.



Historic downtown Saratoga Springs, NY

10 | UNDERSTANDING AND ADVANCING THE PRESERVATION TRADES UNH EXTENSION | 11

ASSESSING THE NORTHEASTERN PRESERVATION TRADES WORKFORCE

To better understand the preservation trades workforce in the Northeast region and the nature of these career paths, the survey asked a variety of questions pertaining to workforce shortages, referral networks, and perceptions about certain jobs and about historic preservation more broadly. Survey data provided a foundation of region-specific information for the interviews and focus groups to investigate further.

Workforce Shortages

Over one-quarter of the tradesperson respondents stated that they had immediate staffing needs and were actively hiring. They reported that most hiring happens through informal channels and personal networks: 39% reported typically hiring through word-of-mouth or personal referrals, and 23% reported that interested candidates usually come to them directly.

The preservation trades that respondents believed to be experiencing the greatest shortages in the Northeast region included plastering, masonry, carpentry, materials conservation, decorative finishes, windows, ironwork, and plumbing. The fields perceived to have the least severe shortages were architectural design and planning, landscaping, interior design and engineering (Chart 1).

Table 1

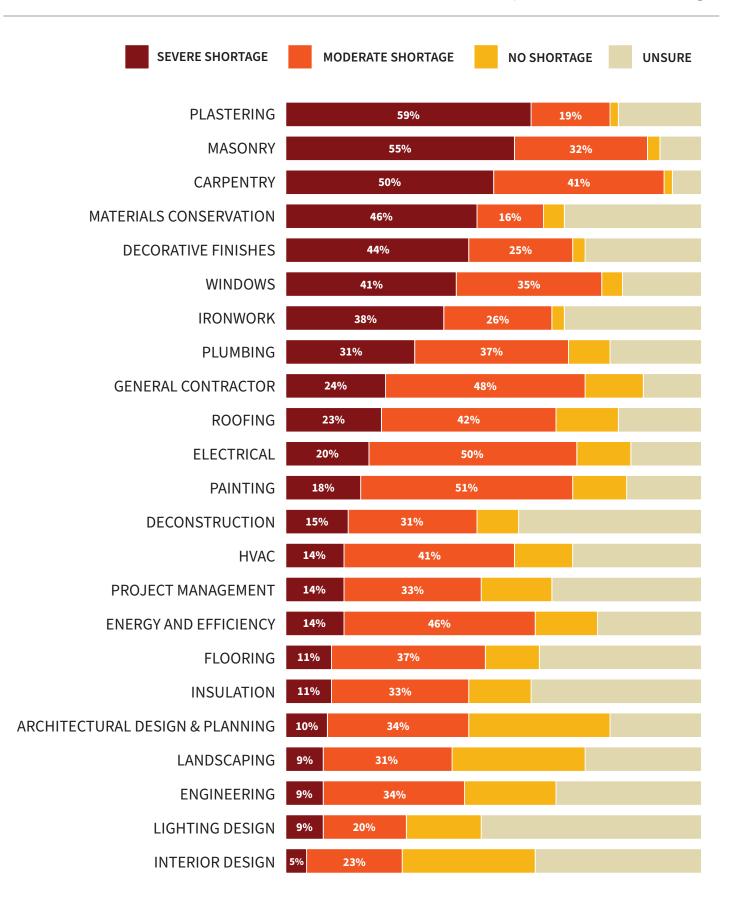
Project Backlog	%	Count
Less than 1 month	3%	3
Between 1 to 3 months	21%	21
More than 3 months but less than 1 year	42%	41
Between 1 and 2 years	30%	29
More than 2 years	4%	4
Total	100%	98

"As our housing stock becomes older, we need young people to get involved as the older professionals begin to retire. I am afraid the knowledge to help maintain and preserve historic buildings and structures will be forgotten. The dearth of eligible and properly trained tradesmen will have a deep and profound impact as to whether our communities can grow and remain vibrant."

- survey respondent

Typical project backlogs varied by trade/specialization and region, but very few tradespeople stated that they would be able to start work immediately. Seventy-six percent reported at least a 3-month wait for them to be able to start a new project (Table 1).

About 73% of tradesperson respondents said that they are commonly asked for referrals for other preservation tradespeople. Of the trades most requested, masonry (60% of respondents), windows (40%), and carpentry (36%) were mentioned most frequently in responses (see full findings in the Appendix - Survey Results). Respondents were asked if they felt like they were confidently



12 | UNDERSTANDING AND ADVANCING THE PRESERVATION TRADES UNH EXTENSION | 13

able to offer referrals when asked. Responses were mixed, although several key themes emerged, including a limited workforce and a lack of capacity, which impacted the reliability and plausibility of referrals. Respondents reported that:

"There are few who do this well and their project schedules fill up quickly."

"Most often they are too busy to take on new work or don't call back potential clients. When that's the case, I'm hesitant to refer them again."

"I often recommend the same people, who then become overwhelmed, overcommitted, and unresponsive."

Attrition was also a major factor:

"At this point in my career, almost everyone I knew has retired or died."

"Most of my go-to recommendations are overbooked and/or are close to retirement and are selective about work they take on now."

Others expressed that they often do not feel comfortable referring others due to concerns about quality of work or about others' lack of knowledge about preservation best practices:

"Have had some bad experiences with poor contractors selling themselves for things they could not do. Other contractors have been wonderful. Most professional preservationists are scheduling two years out and will only take on big projects."

"There are few professionals I can recommend, as they are not properly trained or have historic preservation experience. Many today do not follow the Secretary of the Interior's Guidelines for Preservation. If I find a seasoned professional for one of my projects and observe their work and work habits, I do recommend them."

These reasons are likely unsurprising to those familiar with the preservation trades workforce. Nevertheless, they provide indication of how a potentially connected ecosystem of trades professionals dedicated to preservation can become broken when subject to workforce deficiencies, contributing to missed opportunity for tradespeople to cross-promote, build trust, and share knowledge. Interestingly, participants rarely mentioned

concerns about whether future market forces could cause declines in work demand. Presumably, the current surplus of work, plus the expected retirement of even more professionals, were both substantial enough in scale to override job security concerns.

Preservation Challenges and Opportunities in the Northeast

Three agreement scale items on the survey asked about perceptions of preservation and preservation trades. (For complete responses, see the Appendix). Responses were much more varied for these questions (see Table 2); however, the distributions of scores were similar across all four states (NY, VT, NH, and ME). The different age categories also responded similarly overall, although respondents between 18-35 responded more favorably on average to "I believe that more home and property owners are becoming interested in historic preservation" (mean score = 4.0, compared to 3.4 for ages 36-55), which could be hopeful news for the future of preservation initiatives, and further reason why the preservation trades workforce could benefit from active current development.

In an open-ended question, the survey specifically inquired whether respondents believed there to be any challenges or opportunities in preservation trades workforce development that were unique or more relevant to the Northeast Region. Responses covered a wide range of themes, with several commonalities centered upon weather and environmental considerations, socioeconomic factors, regional history, and rural characteristics. The guotes below illustrate a variety of these key themes.

High number of older buildings:

"Great building stock/market and growing customer base as preservation movement grows (constituent numbers and awareness, grant funds, etc.)."

"We have the most old buildings of anywhere in America, and I think a lot of tradesmen don't realize that you don't just have to live in Boston to work on historic buildings, they're all over New England."

"Opportunities - lots of old houses not being torn down. Challenge - convincing the homeowner restoration will satisfy their goals better than renovation (gutting the house)."

Table 2

Preservation statement	Respondents who agreed or strongly agreed	Total responses
I believe that historic home and property owners understand the importance of preservation trade specialists.	51%	218
I believe that more home and property owners are becoming interested in historic preservation.	60%	206
I believe that demand for the preservation trades is growing.	75%	206

"We have a lot of buildings that are old and maybe not spectacular seeming, but still part of the character of our communities. A lot of everyday people with low to medium income live in older homes with considerable upkeep needs."

Wealth of cultural and historic assets:

"The Northeast has some good craftsmen and a lot of historic buildings. It also has somewhat of a culture for appreciating old things and history."

"The Northeast is known around the country as being steeped in history and rich in historical resources. We could do a better job at promoting those assets as some other historical communities do, and highlight the preservation trades at the same time."

Socioeconomic trends and factors:

"We're running out of young people."

"Too many craftspeople are about to retire. Opportunity is huge."

"I actually think that the Northeast Region is a strong market for preservation although the upper income children are all steered to college with a very few exceptions."



United Baptist Church of Lakeport, a "Seven to Save" site of the N.H. Preservation Alliance. Laconia, NH.



High cost of living (positive and negative implications):

"High cost of living...but this means that much work is affordable by a decent level of socio-economic businesses and households."

"The supply of work, and interest in preservation is huge in a historic part of the country. It's also an expensive place to live, especially for a poorly paid young tradesperson who wants to be a professional."

Rural challenges:

"We need to be reaching out specifically to homeowners in the more rural areas of northern Maine, New Hampshire, and Vermont. There is a wealth of historic buildings in those areas that are not being preserved and homeowners that are resilient and able to preserve them if they had the right training and education."

"We work in a very rural area. Reliable transportation is a problem for employees and potential employees. We've talked to lots of potential great folks who are entry level, have a great work ethic, and are trainable, but don't have a car and we're not anywhere near a bus route - then they can't get to job sites."

"Distance between jobs, you don't get paid to get to the site."

Weather and environmental challenges:

"Our harsh weather creates issues with roofs, heating, sidewalk repairs."

"The seasonal nature of some of the trades likely present a challenge."

"Learning how climate change will likely effect our region would be beneficial. One of the pluses of historic building techniques is that they're adapted to the environment and stand the test of time. If our environment is changing, we should be looking at how our techniques and materials might need to be adjusted."

While seasonality, an aging population, rural mobility issues, and an overwhelming number of older buildings in need of care can be particularly acute factors in the Northeast, there was also a wide acknowledgement that this region is special in terms of its people, built environment, and history. The general sense was that there are a lot of opportunities for those who seek them out, but circumstances can be challenging.

Altogether, the survey provided a wealth of quantitative and qualitative insights which paint a picture of considerable challenges and urgency, as well as opportunities and optimism. Additional survey results are presented in the following sections, pertaining to tradespeople's experiences working in their fields and perceptions of trades education, training, and workforce development.

PRESERVATION TRADES AS CAREER **PATHS**

In general, this research painted a positive picture of work in the preservation trades: rewarding, creative, interesting, and enjoyable. However, several common barriers and frustrations provide key insights into workforce development challenges. A comprehensive review of the survey responses, interviews and focus groups detail the experiences of being a preservation tradesperson in today's modern era.

Table 3

Factors for pursuing preservation trades work (check all that apply)	%	Count
Personal appreciation for historic buildings and desire to play a role in preservation	83%	101
Challenging and engaging nature of work	63%	77
Hands-on artistry of the work	51%	62
Variety of work and work sites	42%	51
Demand/Number of older buildings in need of restoration or repair	41%	50
Ability to secure a reliable income	24%	29
Family influences (e.g., family trade or business)	16%	20
Recommendation or job offer from another tradesperson/contractor	11%	13
Not sure – I just sort of "fell into" this line of work	3%	4
N/A – most of my work is not (intentionally) on historic buildings	3%	4
Availability of training programs	2%	3
Other (please explain)	7%	8
Total		422

Career Appeal

There are a variety of reasons why people choose to work in the preservation trades. Understanding these reasons provides insights regarding some of the key strengths of the career path, which may be helpful themes to highlight in workforce development promotional efforts. Specifically, a large percentage (83%) of participants cited personal appreciation for historic buildings and a desire to play a role in preservation as a factor for pursuing this type of work. Additionally, 63% of participants cited the challenging and engaging nature of this work as a motivating factor to enter the preservation trades field, and 51% of participants specified that the hands-on artistry of the work was a factor (see Table 3).

Research participants shared a wide variety of reasons why they enjoy their careers in preservation trades:

"I have a love of history and a passion for preservation and those are the reasons why I wanted to enter the field."

"This is the coolest job I have ever had."

95%

of respondents agreed that preservation trades can provide an interesting, fulfilling, and profitable career path

96%

of tradespeople respondents were satisfied with their chosen career

"Gratification with my job and an autonomous working environment."

"Never the same two days in a row, lots of problemsolving, working collaboratively with Historic Preservation orgs."

With these perspectives in mind, it is not surprising that most participants expressed that they would confidently recommend a trades career to young people. Their reasons included:

"You can travel almost anywhere and find work as well as connect with other similar contractors."

"You will gain skills and be confident in your abilities."

"Make good money, be your own boss, have pride in your work."

"Have a career for life."

"Make a connection with places and your community."

"Satisfaction of restoring historic properties."

"Income potential, artistic expression, and opportunities."

"Being able to be creative and work with your hands is very appealing and rewarding."

"You will always be able to find a job."

"There is ample room to grow and evolve. The projects are very interesting."

All in all, responses from participants generally indicated a high level of satisfaction and positive perceptions of trades careers. From the survey, 95% of respondents believed that a career in the preservation trades field provides an interesting, fulfilling, and profitable career path (with 72% "strongly agreeing"). Additionally, 96% of tradesperson respondents stated that they agree or strongly agree with the statement that they are satisfied with their chosen career. Furthermore, 95% of those surveyed indicated that preservation trades can provide an interesting, fulfilling, and profitable career path.

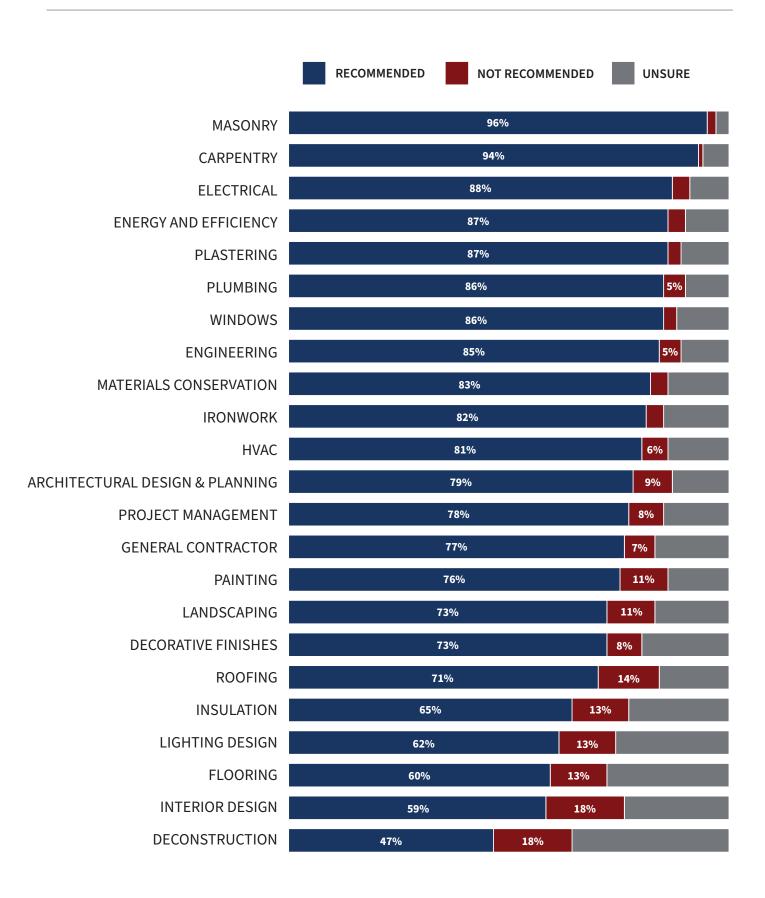
Recommended Career Paths

While participants discussed several factors that may discourage workforce participation, for the most part participants still held favorable opinions about these professions as career paths. The survey asked all respondents which preservation trades careers they would specifically recommend to young people. The trades with the most support from respondents were masonry, carpentry, electrical, energy and efficiency, plastering, plumbing, windows, and engineering, with several other fields close behind (see Chart 2). The least recommended careers were deconstruction, interior design, roofing, flooring, insulation, and lighting design.

Respondents explained their reasoning, reflecting a variety of financial, health, and social factors. Many respondents expressed broad support for any preservation



Painting work underway. Photo: New Hampshire **Preservation Alliance**



trade, especially those requiring more specialization or expertise:

"Any field that can become a career working with historic buildings is needed, and if someone is interested, I'd recommend they explore all their options."

"I would not put down any trades, but do tend to focus on areas of need where craftspeople can be their own boss, demand a decent wage for their unique skill set."

Financial stability commonly arose as a theme, both as a positive characteristic and a point of concern, depending upon the career path and the particular individual's perspective:

"These jobs aren't being sent offshore."

"Generally, I would recommend preservation trades due to the potential for higher compensation for high quality work that can also be applied to new construction. Not sure about areas like deconstruction where people may not be adequately compensated for the work required."

"The demand for skilled traditional trades has been consistent if not growing for the past decade. Unlike general construction, there has been no downturn in the market if you are doing good work."

"As an architect, I can tell you that this field is way too crowded, and there is a lot of confusion among both students and practicing professionals as to just what historic preservation IS. Though fun to participate as an architect, as a career path it is fraught with uncertainty in terms of job security and advancement."

"[My] only hesitation comes from the reality that many skilled trades are self-employed routes. When times are good, pay is good. When the economy is poor, work is tougher. With housing prices so expensive, student loan debt, and other economic realities, it can be a gamble to join the trades."

Others noted the **physical hazards** of certain trades compared to others:

"Some jobs are difficult and hard on the body and/or include exposure to toxic materials. A recommendation would often depend on the character of the person and their interests."

"I know from first-hand experience that electricians and plumbers in particular are desperate to recruit young people, and they can expect a long, decent, and interesting career if they stick with it. Might be a little more hesitant with, say, flooring - could be tough on the back after many years!"

While participants' own experiences and their perceptions of certain fields varied widely, some respondents noted that certain career paths may be less welcoming to **nontraditional workers** (e.g., those who are not white, male, heterosexual, or cisgender), for example:

"I would not recommend architecture or engineering to young people because those fields are incredibly toxic schooling and work environments, especially to young

"Lack of jobs or industry support of women, nonbinary, and trans people."

Others mentioned that **personal or family factors**, such as ability to travel, should be a factor when considering the viability of certain paths, for example:

"I think all of these trades are critical and a young person can make a living at them. Sometimes, this may require the person to travel substantially, however. So, understanding that while an electrician or HVAC technician can find local employment in most places, a decorative painter will probably be required to travel to remote project sites."

A long list of variables may impact a career's viability for a certain individual. Career exploration, talking with current professionals, and keeping an open mind may help future workers way-find through a variety of possibilities.

Perceptions of Preservation Trades Careers

Despite many positive perceptions of preservation trades careers, much work is needed to promote these fields and their positive attributes. In the survey, 93% of



respondents believed that young people lack knowledge about career possibilities in preservation trades. Only slightly fewer (86%) believed that young people are often discouraged from exploring careers in trades.

The survey, interviews and focus groups revealed many commonly noted challenges and shortcomings, particularly in terms of workforce development. Two themes were very recurrent:

- Numerous participants noted that longstanding stigma associated with trades careers was prevalent, although this has been gradually changing for the better in recent years.
- Very many noted that there was a lack of awareness about preservation trades career paths and what these careers are actually like for professionals in these fields.

In terms of stigma, participants shared what they perceived to be common sentiments and comments, including: "you must go to college to be successful," "trades are for dumb people," and "trade programs are for dummies." Such comments can create lasting damage in terms of recruitment, discouraging otherwise well-suited young people from exploring these career paths. These stigmas then also impact perceptions of certain educational and training offerings:

"Trades programs are not presented as a viable option for young people as they develop their careers."

"CTE [Career and Technical Education] programs, while diverse in their offerings, still have the reputation of being the career path for those who are not college bound."

The notion that young people are often not interested in trades careers emerged as a recurring theme. In addition to a general lack of awareness among young people about these career paths and pressures they face to pursue a traditional college education, there were also many comments from current tradespeople suggesting that younger people may not initially possess the skills needed to be successful in these careers, having had less interaction with shop skills and manual labor than prior generations. While training programs (whether the high school or post-graduation level) could help ameliorate some of these prospective workforce shortcomings, participants reflected that technical education and training programs were often not well-known in their regions, if

93%

of survey respondents agreed that young people lack knowledge about career possibilities in preservation trades

86%

agreed that young people are often discouraged from exploring careers in trades

they existed at all. For students who are aware of these career paths and training opportunities, financial concerns often play a role in young people's decision making:

"Financial costs, no assistance or traditional student loan funding for trades programs."

"Pay disparity between those just starting and experienced practitioners is big problem."

Additionally, generational trends may impact the topics that younger people find most compelling, in turn impacting career choices. Some (but not all) participants believed that younger people often lack interest in restoration and older homes:":

"40-50 years ago there seemed to be much more interest in restoring historic homes than there is today. The younger generation does not want the work of maintaining historic structures. Also, they don't like living with the design of older houses."

Many participants relayed the notion that if these careers are going to be successfully promoted to younger generations, work needs to be done to get into the minds of younger people, find ways to meet them where they are at, and emphasize the aspects of this work that are most appealing in today's modern world (such as creativity



and the opportunity to do hands-on work in a variety of interesting settings).

Diversity

In terms of understanding the experiences of tradespeople and strategizing workforce development, a highly important theme present in this research is the lack of diversity within the preservation trades in the Northeast. The demographics of the survey respondents who identified as current tradespeople provide some indication of this, as 92% of respondents identified as white and 81% as male (with 17% female and the remainder declining to specify). This lack of diversity and historically male-dominated industry has created some unique challenges in the field for women, minorities, people who identify as LGBTQIA+ and/or people of color, as participants commented:

"Sexism in the trades can be a difficulty but it is improving overall in recent years."

"As a female who tried to become a carpenter, there is still a stigma of what a person in the trades looks like."

"One of the things I say to people, my friends, especially, is it is a shame that I spent my whole life working in a trade and I struggled. It was a struggle. It was a struggle to get any respect from people. It was a struggle to make a good living. It was just a struggle my whole life, and now here in the last few years working in the trade, you can almost name your price, because there's no one to do the work."

- interview participant

22 | UNDERSTANDING AND ADVANCING THE PRESERVATION TRADES UNH EXTENSION | 23

"[There is] lack of awareness and education for women in the field and for opportunities available."

"Need more safety programs and training to create an all-inclusive environment."

"Need to get more diverse populations interested in the field."

The optics of workforce demographics, word-of-mouth stories about discrimination, and gender stereotypes can all make lasting impressions about how people perceive the trades and what types of people believe they might be well-suited for such careers.

Factors for Success in These Careers

Participants often mentioned that it takes a certain type of person to be most successful in these careers: hard-working, curious, perseverant, self-assured, and self-aware. Mentoring and maintaining professional networks were commonly mentioned as important factors of career satisfaction and success (see the following section: Workforce Development, Training, and Education). Preservation trades careers often require ongoing education, troubleshooting, and on-the-job, cross-trade cooperation and collaboration. Participants highlighted how networking and participating in professional development and training programs are important tools for recruitment and retention of qualified personnel. Professional development takes different forms for different people:

"I have received training in all facets of construction, trades and preserving historic structures."

"[it's enjoyable] working with others who share your interests, who bring expertise to a collaborative project, learning about history and culture with every project, accomplishing a mission--preserving heritage."

"Partnering with other groups, non-profit organizations and the community creates positive outcomes."

However, a key challenge for the continuation of the industry is that for very many experienced professionals, it can be difficult to commit time and energy to helping to train the next generation:

"No incentives for mentoring, I don't have time or need another thing to do."

"Working with apprentices takes a lot of time and money that I do not have."

Preservation trades work can be long hours of exhausting, physical work. Tradespeople often work independently and this can create additional strains on the availability of time and finances. These critical themes of leading and mentoring the next generation of professionals are explored in greater depth in the Workforce Development, Training, and Education section.

Income

One major element at the heart of understanding stigma, recruitment, retention, satisfaction, and success is income. To better understand compensation and profitability in the preservation trades, the survey asked respondents who currently work in preservation trades to report their annual income. This reflected a broad range of responses, with about half of respondents making between \$50,000 to \$100,000 (Table 4; noting that some respondents may only work part-time or be phasing into retirement). For context, the median single earner annual income for this four-state region ranges from about \$57,000 to \$75,000 according to the U.S. Census Bureau.

Several research participants commented that they could essentially now "name their price" due to workforce shortages and demand. However, many reflected upon income disparity (such as between business owner and employee) as being very problematic. While the financial outlook of the trades generally seemed positive, many noted financial struggles when starting out their career or when trying to balance work and education.

Table 4

Annual Income	%	Count
Less than \$50,000	22%	14
\$50,000 - 74,999	33%	21
\$75,000 - 99,999	21%	13
\$100,000 - 149,999	8%	5
\$150,000 - 199,999	0%	0
More than \$200,000	5%	3
Prefer not to answer	11%	7
Total	100%	63

While many commonalities stood out across these responses from a broad range of types of tradespeople and professionals, responses revealed how much professional experiences can vary for individuals based on their specific profession, position, job placement, and demographics, among other variables. An important takeaway here in terms of workforce development is that many paths and opportunities exist within the broad umbrella of "preservation trades," potentially engaging a wide range of people. While some jobs might not feel like the right fit for certain people, there is a lot of space for interested individuals to explore options and find their way.

Investigating these themes further, the following section provides additional information pertaining to the themes of workforce development, training, and education across participants' insights from the survey, interviews, and focus groups.

"You must be secure in your own person, have good self-esteem and a strong work ethic. It is important to be vocal and outgoing in your work so to project knowledge and strength. It is good to learn how to deal with rejection and criticism. Resiliency and self-worth are keys to success."

- interview participant, on being successful as a preservation tradesperson





WORKFORCE DEVELOPMENT, TRAINING, AND EDUCATION

Hiring Needs and Challenges

Tradespeople survey respondents and interview participants very commonly expressed how challenging it is to find qualified staff to hire. Many new hires don't work out - perhaps the job wasn't what they thought it would be, or they lacked the motivation to commit to the long days of physical labor, often-outdoor work in inclement conditions, or the demands for ongoing learning. For those that do stick with it, there still may be considerable challenges in terms of the learning curve required to jump into specialized work at a professional pace and high standard of quality. Respondents commonly mentioned that newer professionals often have unrealistic expectations:

"The young work for a few months and think they can do it on their own. Ha."

"They all want to be chief."

A commonly mentioned issue was that even if new hires have previous training or trades experience, they often lack a crucial historic preservation specific knowledge

"New hires have minimal construction skills, mostly learned from new construction work."

"I think on the job training is often either inadequate or set up against working with historic properties."

"In a lot of cases, the knowledge of preservation and how it should be done is more valuable in the trades than being able to do it really fast."

Other respondents spoke of how workforce shortages create questions or challenges for the employer in terms of where to set expectations of new hires:

"The problem is that there is not enough [workers]. I don't want to make standards of training and preparation too rigorous if we're already struggling to attract people into the trades - especially people of color."



Canaan Memorial High School Building Construction and Restoration Carpentry program, Colebrook, NH. Photo: New Hampshire Preservation Alliance

"The learning style and work ethic is different, so I believe the real issue is embracing these differences and meeting them halfway. This is not a new concept in evaluating new workers entering any profession. If there is "blame," it should be directed towards us (GCs, working professionals, etc.)"

Many respondents reflected that new hires require a large amount of initial training, even for those who came with some basic trades or construction skills. Some employers seemed to enjoy this teaching component more than others, but all expressed that training creates considerable constraints upon time and money.

Demographics

Not only does the aging workforce of the Northeast's tradespeople contribute to significant challenges in terms of workforce attrition, but additionally respondents reflected that either they or other older workers they know lacked the energy, patience, or feeling of investment (if they weren't planning to train their own offspring or eventually sell their business) to commit to training or mentoring newer professionals. This is particularly problematic given that one of the most common sentiments expressed by research participants was that on-the-job or field-based training is absolutely essential for new workers to be able to successfully enter the preservation trades and that expert mentoring makes a remarkable difference to the sustainability of one's career.

While respondents commonly reflected that preservation and restoration trades and crafts have generally been dominated by "old white guys" in the Northeast, two key workforce trends emerged in the research:

Women in Trades

More women have been entering the trades and widely showing great success in these career paths, despite sometimes still facing issues with sexism, gender bias, and stereotyping. Many respondents attribute this more inclusive shift to broader trends pertaining to societal norms and expectations. Others additionally attribute women's increased interest in the trades as stemming from a recognition of the strong element of creativity that is central to many of these jobs.

Second Careers

Preservation trades, specifically, have been a popular choice for second careers or career changes, also reflecting the appeal of hands-on work and craftsmanship, as well as a recognition that preservation work can deeply engage one's personal interests in topic areas such as history, architecture, geography, chemistry, and many other domains of study that may be more often associated with fouryear degree programs or liberal arts education.

These trends are promising in terms of workforce expansion and also help to illustrate the many positive qualities of preservation trades work, particularly how a single type of job may appeal to different individuals for different reasons.

Training Pathways

As was highly evident in this research, a very wide variety of life paths can lead to careers in preservation trades. Some routes may be more direct, and some education and training options may be more tailored to the practical needs of preservation tradespeople. Many participants expressed that the "right" path can very much depend upon the individual, not just their chosen trade. Some participants expressed that formal education can be very helpful, particularly in terms of learning about history and technology. Formal programs, when the appropriate fit, may help fast-track individuals who already have clear focus. Depending upon the topic and specialization, such programs may be based out of community colleges or technical schools, nonprofit-run institutes, for-profit training schools, four-year colleges or universities, or graduate programs. Several individuals expressed frustration of how trades education is often seen as the "opposite" of a traditional college education, posed against one another in terms of career path options, when really the two can be very complementary in creating a well-rounded professional.

Despite participants' differences in their own career pathways, one clear message stood out across all participants: no matter whether one chooses to pursue a degree program, an informal education, or another training pathway, field-based or on-the-job experience (such as through apprenticeships or internships) is absolutely essential to gain real-life proficiency for entering the trades:

"Generally - much is gained by hands-on work, either in the training or in actual work experiences. Classroom training provides just a basic foundation, and doesn't encompass the skills and knowledge needed for onsite work."

"I went the college route and learned my trades knowledge on the job after. I don't understand why the two paths need to be so separate."

"A huge amount of learning can be done on the job, as long as companies are willing to take the time and risk." Some respondents believed that formal educational and training programs were perhaps completely unnecessary:

"What I have learned can only come through experience which cannot be taught."

"The trade is something you need to learn by working in it, any paid professional training is a waste of time and money."

Training requirements for the trades can vary greatly depending upon the field. Of the survey respondents who were tradespeople, 85% said that licensure is not required for their trade. Eight percent relayed that licensure was not required, but was recommended. Duration of training also varies; most commonly, respondents stated that one to five years was most common, although many reflected that their own training was longer (see Table 5).

When asked to elaborate about training, numerous respondents commented that typical training periods were insufficient – longer apprenticeships would be helpful, as would more in-depth incorporation of on-the-job or field-based training as part of educational programs. Many respondents stated the importance of a continued commitment to learning, beyond the scope of official licensure, certification, or degree programs.

Training Challenges

When asked two questions in the survey, "Did you (or do you) feel satisfied with your trades training, overall?" and "Do you believe that new workers are entering the trades

"The two biggest challenges are availability of programs and costs. The lack of knowledge about the trades' programs, lack of mentors willing to train young people, and overall lack of awareness of the preservation trades movement are all barriers to young people entering the field."

- interview participant

Table 5	If current training programs exist for your trade, what is the typical duration of training?		How long was <i>your</i> training prior to entering the profession?	
Duration	%	Count	%	Count
Less than 6 months	27%	18	26%	22
6 months to 1 year	12%	8	9%	8
1 to 5 years	53%	35	41%	35
More than 5 years	8%	5	24%	20
Total	100%	66	100%	85

with adequate training and preparation?", there were noticeable differences across the types of responses. Many expressed that they were satisfied with their own education, especially those who attended established and generally well-regarded programs (such as North Bennet Street School and Heartwood School, which were both commonly cited). However, many of these same people were less satisfied the level of training they had observed in others, such as newly-hired employees who may not have had the same types of educational opportunities or training pathways. This, in part, reflects the nature of the type of professional who would likely take part in this research, but also is indicative of the widespread frustration many established professionals have faced when trying to hire trusted new staff or locate qualified subcontractors.

Some of the key reasons why respondents believed that new workers were entering the trades with inadequate training and preparation stem from the specialized knowledge and adaptivity that these fields require beyond what basic construction or trades training typically provides. This was evident across a broad range of trades and skills:

"I do not think new workers are entering the field of historic preservation with adequate training. There is a general lack of understanding of historic timber framing skills i.e., hewing techniques, regional joinery techniques, scribe rule vs. square-rule, pairing of inappropriate materials with historic fabrics." "There are not enough individuals in the painting trade who understand why houses or structures were treated with traditional materials- i.e., linseed oil paint, linseed oil putty and pine tar. In my line of work, I employ traditional materials because today's modern materials cannot not be used to properly treat historic structures."

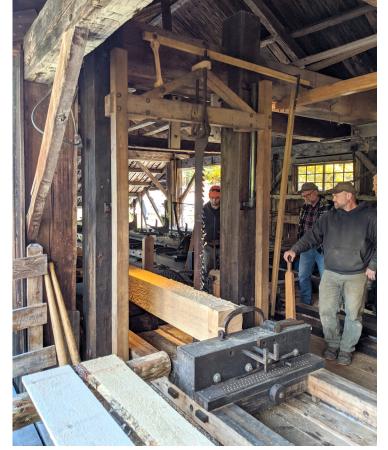
"The compatibility of elements of construction such as mortar are dissimilar, lumber is standardized differently, bricks are different density and composed differently. Some forms of insulation seem incompatible."

"Metalworking is diverse, what applies to one project may not apply to others, and there are times to "be a purist" and times to do whatever is needed to stabilize and preserve what exists. Knowing things like that is key."

"They are not usually faced with "real world" projects coming out of schools/training programs. Problem solving when opening up rotten sills, and dealing with the cascading issues associated with rot repair is never the same and can only be learned over time."

A lack of trades-specific education, whether through formal or informal channels, may have a broad range of neg-

28 | UNDERSTANDING AND ADVANCING THE PRESERVATION TRADES UNH EXTENSION | 29



Historic sawmill demonstration at Sanborn Mills Farm, Loudon, NH.

ative implications for one's career, including safety and worker's rights:

"Not only do [new workers] lack exposure to preservation basics on all levels (theory, practice, hands-on experience) on a range of materials (stone, metals, masonry, glass, etc.) they are purposefully kept ignorant of their rights as workers including safe workplaces, and transparent employer practices, and excluded from opportunities due to the classist nature of the emphasis on academic credentials over handskills and abilities."

Respondents noted that there are a number of respected training programs in the Northeast that are either focused on preservation or restoration trades and skills or at least offer some specialized tracks. However, many others commented that such programs are limited; while established programs and resources exist for some trades such as carpentry and timber framing, many other trades and specializations are underrepresented in formal training offerings. Furthermore, participants identified a number of common barriers to enrollment in existing programs:

Cost of programs – In addition to tuition, this may include travel expenses, moving costs, and tools and supplies. It was noted that adults looking to switch

careers may not qualify for some of the tuition assistance or scholarships that "traditional age" students are eligible for. Many prospective tradespeople may feel reluctant to take out student loans or go into debt, especially considering that entering the trades is often touted as a way to avoid educational expenses and debt. Stipends, while helpful, may not be large enough to make schooling feasible for all.

Availability of time – Dedicating time to education can be especially challenging if individuals need to work to earn a living while in school and/or care for family. Courses may not be offered with flexible scheduling.

Geographic/travel limitations – This barrier may be especially cumbersome for older individuals who have less flexibility due to home ownership, family obligations, or other factors.

Awareness of programs – Many programs may be smaller or lesser-known; furthermore, there appears to be a general lack of awareness of preservation trades as career paths altogether, so one might not learn about a program unless they "stumble upon it" or are referred by someone.

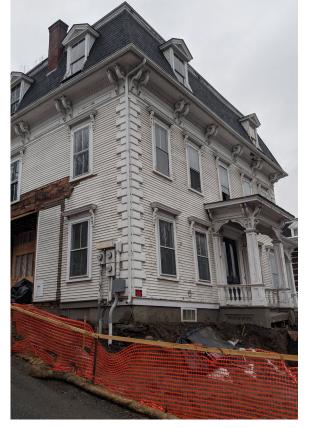
Lack of precise fit – Due to the many specialized tracks that can exist within preservation trades, programs may not offer prospective students precisely what they are looking for.

Many research participants reflected that their own educational paths were self-directed, or a more piecemeal approach. For some this was by choice, and for others from necessity:

"Overall in the US, Technical Training is non-existent.
Thus the lack of available tradespeople, thus the reason I learned to do it ALL myself. Bought a house, stumbled into repair and then historic restoration, rented it out, bought another...Only responsible way to do repairs required restoration, and I did it over and over."

"I would have moved to find a program to take but none teach on the job and pay a living wage. OTJ training is best."

"We have been able to piece together the training we need, but it would be better if we could have more of it concentrated together in one place closer to us in the northeast."



Old home awaiting restoration work in Woodstock, VT



Porch restoration at the First Amendment Museum, Augusta, ME. Photo: Maine Preservation.

Other participants reflected that many existing preservation-focused programs lack a business education component, which is essential for future career success, especially for those who plan to work independently (as many preservation tradespeople do). Future tradespeople need to learn about essential topics such as budgeting and finances, human resources, and insurance and liability. Tradespeople are often left to their own devices, which can lead to inefficiencies and costly mistakes.

Training Programs and Workforce Recruitment

It is important to note that while opinions differ on the educational value of formal training programs for the trades, schools, colleges and other educational programs are potentially positioned to offer additional value in terms of trades workforce development. Survey respondents were asked a series of questions pertaining to the roles and impacts of training programs in terms of outreach and recruitment to these career paths (Table 6).

When asked to elaborate about training, numerous respondents commented that typical training periods

were insufficient – longer apprenticeships would be helpful, as would more in-depth incorporation of on-the-job or field-based training as part of educational programs. Many respondents stated the importance of a continued commitment to learning, beyond the scope of official licensure, certification, or degree programs.

Apprenticeships and Mentoring

Whether through formal apprenticeships, internships, or informal mentoring, research participants broadly articulated the invaluable importance of being able to access guidance and expertise from experienced professionals in their field as part of their initial education as well as their continuing professional development.

Apprenticeships

Apprenticeships are seen by many tradespeople as the "gold standard" of training and professional development and can also play a critical role in filling the gaps of what other education and training offer. One career development professional offered the perspective that "appren-

30 | UNDERSTANDING AND ADVANCING THE PRESERVATION TRADES UNH EXTENSION | 31

ticeship offers structure to something that's happening anyway," referring to the understanding that new professionals will need to learn on-the-job no matter what, so apprenticeships can offer clarity of expectations and mutually beneficial terms for both host and participant.

However, many professionals may not have access to appropriate apprenticeships, know how to seek them out, or recognize how to best leverage the experience:

"Yes, [available training is adequate for new professionals] if they have an apprentice program that focuses on repair/restoration or take upgrade training for historic preservation. Large majority do not do this."

"Money and time are barriers. I know there are undergraduate and master's programs in colleges that are way beyond my means. I would love to have full-on mentorship with someone who has had their own glass studio for decades."

"I didn't know union apprenticeship was an option and went the graduate school route, but if I had known I could work on historic buildings by joining the union, I would have likely done so."

Several participants expressed that they were able to find apprenticeships or mentoring arrangements, but it took considerable personal effort:

"I feel blessed with the opportunities that I was given, but I had to seek them out."

"I tried to create my own apprenticeship and journey. However, it should be easier."

Roles and impacts of training programs

recruitment and workforce development.

Training programs could play a greater role in recruitment and workforce development.

already interested in the trades.

Training programs commonly play an active role in

Training programs usually only reach people who are

While many respondents who had participated in apprenticeship arrangements expressed great appreciation toward their masters or apprentices, many also expressed need for improvement if apprenticeships are to be the go-to, "best practice" model for training. Some commonly mentioned issues with apprenticeships (as they often currently stand, although there can be a lot of variation) is that they may offer low compensation and there may be insufficient systems in place to support the master tradesperson/host business - either financially, or by way of pairing apprentices, or by providing guidance on best practices for these work and teaching arrangements. Some participants noted that some specializations have very limited pools of "experts," which positions these few professionals as gatekeepers. If these individuals aren't able or willing to support new professionals through mentoring, internships, or apprenticeships, the entire field suffers. This is a lot of pressure to put on a small body of professionals, and as several participants noted, just because someone is a master in their trade does not mean they are necessarily skilled with instructing or mentoring others.

With these points in mind, improving the structure and experience of apprenticeships was a topic of interest to many research participants:

"Modern apprentice programs are outdated, particularly in carpentry. Too few tradeswomen and tradesmen are truly skilled at mentorship. I personally left a carpentry apprenticeship due to inadequate mentorship, rejection of technology to improve communication and efficiency, hazing and high rate of intoxication of co-workers from alcohol and drugs."

Unsure

32%

25%

10%

Disagree

15%

12%

2%

Agree

53%

63%

88%

"If I were looking to become a preservation mason today, I don't know that I would be satisfied with the opportunities for training that are available in the NE US. For a long time now I have been thinking that what is needed for the trades in general is a governmentsubsidized apprenticeship system (similar to the one that operates in Germany and other European countries) which would take some of the cost burden for training off employers."

"[There is] not enough access to resources, there are mostly only retiring studios who do not have the patience or need to train others, and of course I can't afford to apprentice for free at this point in my life."

Additionally, many participants reflected that apprenticeships are often not long enough. While this may vary by trade, some thought that three years could provide a strong base of experience, and others suggested that five years would be even more preferable. Some of the key values of longer apprenticeships are to have the ability to pace yourself in your career development, not "bite off more than you can chew," and have safe, controlled opportunities to learn the limits of your skills and knowledge. Participants emphasized that these notions aren't important just to the individual practitioner, but also to the broader reputation of the trade in which they work.

Acknowledging that apprenticeships can fill major voids in one's education and training, respondents noted that there has been recent momentum in the Northeast and nationally to develop more intentionally-designed apprenticeship and fellowship programs. Some examples that were mentioned include the Timber Framers Guild apprentice and internship programs, Maine Preservation's Summer Fellows program, and the Campaign for Historic Trades mentorship program (along with partnerships with the National Park Service). A large component of many of such programs is not only recruiting and pairing mentors with apprentices, but providing mentors/ masters with additional training and resources to help them succeed as instructors and advisors.

Community Colleges

Participants noted that community colleges may offer promising pathways for recruitment and more affordable education, as well as opportunities for students to explore different aspects of career development. One such program of note is Hudson Valley Community College's workforce development program, which through inter-organizational partnership offers historic carpentry, window rehabilitation, masonry and plastering courses. Community colleges and state technical institutes may also be able to formalize apprenticeship pipelines, cre-

Slate roof restoration by The Heritage Company, Colby College, Waterville, ME. Photo: Maine Preservation



ating a more holistic educational blend of classroom and field experience for students and new professionals. In Maine, the community college system is central to apprenticeship formalization and development, a positioning which helps provide structure and curricular incorporation for the apprenticeship experience, as well as help encourage awareness of opportunities and reasonable apprentice wages across the board.

Informal Mentoring

Mentoring can happen in formal and informal ways, and both can be extremely valuable. In the survey, 77% of tradesperson respondents said that informal mentoring was "very important to their professional development (see Table 7).

Many research participants expressed how much they had appreciated or have hoped to participate in training opportunities with seasoned professionals (including workshops and other short-term engagements) who have done the work for many decades (i.e., "the old timers"). There was a sense of urgency that these opportunities were slipping away, as some of the most celebrated and accomplished tradespeople were retiring or had passed away:

"Mentored hands-on training with master craftspeople is crucial for passing on the knowledge learned and gained from generation to generation."



"Programs are needed to support the older more experienced workers who are retiring out of the trades, training them to be trainers and paying them as educators and trainers."

Importantly, these training opportunities are desired by tradespeople at all stages of their careers. Nearly all participants reiterated that there is much to be learned from one another and there are always new ways to advance your knowledge.

Professional Development and Continuing Education

In the preservation trades, learning is a perpetual process. Participants shared a common sentiment that a well-educated, knowledge-seeking preservation workforce enhances public perceptions of preservation and advances the preservation trades fields altogether. Continued learning can happen through a variety of forums – workshops, conferences, on-the-job teachable moments, or just a casual phone call between two troubleshooting professionals.

Many survey respondents expressed frustration regarding the lack of formal training and continuing education opportunities available for people with their trade or specialization:

"Too few accredited courses in-person or online for preservation work."

"I've not seen any training offered that was relevant to my work."

"None [no educational or training opportunities] have been valuable for a very long time. I have almost no one to talk to."

"[Training has been] ad hoc at best, highly dependent on individual motivation."

Cost and distance were most commonly mentioned in the survey as barriers for participating in continuing education opportunities. Many others mentioned that they had yet to hear of programs that actually seemed relevant to them, in part due to the highly specialized nature of some preservation trades. These points illustrate an opportunity to develop more remote learning opportunities, in

Photo Left: Apprenticeship poster at a New Hampshire high school.

Table 7

Question: How important was informal mentoring to your professional development? ("informal mentoring" defined as professional guidance and knowledge-sharing not considered part of the formal training program(s))

Response	%	Count
Very important: I've learned so much and/or relied upon others who work in the field	77%	89
Somewhat important: others have provided some valuable guidance, but it was infrequent and/or not essential	15%	17
Not very important: I have not used or needed much informal mentoring in my career	3%	4
Other/not applicable	5%	6
Total		116

order to expand geographic reach of potential participants, reduce transportation demands, and keep costs lower. While the nature of hands-on learning can make remote strategies difficult for trades education, there are opportunities for educators and trainers to think about which course topics could be taught remotely, perhaps supplemented by hands-on independent exercises (supported by kits or other physical materials) or engagements for smaller regional "break-out" groups.

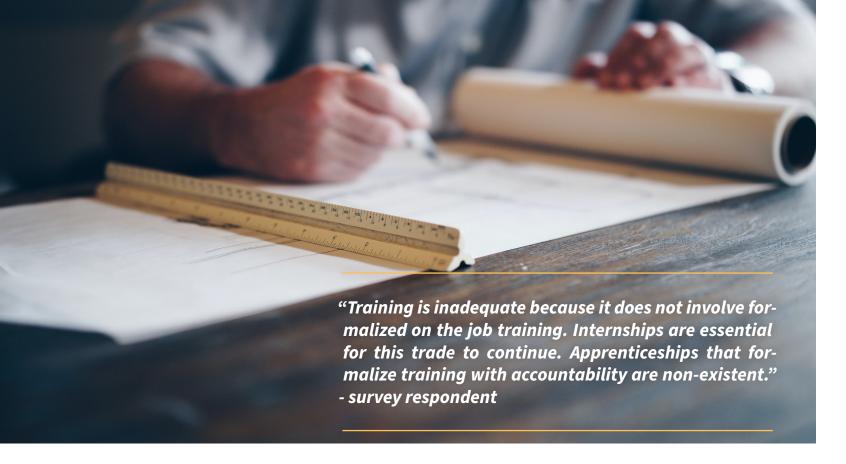
Since limited time was often cited as a factor discouraging professional education participation, many survey respondents expressed appreciation for short courses, one-time workshops, condensed conferences, or daylong special events as ways to advance their skills and make valuable connections with other professionals. Some course topics may not be specific to preservation, but could be tailored to preservation trades audiences, such as business, finance, and marketing.

Some tradespeople noted that the limited workshops and classes that do exist are often geared more toward (or end up attracting more of) the DIY homeowner audience than experienced professionals. This has implications both in terms of the ability of these events to serve as useful professional development for those who are already at a higher level of knowledge and of how these events may

be tailored as introductions to prospective tradespeople who may be interested in preservation specializations. However, DIY homeowners, too, have been known to switch careers into the preservation trades, which came up across multiple participants in this research sample, so this audience should not be overlooked in the context of workforce development.

Several respondents reflected positively upon conferences or training programs that used to exist but are no longer in operation. Examples mentioned include workshops offered by Historic Windsor, Inc. and Greater Portland Landmarks, as well as the Traditional Building Exhibition and Conference when held in Boston. Revisiting the structure and content of some of these past programs could offer ideas for in-demand future programming, as well as insights into what may not work so well or what barriers may exist by inquiring why the events stopped occurring or switched directions.

One point that arose in the interviews is that tradespeople with formal education backgrounds may approach professional development differently, as they may be more likely to seek out similarly structured educational opportunities in the future, such as workshops or conferences. Others, however, may feel more comfortable with informal information sharing, such as through online forums



or casual events. Employing different methodologies can help reach a wider range of practitioners.

Networks and Support

Having reliable knowledge and support networks are evident in this research as highly important factors contributing to success in the preservation trades. A few participants noted that working in a shop setting or a collaborative company/business with a couple of other people can be highly helpful for these reasons. "Going it alone," as many professionals (including new workers) often set out to do, can create large disadvantages in terms of making costly, potentially avoidable mistakes, not learning best practices for working safely and protecting your body, and also by impacting work-life balance (as some may assume that independent workers have more flexibility, but in reality coworkers can help cover for one another and complete projects together more efficiently.)

Two common insights shared by research participants together offer a major opportunity in terms of professional development: First, participants shared that professionals in the preservation trades tend to be very open to sharing knowledge. Second, participants often reflected that there are not many established forums or networks for connecting with others and creating these opportunities to actually share information:

"I think that a lot of people find in preservation trades that there's kind of a network of people who are connected to the information and once you break into the network, they're very eager to information share. But finding the network and getting to that place can be just like hunting for a needle in a haystack."

"Unions are rare, as are trade groups, thus networking and cooperation between people and companies require effort and perseverance."

"There should be better networking between the preservation trades professionals so it would be easier to team up for larger jobs, easier to create teams of professionals with complementary skills."

Several participants expressed that it has been a significant disadvantage to preservation trades, compared to

other trades, to not have established unions, guilds, and other professional associations. Tradespeople in certain fields mentioned specialized associations (such as the Window Preservation Alliance or Timber Framers Guild) that have been helpful in creating networking and educational opportunities, but many tradespeople felt that they were essentially on their own – without camaraderie, co-learning opportunities, representation, or advocacy. A trade union could be very helpful in helping professionals secure benefits, higher pay, and reliable work. Some participants noted that there aren't many useful directories to help connect them, another void left by a lack of unions and dedicated organizations.

Interview participants, in particular, noted that gatherings and events that are both sociable and educational (such as a "summit") could be very helpful, especially for young preservationists trying to become established. If such events were not specific only to one trade, it could be very helpful in terms of building knowledge and creating referral networks that could last a lifetime. Preservation nonprofits could be helpful in an organizational capacity to host or facilitate such events. Research participants also noted how trades suppliers can be an important source of both information and networking, and thus should be included in such events. Many participants referred to their work in preservation as being part of a

"I was mentored by several really patient, passionate, knowledgeable craftsmen who really helped me find my way."

- survey respondent

"movement," and gatherings could help solidify feelings of momentum and pride to be a part of this movement. It was also noted that preservation trades, as a movement, may have more success if it were better tied into other movements, such as affordable housing, local agriculture, adaptive reuse, or other community-minded issues and causes.

Not all networking needs to happen in person, especially in this modern age. Online events, discussion forums, listservs, and directories can also help unite people, especially those who are geographically separated. These are other key areas in which preservation nonprofits may be able to assist (and some have already).

Mid-Maine Restoration finishing the weathervane on the Sewall Memorial Congregational Church, Robbinston, ME. Photo: Maine Preservation.



Certifications, Credentialing, and Licensure

Respondents had different opinions on the usefulness of certifications, credentialing, and licensure in terms of professional development and workforce development. Some trades require certifications and their regular renewal, whereas many other do not. Other trades have optional credentials available, such as the Historic Masonry Preservation Certificate. Other certificates, such as the Dry Stone Walling Association certifications, enable recipients to be eligible to become certified instructors in their fields. In light of the variations that exist, several participants expressed interest in how certification and credentialing programs might enhance the quality of the workforce, or perhaps incentivize new workers to pursue certain fields and stick with them.

Some focus group and interview participants familiar with high school education expressed curiosity, but not necessarily certainty, about whether certifications or credentials might incentivize youth engagement (such as through Career and Technical Education [CTE] programs). High school students might be more interested in participating if credentials were "stackable" with different units, and if future employers or training programs recognized their value in terms of applied credits or better introductory pay. However, some education specialists noted that high school students often are not yet thinking concretely in terms of future finances, but may respond positively if programs are presented in a fun, accomplishment-based or even gamification-based format.

Some participants believed that certificates and official credentials may not mean much internally within the trade (amongst other tradespeople), but could make a difference externally. They could offer a competitive advantage if a public project were to go to bid, for instance, or if a tradesperson were trying to attract new clients. However, many tradesperson respondents noted that with their current workloads, it was not necessary for them to tout additional credentials - the work was already there, and experience and reputation often were sufficient on their own.

Some participants expressed that their own fields could benefit from credentialing like other fields have:

"In my judgement, there are many people currently working in the building trades who lack adequate knowledge and skill. There is state-level certification and licensing for electricians and plumbers; I am of the opinion that the same should be done for carpentry and masonry."

"My clients consider me to be a master painter yet there are no formally recognized programs in my trade in my country with that designation as an end point."

Several others were interested specifically in certificates or credentials that would indicate proficiency with preservation contexts. These programs might be trade-specific or broader:

"I think certificates for preservation training could be nice features to make available. I know that as a structural engineer, I received no formal training on historic preservation so I have had to learn on the job. *If there were a good certificate program for engineers* that could augment my knowledge - and credentials - for preservation work, I would probably pursue it. Ideally those would be regionally based so that what was taught was relevant to the area professionals work in."

"There should be a formal certification system so that a person in the trades (or wants to be in the trades) can make it clear what they know about repairing old buildings. The tech colleges should offer a one or two year program. I have heard nightmares about workers removing too much of the brick in a house where the brick is weight holding, and the house is seriously damaged. I would like to see a certification that clearly states what the person has been trained to do."

"Perhaps some preservation short courses (certificate programs?) for trades people led by veteran preservation carpenters, masons, painters, etc. would be great. Something that would incentivize contractors and trades people to think preservation

"Each state could provide a training and certification program through its state college system and offer joint accreditation with other nearby states to broaden available resources."

These various types of responses pertaining to certification and credentialing programs indicate strong interest in such offerings that merit further attention and illustrate a range of possibilities of what such products could look like.

"Anyone doing this work must have a love and passion for the work and preservation. Also, they need to realize that this is not just a job but a career that comes with pride and excitement. Folks also must be willing to be always learning."

- interview participant

Youth Education and Engagement

Finding ways to spark interest in the preservation trades amongst younger people was highlighted by numerous participants across the survey, interviews, and focus groups. In the latter, participants were able to discuss this theme in greater depth, as several participants had specific experience with high school carpentry and construction education, career and technical education (CTE) programs, and youth educational partnerships. Many newer trade-focused initiatives provide possible channels for increased youth engagement.

A very common theme across this research was frustration and regret that so many middle and high schools in the Northeast have eliminated the requirement or availability of shop class and related hands-on instructional offerings. Broadly, research participants identified high schools as a key area of improvement in terms of improving the preservation trades workforce:

"Public schools seem to have lost interest in offering trade education."

"The trades have fallen off the radar for high school aged students compared to college track courses of study. Compensation, except for successful business owners, is one factor."

"[There are] not enough affordable training resources for young people and not enough encouragement to enter trades as a career."

UNH EXTENSION | 39

Photo, right: Wilbur H. Palmer Career & Technical Education Center, Hudson, NH

"High schools don't appear to train people to understand the nature of historic buildings and how they work. Construction education that does exist, especially at the high school level, typically focuses on new construction."

While, as noted previously, many of the tradespeople who participated in this research noted frustrations

with new hires who have basic construction skills but no preservation-specific knowledge, many others did note that basic construction training creates an important foundation of knowledge to build upon, giving these individuals a head start in their learning. For employers, this also has important implications for workplace safety and liability:

"If a person comes to you and they already have rudimentary skills of how to use a power tool and not cut their hand off, that's a huge deal, because you've got six

months with the new hire worried they're going to injure themselves and sue you. So, those skills learned in high school shop were really valuable. We don't get those anymore."

Another participant noted that liability insurance can make it difficult to hire high school age students as carpenters, so the ability of youth to gain hands-on experience outside of a school or extracurricular program may be limited if they are not doing it at home.

Career and Technical Education (CTE) and Other **High School Education**

While many shop classes have disappeared in the Northeast, some school's CTE programs, such as in New Hampshire, have recently seen some increased investment as well as interest from an increasingly broad range of students. These programs typically offer carpentry/ construction, plumbing, electrical, and welding courses (varying by school/CTE center). Typically, these programs have not included historic preservation elements, as one administrator explained:

"Unfortunately, that conversation [about restoring and upgrading older homes and buildings] is not happening a lot [in CTE] because a lot of our building construction programs have been historically focused on carpentry and on this idea that somehow the students are going to be involved in new builds. And a lot of the applied work that they do in our shops has to do with shed building, partially because that's always

"Guild projects and international

projects with different groups have

been my most valued learning

opportunities. Love all the camara-

derie of fellow craftspeople who are

willing to share their knowledge."

- survey respondent

been program income... The downside of that is that yes, in a microcosm, you're getting the basics of framing as a structure, but you're also missing out on where the historic preservation part comes in. You're missing out on some other things like the basics of masonry. You're missing out on how to how to work with old wiring and how to install new, up-to-date, upto-code wiring."

Other research participants relayed similar perceptions of

a high school educational bias toward new construction. One explanation for this offered by participants is that beyond corporate or financial reasons, new construction can be very rewarding in its more instantaneous nature. By comparison, preservation or restoration work can be slow and the end results may be more subtle. For young people, in particular, the slower pace may be a deterrent, especially if they see classmates building full sheds in a relatively short period of time.

While research participants did not know of any CTE programs that offer a preservation element in their curriculum, those who were knowledgeable about CTE expressed that there's no real reason why it couldn't be included. Since CTE programs aim to serve students' future career prospects, learning skills to work specifically on older buildings could be a great advantage in the Northeast, given the aging housing stock and clear workforce demands. As the research participants described, these programs and other high school shop or extracurricular offerings are largely dependent upon the availability of appropriate professionals to teach courses. If

someone with preservation expertise were to express interest in becoming involved as a CTE instructor, schools would likely be receptive to offering courses with preservation aspects (whether as a core feature or a supplementary part of the curriculum).

However, some notable barriers to this type of preservation engagement do exist. CTE programs are often required to have an industry certification attached to them. Potentially, a preservation or trades association could create such an industry standard. While students may or may not particularly care about this credentialing in their own decision-making, it could help make curricular incorporation of preservation more possible. Additionally, logistical issues such as limited funding to support additional instructors and limited shop or classroom space to host courses (given the parameters of the student schedule and already-over-capacity programs) could also create roadblocks.

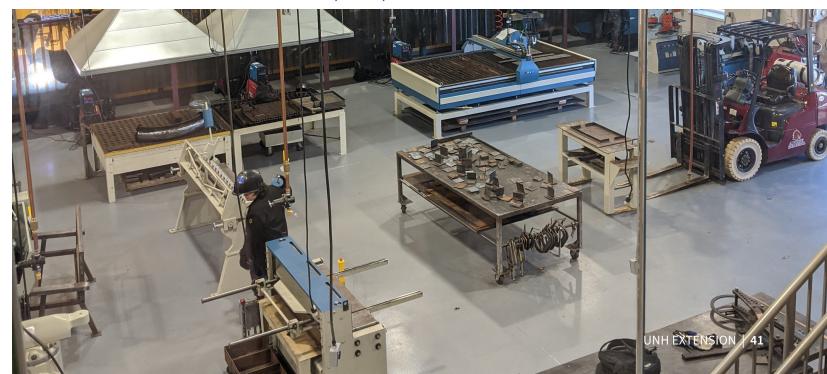
Importantly, for preservation-oriented CTE programs to be successful, students would need to be informed about why a preservation or restoration focus would be fun or worthwhile. Research participants generally perceived that most students have very little awareness about historic preservation, in general, let alone that careers focused on preservation work exist. Key selling points for catching the interest of youth could be the elements of creativity and problem-solving that are central to the work. Field trips and field work could also make a preservation track stand out compared to other shop-based high school programs, although educators participating in this

research noted that travel funding and transportation can be challenging to procure. A field work component may be more feasible through additional partnerships such as high school "jump start" educational programs (for instance, in New Hampshire it may be possible to partner with another institution and/or organization to establish a Learn Everywhere program site).

While CTE programs offer a promising potential pathway for preservation trades education, they are only a partial solution. Interview and focus group participants noted that many high school students are not aware of CTE offerings, or still consider them to be an offering mainly for those who are not college bound. Furthermore, many CTE programs are already running at or above capacity, and oftentimes require students to travel to a different town. These factors make it challenging to encourage students who might not initially consider CTE to pursue such educational opportunities. Therefore, in trying to reach a variety of students with different backgrounds to increase awareness and opportunities for preservation trades, CTE comes with its own array of challenges.

Nonprofit partnerships may be able to create unique place-based opportunities for younger people in ways high schools often are not able. An example from New York is the World Monuments Fund's Bridge to Crafts Careers (B2CC) program, which generated a partnership with Woodlawn Conservancy at the historic Woodlawn Cemetery in the Bronx. Programs at the cemetery have aimed to engage underrepresented and at-risk youth in

Wilbur H. Palmer Career & Technical Education Center, Hudson, NH



outdoors, hands-on work training, reaching young people who may not have otherwise had knowledge of this type of job opportunity.

Engagement Across Age Groups

Several of the educators and instructors who participated in this research spoke of middle school as being an important time to get students engaged with trades. Some CTE programs have partnerships with middle schools to help create CTE interest and pipelines from an earlier age. Educators shared how important middle school integration is:

"I believe you have to start students early – junior high school, middle school, seventh, eighth grade introduce them to the trades. General shop classes, woodworking, a little electrical...I'm doubting robotics and all that could stop, but they need some more of those traditional skills. We do that here and students find it very rewarding. And the sooner you can introduce them to those things, the more appetite they have for those things."

"We are targeting the middle schools. We have really concluded that by seventh grade, if they have not made that decision [to consider CTE or trades pathways], and their parents have not made that decision, it is already too late. So, we are doing a lot of work at the middle school. We are active and we bring our student ambassadors representing all our programs down to the middle school every month. Each month is a different career field. We have employers set up in the gym and we do we call it speed dating."

An important aspect of shop classes, CTE programs, and other middle or high school level education is that these programs can help facilitate broader skill bases such as problem solving, hand-eye coordination, and work ethics, which will later be critical for developing more specialized trades skills. Several research participants reiterated the notion that the new hires they seek don't necessarily need to be starting with a full range of skills, but do need common sense and a willingness to focus and learn:

"We don't expect them [new workers] to know anything. We just want them to be teachable and have a desire to learn."

"This is not rocket science, if you let your eyes and common sense guide you restoration is fairly intuitive." "We'd rather hire committed, smart, safe people and train them ourselves - so we don't have to break bad habits."

"Any training is very narrow and can't cover the variety of situations found while working. What is needed is more the attitude of figuring out what is the best thing to do for that building and that time. Training gives one only a blunt tool, which is not useful in preserving a building."

Broadly, research participants acknowledged youth experiences to be highly formative and impactful to individuals' abilities to later propel themselves successfully into a career.

> "It feels like, to me, the days of your dad or grandfather teaching stuff to you are gone. Kids are buried in their phones and not learning skills."

- survey respondent

Shifting Narratives for Greater Inclusivity

While this research revealed preservation trades to be a generally high-satisfaction career path attracting people from a wide range of backgrounds, lacks of respect, inclusivity, and awareness of what these careers actually entail have been detrimental to generating broader interest. Applying intentional outreach and messaging strategies may help overcome these challenges, some of which participants report have already been improving.

Broadening the Worker Landscape

As discussed earlier, pervasive stigmas are broadly perceived to have strongly impacted interest in trades education and careers. Participants' comments provide examples of precisely what types of notions may need to be corrected or addressed:

"Trades have been looked down upon as everyone is told they MUST go to Harvard and study social sciences."

"There was a huge stigma associated with the trades when I was graduating from high school. Unless you grew up in a family trades business, you believed that going into the trades was not a lucrative choice. I do see, recently, a shift in this thinking and hopefully this translates into more young people entering the trades."

"I was using the trades as a means to pay for my education. I hoped to get a "better" job once I had my degree. Upon graduating and getting a professional job I realized that it was not the right fit for me. I spent many years trying to get out of the trades and later discovered that it was the best fit for me all along."

Comments such as this last quote suggest how storytelling approaches of sharing individual tradespeople's backgrounds may be helpful in shifting damaging narratives. Some participants relayed that recent generations may have thought poorly of the trades having seen their own parents or other family members engage in this type of work with long days, low pay, and heavy tolls on the

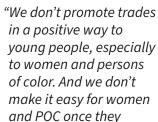
Promisingly, many participants spoke of how negative perceptions are shifting, although some did note that there is still a lot of geographic variation in terms of perceptions. Most attribute these changing societal attitudes to the recognition that these careers can be profitable and an acknowledgement of how important they are, given current shortages.

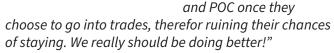
Diversity and Inclusion

When examining workforce diversity, the perceptual matter of "who trades careers are for" – and who may be best positioned to advance in such careers – still reveals room for growth. Participants offered a variety of insights regarding diversity and inclusivity in the trades, noting current problem areas and making several calls to action:

"Perceptions of who does this work are influenced by perceptions of who does contracting work in general - male, white, working class, burly, uninterested in academics, the whole stereotype. Those who don't fit that image often don't see themselves as potentially

> doing this kind of work. Publicity that highlights the diversity of historic tradespeople might be beneficial (mind you, the racial diversity needs *improving, but there are* for example a decent number of women and a general atmosphere of LGBTQ friendliness)."





"Bring attention [to the trades] as a positive option to young people. Create an equal and equitable environment for women and POC... fire those that behave in a sexist, racist, or anti-gay way with one strike you are out. Clean up the industry at the entry level all the way to the very top. It is really ridiculous what is out there."



Olde Window Restorers, Warner, NH.

body and health. There is a need to illustrate a new, more positive model. The societal push of youth toward fouryear college and other professions has also been tied to the notion of "I can do better than the generations before me," which may not actually be reflective of what professions may be lucrative or enjoyable for the individual. As one participant put it, there's a need to "bring sexy back!" to the trades and highlight how these careers can be rewarding and attractive.

"The most important thing is to change the narrative surrounding trades and create a new narrative of one with good pay, great benefits, and a great working environment to get young people interested in joining the movement."

- interview participant

"I think racism may play a role in the lack of interest or pursuit of the trades; I see many immigrants working on crews but know of no examples where they are guided, taught, promoted, etc. I see almost no Black people on crews (I can only speak for masonry)."

Participants' comments reflected that issues and concerns pertaining to diversity and inclusion can vary greatly by geography and type of job. Depending upon context, a variety of agencies and organizations (from industry to education) may be able to offer the specific positioning and expertise to help address shortcomings and leverage moments of opportunity.

Making the Pitch

Participants asserted that messaging is critical to continue shifting perceptions of the trades and create more welcoming environments. The preservation trades, specifically, offer opportunities to create narratives that illustrate how these careers can be intellectually stimulating. Many of the adult tradesperson participants of this research were not people who started off their careers in the trades, but instead came from backgrounds such as urban planning, history, and marketing. Focus group and interview participants noted the importance of broad messaging that illustrates how preservation trades careers can be appealing to students interested in other areas, such as history. Field trips to historic sites, especially those that are actively under restoration, may be a valuable tool for showing youth and college students how interests in topics like history can be directly applied to hands-on work in the preservation trades.

Several organizations and local initiatives around the Northeast have aimed to get youth interested and excited about the trades, whether as future careers or simply as useful and empowering skillsets. In New Hampshire, the relatively new organization Bring Back the Trades partners with a variety of businesses and professionals to organize family-oriented trades fairs, hoping to build excitement about the trades amongst not just high school students, but also their parents and younger siblings. This intentional design aims to build pride in these careers, break down stigma, and create multi-generational impacts upon the trades workforce. Other regional nonprofits aim specifically to engage girls or women in trades skill development. Many initiatives and nonprofits are just emerging, so there are increasingly opportunities to collaborate toward shifting historic, dominant narratives and creating a more diverse trades workforce.

Generating Interest and Excitement

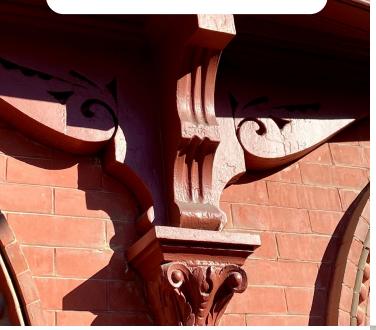
The financial burden of four-year college degree programs also creates a prominent factor in how the trades may be perceived. Many youth (and their parents) are wary of future student debt and beginning to recognize other career development pathways as appealing options. Some youth may see college as a distraction or a delay toward beginning work and earning money, as one high school instructor described:

"Five of my students are less interested in going to college. They're more interested in the certificate programs, they are more interested in apprenticeships. They like the licensed trades because they're higher pay – linemen, plumbers, electricians, welders. They want to save by not going to college, and they can do that with the certificate program. Instead of an associate's degree or a four-year degree, I see college disappearing from their future plans, and more trade orientation to get right into the trade. Start working, start making money, buy a Toyota Tacoma."

There was a common sentiment in this research that lasting change begins with youth, and youth of all ages can be engaged in the process of creating a more diverse, sustainable, and satisfied workforce. While participants shared frustrations and many areas of improvement for workforce development, there was a strong sense across areas of this research that public perceptions of the trades are improving and many opportunities exist to shift narratives, develop educational offerings, create new partnerships, and engage a variety of audiences. For historic preservation specifically, enhancing awareness of these career paths and their many strengths was one of the largest needs and opportunities.

What we heard about people in the preservation trades workforce:

- Must be a self-starter
- Must be confident in what you are doing
- Must recognize the limits of your knowledge and abilities
- Must be willing to continually learn



Historic building detail in Hudson, NY

The Roles of Preservation Nonprofits

Some tradespeople interviewed in this research saw opportunities for preservation organizations to help address these workforce challenges and opportunities. One notion that arose from some participants is that promoting preservation, as a principle or virtue, is no longer enough, and they hoped preservation organizations would do more to support on-the-ground tradespeople working in preservation:

"We need less people trying to promote historic preservation or restoration, and we need more support making it so we can do it. More support for the people actually in the field."

In conversations with research participants, many were not aware of how or if preservation organizations (whether statewide, regional, or local) were trying to address workforce challenges. Matters of policy and legislation rarely came up in the research responses, although some expressed desire for more government funding to go toward supporting trades education or apprenticeships. At the more local level, some respondents reflected that if communities would pay more attention and care to zoning and ordinances, this could help create more favorable environments for preservation trades to thrive.

In terms of public perceptions of historic preservation, some expressed frustration that it is often seen as an "elite" or upper-income cause that may not be accessible to all types of people, and that this notion, in turn, has been problematic for advancing the trades:

"Preservation trades are niche and expensive, seems like most [new workers] today are going to 'modern'

"Preservation is expensive; especially using 'traditional' construction methods. Convincing our throw-away culture that this expense is "worth it" is the primary challenge IMO."

"Don't tailor your 'sell' to create elite preservation professionals. The few who exist today are too busy,



Maine Preservation Summer Fellow at Bagala Window Works, Westbrook, ME. Photo: Maine Preservation.



Students learning welding skills.

too hard to hire, and can be picky when choosing their next projects. Some of my best contractors have not been on preservation contractor lists but have been wonderful with years of first-hand experience."

Additionally, preservation nonprofits may not be seen as inclusive as they aim to be based on geography. Since they are often based in a state's major city, residents and professionals in more remote regions may have less awareness of their programs or less access to their offerings.

As key advocates of preservation, nonprofit organizations may be able to employ intentional engagement strategies and carefully selected language and communication strategies to make preservation more accessible, inclusive, and broadly appealing. Preservation organizations may also be able to play key roles in creating networking and educational opportunities where gaps exist.

RECOMMENDATIONS AND FUTURE ACTIONS

Building and sustaining the preservation trades workforce in the Northeast will need to engage a variety of collaborators and stakeholders. Everyone has a role to play, including (but not limited to) tradespeople, educators, preservation groups, trades organizations, families, and local, state, and federal government. Coalitions and inter-organizational task forces will likely be far better positioned for success than individual actors alone.

Research participants shared many ideas and strategies related to outreach, promotion, training, and professional development. Guided by the research findings, this section presents five categories of recommendations for consideration. Some of these may be fittingly spearheaded by preservation nonprofit organizations, and others may depend largely upon other stakeholders such as trades associations and educators. Some may be more feasible in some places than others, depending upon existing infrastructure, programs, resources, and organizational capacity. Throughout these recommendations, *collaboration* and *partnerships* are imperative themes.

A. Building Awareness and Enthusiasm for the Preservation Trades

Throughout this research, many participants expressed desire for more people to share the story of preservation trades, illustrating how they can be fulfilling careers and serve important roles in society. There is great pride in this work and much interest from practitioners in promoting their professions through a variety of marketing and outreach avenues. In particular, outreach efforts should aim to spark interest among young people and consider how to reach more diverse audiences.

1. Develop topical marketing and promotion such as "appreciation" or "pride" campaigns to enhance awareness at the community level.

Historical societies, main street/downtown associations, and preservation nonprofits can play meaningful public relations roles by developing community and stakeholder communication and engagement strategies. Providing regular project updates via media and communication

channels can help keep local interest alive. Themes to highlight in marketing and promotion could include:

- Community pride in successful rehabilitation/ restoration outcomes
- Creativity and craft of the work
- The differences between hiring a preservation/ restoration specialist and a generalist
- Positive aspects of this field as a career (especially targeted to those outside the field)
- Connections to community art and placemaking movements

2. Use inclusive and intentional language to communicate concepts and ideas.

It is important to note that not everyone has knowledge of what "historic preservation" really means in practice, or that it can engage people from all walks of life. Some personal associations with the term may not be wholly positive. Preservation advocates should explore the language and framing used to describe historic preservation work and workforce development to determine how it is understood and best employed. It may be worthwhile to identify experts in this area to help create effective marketing, promotion, and outreach materials.

3. Use events to expose people to various aspects of preservation trades work.

Trade, business, and nonprofit associations can work with businesses, schools, and community groups to expand their reach and exposure. Events with social and hands-on components are encouraged in order to garner strong participation and engagement. Such events could include:

- Site tours of notable places that are actively being restored, offering some sense of "before and after" (noting any safety and liability limitations of active work sites)
- Home restoration project open houses and workshops to attract DIY/renovation audiences while enhancing understanding of the importance of preservationspecific strategies
- Public, all-ages "living history" events where attendees can try certain crafts and trades and understand their contexts of use

4. Facilitate fieldwork and field trip experiences for youth.

Field trips to historic sites can spark life-long appreciation for history and preservation. Fieldwork was often cited in this research as critical both for gaining skills in preservation trades and for exposing those potentially interested in the field to its possible options. Off-site field trip and fieldwork opportunities are not typically incorporated into many Career and Technical Education (CTE) programs, but could be offered with some additional planning and resources. For students not engaged in CTE, history class field trips to sites actively under restoration that allow opportunities to speak with tradespeople could provide a memorable introduction to these professions. Preservation organizations, historical societies, and trades organizations could also help bring in preservation specialists to CTE programs or school classrooms when field trips are not possible.

Identify and create new partnerships with trades-related organizations and businesses that are not specific to preservation, especially toward reaching more diverse audiences.

Organizations such as Bring Back the Trades, Women in the Trades, Girls at Work, and Habitat for Humanity could offer opportunities for preservation education, outreach, and hands-on experience. Respondents suggested that stronger linkages with the business community should be created and could be mutually beneficial.

6. Identify opportunities for advancement through policy making and advocacy.

Coalitions and groups advocating for the advancement of preservation trades can actively work to mobilize stakeholders to participate in legislative action. This research did not uncover many references to legislative and policy work, nor did the researchers specifically probe for this information. However, some participants did relay the need to lobby elected officials for more resources at local, state, county, and federal levels. Preservation organizations (many of which are already very familiar with public policy and advocacy work) should consider their role in legislative and policy work as it connects to these topics, seek to understand how certain policies (which may be specific to workforce issues more broadly, rather than preservation) may impact workforce advancement, and engage trades professionals and other stakeholders in

related activism. Some examples of areas that may benefit from legislative engagement include CTE program funding at the state level or post-secondary financial aid eligibility. Policy may be a topic area that merits future targeted investigation.

B. Workforce Development and Recruitment

Many tradespeople have relied upon word of mouth, personal connections, and informal networking for hiring employees. While informal channels are valuable and have been appreciated by many in the trades, there are recognized opportunities to incorporate new forms of communication and outreach. Several respondents shared ideas for using more formal promotion and recruitment strategies (such as employing social media), while noting that they are not actually doing this yet themselves.

1. Start with youth and young people.

Times have changed and many of the activities that used to be fundamental to the experience of being a kid – playing with blocks, building backyard forts, or learning woodworking basics in shop class – are no longer so commonplace. Many young people may lack knowledge of building-related jobs and the senses of fun and satisfaction that these occupations can yield. Partnerships and funding to expand youth-centered trades learning programs with a focus on preservation skills are needed. These efforts will involve ongoing relationship building to further the trades fields and offer education and pro-

"Selling preservation as 'environmental conservation and repair/ maintenance' rather than 'gentrification' I think is key to this sector's future."

- survey respondent

motion of career opportunities. Research participants often suggested that middle school is where the initial exposure to preservation trades fields should start. Some northeastern schools have created partnership programs between high school CTE and middle school students, helping to generate early knowledge and enthusiasm for CTE-based career exploration.

2. Engage the whole family.

The roles and attitudes of the family are important in influencing students' knowledge and understanding of preservation trades (or the trades, more broadly) as work and career opportunities. There is an opportunity for outreach and recruitment campaigns to highlight how preservation trades can be intellectual pursuits and can offer very respectable, reliable income. Trades outreach events can engage the whole family, aiming to recruit high school students, gain support from parents, and plant a seed of an idea within kids. Respondents suggested that work to promote preservation trades career paths to families could happen via the following:

- State or community fair interactive stations
- Interactive, place-based family events (such as those hosted at Sanborn Mills or Muster Field Farm in New Hampshire)
- High school trades/career fairs also featuring children's or all-ages activities
- Parent/teacher night for CTE programs with a preservation trades feature
- More CTE engagement in the community to demonstrate skills, such as through local build/restore projects
- Summer CTE/shop/trades camps for young people sponsored by preservation trades

3. Appreciate and foster both informal and formal promotional strategies for workforce development.

Employers and the organizations supporting them should continue to acknowledge and support the informal nature of word-of-mouth marketing in the preservation trades. At the same time, they should consider how they might utilize more formal marketing, and how it may



Wood shop at Sanborn Mills Farm, Loudon, NH. Photo: Steve Booth Photography

be developed in cooperation with affiliates such as preservation groups and workforce advocates. Promotional suggestions that could contribute to workforce recruitment include:

- Better utilizing social media to reach a wider audience
 this audience is likely to be younger and at the stage of making work/life decisions
- Creating and sharing YouTube do-it-yourself (DIY) videos to demonstrate the work and highlight gratifying aspects
- Identify appropriate influencers to promote the preservation field
- Starting promotion and education at the middle school level, with an emphasis on offering hands-on activities

4. Share and develop strategies and best practices for hiring.

Current hiring norms, including word of mouth and informal networks, should be recognized and supported along with the expansion of more formal hiring processes.

Creating job boards, newsletter employer highlights, and job fairs may be ways that preservation organizations can lend support to employers and businesses. Centralized resource hubs can make job wayfinding much easier for prospective employees.

5. Collaborate with existing training programs to reach and recruit broader audiences.

Research participants cited numerous training programs across the Northeast that are known to offer high-quality educational experiences for new and seasoned professionals (some examples: North Bennet Street School, the Stone Trust, Timber Framers Guild/Heartwood School, Historic Windsor, Inc/the Preservation Education Institute). There are opportunities to combine outreach abilities with educational expertise across organizations or businesses to get the word out to different audiences about these programs and the career paths they serve.

6. Strategize clear and distinct efforts to diversify the industry.

The network for this research was largely white and male. The insights shared suggested both positive and challenging experiences for women, people of color, and LGBTQIA+ individuals participating in the preservation trades. A variety of resources pertaining to workforce diversity, equity and inclusion have been developed or improved in recent years. These may provide overarching guidance that can be referred to as a starting point and adapted for a preservation trades specific audience. Partnering or consulting with existing organizations with success in this area is recommended to deepen engagement and articulate action plans.

C. Expanding and Enhancing Educational Pathways

While several strong educational programs already exist in the Northeast, their capacity, reach, or specializations may be limited. There are opportunities to introduce preservation-specific knowledge and specializations to more general trades training programs. Outreach and education efforts should start with youth and young people, emphasize hands-on experiences, and aim to reduce financial or logistical burdens.

1. Strengthen vocational training programs and coursework in high schools.

There are limited resources and focus on vocational training in schools, although many existing career and technical education (CTE) programs have experienced much interest and demand from students in recent years. Vocational training is seen as a key opportunity to expose youth to the various trades and pique their interest. School vocational education offerings can change from year to year based on funding, available facilities, and student interest, so it is important to continually review opportunities to strengthen programs and identify openings to add preservation-related focuses and explorations.

2. Explore possibilities to develop preservation trades industry standards and associated curricula.

While this varies by state, high school CTE courses and community college-based apprenticeship programs often require a set of industry standards and a related curriculum in order to be included in institutional offerings. A partnership between preservation organizations, trade industry associations, and educators may be able to develop such standards and tailor them to be age-appropriate, propelling how preservation trades can be featured in public education.

3. Expand apprenticeship and mentorship pipelines and provide support to improve participant experiences.

Apprenticeships are seen as critically important to the recruitment, learning, and retention process. Access and participant experience are key areas for attention in terms of apprenticeship program development. Preservation groups and workforce development organizations, among others, can play vital support roles to increase awareness of apprenticeship opportunities in their region by facilitating stronger relationships between tradespeople/employers and students, educators and administrators. Trades associations, chambers of commerce, and other business groups may be able to encourage and incentivize greater participation from professionals. There is a widely expressed need to more creatively explore funding possibilities to help subsidize paid apprenticeships, thus reducing the financial burden on the master/ employer and making apprenticeships more feasible for

a wider range of students and new professionals. Preservation and trade nonprofits, perhaps working under guidance from established training programs, may be able to develop mentorship and pedagogical resources to help guide the master/employer, enhancing the effectiveness and enjoy-ment of the apprenticeship experience.

4. Build hands-on work or field-based practicums into college and graduate programs.

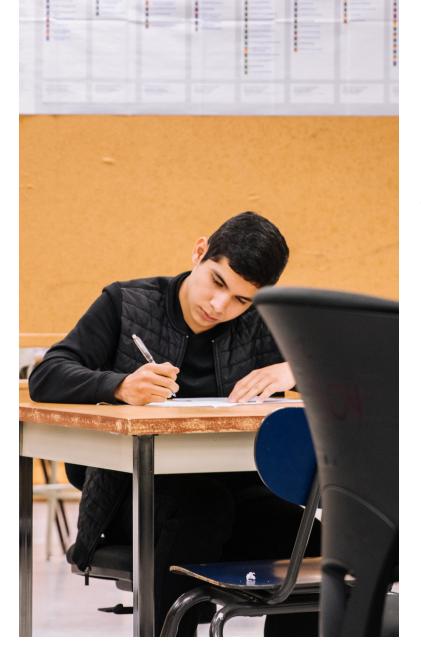
A lack of hands-on work commonly emerged in this research as a major deficiency in formal educational programs. Preservation nonprofits and trades associations may be able to help initiate conversations with program chairs and directors about the recognized importance of these curricular elements and introduce well-suited professionals to program chairs and faculty. Many CTE programs and community colleges already have well-connected professionals working as faculty, but support and advocacy may be needed to provide course scheduling flexibility, transportation assistance, and additional funding for supplies.

D. Workforce Retention and Capacity Building

Maintaining a satisfied and competent workforce is an ongoing process of engagement with critical social aspects. Broadly, research participants noted that they are constantly learning and seeking new opportunities to advance their crafts and competencies.

Expand continuing education offerings to better support existing practitioners and small businesses.

This research identified areas of improvement in terms of both continuing education topics and reach. There is a need for training and education on the business aspects of preservation trades so that contractors and businesses can thrive and grow. Organizations supporting tradespeople could partner with organizations that typically provide these types of training (such as for budgeting and financial planning, or human resources and benefits guidance), while engaging preservation professionals to tailor the content to the trades audience. Succession planning was not a major theme generated by the responses of



this research, but there was a keen awareness that the average professional is growing older and there is a need for younger trained tradespeople to have the capac-ity to take over the work. Support organizations could also help facilitate conversations between and across workers and employers about tricky topics like compensation, safety, and professional support. Educational providers should consider how different continuing education formats engage and reach different people. Training and education programs should employ both in-person and online offerings, short workshops and multi-day trainings, and structured education and informal networking/informa-

tion sharing. In the Northeast region, it is important to make intentional efforts to serve professionals who are based in remote areas.

2. Host social and educational events and forums open to people from different preservation trades.

This approach can help build referral networks, create cross-sectors of knowledge, and encourage support systems (especially for newer professionals). Potentially organized by preservation nonprofits, events could include:

- A conference for all preservation/restoration tradespeople with trade-specific breakout sessions and business development sessions
- "New professionals" networking events, in addition to related groups, listservs, etc.
- Business development workshops
- Regional social gatherings intended to build referral networks and develop shared knowledge

3. Explore ways technology may advance these fields.

Research participants noted that many young people are accustomed to using smartphone or computer-based apps and technology in nearly all aspects of their lives. While many of today's youth may not have grown up with the hands-on woodworking or building experience of prior generations, they may have been introduced to building and engineering through gaming or other online or technology-based experiences. While preservation trades are often seen as "traditional" skills that celebrate "old-fashioned," hands-on work, there are opportunities to explore how newer technol-ogies may improve efficiency and make these careers more engaging and appealing, especially to younger people.

E. Measuring and Monitoring Success

The aforementioned strategies will require regular checkins to ensure that they are helping to achieve desired outcomes. In a potentially changing workforce, hiring, and

education landscape, continually reassessing progress and priorities will be important aspects of projects and initiatives.

1. Develop and maintain a list of cross-sector indicators that can provide ongoing insights about recruitment and retention.

Continue to build partnerships to be able to access and include a wider range of data and metrics. Plan to track certain data points year to year to monitor progress. Consider compiling data points such as the number/amount

- Post-secondary preservation trades training programs in the region, with attention to which trades are more available and which trades are underrepresented
- Annual program inquiries and enrollment figures for existing preservation trades training programs, as well as attrition and drop-out statistics
- · Public middle and high schools statewide offering trades-related coursework or extracurricular activities
- General trades training programs (at any level) that also include preservation or restoration components in their curricula
- Students in a chosen sample of trades programs who



Foundation and sill work. Photo: New Hampshire Preservation Alliance

select certain trades paths of interest (for example, preservation masonry)

- Paid preservation trades internships statewide
- Public school funding allocated to CTE programs or other related educational programs statewide or countywide
- Subscribers of relevant newsletters, listservs, and other preservation trades-specific mailing lists
- Website hits and/or email open rates for preservation trades career information, events, or training programs

2. Compare how preservation trades workforce development progress compares to more general trades workforce development.

This research found that many issues creating challenges for the preservation trades workforce (such as stigma against certain career paths and lack of foundational experience with shop class-type skills) are shared with the trades more generally. Preservation trades workforce initiatives should continually evaluate where their own challenges and opportunities converge or are unique. Information gathering could include:

- Meeting with representatives from trades unions, builders' associations, and other trades organizations to understand how they currently view their own respective workforces and future trajectories
- Reviewing U.S. Bureau of Labor Statistics data on construction laborers or other federal or regional labor data to offer comparison points

3. Incorporate evaluation tools into events and programming.

Continually work to refine understandings of best practices for engaging youth and new audiences, noting that these can vary depending upon geography and audience and will likely change over time. Seek data and insights from both formal and informal channels to help guide ideas and strategies. For instance, organizers of an educational outreach event might consider how exit surveys or post-event surveys may help generate valuable information, but also intentionally plan to make time to talk with participants informally about what they liked or didn't like. Fostering communication with trades students and establishing exit evaluations in schools and training programs can help develop understandings of satisfaction and retention factors.

4. Continually re-evaluate which actors or stakeholders should be invited to the table.

Coalition building is an iterative process, especially in a changing workforce landscape. Groups leading initiatives can glean new insights and avoid becoming static by casting a broad net, inviting new groups and individuals to participate in conversations and activities.

F. Recommendations for Future Study and Information Gathering

This research engaged a broad range of tradespeople, preservation professionals, educators, and others with ties to the research themes. The research team had only limited success reaching out to students and newer professionals, despite engaging several nonprofit organizations and high school CTE programs that work directly with young people. Additional research or engagements to learn about the perceptions and preferences of young people would be helpful in building campaigns and developing outreach strategies. This would be helpful at the middle school or high school age levels, as well as the 18-25 age category.

Participants in this research came from across the four states, which covers very high-density urban areas such as New York City, and very remote regions such as Northern Maine. Many of the respondents came from more rural or suburban contexts, although city-based professionals and training programs were also included. This research did not delve deeply into the differences between workforce development challenges and opportunities in rural versus urban areas. Many of the perspectives shared about these careers were similar whether people lived and worked in a city or in a small, remote town. However, comments did arise pertaining to access to training, diversity in the workforce, and external attitudes of tradespeople that reflected or implied differences between geographies. Additional investigation of urban settings, specifically, could help expand the knowledge base that this research has aimed to build. Partnering with workforce organizations specifically focused on urban settings, such as New York City, Buffalo, Manchester, or Portland, could be helpful in developing specific recommendations and initiatives for these areas. This could be particularly

relevant in terms of developing a more diverse, inclusive, and equitable workforce. Opportunities to engage and advance minorities and people of color in preservation trades may be greater (or more apparent) in urban areas, although all Northeast regions should consider ways the workforce could have wider demographic representation.

DISCUSSION AND CONCLUSION

This research depicts a workforce landscape in the Northeast that is currently experiencing shortages across a wide variety of preservation and restoration specializations. With many research participants reflecting that their colleagues are retiring while younger people lack interest or knowledge of these fields, these shortages will likely intensify if interventions are not made. The Campaign for Historic Trades' recent labor study indicates that every year there will be about 261,000 historic properties in need of rehabilitation projects, equating to the need for about 100,000 highly specialized trades workers in the next decade across the country.1 With its high percentage of historic homes and buildings, the Northeast is positioned in the epicenter of this growing demand.

Workforce diversification, de-stigmatization of trades careers, and compensation are key areas for attention. Recent research from the Federal Reserve Bank of Boston reports that men without 4-year college degrees between 25-54 years (a key demographic group of people to have traditionally worked in trades jobs) have been earning smaller shares of the total average labor force earnings (over 30% less since 1980). This demographic group has also been exiting the labor force at concerning rates, which the research attributes in part to workers' perceptions of their social status and position among peers.²

Compensation

This preservation trades research revealed compensation to be a complex topic. While many participants reflected that the workforce shortage has allowed tradespeople to

¹Campaign for Historic Trades. Status of Historic Trades in America. July 2022. https://historictrades.org/wp-content/uploads/2022/11/ Campaign-for-Historic-Trades-10.31.2022.pdf

²Pinghui Wu. 2022. "Wage Inequality and the Rise in Labor Force Exit: The Case of US Prime-Age Men." Federal Reserve Bank of Boston Research Department Working Papers, no. 22-16. https://doi. org/10.29412/res.wp.2022.16

essentially "name their price," comments often reflected a variety of worker challenges related to pay, especially when entering the trades workforce. To an extent, this may be a matter of the market not yet "balancing out" – established tradespeople are now (as of recently, post-COVID-19) generally making a very good living, but those just starting off are still entering the workforce at pay levels similar to five or ten years ago. The Federal Reserve Bank of Boston research suggests that earnings inequity between top earners in a state and other workers may contribute significantly to labor force exit, especially among younger, white men.

In this preservation trades research, some participants lamented about unpaid or underpaid training or apprenticeship periods creating financial burdens (or impossibilities), while others applauded the ability of apprenticeships to offer reliable base pay to those still learning. Some of these considerations can vary by state, impacted by agency intervention and minimum wage and labor laws. In 2022, for instance, minimum wage in the Northeast region ranged between \$7.25 in New Hampshire to \$14.20 in New York. Providing information about compensation, normalizing conversations about pay rates, and exploring opportunities to support small businesses in offering more comprehensive employee benefit packages could be ways organizations could address this sometimes-controversial topic area. Helpfully, the Campaign for Historic Trades provides detailed findings pertaining to typical wages across a variety of preservation trades jobs in their 2022 report.³

Organizational Representation

Many respondents in this Northeast preservation trades research commented on the negative impacts of not having union or guild representation. In countries around the world, the decline of unions has been linked with workforce insecurity, as worker pay and safety lack regulation and greater pressures are put on the individual in terms of performance and outputs in order to make a living.⁴ As this current research indicates, a lack of collective organization and oversight may also impact professional development and support networks, pride in one's career, and public knowledge of career opportunities. There are opportunities for non-union organizations to fill at least some of these roles.

Diversity and Inclusion

Diversification of the trades workforce in the Northeast arose in this research as a clear area for potential improve-

ment. Data from the Bureau of Labor Statistics shows a sharp incline since 2016 in the number of women entering construction jobs. Hispanic women comprise much of this growth. A recent Washington Post article shares a perspective that women are often more difficult to recruit and to train for construction work due to a comparative lack of prior experience, but it notes that efforts from women-focused organizations and from women reaching out to other women has helped encourage interest and engagement, which can have rippling effects. Furthermore, President Biden's Bipartisan Infrastructure Law (i.e. the Infrastructure Investment and Jobs Act), passed in 2021, is expected to make further strides toward engaging women in the trades by creating new work opportunities across the United States.⁵ Most of the priority areas of this legislation do not have clear linkages to preservation work, specifically, 6 but may be instrumental in diversification of the trades workforce more broadly.

This Northeastern research depicted a generally very white preservation trades workforce. While this may seem to be primarily a reflection of the general Northeast population, studies of other regions, such as Covington, KY, also see similar demographic tendencies, despite having population percentages of non-white people that are higher than many Northeastern communities. In considering how a preservation trades workforce may foster greater diversity, it is valuable to consider how community art and preservation projects may be designed toward engaging diverse participants and audiences and improving local equity, as a reciprocal relationship may emerge between local placemaking initiatives and young people's interests in preservation careers. Previous investigations of this topic (such as from student work in Buf-

³Campaign for Historic Trades. *Status of Historic Trades in America*. July 2022. https://historictrades.org/wp-content/uploads/2022/11/Campaign-for-Historic-Trades-10.31.2022.pdf

⁴Edmund Heery and Brian Abbott. "Trade Unions and the Insecure Workforce." In *The Insecure Workforce*. (London: Routledge, 2000),167-192.

⁵Andrew Van Dam. "Why are way more women suddenly working in construction?" *The Washington Post*. (Washington, D.C.) Nov. 11, 2022. https://www.washingtonpost.com/business/2022/11/11/hispanic-women-construction-trades/

⁶The White House. "President Biden's Bipartisan Infrastructure Law." Accessed December 10, 2022. https://www.whitehouse.gov/bipartisan-infrastructure-law/

⁷City of Covington Historic Preservation Office. *Historic Trades Labor Analysis*. April 2022. https://www.placeeconomics.com/wp-content/uploads/2022/05/Covington-Heritage-Trades-Analysis_May31.pdf

falo, NY)⁸ may be helpful toward identifying appropriate project frameworks.

Stigma

The historic stigmatization of trades careers is also important to address in terms of diversity, equity, and inclusion. There is opportunity now for a positive snowball effect: if the trades can be successfully promoted in a positive new light, a broader variety of individuals are likely to become involved, and as the workforce starts to look demographically different than it did a few decades ago, past stereotypes and biases could increasingly fade away as their fundamental generalizations (such as that these paths are only for men without college degrees) no longer hold true. Emphasizing how preservation trades can be skilled, STEAM (science, technology, engineering, art, and math) oriented jobs that are benefitted by personal passions for history, creativity, and artistry may help propel preservation specializations toward improved public perception.

Mentoring and Social Networks

In this research, the importance of mentoring and information sharing arose continually as key factors of success for preservation tradespeople. Informal mentoring and social-professional networks are widely valued by trades professionals. Research from Australia on carpen-

New York Public Library, New York, NY



try apprenticeships notes that informal mentoring plays a valuable role in supporting mental health and wellbeing of apprentices, perhaps more than formal mentoring, yet informal mentoring can be more difficult to facilitate.9 A study from the United States identifies eight foundational attributes that contribute to construction workforce sustainability: nurturing, diversity, equity, health and well-being, connectivity, value, community, and maturity.¹⁰ It is important to note that several of these relate to interpersonal or social dimensions. Construction sector research also suggests that "nurturing and maintaining the requisite skills and competencies constantly" is a key aspect of achieving workforce sustainability. 11 This aligns with findings from this preservation trades research, in which exhibiting a commitment to ongoing learning was commonly seen as an important factor of career success.

Closing Thoughts

An important point to note in reflecting upon this research, as a whole, is that a lot of things are already going very well for the preservation trades in the Northeast. In terms of considering, "what would success look like?" for workforce development, a basic answer is: more of what's already been happening. Preservation tradespeople broadly report being satisfied in the careers and loving their work. Long-time professionals indicate that stigmas against these types of careers are not nearly as prevalent as they were a decade or two ago. Many women report that trades careers are becoming more inclusive and gender stereotypes are changing. While there is still ample room for improvement and innovation, the preservation trades have numerous desirable qualities that, if properly featured, can be leveraged into a larger, more capable, and more content workforce.

54 UNH EXTENSION | 55

⁸Jennifer Minner. "Preservation that Builds Equity, Art that Constructs Just Places." *Future Anterior: Journal of Historic Preservation, History, Theory, and Criticism* 17, no. 2 (2020): 133-146.

⁹John Buchanan et al. *Beyond Mentoring: Social Support Structures for Young Australian Carpentry Apprentices*. Research Report. National Centre for Vocational Education Research Ltd. Adelaide, SA, Australia, 2016.

¹⁰Ali A. Karakhan et al. "How to improve workforce development and sustainability in construction." *In Construction Research Congress* 2020: Safety, Workforce, and Education, pp. 21-30. Reston, VA: American Society of Civil Engineers, 2020.

¹¹John Gambatese et al. "Development of a workforce sustainability model for construction." *The Center for Construction Research and Training* (2019).

References/For Further Reading

- Buchanan, John, Catherine Raffaele, Nick Glozier, and Aran Kanagaratnam. Beyond Mentoring: Social Support Structures for Young Australian Carpentry Apprentices. Research Report. National Centre for Vocational Education Research Ltd. Adelaide, SA, Australia, 2016.
- Campaign for Historic Trades/PlaceEconomics. Status of Historic Trades in America. July 2022. https://historictrades.org/wp-content/uploads/2022/11/ Campaign-for-Historic-Trades-10.31.2022.pdf
- City of Covington Historic Preservation Office/PlaceEconomics. Historic Trades Labor Analysis. April 2022. https://www.placeeconomics.com/wp-content/ uploads/2022/05/Covington-Heritage-Trades-Analysis May31.pdf
- Gambatese, John., Ali A. Karakhan, and Denise R. Simmons. "Development of a workforce sustainability model for construction." The Center for Construction Research and Training (2019).
- Heery, Edmund, and Brian Abbott. "Trade Unions and the Insecure Workforce." In The Insecure Workforce, pp. 167-192. London: Routledge, 2000.
- Karakhan, Ali A., John Gambatese, Denise R. Simmons, and Chukwuma Nnaji. "How to improve workforce development and sustainability in construction." In Construction Research Congress 2020: Safety, Workforce, and Education, pp. 21-30. Reston, VA: American Society of Civil Engineers, 2020.
- McAnaw Gallagher, Claire/U.S. Bureau of Labor Statistics. "The Construction Industry: Characteristics of the Employed, 2003–2020." Apr. 2022. https:// www.bls.gov/spotlight/2022/the-construction-industry-labor-force-2003to-2020/home.htm
- Minner, Jennifer. "Preservation that Builds Equity, Art that Constructs Just Places." Future Anterior: Journal of Historic Preservation, History, Theory, and Criticism 17, no. 2 (2020): 133-146.
- The White House. "President Biden's Bipartisan Infrastructure Law." Accessed December 10, 2022. https://www.whitehouse.gov/bipartisan-infrastructurelaw/
- Van Dam, Andrew. "Why are way more women suddenly working in construction?" The Washington Post. (Washington, D.C.) Nov. 11, 2022. https://www.washingtonpost.com/business/2022/11/11/hispanic-womenconstruction-trades/
- Wu, Pinghui. "Wage Inequality and the Rise in Labor Force Exit: The Case of US Prime-Age Men." Federal Reserve Bank of Boston Research Department Working Papers, no. 22-16. 2022. https://doi.org/10.29412/res.wp.2022.16