State of New Hampshire

Workforce Innovation and Opportunity Act (WIOA)

Annual Report

For the period July 1, 2022, through June 30, 2023

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INTRODUCTION

Each state that receives Workforce Innovation and Opportunity Act (WIOA) funds must prepare and submit an Annual Report of performance progress to the Secretary of Labor.

As indicated in the Training and Guidance Letter 5-18, Workforce Innovation and Opportunity Act Annual Statewide Performance Report Narrative (published November 7, 2018), the following materials respond to the content of the WIOA Annual Statewide Performance Narrative. The narrative report submitted by the State Workforce Innovation Board is due to US DOL by no later than December 1, 2023, and not to exceed 25 pages. The Narrative Report must include:

- Progress towards meeting the strategic vision and goals for the workforce system.
- Status of waivers that the state has had in place for at least one program year.\
- Identify the two approaches the state has chosen for the Effectiveness in Serving Employers Performance Indicator Pilot.
- Brief description of
    a. Current or planned evaluation and related research projects including methodologies used;
    b. Efforts to coordinate the development of such projects within WIOA core programs, other state agencies and local boards;
    c. A list of completed evaluation and related reports and links to where they were made accessible to the public electronically;
    d. State efforts to provide data, survey responses, and timely site visits for Federal evaluations; and
    e. Any continuous improvement strategies utilizing results from studies and evidence-based practices evaluated.
- State's approach to customer satisfaction which may include such information used for one-stop center certification including
    a. The state's methodologies;
    b. Number of individuals/employers who were provided customer satisfaction outreach, the response rate and efforts made to improve the response rate
    c. The results and whether the results are generalizable to the entire population of customers; and
    d. A description of any continuous improvement processes for incorporating the customer satisfaction feedback.
- Progress made in implementing sector strategies and career pathways including, but not limited to, business engagement strategies, work-based learning (including apprenticeship), work experiences for youth and adults, transitional jobs, and incumbent worker training strategies and policies in the state.
- The State's performance accountability system including
    a. Any specific state performance measures or goals and progress towards meeting them.
    b. Any performance deficiencies on the primary indicators of performance, which may include descriptions of any factors effecting performance.
    c. The State's common exit policy including which ETA-funded partner programs are included in the states common exit policy.
    d. Negotiated performance levels for local areas for Title I and III core programs for program years 2022-23.
    e. State's approach to data validation and ensuring data integrity including a description of methodology of any validation activities that occurred.
- Activities provided by state funds:

a. Activities provided with the funds reserved by the governor, which can be up to 10 percent of the state's allotment.
  b. Rapid Response activities and layoff aversion
- Activities provided under the Wagner-Peyser Act Employment Service.
- National Dislocated Worker Grants awarded to or within the state.

On behalf of Department of Business and Economic Affairs, Office of Workforce Opportunity and the State Workforce Innovation Board, we are pleased to offer this Annual Report narrative summarizing our activities consistent with US DOL requirements.

To our partners, we wish to take this opportunity to acknowledge the dedication and hard work of the staff involved in providing service through the NH Works system. Their ongoing commitment to provide quality services to all who access our services is evident in positive program outcomes, and the high satisfaction ratings from our customers.

Annual Report Narrative
For the period July 1, 2022, through June 30, 2023

NH WORKFORCE SYSTEM – VISION, GOALS AND STRATEGIES

The Workforce Innovation and Opportunity Act (WIOA) provided the vision for the initial planning process that included partners, stakeholders, and customers from across the state, focused on creating a demand-driven workforce system that seeks the best possible experience for all business and jobseeker customers, and strives for continuous improvement alignment, and integration of services. The WIOA State Four-Year plan updated in PY2021, and effective July 1, 2020 - June 30, 2024, reinforced established goals and system-wide priorities.

The State Workforce Innovation Board (SWIB) vision is "to serve as a catalyst to establish a secure and sustainable workforce that can meet current and future skilled labor needs and provide a competitive advantage for New Hampshire businesses." The mission of the SWIB is "to promote life-long learning by partnering with businesses, agencies, and organizations to bring the state's education, employment and training programs together into a workforce development system that will provide the means for residents of New Hampshire to gain sufficient skills, education, employment and financial independence." Five system-wide goals are in place to guide our work.

Goal 1: Create a demand-driven workforce development system that bases strategies, services, and investments on a data-informed approach, with a focus on sector strategies.

Goal 2: Offer flexible training and education opportunities that align with business needs, including the development of career pathways and apprenticeships.

Goal 3: Increase awareness of services available through the talent development system to support businesses and individuals.

Goal 4: Streamline access to employment and work-and-learn opportunities.

Goal 5: Expand communication and collaboration among partner agencies and programs.

Specific activities that highlight our progress toward achieving these goals include the following:

- The use of WIOA program tools such as the Demand Occupation List and the Eligible Training Provider List to identify and support sector related occupations for the use of WIOA training dollars. Our Eligible Training Provider List has now been merged into our state case management system, Job Match System, to allow for easier access and comparison for individuals and career navigators.
- Within all funding sources, the Career Navigator (Adult), Employment Counselor Specialists (Dislocated Worker Program), and the Youth Specialist (Youth) work with participants to ensure flexible training and opportunities that include career pathways and linkages to apprenticeship. Tools developed by the NH Department of Education (NH DOE) and the Community College System of New Hampshire, along with targeted labor market and career resources information provided by the Bureau of Labor Market Information, within NH Employment Security, help guide this process. Specifically, the NH Department of Education College & Career Pathway Model developed by education and workforce partners helps

student's/program participants develop a Personalized Pathway Plan, identify the core academic courses needed to achieve goals, identify community-based experiences that are available to support goals, and provide information on Career and Technical education programs.

- [The State of New Hampshire Workforce Assessment](#) conducted by Camoin Associates is being utilized as a roadmap for workforce development within the state. The SWIB and WIOA partners using this report to make strategic and insightful decisions regarding the future of workforce in New Hampshire. A copy of this report is located in Appendix C.
- The Vibrant, Inclusive, and Prosperous (VIP) Workforce Program was launched this year. This program utilizes WIOA Adult funds to provide outreach and referral services to historically marginalized populations with the goal of increasing enrollments in the program as well as the identification of businesses that would be willing to hire individuals from these populations. Two subrecipients have been working on this grant in different ways. The International Institute of New England focuses on directly engaging with immigrants, New American's and refugees who may benefit from the services that the WIOA program can provided. Southern New Hampshire Services focus has been to engage with community organization who work directly with individuals who are historically marginalized. Both approaches have proven to be incredibly successful: 146 participants from historically marginalized populations were enrolled in the WIOA Adult program and are receiving career and training services.
- The Department of Business and Economic Affairs continues to recruit job seekers to relocate to New Hampshire. The recruitment efforts include descriptions of New Hampshire's economic development and lifestyle advantages on social media and other channels.
- The Department of Business and Economic Affairs developed a comprehensive and executed a marketing strategy that included digital ads, billboards, and advertisements on public transportation.
- The state's Interagency Business Team (IBT), led by the Office of Workforce Opportunity's Workforce Development Administrator continues to coordinate efforts to streamline business services and jointly track business contacts in an effort to leverage resources available to the business community and minimize redundancy.
- Communication and collaboration have always been and continues to be a strength of New Hampshire's workforce system. Established partner committees, including the State Workforce Innovation Board, NH Works Consortium, Professional Development Team, and Interagency Business Team, as well as local NH Works Partner meetings, work together to offer the highest quality services to those we serve.
- Job Fairs are another strategy to increase awareness of services available through the talent development system to support businesses and individuals. NH Employment Security is the lead agency for coordinating Job Fairs, and most recently Virtual Job Fairs, throughout the state. Over the last year, 66 job fairs were held, resulting in bringing hundreds of employers and unemployed workers together. Partner agencies use these opportunities to educate employers and workers alike on the vast array of services available to them from immediate job placement services to training services to incumbent worker and business development services.
Examples of other activities that highlight our progress toward achieving these goals are found in the section on Sector Strategies/Career Pathways.

SYSTEM WAIVERS UNDER WIOA

The US Department of Labor identifies the Secretary of Labor's waiver authority under the Workforce Innovation and Opportunity Act (WIOA) as a tool to promote workforce system innovation and focus on

outcomes. That is, states may request exemption from certain funding and/or programmatic requirements if it is determined that such requirements might impede the State's ability to achieve success, or conversely improve the State's ability to succeed. NH had requested and received approval for the waiver listed below.

WAIVER REQUEST – **Waiver through June 30, 2023, from the requirement to expend all WIOA Dislocated Worker and Governor's Discretionary funds for the Program Year 2019/Fiscal Year 2020 which are not expended in the required three-year period. 20 CFR 683.110 (b) (1)**

Specifically, the State of New Hampshire is requesting from the Employment and Training Administration (ETA) a waiver of 20 CFR 683.110 (b) (1), which read as follows:

(b) Grant funds expended by States. Funds allotted to States under WIOA secs. 127(b) and 132(b) for any program year are available for expenditure by the State receiving the funds only during that program year and the 2 succeeding program yeas as identified in section 683.100.

The law also states the following in WIOA section 189(g)(2)(A):

(g) PROGRAM YEAR-

(2) AVAILABILITY. —

(A) IN GENERAL. — Funds obligated for any program year for a program or activity funded under subtitle B may be expended by each State receiving such funds during that program year and the 2 succeeding program years.

This waiver will allow New Hampshire access to WIOA PY19 funding for an entire year through June 30, 2023. With the unprecedented circumstances of the COVID-19 pandemic, the state has seen NH Works Offices close only to re-open part-time, significant reductions in customer traffic, and decreased spending on WIOA programs. As the New Hampshire economy has opened back up, the State has seen a decrease in those seeking career and training services. However, the state does anticipate an influx of customers who will require WIOA services and programs in the coming months. To address the financial demand of this influx, OWO believes that the state should have PY 2019 WIOA funding available for an additional program year. This will allow the state to continue to offer training programs, on-the-job training (OJT) programs, and virtual seminars for WIOA customers and prevent any denials to these programs based on the lack of available funding. In addition, the ability to retain PY19 discretionary funds will allow the state to develop and implement new initiatives to deal with the aftereffects of the COVID-19 pandemic on the New Hampshire workforce system.

Projected programmatic outcomes resulting from waiver implementation:

Improved flexibility of state and local funding to best meet the needs of our citizens and businesses during and after the COVID-19 pandemic.

State strategic goal(s) and Department of Labor priorities supported by the waiver:

Approval of this waiver would support the Department of Labor's strategic priorities to improve the effectiveness and efficiency of workforce development programs. ETA made it an objective in the FY 2018-2022 Strategic Plan to support flexibility for governors and Local Workforce Development Boards, to enable them to effectively tailor their workforce strategies to meet state and local needs. This support is needed more than ever as we adapt to serving citizens and businesses through the COVID-19 pandemic and beyond.

Individuals, groups, or populations benefitting from the waiver:

The waiver will positively impact all eligible participants as identified at WIOA section 129 and 134 and 20 CFR 680.120, 20 CFR 680.130, and 20 CFR 681.200. These participants include adults, dislocated workers, in-school and out-of-school youth.

The waiver would secondarily benefit people who are not WIOA eligible recipients but who have an economic relationship with recipients. These include businesses and employers, residents, and other individuals and entities affected by the COVID-19 pandemic.

Outcome:

The State of New Hampshire was able to utilize all of the PY19 funds that were granted under this extension. PY19 grants have been closed out and the state will not be requesting this waiver in PY23.

EFFECTIVENESS IN SERVING EMPLOYERS

For the purpose of this annual report, we are required to identify the two approaches the state has chosen for the "Effectiveness in Serving Employers Performance Indicator Pilot" as defined by US DOL. The two measures applicable in New Hampshire are the "Repeat Business Customers Rate" and the "Employer Penetration Rate," which includes information and support as well as workforce recruitment assistance. NH Employment Security (NHES) tracks employer contacts with the NH Works offices throughout the state. Program year 2022 represents the fifth year in which these WIOA employer performance measures were calculated.

The Employer Penetration Rate was 2.2% (1,411 out of 64,025) and the Repeat Business Customer Rate was 10.6% (6,770 out of 64,025).

EFFECTIVENESS IN SERVING EMPLOYERS		
Employer Services	**Establishment Count**	
Employer Information and Support Services	6,770	
Workforce Recruitment Assistance	5,302	
Engaged in Strategic Planning/Economic Development	433	
Accessing Untapped Labor Pools	1,411	
Training Services	329	
Incumbent Worker Training Services	162	
Rapid Response/Business Downsizing Assistance	376	
Planning Layoff Response	74	
Pilot Approaches	**Numerator/ Denominator**	**Rate**
Retention with Same Employer in the 2nd and 4th Quarters after Exit Rate	n/a n/a	n/a
Employer Penetration Rate	1,411 64,025	2.2%
Repeat Business Customers Rate	6,770 64,025	10.6%
State Established Measure #1	n/a n/a	n/a

Other measures for assessing the effectiveness of services to business may include training services such as on-the-job-training, incumbent worker training, rapid response services and employers engaged in economic development and planning. Since July 1, 2017, we have placed 330 customers in On-the-Job Trainings (OJT) through WIOA Title I Adult, Dislocated Worker, and Dislocated Worker Grants. NH has been recognized nationally for its success in accomplishing such a high rate of OJT placements, which requires strong working relationships with businesses to ensure that customers are placed in OJT opportunities that will lead to stable and long-term employment.

In January 2020, the Job Training Grant was transferred to NHES and was given a new name of WorkInvestNH (WINH). From January 2020, WINH has awarded 243 grants totaling over $3.8 million. With a match by employers, a total of close to $7.6 million in new training programs has helped over 6,000 workers gain new skills. In PY22, close to $1.5 million was awarded in contracts to 82 companies with 2,300 workers trained.

There are a number of efforts in providing services to Employers via the NH Works Partners. There is an Interagency Business Team made up by representatives of the NH Works Partners. At their meetings, they discuss regional Partnership Opportunities such as summits, job fairs, workforce recruitment, sector updates from the various committees, rapid response, and an updated Business Service Guide. All of their contacts with employers are entered into the Neoserra system so that all partners have access to the employers' information and contact frequency information. As reflected above, contact may be through Employer Information and Support Services, Workforce Recruitment Assistance, Strategic planning/Economic Development, Accessing Untapped Labor Pools, Training Services, Incumbent Worker Training Services, Rapid Response and/or Planning Layoff Response.

SYSTEM EVALUATION

System evaluation, woven into the operational practices of partners, is ongoing to ensure we continue to offer quality services that comply with state and federal requirements. System partners meet regularly to assess program effectiveness through the review of new and current programs to promote efficiencies, coordinate and reduce duplication of services, discuss key monitoring findings, review best practices internal and from other states, review performance outcomes for core WIOA programs, and share formal and informal customer satisfaction results in an effort to inform system change.

This year, through competitive procurement, the State of NH awarded a contract to Thomas P. Miller and Associates (TPMA) to conduct a Statewide Workforce Needs Assessment. This assessment was done to help New Hampshire build a stronger, more impactful public workforce development system. TPMA staff used both qualitative and quantitative data collection to complete the assessment of the New Hampshire workforce system with a particular emphasis on ensuring that workforce services operate as envision under WIOA.

The recommendations resulting from this assessment are based on a process of gathering key insights through a secret shopping experience, collecting feedback from stakeholders across the workforce system, and evaluating the successes of existing programs and strategies through the lens of those who have been directly affected by them. The purpose of this report is to provide an assessment of what is working and what can be improved as New Hampshire continues to grow and develop its approaches to building a competitive and sustainable workforce.

This report provides a concise summary of multiple reports prepared by TPMA and includes assessment process, findings, and implementation recommendations for New Hampshire to consider. Based on the

quantitative and qualitative research completed, TPMA has developed recommendations that have been organized around the topics of digital modernization, employer engagement, and service delivery.

The report was presented to the State Workforce Innovation Board on October 17, 2023. The SWIB will be utilizing this report in several ways but most importantly while developing the 2024-2028 WIOA Combined State Plan. The report has been attached to this narrative and can be found in Appendix A.

Additionally, Program Monitoring, including federal reviews are an important component of system evaluation for compliance with WIOA regulations, as well as State policy and procedures for program and financial management. Program Year 2022 WIOA monitoring activities included the following major activities.

- OWO staff completed 12 individual program and fiscal desk reviews.
- OWO staff completed onsite monitoring which generated 13 program and fiscal reports. Any findings or disallowed costs resulting from these monitoring activities were resolved.
- On-site reviews with service providers included Equal Opportunity monitoring.
- Desk reviews and on-site reports document the on-going concerns regarding the WIOA Youth programs. Both subrecipients of WIOA Title I Youth funds, faced difficulties in staffing, implementation of new site locations and funds expenditure.

CUSTOMER SATISFACTION

A WIOA Adult, Dislocated Worker, and Youth Customer Satisfaction Survey is distributed through Survey Monkey to all WIOA Customers who are enrolled in the program. New Hampshire has experienced a significant drop in the competition rate of the customer satisfaction survey across all programs over the last few years. We are continuing to explore new and innovative ways to try and get the customer voice heard.

In addition, this year, Thomas P. Miller and Associates completed a customer survey in regard to our evaluation process. The results are included in Appendix A of this report.

PY22 Data

The Customer Satisfaction Survey is sent to WIOA Adult, Dislocated Worker and Youth customers using two methods, a direct web link and a Survey Monkey email. When a customer obtains employment or exits the program, a Career Navigator will send the Customer Satisfaction Survey via web link.

Customers also receive an automated Survey Monkey email after their file exits in the Job Match System (JMS), our case management system. A Survey Monkey reminder email is sent to the customer fourteen days later if the survey has not been completed.

This year, Southern New Hampshire Services, the adult program provider, adopted a multi-faceted approach to gather customer satisfaction feedback. This year, they utilized both Survey Monkey and Microsoft Forms, leveraging their intuitive interfaces for participant convenience. A new avenue of surveying was introduced through text messaging, a technology that proved to be remarkably effective in boosting completion rates.

Key Survey Metrics:

- Completion Rate: 54.3% (Exceeded the 50% target)
- Overall Program Satisfaction: 4.7 out of 5 stars
- Services Meeting Expectations: 4.8 out of 5 stars

- Employment and Training Support Satisfaction: 93%
- Participants Intending to Recommend WIOA Adult to others: 96%

Innovations for Success:

A major stride in our survey administration strategy was the incorporation of text messaging to distribute survey links. This innovative approach yielded the highest completion percentage observed in recent years. In addition, the implementation of Microsoft Forms introduced a modern survey interface, seamlessly adaptable to both desktop and mobile platforms. Forms also allows for easy exporting of survey results into a Microsoft Excel spreadsheet for additional analysis.

Participant Voices:

The heart of this report resides in the voices of our participants. Their experiences and reflections provide invaluable insights into the profound impact of the WIOA Programs.

"I have nothing but great things to say about the entire program."

"I tell everyone about the program!! I think it's a hidden gem!"

"My Career Navigator always treated me with respect and encouraged me every step of the way."

"The experience was one of the best things for me. I was at a low point when I met Jean. She believed in me an gave me the confidence I needed."

"It's very humbling to start over in your 40s. Now I work as a Medical Assistant in a Cardiology office, and I really love telling people what I do now."

"Unfortunately, I've had to use a lot of state program due to unforeseen circumstances that life has presented. This program is the top of the top!!"

"I could sit her for hours writing about how amazing, wonderful, and helpful this program has been."

"This program definitely exceeded my expectations. I was able to pursue my dream career. I'm now working at a reputable firm and have never felt more supported, independent, and confident."

"I graduated from a good school with flying colors, and they also helped me locate my dream job with no prior working experience."

"This is a great program that is managed by very professional and supportive people."

"Without these services I would not have been able to get a job in my current field."

"I hope you realize how much of a positive impact these types of programs can make in people's lives."

Business Customer Satisfaction Results:

Job Fairs:

During COVID-19's impact on the state, NHES started hosting Virtual Job Fairs. During PY 22, there were Sixty-six (66) Job Fairs that occurred serving 1,722 employers. The range of openings per employer varied - a few openings (less than 5 openings 10%) to 30 or more openings (38%). Overall employers reported 121,255 openings. Sixty-two percent (62%) of the employers reported they met potential employees to respond to their position openings. At least two hundred and nineteen (219) interviews resulted because of the Job Fairs.

Eighty-one percent (78%) of the employers responded that they would attend future NHES hosted job fairs and the remaining Twenty-two percent (22%) responded they were not sure.

SECTOR STRATEGIES/CAREER PATHWAYS

OWO is part of the NH Department of Business and Economic Affairs (BEA), the premier resource for businesses, workforce initiatives, state planning and economic activity. The BEA has invested in several studies looking at workforce and economic development including retaining an independent contractor, Camoin Associates to conduct a Workforce Assessment of the State's identified target sectors. These sectors include Technology, Construction, Hospitality, Healthcare and Manufacturing. While there are many additional industries that support the States economy, the intent of this research was to identify and study the high-wage jobs in occupations that have shown strong growth within these industry sectors. With tightening resources and increased demand on workforce and economic development entities, the study helps BEA make strategic decisions about how and where to pursue proactive sector-based strategies with clear career pathways.

To overcome systemic challenges and demographic shifts in NH's economy, the State will need to take a collaborative, multi-disciplinary approach to fill unmet demand in the top occupations within targeted sectors that also have career pathways. One of these approaches has been the creation of Collaborative Economic Development Regions or CEDRS. The CEDRS will build on existing programs and include members from local organizations who volunteer to form regionally focused groups. CEDRS are charged with the following responsibilities:

1. Collaborate with BEA to create or align existing strategies focused on regional economic development.
2. Identify meaningful economic development initiatives and potential solutions and foster regional and state support.
3. Ensure information exchange on available services delivered to businesses and potential investors.
4. Convene economic development stakeholders though meetings and events to facilitate collaboration.

While some of this work may be enacted at various scales throughout the state, a comprehensive and coordinated effort among partners will be necessary to enact meaningful gains.

PERFORMANCE ACCOUNTABILITY

Participant Performance Goals and Outcomes: The U.S. Department of Labor (USDOL) requires the reporting of annual performance outcomes/goals for each funding source. In PY2022, the WIOA program was responsible for achieving performance goals, as follows for Adult, Dislocated Worker, Youth and National Dislocated Worker grants: Employment Rate Second Quarter after Exit; Median Earnings; Employment Rate Fourth Quarter After Exit; Measurable Skill Gains and Credential Rate. One additional performance goal, effectiveness in serving employers was considered "baseline" for reporting purposes in PY22, which means specific outcome goals for this measure will be determined later.

According to US DOL policy, a goal is considered "met" if the state achieves 80% of an approved target goal. To "exceed" a goal, performance must be at 100% of the negotiated goal; and a failed or "not met" goal is

defined as any performance below 80% of the measure. In PY2022, New Hampshire met or exceeded all but two negotiated performance goals for each of the Title I programs (exceeded 6 measures and met 7 measures). Please note: WIOA requires a statistical adjustment model to account for variation in participant characteristics as well as labor market conditions which is completed by US DOL ETA at the close of the program year. The information provided here does not include this information. These numbers are not final and are subject to change.

	Title 1					
	Adult		**Dislocated Workers**		**Youth**	
Performance Item	Actual	Goal	Actual	Goal	Actual	Goal
Employment Rate Second Quarter After Exit	77.9%	77.5%	83.3%	83.5%	87.5%	70.0%
Median Earnings	$9,569	$6,800	$11,327	$9,000	$5,404	$4,550
Employment Rate Fourth Quarter After Exit	80.4%	72.0%	66.7%	81.0%	87.5%	70.0%
Credential Rate	62.1%	68.0%	60.0%	69.0%	63.2%	70.0%
Measurable Skill Gains	41.1%	66.0%	24.8%	76.0%	42.5%	63.5%

The Wagner-Peyser program (i.e., NH Employment Security labor exchange program) also met all of their goals in PY22. This information is measured against all individuals registered in the State's job match system. Again, please note: WIOA requires a statistical adjustment model to account for variation in participant characteristics as well as labor market conditions which is completed by US DOL ETA at the close of the program year. The information provided here does not include this information. These numbers are not final and are subject to change.

Goal	Target Goal	Actual Performance
Employment (Second Quarter after Exit)	65.5%	78.4%
Employment (Fourth Quarter after Exit)	64.0%	73.8%
Median Earnings	$7,000	$10,699

In addition to the performance outcomes required by USDOL, the SWIB manages financial performance measures to ensure adequate numbers of people are served, and that funds are expended consistent with approved costs. Seven hundred and forty (740) individuals were enrolled for services in the adult funding source during PY22. All participants received career services and 553 enrolled in training (75%), at a cost per participant of $1,653 for career services and $3,016 for training services. Fifty-nine percent (59%) of those enrolled were low-income individuals. Fifty-eight percent (58%) were English Language Learners, Low Levels of Literacy or had cultural barriers.

The Dislocated Worker program served 327 people, with 176 (54%) enrolled in training. The cost per participant for career services was $2,896. The cost per participant for training was $4,212. Of particular note is that 64% of dislocated workers enrolled during PY22 were 45 years of age or older.

The WIOA youth program, which includes both in-school youth and out-of-school youth between the ages of 16 and 24 years, had 290 youth enrolled during PY22. The majority of youth are 18- 24 years of age, which is reflective of the requirement that 75% of WIOA youth expenditures be for out-of-school youth programs. 247 youth (85%) qualified as low-income, and 38% of youth enrolled in the WIOA youth program identified as an "individual with a disability." Youth services are designed as comprehensive services, with a focus on barrier resolution, support services and other intense one-on-one services that are reported as "career services." The cost per for career services for the youth program is $4,567. The costs for formal training (e.g., individual training accounts and/or work-based learning (WBL) training) is available through the WIOA youth program; the cost per training for youth in PY22 was $1,811.

WIOA requires WIOA program administrators to have an exit policy for participants. Currently there is a common exit policy for dually enrolled clients enrolled in WIOA Title I and WIOA Title III programs. For clients that are dually enrolled, clients are provided services by all enrolled funding streams until the client has completed services (including training) in all enrolled funding streams. When the client has completed all services, the client is exited on the same date from all co-enrolled programs.

WIOA also requires states to perform Data Validation that is a process by which the state "validates" that the information recorded for data reporting purposes is accurate. The Office of Workforce Opportunity as well as our WIOA sub-recipients, Southern NH Services (Adult Funding), New Hampshire Employment Security (Dislocated Worker Funding) My-Turn and NH JAG (Youth Funding) conducted internal data validation reviews as part of the regular monitoring. In addition, during part of the State On-Site Monitoring, subrecipient files are sampled to ensure compliance and accuracy. The process entailed comparing source documents with the documentation submitted in our Job Match Case Management System as well as ensuring that data is being captured accurately.

GOVERNOR'S RESERVE FUNDS

The State of New Hampshire utilizes some Governor Reserve Funds for the state administration of the Adult, Dislocated Worker and Youth programs which includes program monitoring activities as well as to provide technical assistance to our subrecipients. In addition, New Hampshire utilizes the majority of Governor Reserve Funds on various projects each year. In PY22, these projects included the following:

- Governor Reserve Funds were allocated to hire Thomas P. Miller and Associates (TPMA) to complete a workforce needs assessment. Work began on this assessment late in PY21 and was completed during PY22. The assessment took place in stages which included a best practice research, secret shopper experience, and stakeholder engagement. The team from TPMA worked closely with staff from the Office of Workforce Opportunity to conduct this assessment. Recommendations from the assessment have been organized around three topics: digital modernization, employer engagement, and service delivery. The State Workforce Innovation Board (SWIB) was provided with the report on October 17, 2023. Amongst other uses, the SWIB and workforce development staff will be utilizing this report while preparing the 2024-2028 WIOA Combined State Plan for New Hampshire. A copy of this report is included as Appendix A.
- Governor Reserve Funds were also allocated to hire The Public Consulting Group (PCG) to complete a Return to Community Strategic Partner Engagement and Study. To complete this work, PCG engaged with several stakeholders and conducted a feasibility study to determine what employment barriers exist to successful re-entry after incarceration and involvement with the criminal justice system, what programs and services exist in New Hampshire to aid re-entry after incarceration with an emphasis on

employment, and what programs and services are needed to fill geographical and programmatic gaps in re-entry service. OWO and the New Hampshire State Workforce Innovation Board (SWIB) will use the results and recommendations included in this report to determine whether a Return to Community program is needed. If this program is deemed necessary, information from this study will be used to design a program that addresses the workforce needs of this population. A copy of this report is included as Appendix B.

RAPID RESPONSE

The Office of Workforce Opportunity (OWO) staff coordinates local dislocated worker team activities. Local teams include representation from each of the primary NH Works system partners (e.g., NH Employment Security (DW, ES/UI/Trade Act); NH Department of Health and Human Services (SNAP, TANF, Medicaid); NH Vocational Rehabilitation (VR); Community Action Program (WIOA Adult, Fuel Assistance, WIC, etc.); and others as determined necessary).

Rapid Response is also an effective employer program because it helps the employer deal with the trauma of large layoffs and/or closure. Affected workers may be able, through the coordinated efforts of the Rapid Response team, to immediately relocate to existing positions in companies needing their skills. Job Fairs and Resource Fairs assist in re-employment efforts, along with the individual assistance provided by the partner agencies.

The Office of Workforce Opportunity (OWO) ended the July 1, 2022 – June 30, 2023, reporting year, documenting 40 Rapid Response Activities that affected 1764 workers, which is a noticeable increase from the last 2 years. Based on last year's numbers, we documented 14 Rapid Response Activities that affected 784 workers. Throughout this year, all Rapid Response Sessions were offered as "in person" events to all businesses announcing closures and/or substantial layoffs (25+ RR). Final numbers indicate that 155 workers attended one of our "in person" Rapid Response sessions in 2022/23. Industry's affected were retail, health care, manufacturing, insurance, trucking, services, childcare and hospitality. While then number of "in person" attendance is lower than expected, it is important to remember that several of these businesses either "closed without notice", benefited from Layoff Aversion efforts or workers had numerous job opportunities in the local area, so Rapid Response services were not needed.

Through ongoing engagement, partnerships, and relationship building activities with businesses and community partners, NH Works continues to assist many laid off workers identify new career opportunities. We meet these challenges by collaborating with the business, working individually with workers, identifying training opportunities (WIOA Dislocated Worker Program), and promoting job fairs in local areas impacted by the layoff or closure. When possible, we assist employers in managing reductions in force, which may include early identification of companies at risk of layoffs, assessment of their needs and the delivery of services to address these needs. Layoff Aversion activities for the current reporting year, has contributed to the reduction of layoffs by approximately 305 workers (40 Cooper Products, 85 PMC Medical, 118 Legacy by Gersh at Crotched Mountain, 40 Hunter's Shop & Save, 22 Dartmouth Medical Center).

As we transition into the new 2023/2024 reporting year, OWO will use "in person" Rapid Response Sessions as our primary mode of delivering services but will use Zoom video conferencing and our NH Rapid Response webpage as resources as needed. To ensure we meet the needs of our employers and workers, we will continue to support smaller numbers of layoffs including those that fall under the mandatory response number or 25, with direct support from OWO staff.

To make sure we maintain continuity in the delivery of Rapid Response services across the State of New Hampshire, OWO will provide Rapid Response Training, to NH Business and Economic Affairs – Division of Economic Development's Rapid Response Team facilitators. Training will cover the Rapid Response Standard Operating Procedure (SOP), best practices, funding, documentation, and reporting. Follow-up training will be provided as needed.

WORKNOW NEW HAMPSHIRE

During this program year, Employment Security continued with the WorkNowNH program through the Granite State Jobs Act of 2019. The WorkNowNH program provides extensive case management services to individuals receiving either Medicaid, SNAP or TANF benefits, to assist participants with training and resolving barriers to employment. The program was also developed to provide employers with needed employees by matching participants with job opportunities in high demand industries. The program provides the participant with funding for training, travel, books, fees, supplies, travel, childcare registration, and on-the-job training funds to employers.

WNNH	
From 7/1/2022 to 06/30/2023	
Total participants found eligible	866
Tuition	$1,802,304.09
Books, Fees, Supplies	$113,065.02
Child Care	$150
Travel Reimbursements	$46,731.94
OJT Contracts	2
OJT Contract Amount Reimbursed	$491.22
Total Dollar of Approved support services payable to CCSNH	$448,236.26
Total Dollar of Approved support services payable to USNH	$51,475.73

WAGNER-PEYSER ACT EMPLOYMENT SERVICE ACTIVITIES

Wagner-Peyser funds, administered by the NH Department of Employment Security, are used to support staff providing direct customer service and referrals in each the 12 NH Works Centers. NH Works resource centers are staffed by Wagner-Peyser i.e., Employment Service (ES) staff who assist individuals in accessing re-employment information and services, and to register in the state's Labor Exchange system, Job Match System (JMS). During the twelve-month period of July 1, 2022, through June 30, 2023, 10,336 Participants were served through the NH works offices. In addition, Employment Security (ES) staff conduct regular and ongoing outreach to target populations, including Reemployment Services and Eligibility Assessment (RESEA), Unemployment Insurance Claimants, Veterans, individuals in recovery, and offenders (particularly those in the

county jails) and offer workshops on relevant re-employment topics such as Career Exploration, social networking, interviewing and resume writing. ES staff serve as the "front door" for access to the 12 NH Works centers, often the first person to greet staff, assess their needs and make referrals for additional services, as needed.

Employment Security staff outreach to employers to promote employment opportunities; both subsidized and unsubsidized. They provide a variety of business services, including but not limited to: Economic and Labor Market services, registering and posting jobs in the state's Labor Exchange system, Job Match System (JMS); assisting with on-site recruitment; the provision of labor-related and employment and training information; and access to job training options (i.e., OJT, Job Training Grant, work experience, return to work, etc.). As mentioned earlier in this report, NH Department of Employment Security hosts seminars for employers and is the primary entity for organizing and hosting job fairs throughout the year, throughout the state. In 2020, NHES started hosting multiple virtual job fairs focusing efforts on specific industry sectors and am ongoing series of Regional virtual job fairs covering each Region of NH that has been continued into Program Year 2022.

NATIONAL DISLOCATED WORKER GRANTS

New Hampshire had no National Dislocated Worker Grants PY22.

SUCCESS STORIES

The impact that the WIOA programs have on the citizens of New Hampshire is undeniable. It is with great pleasure that we share the stories of our participants not only here in our Annual Narrative but also at the State Workforce Innovation Board meetings. Every board packet contains success stories from our WIOA Title I programs to show board members the life changing impact these programs have on our participants. To shine the spotlight even brighter on our participants, a group of participants representing all of our programs appeared in person at a board meeting. Individuals and their career navigators spoke to the board members about their experiences and how the various programs helped them achieve their goals. Below are some of the success stories from this past year.

WIOA Adult:

Kevin: Kevin was enrolled in the WIOA Adult program in PY 2022. He is 18 years old, living in Londonderry, NH and working part-time at Papa Gino's as a food preparation Team Member. Kevin was considered underemployed, and his highest level of education was a high school diploma with no post-secondary training. His barriers consisted of low income, underemployed, and lack of currently marketable skills/credentials for the current labor market. His ultimate goal was to work in the manufacturing field, which has a bright outlook, is in high demand, and has many good paying jobs in NH.

Kevin was accepted into the Microelectronics Boot Camp Training Program at Nashua Community College in Nashua, NH. The WIOA Adult program was able to cover the entire cost of the program's tuition, as well as offer mileage reimbursement to and from training. This program was designed to both meet industry demands and teach students basic military standards and assembly techniques for radio frequency (RF) and microwave electronic (MW) assemblies. The Microelectronics Boot Camp builds a portfolio for future interviews as well, with a strong 95% success rate and a job growth of 5-10%. During training, Kevin also received his Lean White

Belt Certification to help him become more marketable to some of the high-end companies he was interested in working for.

In the final weeks of training, Kevin became very sick and was bedridden with a 104-degree temperature that forced him to miss some critical training time. As soon as he recovered and returned to class, he started to experience car troubles that almost sidelined him again. Fortunately, he had been maintaining frequent communication with his Career Navigator and the Adult program was able to approve support services to cover the cost of his auto repairs, enabling Kevin to continue with his training.

Kevin had never created a resume, so on the days that he was not at training, he was actively working with his Career Navigator to get professional job search tools created and begin doing some interview preparation. Kevin was able to develop an excellent resume that highlights the skills that he possesses and the training that he has now completed. This went a long way to boost his confidence level as he embarked on a new career path.

Without WIOA, he would not have had this training opportunity. Throughout the training, Kevin received positive comments, showed up on time, and worked hard in every class. All his hard work allowed him to successfully complete the training and earn a valuable industry-recognized credential.

Kevin has now accepted a full-time position working at Macom, where he is receiving a competitive rate of pay, with a comprehensive benefits package. He is very thankful for the opportunity that WIOA provided him with and for helping him develop a new career that he truly enjoys.

Chris: Southern NH Services staff have been working in collaboration with the Rockingham County Department of Corrections (DOC), to help identify soon to be released inmates that would benefit from the services that are available in the WIOA Adult program. Many of the inmates are excited to learn about the program and its ability to help people establish meaningful careers. In addition to finding something that will pay good wage, the inmates are often looking to create a life that they can be proud of.

During the 4th Quarter of Program Year 2021, the SNHS team began working with Chris. Initially the DOC staff was surprised to hear that Chris actually followed through with the WIOA Adult referral, as he had been very guarded and appeared to be somewhat disinterested in the program initially. When he connected with SNHS he had been fully released from the Brentwood facility and was temporarily living with his parents. The Career Navigator determined Chris eligible due to low income and having basic skills deficiency.

Chris had his high school diploma and limited work experience at a fast-food restaurant. He didn't care for that work environment and was interested in doing something completely different. After finishing his vocational assessments and spending some time reviewing the in-demand occupations of NH, Chris seemed to really gravitate towards commercial truck driving. The SNHS staff provided him with more information about this occupation, frequently used training providers, and a list of companies that are open to hiring CDL drivers that have a felony conviction on their record.

Before long, Chris was accepted into a 540-hour CDL-A training program. His SNHS Career Navigator was able to approve Chris for $6,500 of tuition assistance to cover a sizable portion of the programs overall cost. His Career Navigator also helped him to apply for a Pell grant and explore other scholarship opportunities to help eliminate any out-of-pocket expenses. With gas prices on the rise, Chris was worried about the cost of traveling to and from training each day.   SNHS was able to approve Chris for support services, making him eligible for mileage reimbursement, which eliminated this sizable expense.

Chris has been making the most of this opportunity and hasn't missed a single day of training. His instructors report that he always arrives a little early, with a positive attitude and a willingness to learn everything that the

instructors cover. Chris is still in training, but we're encouraged by his level of commitment to the program and to creating a brighter future for himself. It has been a pleasure working with Chris and watching him grow. He has been incredibly grateful for the assistance SNHS and the WIOA Adult program has been able to provide him with.

Doris: Doris first arrived in the United States from El Salvador on March 29, 2022. Spanish is her first language, but she enrolled in English classes at the International Institute of New England in Manchester.

Doris' worked very hard on her English, and eventually improved to a level where she was accepted into the LNA for Success program. A specialized program in collaboration with Manchester Community College and the International Institute of New England. Through this specialized program students would learn to become an LNA while also attending specialized English class to review their coursework and provide translation with the day-to-day medical terminology that will be used in their day-to-day jobs.

Doris was enrolled in the WIOA program on July 26, 2022. She started training on Sept 12, 2022, and successfully completed the LNA for Success program on Nov 18, 2022. Doris sat for the LNA state test on 12/8/2022 and passed her first try. She was awarded her LNA license on 12/19/22.

Doris secured employment on 12/19/22 and is now working as an LNA at Villa Crest Nursing & Retirement Center where she is making $20.00 per hour.

*Special Note: Doris had never worked before even in her country of El Salvador. Yet she was eager to learn English, attend training in the nursing field and seek employment in the U.S. all of which she accomplished.

Vibrant, Inclusive and Prosperous (VIP) Workforce Program:

Umi: Soon after arriving in the U.S., Umi, a newly resettled refugee from Burundi, joined IINE's LNA for Success program hoping to learn some new skills that would allow her to get a good job and start off this new phase of her life on the right foot.

During module 1, the intensive ESOL portion of the program, Umi worked closely with her ESL instructor to learn how to create a resume, something she had never done before. In Module 2, the LNA training portion of the program at Manchester Community College, Umi was able to get a job as a home care worker. Each week she would learn skills at MCC and would not only practice them in lab and clinical but would apply them to the work that she did as a home health aide.

Umi was very dedicated to the program, persevering even when she or her family faced the challenges that come with being a newly arrived refugee. She balanced all her resettlement requirements and appointments, and her job, while still making sure to complete the program and study for her state test. Once she even joined a zoom class from the DMV to ensure she could get her ID and practice for the state test.

Since receiving her state LNA license, Umi continues to work as a home health aide and has also picked up a second job working in the Neuro/orthopedic surgery unit at Southern New Hampshire Health, helping to fill a critical gap in NH's workforce. In addition to her new job, Umi has begun taking the next steps to receive her high school equivalency credential; she was only 1 year away from graduating in her home country. After she receives her high school credential, Umi hopes to continue her education and become a nurse.

Dora: Dora first came to the IINE in September of 2021 with her sister, Ruby, to apply for IINE's LNA for Success Program. She had been in the country for a few months and was eager to continue her career in healthcare. She had been a nurse midwife in Nepal, helping with everything from education on contraception, to making home visits to provide prenatal care to pregnant women, to assisting with labor and delivery. She

even assisted with making sure new parents knew about the importance of vaccinating their children to keep them healthy.

When she first applied for the program in 2021, she unfortunately did not have the English level that she needed to qualify for the program. She needed an advanced reading level, and she had tested into beginner. This did not deter her though. She quickly enrolled in IINE's beginner English class to improve her English. During her beginner class she studied diligently, even meeting with a tutor twice a week after class. And all her hard work paid off, by January she was ready to move up to IINE's Intermediate class, something that normally takes students about a year of study to accomplish.

After some more time in intermediate English learning tech skills and working on her writing, Dora finally tested into the LNA for Success program, a little less than a year after she initially applied. Dora was ecstatic when she got into the program and was so excited to begin her LNA studies and finally enter the U.S. healthcare field!

This class was not without its challenges for her though. While Dora had the advantage of a wealth of healthcare knowledge, she still greatly struggled with technology. This was difficult in a course where the majority of the content was only accessible online. Fortunately, Dora was surrounded by people willing to help her. She frequently met with her ESL teacher at the IINE to practice using the main technologies needed for the course, like Canvas. She also worked with her theory teacher to find easier ways to submit assignments where needed, such as handing in a handwritten essay, so that she could focus more on the content of her work rather than stressing about the tech.

Although it wasn't always easy, Dora continued to work hard and push through the course, and her hard work recently paid off when she passed her state LNA exam on her first try earlier this month. Now Dora is eagerly awaiting her LNA license from the board for nursing and is thinking about where she wants to apply when she gets it. Now that she has improved her English and successfully completed the LNA for Success program, a whole world of opportunities has opened up for her that she can't wait to explore!

Dislocated Worker Program:

Dale: Dale was laid off from Credit Adjustments Inc as a programmer making $28.85 an hour. Dale entered the Dislocated Worker program and was interested in data analytics. Dale entered the Visible Edge training for Data Analytics and completed the training. He was offered a position with Monument Tech, but the offer was lower than expected. In discussions with the president of the company, a deal was created where Dale was hired as a consultant at $150,000 a year ($72.11 per hour) in April 2022.

Susan: Susan is a 59-year-old unemployed woman with a disabled spouse and grown children who came to NHES when she was laid off from her job at the VNA. Susan had been working as an LNA scheduler for the VNA for several years before being terminated for not meeting performance requirements. Susan's goal was to stay in the medical/ nursing field but as more than a scheduler as well as finding full-time employment at a higher rate of pay with more responsibility because she was the primary support of her family.

Susan entered the Dislocated Worker program through the Somersworth office and after working with her Employment Counselor Specialist, chose to enter training to become a Medical Assistant. Susan started her training on 6/24/2022 at Great Bay Community College to earn her Medical Assistant Training Certificate and graduated from the program on September 28, 2022. Susan was hired by Wentworth Douglass Hospital in Dover New Hampshire on October 17, 2022, as a Medical Assistant full time with benefits. Not only was Susan able to fulfill her goal of a more satisfying position but was earning more money and full benefits allowing her to support her family, including her disabled husband.

On follow up, Susan reports that she loves her job and that being a Medical Assistant is much more rewarding than just scheduling medical appointments. Susan also talked about possible additional training through work to continue learning.

WIOA Youth:

Zee: Zee originally joined MY TURN to pursue a career in real estate, but after taking a stab at it, she wasn't convinced it was her true calling. She has always been an office regular in our Nashua office, bringing food, laughs and good energy along with her every time she came through the door. Not after long, we became Zee's extended family. Our office was her second home.

During her visits, she continued to explore other career paths and became mesmerized by the "creepy arm" we had in our office. This arm was used for our Phlebotomy students to come in and practice the skills they had learned in class before they had to try it out on real people. She would consistently "hit a vein" without any prior knowledge and it came very easy to her. We began to discuss the healthcare field and whether she would be interested in further training. It was something she had never even considered, but after researching the opportunities that were available to her, she was all in. She began taking the Phlebotomy course at LNA Health Careers. She would check in daily and proudly tell us about her progress and all the successes she was having. Her enthusiasm was contagious as we helped her find "volunteers" so that she and her classmates could get the required amount of blood draws they needed to graduate.

Zee completed the course successfully and will soon be starting her externship once she determines which type of healthcare setting would suit her best. This is just the beginning for her, and we can't wait to see what happens next as this opportunity continues to open doors for her that she couldn't even imagine before.

Morgan: Morgan has lived in many states across the nation facing many barriers, her biggest being homeschooled and never seeing it to a high school diploma. This stood in her way as she traveled from job-to-job and never earned her GED or HiSet. She did try, but the costs were accruing after not being able to pass. Her most recent move was this summer to New Hampshire with her husband. She landed a job working at the Home Depot and learned of WIOA Youth and NH JAG through a co-worker.

Morgan connected with her NH JAG Specialist and started the process of completing her LNA training at LNA Health Careers with the help of WIOA funds. Her biggest hope was to see something through and complete this occupational training and become a true licensed nursing assistant. Through this training, Morgan was able to improve her social skills, overcame her shyness and overall learned to persevere.

Through WIOA Youth and NH JAG, Morgan is now a New Hampshire Licensed Nursing Assistant. She secured employment at Riverwood Retirement Living as an LNA and is putting her skills to use. She will continue to work with her JAG Specialist to work towards attaining her HiSet with her new goal of entering a Phlebotomy training program. With the help of WIOA Morgan is on the path of feeling the true meaning of completion.

John: When John joined the MY TURN Nashua ISY program, he was an average student, at best, with no real plan for after high school. Despite those facts, I saw a different side of John; somebody with the potential to have a bright future.

Upon graduation from high school, I was able to convince him to consider enrolling into the Nashua OSY program after explaining the benefits of the program and the available opportunities. I connected with the OSY office and brought him in for an appointment. John immediately felt welcomed by the OSY staff and agreed to join.

Not long after, John decided to enroll at Nashua Community College and register for the Microelectronics Boot Camp program. MY TURN staff worked together to provide John with guidance and support throughout the duration of the boot camp, which was a huge relief to him, as it was much needed and appreciated. John successfully completed the program and upon his graduation, was offered a full-time job at Mercury Systems making $19 an hour with a full benefits package. John had previously worked at the counters of Chipotle and Five Guys, making half of that amount of money with no benefits, so accepting that kind of offer was a no-brainer for him, as well as a very exciting moment!

John is now saving to buy a new car and get a place of his own, with hopes of being able to also help support his family once he is out of their household. John has come so far in such a short amount of time. I believe that he is going to be very successful in this field and will go on to live a prosperous life. You can see a gleam in his eye now. He is proud of himself and so am I.

Carly: Carly joined NH JAG in her Junior year at Manchester Memorial High School. She was a star athlete, however, was not sure about time management when it came to juggling both time on and off the field. Through her sister, a NH JAG alumni, she learned of NH JAG and enrolled. Her focus was to overcome that "you will never be an athlete, have a backup" mantra that stuck with her. NH JAG saw this as a learning opportunity to have Carly understand the importance of balance of academics and athletics, and that she did.

Carly, now in her Senior year and final year of NH JAG, has the right insight into her future and is set with a career pathway. Anna Maria College Field Hockey Recruiters saw greatness in her as well and scooped her up! Carly is excited to announce she will be defending goal as an AMCAT Student Athlete this Fall! While she is not on the field, Carly will be majoring in Health Science with a focus in Anesthesiology. We are so proud to watch Carly embark on her collegiate and athletic career! GO AMCATS!

Rosa: For this quarter's success story, we want to highlight the sensational, hard work of Rosa. Rosa has been through many hardships over the past couple of years beginning with the loss of her mother. This tragic event made things difficult for Rosa and set her back. Rosa was lost with no direction on what she wanted to do next, but she knew she wanted to help people!

Rosa came into the office with no plan but knew what she wanted. MYTURN was able to help her sit down and create a short-term and long-term plan for her future which included removing many barriers. Rosa was able to enroll in LNA Health Careers for the LNA program and successfully completed the course while battling mental illness! Throughout this process, there were a lot of self-doubts and unknowns while completing her course but with her perseverance, she was able to prevail. Rosa with some assistance completed the application for her LNA License number through the Board of Nursing in Concord to obtain her license.

Now Rosa is working on her goal of obtaining full-time employment in the LNA field to gain experience for her future. Rosa is now breaking down more barriers with her recent entry into a driver's ed program in Manchester to finally complete her goal of obtaining her Drivers' License.

Tony: Tony joined the MY TURN Manufacturing program in need of some assistance with school and employment. While in our program he set goals with his caseworker and created a timeline to achieve them. As he saw success from being in the program, he told his friends about what MY TURN was doing for him and how they could help them. He was living proof that what we did works, and he brought in a steady stream of applicants wanting the same thing for themselves.

During his time with MY TURN, we secured a Work Based Learning Experience with Clear Align, as a Computer Network Specialist. Clear Align specializes in optical fabrication and electro-optic systems as well as Subsystems Integration. He would get to work under the systems administrator putting what he learned in

school into real-life work situations. His supervisor was so impressed with his professionalism, his eagerness to tackle new challenges, and his resourcefulness in finding answers as well as performing research on his own. Tony made a great addition to his team while there and though they did not have an open position at that time, they said they hoped that they would be able to work again together in the future.

Tony soon graduated from NHTI in June of 2022 with his Associate in Information Technology. He came into the office to update his resume and work on individual cover letters for each application he submitted for a job in his field. He soon began to receive calls for Interviews, and we practiced interview questions and discussed wardrobe for each interview. I received a referenced call regarding Tony, and they spoke about how professional he was during the interview and how impressed they were with him. The HR representative inquired more about what our program does and after explaining he said, he wished more young men and women had this opportunity to get this invaluable experience from what he saw in Tony. He got the job and now is an Assistant Systems Administrator with the Nashua School District.

Tony has worked tirelessly toward his goals while also being a Corporal in the Marine reserves. He specializes in communications in the Reserves and is currently in Brazil for training.

We are so proud of Tony and all that he has accomplished while in the program. His determination and perseverance are something to be admired and that is the recipe for his success.

Jason: Jason came into the MY TURN office after seeing the change in his friend, Quin. Quin has told him about the program and at first Jason couldn't believe what he was hearing and why no one had told him about this sooner. Jason called for an appointment soon after, he was ready to make a change and stop working in warehouse jobs that didn't have much of a pathway to success.

When Jason first came in, he was very shy and would look at the floor when speaking, not wanting any direct eye contact. He explained he had social anxiety, and it was hard for him to open up. We started to build a relationship as we talked about outside interests, and I found others who shared those and brought them together. I watched his confidence grew and he was beginning to make new connections with students in his class. We explored careers and opportunities that were available to him and after touring the Microelectronics Bootcamp he found his path.

He started the Bootcamp nervous at first wondering if he would be able to do it and he did. He became more confident in his skills each day; would share how they were divided into teams and how he had the opportunity to be the team leader. He told me how prior to this he would have never volunteered to lead and would just sit back and let others take the lead. I watched a new and improved Jason emerge. It really showed when we practiced interviewing, and his answers were so fluid with the knowledge he had gained. As he met the employers that were recruiting him, he set his sights on working for L3HARRIS and made his dream become reality.

Jason started working at L3HARRIS a few weeks ago and could not be happier. He recently came into the office and was so thankful for the opportunities he had because of joining MY TURN. He said he would not have had the confidence to go through this experience if it was not for the support, he received that helped him believe in himself and gave him the tools that he needed to succeed. Can't wait to see what he does next.

Appendix A – New Hampshire Workforce Needs Assessment

New Hampshire Workforce Needs Assessment

PREPARED FOR
THE OFFICE OF WORKFORCE OPPORTUNITY

SEPTEMBER 2023

Contents

Executive Summary

The following report is a collection of quantitative and qualitative data collected for the purpose of conducting a statewide assessment of the New Hampshire workforce system with a particular emphasis on ensuring workforce services operate as envisioned under Workforce Innovation and Opportunity Act (WIOA). The recommendations resulting from this assessment are based on a process of gathering key insights through a secret shopping experience, collecting feedback from stakeholders across the workforce system, and evaluating the successes of existing programs and strategies through the lens of those who have been directly affected by them. The purpose of this report is to provide an assessment of what is working and what can be improved as New Hampshire continues to grow and develop its approaches to building a competitive and sustainable workforce.

This report provides a concise summary of multiple reports prepared by TPMA and includes assessment process, findings, and implementation recommendations for New Hampshire to consider. Based on the quantitative and qualitative research completed, TPMA has developed the following recommendations that have been organized around the topics of digital modernization, employer engagement, and service delivery.

Modernize Virtual Tools	» Modernize web presence » Clarify branding and improve navigation » Reestablish direct center phonelines
Build Employer Strategy	» Develop strategic vision for Interagency Business Team » Conduct assessment of tools » Invest in tools and develop employer engagement toolbox » Prioritize Business Services Team training
Enhance Service Delivery	» Deploy uniform and consistent professional development » Deliver seamless customer service experience » Focus internally and externally on job quality » Expand customized training and wraparound supports

Introduction

The Workforce Innovation Opportunity Act (WIOA) is a federally funded program designed to help jobseekers access employment, education, training, and supportive services to succeed in the workforce. This program designates funding to state entities and requires them to align workforce programs to serve residents across the state. The administrative entities have the liberty to decide how programs and initiatives across the state are coordinated and organized. The New Hampshire Office of Workforce Opportunity (OWO) serves as the state-level entity responsible for administering WIOA programs. Programs administered by the OWO include all WIOA Title I Adult, Dislocated Worker, and Youth funds.

The OWO launched the WIOA Statewide Workforce Assessment to build a stronger, more impactful public workforce development system. This workforce assessment, conducted by TPMA alongside the OWO, outlines recommendations to improve the workforce system based on the perspectives of various stakeholder groups across the state, findings from a secret shopping experience, and best practice research. The assessment is designed to provide functional and actionable recommendations for the OWO to better serve residents of New Hampshire.

Data collection for this project was conducted in three phases:

1	2	3
Best Practice Research	Secret Shopping Experience	Stakeholder Engagement

Below are brief summaries of the data findings from the secret shopping experience and stakeholder engagement phases of the project. Full summary reports for each of these areas are included in the appendix of this report.

Summary of Secret Shopping

Methodology

The OWO has provided jobseeker and business services across the state through One-Stop Centers called New Hampshire Works (NH Works). One-Stop Centers are public employment offices that provide jobseekers with tools to navigate various state-level career services and resources. Individuals seeking employment may utilize these offices to discover career opportunities or training programs, prepare for interviews, and receive help with other job search activities. It is important that One-Stop Center staff are equipped with the resources and knowledge to serve jobseekers in their search for employment and training opportunities. Employer services are also offered and provide support for businesses across the state in accessing a robust pipeline of skilled talent. Virtual services consist of online and phone accessible resources for both jobseekers and employers to help individuals access publicly available resources that will increase workforce productivity and grow New Hampshire's economy.

Throughout this project, various One-Stop Centers across New Hampshire were "secret shopped." Secret shopping is a method of evaluating an individual's or an agency's ability to meet the needs of their customers. Various evaluators, also known as secret shoppers, posed as jobseekers and created a unique persona of an individual looking for a job in New Hampshire. Secret shoppers examined the appearance of the One-Stop Center, expertise of staff members, function of the various online resources, and other items. At the conclusion of the secret shopping experience, One-Stop Centers were evaluated based on the secret shopper's experience. Similarly, Employer Service systems were evaluated through calls with Employer Services Representatives. The representatives were secret shopped, similarly to the One-Stop centers, and evaluated based on the level of support they were able to provide. The names of staff members were not recorded for the purpose of these assessments.

Virtual services include online websites that provide access to New Hampshire's public workforce system including nhworks. org, nhworksjobmatch.nhes.nh.gov, and nhes.nh.gov. The review of these websites did not include recommendations, but rather observations to help improve the quality and accessibility of services the OWO and its partners could provide to jobseekers and employers.

Findings

Secret shopping allows researchers to gain insights from the perspectives of individuals who utilize the tools on a regular basis. Outlined below are core themes as identified by the project team based on several predetermined indicators to assess the quality of service from One-Stop Centers, Employer Services, and Virtual Services. The specific One-Stop Centers that are included in this study are Keene, Littleton, Salem, and the JAG Center in Concord. More detailed information on the findings from the secret shopping experience can be found in the appendices.

One-Stop Centers

The NH Works One-Stop Centers exhibited inconsistency in the levels of customer service and accessibility experienced by Secret Shoppers. Some centers provided assistance from attentive and helpful staff who made genuine efforts to provide jobseekers with guidance. They proactively suggested local events and job opportunities and maintained a high level of professionalism in their interactions. Nevertheless, it was observed that the expertise of frontline staff varied across the different locations visited, with some staff displaying exceptional proficiency and others took more of a wait-and-see approach to dealing with customers, delivering services, and offering partner referrals.

This mixed evaluation extended to the services offered by the One-Stop Centers. Secret shoppers noted that they would not have been informed about certain services if they had not specifically inquired about them from the staff. Follow-up services were identified as another potential growth area. While secret shoppers felt encouraged to seek further assistance, only one shopper received a follow-up contact after their visit. Moreover, the One-Stop Centers are designed to serve as information hubs for both employers and jobseekers, offering a wealth of information. However, the information was overwhelming and unorganized and could be restructured to create a more welcoming experience for clients.

Employer Services

The Employer Services representatives displayed a friendly and professional demeanor, using proper phone etiquette and showing a willingness to assist and answer questions. Staff placed a strong emphasis on job orders and recruitment assistance with detailed explanations of the job match system and how employers can post jobs and search for candidates. Additionally, the representatives addressed a common employer misconception that American Job Centers are only for those with significant barriers to employment. Representatives assured the Secret Shopper that there is a diverse pool of qualified, job-ready candidates available.

However, the analysis also revealed some gaps in service. The representatives did not provide adequate detail about the American Job Center's overall purpose and ecosystem, missing an opportunity to fully educate the Secret Shopper on the breadth of services available. Furthermore, while there was a focus on recruitment services, there was no mention made of other helpful services for employers, such as city/state incentives, training grants, and labor market information. Additionally, the follow-up and next steps were unclear. Only two representatives suggested the Secret Shopper should "call back" if they faced issues with job postings, leaving doubts about how the center would directly assist in finding suitable candidates.

Virtual Services

The NH Works website (NHWorks.org), serving as the gateway to New Hampshire's workforce system, lacks clarity and direction, leaving users with more questions than answers. While the website clearly provides navigation paths for specific users based on their user profile (jobseeker, employer etc.), the paths contain broken hyperlinks and outdated information and fail to provide current and relevant information. Overall, the website's design and navigation pose significant challenges for both jobseekers and employers.

The NH Works Job Match tool (Nhworksjobmatch.nhes.nh.gov) displayed several promising practices on first review, however deeper inspection found it suffered from many of the same usability issues of the other reviewed sites. The tool had an approachable home page that displayed labor market information. The page also contained a valuable translation feature for Spanish-speaking populations. However, the Job Match tool lacked a modern design and was cumbersome for users to upload information pertaining to their resumes. The tool did not provide adequate recommendations of skills for jobseekers to add to their online resume and relied heavily upon one's ability to effectively identify their own skills and abilities. The tool did not demonstrate added value over other publicly available tools such as Monster or Indeed and appears to be more of a compliance tool rather than a quality tool designed to connect jobseekers to meaningful jobs.

New Hampshire Employment Security's (Nhes.nh.gov) website was the most difficult to navigate among the three websites examined. The interface was unapproachable, suffering from a dated and overwhelming design, making navigation difficult for both jobseekers and employers. The lack of a functional search bar further compounds the difficulties faced by both jobseekers and employers, hindering their ability to find specific information within the website. Additionally, the News and Events section presents itself with scattered information eroding trust and partnership with users instead of encouraging the use of state resources to advance career pathways.

Branding was a common growth opportunity across all virtual tools. Brand consistency will help users because it allows them to visualize the interconnectedness of workforce systems. The analyzed websites seldom displayed logos and branding information of partner agencies and failed to advance each other's brands.

Summary of Stakeholder Engagement

Methodology

This report was created using a comprehensive stakeholder engagement process, utilizing qualitative data collection methods to gain an in-depth understanding of New Hampshire's public workforce system to provide point-in-time perceptions from individuals involved with the workforce system. Individuals interacting with the system were categorized into six stakeholder profiles, namely the NH Works Consortium, Frontline Staff, Interagency Business Team, NH Works Office Managers, Businesses, and Jobseekers. These stakeholders actively participated in a series of focus groups, providing valuable insights and perspectives. To supplement focus group efforts, individuals were contacted via phone for one-on-one interviews and a jobseeker survey was deployed through the NH Works system. The findings from the various stakeholder groups were organized based on their profiles, and perspectives were further grouped into identified successes, challenges, and recommendations for the enhancement of the public workforce system in New Hampshire.

Findings

Stakeholder engagement plays a pivotal role in gaining invaluable insights from individuals connected to New Hampshire's public workforce development system. By actively seeking and understanding their perspectives, the OWO can glean valuable information for enhancing processes. These valuable perspectives, categorized into three groups—successes, challenges, and recommendations—offer a general view of the system's strengths, weaknesses, and opportunities for improvement. Armed with this multifaceted understanding, the OWO can drive meaningful and targeted enhancements to create a more effective and inclusive workforce development experience for New Hampshire residents.

Successes

The ability of Consortium partners to collaborate as the One-Stop Operator was cited by many stakeholders as a success of the New Hampshire workforce system. This cross-agency approach involves agencies responsible for WIOA core programs and key partners, working to offer seamless referrals and a cohesive workforce development ecosystem. The One-Stop Operator plays a vital role in building authentic relationships that can make the system more responsive to jobseekers and employers. Stakeholders also acknowledged the vision of leadership within the NH Works system as a driving force behind its successes. This more open-minded and inclusive approach to leadership fosters a sense of camaraderie and desire for continuous improvement within the workforce development system.

Another success cited by stakeholders was the increased flexibility in training funds and commitment to co-enrollment practices. Stakeholders highlighted the expanded eligibility requirements, allowing a broader range of jobseekers to access training funds, thus reducing barriers to skill development. The commitment to co-enrollment of participants fostered collaboration and braided together services, resources, and funding to create a more comprehensive workforce development experience.

Referral partnerships were another strength of the NH Works system cited by stakeholders. Co-location of various programs facilitated seamless coordination and referrals, ensuring that customers received access to a comprehensive suite of benefits and assistance. This collaborative approach extended to partnerships with Apprenticeship NH, Community Colleges, and the Department of Health and Human Services (DHHS), ensuring strong levels of coordination and service delivery.

Challenges

Stakeholders identified several challenges within the NH Works system. Internal and external technology platforms were two high priority growth opportunities. Stakeholders expressed weariness with the internal case management system, despite some improvements. External technology platforms, such as outdated workforce system websites and underutilized social media for recruitment, caused confusion for users. Secondly, the accessibility of NH Works Centers proved intimidating and confusing to some adult jobseekers. Furthermore, consistency of training and communications across partners was a concern, leading to opaque service availability, inconsistent messaging, and difficulty navigating the system.

Stakeholders mentioned the system faced difficulty filling frontline positions, especially Specialists. The system also lacked consistent training and professional development opportunities for frontline workers, particularly in the face of seasoned program experts retiring.

Another set of challenges arose in the area of training for jobseekers. Stakeholders highlighted the need for a stronger emphasis on common skills training and increased accessibility to short-term technical training opportunities. They also expressed a desire for customized training solutions to meet specific talent needs. Issues with funding distribution and service eligibility were also cited, with employers struggling to navigate the system and feeling discouraged by data reporting requirements and restrictions.

Lastly, the NH Works system encountered difficulties in young adult recruitment. Despite expanded eligibility criteria, enrolling youth, especially in-school youth, proved to be a serious challenge. The changes brought about by COVID-19, such as remote learning and restricted access to schools and programs, were significant contributing factors to this issue. The pandemic disrupted traditional recruitment strategies, making it harder to engage and attract young jobseekers.

Recommendations

Stakeholders offered several recommendations to enhance the NH Works system. Strategies for Diversity, Equity, Inclusion, and Accessibility (DEIA) were seen as critical to creating a more diverse and robust workforce pipeline. Participants suggested engaging with the state prison system and immigrant populations to bolster the diversity of individuals in the workforce and expand the pool of skilled workers. This would include programs that help justice-involved populations and English language learners successfully participate and thrive in the workforce.

Regarding training programs and systems, participants recommended a stronger focus on common skills training, such as teamwork, problem-solving, and communication. They also urged the development of more short-term credential programs to meet the evolving needs of businesses and jobseekers. Leveraging partnerships within the Community College system and creating career pathway programs that serve multiple employers were also suggested to maximize impact and efficiency.

Stakeholders also expressed the need for a more transparent and streamlined system. A "menu" of funding and service opportunities would make it easier for employers to access resources and support, reducing the reliance on personal relationships to navigate the system. Finally, stakeholders stressed the importance of cultivating a positive workplace environment that emphasizes company culture and flexibility. These environments should accommodate employees' personal demands, ultimately contributing to a more productive and satisfied workforce.

The chart below provides a high-level summary of the success, challenges, and recommendations outlined by each stakeholder group. For greater detail on each of these areas, please see the Appendix.

NH Works Consortium	Successes	» Collaboration » Vision of leadership » Co-enrollment and increased flexibility of training dollars
	Challenges	» Internal and external technology platforms » Accessibility of NH Works Centers » Consistency of training and communications
	Recommendations	» NH Works Centers serve as a front door to workforce development services » Continued employer engagement alignment » Improved external communications
Frontline Staff	Successes	» Referral partnerships » Customer focus » Partner outreach
	Challenges	» Young adult recruitment » Customer focus » Partner outreach
	Recommendations	» Attraction and retention of staff » Improved communications

Interagency Business Team	Successes	» High quality existing employer relationships » IBT partner diversity » Collaboration among partners
	Challenges	» Rapid Response priority » IBT meeting effectiveness » Limited capacity to deliver customized training
	Recommendations	» Develop strategic plan for IBT » Employer engagement staff training » Enhance online presence
NH Works Office Managers	Successes	» Co-location of partners » Unemployment insurance and RESEA
	Challenges	» Phone system » Center traffic » Staff training
	Recommendations	» Reinstate direct phone lines » Establish professional development series » Assistance in driving traffic
Businesses	Successes	» NH Works systems » Responsiveness to business » Workforce programs
	Challenges	» Systematic » Training » Funding distribution » Engagement
	Recommendations	» Strategies for Diversity, Equity, Inclusion, and Accessibility » Training programs and systems » Funding
Jobseekers	Successes	» Building connections » Support from Frontline Staff » Program flexibility
	Challenges	» Wages and affordability » Diversity, Equity, Inclusion, and Accessibility » Consistency of program delivery
	Recommendations	» Common skills training » Learn and earn » Workplace environment

Recommendations

Based upon the findings of the secret shopping experience, stakeholder engagement process, and ongoing research, recommendations for the New Hampshire workforce development system have been outlined in three key areas: digital modernization, employer engagement, and service delivery. The purpose of these recommendations is to expand the breadth and depth of the New Hampshire workforce system to ensure that there is a robust talent pipeline for business while also increasing access to quality jobs for workers.

Digital modernization

Modernize web presence: By updating the website platforms with user-friendly interfaces, improved job matching capabilities, and streamlined account services, the New Hampshire workforce system will empower jobseekers to access a wide array of opportunities efficiently and allow them to access virtual services at times that meet the needs of their current life and work obligations. Simultaneously, businesses will benefit from improved talent acquisition capabilities, allowing them to identify and recruit a skilled workforce more effectively. With a modernized web presence, the New Hampshire workforce system will foster stronger connections between jobseekers and employers, stimulating economic growth and ensuring the state remains at the forefront of workforce development and innovation.

Improve branding and navigation: Consolidating the New Hampshire workforce system's digital presence into one website is a crucial step needed to optimize user experience and navigation. By collapsing and condensing the various platforms into a unified, centralized website, the system can create a seamless and efficient hub for both jobseekers and businesses. This consolidation will not only simplify access to resources but also promote a more cohesive and user-friendly interface, making it easier for individuals and employers to navigate through services, find relevant information, and engage with the workforce development opportunities available. In addition to this consolidation, consistent branding should be used across all web platforms across the workforce system. This will reinforce the system's identity and mission while also building trust and recognition among users.

Reestablish direct center phonelines: Reestablishing individual direct phone lines at each NH Works Center will further enhance accessibility and strengthen the connection between jobseekers or employers and the workforce system. While the centralized phone system was a critical strategy of the pandemic era workforce system, it may be time to revisit the strategy. Direct phone lines will offer a reliable and efficient way for individuals and businesses to access personalized support, guidance, and resources. This approach fosters a more personalized and human touch, allowing staff at the centers to address specific inquiries promptly, offer tailored assistance, and ensure a seamless experience for all users. In addition, by reinstating individual phone lines, the New Hampshire Workforce system will be centering the needs of the individuals staffing the New Hampshire Works offices who believe strongly that the addition of these phone lines will improve both the quality and quantity of services they are able to provide.

Employer engagement

Develop strategic vision for Interagency Business Team

Creating a strategic plan for the Interagency Business Team (IBT) within the New Hampshire Workforce system will harness the full potential of the diverse partners and individuals participating in the IBT. With each partner possessing unique organizational goals, varying levels of employer engagement expertise, and sometimes disparate understandings of the IBT's purpose, a comprehensive strategic plan will align their efforts towards a unified vision. By defining common objectives, clarifying roles and responsibilities, and fostering open communication channels, the strategic plan will enhance collaboration, promote knowledge sharing, and maximize the collective impact of the IBT.

Conduct assessment of tools:

Assessing employer engagement tools, relationship trackers, and resources currently in use within the New Hampshire workforce system is essential to streamline processes, build efficiencies, and reduce duplication of efforts. By evaluating the effectiveness and efficiency of these existing tools, the workforce system can identify gaps and areas of improvement, leading to a more cohesive and targeted approach in engaging employers. Such an assessment would not only optimize resource allocation but also foster stronger partnerships between existing partners and employers, enabling better alignment of services with industry needs and workforce demands.

Invest in tools and develop an employer engagement toolbox

Based upon the findings of the assessment process, the New Hampshire workforce system should prioritize investing in the areas identified and develop a toolkit of resources and strategies accessible to all partners of the system. By doing so, the workforce system can capitalize on the strengths of these identified tools and enhance overall efficiency and effectiveness in serving businesses. Pooling resources and leveraging economies of scale enables the system to negotiate better pricing and access more advanced technologies, maximizing the impact of their investments. Moreover, the creation of a standardized toolkit ensures consistent and uniform services provided to businesses, regardless of which partner they engage with within the system. This approach fosters a seamless experience for businesses, reduces confusion and administrative burdens, and ultimately strengthens the workforce system's capacity to support businesses in their recruitment, training, and workforce development needs.

Prioritize Business Services Team training

There is a need to coordinate service delivery among staff and core partners that interact with businesses. Many groups are reaching out to businesses individually, but the efforts could be coordinated to enhance impact. In addition to an improved strategic direction for the IBT and the development of toolkit, there is an opportunity to provide training to business services staff and partner staff on research, outreach, coordination with partners, job matching versus job placing services, interviewing for information, sales techniques, and follow-up services and strategies. Business services can be strengthened through training and coordination.

Service Delivery

Deploy uniform and consistent professional development

Customer service could be improved through implementing regular and ongoing investments into New Hampshire Works staff and partner training and upskilling. The training would help New Hampshire Works centers articulate a full array of workforce services beyond Job Match registration and job search assistance. Training would provide guidance on active engagement with and interviewing of jobseekers and would reinforce the value of in-depth services that enhance the customer experience. There is an opportunity to develop and benchmark standards for excellent customer service, not just at the one-stops, but at partner providers where referrals may take place. Training examples could include developing a human connection with customers before requiring computer registrations, proactively asking customers questions, and listening to learn about their wants and needs.

Deliver seamless customer service experience

Currently, many of the programs and staff are operating in silos and the operations do not always reflect the WIOA vision for a "One-Stop" integrated center. There is a need for an overarching training strategy to focus on developing cross training on partner services, encouraging the continued use of program and partner integration (such as team-based case management and customer centric design), increasing inclusion of partner services in addressing customer needs, and providing guidance on creating a seamless customer flow process that puts the customer at the center/focus.

Focus internally and externally on job quality

Adopting a dual focus on job quality, both internally and externally, will help the New Hampshire workforce system to cultivate a thriving and sustainable labor force. Internally, the system should prioritize investing in its staff and enhancing the quality of jobs within the workforce system itself. By fostering a positive work environment, offering professional development opportunities, and ensuring competitive compensation, the system can boost employee morale and retention, leading to greater expertise and dedication in serving job seekers and businesses. Externally, the workforce system should actively collaborate with employers to emphasize the significance of job quality in attracting and retaining a skilled workforce. By educating employers about the direct link between job quality and talent attraction, the system can encourage businesses to implement measures that improve working conditions, provide opportunities for growth, and offer fair compensation.

Expand customized training and wraparound supports

The New Hampshire workforce system has an opportunity to make a strategic investment in expanding its partnerships to enhance its capacity to deliver tailored, short-term, technical training programs that align precisely with the evolving needs of employers. By forging robust collaborations with industries, educational institutions, and training organizations, the system can offer training opportunities that equip jobseekers with the precise skills demanded by the job market. Furthermore, given the structural issues facing today's workforce, such as inaccessible and unaffordable childcare, healthcare, transportation, and housing, it is crucial to ensure that the appropriate wrap-around services and coaching supports are readily accessible to jobseekers throughout training and placement. This comprehensive approach not only supports workers, but also ensures that the workforce system is responsive to employer needs.

Conclusion

A state's ability to connect its workers with good, quality jobs and employers with a skilled, qualified workforce is central to its economic vitality. With a robust education system located within the state, a network of workforce development, economic development, and community-based organizations, New Hampshire has the pieces in place to rise to the challenge of further aligning its talent development system to ensure that workers have access to high quality employment opportunities and employers have access to a robust talent pipeline.

Building on its strengths, best practices from across the country, and the wisdom of stakeholders, New Hampshire can take several steps to increase the depth and quality of services offerings while continuing to improve accessibility for businesses and jobseekers alike:

Modernize Virtual Tools

- » Modernize web presence
- » Clarify branding and improve navigation
- » Reestablish direct center phonelines

Build Employer Strategy

- » Develop strategic vision for Interagency Business Team
- » Conduct assessment of tools
- » Invest in tools and develop employer engagement toolbox
- » Prioritize Business Services Team training

Enhance Service Delivery

- » Deploy uniform and consistent professional development
- » Deliver seamless customer service experience
- » Focus internally and externally on job quality
- » Expand customized training and wraparound supports

Appendix A:

Stakeholder Engagement Summary

NEW HAMPSHIRE OFFICE
OF WORKFORCE OPPORTUNITY

Stakeholder Engagement Summary

NEW HAMPSHIRE OFFICE OF WORKFORCE OPPORTUNITY

Contents

STAKEHOLDER ENGAGEMENT SESSIONS SUMMARY

This engagement document outlines TPMAs methodology for engaging with various stakeholder profiles across the State of New Hampshire. Qualitative data collection including interviews, focus groups, and observation, seeks depth of understanding and narrative context rather than generalizable/abstracted results across a large population. To carry out the focus groups, TPMA used convenience sampling and separated groups by homogeneity pending their role within the NH Works ecosystem. Groups were separated into six stakeholder profiles including frontline staff members, the NH Works office managers, the Interagency Business Team, businesses, the Consortium, and job seekers. Focus groups contained up to 10 participants and lasted approximately 1 hour.

In addition to the focus groups mentioned above, TPMA supplemented stakeholder engagement focus groups with interviews for stakeholders who were unable to participate in the focus groups. A survey was also distributed to job seekers to further capture their perspectives.

Throughout the focus groups and interviews, stakeholders were invited to participate in an open-ended discussion about their experiences with and recommendations for the New Hampshire workforce development system. Members of TPMA staff hosted sessions and guided conversations with questions and prompts based on information presented in the discovery phase of this project.

NH Works Consortium

New Hampshire's One-Stop system, known as NH Works, is managed by the NH Works One-Stop Operator Consortium (NH Consortium) . This committee serves as the One-Stop Operator and has the purpose of establishing and overseeing the implementation of a comprehensive vision for the one-stop delivery system. TPMA conducted stakeholder engagement with members of the NH Works Consortium using a blend of one hour focus groups and thirty-minute interviews. Interviews and focus groups were conducted over the course of three months with stakeholders representing six organizations from the NH Works Consortium.

Successes

Throughout the focus groups and interviews, representatives from NH Consortium identified several successes of the NH Works system: 1) Collaboration; 2) Vision of leadership; 3) Co-enrollment and increased flexibility of training dollars.

Collaboration

The NH Consortium is comprised of the state agencies responsible for the 6 WIOA core programs and other key partners delivering workforce services across the state. Due to the cross-agency nature of this committee, stakeholders find that collaboration and partnership has increasingly become more natural for the group. As participants in the NH Consortium, agencies have gotten to better understand one another's strengths, areas of expertise, and opportunities for seamless referrals for both jobseekers and employers. In particular, stakeholders point to the role as One-Stop Operator as one of the key drivers of successful collaboration as it has allowed the agencies to build authentic relationships and develop trust in one another.

Vision of leadership

There was a consensus that leadership at the OWO and in other parts of the workforce system has been moving in the right direction. New Hampshire is a small state and as a result, it's many of the same individuals who have been working within the system for a long time; however, stakeholders described current leadership as being "willing to hear new voices and new ideas."   One stakeholder said, "leadership is great at inviting others in to do the work,"   while another described training providers as interested in thinking differently about creating programs that meet the needs of employers.

Co-enrollment and increased flexibility of training dollars

Related to the above, multiple stakeholders mentioned the increased flexibility of training dollars to serve a broader range of jobseekers as a significant success of the last three years. Many described eligibility requirements being a limiting factor to the accessibility of training funds; however, multiple stakeholders expressed a feeling that eligibility requirements have expanded, thus allowing more jobseekers to access training funds. Further aiding this sense of increased flexibility is the commitment from the OWO, New Hampshire Employment Security, and other leaders to begin prioritizing co-enrollment of participants to braid together services, resources, and funding to provide a holistic workforce development experience.

Challenges

Throughout the process, NH Consortium listed challenges that exist within the NH Works system. The challenges that were mentioned were divided into three categories: 1) Internal and external technology platforms; 2) Accessibility of NH Works Centers; 3) Consistency of training and communications across partners.

Internal and external technology platforms

Stakeholders named issues with the internal case management as one of the greatest challenges experienced by the NH Works system in recent memory. While many of the issues caused by the internal case management system failure have been rectified, there is still some lingering weariness of the platform itself. Additionally, external technology platforms are perceived as a persistent issue. The platforms identified most notably included public-facing outreach and communication tools such as the workforce system websites (which are outdated) and social media (which is being underutilized in recruitment).

Accessibility of NH Works Centers

Stakeholders used the terms "intimidating" and "confusing" to describe how some adult jobseekers experience the NH Works Centers. Some of this feeling seemed to come from the sense that all government buildings can feel intimidating; however, the jargon of workforce and the somewhat institutional style of service in some NH Works Centers does little to alleviate this feeling of unease. Three focus group participants said that they themselves have found navigating the NH Works Centers difficult when they've arrived to participate in meetings or lead programming for participants.

Consistency of training and communications

There is a general feeling that leaders have a clear vision for the NH Works Center experience, but that the day-to-day delivery of that vision can break down at the Center level where referrals are not seamless for jobseekers, availability of services can feel opaque to both employers and jobseekers, and messaging about programs and eligibility may not be consistent across partners and Centers.

Recommendations

Throughout the stakeholder engagement process, businesses inserted recommendations on programs or systems they thought would benefit the workforce development system in New Hampshire: 1) NH Works Centers serve as front door to workforce development services; 2) Continued employer engagement alignment; 3) Improve external communications.

NH Work Centers serve as front door to workforce development services

NH Consortium members cited strong relationships between leaders serving on the committee as one of the strengths of the New Hampshire workforce system. While these relationships are clear at the leadership level, some stakeholders felt that organizational partnerships have a history of breaking down at the service level. Stakeholders suggested regular training for frontline staff about the services of each organization, online tools clearly cataloging services, and stronger referral processes as possible solutions to ensure that no matter where a jobseeker or employer enters the workforce system, they will be able to find the services that they need.

Continued employer engagement alignment

Stakeholders mentioned that while current employer engagement efforts are well-received and efforts have been made to reduce duplication of services, there is still work to be done in further aligning the employer engagement efforts of partners. Some stakeholders felt like their organization had a clear vision for employer engagement in the state, while others discussed feeling unsure of their role in engaging employers and were unsure about how they might plug in beyond attending the Interagency Business Team meetings. There was a general desire to be doing more with employers and interest in system-wide training to better and more consistently engage employers across the system.

Improve external communications

A topic that surfaced throughout focus groups and interviews was the desire for an improved public-facing communications strategy. This strategy could include a website overhaul, a regular and robust social media campaign, as well as paying special attention to the accessibility of digital tools. Further suggestions included creating space on an updated website where both businesses and jobseekers could easily search through a menu of services available through the workforce system. Finally, a suggestion was made to increase in-person outreach into third spaces – schools, churches, coffee shops- to develop community relationships.

Frontline Staff

The Frontline staff, arguably the backbone of the One-Stop system in the state of New Hampshire, were given the opportunity to highlight strengths, challenges, and opportunities they face in their work. Through a series of guided questions, staff from TPMA met for just over an hour with a pre-identified group of employees from across the state virtually via Zoom. The highlights of that conversation appear below.

Successes

Frontline staff identified the following successes through focus groups and interviews: 1) Referral partnerships; 2) Customer focus; and 3) P artner outreach.

Referral partnerships

In the most general of terms, a vast majority of the successes highlighted by the group focused on a strong, collaborative work environment in the centers themselves. With the stage set by WIOA requirements of colocation, the staff pointed to the importance of ready access to colleagues across the programs as making coordination efforts relatively easy. Staff felt that co-enrollment occurs at an extremely high rate, ensuring that customers get access to the full suite of available benefits and assistance. They pointed to the important role of collaboration with Apprenticeship NH and Community Colleges, with more and more students/prospective customers interested in shorter term or on the job training opportunities. DHS was also highlighted as a valuable partner in the one-stop, with strong levels of collaboration between Frontline staff and DHS officials regarding SNAP, TANF benefits and general program eligibility.

Customer Focus

With such high levels of collaboration, it stands to reason that a pervasive commitment to the mission of the New Hampshire Works Centers (NHWCs) and laser-sharp focus on customer service was identified as a real strength of the system as well. In addition to help from DHS on eligibility and wrap-around services, the staff indicated that outside partners are also committed to help the citizens of New Hampshire seeking training and employment assistance. Staff pointed to a healthy, steady stream of referrals coming into the center from training providers who are on the lookout for potentially eligible students among their rosters. The team also highlighted the important role of Board Administrators and their overwhelmingly positive impression that they are truly supported by a leadership group that is accessible and willing to help.

Partner outreach

The Frontline staff felt that partner outreach is an important strength of the system as well. Most felt that their efforts to form relationships with industry partnerships, individual employers, and education leaders from around their communities were all meaningful and effective ways to increase the penetration rate for WIOA-funded services in their areas.

Challenges

Frontline staff identified the following challenges through focus groups and interviews: 1) Young adult recruitment; 2) Processes and systems; and 3) Staffing.

Young adult recruitment

While expanded eligibility criteria were pointed to as a positive in terms of customer recruitment, WIOA Youth staff, specifically, indicated serious challenges in finding youth to enroll, especially in-school youth. Staff pointed to COVID-19 and the changes that accompanied it, such as remote learning and tighter access restrictions to schools and programs, as the primary factors behind this challenge.

Processes and systems

Staff recognized the importance of the system of record and tracking services within it but did indicate that sometimes behind the scenes note taking and 'paperwork' can take away from time better spent with customers. The JobMatch system was also universally lamented as not user friendly and an incredible drag on their time. Finally, although resolved, staff also pointed to a nearly 3-month period of time when the database was down and they are, as of time of the focus group, still struggling to play catch up AND serve new customers coming through the doors.

Staffing

Not surprisingly, given national trends in labor force, the system itself is not immune from worker shortages. The staff indicated that difficulty filling frontline 'boots on the ground' positions, especially Specialists, is a significant challenge.

Recommendations

Frontline staff identified the following recommendations through focus groups and interviews: 1) Attraction and retention of staff and 2) Improved internal communications.

Attraction and retention of staff

By and large, the group was largely content with their work and felt a sincere commitment to the mission of the NH Works. However, they did highlight serious problems in attracting and retaining staff. They pointed to job quality improvements such as increased professional development and training as a potential retention strategy. Additionally, they noted that an improved pay scale would be the most immediate remedy to this challenge both in attracting new staff and ensuring the retention of current staff.

Improved communications

Staff noted that there are often updates to processes, procedures, and systems and that these updates can feel overwhelming, particularly when communication is rushed or multiple updates are being rolled out at one time. A more measured approach to system updates and tech roll outs was suggested; while all acknowledged challenges should be expected when changes like this occur, a greater focus on disrupting the day-to-day work of staff was recommended.

Interagency Business Services Team

TPMA conducted stakeholder engagement with members from the Interagency Business Services Team (IBT) using a blend of one hour focus groups and thirty-minute interviews. The IBT is comprised of individuals from NH Works and other partner agencies who have day-to-day contact with the business community and who are responsible for facilitating communication to businesses about the services available through the workforce system. The IBT works to streamline access to workforce services available from each partner and create a seamless customer services experience for business regardless of the services they are interested in accessing. Interviews and focus groups were conducted over the course of three months.

Successes

Members of the IBT identified the following successes through focus groups and interviews: 1) High quality existing employer relationships; 2) IBT partner diversity; and 3) Ove rall collaboration between partners.

High quality existing employer relationships

Stakeholders applauded the existing employer relationships that have been built through the IBT. In particular, they noted the leadership of Jimmie Hinson and that for employers with whom the state has provided workforce services, his name is often synonymous with the positive business engagement efforts of the workforce development system.

IBT partner diversity

As in other parts of stakeholder engagement, partners pointed to leadership from the OWO setting a more inclusive course for the workforce system that allows new and different partners to engage in the IBT. In particular, there has been a renewed energy around ensuring that the eligibility for participation on the IBT reflects the true composition of those serving workers and employers in New Hampshire. A recent example of this inclusive vision in practice is the inclusion of Adult Basic Education at the IBT. While not in theory a business serving organization, they have a clear mandate to ensure that programming is responsive to and aligned with the needs of New Hampshire businesses.

Collaboration among partners

Overall, stakeholders described a general sense of comradery across partners. Partners with less sophisticated employer engagement strategies and staff capacity n oted a willingness of more established partners and programs to provide mentorship. Additionally, partners have been using a shared CRM system to mitigate the duplication of services to employers. While the tool is imperfect and implementation has been uneven, the introduction of this shared tool points to a desire to work more effectively across the partners participating in the IBT.

Challenges

Throughout focus groups and interviews, stakeholders identified the following challenges: 1) Rapid Response priority; 2) IBT meeting effectiveness; and 3) Limited capacity to deliver customized training.

Rapid Response priority

The purpose of the IBT is to streamline access to all of the employer engagement services available from each of the partners represented on the IBT, however, Rapid Response services to avert lay-offs at New Hampshire companies is perceived as the predominant focus of the IBT when the committee meets.

IBT meeting effectiveness

Stakeholders cited that the meetings are often very tactical with relation to a particular company or focused on a compliance-based issue. This can leave some partners with a feeling of "what's my role" and "what am I doing here". There is limited time dedicated to building strategies that drive employer engagement beyond immediate employer's needs. There is a desire to revisit the overall strategic vision of the group to ensure there is alignment between the activities of the IBT, the roles of its members, and the overall goals.

Limited capacity to deliver customized training

Two key issues were identified that may be limiting NH Works' ability to deliver customized training to ensure that jobseekers have access to high quality employment opportunities and employers have a pool of qualified talent. From an employer engagement perspective, stakeholders see an opportunity for conversations with businesses to extend beyond transactional conversation about placements and job openings and into deeper engagement around training and talent needs. Additionally, stakeholders cite a lack of diverse short-term technical training opportunities which limits employer engagement staff's ability to connect employers to customized training solutions, particularly for employers who may one need to upskill or fill a small number of positions.

Recommendations

Throughout the stakeholder engagement process, the Interagency Business Services Team provided recommendations on strategies, programs, and systems that they thought would benefit the workforce development system in New Hampshire: 1) Develop strategic priorities for IBT; 2) Employer engagement staff training; and 3) Enhance online presence.

Develop strategic plan for IBT

Stakeholders would like to spend some time planning for the future of the IBT. This includes the opportunity to think strategically about the priorities for the IBT and ensuring alignment with the overall vision for the workforce system and the partners at the IBT table. Additionally, a strategic planning process may offer an opportunity to more clearly articulate roles and responsibilities for each IBT member so that they can effectively leverage the relatively limited staff capacity and resources available for employer engagement.

Employer engagement staff training

There is a desire for consistent and uniform staff training across partners for any staff who are engaging with businesses. This would include the compliance-based aspects of service delivery as required by WIOA, as well as practical aspects of employer engagement and capacity building that ensures staff are on the forefront of leading job quality and diverse talent pipeline conversations with employers.

Enhanced online presence

There is limited staff capacity to engage employers across the workforce system. In addition, the staff capacity that does exist is often directed toward service delivery. This leaves very little time for broad outreach and engagement. Currently, the web presence for NH Works, JobMatch, and NHES is overwhelming to employers and does not provide a clear avenue for them to engage the workforce system and access services. Additionally, there's an opportunity to create a web presence that enhances the employer engagement efforts of staff through self-service tools.

NH Works Office Managers

Office Managers in the New Hampshire One Stop System are responsible for overseeing administrative tasks and procedures for centers and ensuring that the office operates efficiently and smoothly in accordance with WIOA guidelines. TPMA hosted a focus group of office managers throughout the state, using a series of guided questions, to uncover successes, challenges, and opportunities from their perspectives. Office managers were able to elaborate on what is helping move their individual centers forward and what may be holding them back. A summary of the findings follows below.

Successes

NH Works Office Managers identified the following successes through focus groups and interviews: 1) Collaboration and 2) Unemployment and RESEA.

Co-location of partners

Office managers expressed nearly the same outlooks related to collaboration as conveyed by frontline staff. The TPMA team consistently heard that collaboration is a "core strength" across the state which allows for high quality service delivery to customers. Office managers further explained that partners effectively operate under the same roof and are able to routinely "cross refer" and provide programmatic information to customers when necessary.

Unemployment insurance and RESEA

Office managers specifically cited the hard work and dedication of the teams in these two programs during the pandemic and noted them as a "sail" for their centers. As Unemployment Insurance (UI) supports customers who have lost jobs and Reemployment Services and Eligibility Assessment Grants (RESEA) supports with reemployment, these two programs were hardest hit and had to respond and adjust immediately to best serve customers. Office managers expressed their appreciation and gratitude for the successes of these programs during the height of the pandemic.

Challenges

NH Works Office Managers identified the following challenges through focus groups and interviews: 1) Phone system; 2) Center traffic; and 3) Staff training.

Phone system

Almost immediately when the focus group started TPMA overwhelmingly heard the desire to "get our phones back" post-covid. Office managers stated that it was essential in providing good service to customers, and that it is often discouraging to jobseekers when they can't get in touch with a team member directly. They felt this was an important challenge for TPMA to highlight, and an immediate action item to be considered to get the centers "back to normal."

Center traffic

Office Managers across the state noted that despite efforts, foot traffic to the center has not been the same since pre-covid. They discussed innovative strategies they have tried such as onsite recruitment events, open houses, and job fairs which generate temporary traffic; however, to date traffic has not picked up consistently post covid.

Staff training

Like the challenge noted by frontline staff related to staffing, Office Managers went a step further to discuss the need for consistent training and professional development at the state level. TPMA heard things like RESEA program is "ever-changing," and it is often impossible to pause, track, and acquire program updates. They stated that when new staff are onboarded, there is barely any time for them to learn the particulars of the various programs they are responsible for—often creating a disconnect between the staff member and the customer. Finally, they discussed how many of the seasoned program experts across the state are "retiring" and how that expertise is undoubtedly lost without a system in place for training and mentoring newer staff. It was mentioned that there isn't a time and space for team members in the same positions to "work and learn" together.

Recommendations:

NH Works Office Managers identified the following recommendations through focus groups and interviews: 1) Reinstate direct phone lines; 2) Establish professional development series; and 3) Assistance in driving traffic.

Reinstate direct phone lines:

Office Managers stood firm on recommending that sites get their phones back as this is a critical piece to center operations. This recommendation was heard consistently in various ways throughout the entirety of the focus group.

Establish professional development series:

Office Managers also recommended developing a professional development series and "work and learn opportunities" for staff across the state in similar roles. They noted this is critical in succession planning and passing down knowledge of seasoned employees who are actively planning for retirement.

Assistance in driving traffic:

Lastly, Office Managers recommended additional support at the state level to help drive traffic back to the centers—whether it be updated marketing materials, website enhancements, social media, advertisement campaigns, or outreach aid to get the centers "back to normal."

Business

TPMA conducted stakeholder engagement with businesses across the state of New Hampshire using a blend of one hour focus groups and thirty-minute interviews. Throughout the course of this project, the project team spoke with four individual businesses. Interviews and focus groups were conducted over the course of three months.

Successes

Throughout the focus groups and interviews, representatives from businesses identified several successes of the NH Works system: 1) NH Works systems; 2) Responsiveness to business; and 3) Workforce programs.

NH Works Systems

The most common success identified from businesses was working with programs administered by Jimmie Hinson. Participants frequently mentioned their appreciation of the services and support that Mr. Hinson provided and referred to his services as one of the most valuable resources the NH Works system provided. Common services mentioned include connecting employees to job postings, helping businesses discover creative and innovative solutions to problems, and improving the networking capacity of businesses. Additionally, employers felt that Mr. Hinson's services make accessing the public workforce system less bureaucratic.

Respondents were also appreciative of new leadership at the NH Works office. They mentioned sentiments that the workforce development board is empathetic and open to their needs and that the new leadership has worked to embrace flexibility in programming and has worked diligently to streamline processes.

New Hampshire's single board state system was another asset highlighted by businesses. Respondents mentioned that this system provides clarity and consistency among programs and made leadership easier to access.

Responsiveness to business

Another success of the NH Works system that was mentioned was the office's reaction to workforce needs. For example, when the state experienced major layoffs, the NH Works office facilitated a job fair for displaced workers. Furthermore, the Office helped increase the accessibility of high demand training programs, such as the Commercial Driver's License (CDL) training program, to help employers meet their workforce needs.

Workforce programs

A program that was highlighted as a success includes the NH Invest program that offers a 50% match to employers when they provide training to employees that results in skill acquisition for the employee. Another strength of the NH Works system that was mentioned by businesses was the quality of training programs, specifically those offered by the Community College system and Career and Technical Education (CTE) programs.

Challenges

Throughout the process, businesses listed numerous challenges that exist within the NH Works system. The challenges that were mentioned were divided into four categories: 1) Systematic ; 2) Training; 3) Funding distributio n; and 4) Engagement.

Systematic

States across the country are facing workforce challenges. Many of these themes are consistent across New Hampshire. For example, representatives from businesses are reporting a shrinking talent pool due to an aging and retiring workforce. As a result, there are not enough job seekers to meet the demand of job postings. This overall tightness of the labor market is providing workers with more choice to explore new and different types of employment opportunities as well.

Furthermore, workers across the state are facing three primary challenges to staying employed. First, the cost of housing has become too expensive compared to the wages workers are being paid so they are being priced out of the location of their jobs. Second, there is a lack of viable and reliable transportation options for workers, particularly through the public transportation system. Third, with rising childcare costs, families are increasingly having to make tough choices about the decision of dropping out of the labor force to ensure their children have high quality, affordable childcare.

Other systematic challenges pertain specifically to the NH Works system. Several representatives mentioned that the NH Works system is reliant upon "person knowledge." In other words, processes and systems are not documented or publicized, therefore, individuals hoping to receive services are required to build a relationship with the staff member responsible for coordinating the system. This obscures the transfer of knowledge as individuals transition out of roles and forces individuals to create and maintain relationships. Furthermore, employer participants mentioned that there seems to be a lack of coordination among agencies working to address similar workforce challenges. The lack of coordination has led to duplication of services, confusion about how the workforce development system works and who is responsible for certain programs.

Training

A few employers mentioned their appreciation for the State of New Hampshire's Community College system. They mentioned that they have hired workers who have received training from the system in the past, and the system adequately equipped the job seekers with the technical skills necessary to work effectively. However, one limitation that they highlighted was a lack of emphasis on common skills, also known as soft skills.

Common skills are colloquially considered skills that enable workers to work collaboratively with others. Examples of common skills include teamwork, problem solving, emotional intelligence, and communication. Several employers highlighted the primary reason they need to terminate workers is because of deficiencies in the workers' common skills. In addition to common skills training, employers mentioned they would appreciate increased accessibility to short-term training credentials across the state to expeditiously help their employees build skills.

Another limitation of the training system that employers mentioned was a lack availability for incumbent worker training programs. Employers felt that NH Works programs were a hidden gem and that other business owners within their networks were less familiar with the system and how to access funding to support upskilling their current workers. In conjunction, employers mentioned that there was a high demand for these activities among businesses.

Funding distribution

A third theme that employers referenced throughout the focus group process related to funding distribution and service eligibility. Employers reported that funding was difficult to access because they did not understand which programs they qualified for and the workforce development system was cumbersome to navigate, particularly on issues of eligibility. Additionally, the data reporting requirements and restrictions, as well as documentation required to participate in programs, discouraged employers from applying for funds and that the opaqueness of these programs could leave employers feeling that the process was "... more trouble than it was worth."

Engagement

The fourth and final challenge theme reported by employers was related to engagement. Specifically, employers mentioned services and marketing was primarily advertised across the larger cities such as Concord and Manchester. The participants understood this happened as a result of population density but felt efforts could be expanded into rural communities.

When asked about diversity, equity, inclusion, and accessibility efforts, employers mentioned that they did have challenges building a diverse workforce; however, this was often attributed to the lack of diversity reflected by New Hampshire's population demographics.

Recommendations

Throughout the stakeholder engagement process, businesses inserted recommendations on programs or systems they thought would benefit the workforce development system in New Hampshire: 1) Strategies for Diversity, Equity, Inclusion, and Accessibility; 2) Training programs and systems ; and 3) Funding.

Strategies for Diversity, Equity, Inclusion, and Accessibility

Among the recommendations for improving the workforce development system, several employers recommended strategies for creating a more diverse workforce and increasing the pool of talented workers. These two strategies include creating systems to engage with the state prison system and to engage with immigrant populations. Business representatives mentioned that New Hampshire has high resettling immigrant populations. Therefore, the pool of talented workers could be expanded if the NH Works system had stronger methods of engaging these groups.

Additionally, business representatives mentioned that, to their knowledge, the State does not have any programs working to build the skills of justice-involved populations, particularly those who have experienced incarceration. As a result, the workforce system would benefit from programs to engage these individuals.

Training programs and systems

While employers expressed satisfaction with the training opportunities provided, they expressed ideas for further enhancing this aspect of the workforce development system. One recommendation provided was creating more short-term credential programs. While the State has numerous longer term training programs through the Community College system, and other avenues that take anywhere from two to four years, employers mentioned that their businesses have evolving needs that require more rapid and specialized training programs.

As mentioned earlier, the Community College system was touted as an asset to the workforce development system, but it was also recommended that partnerships within the system ought to be leveraged to increase the impact. Another suggestion that was mentioned by a representative was creating a career pathway program in partnership with the Community College system that served multiple employers. Career pathway programs are workforce development tools that help job seekers view skills required for certain jobs, compensation associated with certain jobs, and overall career trajectories.

Accessing services and funding

The WIOA program provides funding opportunities for both job seekers and businesses. However, businesses reported challenges accessing and utilizing funding opportunities and employer services. Employers stated that they would prefer a more transparent, streamlined system to access resources that relies less on personal relationships to navigate (i.e., knowing the right person to call) and more easily accessible tools that would include a "menu" of funding and service opportunities.

Job Seekers

TPMA conducted stakeholder engagement with job seekers across the state of New Hampshire using a blend of one-hour focus groups and thirty-minute interviews. Throughout the course of this project, the project team spoke with three individual job seekers. Interviews and focus groups were conducted over the course of three months. The lack of focus group and interview engagement was a limiting factor and the project team felt that additional engagement was necessary in order for jobseekers to be reflected in the stakeholder engagement. The summary below outlines the results of the limited jobseeker engagement in the focus groups and interviews. Additional analysis of survey results can be found in the section below, "Jobseeker Survey Analysis."

Successes

Throughout the focus groups and interviews, representatives from businesses identified several successes of the NH Works system: 1) Building connections; 2) Support from Frontline Staff; and 3) Program flexibility.

Building connections

Two participants mentioned appreciation for the connections they were able to make throughout the process. One participant mentioned that once he was entered into the system, he was quickly connected with an employer and able to begin work in a satisfactory timeline. This sentiment was echoed by another participant who went through the NH Jag system. Furthermore, one participant mentioned the connectedness of communities across New Hampshire as an asset. He feels that down the road, the strong community network can help him further his career.

Support from Frontline Staff

All participants mentioned how appreciative they were of the support they received from frontline staff. One participant had a supportive connection from the NH Jag center that not only helped her gain employment, but continued to follow-up after she gained employment to offer additional support. Another participant, who was highly discouraged by the job search process, expressed sincere appreciation for the staff.

Program flexibility

Two job seekers referenced the flexibility of the workforce system as an asset, particularly when completing their learning requirements. More specifically, participants appreciated having the opportunity to learn in-person or online.

Challenges

Throughout the process, job seekers listed numerous challenges that exist within the NH Works system. The challenges that were mentioned were divided into four categories: 1) Wages and affordability; 2) Diversity, Equity, Inclusion, and Accessibility; and 3) Consistency of program delivery.

Wages and affordability

The most common challenge mentioned was the low starting wages of jobs that individuals were connected to and affordability of living in New Hampshire. Participants felt that the compensation they were starting at was not competitive and it would be challenging for them to achieve financial stability, particularly if they had to support a family. Participants also mentioned that the wage for their learn-and-earn opportunities were low and it was difficult to cover their basic needs.

Diversity, Equity, Inclusion, and Accessibility (DEIA)

As mentioned earlier, respondents believed New Hampshire's population was more homogeneous and tends to be mostly White. This belief was echoed by job seeker participants. However, one gap that a respondent mentioned was lack of support and services for English language learners (ELL). She mentioned she participated in a class with an individual who was an ELL student. Students in the class helped this student to the best of their ability; however, there was not a coordinated system to support the ELL student in a formal way. If not for the support of classmates, it was difficult for this stakeholder to imagine the ELL student succeeding.

Consistency of program delivery

When participating in the focus groups, it became clear that respondents received different degrees of service. One young adult focus group participant mentioned that her case worker continually communicated with her, even after she gained employment. The other adult participant stated that she had not been followed-up with, other than to report a success story.

Recommendations

Throughout the stakeholder engagement process, job seekers inserted recommendations on programs or systems they thought would benefit the workforce development system in New Hampshire: 1) Common skills training; 2) Learn and earn; and 3) Workplace environment.

Common skills training

One expansion recommendation that was made relates to common skills. When discussing the value of common skills, one respondent specifically mentioned his belief that common skills were the reason he was able to secure, maintain, and advance in his role. He further mentioned that he developed these skills though some support of the NH Works system; however, much of this came from other work experiences and mentors.

Learn and earn

When discussing challenges to the workforce system, one participant mentioned that she struggled to continue with a program because the financial gain was not a livable wage. The participant feared if an emergency came up, she would not be able to afford it and may need to drop out of the program. As a result, she recommended increasing the available stipends and having an emergency fund for individuals in need of increasing compensation during learn and earn opportunities.

Workplace environment

All participants were asked what they looked for in an ideal employer. All three participants mentioned that company culture was the highest priority on their list. They wanted to work somewhere that they felt they belonged and enjoyed their supervisor and co-workers. They also wanted to work somewhere that could be flexible to the demands of life whether they experience challenges with family, illness, or another reason.

Jobseeker Survey Analysis

TPMA conducted a survey of jobseekers in New Hampshire to assess the demographics, preferences, and quality of experience individuals had when interacting with New Hampshire Works Centers. The New Hampshire JobMatch system was used to field the survey and the survey was opened between March 6th and March 28th. In total, 63 participants started the survey and i t was completed by 50 respondents. The following charts and tables show the results of the survey and are supported by narrative or additional contextual information where necessary.

Survey results displayed a moderate bias towards unemployed and underemployed respondents. Of those unemployed, 46% were receiving unemployment insurance benefits at the time of submission (22% overall). This does show that while many individuals access NH Works while unemployed, many individuals visit to access other resources, as well as suggests a significant success rate when helping individuals find employment. This is further demonstrated in additional feedback in the survey.

Figure 1: Respondent's Age Breakdown

Legend	
■	18-24
■	24 - 34
■	35 - 44
■	45 - 55
■	55 - 65
■	65+
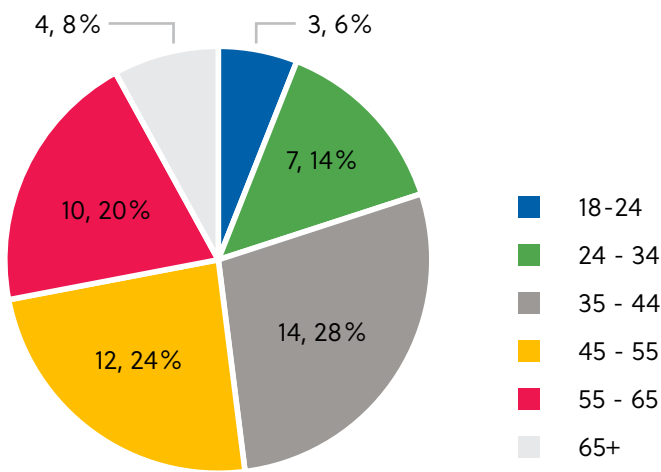
Figure 2: County Residence

County	Number Respondents	Percent of Total
Belknap	5	10%
Carroll	4	8%
Cheshire	8	16%
Coos	3	6%
Grafton	7	14%
Hillsborough	8	16%
Merrimack	3	6%
Rockingham	4	8%
Strafford	2	4%
Sullivan	3	6%
(blank)	3	6%

Figure 3: Employment Status

Employment Status			Receiving Unemployment Insurance Benefits	
			Yes	-
Employed	21	42%	No	21
			Unsure	-
			Yes	-
Underemployed*	5	10%	No	4
			Unsure	1
			Yes	11
Unemployed	24	48%	No	2
			Unsure	11

*WORKING, BUT NOT MEETING FINANCIAL OBLIGATIONS

Respondents were asked if any of the following have impacted their ability to work in the last two years, ranked on a scale of 1 (not at all) to 5 (regularly impacted). Results from this question suggest that access to affordable housing and access to adequate childcare represent the most significant barriers to employment. Mental health challenges, food insecurity, and transportation barriers were also all ranked as at least a 3 by over 50% of respondents

Figure 4: Factors Impacting Ability to Work in Previous 2 Years
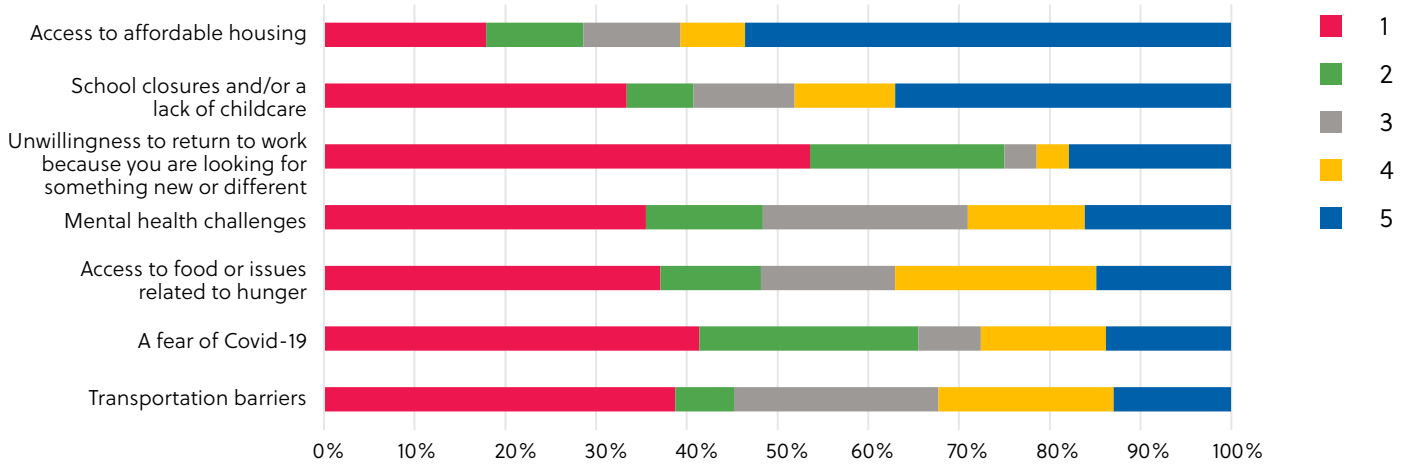
Respondents were asked how important each of the following were when considering a job opportunity from 1 (is not important) to 5 (is most important). The chart above displays the average rating. While all 10 factors had an average rating above 3, the standout factor was that the company pays a living wage. The following 3 highest average rankings all relate to communication and flexibility on the part of the employer. Only 3 factors had an average rating below 4, regarding a company's mission, medical/dental benefits, and remote working.

Figure 5: Factors Impacting Potential Employment Consideration
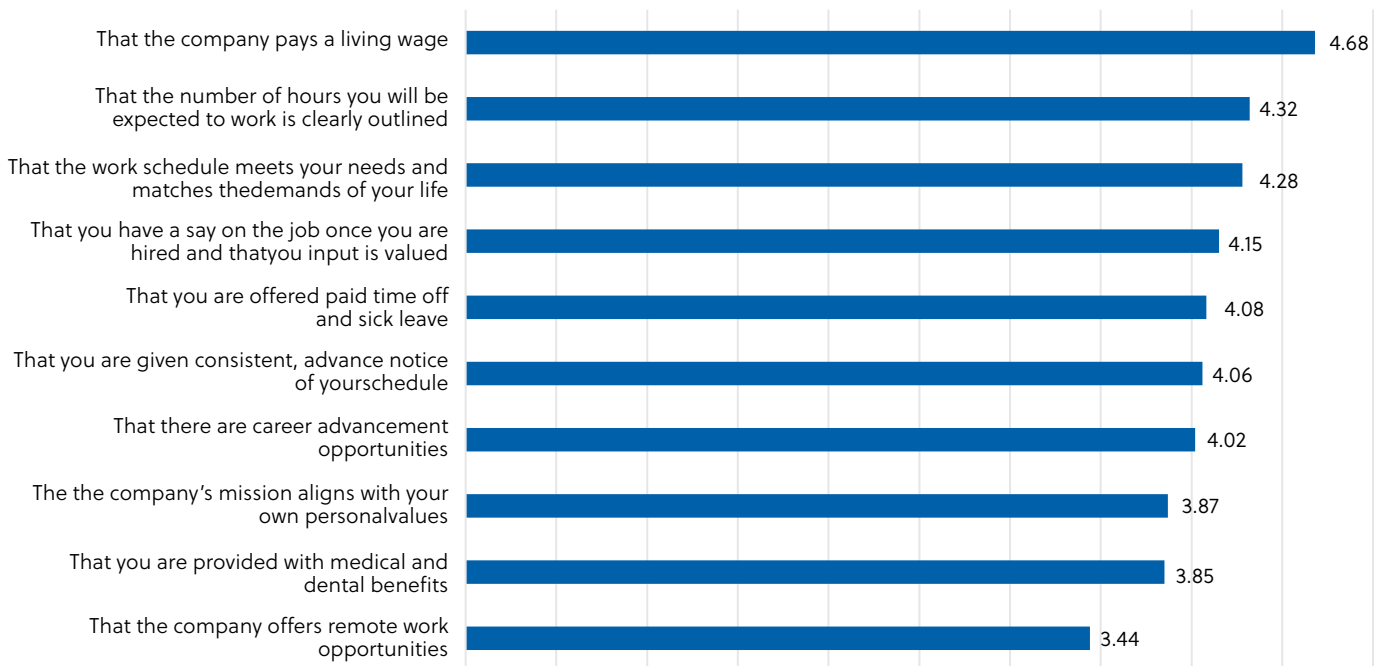
Figure 6: Recent Use of New Hampshire Works Services

One month to one year ago	17
Less than one week ago	11
One week to one month ago	11
More than a year ago	6
Never	3
I am not aware of New Hampshire Works	1
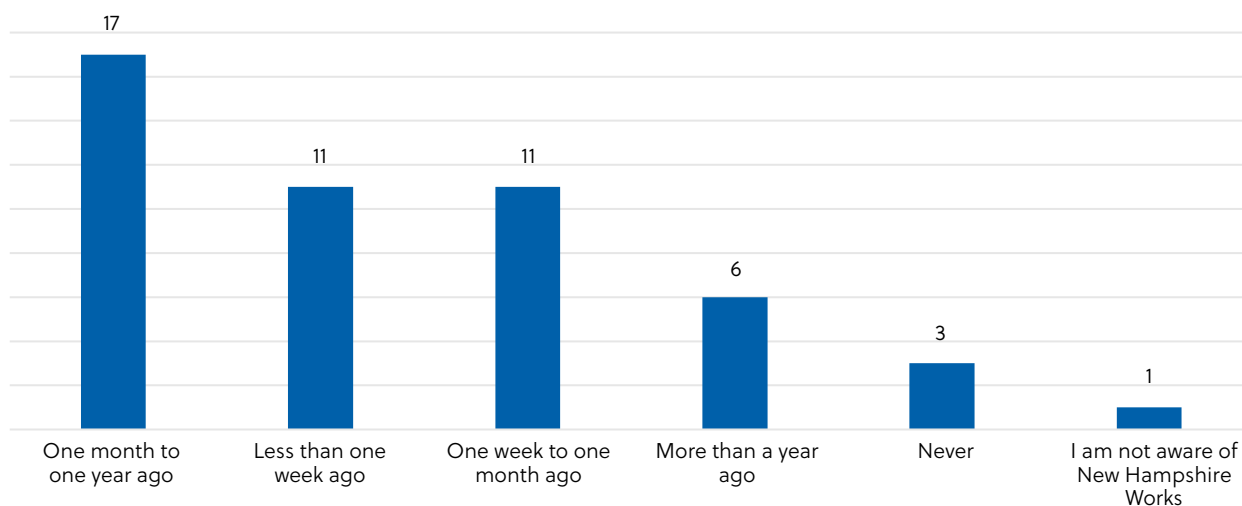
Respondents were asked to identify the last time they used NH Works Services. 78% of respondents had accessed NH Works services of one kind or another within the last year, with only 4 respondents (8%) having either not accessed NH Works at all or entirely unaware of the system.

Figure 7: NH Works Services Most Valued by Respondents

NNH Works Service	Number of Respondents	Percent of Total
Access to partner programs and services	30	60%
Financial assistance to pursue training	27	54%
Assessments for skills, interests, and/or supportive services	26	52%
Job search	26	52%
Career explorations	22	44%
On-the-job training	16	32%
Labor market information	15	30%
Learning activities to provide instruction on key topics	15	30%
Information on filing for unemployment compensation	13	26%
Apprenticeship programs	12	24%
Resume preparation	10	20%
Financial literacy	4	8%
English as a second language	1	2%

Respondents were asked to check all NH Works services they personally valued. The table above displays the aggregated responses in order of most to least valued. Notably, over 50% of respondents reported valuing partner programs, financial assistance for training, personal assessment, and access to job search resources. Additionally, it is worth noting that the two services respondents reported valuing the least are arguably the more niche services, and if the individuals who completed the survey did not need access to them, they likely wouldn't have any reference by which to assess value.

Figure 8: Respondents' Rating of NH Works Services
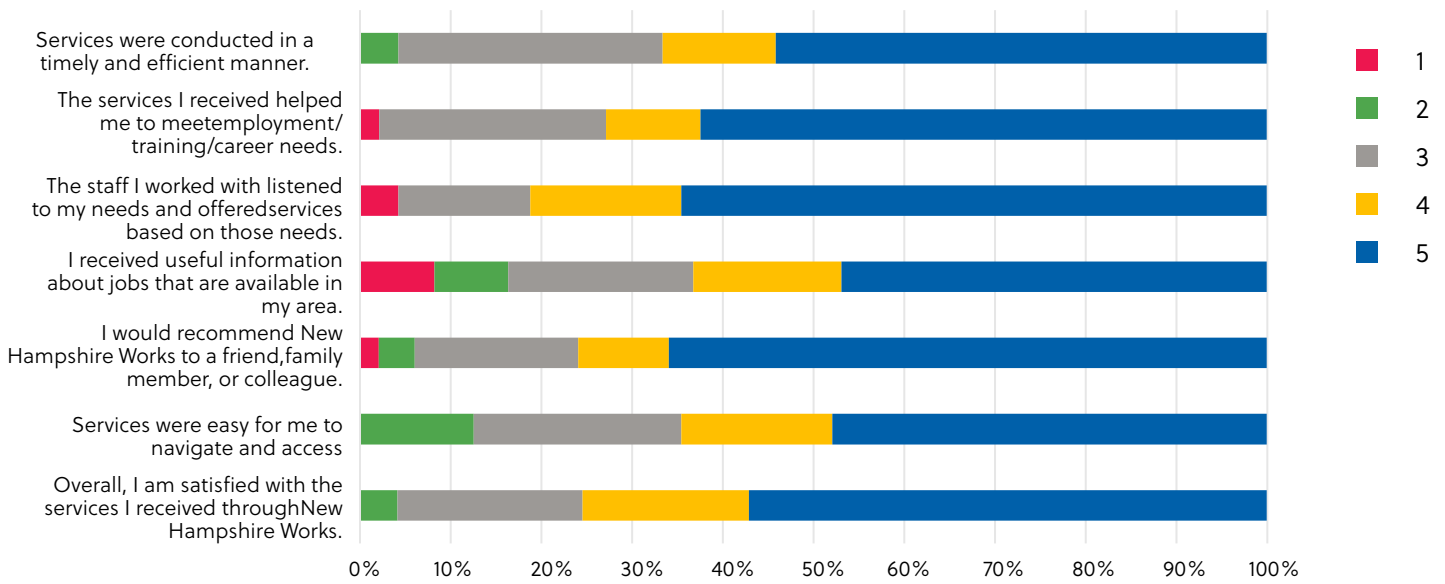
Participants were asked to rate the degree to which they agreed with each statement regarding the services they accessed via NH Works on a scale of 1 to 5. All 7 statements were rated at least a 3 by 80% of respondents. The two statements most highly rated by respondents regarded the timeliness and efficiency of services and overall satisfaction, while the lowest had to do with ease of access and navigation as well as information provided about jobs in their area. Both of these aspects are reflected in the qualitative feedback reported in the next section.

Qualitative Feedback Summary

Participants were asked two open-ended questions that allowed them to provide qualitative feedback on the areas of strength and weakness for NH Works. The chart below summarizes those responses into four categories that broadly described the majority of the responses that were received. For the raw responses, please see the Appendix.

Category	What is Working Most Effectively at NH Works	Suggestions or Comments on How NH Works Centers Can Better Serve Workers
New Hampshire Workforce Digital Resources	-	Respondents suggested improvements to the NH Works website, expressing numerous difficulties finding the information they were looking for, either because it wasn't posted at all or because it was challenging to locate.
Quality of Programs and Employment Opportunities	Respondents reported success in finding jobs that met their needs and supported their interests through NH Works. WIOA and Virtual Job Fairs were mentioned as improvements to traditional unemployment services, and those who reported accessing training and apprenticeship programs were satisfied with their outcomes and current employment in the field.	Suggestions for future improvement primarily surrounded including additional or more widely offered opportunities, including new job training, programs targeting seasonal employees, and a wider array of partnerships with employers and rehabilitation programs.
Workforce System Accessibility	Respondents valued the ability to access appointments in a flexible timeframe and virtually, as well as financial assistance to access training opportunities.	Accessibility suggestions included improving flexibility for program offerings, access to more information regarding job offerings, classes, and events in a more centralized and accessible format, and an overall expansion and refresh to physical locations.
Staff Expertise and Relationships	The relationships respondents had built with staff at NH Works were easily the most consistently positive feedback reported in the survey. Respondents expressed appreciation for the one-on-one meetings, communication, and care shown by those they connected with.	While respondents had overwhelmingly positive things to say about staff relationships, they did express two main difficulties. The first was simply a matter of understaffing. The second had to do with inconsistencies in the knowledge base of different staff members. While some were clearly knowledgeable and great resources, others were reported to give out incorrect or incomplete information that set back respondents' time or discouraged them from future contact.

Appendix

Qualitative Responses Raw Data

Based on your experiences in the NH Works Offices, what do you believe is working most effectively?

New Hampshire Workforce Digital Resources
» Website fine but hard to navigate

Quality of Programs and Employment Opportunities
» Being able to find jobs that are in my interest and around me.
» I'm all set I went through training and completed my apprenticeship. I'm currently working in my career field in healthcare
» Timely alerts to job possibilities suitable for me
» Job search and programs that help.
» Receiving information on available jobs in the state so I can have a sense of what sorts of jobs to find available within the state.
» Online Job Fairs
» Access to classes I otherwise wouldn't be able to take allows me the opportunity for a better job.
» Everything for everyone like different country people
» I was able to get into the dislocated worker program and learn new/updated skills
» WIOA and Virtual Job Fairs are dramatic improvements to traditional unemployment and job-search services! The job match system is very convenient, and I have been contacted by recruiters and employers as well, based on information in the job match system.

Workforce System Accessibility
» Being able to have appointments in the convenience of my home
» Offering tuition for furthering education
» Easy to find information
» Financial assistance for training
» Website
» My Remployment Plan booklet. It's everything you need at your fingertips

Staff Expertise and Relationships
» 1-1 time with Sondra and Lisa
» The humans I worked with were amazing. The online job search system was horrible, hard to navigate. Hard to understand.
» Staff and the online assistance for job seeking are very useful.
» the personal touch. Caring people.
» I believe it's the workers at the nh works office in keene nh. It's hard to apply for unemployment after you have been at the same job for over 25 years. They made me feel comfortable and they listened to my needs and they were very understanding! Great job ladies!!
» Staff was amazing in helping me find the items needed to launch my career forward.
» Communication is the most effective. My case worker communicated with me about everything I needed done.
» 1 on 1 meetings.. their communication is 5 stars. Always available, and have solutions, if ever they don't. They make sure to find answers/solution to what you're looking for.
» Communication with the staff
» The balance and supper without any biases or judgment of anyone situation. They aid you in all the ways they can and are very good at answering any questions you have. More importantly if there is something they cant answer they take the time to find someone who could answer your questions to send you in the right direction.
» the relationship that is developing with thier staff
» That my person keeps in touch with me on regular basis
» The case managers
» For a serious job seeker the assistance is appropriate and available.

Please provide 2 –3 suggestions or comments on how the NH Works Centers can better serve you and other workers.

New Hampshire Workforce Digital Resources

» I believe they could make the website a little bit more user-friendly, and provide additional tips For jobseekers.
» Make the website a little more user friendly.
» Make the website a little more user friendly.
» Improve the automated phone system and the web site
» Improve the automated phone system and the web site
» Improve the automated phone system and the web site
» Email of job openings in field would be good.
» Better website
» Options available in one location.
» My information in one location.
» My biggest concern has nothing to do with NH Works. Currently, the online approach to reaching out to prospective employers by way of search engines boils down to interacting with an algorithm instead of a human being. That is nothing but a disconnect in a system that by definition requires talking face to face with another human being. It's like everything is being put on autopilot.
» Jobs in job match are in other states, not real jobs, and or have nothing to do with what you are searching for. Example... I am in healthcare and I get warehouse, construction, tech support jobs in my match system.
» The job match system cannot limit to specific towns

Quality of Programs and Employment Opportunities

» More on the job training opportunities
» Easier access to programs that help older workers access sustainable employment
» Being a seasonal employee has its challenges. Programs that target seasonal opportunities for seasonal workers would be helpful.
» Maybe more training on how to help someone choose a new career path.
» Specially unemployment people and different countries
» Have a coffee maker in the office area
» Include a rehabilitation area for thous who struggle with every kind of addiction including but not limited to nicotine, legal and illegal drugs in addition to a forum of mental health part of the program
» Find ways to use previous work experiences better
» Could help me find housing. Could help with child care info.
» Any help with medical needs.
» Partner with more employers who offer remote opportunities.
» The programming for anybody that has none to limited computer skills doesn't have a chance finding training or jobs.

Workforce System Accessibility

» It needs a modern refresh as it has been the same for a while now.

» The system is flawed, it really doesn't navigate well. The people once again, are amazing.

» If you going to work with other programs (tuition assistance) be on the same page as one another

» Also more information on the classes, such as is it an online class or an in person class.

» Inform the length of weeks unemployment last

» More locations

» easier access to financial help

» What I really needed was assistance in starting a learning/training program that was flexible enough to meet my needs. They were not able to find me classes that I could attend in-person and that weren't too far away from home.

» it would be nice to have a list of local employers actively hiring posted at the physical location in keene

» I do not believe it works effectively. I go above what I am asked to do and attend all classes and still they will find a reason to hold my checks, I am in training supposed to get gas reimbursement and after 6 weeks i have only got one for one week and since in training I never missed one class and my check was held as well as reimbursement not coming in made it near impossible to get to my training. I did with small loans from friends but without that I would not have been successful.

» i did not get into the business program and was never told why and think more small business start up help should exist with investors or grants as part of it

Staff Expertise and Relationships

» More contact

» More staff

» Don't leave someone hanging as to if they are enrolled in a program or not up to the business day before the class starts. Staff could not give yes or no to if NH works is paying for a course or not.

» The woman I work with is nice and does what she can but when I call to ask about things people are rude I cannot get my local office which is actually 40 mins from me . They say they will call back and never do.

» The worknowNH program was no help and my case manager was a bit rude and misunderstood a lot.

» (1) Phone waiting times can be lengthy and stressful. If a caller believes the question is likely to get a simple answer, there should be an option for quick questions. Otherwise, expected lengthy and complex issues should wait in line on a different menu option. (2) Sometimes the csller needs a rather immediate response, but if they are not rushed for an answer, their request can go to voicemail for a less urgent response.

» Communicate claim denial reasoning and necessary actions promptly. I lost two month's payments because I was told I did not need to renew my claim in January, 2021. Then I was denied, later, because I had claim money available, but the claim expired. Also, I was never informed that I needed to provide additional information about an illness (one week), so my claims were denied for five months. I had to ask, in person, repeatedly, for justification.

Appendix B:

Secret Shopping Summary

NEW HAMPSHIRE OFFICE
OF WORKFORCE OPPORTUNITY

Secret Shopping Summary

NEW HAMPSHIRE OFFICE
OF WORKFORCE OPPORTUNITY

Contents

Introduction

The New Hampshire Office of Workforce Opportunity (OWO) contracted Thomas P. Miller and Associates (TPMA) to conduct a statewide Workforce Innovation and Opportunity Act (WIOA) Workforce Assessment to ensure programs are meeting the needs of jobseekers and employers. The assessment is informed by four discreet areas of work: **(1) Asset Inventory** review of relevant statewide documents, **(2) Stakeholder Engagement** to gather qualitative feedback on the New Hampshire WIOA system, **(3) Secret Shopping** review of customer service experiences throughout the state's NH Works Centers (NHWCs) and websites, and **(4) a Best Practices scan**. This report is a summary of the secret shopping component of the assessment and will not include recommendations or information related to the other assessment components outlined above.

Background

A secret shopper review helps agencies identify areas of strength and opportunities for improvement when serving customers and supports the efforts of professionals and organizations that are committed to continuously improving services and outcomes. It can provide agencies with an opportunity to receive feedback on their services, not only from an agency-level point of view, but also the customer's point of view – perspectives that are not always the same.

Secret shopping is a useful tool for gaining a first-hand view of how a customer encounters service delivery. It provides a rich, qualitative look at customers' experiences that complements other sources of customer feedback. Secret shopping reviews provide a "snapshot" in time, so they are most effective when used in concert with other methods (e.g., surveys, focus groups) for assessing customer satisfaction.

As described above, this process offers an opportunity to identify areas of strength, as well as suggest opportunities for improvement. It is not intended to be a program monitoring or compliance review, but rather a continuous improvement technique for refining customer service and enhancing customer satisfaction. It can also reinforce training and standards already in place and help target technical assistance efforts.

Methodology

A secret shopper is someone who conducts business with an organization under the guise of being a regular customer, when in fact he or she is employed to review and evaluate the customer service that they experience. The design and implementation of a secret shopping process is a multi-phased process that requires deep collaboration between the project team and OWO staff to ensure that the secret shoppers experience an authentic engagement with the NHWCs and their staff. Outlined below are key steps:

Planning and Design

In this initial planning and design phase, TPMA developed a set of indicators to address customer satisfaction and service effectiveness at three points of customer access to workforce services – physical onsite visits, phone call interactions, and website information and services.

Additionally, during the planning and design phase, a variety of customer scenarios were created, appropriate for the locations and types of program services being shopped including services for adult dislocated workers, youth/young adult workers, and business customers. A team of shoppers was selected to conduct the onsite, phone and website reviews. Shoppers had no previous experience with specific NHWC services, but they did have general knowledge about workforce service delivery systems. They were instructed to act as objective observers, but also asked to immerse themselves in the customer experience and provide feedback about what they experienced and what they observed during their interactions. Once selected, shoppers were trained regarding the goals of the project and the process for conducting visits and reviews. Coaching was made available throughout the project to assist shoppers as they prepared for reviews, and to troubleshoot any unanticipated situations.

Review Type	Example indicators
Onsite - Jobseeker	» Appearance of the center » Responsiveness and courtesy of staff (at entry/first point of contact) » Accessibility of resource room » Professionalism and attentiveness of staff (at service level) » Skill level of staff » Services available/offered » Follow-up services » Customer feedback and overall customer satisfaction
Virtual - Employer	» Access » Automated system encounters » Live contact encounters » Overall customer satisfaction
Website – Jobseeker and Employers	» Ease of navigation » Quality of information provided » Accessibility of services offered » Overall customer satisfaction

Implementation of Secret Shopping Visits and Reviews

Shoppers conducted their onsite visits and reviews during the time period of November 14 – 16, 2022. Times and locations were unknown to the organizations being shopped. In addition to onsite secret shopping, the project team reviewed the following:

» Business Services Representatives (via phone)
» Websites (virtually from a jobseeker and employer perspective)

Secret Shoppers were assigned one of four customer scenarios to "role play" during their visits.

Adult Dislocated Worker #1: Secret Shopper 1

Secret Shopper 1 presented herself as a white female in her mid-30's who had a high school degree and good work history in the restaurant industry. For the past five years, Secret Shopper 1 had stayed at home with her two small children, but after recently moving to New Hampshire, she was attempting to get back into the workforce. Given the upheaval in the restaurant industry of late, she chose to look for something in an office with regular hours and flexibility to meet the needs of her children, but to do so, she needed to brush up on her office and computer skills. Secret Shopper 1 had never authored a resume and while her computer skills were good, they mostly centered around web browsing and accessing the web from her mobile device. Secret Shopper 1 did not have any official credentials or certifications but expressed interest in accessing training for a job in an office. She was not accessing TANF or SNAP benefits in New Hampshire but had accessed those benefits in the past and was interested in the process to do so again. Secret Shopper 1 arrived at the New Hampshire Works Salem office at 1:30 pm on Monday, November 14th and departed around 2:30 pm.

Adult Dislocated Worker #2: Secret Shopper 2

Secret Shopper 2 presented himself as a white male dislocated worker who relocated from Cleveland, Ohio to Littleton, New Hampshire because he had a friend from high school who had been living in the area, and after losing his job, Secret Shopper 2 wanted a change of scenery and to explore new areas. He was in his late-20s and had a couple years of experience in the manufacturing industry. Secret Shopper 2 had three and a half years of experience as a Process Technician working for a company called JK Plastics located in Middlefield, Ohio, and several years working for the City of Cleveland as a Grounds Crew member. Secret Shopper 2 did not have any official credentials or certifications but was interested in pursuing opportunities through the local community college system after becoming a resident. Secret Shopper 2 arrived at the Littleton office on Tuesday, November 15th at 10:00 am and departed around 11:45 am.

Adult Dislocated Worker #3: Secret Shopper 3

Secret Shopper 3 presented himself as a white male dislocated worker moving into the region from Pennsylvania to be closer to his adult daughter and grandchild. He was laid off after nearly 25 years from a dog food factory in his hometown, the only job he had ever had. Secret Shopper 3 had received a severance package and a partial pension from the factory and wasn't sure how/if that might impact his ability to collect unemployment benefits or his ability to qualify for job training. He shared that he had fork truck certification, was handy with machinery, and was comfortable in a manufacturing setting, but was interested in training opportunities as well and any new careers in New Hampshire. Secret Shopper 3 arrived at the Keene office on Tuesday, November 15th at 2:00 pm and departed around 3:15 pm.

Young Adult Worker #1: Secret Shopper 4

Secret Shopper 4 presented herself as a white female in her early 20s which classified her as a WIOA Youth. She obtained a high school degree in Fishers, Indiana but had not attended any further education or training post-graduation. Since graduating high school, she had primarily been working in food service at a couple of different restaurants where she was mostly waitressing or bartending. She expressed that she had moved to New Hampshire a little over 3 months beforehand when her friend graduated from college and got a job in the Providence area. She had been staying with her friend during that time but had hopes of obtaining her own housing soon. She explained that she was interested in working in health care, and wanted to go to nursing school, but that her grades and financial situation resulted in college being a little out of reach. Secret Shopper 4 arrived at the Concord JAG office on Monday, November 14th around 10:00 am and departed around 11:00 am.

Employer Services Secret Shopper #1

Employer Services Secret Shopper #1 presented himself as a local entrepreneur with an established restaurant business who wanted more information about the services available at the NHWCs. He stated that he typically has issues recruiting reliable servers and cooks and did not know the NHWCs existed until he visited the local chamber of commerce. He stated that he has 10-15 immediate openings for the right candidates and was curious about all the services offered to local employers.

Reporting

Based on the indicators described above, specific report forms were developed for each of the review categories (onsite, phone or website). As each review was completed, shoppers recorded their experience and observations via the appropriate reporting form. Some items were assessed regarding whether they were observed or not (yes/no); some items were rated on a scale (strongly disagree, disagree, neutral, agree, strongly agree). If a shopper was unable to observe an item, that item was reported as "unobserved" (this applied to rating scale items only). Shoppers could also provide narrative comments to support their view of the customer experience.

Understanding Secret Shopper Reports

The secret shopper method is not intended to be a controlled scientific study, nor is it a monitoring report or grading tool. Rather, it is a process intended to illuminate a single point-in-time customer experience. Shoppers are asked to immerse themselves in their workforce system experience, and their feedback will reflect impressions about what they observed and felt during their visit. A shopper's experience may or may not be reflective of how a local NHWC provides service on a day-to-day basis. However, readers of secret shopper reports are encouraged to reflect on the experience of the shopper's customer experience and consider how they can use the feedback to inform service delivery improvements to enhance the experience and outcomes of actual customers that use their services.

Statewide Summary of Onsite Visits

For each onsite Secret Shopping experience, the project team reviewed the following indicators to assess customer satisfaction and service delivery effectiveness:

- » Appearance of the center
- » Responsiveness and courtesy of staff (at entry/first point of contact)
- » Accessibility of resource room
- » Professionalism and attentiveness of staff (at service level)
- » Skill level of staff
- » Services available/offered
- » Follow-up services
- » Customer feedback and overall customer satisfaction

For each indicator, the project team assigned a numerical ranking and for indicators that were not observed or not applicable, a "n/a" was noted on the review form. The numerical ranking assigned to each indicator represents the extent to which the Secret Shopper agreed or disagreed with a given statement about their satisfaction as a customer. The following outlines the numerical scale that was used during the Secret Shopping experience:

- » 1 – strongly disagree
- » 2 – disagree
- » 3 – neutral
- » 4 – agree
- » 5 – strongly agree
- » 0 – not applicable, "n/a"

The charts below provide a summary of how each NHWC was reviewed for each of the Secret Shopping indicators. The purpose of these summary charts is to identify overall areas of strength and weakness for customer satisfaction and service delivery, as well as begin to identify outliers in performance.

Appearance of Center

Each member of the project team reviewed the NHWC that they visited with an eye towards overall appearance. Included within the review of overall appearance were indicators related to cleanliness, atmosphere, and organization.
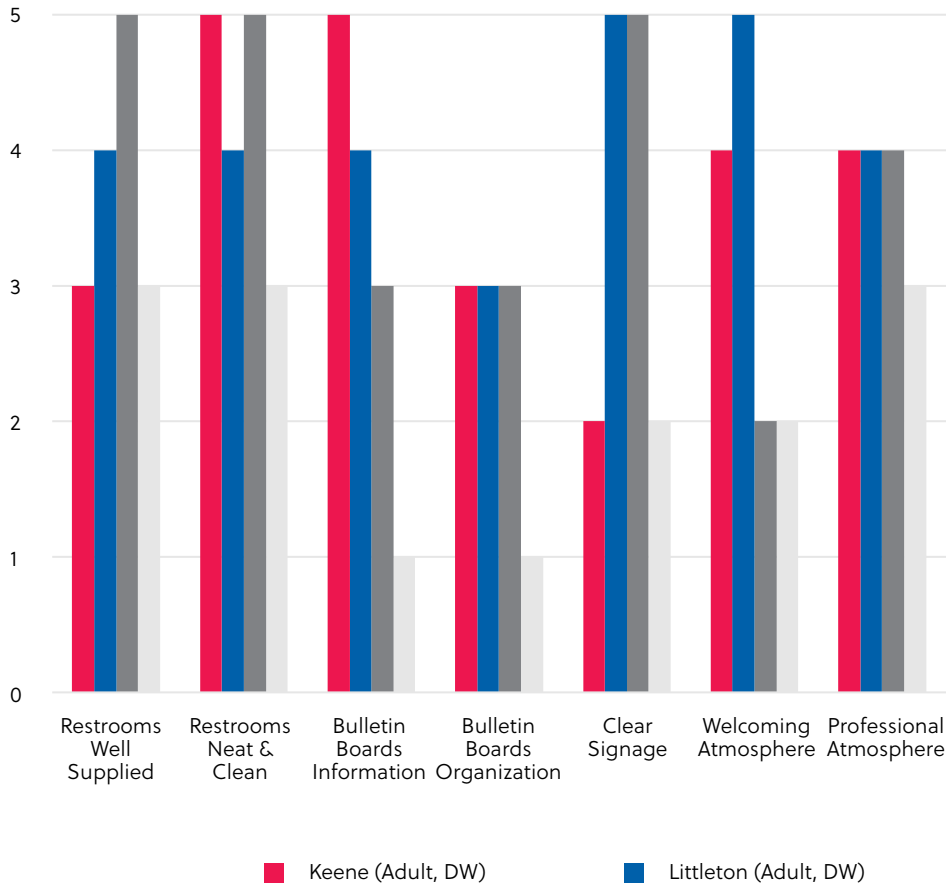
Responsiveness and Courtesy of Staff

Upon entering the NHWC , Secret Shoppers reviewed the responsiveness and courtesy of staff. The purpose of this indicator is to better understand the initial experience of jobseekers' interactions with staff members upon his or her first visit to a NHWC.

Appearance of Center

Responsiveness and Courtesy of Staff

Keene (Adult, DW)   Littleton (Adult, DW)   Salem (Adult, DW)   JAG, Concord (Youth)
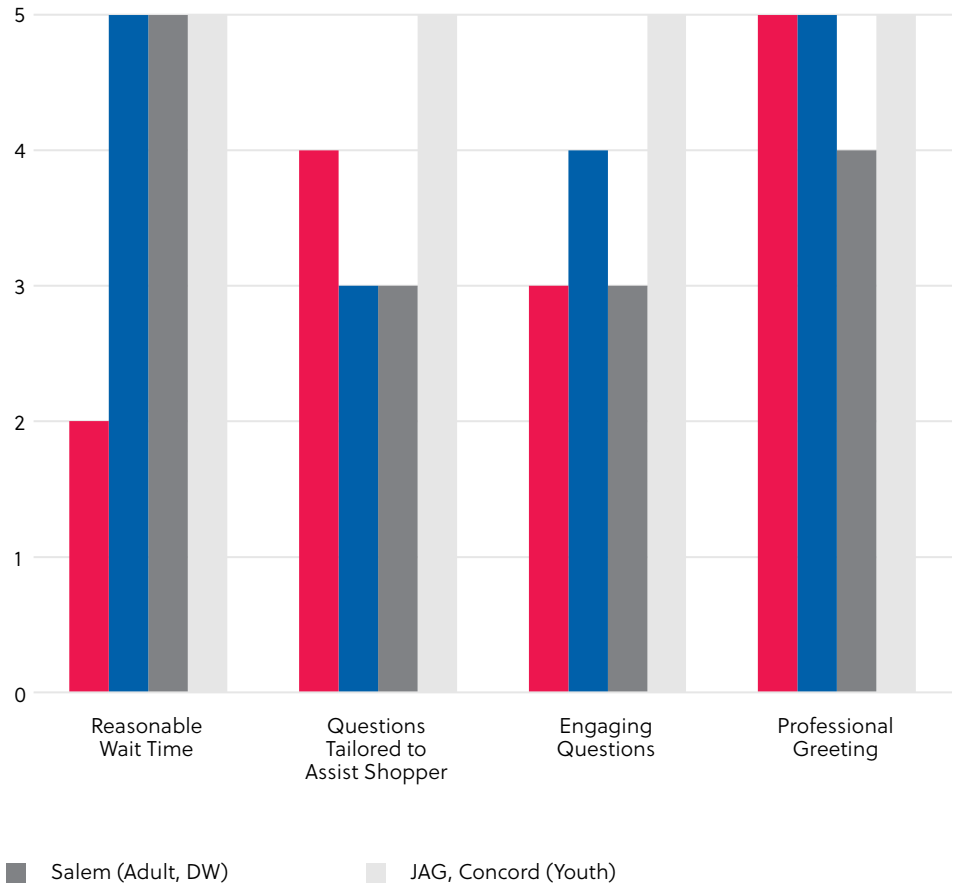
Resource Room

As a part of WIOA guidelines, the availability of an easily accessible and useful resource room is a foundational piece of the service delivery experience within any American Jobs Center. The purpose of this indicator was not only to ascertain the availability of a resource room, but also to better understand the accessibility and usefulness of the resources provided. Notably, the Secret Shopper who visited JAG did not observe a resource room.
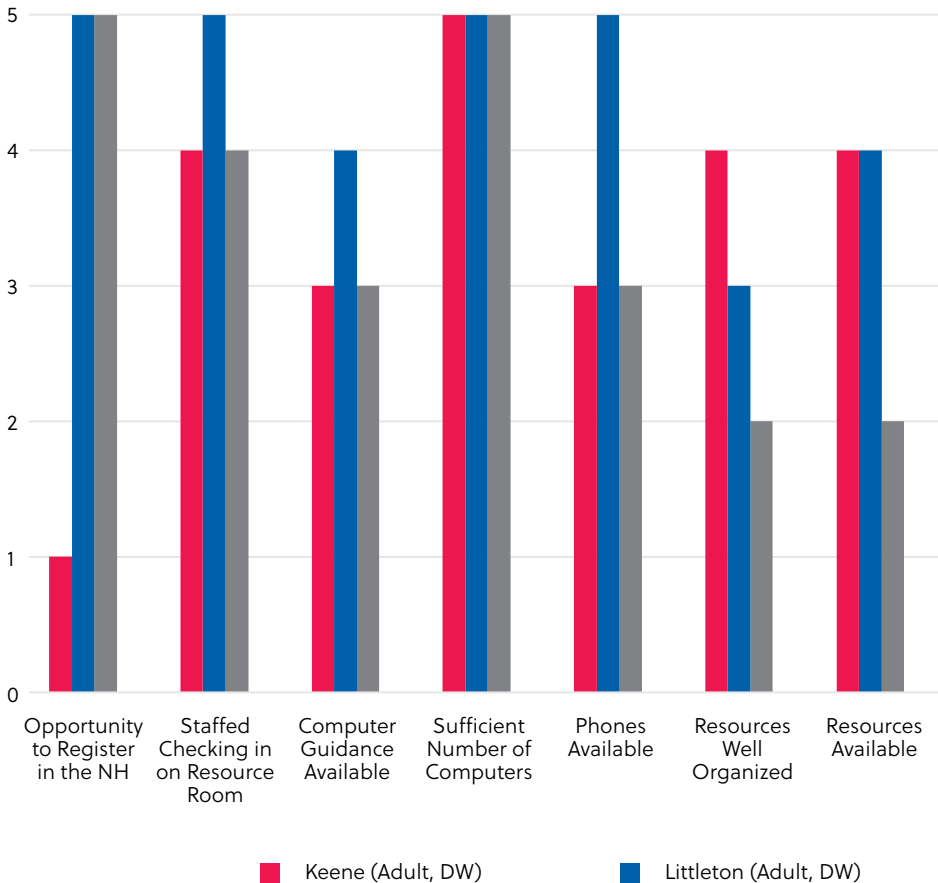
Professionalism and Attentiveness of Staff

Throughout the Secret Shopping visits, shoppers reviewed the professionalism and attentiveness of the NHWC staff. The indicators of professionalism and attentiveness aimed to better understand the extent to which staff were approachable, focused on the needs of the Shopper, and projected a professional image in line with the overall mission of the New Hampshire Works system.

Resource Room

Professionalism and Attentiveness of Staff

■ Keene (Adult, DW)   ■ Littleton (Adult, DW)   ■ Salem (Adult, DW)   ▢ JAG, Concord (Youth)
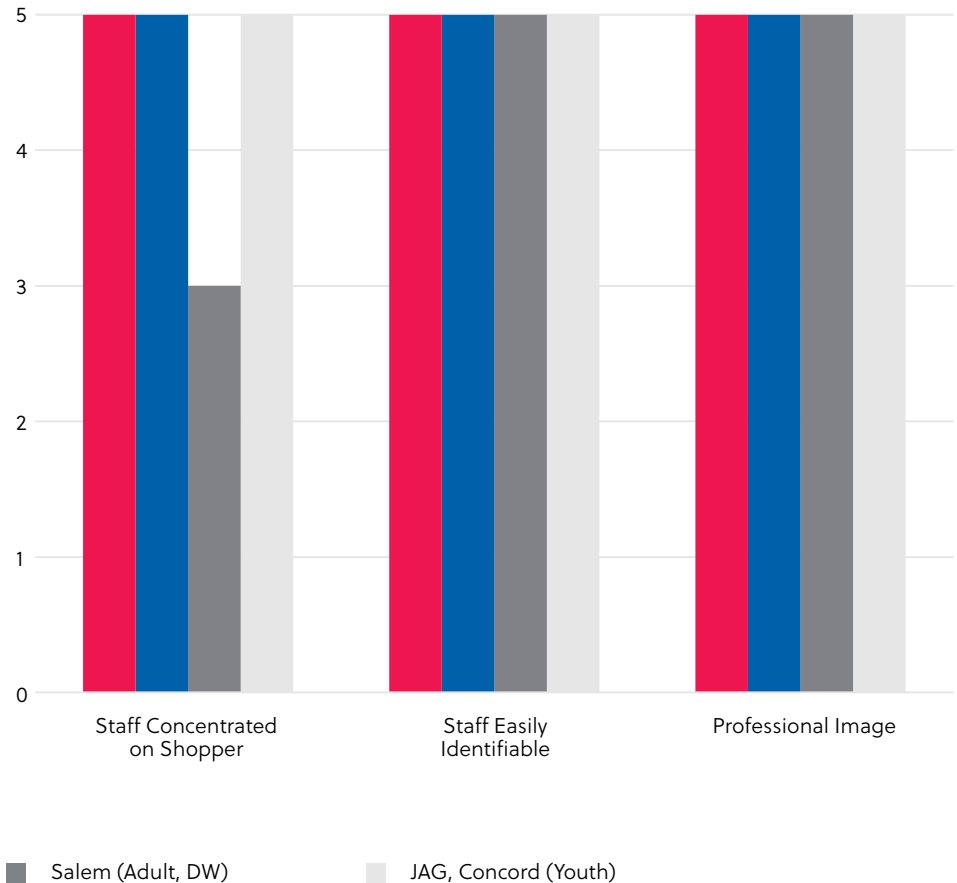
Skill of Staff

Many of the indicators discussed thus far focus on the initial experience of the Secret Shopper or specific encounters or experiences the shopper was expected to have. The following indicators attempt to provide an understanding of the overall experience the Secret Shopper had with staff. Throughout the experience, the Secret Shopper reviewed indicators of staff skill, particularly focusing on their command of the services available and the ways in which they engaged the Shopper to better understand the overall fit of services and resources provided at the center.
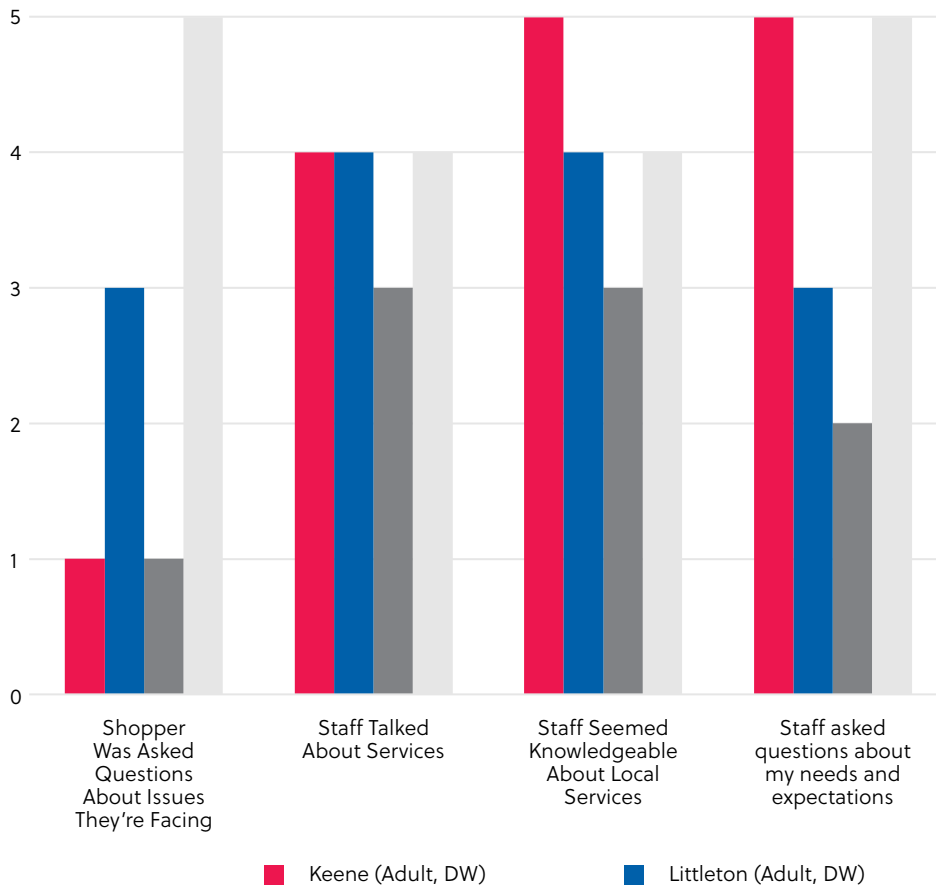
Services Available/Offered

A key element of customer experience is the amount of value that they perceive as a result of their visit. This value can come in multiple ways, including receptiveness of staff, services that staff mentioned to the secret shopper, staff members' ability to use context to support the secret shopper, etc. This set of indicators aims to identify the services offered including internal services, external services, and partner referrals.

Skill of Staff

Services Available/Offered

Legend: Keene (Adult, DW) · Littleton (Adult, DW) · Salem (Adult, DW) · JAG, Concord (Youth)
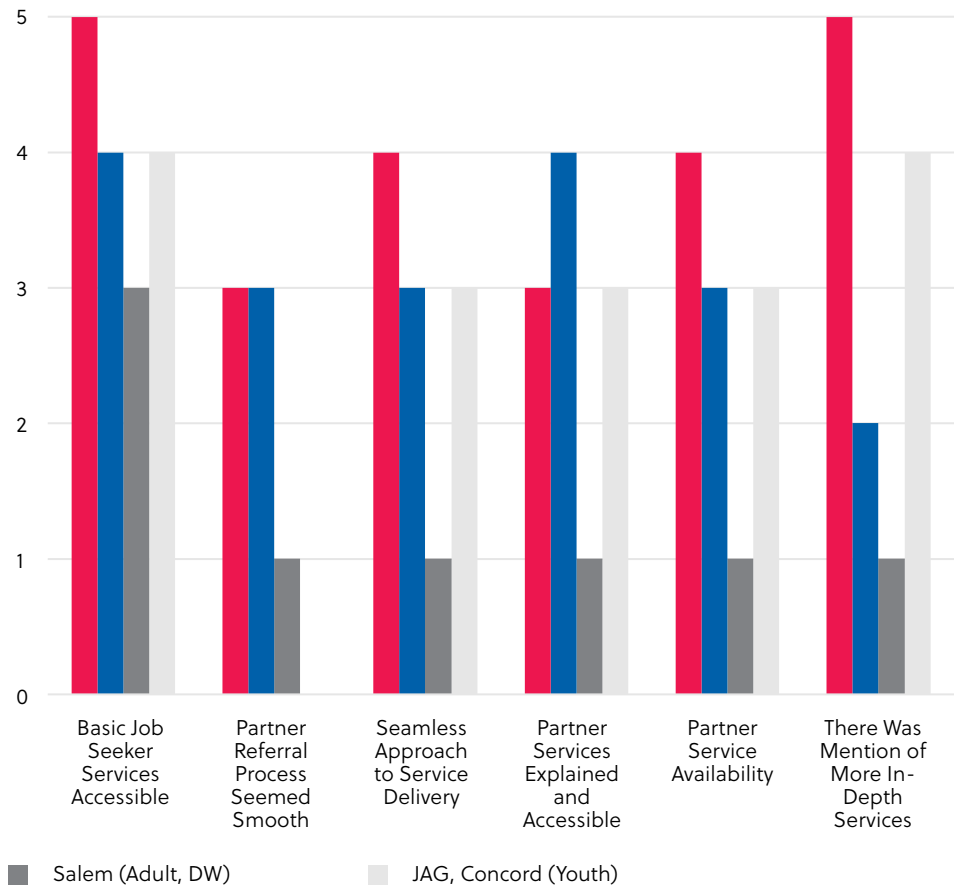
Follow-Up Services Offered

Customers accessing WIOA services often face multiple challenges and barriers that can keep them from stepping through the front doors of a NHWC. Therefore, it is critical that once that initiative has been taken by the customer that they have a clearly articulated set of next steps that they can follow to access additional services and employment opportunities.

Customer Feedback and Overall Satisfaction

The purpose of this final set of indicators was to better understand the overall satisfaction experienced by the Secret Shopper and to determine the availability of the opportunity to provide feedback.

Follow-Up Services Offered

Customer Feedback and Overall Satisfaction

Legend: Keene (Adult, DW), Littleton (Adult, DW), Salem (Adult, DW), JAG, Concord (Youth)
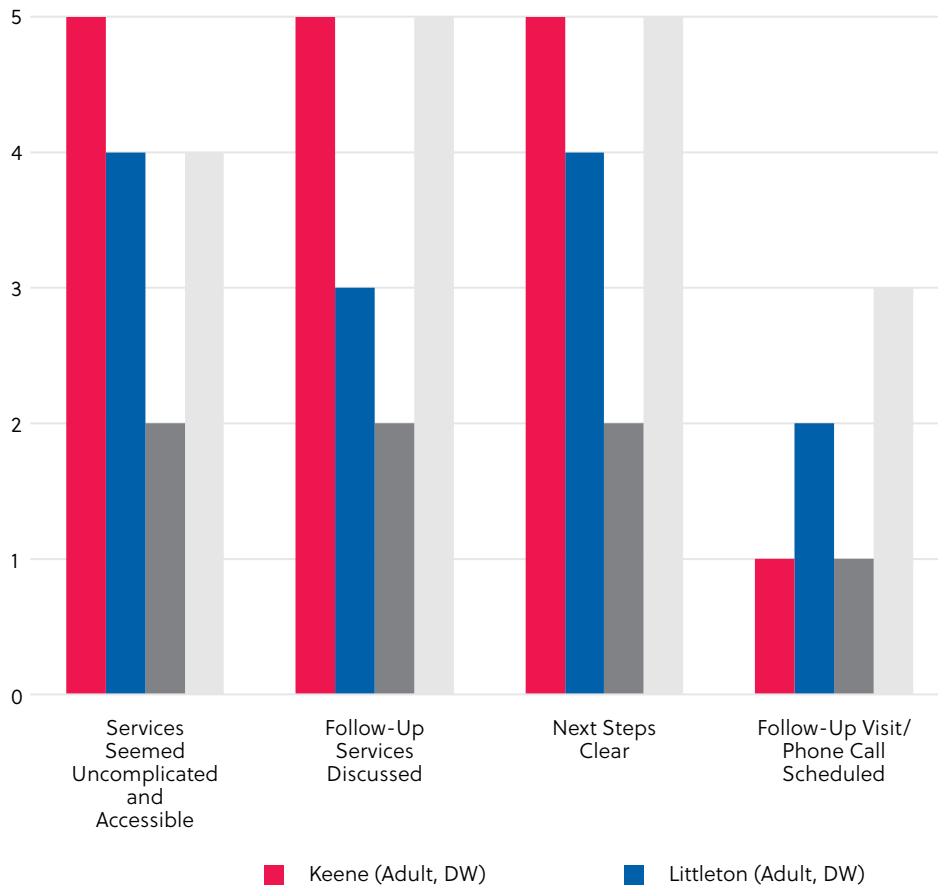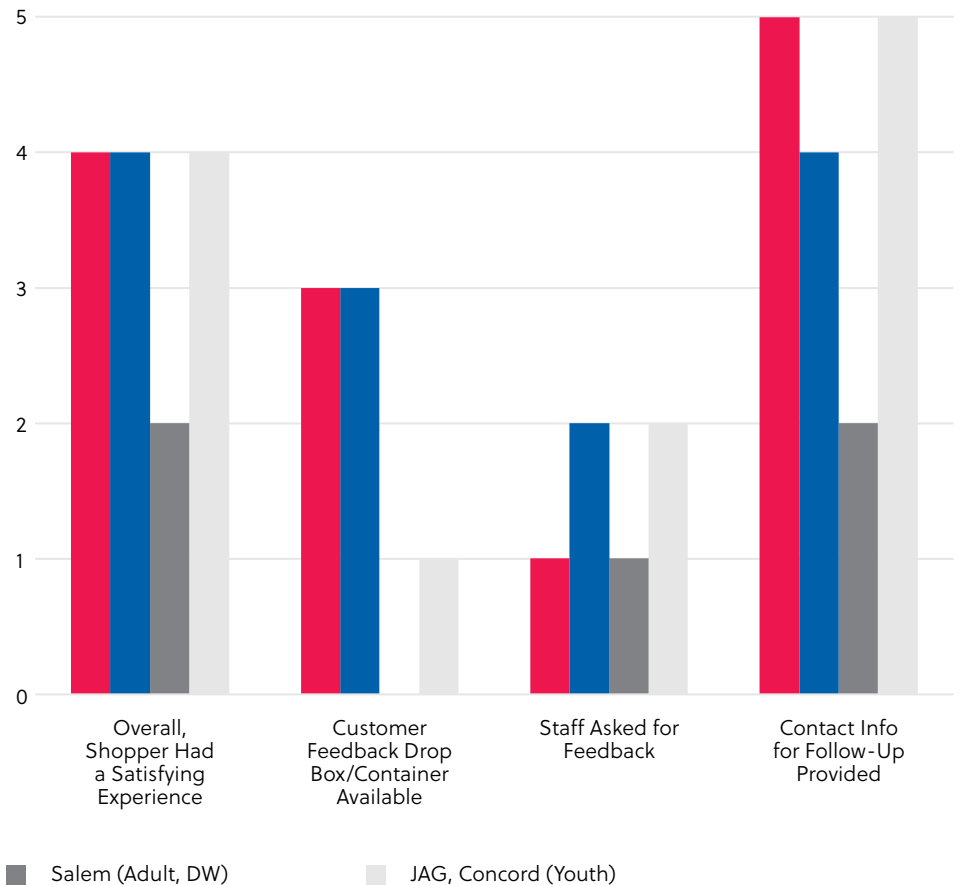
New Hampshire Works Asset and Gaps Analysis

Based on the Secret Shopping experience, the project team conducted an analysis of the individual NHWC reviews. The purpose of this analysis was to identify assets and gaps in services at each of the Centers. Outlined below are areas of strength (assets) and areas of opportunity (gaps) at each of the New Hampshire Works Centers that were included in the Secret Shopping experience. As outlined above, the Secret Shopping experience is a single point-in-time customer experience and may not be reflective of the quality of service a workforce center typically provides on a day-to-day basis.

Salem

Secret Shopper 1 visited the Salem New Hampshire Works Center on the afternoon of Monday, November 14th from approximately 1:30 – 2:30 pm. Based on the experiences of that visit, the charts below outline assets upon which the Salem NHWC can build and areas where gaps were identified in service delivery.

Assets

Category	Examples
Appearance of Center	» Center was easily accessible with ample off-street parking.
	» Center signage was clearly visible from the road.
	» Center is neat and tidy with good lighting.
Professionalism and Attentiveness of Staff	» Center staff was prompt in their greeting of Shopper 1 and there was a reasonable wait time to access services given the amount of customer traffic at the time of the visit.
Resource Room	» There was an abundance of computers in good working order available for use.
	» Registration into the NH Works Job Match system was highly prioritized during the visit.
	» Use of the Job Match website as an ongoing tool for the job search process was highlighted throughout the visit.

Gaps

Category	Example

Resource Room
- » While the Job Match website was available on computers in the Resource Room and was highly prioritized by staff, the website was not intuitive to navigate.
- » In addition to the difficulty navigating the website, Shopper 1 was told that if she forgot her password, she would not be able to access her account again. According to the staff member, the website does not have a password reset function.

Skill Level
- » While staff were able to answer questions when prompted, there was very little proactive discussion about Shopper 1's needs and expectations. As the customer, Shopper 1 was asking questions, digging for more information, and actively providing opportunities for the NHWC staff to engage with her in a proactive manner.
- » Staff had a high-level understanding of resources and local services available to jobseekers; however, there were not any connections made between Shopper 1 and those resources.
- » Without any outside context for the visit, Shopper 1 would assume the only services available to her at the NHWC would be using a computer to register for the Job Match site and reviewing printed materials on a table near the entrance.

Services Available/Offered
- » There was a brief and informal greeting and interview process while standing in at the front desk to determine how Shopper 1 might best be served, but the experience would have benefited from additional follow-up questions from NHWC staff about the barriers she was facing to employment, information about the labor market, and an overview of available services.
- » Only limited basic job seeker services were offered. These services included reviewing printed materials at the front of the NHWC and accessing the Job Match system through computers onsite.
- » Shopper 1 specifically requested office skills training and was told that those services were only eligible for people who received TANF or SNAP benefits. When it was disclosed that Shopper 1 had previously accessed food stamps, and would like to sign-up again, she was handed a flyer with a general number to call about information related to TANF and SNAP.
- » Additional partners and services available through the NHWC were not clear.

Follow-up Services Offered
- » The visit would have benefited from an outline of clear next steps. After independently working on the computer for the better part of an hour, Shopper 1 departed. As she was exiting, Shopper 1 was quickly told to keep checking the Job Match website and come back again any time.
- » A clear plan to access additional services, a warm hand-off to a referral partner, and a scheduled future visit would have encouraged a great connection between Shopper 1 and the NH Works system.

Littleton

Secret Shopper 2 visited the Littleton New Hampshire Works Center on the afternoon of Tuesday, November 15th at 10:00 am and departed around 11:45 am. Based on the experiences of that visit, the charts below outline assets upon which the Littleton New Hampshire Work Center can build and areas where gaps were identified in service delivery.

Assets

Category	Example
Responsiveness and Courtesy of Staff and Professionalism and Attentiveness of Staff	» Staff members were welcoming, professional, accessible, and inquisitive. When entering the NHWC, Shopper 2 was greeted immediately and asked questions regarding job history, ideal occupations, etc. » NHWC staff made the visit comfortable and were willing and able to support as requested. » NHWC staff members consistently checked on the secret shopper and asked if he needed assistance. Staff seemed genuinely interested in helping Shopper 2.
Resource Room & Services Available/Offered	» The NHWC had abundant information related to local job connection services. The NHWC maintained abundant fliers and print materials related to job fairs, upskilling opportunities, and other support systems for jobseekers. » There were ample computers available for jobseekers. The NHWC had 6-7 available computer stations, each with adequate seating and proximity to staff in case jobseekers needed assistance. » The staff member who greeted Shopper 2 asked about his veteran status immediately after customer sign-in, evidencing clear familiarity with veterans' preferences and standards.
Knowledge of Staff	» The NHWC staff members were knowledgeable and able to access resources outside of the online WDB system to connect jobseekers to jobs. » Staff members used their knowledge of local resources and events to assist Shopper 2, connecting him to an upcoming job fair in Shopper 2's field of interest.

Gaps

Category	Example
Appearance of Center	» While the NHWC had ample print resources, the volume of resources was overwhelming and difficult to navigate. » Offering an overview of available print resources to Shopper 2 could have made this less of an issue and the content more easily digestible.
Website	» The website for the NHWC is cumbersome to navigate and requires relevant knowledge to operate effectively. » Shopper 2 struggled to use the NH Works portal to create a resume that highlighted his experience in the manufacturing sector. The skill recommendation tool did not provide valuable recommendations to help the Shopper 2 display his experience and knowledge. » NHWC staff did not provide guidance on the features of the NH Works website, suggesting a self-exploratory approach instead.
Professionalism and Attentiveness of Staff	» NHWC staff capacity seemed to be limited. Individuals who were assisting Secret Shopper 2 appeared to have several other tasks to tend to at once. » While staff provided valuable insight when available, Shopper 2 would have benefitted from more attention.
Skill of Staff	» Staff did not provide opportunities for Shopper 2 to explore or guidance on next steps other than a referral to an upcoming job fair. » Staff took initiative in asking Shopper 2 high-level questions but could have been more intentional in discovering career goals of the jobseeker by further exploring employment experiences and skills, and providing insights on how he may want to proceed. » Staff members did not expound upon their roles and responsibilities at the NHWC and what they could do to support Shopper 2.
Services Available/Offered	» There were no clear print or virtual resources to help the Shopper 2 build his resume or prepare for interviews. » NHWC staff provided minimal guidance on developing a resume and had to be prompted by Shopper 2 to do so.
Follow-Up Services	» NHWC staff encouraged Shopper 2 to return if he had any questions; however, staff did not provide detailed next steps or an action plan for doing so

Keene

Secret Shopper #3 arrived at the Keene office on Tuesday, November 15th at 2:00 pm and departed around 3:15 pm. Based on the experiences of that visit, the charts below outline assets upon which the Keene New Hampshire Work Center can build and areas where gaps were identified in service delivery.

Assets

Category	Examples
Appearance of Center	» The NHWC was tidy and well kept, lighting adequate, and accessibility options were evident. » Restrooms were clean and accessible.
Professionalism and Attentiveness of Staff	» The NHWC staff were friendly, and the resource center specialist/ staff member did not rush Shopper 3 and patiently answered all questions. » The staff member who greeted Shopper 3 asked about his veteran status immediately after customer sign-in, evidencing clear familiarity with veterans' preferences and standards.
Resource Room	» There was an abundance of computers in good working order available for use by jobseekers.

Gaps

Category	Example
Resource Room	» Shopper 3 found it difficult to sort through available job materials, which could have been better organized with "hot jobs" highlighted front and center. » The layout of the Resource Room allowed limited opportunity for privacy. Secret Shopper 3 could hear details about the customer ahead of him. Such close proximity could make jobseekers uncomfortable or unwilling to disclose information.
Responsiveness and Courtesy of Staff	» Though a small center, if more than one customer needs detailed assistance, there could be a considerable wait. Shopper 3 experienced a wait of about 35-45 minutes to see a specialist. » Additional assistance for the floor staff would have been beneficial. There appeared to be cubicles and desks in the back of the NHWC that were occupied, although those staff may have different job functions.
Skill of Staff	» There were limited probing questions during specialist interview phase to better understand the potential opportunities and/or eligibility for Shopper 3. » For example, Trade Adjustment Assistance (TAA) or Trade Readjustment Allowance (TRA) would have been appropriate given the back story provided by the Shopper 3, but were not brought up by the specialist.

JAG

Secret Shopper 4 (WIOA Youth) visited the Concord JAG Center on the morning of Monday, November 14th from approximately 10:00 – 11:00 AM. Based on the experiences of that visit, the charts below outline assets upon which the Concord JAG Center can build and areas where gaps were identified in service delivery.

Note: Because NH JAG's services are tailored specifically towards health care programming, some of the metrics used to review other facilities simply do not apply. Those metrics won't be mentioned in either the assets or gaps, as they would skew the overall quality of the organization's offerings at their Concord office.

Assets

Category	Examples
Appearance of Center	» The atmosphere of the office itself was welcoming and professional, despite being a small space.
Responsiveness and Courtesy of Staff	» Shopper 4 was made to feel welcome. » Staff paid attention to detail, not just to the program offerings, but also to the specific needs and interests of Shopper 4.
Professionalism and Attentiveness / Skill Level of Staff	» Staff provided excellent one-on-one service for a drop-in visit. » Shopper 4 was made to feel welcome. » Staff paid attention to detail, not just to the program offerings, but also to the specific needs and interests of Shopper 4.
Skill Level of Staff	» JAG center staff were knowledgeable about the program offerings and were able to walk the shopper through what jobs were in high-demand as well as what looking for employment after completing training would look like and how the programming aided in that process. » Staff were knowledgeable about other programs and opportunities that would help supplement or complement their own, as well as opportunities that would allow the shopper to access resources in the meantime if they were not immediately eligible for JAG's programs. » The advice and direction given was significantly improved by the fact that Shopper 4's specific barriers were discussed and taken into account.
Services Available	» The programming offered was diverse and holistic, especially considering the specialized scope of the office, and the way it was conveyed made Shopper 4 feel engaged and excited at the potential opportunities.
Follow-up Services	» Staff followed up within a couple of days of the visit, in addition to giving Shopper 4 contact details for any further questions.

Gaps

Category	Example
Appearance of Center	» The signage out front said that the JAG office was in the building, but upon entering it appeared to be solely a construction contractor's office space. The JAG office was around the corner with no sign in the hallway or on the door. This made entering confusing. Clear signage is needed at this location
Services Available	» While the staff were incredibly kind and helpful, as well as knowledgeable about the programs offered and ready with the necessary paperwork to get Shopper 4 started, they did not have many physical resources on hand. » There were not any printed flyers or educational materials on the offered programs, or additional resources on finding a job or supplementary workforce programs or offerings. » They were able to write down resources and notes, but it would have been beneficial to have walked away with something more organized.
Resource Room	» While not absolutely necessary, it might have been beneficial to have a resource room dedicated to walk-ins or appointments that would allow jobseekers to look through JAG's website or walk through steps they need to complete before applying.
Customer Feedback	» There were no opportunities to give formal or informal feedback before departing the center or after the visit.

Employer Services Summary

Following the Employer Secret Shopping Telephone experience, the project team conducted an analysis to identify assets and gaps in service. Our team was able to connect with 4 of the 7 Employer Services Representatives and identified the following trends. As outlined above, the Secret Shopping experience is a single point-in-time customer experience and may not be reflective of the quality of service the center provides on a day-to-day basis.

Friendly and Professional
Each Employer Services Representative exhibited a friendly and professional demeanor during the engagement. They used proper phone etiquette, and in general, seemed willing and eager to provide assistance and answer questions.

An Emphasis on Job Orders and Recruitment Assistance
Representatives were asked several questions about the services offered to employers at no cost, and there was a clear-cut focus on job orders and recruitment. Each explained the purpose of the job match system, how to post a job, and how to search for candidates.

Addressed Common Employer Misconception
A common misconception that employers have about American Job Centers is that it is a "Back to Work" program, candidates are forced to participate, and they all have significant barriers to employment. The Secret Shopper intentionally asked about the quality of candidates stating that they wanted candidates that were "reliable" without barriers, and the representatives all took the time to assure them that there is a variety of qualified, job-ready candidates in the pool.

Lack of Detail about the Center's Purpose
In the conversations, the Secret Shopper stated multiple times that they didn't know the NHWC services existed until they visited the local Chamber of Commerce. This was a great opportunity for the representatives to explain the purpose and ecosystem of American Job Centers; however, they kept it concise by discussing the job match system.

Lack of Detail about Additional Employer Services
As stated, there was an emphasis on recruitment services, but no mention of additional services that could potentially be helpful to employers such as city/state incentives, training grants, labor market information, etc.et information, etc.

Unclear Follow-Up and Next Steps
Two of the four representatives opened an invitation for the Secret Shopper to "call back" if they had issues with posting. Overall, the next steps were unclear regarding how they might directly assist in finding candidates.

Virtual Services Summary

In addition to secret shopping, the project team reviewed three widely used websites. Each of the websites was reviewed from both a job seeker and an employer perspective. The three websites reviewed were:

- » nhworks.org
- » nhworksjobmatch.nhes.nh.gov
- » nhes.nh.gov

While the purpose of this report is not to provide recommendations, overarching observations from the team suggest that consolidating these three sites into a single one-stop website would be beneficial and mitigate against many of the issues outlined below. Additionally, the project team found that the three websites currently being utilized employed by the New Hampshire workforce system undermine the efforts of leaders to improve the delivery of workforce services throughout the state by presenting the system as antiquated, difficult to navigate, and without clear direction. As currently designed, the constellation of websites that make up the digital presence of the New Hampshire public workforce system results in a system that feels impenetrable and services that feel inaccessible from a user perspective. A summary of the findings related to each website is below and individual Secret Shopper reviews can be found in the appendix.

NHWorks.org

The NH Works website is the front door to the workforce system in New Hampshire, but its overall design does not bring clarity or direction from a user perspective. From the overall look to the content to the functionality, the NH Works website is antiquated and, in many cases, leaves users with more questions than answers. While the purpose of this website may be to provide a front door to the workforce system in New Hampshire, it has the effect of leaving the user where to go next. From both the jobseeker and employer perspectives, common themes emerged from the secret shopping reviews.

Broken hyperlinks and out of date information

The tab for jobseekers includes helpful information, but all resources are hyperlinked to other sites. With so many links, it is easy for them to end up broken and unusable for site visitors and this proves to be the case with this website. Multiple links are broken throughout the website and many of the links provide access to websites that in many cases are also outdated or contain broken links. Embedded relevant content within the NH Works site will provide a better user experience and serve as a reinforcement of the brand as the "go-to" organization for career support. Without this level of information being embedded, the result is that the website does little to further the NH Works brand, nor provides users with the feeling that they are "in the right place."

Website design

The overall design of the NH Works website is not conducive to an intuitive user experience. While the homepage is clean with obvious links to resources to jobseekers, employers , etc. services, once a user begins to navigate the website, they quickly run into landing pages that are dead ends, landing pages that refer to information no longer available on the page, and landing pages that are broken links containing various error messages. Additionally, there are sub-pages available for nearly all the main areas of the website (jobseekers, employers, etc.); however, the sheer volume of sub-pages and the disconnected nature of the pages leaves the user quickly overwhelmed and unsure of where they should click in order to get the information that they need.

Website does not advance NH Works brand

The NH Works website lacks a cohesive brand and does not help either jobseekers or employers see how see how engaging with the workforce systems can lead to better outcomes. The dated nature of the website does not advance the narrative that New Hampshire Works is offering a first-in-class workforce experience for its residents. Rather, it perpetuates a notion that the workforce system is out of touch and unable to keep up with the fast-moving pace of industry and urgent employment issues of workers. There should be content highlighting the success stories of people in their communities related to education, employment, and career advancement. This is an opportunity for content that highlights the "value add" of the NH Works offices and staff.

Questions about audience

The intended audience for this website was unclear to the reviewers. While there are resources and links to services that apply to jobseekers and employers alike, there is also a robust section of information dedicated to the Workforce Innovation Board. Additionally, there is information related to resources for NH Works staff, but this information can easily be confused for information that is available to jobseekers who are seeking training information. Further confusing matters was that contact information in the "About Us" tab links to contact information for the Office of Workforce Opportunity, rather than individuals providing frontline jobseeker or business services.

Internal vs external functionality

As described above, the NH Works website is being used for the sharing and storage of staff training materials. While it is important to have a web-based tool for sharing resources , the reviewers found the materials shared to be inappropriate for an external audience. For example, the materials are from 2016 which may lead to users to believe the system in use is just as out of date. The dated materials may also lead the user to believe staff are not regularly receiving training. Additionally, the ways in which staff speak internally about their work may not match the way in which they wish external users to perceive their work.

Unclear contact information

Contact information throughout the website is not consistent. In some cases, contact information for jobseeker and employer services refers individuals to executive staff at the OWO. In other cases, jobseekers and employers are directly sent to additional external websites that link to the New Hampshire Employment Security Office and/or New Hampshire Works Offices. In each of these cases, it can be unclear to the user who the appropriate contact person is for accessing services.

A lack of racial and cultural diversity

It is important to appeal to a variety of jobseekers who may need career support at the NHWCs. The primary photo on the homepage appears to be an all-white group of employers and/or workers.

Nhworksjobmatch.nhes.nh.gov

The Job Match website is the central mechanism through which New Hampshire digital workforce services are delivered. The key features and services offered through the website include job search, resume building, and career exploration for jobseekers and job posting for employers. Due to the antiquated nature of the website, the Job Match website is not able to deliver on these services in a way that adds value for job seekers and employers. The common themes that emerged for both jobseekers and employers included:

Easy to navigate homepage

Both jobseeker and employer Secret Shoppers reported a homepage that was clear, easy to understand, and from which they could easily navigate to the services that met their needs. The minimal amount of text and easy-to-read style of the website homepage allowed them to quickly identify where to go next.

Homepage labor market information

The labor market information on the homepage of the Job Match website immediately undermines the quality of the resources available on the website. The labor market information table titled, "Occupational Wage Rates for the First Half of 2021", does not include labels to help the reader understand the purpose of the chart, which gives it the impression of being inaccurate regardless of the data's validity. Additionally, the labor market information is out of date by almost two years at the time of review (spring 2023). While this is just one example, it highlights common issues both with labor market information displayed on the website as well as other features and resources that are offered.

Valuable translation feature

The ability to quickly translate the home page from English to Spanish was useful and an important signal to both jobseekers and employers that diversity is a priority for the state. However, the ability to translate the website was limited to only the home page, which means the key services delivered on other parts of the website did not have a translation option. Despite the good intentions, the fact that this feature does not run throughout the website gives the user the impression that DEIA is of secondary importance to New Hampshire.

Visual appeal and ease of use of job search tool

The job search tool is a foundational offering of the Job Match website; however, while it includes many useful features such as the ability to search by Preferred Employer and other advanced search capabilities, it was difficult to navigate. Secret Shoppers cited workforce jargon and out of date aesthetic of the website as key barriers to finding more success and value in utilizing the search tool.

Job Match tool value

Throughout the review of the Job Match tool, the reviewers kept coming back to the question of why a jobseeker or employer would use the Job Match tool rather than one of the high quality, commercially available job posting boards currently available, such as Monster and Indeed. Job Match is a tool that gives the impression of value through compliance or eligibility requirements, rather than value as a result of a high quality and highly effective service delivery.

Account accessibility

It is common to forget usernames and passwords, however, for both employers and jobseekers the process to retrieve a password is dependent upon a person's ability to remember their username. This can be difficult and multiple secret shoppers found themselves struggling to log into the Job Match system despite having set-up accounts while onsite in New Hampshire.

Job Match and Workforce Connect:

The connection between Workforce Connect and NH Works Job Match was unclear to secret shoppers. The Job Match website links to Workforce Connect for the delivery of some of its services, however, it was unclear how usernames and passwords were connected across sites. It also led to a disjointed service delivery model where some services, like the job search tool, are available through Job Match and other services like the resume builder is a feature of Workforce Connect. The two systems should be more integrated.

Nhes.nh.gov

Nhes.nh.gov is an important repository for both jobseeker and employer information; however, due to the sheer volume of information and its visual display, the site was difficult for employer and jobseeker Secret Shoppers to navigate. This website does not invite users in; rather, it repels them with dated visualizations, graphics, and a disregard for user experience. The themes that surfaced from reviews are documented below:

Design and organization:
As noted above, the overall design and organization of the Nhes.nh.gov does a significant disservice to the quality and quantity of information available through the website. The homepage can leave the user immobilized and overwhelmed with little direction on how to best access services. Additionally, the antiquated design of the website undermines the users' trust in the website and the resources displayed.

Approachability of employer information:
The high volume of links and resources available on the "employer" tab of the website made it difficult for the employer Secret Shopper to know where to start in terms of connecting with and utilizing the resources of the New Hampshire Works system. Further complicating the approachability of the "employer" tab was the use of workforce jargon and technical terms to describe many of the resources and services available.

Search function:
With a website of this complexity, a working search bar function is essential. For both jobseeker and employer Secret Shoppers, it was difficult to complete review forms because it was difficult to navigate and find all elements of the review with neither an intuitive site design nor working search function.

NH Works job match vs New Hampshire job search portal:
A key piece of the digital services offered by NH Works is the Job Match system, through which jobseekers and employers can access the statewide job board and job matching services. However, the job search portal on the New Hampshire Employment Security website connects to a completely different job board maintained by the NH Employment Security Office. From a user perspective, it is difficult to understand which of these job boards is which and, more importantly, which of these job boards can most effectively lead to better employment outcomes.

News and Events:
The News and Events section of the website reads as a crime blotter. Its location on the home page of the website creates an atmosphere of distrust with users rather than one of partnership that invites the use of state resources to advance workers along their career pathways, which may include times of unemployment. While the purpose of this feature may be to demonstrate the penalties associated with unemployment insurance fraud, it may in fact undermine itself with only six instances of fraud being cited in the last year. Rather than demonstrating a rampant issue, this section of the website illustrates a system that is mostly free from fraud.

Conclusion

This Secret Shopping Summary is a component of the Workforce Innovation and Opportunity Act Statewide Workforce Assessment being conducted by Thomas P. Miller and Associates on behalf of the New Hampshire Office of Workforce Opportunity. This report is a summary of the Secret Shopping component of the assessment. Additional components of the assessment are forthcoming and will include recommendations for continuous improvement based on the findings from this Secret Shopping Summary. As described above, the findings of this summary are from a single point in time and may not be reflective of the day-to-day operations and quality of the New Hampshire Works workforce system.

Appendix 1: Onsite Secret Shopping Individual Reports

Keene
Onsite Review

Location:	Keene, New Hampshire
Date & Time:	11/15, 2022 02:00 PM.
Customer Type:	Adult

Appearance of Center

1.	The center conveys a professional, business-like atmosphere.	Agree
2.	The center conveys a welcoming atmosphere.	Agree
3.	Signage makes the center's name readily identifiable from the street.	Disagree
4.	Bulletin boards are neat and organized.	Neutral
5.	Bulletin boards are stocked with useful information.	Strongly Agree
6.	Restrooms are neat and clean.	Strongly Agree
7.	Restrooms are well supplied.	Neutral

Comments:

Signage from the street is not apparent, at either the front or rear entrance to the complex. There is an appropriately sized sign above the store front, it's just hard to see but appropriate to other shops in the complex.

Responsiveness and Courtesy of Staff (at entry/first point of contact)

1.	I was greeted in a professional manner.	Strongly Agree
2.	I was asked questions that engaged me.	Neutral
3.	I was asked questions to determine how I could best be assisted.	Agree
4.	There was a reasonable wait for access to services, given the amount of customer traffic at that time.	Disagree

Comments:

Greeter was friendly and suggested I look at some job flyers and wait to speak to Joe. She was engaged and was helping a customer with a lot of questions sitting at a resource room computer. She did circle back around to check on veterans' preference status. Joe, the resource room manager, was engaged with a customer with many, many questions, and it appeared he was the only available staff. I waited 20/25 minutes to speak with him again. This was appropriate given the level of care the client he was already engaged with required.

Resource Room

1.	There were resources available on how to find a job.	Agree
2.	Resources were organized in a helpful manner.	Agree
3.	There was a phone(s) available for contacting employers.	Neutral
4.	There was a sufficient number of computers for customer use, given the amount of customer traffic at that time.	Strongly Agree
5.	Guidance was available about using the computer.	Neutral
6.	Staff checked with me while in the resource room to see if I had questions or needed assistance.	Agree
7.	I was provided the opportunity to register in the NH Workforce system.	Strongly Disagree

Comments:

Signage from the street is not apparent, at either the front or rear entrance to the complex. There is a an appropriately sized sign above the store front, it's just hard to see but appropriate to other shops in the complex.

Professionalism and Attentiveness of Staff (at service level)

1.	Staff presented a professional image (workspace, attire, language, etc.).	Strongly Agree
2.	I could identify people to assist me.	Strongly Agree
3.	Staff concentrated on my issue in my presence (not doing other tasks, chatting with co-workers, etc.) and devoted sufficient time to my questions.	Strongly Agree

Comments:

When it was my turn to meet with Joe, I explained my situation and he listened attentively. I told him I may have an interest in some training, maybe a CDL, and he talked about training options. Also, as I was a customer moving in from out of state, he discussed my need to establish residency, resolve my UI claim from PA, and come back in to talk more. Also offered help with resume writing and talked about the different industry sectors in different parts of the state, and where the best jobs for manufacturing could be found. Joe also showed me the state web site and how to navigate to the job postings and skill matching functionalities.

Skill Level of Staff

1.	Staff asked questions about my needs and expectations.	Strongly Agree
2.	Staff seemed knowledgeable about local services.	Strongly Agree
3.	Staff talked about services rather than program titles, acronyms, or funding sources.	Agree
4.	I was asked about what issues I faced in searching/preparing for a job (barrier identification).	Agree

Comments:

I presented myself as a long-time, recently displaced manufacturing employee, so Joe did not get into barriers with me. He asked about my credentials, experience, expected rate of pay, and mentioned some employers. He did mention "WIOA" one time, but only in the context of the training options I may have available if I moved to the state, and to underscore it was a national program, with similar training offerings in other states as well. It was an appropriate use of the program name to illustrate a broader point, I felt

Services Available/Offered

1.	There was mention or offering of more in-depth services (e.g. assessment, job search skills, resume preparation, etc.).	Strongly Agree
2.	There was evidence of partner service availability.	Agree
3.	If appropriate, partner services were described and access to them explained.	Neutral
4.	Center representatives provided a seamless approach to service delivery.	Agree
5.	If a referral to a partner was made, it seemed to be a smooth and easy process.	Neutral
6.	There was access to basic job seeker services, observed as follows:	

Assessments for skills, interests and/or supportive service needs	Agree
Program eligibility information	Agree
Overview of services available at the Center	Neutral
Eligible Training Provider Information	Disagree
Information on filing for Unemployment Compensation	Strongly Agree
Labor Market Information	Neutral
Referrals to partner programs and services	Disagree
Resume preparation	Strongly Agree
Job search and interviewing guidance, tutorials or workshops.	Agree

7.	Overall, services seemed uncomplicated and easy to access.	Neutral

Comments:

Lots of partner services flyers and related information. Joe did not get into the details with me, but it was not really appropriate given my story. I did, however, while waiting to see him, hear Joe explain in a good bit of detail potential skills upgrade training programs, small business support opportunities, the UI claim process, and the workshops offered on site. He made a follow up appointment with the lady he was helping before me and seemed very knowledgeable about the full array of complementary services available.

Follow-Up Services Offered

1.	There was discussion of follow-up services to this visit.	Strongly Agree
2.	I was clear about what my next steps should be.	Strongly Agree
3.	A follow-up visit or phone call was scheduled.	Strongly Disagree
4.	I was provided with contact information for follow-up	Strongly Agree

Comments:

Appropriate follow up steps, Joe gave me his card and asked I call him when I was ready to work on a resume or had established residence in NH. Also mentioned I could pop into any job center around the state and get the same level of help, if I ended up moving to a different region.

Customer Feedback

1.	Staff asked for feedback (formal or informal) prior to my departure from the Center.	Strongly Disagree
2.	There was a customer feedback drop box or container where a feedback form could be deposited.	Neutral

Comments:

I did not notice a feedback drop box.

Overall Customer Satisfaction Experience

1.	Overall, I had a customer-satisfying experience.	Strongly Disagree

Comments:

Friendly staff, the wait time was a little long, and the area lacked privacy, for some more sensitive conversations about job history, barriers, etc. As mentioned earlier, I could hear all the details of the jobseeker ahead of me.

Littleton

Onsite Review

Location:	Littleton, New Hampshire
Date & Time:	11/15, 2022 09:26 AM
Customer Type:	Adult

Appearance of Center

1.	The center conveys a professional, business-like atmosphere.	Agree
2.	The center conveys a welcoming atmosphere.	Strongly Agree
3.	Signage makes the center's name readily identifiable from the street.	Strongly Agree
4.	Bulletin boards are neat and organized.	Neutral
5.	Bulletin boards are stocked with useful information.	Agree
6.	Restrooms are neat and clean.	Agree
7.	Restrooms are well supplied.	Agree

Comments:

The office had a lot of information (fliers), but it would have been overwhelming as a job seeker to look through everything. Staff seemed knowledgeable about what resources were available.

Responsiveness and Courtesy of Staff (at entry/first point of contact)

1.	I was greeted in a professional manner.	Strongly Agree
2.	I was asked questions that engaged me.	Agree
3.	I was asked questions to determine how I could best be assisted.	Neutral
4.	There was a reasonable wait for access to services, given the amount of customer traffic at that time.	Strongly Agree

Comments:

Staff were incredibly warm and welcoming, could have asked better probing questions. I knew what to ask for, but if I hadn't, I may have missed out on several resources.

Resource Room

1. There were resources available on how to find a job. Agree

2. Resources were organized in a helpful manner. Neutral

3. There was a phone(s) available for contacting employers. Strongly Agree

4. There was a sufficient number of computers for customer use, given the amount of customer traffic at that time. Strongly Agree

5. Guidance was available about using the computer. Agree

6. Staff checked with me while in the resource room to see if I had questions or needed assistance. Strongly Agree

7. I was provided the opportunity to register in the NH Workforce system. Strongly Agree

Comments:

Staff were knowledgeable and helpful. As noted earlier, fliers and postings were overwhelming. However, everything else was sufficient.

Professionalism and Attentiveness of Staff (at service level)

1. Staff presented a professional image (workspace, attire, language, etc.). Strongly Agree

2. I could identify people to assist me. Strongly Agree

3. Staff concentrated on my issue in my presence (not doing other tasks, chatting with co-workers, etc.) and devoted sufficient time to my questions. Strongly Agree

Comments:

N/A - staff were attentive and focused on all jobseekers.

Skill Level of Staff

1. Staff asked questions about my needs and expectations. Neutral

2. Staff seemed knowledgeable about local services. Agree

3. Staff talked about services rather than program titles, acronyms, or funding sources. Agree

4. I was asked about what issues I faced in searching/preparing for a job (barrier identification). Neutral

Comments:

Staff could use some room for improvement here. They were knowledgeable about local jobs and the needs of the area. They could have done a better job of explaining what the center can do or having a resource that outlined what the center can do. I had to ask to get more details.

Services Available/Offered

1. There was mention or offering of more in-depth services (e.g. assessment, job search skills, resume preparation, etc.). — Disagree

2. There was evidence of partner service availability. — Neutral

3. If appropriate, partner services were described and access to them explained. — Agree

4. Center representatives provided a seamless approach to service delivery. — Neutral

5. If a referral to a partner was made, it seemed to be a smooth and easy process. — Neutral

6. There was access to basic job seeker services, observed as follows:

Assessments for skills, interests and/or supportive service needs	Neutral
Program eligibility information	Disagree
Overview of services available at the Center	Neutral
Eligible Training Provider Information	Disagree
Information on filing for Unemployment Compensation	Strongly Agree
Labor Market Information	Agree
Referrals to partner programs and services	Strongly Agree
Resume preparation	Disagree
Job search and interviewing guidance, tutorials or workshops.	Disagree

7. Overall, services seemed uncomplicated and easy to access. — Agree

Comments:

Staff mentioned some of the job seeker services listed in question 40 (veteran, unemployment, state healthcare). Could have elaborated a bit further on service providers (although I was technically ineligible based on my story, I was not registered for state healthcare). I also showed I was struggling with my resume but was not directed to any resources. Furthermore, the staff provided a lot of verbal information regarding basic job seeker services; however, I was not directed to print or online resources (question 6).

Follow-Up Services Offered

1.	There was discussion of follow-up services to this visit.	Neutral
2.	I was clear about what my next steps should be.	Agree
3.	A follow-up visit or phone call was scheduled.	Disagree
4.	I was provided with contact information for follow-up	Agree

Comments:

Staff did instruct me to return or call if I had any questions. They also gave me instructions to follow up with Westaff, a separate agency. No follow-up was technically scheduled; however, they did encourage me to reach back out.

Customer Feedback

1.	Staff asked for feedback (formal or informal) prior to my departure from the Center.	Disagree
2.	There was a customer feedback drop box or container where a feedback form could be deposited.	Neutral

Comments:

Did not see a feedback drop off box, staff did not seek immediate feedback.

Overall Customer Satisfaction Experience

1.	Overall, I had a customer-satisfying experience.	Agree

Comments:

Staff were hands-on, eager to help, and well informed about employment in the area. The biggest growth areas were assistance with my resume and explanation of available training opportunities. They directed me to the site to discover training opportunities after I informed them of my interest in learning new skills.

JAG

Onsite Review

Location:	JAG, Concord, New Hampshire
Date & Time:	11/14, 2022 10:00 AM
Customer Type:	Youth

Appearance of Center

1.	The center conveys a professional, business-like atmosphere.	Neutral
2.	The center conveys a welcoming atmosphere.	Disagree
3.	Signage makes the center's name readily identifiable from the street.	Disagree
4.	Bulletin boards are neat and organized.	N/A
5.	Bulletin boards are stocked with useful information.	N/A
6.	Restrooms are neat and clean.	Neutral
7.	Restrooms are well supplied.	Neutral

Comments:

While the signage from the street was clear, once you were in the building it was unclear if the door to "JAG Suite 2" was a customer entrance or just an office, and there was no window to see inside. I had to knock kind of awkwardly. There weren't materials posted inside the office and they didn't have informational materials to give me. I ended up just taking written notes, although the man I worked with did give me his card.

Responsiveness and Courtesy of Staff (at entry/first point of contact)

1.	I was greeted in a professional manner.	Strongly Agree
2.	I was asked questions that engaged me.	Strongly Agree
3.	I was asked questions to determine how I could best be assisted.	Strongly Agree
4.	There was a reasonable wait for access to services, given the amount of customer traffic at that time.	Strongly Agree

Comments:

The two people I spoke to, especially the individual who sat down with me, were incredibly kind and helpful the whole time.

Resource Room

1. There were resources available on how to find a job.   N/A

2. Resources were organized in a helpful manner.   N/A

3. There was a phone(s) available for contacting employers.   N/A

4. There was a sufficient number of computers for customer use, given the amount of customer traffic at that time.   N/A

5. Guidance was available about using the computer.   N/A

6. Staff checked with me while in the resource room to see if I had questions or needed assistance.   N/A

7. I was provided the opportunity to register in the NH Workforce system.   N/A

Comments:

There was no resource room, likely because they're an office for just one program.

Professionalism and Attentiveness of Staff (at service level)

1. Staff presented a professional image (workspace, attire, language, etc.).   Strongly Agree

2. I could identify people to assist me.   Strongly Agree

3. Staff concentrated on my issue in my presence (not doing other tasks, chatting with co-workers, etc.) and devoted sufficient time to my questions.   Strongly Agree

Comments:

As I said, Marco sat down with me and walked me through intake and how the program worked, what my next steps would be, and how to be best prepared for the process. He was incredibly helpful and kind.

Skill Level of Staff

1. Staff asked questions about my needs and expectations.   Strongly Agree

2. Staff seemed knowledgeable about local services.   Agree

3. Staff talked about services rather than program titles, acronyms, or funding sources.   Agree

4. I was asked about what issues I faced in searching/preparing for a job (barrier identification).   Strongly Agree

Comments:

There was some uncertainty on an aspect of the program, but I believe that was focused on if I would be able to meet an eligibility requirement. Otherwise, he was very knowledgeable, and I only occasionally had to ask what something meant.

Services Available/Offered

1. There was mention or offering of more in-depth services (e.g. assessment, job search skills, resume preparation, etc.). **Agree**

2. There was evidence of partner service availability. **Neutral**

3. If appropriate, partner services were described and access to them explained. **Neutral**

4. Center representatives provided a seamless approach to service delivery. **Neutral**

5. If a referral to a partner was made, it seemed to be a smooth and easy process. **Neutral**

6. There was access to basic job seeker services, observed as follows:

Assessments for skills, interests and/or supportive service needs	Agree
Program eligibility information	Agree
Overview of services available at the Center	Agree
Eligible Training Provider Information	Agree
Information on filing for Unemployment Compensation	Agree
Labor Market Information	Agree
Referrals to partner programs and services	Agree
Resume preparation	Agree
Job search and interviewing guidance, tutorials or workshops.	Agree

7. Overall, services seemed uncomplicated and easy to access. **Agree**

Comments:

There wasn't much of a focus on partner services, though Marco did point me towards a specific employer that might be helpful due to my specific circumstances. The program itself does aid participants in many of the services in Q40, though not so much beforehand. The lack of program materials did make the process a little more confusing, but they really made up for that in customer service and 1 on 1 attention.

Follow-Up Services Offered

1.	There was discussion of follow-up services to this visit.	Strongly Agree
2.	I was clear about what my next steps should be.	Strongly Agree
3.	A follow-up visit or phone call was scheduled.	Neutral
4.	I was provided with contact information for follow-up	Strongly Agree

Comments:

Marco did explain how he would follow up but didn't give a specific date/time. I was given his card and walked through how I can best prepare for next steps.

Customer Feedback

1.	Staff asked for feedback (formal or informal) prior to my departure from the Center.	Disagree
2.	There was a customer feedback drop box or container where a feedback form could be deposited.	Strongly Disagree

Comments:

I was asked if I had any other questions but otherwise there was no feedback method offered.

Overall Customer Satisfaction Experience

1.	Overall, I had a customer-satisfying experience.	Agree

Comments:

Other than a lack of supplementary materials/services, my experience was great. Marco made the process simple and engaging, and I left feeling like if I was actually looking for work in healthcare, I would be very optimistic, even excited, about the opportunities they presented.

Salem

Onsite Review

Location:	Salem, New Hampshire
Date & Time:	1/14, 2022 01:30 PM
Customer Type:	Adult Dislocated Worker #1

Appearance of Center

1.	The center conveys a professional, business-like atmosphere.	Agree
2.	The center conveys a welcoming atmosphere.	Disagree
3.	Signage makes the center's name readily identifiable from the street.	Strongly Agree
4.	Bulletin boards are neat and organized.	Neutral
5.	Bulletin boards are stocked with useful information.	Neutral
6.	Restrooms are neat and clean.	Strongly Agree
7.	Restrooms are well supplied.	Strongly Agree

Comments:

» The center seemed completely empty when I entered, which felt intimidating. It almost felt like I was not in the right place. It felt more like an administrative building and not a building that many jobseekers visit.

» There was a bulletin board, but it used jargon like "Dislocated worker" to describe available services.

» There were a number of tables with many job postings and employer information, but it was not in any kind of organized fashion. There was no way to sort through the information by industry, job type or recentness of posting. Everything was mixed together which made it difficult to tell if I should be prioritizing my search in any way.

Responsiveness and Courtesy of Staff (at entry/first point of contact)

1.	I was greeted in a professional manner.	Agree
2.	I was asked questions that engaged me.	Neutral
3.	I was asked questions to determine how I could best be assisted.	Neutral
4.	There was a reasonable wait for access to services, given the amount of customer traffic at that time.	Strongly Agree

Comments:

When I entered the building I was greeted immediately by a man at the front desk. He asked me to sign-in. After which time, he continued to work for another few minutes while I stood in the empty office. When he was done working he asked what brought me into the office and whether or not I wanted to file unemployment. I answered that I did not think I was eligible for unemployment and that I was looking for a job.

Resource Room

1.	There were resources available on how to find a job.	Disagree
2.	Resources were organized in a helpful manner.	Disagree
3.	There was a phone(s) available for contacting employers.	Neutral
4.	There was a sufficient number of computers for customer use, given the amount of customer traffic at that time.	Strongly Agree
5.	Guidance was available about using the computer.	Neutral
6.	Staff checked with me while in the resource room to see if I had questions or needed assistance.	Agree
7.	I was provided the opportunity to register in the NH Workforce system.	Strongly Agree

Comments:

» Resources about employers and available jobs were located on tables throughout the front of office. However, as someone looking for an office job, there was not an easy way to sort through all of the papers and find resources that might be a fit for me.
» My visit at the center almost exclusively revolved around my registration into the Job Match system. Guidance was provided to me about the importance of Job Match system and I was able to sit and register for an account on my own. However, the website was not intuitive to navigate.
» I was able to ask questions when needed, but no one checked on me proactively.
» I did not ask to use phone because my registration in the JobMatch system had not yet resulted in any opportunities for me to reach out.
» There was some guidance about generally using the computer, but there was very little guidance about navigating the website beyond a pamphlet that was provided.

Professionalism and Attentiveness of Staff (at service level)

1.	Staff presented a professional image (workspace, attire, language, etc.).	Strongly Agree
2.	I could identify people to assist me.	Strongly Agree
3.	Staff concentrated on my issue in my presence (not doing other tasks, chatting with co-workers, etc.) and devoted sufficient time to my questions.	Neutral

Comments:

The staff member was very friendly but seemed busy with other work. Despite there being no one else to serve, I was very quickly sat at a computer and left to my own devices unless I proactively asked questions.

Skill Level of Staff

1.	Staff asked questions about my needs and expectations.	Disagree
2.	Staff seemed knowledgeable about local services.	Neutral
3.	Staff talked about services rather than program titles, acronyms, or funding sources.	Neutral
4.	I was asked about what issues I faced in searching/ preparing for a job (barrier identification).	Strongly Disagree

Comments:

» I felt like all the information that the counselor had about me- was information that I provided unprompted hoping to initiate access to additional more services.

» I asked if there was training available in Microsoft and he brought a flyer about New Hampshire Works. He said I could only receive training if I was enrolled in SNAP or TANF. He asked if I received TANF or SNAP, I said I used to be, but wasn't signed up now and that I would like to be. In response I was given a general customer service phone number for benefits and told that I should try calling there. Once I'm enrolled, he said I should come back and that I should be able to access training. He said that this was the only avenue into a training program that was available to me.

Services Available/Offered

1. There was mention or offering of more in-depth services (e.g. assessment, job search skills, resume preparation, etc.). — Strongly Disagree

2. There was evidence of partner service availability. — Strongly Disagree

3. If appropriate, partner services were described and access to them explained. — Strongly Disagree

4. Center representatives provided a seamless approach to service delivery. — Strongly Disagree

5. If a referral to a partner was made, it seemed to be a smooth and easy process. — Strongly Disagree

6. There was access to basic job seeker services, observed as follows:

Assessments for skills, interests and/or supportive service needs	Neutral
Program eligibility information	Neutral
Overview of services available at the Center	Neutral
Eligible Training Provider Information	Neutral
Information on filing for Unemployment Compensation	Neutral
Labor Market Information	Neutral
Referrals to partner programs and services	Neutral
Resume preparation	Neutral
Job search and interviewing guidance, tutorials or workshops.	Neutral

7. Overall, services seemed uncomplicated and easy to access. — Disagree

Comments:

» The staff member helping me was very friendly and kind, however, I did not leave my visit feeling like I had furthered my ability secure an office job after visiting the Center. Additional services or offerings were only offered when I prompted with questions.

» I did not get to have an in-depth conversation with staff about the barriers I was experiencing, nor did I get clear information about services that I may be able to access.

» The only partner that was offered was the TANF/SNAP referral. But these were only in the context of being eligible for Microsoft training.

» Two services were offered to me on site – reviewing printed materials at the front of the office and accessing the JobMatch website.

Follow-Up Services Offered

1.	There was discussion of follow-up services to this visit.	Disagree
2.	I was clear about what my next steps should be.	Disagree
3.	A follow-up visit or phone call was scheduled.	Strongly Disagree
4.	I was provided with contact information for follow-up	Disagree

Comments:

I received a quick- come back again each week as I was leaving. No clear next steps. No one-on-one discussion or plan.

Customer Feedback

1.	Staff asked for feedback (formal or informal) prior to my departure from the Center.	Strongly Disagree
2.	There was a customer feedback drop box or container where a feedback form could be deposited.	N/A

Comments:

Did not see customer feedback box if there was one. Was not offered opportunity for feedback

Overall Customer Satisfaction Experience

1.	Overall, I had a customer-satisfying experience.	Disagree

Comments:

» It was clear that the gentleman I worked with was very nice and certainly very professional. He also appeared to be the only person in the Center or at the very least, the only person that I saw for the entire length of my visit.

» However, in many ways it felt like the purpose of the Salem New Hampshire Works Center was to serve as a computer lab from which to access the JobMatch services, rather than a one-stop center from which to access all of the opportunities of the state's workforce system.

» For nearly the entirety of my visit I worked independently at a computer. Interactions were prompted only when I asked questions and despite voicing some clear goals related to accessing training and public benefits, I did not leave the Center any closer to achieving those two goals.

» While certainly the staff was personable, I left with the feeling that I had not come to the right place to help with my career goals.

Appendix 2: Onsite Secret Shopping Statewide Summary Report

Onsite Review

Location: Keene (Adult, DW), Salem (Adult, DW), JAG, Concord (Youth) and Littleton (Adult, DW)

Date & Time: November 14th – 15th, 2022

Customer Type: Adult Dislocated Workers, Young Adult Worker

Appearance of Center

	Indicator	Center	Score
1.	The center conveys a professional, business-like atmosphere.	Keene	4
		Salem	4
		JAG, Concord	3
		Littleton	4
		State Average	3.75
2.	The center conveys a welcoming atmosphere.	Keene	4
		Salem	2
		JAG, Concord	2
		Littleton	5
		State Average	3.25
3.	Signage makes the center's name readily identifiable from the street.	Keene	2
		Salem	5
		JAG, Concord	1
		Littleton	5
		State Average	3.5
4.	Bulletin boards are neat and organized.	Keene	3
		Salem	3
		JAG, Concord	N/A
		Littleton	1
		State Average	2.3

	Indicator	Center	Score
5.	Bulletin boards are stocked with useful information.	Keene	3
		Salem	3
		JAG, Concord	N/A
		Littleton	3
		State Average	3
6.	Restrooms are neat and clean.	Keene	5
		Salem	5
		JAG, Concord	3
		Littleton	4
		State Average	4.25
7.	Restrooms are well supplied.	Keene	3
		Salem	5
		JAG, Concord	3
		Littleton	4
		State Average	3.75

Responsiveness and Courtesy of Staff (at entry/first point of contact)

	Indicator	Center	Score
1.	I was greeted in a professional manner.	Keene	5
		Salem	4
		JAG, Concord	5
		Littleton	5
		State Average	4.75
2.	I was asked questions that engaged me.	Keene	3
		Salem	3
		JAG, Concord	5
		Littleton	4
		State Average	3.75
3.	I was asked questions to determine how I could best be assisted.	Keene	4
		Salem	3
		JAG, Concord	5
		Littleton	3
		State Average	3.75
4.	There was a reasonable wait for access to services, given the amount of customer traffic at that time.	Keene	2
		Salem	5
		JAG, Concord	5
		Littleton	5
		State Average	4.25

Resource Room

	Indicator	Center	Score
1.	There were resources available on how to find a job.	Keene	4
		Salem	2
		JAG, Concord	N/A
		Littleton	4
		State Average	3.3
2.	Resources were organized in a helpful manner.	Keene	4
		Salem	2
		JAG, Concord	N/A
		Littleton	2
		State Average	2.6
3.	There was a phone(s) available for contacting employers.	Keene	3
		Salem	3
		JAG, Concord	N/A
		Littleton	5
		State Average	3.6
4.	There was a sufficient number of computers for customer use, given the amount of customer traffic at that time.	Keene	5
		Salem	5
		JAG, Concord	N/A
		Littleton	5
		State Average	5
5.	Guidance was available about using the computer.	Keene	3
		Salem	1
		JAG, Concord	3
		Littleton	4
		State Average	3.3

	Indicator	Center	Score
6.	Staff checked with me while in the resource room to see if I had questions or needed assistance.	Keene	4
		Salem	4
		JAG, Concord	N/A
		Littleton	5
		State Average	4.3
7.	I was provided the opportunity to register in the NH Workforce system.	Keene	1
		Salem	5
		JAG, Concord	N/A
		Littleton	5
		State Average	3.6

Professionalism and Attentiveness of Staff (at service level)

	Indicator	Center	Score
1.	Staff presented a professional image (workspace, attire, language, etc.).	Keene Salem JAG, Concord Littleton **State Average**	5 5 5 5 **5**
2.	I could identify people to assist me.	Keene Salem JAG, Concord Littleton **State Average**	5 5 5 5 **5**
3.	Staff concentrated on my issue in my presence (not doing other tasks, chatting with co-workers, etc.) and devoted sufficient time to my questions.	Keene Salem JAG, Concord Littleton **State Average**	5 3 5 5 **4.5**

Skill Level of Staff

	Indicator	Center	Score
1.	Staff asked questions about my needs and expectations.	Keene Salem JAG, Concord Littleton **State Average**	5 2 5 3 **3.75**
2.	Staff seemed knowledgeable about local services.	Keene Salem JAG, Concord Littleton **State Average**	5 3 4 4 **4**
3.	Staff talked about services rather than program titles, acronyms, or funding sources.	Keene Salem JAG, Concord Littleton **State Average**	4 3 4 4 **3.75**
4.	I was asked about what issues I faced in searching/ preparing for a job (barrier identification).	Keene Salem JAG, Concord Littleton **State Average**	1 1 5 3 **2.5**

Services Available/Offered

	Indicator	Center	Score
1.	There was mention or offering of more in-depth services (e.g. assessment, job search skills, resume preparation, etc.).	Keene Salem JAG, Concord Littleton **State Average**	1 1 4 2 2
2.	There was evidence of partner service availability.	Keene Salem JAG, Concord Littleton **State Average**	1 1 3 3 2
3.	If appropriate, partner services were described and access to them explained.	Keene Salem JAG, Concord Littleton **State Average**	3 1 3 4 2.75
4.	Center representatives provided a seamless approach to service delivery.	Keene Salem JAG, Concord Littleton **State Average**	4 1 3 3 2.75

	Indicator	Center	Score
5.	If a referral to a partner was made, it seemed to be a smooth and easy process.	Keene Salem JAG, Concord Littleton **State Average**	3 1 1 3 2
6.	Overall, services seemed uncomplicated and easy to access.	Keene Salem JAG, Concord Littleton **State Average**	5 2 4 4 3.75

Follow-Up Services Offered

	Indicator	Center	Score
1.	There was discussion of follow-up services to this visit.	Keene Salem JAG, Concord Littleton **State Average**	5 2 5 3 **3.75**
2.	I was clear about what my next steps should be.	Keene Salem JAG, Concord Littleton **State Average**	5 2 5 4 **4**
3.	A follow-up visit or phone call was scheduled.	Keene Salem JAG, Concord Littleton **State Average**	1 1 5 4 **2.25**
4.	I was provided with contact information for follow-up	Keene Salem JAG, Concord Littleton **State Average**	5 2 5 4 **4**

Customer Feedback

	Indicator	Center	Score
1.	Staff asked for feedback (formal or informal) prior to my departure from the Center.	Keene Salem JAG, Concord Littleton **State Average**	1 1 2 2 **1.5**
2.	There was a customer feedback drop box or container where a feedback form could be deposited.	Keene Salem JAG, Concord Littleton **State Average**	3 0 1 3 **2.5**

Overall Customer Satisfaction Experience

	Indicator	Center	Score
1.	Overall, I had a customer-satisfying experience.	Keene Salem JAG, Concord Littleton **State Average**	4 2 4 4 **3.5**

Appendix 3: New Hampshire Secret Shopper Jobseeker Website Review Secret

Shopper Name: Jobseeker, Secret Shopper #1

NH Works Website Review

1.   The website was easy to navigate   Neutral

Comments:

» The overall simplicity of the section heads – jobseekers, employers, etc. was very straightforward and easy to navigate, however, within each of those tabs all tabs all the pages, links, resources, and partners.
» There are multiple instances of broken links and information being outdated which calls into question the validity of the information found on the website.
» For example:
  » Jobseeker home page centers a notice about updated business hours from May 23, 2022
  » The Sector Partnership Initiative link on the homepage is broken
  » Under the Jobseeker tab, Major Job and Resume Banks, nearly every external link is broken.
» There is information about multiple partners and resources available on the website; however, there is no specific contact information for individuals on these websites. Instead, it links to partner websites. It is difficult as a jobseeker to understand where to start and what path/ series of partners to engage with in order to access services.
» There were many acronyms and workforce jargon throughout the website which at times made it difficult to understand the audience for the website – partners? Jobseekers? Board members? Employers?
» It is also difficult to understand which services are services of NH Works and which are services of external partners.

2.   The website provided the following information: (check all that apply)

- ☑ Location of Centers
- ☑ Hours of operation
- ☑ Services available for jobseekers
- ☐ Schedule of jobseeker activities/events
- ☑ Contact information if assistance is needed
- ☐ Information on access for individuals with disabilities

Comments:

» Contact information was inconsistent throughout the website. The 'About Us' section had wonderful contact information for the Office of Workforce Opportunity. General contact information or contact information for jobseekers services is less clear.
» Location information is available, however, it is easy to miss the link on the front page of the jobseeker tab.
» Within the NH Works website, I was not able to find a schedule of jobseeker events or activities. However, there was a link to the New Hampshire Employment Security website which did have links to jobseeker events.
» Within the NH Works website, I was not able to find information on access for individuals with disabilities.

3. **Services available online include: (check all that apply)**

☐ Assessments for skills, interests and/or supportive services

☐ Program eligibility information

■ Overview services available at NH Works Centers

☐ Eligible training provider information

☐ Information on filing for unemployment compensation

■ Labor market information

■ Access to partner programs and services

■ Resume preparation

 ■ Learning activities (tutorials, videos, etc.) to provide instruction on key topics (interviewing, job search skills, soft skills, etc.

■ Job search

■ Career exploration

■ Other services (list below)

Comments:

» Overall, this website seems to be a clearing house of links to external resources and services available through the New Hampshire workforce development system. Nearly all the services available on this website are links to other websites or partners. This website does very little in the way of direct service delivery.

» For example:
 » There is a page for labor market information, however, it redirects to the New Hampshire Employment and Security website.
 » Job search services link to the JobMatch website as well as external private job boards.

4. **Overall, I had a satisfying experience**   **Neutral**

Comments:

» Due to the number of broken links and outdated information, my overall impression of the website is that it is not maintained and updated regularly, which can leave the user unsure of the quality of the information.

» While there is a good amount of information on the website provided through links, the user experience on the website is not particularly intuitive. It is difficult to prioritize resources and create a plan of action as a jobseeker.

» The State Workforce Innovation Board Meetings tab was very well maintained and information about the State Workforce Innovation Board, its meetings, and members was easy to find. This begs the question of the audience for this website. As a jobseeker, I did not find this a useful addition to the other web resources available in the state of New Hampshire.

NH Employment Security

1. The website was easy to navigate　　　　　　　　Strongly Disagree

Comments:

» This website is very difficult to navigate. There is a lot of text on the home page and the font is both very small, but also varied – bold, capital letters, hyperlinks, etc.

» The information on the left-hand column of the page does do some to help call out specific areas of interest, however, as a jobseeker, it is very unclear which of these areas should be accessed.

» There is a jobseeker tab at the top of the homepage, however, it is so small, that it is not the first place that the eye goes on the page which means I missed it the first couple of times I clicked on the page.

» Once I made my way to the Services for Job Seekers tab, the content was much more applicable and manageable to navigate. The font on the page was still very small and at times difficult to read.

» Some of the links that I clicked on took me away from the New Hampshire Employment Security website and this added to the complexity and navigating between multiple websites.

» For example, on the Job Seeker page, the NHJobs Recruitment Portal does not open in a new window. It opens in the same tab which means that I lose the NHES website.

» The search tool is disabled on the website which limits the user's ability to quickly find things that aren't readily apparent.

2. The website provided the following information: (check all that apply)

■ Location of Centers

■ Hours of operation

■ Services available for jobseekers

■ Schedule of jobseeker activities/events

■ Contact information if assistance is needed

☐ Information on access for individuals with disabilities

Comments:

» All the information above is available. However, due to the amount of information on the website, it is not clear or easy to navigate to.

» There may be information on access for individuals with disabilities, however, I was not able to find it through observation and the search tool function was not working.

3.   Services available online include: (check all that apply)

■ Assessments for skills, interests and/or supportive services

■ Program eligibility information

■ Overview services available at NH Works Centers

☐ Eligible training provider information

■ Information on filing for unemployment compensation

■ Labor market information

■ Access to partner programs and services

☐ Resume preparation

■ Learning activities (tutorials, videos, etc.) to provide instruction on key topics (interviewing, job search skills, soft skills, etc.

■ Job search

■ Career exploration

■ Other services (list below)

Comments

» As described above, most of the services outlined above are available through the NHES website, however:
  » there is so much on the website that it is difficult to navigate to what you are looking for;
  » many of these services are provided by links through 3rd party sites. It can be difficult to tell when I've navigated away from NHES page especially because the new pages do not pop up in their own tab.

4.   Overall, I had a satisfying experience   Disagree

Comments

» The overall look of the website is unappealing and undermines the number of valuable resources and content available.

» This site was very busy and difficult to navigate. As a jobseeker, it was unclear what services I should be prioritizing as a part of NH Works, as opposed to services that are being offered by third parties.

» More often than not, I found the website navigating me away from NHES and to other third-party services, which while helpful, did not seem connected to NH Works in any way.

» While the website was difficult to navigate, I found most of the resources and services that I would expect to be able to access through the workforce system.

NH Job Match System

1. The website was easy to navigate   Neutral

Comments:

» Overall, the look of the homepage is very clean. It is clear and obvious that my next step as a jobseeker is to click on the jobseeker tab.

» From there, it becomes less obvious the clearest path to take. It feels like this website would be best used with a tutorial or with a mentor walking an individual through the site.

2. The website provided the following information: (check all that apply)

■ Location of Centers

☐ Hours of operation

■ Services available for jobseekers

☐ Schedule of jobseeker activities/events

■ Contact information if assistance is needed

☐ Information on access for individuals with disabilities

Comments:

» This site seems to focus less on the rest of the resources and service available through the New Hampshire works system and rather serves as more of a conduit to the New Hampshire Connect system and the job searching platform.

3. Services available online include: (check all that apply)

■ Assessments for skills, interests and/or supportive services

☐ Program eligibility information

☐ Overview services available at NH Works Centers

☐ Eligible training provider information

☐ Information on filing for unemployment compensation

■ Labor market information

☐ Access to partner programs and services

■ Resume preparation

■ Learning activities (tutorials, videos, etc.) to provide instruction on key topics (interviewing, job search skills, soft skills, etc.

■ Job search

☐ Career exploration

■ Other services (list below)

Comments:

» The Job Match website is clearly the service delivery mechanism for resume building, job searching, and career exploration.

» It did not seem to connect very clearly to the New Hampshire Works system where in-person assistance is available to support the usage of this site.

» The contact us page connects to email form, but also to individual phone numbers for each of the NH Employment Security Offices. It was unclear the connection between this website and the NH Employment Security Offices. Do they provide technical assistance for this website?

4. Overall, I had a satisfying experience   Disagree

Comments:

» Overall, it was obvious that this website is the service delivery arm of the New Hampshire workforce digital presence.

» The overall appearance of the website was not modern and the functionality of some of the tools seemed dated. For instance, the job search function was not as intuitive as other tools that are available.

» It is unclear the relationship between the New Hampshire Workforce Connect website and the New Hampshire Job Match website. Additionally, when I went to log-in on the New Hampshire Workforce Connect website, there was no way to reset my password if I had forgotten it.

» While there were interesting tools and resources on the JobMatch website, like the Career Informer, they did not have clear instructions on how to utilize them.

» Also, when clicking on links, such as the Career Informer, it was often not possible to click the "back arrow" on the web browser which made browsing all the various tools and resources difficult and time-consuming.

Secret Shopper Name: Jobseeker, Secret Shopper # 3

NH Works Website Review

1.   The website was easy to navigate   Disagree

Comments:

» While it was easy to navigate to the section for jobseekers, once there the website became more confusing
» Most of the tabs provided links to other sites, some of which were broken, instead of providing information directly on the site
» Some information on the site was outdated or clearly hadn't been updated in some time
» Where there was information directly on the site, it was usually in big blocks of (usually small) text. These sections would include information for a lot of different topics or resources, making it hard to digest or retain.
» Any services presented were kind of scattered throughout the site, making it unclear if the user was actually gathering everything, and even more challenging to narrow down the information to what was actually applicable to a single person
» It would also be helpful to know which of the services/resources mentioned are available through NH Works Centers, and which require outside registration or contacts, so the jobseeker can determine who to contact first or which route will be most effective for them

2.   The website provided the following information: (check all that apply)

■ Location of Centers
■ Hours of operation
■ Services available for jobseekers
☐ Schedule of jobseeker activities/events
■ Contact information if assistance is needed
☐ Information on access for individuals with disabilities

Comments:

» Services available for jobseekers were listed in several places, but not necessarily in a easily consumable way. Most of the time it required following multiple links, and wasn't organized in a way that made it easy to follow
» There was a link to NH Employment Security's website listing job fairs, but no other activities or events were listed or mentioned directly on NH Works' site
» Not only was there no information on access for individuals with disabilities, the site itself was not disability friendly. The type was small, not well organized for a screen reader, and most sections were written in a way that would be challenging to process for people with learning or cognitive disabilities.

3. Services available online include: (check all that apply)

☐ Assessments for skills, interests and/or supportive services

☐ Program eligibility information

■ Overview services available at NH Works Centers

■ Eligible training provider information

☐ Information on filing for unemployment compensation

■ Labor market information

■ Access to partner programs and services

■ Resume preparation

■ Learning activities (tutorials, videos, etc.) to provide instruction on key topics (interviewing, job search skills, soft skills, etc.

■ Job search

■ Career exploration

■ Other services (list below)

Comments:

» While there was a way to find most of these services, it wasn't organized very well and none of them were provided on the NH Works site itself, instead they were always just links to other providers. This isn't necessarily a problem, but service was never being provided directly and it did result in an underwhelming experience.

4. Overall, I had a satisfying experience   Neutral

Comments:

» There was definitely a lot of information on the site, and if I were a jobseeker willing to dedicate a significant amount of time to navigating through all of it, I think I'd be happy with the result.

» For the average person visiting the site for the first time, I feel it would be an underwhelming and a little confusing experience. The site feels both outdated and a bit neglected. Visually, it's not appealing to the user, and functionally it doesn't present an intuitive user experience

NH Employment Security

1. **The website was easy to navigate**   Strongly
                                                              Disagree

Comments:

» The website is very confusing and difficult to navigate. The text is tiny, and formatted in a way that makes it difficult to follow.

» The design itself feels outdated, and there's no clear direction for jobseekers. While it seems like there's a lot of information to be found, it feels scattered and the intended user isn't clearly defined

» It took me a while to find the part of the site specifically for jobseekers, and the section itself has many of the same issues as the site overall, though it is paired down and the target audience is clear

» The jobseeker section doesn't seem to be designed for an intuitive user experience, rather, an information and resource cache that jobseekers are expected to wade through

2. **The website provided the following information: (check all that apply)**

- ■ Location of Centers
- ■ Hours of operation
- ■ Services available for jobseekers
- ■ Schedule of jobseeker activities/events
- ■ Contact information if assistance is needed
- ☐ Information on access for individuals with disabilities

Comments:

» While everything is available, it takes a long time to find anything specific just due to the sheer volume. Most needed items aren't highlighted or placed near the top, which would make them much easier to find and use

» In the same way as the NH Works site, NH Employment is not only lacking in information on access for individuals with disabilities, the site itself was not disability friendly. The type was small, not well organized for a screen reader, and most sections were written in a way that would be challenging to process for people with learning or cognitive disabilities.

3. **Services available online include: (check all that apply)**

- ■ Assessments for skills, interests and/or supportive services
- ■ Program eligibility information
- ■ Overview services available at NH Works Centers
- ☐ Eligible training provider information
- ■ Information on filing for unemployment compensation
- ■ Labor market information
- ■ Access to partner programs and services
- ☐ Resume preparation
- ■ Learning activities (tutorials, videos, etc.) to provide instruction on key topics (interviewing, job search skills, soft skills, etc.
- ■ Job search
- ■ Career exploration
- ■ Other services (list below)

Comments

» Like the previous section, these services are listed as available, but they're difficult to find among the long lists of hyperlinks and text

» It's also not clear what services are being provided by NH Employment Security and what's coming from a third party, I think partially because the site design isn't cohesive, so it's not always obvious when you end up on another site

4.   Overall, I had a satisfying experience   Disagree

Comments

» The site as a whole appears outdated and lacks cohesion, which doesn't reflect well on the quality of services New Hampshire has to offer jobseekers.
» While the services jobseekers are looking for can be found, it's time consuming and burdensome to do so, which would likely disincentivize jobseekers from taking the time to do so
» Third party services seem more heavily emphasized than NHES services, which wouldn't be a problem if it was clearer as to how services were tied to or how varying eligibility would work

NH Job Match System

1.   The website was easy to navigate   Agree

Comments:

» The website's design is simple and easy to navigate, if perhaps appearing a bit outdated

» Some links or services required an account, but you can't tell until you click on the link, which might result in someone leaving the site assuming everything is locked down without registering

» The actual system is less intuitive than the site as a whole, but it's navigable with some time. I can see it being a useful tool at a center with someone there to help the jobseeker, but it's difficult to navigate with no background knowledge of the systems it's relying on.

2.   The website provided the following information: (check all that apply)

■ Location of Centers

☐ Hours of operation

■ Services available for jobseekers

☐ Schedule of jobseeker activities/events

■ Contact information if assistance is needed

☐ Information on access for individuals with disabilities

Comments:

» Not all these services were on the site, but I assumed that is because the JobMatch site is specialized for the system and meant to be used in conjunction with the NH Works or NHES site. That being said, it doesn't seem to point the user back in that direction, so if that is the intention there's a gap there.

» Accessing technical assistance or help navigating the site didn't seem readily available, nor did the site direct the user towards additional information about how they could get said guidance

3.   Services available online include: (check all that apply)

■ Assessments for skills, interests and/or supportive services

☐ Program eligibility information

☐ Overview services available at NH Works Centers

☐ Eligible training provider information

☐ Information on filing for unemployment compensation

■ Labor market information

☐ Access to partner programs and services

■ Resume preparation

■ Learning activities (tutorials, videos, etc.) to provide instruction on key topics (interviewing, job search skills, soft skills, etc.

☐ Job search

☐ Career exploration

■ Other services (list below)

Comments:

» The services for skills assessments, labor market information, resume preparation, and tutorials/guides were mostly easy to find and use, though some things do require an account

» Other services that are available on the NH Works/NHES websites were largely not mentioned, and as mentioned above, the site doesn't point the user back in that direction to access additional services.

4.   Overall, I had a satisfying experience   Neutral

» The services provided here are useful and not overly burdensome to use, but navigating through the process can be confusing at times, and guidance or access to help would be beneficial to the site. While the main tools were reasonably intuitive to navigate, some of the more in-depth options were much less user-friendly and required some time to get used to

» The design is simple but straightforward and not distracting, though it did appear outdated, and several of the tools have modern alternatives with a better user interface and more powerful usability.

» The site could be improved by clearly connecting back to NH Works/ NHES where applicable, because those sites offer many of the services not available here.

New Hampshire Employer Secret Shopper Website Review

NH Works Website Review

1.   The website was easy to navigate   **Disagree**

Comments:

»   The site interface was bland and did not show levels of design sophistication.
»   The links didn't provide the user with descriptions to highlight services offered.
»   The structure and formatting of the link paths were inconsistent.

2.   The website provided the following information: (check all that apply)

■   Location of Centers

■   Hours of operation

■   Services available for jobseekers

■   Services available for Businesses

☐   Schedule of jobseeker activities/events

■   Contact information if assistance is needed

☐   Information on access for individuals with disabilities

Comments:

»   The website did not present the information in a user-friendly way.
»   The simple design of the site is a benefit, but many of the links lack descriptions.

3.   Services available online include: (check all that apply)

☐   Assessments for skills, interests and/or supportive services

☐   Program eligibility information

☐   Overview services available at NH Works Centers

■   Employee training information

■   Business HR and compliance information

■   Labor market information

■   Access to partner programs and services

■   Special assistance for small businesses and MBEs

■   Information on employee benefits

■   Employee layoff rapid response

■   Disability Services

■   Job posting information and tutorials

■   Other services (list below): Hiring incentives, Economic Development Information

Comments:

»   Many of the links under the Employer Services tab contained 403, 404, and other page loading errors.
»   The links did not provide relevant information describing the use of the service mentioned. Employers would need to know what they were looking for.

4.   Overall, I had a satisfying experience   Disagree

Comments:

» The New Hampshire Economy website, which many of the NHWorks links directed me to, was helpful and contained relevant information for businesses.
» The NHWorks website, while simple, had numerous broken links and the descriptions of the services could be improved. The website could benefit from a design upgrade.
» The website continually directs users to websites outside of NHWorks, which mystifies who is the official service provider.

NH Employment Security

1.   The website was easy to navigate   Disagree

Comments:

» The website was not modern.
» There was abundant, relevant information with descriptions of the services.
» The search feature of the website was not functional.
» The font was small and could be difficult for individuals with vision impairments.

2.   The website provided the following information: (check all that apply)

- ■ Location of Centers
- ■ Hours of operation
- ■ Services available for jobseekers
- ■ Services available for businesses
- ☐ Schedule of jobseeker activities/events
- ■ Schedule of business activities/events
- ■ Contact information if assistance is needed
- ☐ Information on access for individuals with disabilities

Comments:

» The website contained relevant information, but it lacked structure and user design.
» The website may have contained information on access for individuals with disabilities; however, it was missed by the secret shopper and could not be found through the search feature.

3. **Services available online include: (check all that apply)**

■ Information on funds and incentives available to support business talent needs

■ Program eligibility information

☐ Overview services available at NH Works Centers

■ Business HR and compliance information

■ Information on filing for unemployment compensation

■ Labor market information

☐ Access to partner programs and services

☐ Special assistance for small businesses and MBEs

■ Information on employee benefits

☐ Employee layoff rapid response

■ Job posting information and tutorials

■ Other services (list below): Filing a Trade Act Petition, Foreign Labor Certification Forms

Comments

» The search tool was not functional to search for information on NH Works Center services overview, access to partner programs and services, special assistance for small businesses, or employee layoff rapid response.

» The web page was crowded and lacked user design. But it contained relevant information.

4. **Overall, I had a satisfying experience**   Neutral

Comments

» Overall, the NH Employment Security website had ample resources, but they were difficult to sift through. The website would benefit from a user design vetted layout.

» The website needs to make information and support for users with disabilities more accessible.

NH Job Match System

1. The website was easy to navigate   **Neutral**

Comments:

» The website has clear information presented in a semi-modern format. There is room for improvement, but the use of the website is intuitive.

2. The website provided the following information: (check all that apply)

- ☐ Location of Centers
- ☐ Hours of operation
- ■ Services available for jobseekers
- ■ Services available for businesses
- ☐ Schedule of jobseeker activities/events
- ☐ Schedule of business activities/events
- ■ Contact information if assistance is needed
- ☐ Information on access for individuals with disabilities

Comments:

» There was no information on the locations of NH Works Centers or support for individuals with disabilities.

3. Services available online include: (check all that apply)

- ☐ Information on funds and incentives available to support business talent needs
- ☐ Program eligibility information
- ☐ Overview services available at NH Works Centers
- ■ Employee training information
- ☐ Information on filing for unemployment compensation
- ■ Labor market information
- ■ Access to partner programs and services
- ☐ Special assistance for small businesses and MBEs
- ☐ Information on employee benefits
- ☐ Employee layoff rapid response
- ■ Job posting information and tutorials
- ■ Other services (list below): Filing a Trade Act Petition, Foreign Labor Certification Forms

Comments:

» The website contained relevant information for a job search engine.

4. Overall, I had a satisfying experience   **Neutral**

Comments:

» The website contained basic information relevant to support employers including labor market information, recruitment services, educational services/training provider information, and help information. Nothing seemed especially helpful.

For program funding details in compliance with the Stevens Amendment, please visit
https://www.nheconomy.com/office-of-workforce-opportunity/about-us/transparency

Appendix B – Return to Community Strategic Partner Engagement Study

Return to Community Strategic Partner Engagement Study

New Hampshire

Department of Business and Economic Affairs, Office of Workforce Opportunity

Public Consulting Group

April 2023

PUBLIC
CONSULTING GROUP

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY

A. SCOPE OF WORK

Public Consulting Group (PCG) was contracted by the New Hampshire Department of Business and Economic Affairs, Office of Workforce Opportunity (OWO) to complete a Return to Community Strategic Partner Engagement and Study. To complete this work, PCG engaged with several stakeholders and conducted a feasibility study to determine what employment barriers exist to successful re-entry after incarceration and involvement with the criminal justice system, what programs and services exist in New Hampshire to aid re-entry after incarceration with an emphasis on employment, and what programs and services are needed to fill geographical and programmatic gaps in re-entry services. OWO and the New Hampshire State Workforce Innovation Board (SWIB) will use the results and recommendations included in this report to determine whether a Return to Community program is needed. If this program is deemed necessary, information from this study will be used to design a program that addresses the workforce needs of this population.

B. METHODOLOGY

PCG developed an Evaluation Plan incorporating a mixed-methods study design, collecting both qualitative and quantitative data, to answer identified research questions. Information was gathered during key stakeholder interviews and focus groups and two surveys.

This Evaluation Plan identified the following:

- **Data Type:** Qualitative data, research data, quantitative data.
- **Stakeholder Type:** Employers, individuals who were formerly incarcerated or justice involved, parole/probation officers, service providers, workforce agencies, workforce associations.
- **Research Questions:** Examples include "What types of employers hire individuals who were formerly incarcerated, or justice involved?", "What barriers to employment have been encountered?", "What services are provided?", "What services are most frequently needed?"
- **Analyses:** Identification of themes based on response frequency, comparison of responses between stakeholder groups.
- **Findings and Recommendations:** Barriers/challenges, best practices, contextual/situational circumstances.

The full Evaluation Plan is located in *Appendix A: Evaluation Plan*.

C. FINDINGS AND RECOMMENDATIONS

PCG presents the following findings and associated priority and supporting recommendations for the development of a Return to Community Program. Priority recommendations include those recommendations that are most critical and foundational to effectively develop the Return to Community program.

1. Priority Recommendations

Finding #1:

While there are strong commitments and programs dedicated to successful reentry and workforce development across the state, information sharing and innovation across organizations and sectors is limited. New Hampshire does not have a state-wide coordinated strategy to provide the services and supports needed for formerly incarcerated individuals or individuals involved in the justice system to successfully re-enter into the community and obtain gainful employment. Building partnerships that include stakeholders from workforce development, state and local corrections, education, occupational

licensing, and community-based providers is critical to support a coordinated Return to Community program.

The system also lacks a centralized approach to the collection and dissemination of data related to formerly incarcerated individuals or individuals involved in the justice system. Stakeholders reported that information is not easily shared or disseminated across domains and sectors that are working with this population.

Priority Recommendation #1:

Create a facilitated re-entry/workforce advisory committee with a clear project charter and implementation team to drive decision making and change management.

- **Liaise with other correction system committees, such as the Governor's Advisory Commission on Mental Illness and Corrections System and Governor's Commission on Juvenile Justice Reform.**
- **Develop metrics and collect data across all applicable sectors/domains to effectively track outputs and outcomes.**
- **Utilize data to apply for additional federal or foundation grant funding to support reentry and workforce development.**

Finding #2:

The New Hampshire Department of Corrections (NH DOC) does not have adequate technology (e.g., hardware, software, internet capabilities) to effectively support individuals' virtual learning opportunities.

Priority Recommendation #2:

Equip NH DOC facilities with the technology needed to enable virtual learning and other virtual job readiness skills. Consider procuring a virtual employment readiness tool (VERA) in the NH DOC facilities to prepare individuals for their return to the community and facilitate referrals and warm handoffs to the NH Works American Job Centers.

Finding #3:

The NH DOC utilizes the Ohio Risk Assessment System (ORAS) risk and needs assessment tool at various points in the system – including the Reentry Tool and Community Supervision Tool – however the tool does not provide enough information needed to help with employment and service matching. Research shows that addressing the risk/need/responsivity (RNR) principles through valid assessment tools can help workforce service providers prioritize resources, address job readiness, and help with service matching.

Priority Recommendation #3:

Research and adopt additional occupational skills assessment and job-readiness assessment to better match individuals with employment opportunities upon release. This information should be included as part of the current re-entry planning process by NH DOC case management staff.

Finding #4:

Businesses, community partners and other stakeholders are not aware of best practices and other programs they can utilize to help with successful return to community employment.

Priority Recommendation #4:

Conduct an awareness campaign among human resources and workforce development professionals across the state about best practices – from application to interview – to position businesses as a "Second Chance" employer with current and future employees. The campaign should also further advertise other programs like the Work Opportunity Tax Credit, Federal Bonding Program, WorkInvestNH and the Job Training fund for businesses.

Finding #5:

Transportation to and from employment was the most common barrier discussed in all stakeholder engagement sessions and identified in the surveys. The lack of public transportation, specifically in rural areas of the state, makes it difficult for individuals to maintain employment. Connecting individuals from more rural areas to jobs located in more urban areas (e.g., Manchester, Concord, etc.) is difficult without transportation assistance. Halfway houses have limited capacity to provide transportation and Medicaid transportation is unreliable.

Priority Recommendation #5:

Consider funding for transportation to and from agencies and partners – probation/parole, workforce centers, halfway houses, community-based organizations, peer mentors – to assist with transportation issues.

2. Supporting Recommendations

Finding #6:

The service provider approval process in correctional facilities is cumbersome.

Supporting Recommendation #6:

Review policies and develop a simplified approval pathway so that additional stakeholders can provide services within facilities.

Finding #7:

Communication and partnership between local probation/parole offices and workforce centers varies across the state.

Supporting Recommendation #7:

Embed local probation and parole officers into American Job Centers to provide additional coordination and support to provide for a one-stop-shop for justice-involved individuals. Create additional opportunities for probation and parole officers and NH Works staff to work together, share data, and coordinate efforts.

Finding #8:

Access to adult educational opportunities is not consistent across districts and counties.

Supporting Recommendation #8:

Establish a consistent strategy for individuals to access adult educational opportunities across districts. Credits should follow individuals when transferred between carceral settings to allow for seamless continuation of education classes.

Finding #9:

Peer mentorship programs are underfunded and underutilized in helping individuals successfully re-enter their communities.

Supporting Recommendation #9:

Consider funding for people with lived experience employed as coaches, mentors, and peer support counselors, and avenues for individuals to access mentors prior to release. These individuals may also help with transportation related issues if they are able to secure funding for transportation.

Finding #10:

Employers are uncertain whether justice-involved individuals can be trusted and/or are hesitant to hire without additional information.

Supporting Recommendation #10:

Issue 'employability certificates' with clear eligibility criteria to help remove the stigma associated with hiring individuals with criminal records and help mitigate risk for employers.

Finding #11:

Individuals returning to the community lack options for long-term career development.

Supporting Recommendation #11:

Consider developing a workforce program to temporarily hire/intern individuals who are re-entering into state and/or county jobs (e.g., facilities, public works, etc.) to provide opportunity to demonstrate dependability and reliability while continuing to learn skills. Offering a state-subsidized employment program that also includes career exploration and development will enable individuals to secure immediate employment that is a condition of parole, while also making connections to employers that might have longer pathways to employment.

Finding #12:

Employers are willing to hire formerly incarcerated or justice-involved individuals; however, it is difficult for employers to connect with these individuals, and there can be administrative barriers to overcome, such as obtaining needed employment documents (e.g., identification, birth certificate) and approvals (e.g., waiver process for convictions).

Supporting Recommendation #12:

Create a centralized job posting board where open positions can be advertised and filled by individuals who are re-entering the community. Ensure that individuals have the support in accessing the necessary documents for employment prior to release.

II. METHODOLOGY

PCG developed an Evaluation Plan incorporating a mixed-methods study design, collecting both qualitative and quantitative data, to answer identified research questions. Information was gathered during key stakeholder interviews and focus groups and two surveys.

This Evaluation Plan identified the following:

- **Data Type:** Qualitative data, research data, quantitative data
- **Stakeholder Type:** Employers, individuals who were formerly incarcerated or justice involved, parole/probation officers, service providers, workforce agencies, workforce associations.
- **Research Questions:** Examples include "What types of employers hire individuals who were formerly incarcerated, or justice involved?", "What barriers to employment have been encountered?", "What services are provided?", "What services are most frequently needed?"
- **Analyses:** Identification of themes based on response frequency, comparison of responses between stakeholder groups
- **Findings and Recommendations:** Barriers/Challenges, best practices, contextual/situational circumstances

The full Evaluation Plan is located in *Appendix A: Evaluation Plan.*

A. STAKEHOLDER ENGAGEMENT

PCG conducted interviews and focus groups with many key stakeholders throughout New Hampshire. While our Evaluation Plan included additional focus groups, our team was flexible with stakeholders' schedules which resulted in many more individual interviews than expected. The table below identifies the organizations and agencies from which there was representation across interviews, focus groups, and those associations that were contacted to distribute the business survey.

TABLE 1: INTERVIEWS, FOCUS GROUPS, AND SURVEY RESPONDENTS

Interviews	
New Hampshire State Agencies	
• NH Office of Workforce Opportunity (OWO) • NH Department of Corrections (NH DOC) • NH Commission for Human Rights	• NH Employment Security (NHES) • NH Department of Education (DOE) • NH Governor's Recovery Friendly Workplace
Employers and Partners	
• Southern New Hampshire University • Dartmouth Health • Ballantine Partners • Catholic Charities • MY TURN • Dimas Home	• B.O.S.S. Initiative • NH Community College • NH American Civil Liberties Union (ACLU) • NH Council of Churches • Faith-based community members
Focus Groups	
• Chief Probation and Parole Officers • People with Lived Experience • American Job Center – NH Works	

Business Survey	
• NH Chambers of Commerce • NH Lodging Association • NH Technology Alliance • NH Associated Builders and Contractors • NH Home Builders Association	• NH Healthcare Association • NH Grocers Association • NH Motor Transport Association • NH Retail Association • NH Timberland Owners Association

B. DATA AND MATERIALS REVIEW

Through our Evaluation Plan, PCG identified the type of quantitative data to review and analyze specific to New Hampshire. The majority of the information obtained came from the NH DOC website through publicly available reports. Other information related to employment was obtained from NHES. In addition to state information, PCG also conducted a brief literature review and analysis of national models that have shown promise across the country. The following data was reviewed and analyzed for PCG to obtain a comprehensive understanding of current reentry and employment landscape and the current array of services and opportunities provided to individuals returning to the community.

- **NH Department of Corrections**
  - o Data Elements of Interest, Annual Report, State Fiscal Year 2019
  - o Data Elements of Interest, Annual Report, State Fiscal Year 2020
  - o Data Elements of Interest, Annual Report, State Fiscal Year 2021
- **NH Employment Security**
  - o Occupational Employment and Wage Statistics, 2022
  - o Economic and Labor Market Information Bureau, GraniteStats Labor Market Information
- **National Models and Best Practices**
  - o National Governor's Association
  - o National Association of Counties
  - o National Reentry Resource Center
  - o National Institute of Corrections
  - o U.S. Department of Justice, Office of Justice Programs

III. STRATEGIC PARTNER ENGAGEMENT

A. CURRENT LANDSCAPE

1. Corrections and Supervision

The average population incarcerated in New Hampshire state prisons over the last three state fiscal years (SFY) (2019-2021) was 2,185. When individuals who were maintained outside the state are included, the average total population was 2,398. A total of 2,130 people were incarcerated on June 30, 2021, the most recent year for which data was available.

TABLE 2: NH DOC AVERAGE POPULATION

Total Population on June 30	SFY 2019	SFY 2020	SFY 2021	Average Population
Total NH in Facility*	2,428	2,189	1,937	2,185
Total NH Out of Facility**	216	230	193	213
Total Population	2,644	2,419	2,130	2,398

* Total NH sentenced residents, residents housed for other jurisdictions, and residents of SPU who are on involuntary committal.
** Total NH sentenced residents serving time in other jurisdictions.

In calendar year 2020, 1,215 individuals were released from NH DOC. Since 2020, the number of releases has dropped to 1,071 in 2021 to 1,031 in 2022. The majority of new admissions were for parole or probation violations and the majority of individuals were released to parole.
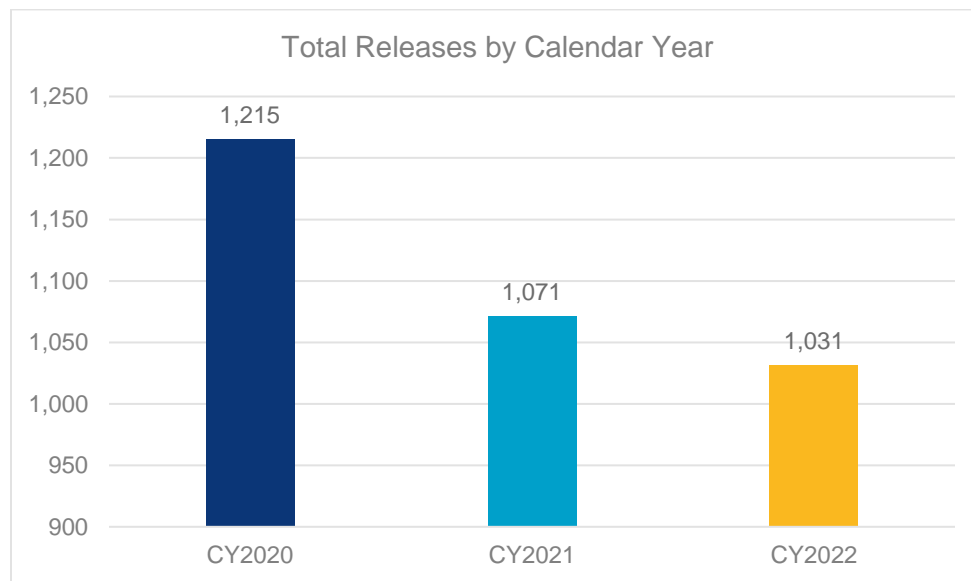
FIGURE 1: NH DOC RELEASES

According to Figures 2-4 below, the overwhelming majority of individuals released from NH DOC are white men ages 30-39. Releases for both men and women have declined from 2020-2022.
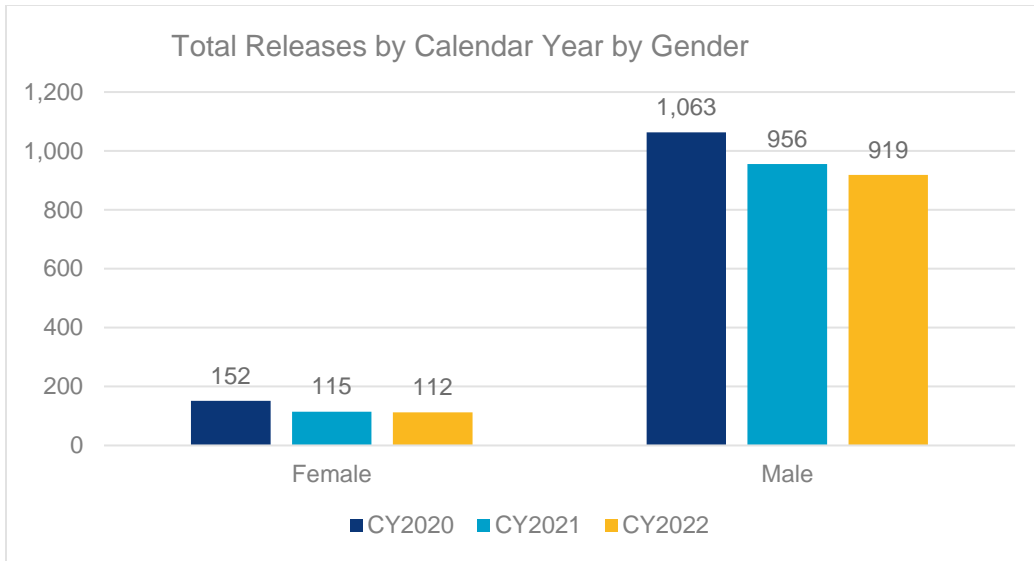
FIGURE 2: NH DOC RELEASES BY GENDER
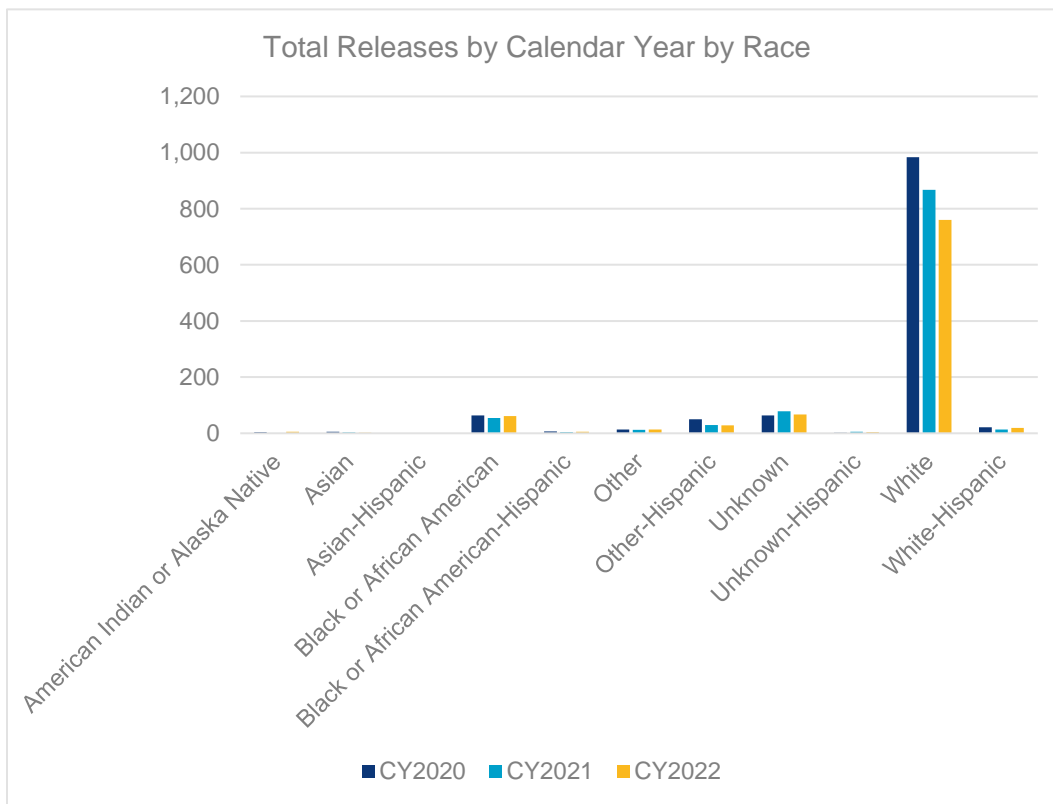
FIGURE 3: NH DOC RELEASES BY RACE
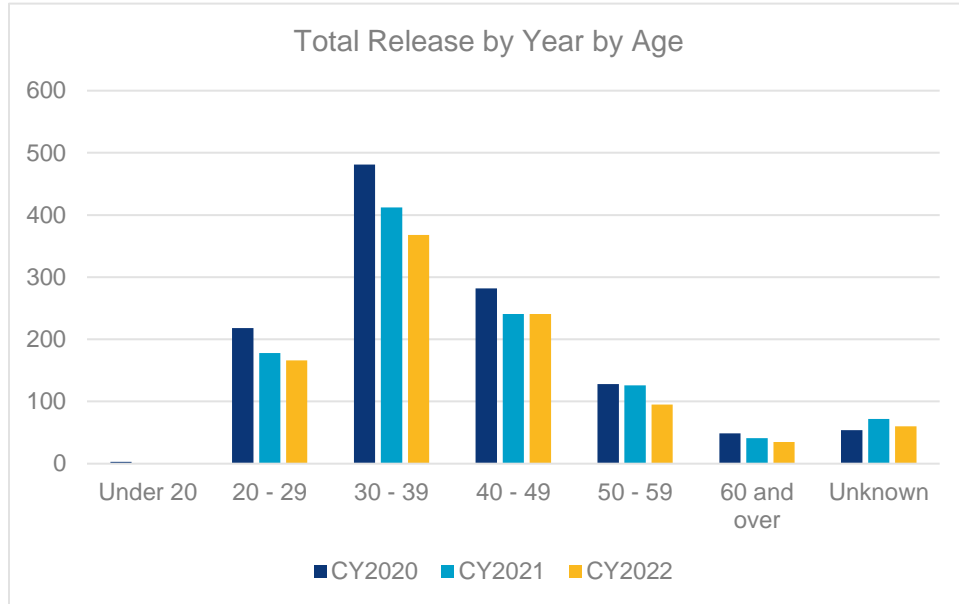
FIGURE 4: NH DOC RELEASES BY AGE

A substantial portion, 61 percent, of individuals incarcerated in New Hampshire state prisons were convicted of crimes against persons.[1] Another 32 percent of individuals incarcerated in New Hampshire were convicted of crimes against property[2] or for a drug/alcohol-related offense.
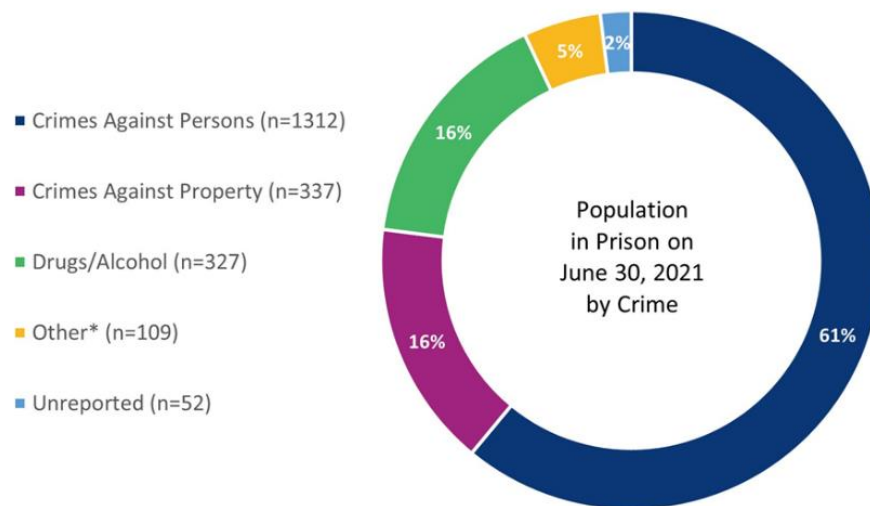
FIGURE 5: NH DOC POPULATION BY CRIME TYPE

Similar to the population incarcerated in New Hampshire, the number of individuals being supervised in the community decreased between state fiscal years 2019-2021. An average of 5,520 individuals were on supervision in New Hampshire during that time period.

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[1] Per the FBI's Uniform Crime Reporting Program, crimes against persons include those crimes whose victims are always individuals (e.g., murder, manslaughter, rape, and aggravated assault).
[2] Per the FBI's Uniform Crime Reporting Program, the object of crimes against property is to obtain money, property or some other benefit (e.g., robbery, bribery, and burglary).

Most individuals on supervision, 69 percent on average (avg n=3,796), reported to parole or probation officers in Hillsborough, Merrimack, Rockingham, and Strafford counties; however, people are on supervision in every county. Almost three-quarters (74 percent) of New Hampshire's population lives in these four counties.
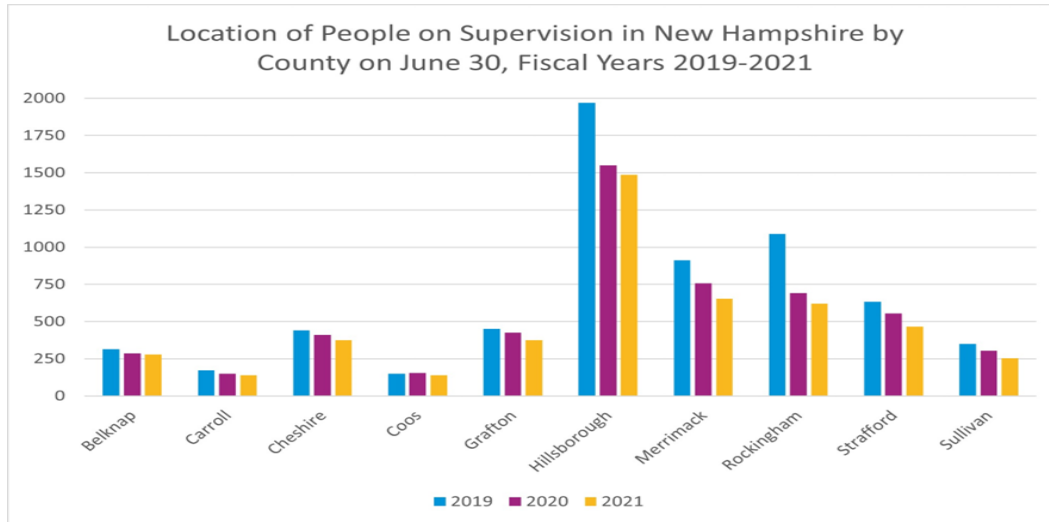
FIGURE 6: COUNTY OF INDIVIDUALS ON SUPERVISION

2. Services Provided in New Hampshire Correctional Facilities

The NH DOC provides a variety of services to individuals who are incarcerated. Chief among these are services to address physical and mental health issues, including substance use treatment. The global coronavirus pandemic that began in state fiscal year 2019 made it challenging for the NH DOC to provide services and data was only available for the education and workforce training programs the NH DOC provides.

The minimal level of education for most employment positions is completing secondary education with a high school diploma or general equivalency diploma. The Corrections Special School District (CSSD) partners with Granite State High School of the New Hampshire Department of Education to provide programs for individuals who are incarcerated to complete their high school diploma or to study for and pass the HiSET exam to earn a high school equivalency diploma. During SFY2019 - 2021, 98 inmates completed their secondary education.
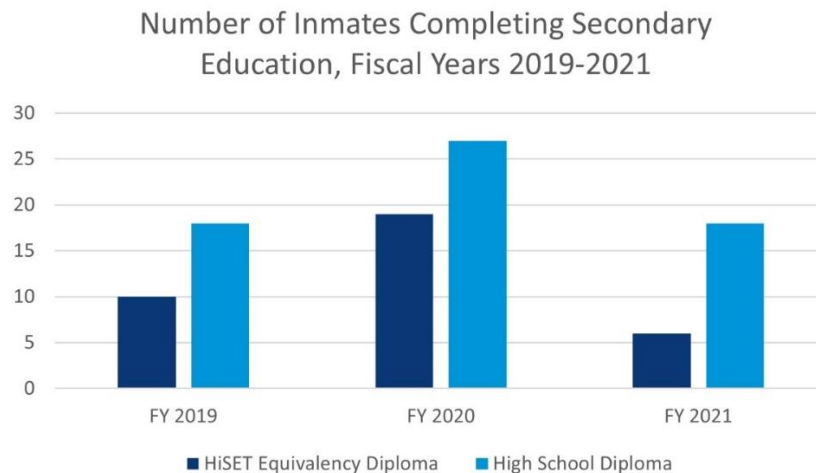
FIGURE 7: NH DOC INMATES COMPLETING SECONDARY EDUCATION

The CSSD also partners with the Career and Technical Education Center (CTEC) to provide vocational education. Six certificate programs are offered – automotive mechanics, building trades, business education, computer education, culinary arts, and introduction to the workforce – and are aligned with justice-friendly industries.

CTE Certificates Earned FY 2019-2021

- Automotive Mechanics (n=58)
- Building Trades (n=11)
- Business Education (n=627)
- Computer Education (n=93)
- Culinary Arts (n=14)
- Intro to the Workforce (n=45)
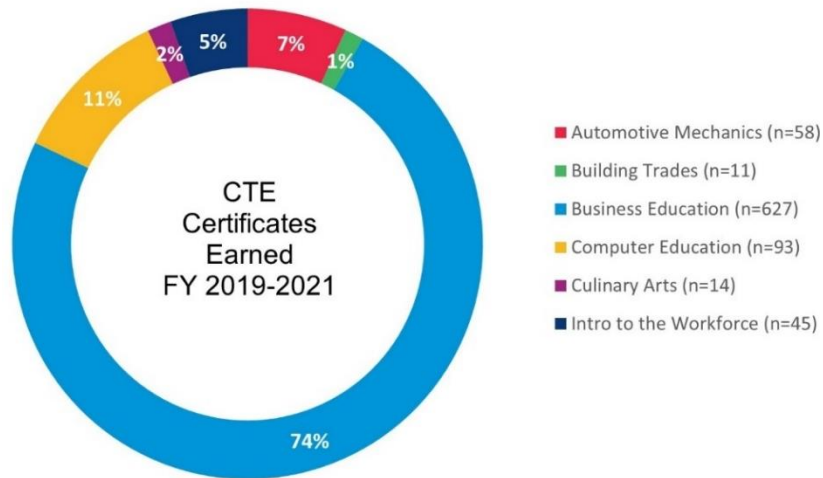
FIGURE 8: PERCENT OF CERTIFICATES EARNED FROM CTEC

The automotive mechanics and building trades certificate programs are not provided at the Correctional Facility for Women and the culinary arts certificate program is unavailable at the Northern Correctional Facility. All six certificate programs are available at the State Prison for Men.

Each certificate program takes one to two years to complete. Program participants receive hands-on skill training along with basic industry knowledge that prepares them for an entry-level position when they re-enter their communities. More than three-quarters (76 percent) of the 689 certificates earned at the New Hampshire State Prison for Men in SFY2021 were in the Business Education Program.

Vocational Certificates Earned by Inmates of the New Hampshire State Prison for Men, Fiscal Year 2021

- Business Education (n=527)
- Computer Education (n=69)
- Automotive Mechanics (n=57)
- Intro to the Workforce (n=20)
- Building Trades (n=11)
- Culinary Arts (n=5)
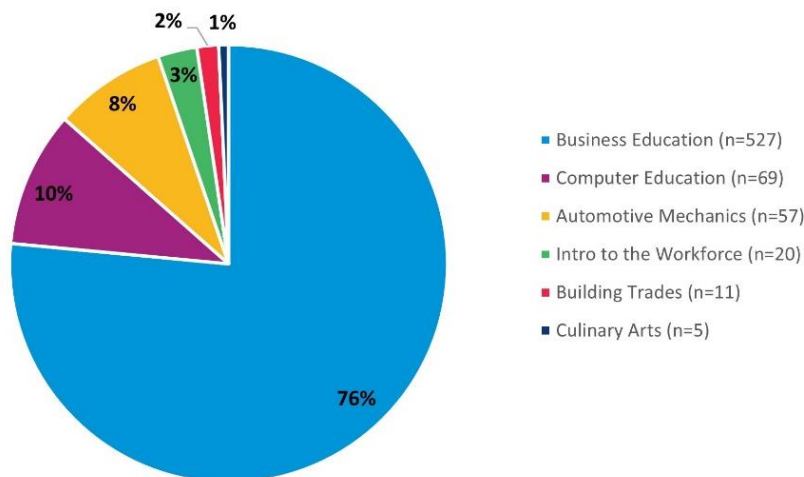
FIGURE 9: PERCENT OF VOCATIONAL CERTIFICATES EARNED BY NH DOC INMATES

The NH DOC has two apprenticeship programs available to individuals who are incarcerated in cabinet making and furniture reupholstery. There is also a partially functional Commercial Driver License (CDL) Program that is in high demand, Individuals who are incarcerated are not provided actual driving but are prepared to pass the CDL exam.

The Rehabilitative Services Division (RSD) of the NH DOC, which operates three transitional housing units in Concord and Manchester, has a Cosmetology and Aesthetics Program. This program was established partially with Perkins funds. The RSD worked with the Office of Professional Licensure and testified to the NH State Legislature to remove barriers, so the Cosmetology and Aesthetics Program leads to licensure.

B. SURVEY RESULTS

1. Justice-Friendly Industries and Businesses

There were 23 respondents to our online survey, representing employers in seven industries: aviation, construction/trades, government, healthcare/social services, hospitality, manufacturing, and staffing. The majority (74 percent) of employers that responded to the survey said their business wants to be known as a justice-friendly business.
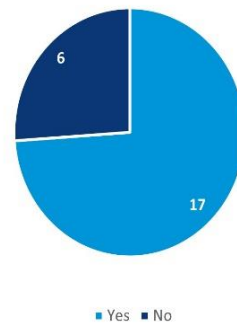
FIGURE 10: SURVEY RESPONDENT INDUSTRIES   FIGURE 11: JUSTICE-FRIENDLY BUSINESSES

The employers surveyed have a slight propensity to hire individuals who are or were justice-involved over those formerly incarcerated. Future hiring is also slightly better than past or present hiring. The employers willing to hire people who were formerly incarcerated or who are/were justice-involved represent more than 1,000 jobs, primarily in Grafton, Rockingham, and Strafford counties.

TABLE 3: BUSINESSES THAT WILL HIRE PEOPLE WHO WERE FORMERLY INCARCERATED

Will Hire People Who Were Formerly Incarcerated			
County	Industry	Employees	Work Sites in Other Counties
Belknap	Healthcare/Social Services	0-19	
Grafton	Healthcare/Social Services	100-249	
Grafton	Manufacturing	500-999	
Grafton	Manufacturing	100-249	
Grafton	Manufacturing	20-99	
Hillsborough	Construction/Trades	20-99	

Hillsborough	Healthcare/Social Services	0-19	
Merrimack	Government	500-999	
Rockingham	Construction/Trades	100-249	Carroll, Merrimack
Rockingham	Hospitality	250-499	
Rockingham	Hospitality	20-99	
Rockingham	Manufacturing	0-19	
Rockingham	Staffing	20-99	Cheshire, Grafton, Hillsborough, Merrimack, Strafford, Sullivan
Strafford	Healthcare/Social Services	250-499	Rockingham
Strafford	Healthcare/Social Services	0-19	Rockingham
Strafford	Hospitality	20-99	
Sullivan	Healthcare/Social Services	0-19	

TABLE 4: BUSINESSES THAT WILL HIRE PEOPLE WHO ARE/WERE JUSTICE-INVOLVED

Will Hire People Who Are/Were Justice-Involved			
County	Industry	Employees	Work Sites in Other Counties
Belknap	Healthcare/Social Services	0-19	
Grafton	Healthcare/Social Services	100-249	
Grafton	Manufacturing	500-999	
Grafton	Manufacturing	100-249	
Grafton	Manufacturing	20-99	
Hillsborough	Construction/Trades	20-99	
Hillsborough	Healthcare/Social Services	0-19	
Merrimack	Government	500-999	
Rockingham	Construction/Trades	100-249	Carroll, Merrimack
Rockingham	Healthcare/Social Services	0-19	
Rockingham	Hospitality	250-499	
Rockingham	Hospitality	20-99	
Rockingham	Manufacturing	0-19	
Rockingham	Staffing	20-99	Cheshire, Grafton, Hillsborough, Merrimack, Strafford, Sullivan
Strafford	Construction/Trades	0-19	
Strafford	Healthcare/Social Services	250-499	Rockingham

Strafford	Healthcare/Social Services	0-19	Rockingham
Strafford	Hospitality	20-99	
Sullivan	Healthcare/Social Services	0-19	

Employers willing to hire individuals who were formerly incarcerated or who are/were justice-involved said they had an aggregated 97 to 250 entry level open positions, 32-160 mid-career/skilled open positions, and 8-30 professional/highly skilled open positions in the past year. The variety of positions employers in each of the justice-friendly industries said they had available spans the range of career experience, knowledge, and skills.

TABLE 5: TYPES OF AVAILABLE POSITIONS BY INDUSTRY

Industry	Available Positions
Construction / Trades	laborer, coating, insulation installer, foundation waterproofing applicator, fireplace installer, gutter installer, driver
Healthcare / Social Services	director, manager, peer support worker, youth support worker
Hospitality	manager, cook, expeditor
Manufacturing	entry level production technician
Other: Government	entry level – especially facilities
Other: Staffing Agency	multiple positions

PCG reviewed the licensing requirements for all positions regulated by NH Office of Professional Licensure and Certification (OPLC) to determine which positions require disclosure of criminal records and background checks. A full list of licensed positions and requirements can be found in *Appendix C: Licensing Requirements.*

2. Barriers to Employment

Certain types of convictions are more likely to affect hiring decisions. While 27 percent of business survey respondents said their organization would hire an individual regardless of criminal history or make hiring decisions on a case-by-case basis, 73 percent said they would not hire someone convicted of a crime against persons.

Employers Reporting Being Unable to Hire Certain Conviction Types (multiple choices possible, n = 19)
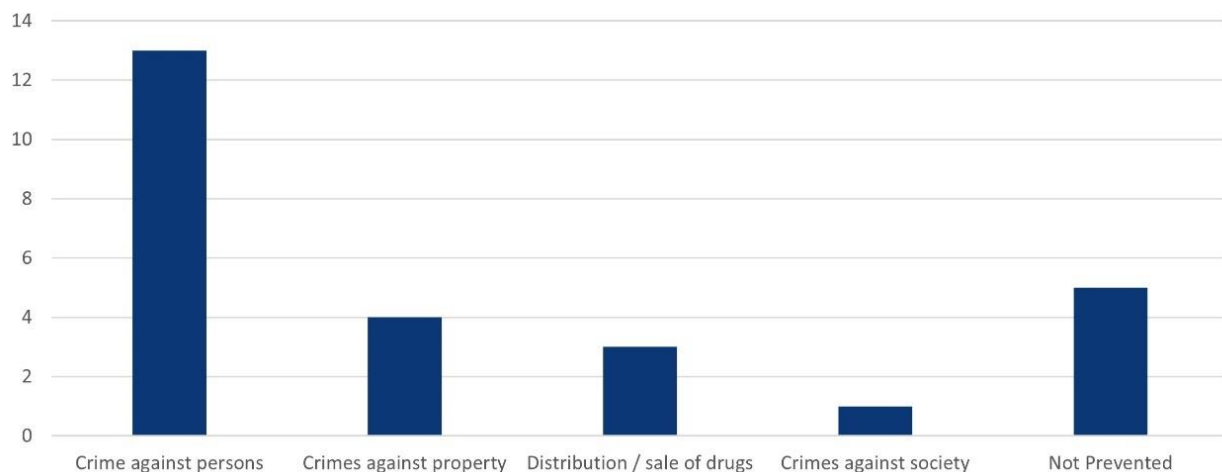
FIGURE 12: CONVICTION TYPE BARRIERS

Survey respondents from the aviation industry said that federal requirements prevent them from hiring individuals who were formerly incarcerated or who are/were justice-involved; however, youth involved in the juvenile justice system may be eligible for an aviation mechanic apprenticeship if their conviction is expunged.

Employers reported lack of transportation and/or housing were the most common barriers to employment, noting that without their own transportation, people re-entering the workforce cannot work second and third shifts - which are the shifts with openings. People with lived experience echoed the barriers employers identified and added that a lack of references was a barrier. In some cases, individuals being released from incarceration have been away from the workforce for an extended period or have never had a job that could provide a reference.

Barriers to Employment Identified by People with Lived Experience and Employers
multiple choices possible, n = 28

FIGURE 13: BARRIERS TO EMPLOYMENT

The majority (21 of 23) of businesses responding to the survey said their organization provides one or more services or supports to address barriers to employment. The most frequently provided services or supports were training to address a lack of knowledge or experience (and one business helps employees qualify for licensing), flexible time/schedule arrangements so employees can meet with their parole or probation officer as well as attend counseling or other services, and transportation to/from work sites to help address the transportation barrier.

Other services and supports several employers said they provide included assistance in obtaining employment documents (e.g., identification and social security cards), information about local housing, and connections to services through an employee assistance program (EAP). While only one person responding to the survey said their business provided peer coaching, this business also provides peer coaching to individuals re-entering their communities who are employed elsewhere.

Services Employers Provide to Overcome Employment Barriers
multiple choices possible, n = 21
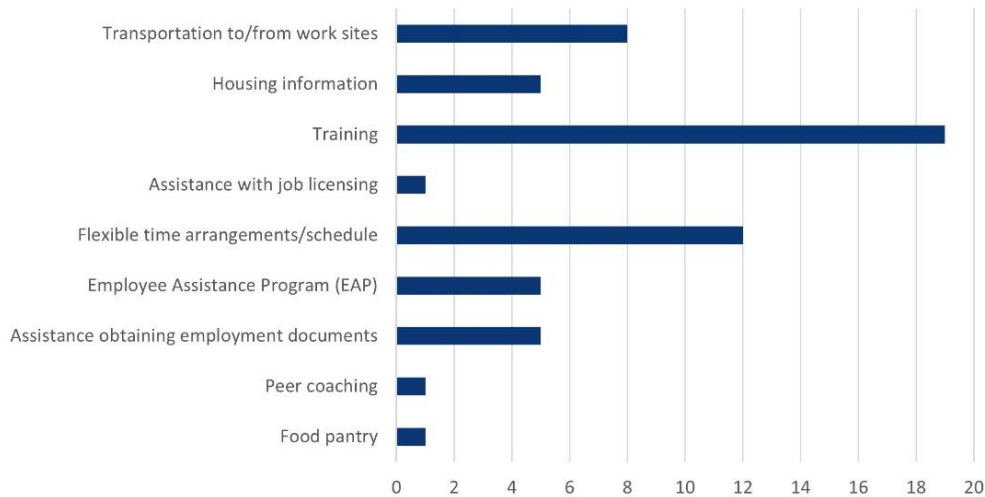
FIGURE 14: SERVICES TO OVERCOME BARRIERS

One barrier identified by employers responding to the survey was an inability to find individuals who were formerly incarcerated or who are/were justice-involved to hire. More than half (57 percent) of the 23 employers who responded to the survey were not aware of the services provided to employers and job seekers provided by NH Works.

Are employers aware of services for employers and job seekers available through New Hampshire Works ?
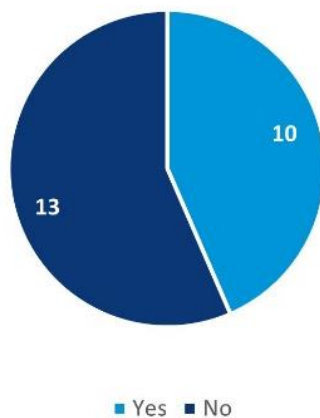
FIGURE 15: EMPLOYER AWARENESS OF NH WORKS

Almost half (43 percent) of the employers said they had hired someone who was formerly incarcerated or was/had been justice-involved as a referral from a community program. Almost a third (30 percent) said their business received referrals from a current or previous employee. Four employers had hired someone re-entering on a referral from NH Works.

Employers that have hired People who are/were Incarcerated or Justice-Involved Reported Referrals from Multiple Sources
(multiple choices possible, n = 23)
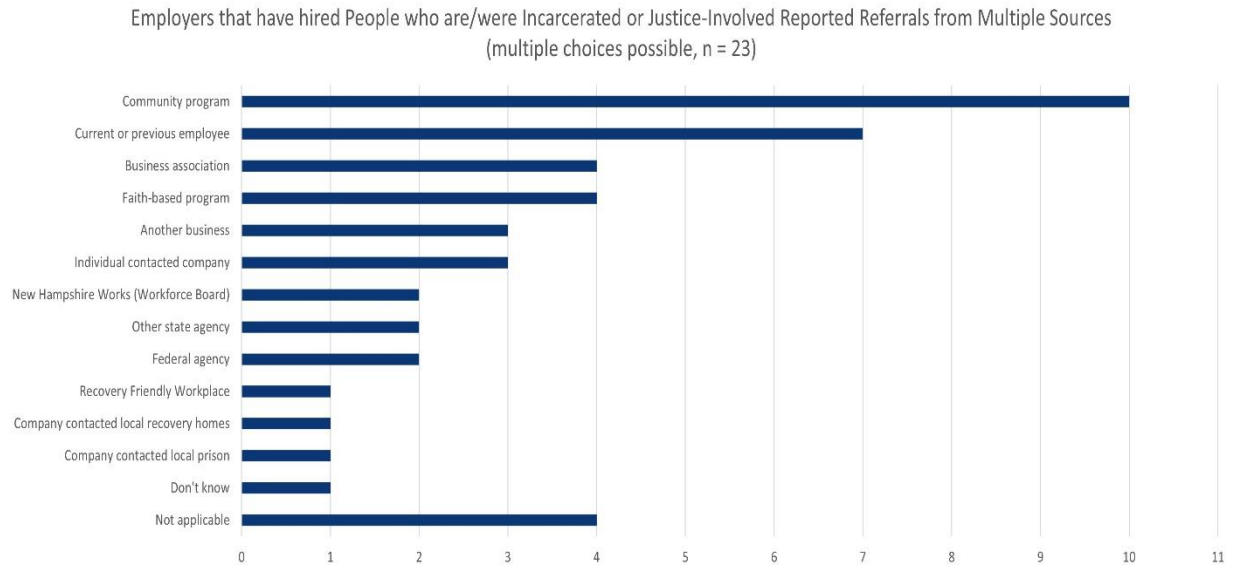
FIGURE 16: REFERRALS

Employers responding to the survey identified the following five priorities to overcome challenges they face when hiring individuals who were formerly incarcerated or are/were justice-involved.

1. Streamline paperwork so it is simple and straightforward for employers working with workforce programs.
2. Create a central job posting board so employers can connect with potential employees, preferably pre-release.
3. Improve communication with NH DOC staff so employers understand what is needed from them and to help employers determine who might be a good fit for their business before the individual is released.
4. Widely advertise the federal bonding program and other incentive programs so more employers can feel comfortable hiring people who were formerly incarcerated or are/were justice-involved.
5. Eliminate incarceration for minor parole/probation violations of the sort that would not result in incarceration for people who are not justice-involved to reduce business disruption and sunk training costs.

C. FOCUS GROUP AND INTERVIEW SUMMARY

PCG conducted a combined 30 interviews and focus groups with individuals who are connected to the issues of workforce development, re-entry services, and education and training in the state of New Hampshire. Described below are four themes that resonated across all the feedback gathered from the conversations held between January and April 2023.

1. Correctional Education

Strengths

- CTEC is a part of multiple advisory boards in the community which has helped to create community connections to employment.
- NH DOC rehabilitation services connects with other state agencies such as the Department of Transportation to directly solve their employment needs.
- The Corrections Special School District (CSSD) partners with Granite State High School of the New Hampshire Department of Education to provide quality educational programs.

- NH DOC partners with the New Hampshire community college system to expand access to education and training. Given recent expanded access to Second Chance Pell, White Mountain Community College is supporting a cohort of 21 individuals in northern NH in business and liberal arts programming. NHTI is exploring implementing a similar model in Concord in the coming year.
- NH Community Colleges recently received a large grant to further integrate their registered apprenticeship programs. This is a multi-year opportunity for the DOC to coordinate with the community college system to build pipelines directly to employers who are poised to hire and train.
- NH DOC recognizes that verifiable credentials are an asset for individuals once they transition back into community and is actively exploring offering more credentials such as the OSHA-10 Certification Program.
- NH DOC leverages limited Perkins funding to defray costs associated with launching new programs, such as cosmetology. Additional offerings include automotive, carpentry and furniture reupholstery.
- In addition to academic and vocational development, the NH DOC is striving to support individuals with their social and emotional needs through efforts such as the Family Connection Center and social skill classes that are available to everyone.

Areas for Improvement

- Some of the individuals with lived experience valued the ability to learn and use their periods of incarceration to better themselves; however, they struggled with a number of things including the limited opportunities to connect with others for support in their studies whether that be virtually to instructors, when facilities go into lockdown, or if they are transferred and lose access courses and credits that were started in a different facility. Individuals also expressed a desire to bring educational materials into their cells.
- In general, individuals interviewed – employees and those incarcerated – acknowledged that connectivity to the Internet was a barrier, both on the inside and on the outside while at halfway houses. People who had lived through the experience recognized that some of the rules are made to prevent sexual offenders from re-offending but is at a huge cost to others who are seeking to make progress in their lives.
- There is also a perception that it is not right that individuals involved with the justice system are eligible for discounted or free education and the people who are working in the same environment are not offered the same opportunities, putting those individuals with justice involvement interests at odds with those who are supervising them.

2. Barriers to Successful Re-entry and Employment

Priority Systemic Barriers

People with lived experience, those supervising and supporting them all acknowledged that some systemic issues, that if addressed, would significantly alter individual's trajectories upon release.

- People's basic needs must be met immediately upon release – food insecurity, available housing, physical and mental health care. Medicaid eligibility should be turned on immediately following release. NHES, NH DOC, and NH DHHS should work together to ensure that health coverage is available to everyone at release.
- Employment documents, such as identification and birth certificates are difficult for many individuals to obtain prior to release. Halfway houses and other providers help to facilitate this process; however, it takes time to complete which impedes the employment process.
- There is a significant lack of public transportation or funding for transportation to allow individuals the opportunity to look for and maintain employment. Available jobs are not "close to home" which means many individuals must have a source of reliable transportation or have the financial means or support to move to more populous areas of the state. Public transportation is also unavailable at

times needed (e.g., 2nd/3rd shift). Medicaid transportation services are unreliable, and ride-share programs (e.g., Uber, Lyft) are expensive.

- The public sector across the board is struggling with workforce capacity; however, the loss of NH DOC's institutional probation and parole officer role was cited by many as an acute problem in the ecosystem of providers, internal and external to NH DOC.

Service Provision Barrier

- While it is understandable that upon release, individuals have multiple appointments that they are required to make (e.g., parole, probation, counseling, doctor, etc.), the number and range of locations that they must visit are impediments to employment. Coupled with the high stakes of risking services or reincarceration for missed appointments, individuals often must make difficult choices that might compromise employment.
- Fee external re-entry or workforce service providers are able to connect with people prior to release to begin planning and building trusting relationships for post-release success.

3. Communication and Connection

Strengths

- Across the state of New Hampshire there are pockets of innovation and success happening in various sectors – higher education, correctional education, recovery friendly workplaces, etc.
- Grassroots efforts among those who were formerly incarcerated to establish professional networks for each other as well as new nonprofits to provide transitional support from those who have walked the same path are promising models.
- Peer counselors and peer support workers help people re-entering to navigate life. Individuals more readily trust those who have firsthand experience of the challenges of being incarcerated and are able to provide emotional support with dignity, respect, and appreciation for the difficulty in making the transition.

Areas for Improvement

- People working in different agencies and community organizations are uncoordinated. As described above, there is a patchwork of handoffs among and between systems and key metrics to measure system performance have not been defined.
- Data that is collected is done so inconsistently and is not easily shared, not only with external service providers but also between NH DOC case managers and probation/parole officers in the community.
- People do not know what resources are available or which agency or organization they are to contact for a specific service. Information on justice-friendly employers and resource lists do exist in pockets but is not systematically available.

D. CURRENT ASSETS

There are many different programs and practices underway across the state that serve as current assets within the justice and workforce systems to help justice-involved individuals connect with jobs and employment services. Intentional coordination and communication of these assets across sectors will significantly help to establish a more formalized Return to Community Program.

1. State System

Most re-entry and workforce related programs offered across the state are administered by NH DOC, DES, and DOE. These programs offer many resources to support justice-involved individuals and employers.

- American Job Center - One Stop Shops
- Use of Federal Bonding Program

- Work Opportunity Tax Credits
- Doorway program for SUD
- WorkInvestNH
- WorkNowNH
- NH DES Reentry Program
- Granite State and CTEC Education
- DOC Apprenticeship programs

2. Business

- Based upon our survey results and speaking with community stakeholders, the following industries are hiring justice-involved individuals. Health care, social services, construction, hospitality. Building connections with these industries and identifying employers that are willing to be "second chance" partners is critical to success. PCG has created a justice-friendly asset list, located in *Appendix B. Justice-Friendly Employers*, which provides a list of employers that are willing to hire justice-involved individuals. This list was compiled with data from the business survey, and information provided by local probation and parole officers.
- The Governor's "Recovery Friendly Workplace Initiative" has gained national attention for promoting individual wellness by empowering workplaces to support individuals recovering from substance use disorder. These individuals are oftentimes also justice involved. Today, there are approximately 350 recovery-friendly employers across the state. These employers are assets with local communities and can be leveraged as potential "justice-friendly" workplaces.

3. Community Innovation

- There are many pockets of innovation across community-based organizations and faith-based organizations. PCG connected with leaders from various organizations that serve justice-involved individuals with development of soft skills, job skills, and general support with re-entry related barriers.
- Organizations led-by or staffed with individuals with lived experience are key to providing the kind of trauma-informed support that people need after incarceration. Organizations such as the Dismas House and the B.O.S.S. Initiative are small in scale but seek to provide comprehensive support and build networks of individuals who "come back" but as role models for others. The advantage to being smaller is that informal arrangements are made to assign one parole officer to the organization to provide more holistic relationships between service providers. This level of coordination was highlighted by Dismas House as a key component to successful cross-agency coordination.
- The B.O.S.S. Initiative is organizing partners as a complete service package that begins during incarceration and continues upon release. While incarcerated, individuals will opt into the program and focus on education through Project AIM at Southern New Hampshire University (SNHU). With relationships and connections to the program already established, individuals will have program continuity and continue upon release with the B.O.S.S. Initiative's dedicated psychiatrist, financial services provider, and other wraparound services.
- PCG met with a focus group of formerly incarcerated individuals through a leader at the ACLU. These individuals have created a professional peer employment referral network for each other. For some who were incarcerated together, they know firsthand the character of the individual and their desire to change their trajectory based on behaviors that they observed. With this perspective, they can authentically vouch for each other with employers. For many individuals, they are not facing a skills deficit, but a social capital deficit when it comes to employment. Employers and parole officers voiced a desire to know and understand "how people did their time." These informal networks from the inside that transfer to life after incarceration can be a key strategy to uplifting individuals, setting them on more positive career track, and putting their talents to use in more lucrative careers beyond initial survival jobs.

- Based upon the information gathered from our stakeholder interviews, there is a strong commitment from the community to support justice-involved individuals. Connecting these types of community programs to state and business stakeholders will help connect to resources that may not be widely known across the state.

E. NATIONAL MODELS & STRATEGIES

The federal government, states and local communities are all addressing the best way to support justice involved and formerly incarcerated youth and adults. Some of these programs even provide resources and support to the families with a focus on reintegrating people into their community and with their families. The examples provided start with the Department of Labor, federal investments, then state initiatives that leverage the federal investments or funded through the state and then community organizations that are focused on reentry support. The following examples share the theme of collaboration and information sharing among departments, employers, social impact organizations, community and the justice involved themselves.

Department of Labor, Education and Training Administration, REO[3]

The Reentry Employment Opportunities (REO) programs inform the public workforce system on how best to serve currently and formerly incarcerated justice-involved youth, young adults and adults. Since 2015, close to 100 REO grantees have tested service delivery models with community, faith-based organizations, and government in supporting the reentry and justice involved entering the workforce. These projects promote collaboration and coordination with all the organizations in the reentry ecosystem.

- Core Services for Young Adults – post - release
- Core services for Adults – pre- and post -release
- Eligibility/Target Populations – Youth 15 -18, Young adult 18 -24 and adults 18 and older

The U.S. Department of Labor (DOL) has invested in reentry services for the last twenty years, by committing funding toward programs serving justice-involved individuals. DOL awarded over $243 million in Reentry Project (RP) grant programs between 2017 and 2019 to improve participants' employment and justice outcomes. These awards went to providers, intermediaries, and non-profit community-based organizations across 34 states and territories.[4]

Highlights:

- Connecting participants to education and training was identified as a key success.
- Helping participants find and retain jobs was one of the greatest successes.
- When working to place participants in employment, RP program staff provided intensive job search support, job placement, and retention assistance.
- Work readiness services laid the foundation for grantees' efforts to connect participants with employment.
- Case management was an integral component of program service delivery.
- Common barriers to employment among individuals with justice involvement in communities served by the grant included perceived employer bias, skill gaps, and substance use.
- Meeting participants' basic needs was a primary challenge.
- Staff members reported that growing and building their RP partnerships were the greatest implementation successes their programs experienced.

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[3] Department of Labor Reentry Employment Fact Sheet
[4] U.S. Dept. of Labor Reentry Projects Grant Evaluation

Department of Labor, LEAP: Linking Employment Activities Pre-Release Implementation Study[5]

The LEAP pilots provided pre-release services through jail based American Job Centers and linked participants to post-release services. These two-year grants, which ended in 2017, have shown potential for breaking the cycle of recidivism by linking participants to the workforce system early—while still in jail— and then immediately upon reentry into the community. The LEAP project best practices are included in the scoring of the current DOL Pathway Home funding opportunities:

- Preparing for the transition, participants need supportive services including help securing identification, applying for public assistance benefits, and developing a housing and transportation plan.
- Sites need a range of strategies for reestablishing contact after release. Having a full array of post-release services is not sufficient to ensure participants reengage.
- Barriers addressed:
  - Transportation
  - Housing
  - Need for substance abuse and mental health counseling and treatment
  - Legal support
  - Registration for health care and public assistance benefits
  - Work clothing and supplies
  - Assistance getting IDs
  - Tuition assistance, support filling out federal student aid and college applications.

- Staff reported the importance of designing a service approach that recognized that uncertainty, incorporating the critical service content early during service delivery, and remaining willing and able to adjust to changing circumstances quickly.
- Plan staffing and service delivery to facilitate overlap between pre-release and post release services to promote continuity. Sites used different approaches to facilitate a smooth transition for participants. Three approaches that promoted continuity included using the same staff to provide services pre- and post-release, bringing post-release staff into the jail early to build relationships, and enabling pre-release staff to reach out after release to facilitate connection.
- Use incentives and transportation support as important tools to boost post-release engagement. Sites reported that cash or gift card incentives were valuable tools to maintain contact with participants after release. Other sites had success offering transportation vouchers or providing a van service to take participants to the community-based AJC or to work.

Prison-to-Work Pipeline, Kentucky[6]

The administration partnered with the Kentucky Chamber of Commerce with the Prison-to-Work Pipeline Program, 13 state prisons and 19 local jails that house state inmates. Inmates receive resume writing assistance and job interview preparation prior to their interviews. Businesses located throughout Kentucky's 120 counties can virtually interview inmates with the goal of the inmate being offered a start date prior to release.

Highlights:

- Multi-agency collaboration to provide state identification cards for Kentucky's justice-involved population, allows inmates being released from state custody to walk out of prison with a state ID card in hand making it easier to obtain employment, find housing, receive financial assistance and access additional needed services.

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[5] Developing American Job Centers in Jails: Implementation of the Linking to Employment Activities Pre-Release (LEAP) Grants
[6] Press Release: Office of the Governor, November 7, 2022, Programs to Boost Workforce Participation by Helping Inmates Find Jobs

- Statewide project that provides transportation at no charge to former inmates so they can access substance abuse recovery facilities, medical appointments, job interviews, educational courses, probation and parole meetings and employment. DOC is partnering with the Kentucky Transportation Cabinet to serve nearly 50,000 Kentuckians, currently under the supervision of probation or parole.

New Jersey Reentry Corporation, NJRC, Reentry Training and Employment Report 2021[7]

Build on What Reentry Service Providers are Doing and Doing Well - Providing Integrated Wraparound Services as the Foundation for Success.

NJRC provides court-involved individuals with employment training and support to secure job opportunities, help individuals obtain medical and behavioral health services, provide legal services and connect to housing. Additional areas to enhance support are:

- **Addiction Treatment & Mental Health:** This is a critical support request identified by Industry leaders. Providing employers with training with a trauma-informed and therapeutic approach can lessen the stress employers have when hiring reentry candidates. Connecting reentry candidates to service providers for medical and behavioral healthcare services increases successful employment.
- **Soft Skills:** Providing life skills, focusing on the emotional intelligence that supports conflict resolution, time and stress management, leadership and team building helps with success in the workplace. Seasoned HR experts can provide real-time insights as candidates search and connect to employment.
- **Mentorship – "Adopt a Returning Citizen":** A new initiative - Adopt a Returning Citizen, NJRC is working with employers and industry leaders across the state to link clients to employment-focused mentors. Mentors are a resource for clients as they launch (and re-launch) their careers, providing mental and emotional support, career advice and positive reinforcement.

Targeting Industries and Appropriate Trainings and Conducting Trainings Directly

- Three Key Criteria: In-Demand Jobs, Growth Industries, Achievable Skill-Gap. The key first step is to identify industries that meet three criteria:
  - o Have in-demand jobs
  - o Skill gap can be filled with training for entry-level jobs
  - o Industries are both well-positioned for growth and have career ladders achievable for the formerly incarcerated.

Quality Placement and Partnership Approach

- Employer commitment to higher graduates is critical.
- Partnerships with established industry networks, reentry service providers and advocates
- Marketing Success Stories and employer ROI: retention rates, work ethic, reduction in employer costs for recruitment, Work Opportunity Tax Credits and federal bonding program

Hope For Prisoners, Las Vegas, NV[8]

Hope for Prisoners serves individuals released from Federal and state correctional facilities, local jails and rehabilitation centers as well as those currently participating in special court programs.

Highlights:

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[7] NJ Reentry Corporation, Reentry Training and Employment Report 2021
[8] UNLV: Center for Crime and Justice Policy, Prisoner Reentry in Nevada: Final Report on the Hope for Prisoners Program

- **Law Enforcement Partnerships:** strong relationship with local law enforcement and many officers are active participants in the program. Deep ties with potential employers, service providers and community leaders that play a vital role in the success of clients.
- **Mentoring Programs:** Mentors commit to stand by their client and help them find solutions to the challenges they face during the reintegration process. Clients have a positive influence that may not have existed for them in the past.
- **Producing Results:** The University of Nevada, Las Vegas Center for Crime and Justice Policy performed a study of prisoner reentry in Nevada and the Hope for Prisoners program over an 18-month period. The rate of re-incarceration among Hope participants was low during the study period with only 6.3 percent of the 522 participants reoffending.

IV. FINDINGS AND RECOMMENDATIONS

PCG presents the following findings and associated priority and supporting recommendations for the development of a Return to Community Program. **Priority recommendations include those recommendations that are most foundational to effectively develop the Return to Community program.**

A. PRIORITY RECOMMENDATIONS

Finding #1:

While there are strong commitments and programs dedicated to successful reentry and workforce development across the state, information sharing and innovation across organizations and sectors is limited. New Hampshire does not have a state-wide coordinated strategy to provide the services and supports needed for formerly incarcerated individuals or individuals involved in the justice system to successfully re-enter into the community and obtain gainful employment. Building partnerships that include stakeholders from workforce development, state and local corrections, education, occupational licensing, and community-based providers is critical to support a coordinated Return to Community program.

The system also lacks a centralized approach to the collection and dissemination of data related to formerly incarcerated individuals or individuals involved in the justice system. Stakeholders reported that information is not easily shared or disseminated across domains and sectors that are working with this population.

Priority Recommendation #1:

Create a facilitated re-entry/workforce advisory committee with a clear project charter and implementation team to drive decision making and change management.

- **Liaise with other correction system committees, such as the Governor's Advisory Commission on Mental Illness and Corrections System and Governor's Commission on Juvenile Justice Reform.**
- **Develop metrics and collect data across all applicable sectors/domains to effectively track outputs and outcomes.**
- **Utilize data to apply for additional federal or foundation grant funding to support reentry and workforce development.**

Finding #2:

The New Hampshire Department of Corrections (NH DOC) does not have adequate technology (e.g., hardware, software, internet capabilities) to effectively support individuals' virtual learning opportunities.

Priority Recommendation #2:

Equip NH DOC facilities with the technology needed to enable virtual learning and other virtual job readiness skills. Consider procuring a virtual employment readiness tool (VERA) in the NHDOC facilities to prepare individuals for their return to the community and facilitate referrals and warm handoffs to the NH Works American Job Centers.

Finding #3:

The NH DOC utilizes the Ohio Risk Assessment System (ORAS) risk and needs assessment tool at various points in the system – including the Reentry Tool and Community Supervision Tool – however the tool does not provide enough information needed to help with employment and service matching. Research shows that addressing the risk/need/responsivity (RNR) principles through valid assessment tools can help workforce service providers prioritize resources, address job readiness, and help with service matching.

Priority Recommendation #3:

Research and adopt additional occupational skills assessment and job-readiness assessment to better match individuals with employment opportunities upon release. This information should be included as part of the current re-entry planning process by NH DOC case management staff.

Finding #4:

Businesses, community partners and other stakeholders are not aware of best practices and other programs they can utilize to help with successful return to community employment.

Priority Recommendation #4:

Conduct an awareness campaign among human resources and workforce development professionals across the state about best practices – from application to interview – to position businesses as a "Second Chance" employer with current and future employees. The campaign should also further advertise other programs like the Work Opportunity Tax Credit, Federal Bonding Program, WorkInvestNH and the Job Training fund for businesses.

Finding #5:

Transportation to and from employment was the most common barrier discussed in all stakeholder engagement sessions and identified in the surveys. The lack of public transportation, specifically in rural areas of the state, makes it difficult for individuals to maintain employment. Connecting individuals from more rural areas to jobs located in more urban areas (e.g., Manchester, Concord, etc.) is difficult without transportation assistance. Halfway houses have limited capacity to provide transportation and Medicaid transportation is unreliable.

Priority Recommendation #5:

Consider funding for transportation to and from agencies and partners – probation/parole, workforce centers, halfway houses, community-based organizations, peer mentors – to assist with transportation issues.

B. SUPPORTING RECOMMENDATIONS

Finding #6:

The service provider approval process in correctional facilities is cumbersome.

Supporting Recommendation #6:

Review policies and develop a simplified approval pathway so that additional stakeholders can provide services within facilities.

Finding #7:

Communication and partnership between local probation/parole offices and workforce centers varies across the state.

Supporting Recommendation #7:

Embed local probation and parole officers into American Job Centers to provide additional coordination and support to provide for a one-stop-shop for justice-involved individuals. Create additional opportunities for probation and parole officers and NH Works staff to work together, share data, and coordinate efforts.

Finding #8:

Access to adult educational opportunities is not consistent across districts and counties.

Supporting Recommendation #8:

Establish a consistent strategy for individuals to access adult educational opportunities across districts. Credits should follow individuals when transferred between carceral settings to allow for seamless continuation of education classes.

Finding #9:

Peer mentorship programs are underfunded and underutilized in helping individuals successfully re-enter their communities.

Supporting Recommendation #9:

Consider funding for people with lived experience employed as coaches, mentors, and peer support counselors, and avenues for individuals to access mentors prior to release. These individuals may also help with transportation related issues if they are able to secure funding for transportation.

Finding #10:

Employers are uncertain whether justice-involved individuals can be trusted and/or are hesitant to hire without additional information.

Supporting Recommendation #10:

Issue 'employability certificates' with clear eligibility criteria to help remove the stigma associated with hiring individuals with criminal records and help mitigate risk for employers.

Finding #11:

Individuals returning to the community lack options for long-term career development.

Supporting Recommendation #11:

Consider developing a workforce program to temporarily hire/intern individuals who are re-entering into state and/or county jobs (e.g., facilities, public works, etc.) to provide opportunity to demonstrate dependability and reliability while continuing to learn skills. Offering a state-subsidized employment program that also includes career exploration and development will enable individuals to secure immediate employment that is a condition of parole, while also making connections to employers that might have longer pathways to employment.

Finding #12:

Employers are willing to hire formerly incarcerated or justice-involved individuals; however, it is difficult for employers to connect with these individuals, and there can be administrative barriers to overcome, such as obtaining needed employment documents (e.g., identification, birth certificate) and approvals (e.g., waiver process for convictions).

Supporting Recommendation #12:

Create a centralized job posting board where open positions can be advertised and filled by individuals who are re-entering the community. Ensure that individuals have the support in accessing the necessary documents for employment prior to release.

V. IMPLEMENTATION STRATEGY

Key goals of our recommendations are to help create a more coordinated and responsive system to reduce barriers to employment for individuals returning to the community. Some of these recommendations align with initiatives already underway in New Hampshire that need additional support and coordination to scale, while other recommendations are consistent with national best practices and other programs that have been shown to work for other communities. In order to effectively implement a Return to Community Program, our recommendations will take significant time and effort to plan, execute and measure.

PCG has identified one primary action step that should be considered immediately to address these recommendations and align them to system goals – as detailed in *Priority Recommendation #1*.

1. **Create a facilitated re-entry/workforce advisory committee with a clear project charter and implementation team to drive decision making and change management.**
   - Liaise with other correction system committees, such as the Governor's Advisory Commission on Mental Illness and Corrections System and the Governor's Commission on Juvenile Justice Reform
   - Develop metrics and collect data across all applicable sectors/domains to effectively track outputs and outcomes.
   - Utilize data to apply for additional federal or foundation grant funding to support reentry and workforce development.

To implement this priority recommendation, we have identified some key action steps below.

1. **Establish project sponsor and governance structure.**

2. **Coordinate with the Governor's Advisory Commission on Mental Illness and Corrections System for lessons learned and strategies for successful implementation in New Hampshire.**

3. **Identify a facilitator or project management office that will help coordinate and facilitate the advisory committee.**

4. **Identify cross-sector members to be included as part of the initiative.**

5. **Develop a work plan to identify key phases of work and deliverables.**

6. **Create subcommittees or working groups to make plans for specific change efforts and/or aspects of the system that need to change with clear expected outcomes and timeframes in which they must accomplish their work.**

7. **Conduct regular work group meetings with periodic convenings by the advisory committee to report progress, challenges, and lessons learned.**

VI. RECOMMENDATIONS ROADMAP

To effectively implement a Return to Community Program that incorporates the recommendations within this report, a phased process with clear priorities is the best path forward. This work will take time and coordination of many different stakeholders to discuss policy, practice, financing, and feasibility. **The matrix below shows the general order in which these recommendations can be implemented through a short-term (6-12 months), mid-term (1-2 years) and long-term approach (More than 2 years). The impact (high, medium, low) of the implementation of each recommendation is also included to represent the potential impact of the system to create positive change for justice-involved individuals.** Based upon state priorities, the approach can be updated to fit the goals of the program.

TABLE 6: RECOMMENDATIONS ROADMAP

Recommendations Roadmap				
Priority Recommendations	**Short-Term**	**Mid-Term**	**Long-Term**	**Impact**
Create a facilitated re-entry/workforce advisory committee with a clear project charter and implementation team to drive decision making and change management.	X			**H**
Equip NH DOC facilities with the technology needed to enable virtual learning and other virtual job readiness skills. Consider procuring a virtual employment readiness tool (VERA) in the NHDOC facilities to prepare individuals for their return to the community and facilitate referrals and warm handoffs to the NH Works American Job Centers.		X		**H**
Research and adopt additional occupational skills assessment and job-readiness assessment to better match individuals with employment opportunities upon release. This information should be included as part of the current re-entry planning process by NH DOC case management staff.	X			**M**
Conduct an awareness campaign among human resources and workforce development professionals across the state about best practices – from application to interview – to position businesses as a "Second Chance" employer with current and future employees. The campaign should also further advertise other programs like the Work Opportunity Tax Credit, Federal Bonding Program, WorkInvestNH and the Job Training fund for businesses.	X			**L**
Consider funding for transportation to and from agencies and partners – probation/parole, workforce centers, halfway houses, community-based organizations, peer mentors – to assist with transportation issues.		X		**H**
Supporting Recommendations	**Short-Term**	**Mid-Term**	**Long-Term**	**Impact**
Review policies and develop a simplified approval pathway so that additional stakeholders can provide services within facilities.		X		**L**
Embed local probation and parole officers into American Job Centers to provide additional coordination and support to provide			X	**H**

for a one-stop-shop for justice-involved individuals. Create additional opportunities for probation and parole officers and NH Works staff to work together, share data, and coordinate efforts.				
Establish a consistent strategy for individuals to access adult educational opportunities across districts. Credits should follow individuals when transferred between carceral settings to allow for seamless continuation of education classes.		X		M
Consider funding for people with lived experience employed as coaches, mentors, and peer support counselors, and avenues for individuals to access mentors prior to release. These individuals may also help with transportation related issues if they are able to secure funding for transportation.		X		H
Issue 'employability certificates' with clear eligibility criteria to help remove the stigma associated with hiring individuals with criminal records and help mitigate risk for employers.			X	M
Consider developing a workforce program to temporarily hire/intern individuals who are re-entering into state and/or county jobs (e.g., facilities, public works, etc.) to provide opportunity to demonstrate dependability and reliability while continuing to learn skills. Offering a state-subsidized employment program that also includes career exploration and development will enable individuals to secure immediate employment that is a condition of parole, while also making connections to employers that might have longer pathways to employment.			X	L
Create a centralized job posting board where open positions can be advertised and filled by individuals who are re-entering the community. Ensure that individuals have the support in accessing the necessary documents for employment prior to release.		X		M

APPENDIX A: EVALUATION PLAN

PROJECT OBJECTIVE: Determine what employment barriers exist to successful re-entry after incarceration and involvement with the criminal justice system, what programs and services exist in New Hampshire to aid re-entry after incarceration with an emphasis on employment, and what programs and services are needed to fill geographical and programmatic gaps in re-entry services.

EVALUATION PLAN			
DATA COLLECTION	**RESEARCH QUESTIONS AND RESPONSES**	**ANALYSES**	**FINDINGS AND RECOMMENDATIONS**
QUALITATIVE DATA			
Focus Group Stakeholders / Groups	**Questions**	**Identify themes based on response frequency.** **Compare responses between stakeholder groups.**	**Barriers/Challenges** **Best Practices** **Context/Situational Circumstances**
Employers	• What employers or types of employers hire individuals who were formerly incarcerated or justice involved? • What positions or type of work is most in demand? • What skills are needed? • What barriers do employers encounter to hiring individuals who were formerly incarcerated or justice involved? • What services or supports are needed for individuals who were formerly incarcerated or justice involved to be successful employees? • What have employers tried that did not work? Why did those attempts not work? • What have employers tried that worked well?		
Individuals who were formerly incarcerated or justice involved	• What barriers to employment have been encountered? • Who provided services or supports to obtain employment? • What services or supports were provided? • What challenges were encountered in accessing services or supports? • What services or supports would have been helpful if available?		

EVALUATION PLAN			
DATA COLLECTION	**RESEARCH QUESTIONS AND RESPONSES**	**ANALYSES**	**FINDINGS AND RECOMMENDATIONS**
	• What advice would you give to someone incarcerated or justice involved that would be helpful to them in obtaining employment?		
Parole / Probation officers	• What barriers to employment have individuals who were formerly incarcerated or justice involved encountered? • What services or supports does the parole/probation office provide to assist individuals who were formerly incarcerated or justice involved to obtain employment? • What services or supports can the parole/probation office connect individuals who were formerly incarcerated or justice involved to obtain employment? • Which services or supports are used most frequently? • Which providers have been the most successful? • Which providers have been challenging to work with? • Are there services or supports needed that do not exist? • Which individuals have most easily obtained employment and why? • Which individuals have been most challenged to obtain employment and why?		
Service Providers	• What services are provided? • What services are most frequently needed? • What services have been most successful? • What populations have been the easiest to find employment for and why? • What populations have been the most challenging to find employment for and why?		
Workforce Agencies	• What services are provided? • What services are most frequently needed? • What services have been most successful? • What populations have been the easiest to find employment for and why? • What populations have been the most challenging to find employment for and why?		
Workforce Associations	• What employers hire individuals who were formerly incarcerated or justice involved? • What positions or type of work is most in demand? • What skills are needed?		

EVALUATION PLAN			
DATA COLLECTION	**RESEARCH QUESTIONS AND RESPONSES**	**ANALYSES**	**FINDINGS AND RECOMMENDATIONS**
	• What barriers are there to hiring individuals who were formerly incarcerated or justice involved? • What services or supports are needed for individuals who were formerly incarcerated or justice involved to be successful employees?		
RESEARCH DATA			
Focus Group Stakeholders / Groups	**Questions**	**Identify themes based on response frequency.** **Compare responses between stakeholder groups.**	**Barriers/Challenges** **Best Practices** **Context/Situational Circumstances**
Employers	• What is the business (i.e., basic information about the business)? • What are the business' current practices in hiring individuals who were formerly incarcerated or justice involved? • What is the business' employment process? • What are the barriers to employing individuals who were formerly incarcerated or justice involved? • What positions and skills are most in demand? • Is the business interested in partnering with the OWO to fill their hiring goals?		
Individuals who were formerly incarcerated or justice involved	• What characterizes individuals who were formerly incarcerated or justice involved (i.e., demographics)? • What barriers to employment have been encountered? • What services or supports were available while incarcerated? • Which services or supports available while incarcerated were helpful and why? • What services or supports were available after release? • Which services or supports available after release were helpful and why? • What jobs in what industries have been applied for? • What challenges were encountered during the application process?		

EVALUATION PLAN			
DATA COLLECTION	**RESEARCH QUESTIONS AND RESPONSES**	**ANALYSES**	**FINDINGS AND RECOMMENDATIONS**
Workforce Agencies / Providers	• What populations are served? • What successful outcomes have been achieved? • What barriers to employment have been encountered by individuals who were formerly incarcerated or justice involved? • What services have been most helpful in overcoming the barriers to employment and why? • What services should be offered that are currently unavailable? • What agencies/organizations do you partner with to help individuals who were formerly incarcerated or justice involved to obtain employment? • What challenges have been encountered in working with individuals who were formerly incarcerated or justice involved?		
• **QUANTITATIVE DATA**			
Statistical Data	• Number of individuals released into the community • Number of individuals employed following release • Number of individuals employed 3-, 6-, and 12-months following release • Recidivism rates • Demographics of those returning to the community • In-Facility Experiences (i.e., # participating in employment program, # who participated in employment readiness program, # participating in education/GED classes, # who earned GED, # who participated in skills program, # participating in trade/job training program) • Number of individuals who are part of a work release program		

APPENDIX B: JUSTICE-FRIENDLY EMPLOYERS

Employer	Type	Phone	Address	Website
TPI (Temp to Hire Organization)	Temp agency	603-543-4155	109 Pleasant Street, Suite 101 Claremont, NH 03743	https://tpistaffing.net/
PBS (Preferred Building Systems)	Construction & Building	603-372-1050	143 Twistback Road PO BOX 1 Claremont, NH 03743	https://preferredbuildings.com/
Subway	Fast Food	603-542-5895	102 Elm St, Claremont, NH 03743	https://restaurants.subway.com/united-states/nh/claremont
Home Depot	Home Improvement	603-542-4471	451 Washington St, Claremont, NH 03743	https://www.homedepot.com/l/Claremont/NH/Claremont/03743/3408
Market Basket	Supermarket chain	603-543-1444	345 Washington St, Claremont, NH 03743	https://www.shopmarketbasket.com/
Big Lots Claremont	Discount Store	603-542-3191	216 Washington St, Claremont, NH 03743	https://local.biglots.com/nh/claremont/216-washington-st?utm_campaign=google-distrib&utm_medium=distrib&utm_source=google
Daddy's Pizza	Restaurant	603-542-9777	50 Pleasant St, Claremont, NH 03743	
Carroll Concrete				
T-Bird Citco	Mini Mart	603-542-4429	225 Washington St, Claremont, NH 03743	https://tbirdminimarts.com/?y_source=1_Mjc1OTgxOTAtNzE1LWxvY2F0aW9uLndlYnNpdGU%3D
Connecticut Valley Home Health	Home Health Care Services	603-543-6800	243 ELM ST CLAREMONT, NH 03743	https://www.dandb.com/businessdirectory/connecticutvalleyhomecare-claremont-nh-11250738.html
Ramunto's Brick Oven Pizza	Restaurant	603-542-9107	71 Broad St, Claremont, NH 03743	https://ramuntos.com/claremont-nh/
Tire Warehouse	Tire Shop	603-509-3410	5 2nd St, Claremont, NH 03743	https://locations.tirewarehouse.net/nh/claremont/5-2nd-st?utm_source=gbp/?&utm_medium=local-listing/?&utm_campaign=store_996/?&utm_id=08-2022
Tremont House of Pizza	Restaurant	603-542-8017	134 Pleasant St, Claremont, NH 03743	https://tremonthouseofpizza.com/contact-us/
Marker Volkl Warehouse	Warehouse	603-542-5986	427 Washington St Claremont, NH 03743	
KFC	Restaurant	603-542-9427	255 Washington St, Claremont, NH 03743	https://locations.kfc.com/nh/claremont/255-washington-street
Coughlin Painting	Painting Services	603-477-3942	82 Winn Hill Rd, Sunapee, NH 03782	coughlinpainting.com

America Brush	Manufacturer	603-542-9951	300 Industrial Blvd, Claremont, NH 03743	
Arrowhead Motors	Car Dealer	603-542-4477	210 Washington St, Claremont, NH 03743	https://www.arrowheadmotorsnh.com/
Claremont County Café	Restaurant	603-287-8383	314 Washington St, Claremont, NH 03743	https://www.facebook.com/pages/Claremont-Country-Cafe/932662170172459
Paclantic Inc.	Plastics-Vacuum & Pressure Forming-Manufacturers	603-542-8600	91 Main St, Claremont, NH 03743	
Canam Group	Construction & Building	603-542-5202	386 River Rd, Claremont, NH 03743	https://www.canam.com/en/
Dollar Tree	Retail	603-287-9000	216 Washington St, Claremont, NH 03743	https://www.dollartree.com/locations/nh/claremont/3674/?utm_source=google&utm_medium=organic&utm_campaign=maps
Burger King	Fast Food Chain	603-543-0401	324 Washington St, Claremont, NH 03743	
Lambert Auto	Car Dealer	603-543-0188	5 River Rd Claremont, NH 03743	
CVS	Drug Store	603-542-7742	1 Wall St, Claremont, NH 03743	https://www.cvs.com/store-locator/claremont-nh-pharmacies/1-wall-st-claremont-nh-03743/storeid=5347?WT.mc_id=LS_GOOGLE_FS_5347
Eagle Times	Media/News	603-543-3100	27 Pleasant St. Claremont, NH 03743	https://www.eagletimes.com/
Foster's Painting	Painting Services	603-504-4474	29 Old Newport Rd Claremont, NH 03743	https://www.fosterspainting.com/
Jiffy Mart	Gas Station/Mini Mart	603-542-9806	102 Elm St, Claremont, NH 03743	https://jiffymartstores.com/?y_source=1_Mjc1OTgxNDktNzE1LWxvY2F0aW9uLndlYnNpdGU%3D
Cumberland Farms	Gas Station/Mini Mart	603-542-1510	121 Pleasant St Claremont, NH	http://cfi-webauth-01.cloudapp.net/stores/nh/claremont-5421
JT's Landscaping & Lawn Care	Landscaping	603-542-2385	357 Winter St, Claremont, NH 03743	
Walmart	Department Store	603-542-2703	14 Bowen St, Claremont, NH 03743	https://www.walmart.com/store/1975-claremont-nh
Sinclair Machine Products	Auto Parts & Supplies, Machine Shop	603-542-8722	62 Airport Rd. Claremont, NH 03743	
North County Smokehouse	Meat Products Store	603-542-8323	19 Syd Clarke Drive, Claremont, NH 03743	https://ncsmokehouse.com/
Bourdon Institutional Sales	Manufacturer	800-231-5468	85 Plains Rd, Claremont, NH 03743	https://www.bourdons.com/Default.asp
LaValley Building Supply	Building Materials Store	603-863-1050	351 Sunapee Street, Newport, NH 03773	https://lavalleys.com/locations/newport/

Yoshi's Convenience and Deli at Newport Meat Market	Meat Products Store	603-863-4054	192 N Main St, Newport, NH 03773	
Dollar General	Retail	802-866-0005	8 John Stark Highway Newport, NH 03773-1803	
All Terrain Skin Protection Products	Skincare	800-246-7328	3 Royal Ln, Newport, NH 03773	https://allterrainco.com/
Salt Hill Pub	Restaurant	603-863-7774	58 Main St, Newport, NH 03773	https://www.salthillpub.com/locations/newport/
Fleury's Sales	Liquidator	603-863-3694	880 John Stark Hwy, Newport, NH 03773	https://www.storeallpurpose.com/locations
Country Kitchen	Restaurant	603-863-7881	339 Sunapee St. Newport, NH 03773	
Crazy Ed's Powersports	Snowmobile dealer	603-863-8770	958 John Stark Hwy, Newport, NH 03773	https://www.facebook.com/people/Crazy-Eds-Powersports-llc/100063660635424/
Newport Golf Club	Golf Club	603-863-7787	112 Unity Rd, Newport, NH 03773	https://newportgolfclub-nh.com/
Jiffy Mart	Convenience Store	603-863-7802	34 Elm St. Newport NH 03773	
Hypertherm		603-298-7849	20 Airpark Rd, West Lebanon, NH 03784	https://www.hypertherm.com/en-US/
Applebees	Restaurant	603-298-8608	280 N Plainfield Rd, West Lebanon, NH 03784	https://restaurants.applebees.com/en-us/nh/west-lebanon/
UniFirst Uniform Services	Uniform Store	603-448-0011	125 Etna Rd, Lebanon, NH 03766	https://unifirst.com/contact/locations/nh/lebanon/?utm_source=local-gbp&utm_medium=organic&utm_campaign=LebanonNH
Tire Warehouse	Tire Shop	603-389-6563	35 Interchange Dr, West Lebanon, NH 03784	https://locations.tirewarehouse.net/nh/west-lebanon/35-interchange-dr?utm_source=gbp/?&utm_medium=local-listing/?&utm_campaign=store_992/?&utm_id=08-2022
Lindt Chocolate Shop	Chocolate Shop	603-772-3614	3 Portsmouth Ave, Stratham, NH 03885	https://www.lindtusa.com/
Field & Sons Mobile Transport	Manufactured Home Transporter	603-863-2220	8 Sturgis Cir, Grantham, NH 03753	https://fieldandsonstransport.com/
Whaleback Mountain	Ski Area	603-448-5500	160 Whaleback Mountain Rd, Enfield, NH 03748	https://www.whaleback.com/
Farmers Table Café	Restaurant	603-863-9355	249 Rte. 10 N., Grantham, NH 03753	https://www.farmerstablecafe.com/
Mitchell's Auto Repair	Auto Shop	603-863-6505	86 Sawyerbrook Plz. Grantham, NH 03753	
Bonnie Plant Farm Inc	Farm	603-863-0603	920 NH-10, Lempster, NH 03605	https://bonnieplants.com/

Ray-Tech Infrared	Manufacturer	603-826-3030	198 Springfield Rd, Charlestown, NH 03603	https://raytechinfrared.com/
Charlestown House of Pizza	Restaurant	603-826-3700	203 Main St, Charlestown, NH 03603	chopizza.com
Jiffy Mart	Convenience Store	603-826-0370	104 Main St, Charlestown, NH 03603	
Connecticut River AG Services	Fertilizer Supplier	603-445-5200	119 Church St, North Walpole, NH 03609	
Whelen Engineering Co	Manufacturer	603-826-4005	99 Ceda Rd, Charlestown, NH 03603	https://www.whelen.com/
Connecticut River AG Services	Fertilizer Supplier	603-445-5200	119 Church St, North Walpole, NH 03609	
Cushman Lumber Company	Lumber Store	603-826-4575	96 Springfield Rd, Charlestown, NH 03603	http://cushmanlumber.com/
Beaudry Enterprises Inc	Trucking Company	603-826-3944	949 Old Claremont Rd, Charlestown, NH 03603	
St. Pierre Sand and Gravel	Sand & Gravel Supplier	603-826-4121	59 Jeffrey Rd, Charlestown, NH 03603	http://www.stpierreincsandandgravel.com/
Mount Sunapee Resort	Ski Area	603-763-3500	1398 New Hampshire Rte. 103, Newbury, NH 03255	https://jobs.vailresortscareers.com/sunapee/go/Mount-Sunapee-Jobs/4560700
The Anchorage	American Restaurant	603-763-3334	71 Main St, Sunapee, NH 03782	http://www.anchoragesunapee.com/
Brilliance Painting & Decorating	Painting Services	603-763-2099	914 Route 103, Newbury, NH, 03255	
Prana Design Painting	Painting Services	603) 865-1315	38 W Province Rd, Newbury, NH 03255	https://pranapainting.com/
White River Junction VA Medical Center	Hospital	802-295-9363	163 Veterans Dr, White River Junction, VT 05009	https://www.va.gov/white-river-junction-health-care/
C&S Wholesale Grocers	Wholesale	603-354-7000	7 Corporate Dr, Keene, NH 03431	https://www.cswg.com/
Jeld-Wen	Energy-Efficient Manufacturer	603-863-1050	351 Sunapee St Newport, NH 03773	https://locations.jeld-wen.com/nh/newport/
K & W Tire	Tire Shop	802-295-3068	1328 N Hartland Rd, White River Junction, VT 05001	
HP Roofing LLC	Roofing Contractor	802-295-1548	240 S Main St, White River Junction, VT 05001	http://www.hproofingllc.com/
Mid-State Health Center	Community Health Center	603-238-3526	101 Boulder Pt Drive, Plymouth, NH 03264	https://www.midstatehealth.org/
The Salvation Army	Faith-based Organization	603-524-1834	177 Union Ave, Laconia, NH 03246	https://nne.salvationarmy.org/laconia/

Meridian Land Services, Inc.	Land and Development Firm	603-673-1441	31 Old Nashua Road, Amherst, NH 03031	https://meridianlandservices.com/
Working Fields	Staffing Agency	802-760-6686	1889 Williston Road, South Burlington, VT 05403	https://workingfields.com/
City of Concord	Government	603-230-3722	41 Green Street, Concord, NH 03301	https://www.concordnh.gov/
NH Teen Institute	Non-profit	978-206-1188	1 Sundial Ave. Suite 219, Manchester, NH 03103	https://www.nhteeninstitute.org/
G.S. Bolton	Concrete Specialist	603-330-0055	61 Airport Drive Unit 4, Rochester, NH 03867	https://www.facebook.com/greg.bolton.980/
SOS Recovery Community Organization	Recovery	603-969-1305	14 Signal St, Rochester, NH 03867	https://www.sosrco.org/
Hope 2 Freedom Recovery Homes	Recovery	603-233-3753	3 Factory St, Claremont, NH 03743	https://hope2freedomrecovery.org/
Installed Building Products	Insulation Installer	603-235-4104	70 Main St., Executive Suite 13, Peterborough, NH 03458	https://installedbuildingproducts.com/
Derry Friendship Center	Recovery	603-548-0521	6 Railroad Ave, Derry, NH 03038	https://thederryfriendshipcenter.org/
DCI, Inc.	Furniture Manufacturing	603-838-6544	265 South Main Street, Lisbon, NH 03585	https://dcifurn.com/
Genfoot America, LLC	Footwear Manufacturer	603-444-2668	673 Industrial Park Rd, Littleton, NH 03561	https://www.nhcompanyregistry.com/companies/genfoot-america-inc/
FUJIFILM Dimatix Inc	Film and Printing	603-443-8342	109 Etna Rd, Lebanon, NH 03766, Lebanon, NH 03766	https://www.fujifilm.com/us/en/business/inkjet-solutions
The Portsmouth Brewery	Restaurant	603-682-6870	56 Market St., Portsmouth, NH 03801	https://portsmouthbrewery.com/
Tinios Hospitality	Restaurant	603-926-6152	325 Lafayette Road, Hampton, NH 03842	https://www.tinioshospitality.com/
Dante's Pasta and Vino	Restaurant	603-312-4085	567 Route 125, Barrington, NH 03825	http://dantespasta.com/

APPENDIX C: LICENSING REQUIREMENTS

Key
Yes
No
No information
*waiver required
**disqualifying but with caveats

Board	Licenses/Positions Regulated	Required Criminal History Check	Required to Disclose Criminal History	Required to Disclose Misdemeanor	Required to Disclose Felony	Misdemeanor Disqualifying	Felony Disqualifying
Acupuncture Licensing							
Alcohol & Drug Use Professionals	Certified Recovery Support Worker						*
	Licensed Clinical Supervisor						*
	Licensed Drug and Alcohol Counselor						*
	Master Licensed Drug and Alcohol Counselor						*
Athletic Trainers Governing Board	Athletic Trainers						
Genetic Counselors Governing Board	Genetic Counselors						
Occupational Therapy Governing Board	Occupational Therapists						
	Occupational Therapist Assistants						
Physical Therapy Governing Board	Physical Therapists						
	Physical Therapist Assistants						
Speech Language Pathology and Hearing Care Providers Governing Board	Speech language Pathologists						
	Speech language pathologist Assistants						

Board	Licenses/Positions Regulated	Required Criminal History Check	Required to Disclose Criminal History	Required to Disclose Misdemeanor	Required to Disclose Felony	Misdemeanor Disqualifying	Felony Disqualifying
Board of Barbering, Cosmetology, and Esthetics	Barber						
	Master Barber						
	Cosmetologist						
	Manicurist						
	Esthetician						
Board of Body Art Practitioners	Body Artist						
	Body Art Apprentice						
Board of Chiropractic Examiners	Chiropractic Doctors						
Board of Dental Examiners	Dental Hygienists						
	Dentists						
Board of Licensed Dietitians	Dietitians						
Electrology Advisory Committee	Electrologists						
Board of Registration of Funeral Directors and Embalmers	Embalmer Apprentice						
	Embalmer						
Board of Hearing Care Providers	Audiologists					**	**
	Hearing Aid Dealers					**	**
Advisory Board of Massage Therapists	Massage Therapists					**	**
Advisory Board of Medical Imaging and Radiation Therapy	Cardiac Electrophysiology Specialists						
	Cardiovascular Invasive Specialists						
	Computed Tomographic						
	Limited X-Ray Machine Operators						
	Magnetic Resonance Technologists						

Board	Licenses/Positions Regulated	Required Criminal History Check	Required to Disclose Criminal History	Required to Disclose Misdemeanor	Required to Disclose Felony	Misdemeanor Disqualifying	Felony Disqualifying
	Nuclear Medicine Technologists						
	Radiation Therapists						
	Radiologist Assistants						
	Radiographers						
	Sonographers						
Board of Registration or Medical Technicians	Medical Technicians						
Board of Medicine	Physicians						
	Physician Assistants						
Board of Mental Health Practice	Clinical Mental Health Counselors					**	**
	Clinical Social Workers					**	**
	Marriage and Family Therapists					**	**
	Pastoral Psychotherapists					**	**
Midwifery Council	Certified Midwives					**	**
Naturopathic Doctors	Naturopathic Doctors						
New Hampshire Board of Nursing	Advanced Practice Registered Nurse (APRN)						
	Licensed Nursing Assistant (LNA)						
	Licensed Practical Nurse (LPN)						
	Medication Nursing Assistant (MNA)						
	Registered Nurse (RN)						
	Nursing Instructor						
Board of Nursing Home Administrators	Nursing Home Administrators						

Board	Licenses/Positions Regulated	Required Criminal History Check	Required to Disclose Criminal History	Required to Disclose Misdemeanor	Required to Disclose Felony	Misdemeanor Disqualifying	Felony Disqualifying
Ophthalmic Dispensing Professionals	Ophthalmic Dispensers/Opticians	[Green]	[Green]	[Green]	[Green]		
Board of Optometry	Optometrists	[Green]	[Yellow]	[Yellow]	[Yellow]		
Board of Pharmacy	Pharmacy Technician	[Green]	[Yellow]	[Yellow]	[Yellow]	** [Yellow]	** [Yellow]
	Pharmacists	[Green]	[Yellow]	[Yellow]	[Yellow]	** [Yellow]	** [Yellow]
	Pharmacy Intern	[Green]	[Yellow]	[Yellow]	[Yellow]	** [Yellow]	** [Yellow]
Board of Podiatry	Podiatrists	[Green]	[Yellow]	[Yellow]	[Yellow]		
Board of Psychologists	Psychologists	[Yellow]	[Yellow]	[Yellow]	[Yellow]		
Advisory Board of Recreational Therapy	Recreational Therapists	[Yellow]	[Yellow]	[Yellow]	[Yellow]		
Board of Reflexologists, Structural Integrators, and Asian Bodywork Therapists	Asian Bodywork Therapists	[Green]	[Yellow]	[Yellow]	[Yellow]	** [Yellow]	** [Yellow]
	Reflexologists	[Green]	[Yellow]	[Yellow]	[Yellow]	** [Yellow]	** [Yellow]
	Structural Integrators	[Green]	[Yellow]	[Yellow]	[Yellow]	** [Yellow]	** [Yellow]
Advisory Board of Respiratory Care Practitioners	Respiratory Care Practitioners	[Yellow]	[Yellow]	[Yellow]	[Yellow]		
Board of Veterinary Medicine	Veterinarian	[Green]	[Yellow]	[Yellow]	[Yellow]		
Board of Accountancy	Certified Public Accountant	[Green]	[Yellow]	[Yellow]	[Yellow]	** [Yellow]	[Yellow]
Board of Architects	Architects	[Green]	[Yellow]	[Yellow]	[Yellow]		
Advisory Board of Court Reporters	Shorthand	[Green]	[Yellow]	[Yellow]	[Yellow]	** [Yellow]	** [Yellow]
	Voice	[Green]	[Yellow]	[Yellow]	[Yellow]	** [Yellow]	** [Yellow]
Electrician's Board	Apprentice	[Green]	[Yellow]	[Green]	[Yellow]		
	Journeyman	[Green]	[Yellow]	[Green]	[Yellow]		
	Master	[Green]	[Yellow]	[Green]	[Yellow]		
	High/Medium Voltage	[Green]	[Yellow]	[Green]	[Yellow]		
Family Mediator Certification Board	Certified Family Mediators	[Green]	[Yellow]	[Yellow]	[Yellow]	** [Yellow]	** [Yellow]
Board of Foresters	Foresters	[Green]	[Yellow]	[Yellow]	[Yellow]		

Board	Licenses/Positions Regulated	Required Criminal History Check	Required to Disclose Criminal History	Required to Disclose Misdemeanor	Required to Disclose Felony	Misdemeanor Disqualifying	Felony Disqualifying
Guardian ad Litem Board	Certified Guardian ad Litems						
Board of Home Inspectors	Home Inspectors					**	**
Manufactured Housing Installation Standards Board	Home Installers					**	**
Board of Land Surveyors	Land Surveyor COAs						
	Land Surveyors						
	Surveyor in Training						
Board of Landscape Architects	Landscape Architects					**	**
Mechanical Safety and Licensing Board	Fuel gas fitting trainee					**	**
	Fuel gas fitting installation					**	**
	Fuel gas fitting service					**	**
	Fuel gas fitting piping					**	**
	Fuel gas fitting- domestic appliance					**	**
	Fuel gas fitting Hearth System Installation and Service					**	**
	Plumber trainee					**	**
	Plumber Journeyman					**	**
	Plumber Master					**	**
	Water treatment technician					**	**
	Oil Heating technician					**	**
Board of Natural Scientists	Certified Soil Scientist					**	**
	Certified Wetland Scientist					**	**
	Soil Scientist Apprentice					**	**
	Wetland Scientist Apprentice					**	**
	Engineer COAs						

Board	Licenses/Positions Regulated	Required Criminal History Check	Required to Disclose Criminal History	Required to Disclose Misdemeanor	Required to Disclose Felony	Misdemeanor Disqualifying	Felony Disqualifying
Board of Professional Engineers	Engineer in Training						
	Professional Engineer						
Board of Professional Geologists	Professional Geologist					**	**
NH Real Estate Appraisers Board	Apprentice Appraisers						
	Certified General Appraisers						
	Certified Residential Appraisers						
	License Residential Appraisers						
NH Real Estate Commission	Associate Broker						
	Managing Broker						
	Principal Broker						
	Salesperson						
Board of Septic System Evaluators	Septic System Evaluators					**	**

Appendix C – State of New Hampshire Workforce Assessment

STATE OF NEW HAMPSHIRE

WORKFORCE ASSESSMENT

AUGUST 2022

UPDATED APRIL 2023

TABLE OF CONTENTS

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

New Hampshire's Department of Business and Economic Affairs (BEA) retained Camoin Associates to conduct a Workforce Assessment of the State's identified target sectors. These sectors include Technology, Construction, Hospitality, Healthcare and Manufacturing. While there are many additional industries that support the State's economy, the intent of this research was to identify and study the high-wage jobs in occupations that have shown strong growth within these industry sectors. With tightening resources and increased demand on workforce and economic development entities, this focus will allow the BEA to make strategic decisions about how and where to pursue proactive strategies.

I.   Identifying the Workforce Gaps

New Hampshire's 80 Top Occupations are projected to have nearly 197,000 job openings from 2022 to 2032, of which only 6,100 will be filled by labor force growth, leaving a gap of nearly 191,000. The largest gaps will occur in the following five occupations:

1. *General and Operations Managers* are expected to see the largest shortage, with a gap of 11,905 jobs
2. *Software Developers and Software Quality Assurance Analysts and Testers* (–9,384)
3. *Heavy and Tractor-Trailer Truck Drivers* (–9,235)
4. *Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products* (–8,070)
5. *Registered Nurses* (–7,946)

A total of 34 occupations were identified with significant gaps. Management occupations accounted for the largest portion (14%) of the projected labor force gap. Other large occupational group gaps include Business and Financial Operations (12% of the gap) and Sales and Related Occupations (11%).

II.   Strategies to Close Workforce Gaps

To overcome systemic challenges and demographic shifts in New Hampshire's economy, the State will need to take a collaborative, multi-disciplinary approach to fill unmet demand in the top occupations. While some of this work may be enacted at various scales throughout the state, a comprehensive and coordinated effort among partners will be necessary to enact meaningful gains.

The data provided in this report will be used to set priorities among partners and inform how resources are allocated to address the most imminent challenges. The labor market analysis identifies those occupations that overlap among the state's target sectors. Supporting occupations that play a large role in driving the success of multiple sectors will have the largest impact on New Hampshire's economic success.

The following outlines the two distinct pathways to address workforce gaps. Additional detail on these strategies – as well as corresponding data or other rationale – can be found in Chapter 5.

Grow From Within New Hampshire

RATIONALE | These are strategies that are targeted at the current residents and workforce of New Hampshire, focusing on adapting the skills and guiding career pathways with institutional partners, such as workforce development leaders and educational institutions.

STRATEGIES |

- Diversify the workforce
- Transfer skills – including veterans
- Increase training pipeline
- Increase state-wide graduate retention
- Promote and train existing employees
- Showcase workforce opportunities for the trades
- Educate employers about long-term labor force trends
- Collaborate and prioritize other sectors that impact the economy

Attracting from Outside New Hampshire

RATIONALE | Shifting demographics and population decline mean that attraction into the state will be necessary to fill some of the jobs most critical to the State's economy. These strategies will be more applicable to workers with high levels of economic mobility, meaning they have the means to move from their current location for another position.

STRATEGIES |

- **Attract and retain commuters** – Over 90% of workers in in-demand occupations commute out of state for work. Factors like taxes, cost of living, and wage rates all play a factor in determining where individuals decide to work – which draws attention to the need for public sector economic development officials and private sectors businesses to team up on addressing or making the case for these individual factors.

- **Attract workers from outside New England** - The analysis also concluded where in-demand occupations are concentrated across the country and which Metropolitan Statistical Areas (MSAs) can be targeted for a marketing attraction campaign. These MSAs have a high concentration of in-demand occupations, with a sizable workforce, and lower median hourly earnings. Workers may be more likely to consider a move from relatively nearby MSAs (e.g., CNC Tool Operators in Lebanon, NH-VT) and/or ones that have large differences in earnings (e.g. Management Analysts in Tallahassee, FL and Sacramento-Roseville-Folsom, CA).

III.   Acting on Workforce Data

In the near-term, the BEA will continue to work with Camoin Associates to determine how a creative marketing agency will use this data within a workforce/talent attraction campaign. A roll out of this report to salient partners will also begin the process of establishing roles in the strategies to grow occupations from within the state.

1. INTRODUCTION

Methodology

For this Workforce Assessment, Camoin Associates used New Hampshire's identified targeted industries to understand the historical, current, and projected talent supply for the targeted industries. The analysis focuses on gaps and opportunities in New Hampshire's workforce related to skills, education, and training needs to support growth. The following graphic outlines the analytical process and research questions for this Workforce Assessment.

Introduction
- What are the parameters for this assessment?

Labor Market Analysis
- What is the current situation of the State's workforce?
- What are major trends that are influencing demand?

Cluster Analysis
- How are the clusters performing?
- What are the Top Occupations for each cluster?

Supply, Demand, and Gap Analysis
- What are the most In-Demand Occupations in the State?
- Is the State's workforce able to meet demand?

Strategies
- How can the State and its partners meet workforce demand?

Region of Analysis

The State of New Hampshire is the primary region of analysis for this report. Where appropriate, comparisons are made to New England (which includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont) and the US to provide context.

New Hampshire is broken into four Collaborative Economic Development Regions (CEDRs) which allow for regional economic deveopment coordination:

- **Central-Southern CEDR:** Hillsborough and Merrimack counties
- **Seacoast CEDR:** Rockingham and Strafford counties
- **Northern CEDR:** Belknap, Carroll, Coos, and Grafton counties
- **South-Western CEDR:** Cheshire and Sullivan counties

Analysis and recommendations are provided by CEDR where relevant in order to provide for regional approaches to workforce strategy.

Sources

Unless otherwise noted, all data is sourced from Emsi. Other sources include the US Census Bureau and the Bureau of Labor Statistics. See Appendix VIV: Data Sources and Terminology for more information about the data sources and indicators used in this report.

The icons used on the cover and throughout the report were designed using resources from Flaticon.com

Time Period

Unless otherwise noted, all data presented are for 2021. Every effort was made to use the most up to date and reliable data. To that end, an update of the labor market analysis was completed just prior to the release of this report to reflect recently released 2022 data. For that reason, the data in Chapter 2 may not match the data presented in subsequent chapters and appendices.

Different time periods are used for historical and projected analysis throughout this report to capture long-term trends. For example, most industry and workforce data projections are through 2026, since projections become less meaningful over long time horizons; however, for the gap analysis, 10-year projections are used to reflect the time required to implement strategies. For historical analysis, the years between 2019 and 2021 are of particular note due to the impacts of the COVID-19 pandemic, the effects of which are still being parsed out as the pandemic continues having global resurgences. Projections are heavily influenced by pandemic trends over the past few years since they are modeled after historical performance.

2. LABOR MARKET ANALYSIS

Labor Market Analysis

Purpose: The Labor Market Analysis uncovers how demographic and socioeconomic trends are impacting the state's workforce. This analysis also determines the major trends across the state that are influencing workforce demand. This helps set the baseline understanding for what occupations are in greatest demand by region across the state.

Key Takeaways

The following bullets summarize the findings of the state-wide labor market analysis. These takeaways help set the foundation for the remainder of the analysis.

- New Hampshire has fast population growth relative to New England, but slightly slower than the nation.
- Racial diversity is significantly lower than in New England and the nation.
- The State follows New England and national trends in aging, but generally at a greater magnitude. It is currently the second oldest state in the country. Overall, the trend points to an intensification of overlapping workforce, healthcare, and housing crises as Baby Boomers begin to retire and the younger cohorts lag in growth. At the same time, the population between the ages of 25 and 44 – prime working years – is growing more rapidly than the broader New England region and the nation.
- The State's population is relatively affluent – both in terms of median earnings and household income – and educated.
- The State has historically low unemployment and declining labor force participation; however, it has a relatively high participation rate compared to New England and the nation.
- New Hampshire is projected to have relatively stagnant job growth, but generally aligns with job growth trends in New England and the nation.
- The occupational mix of the State of New Hampshire is relatively similar to that of New England and the United States.
- New Hampshire is a net exporter of talent, with a large number of workers – particularly high-wage earners – commuting to the Boston metro.
- Population, wealth, and economic activity concentrated in the South-Central and Seacoast CEDRs, in the Greater Boston area, while the Northern and South-Western CEDRs are relatively rural, older, and stagnant.

Overview

The following provides a brief overview of the current labor market relative to New England and the US, with regional data provided for comparison purposes. The following pages provide a more in-depth analysis of a few key topics relevant to this report.

Population	**Population Growth**	**Racial Diversity**
1,404,335 (2022)	**6.0%** (2012 – 2022)	**11% racially diverse residents** (2022)

Accounts for a little over 9% of New England's population

- Central-Southern CEDR: 42%
- Seacoast CEDR: 32%
- Northern CEDR: 17%
- South-Western CEDR: 9%

Faster than New England (4.2%), but slightly slower than the nation (6.5%)

- Central-Southern CEDR: 6.0%
- Seacoast CEDR: 7.4%
- Northern CEDR: 5.9%
- South-Western CEDR: 1.5%

Significantly lower than New England (27%) and the US (41%)

- Central-Southern CEDR: 15%
- Seacoast CEDR: 9%
- Northern CEDR: 7%
- South-Western CEDR: 7%

Median Age [1]	**Median Household Income** [1]	**Average Earnings**
43.0 (2021)	**$83,449** (2021)	**$83,225** (2022)

Higher than the region (40.9) and significantly higher than the nation (38.4)

- Central-Southern CEDR: 41.5
- Seacoast CEDR: 42.4
- Northern CEDR: 47.3
- South-Western CEDR: 44.3

Slightly higher than New England ($82,734) and significantly higher than the nation ($69,021)

- Central-Southern CEDR: $85,751
- Seacoast CEDR: $94,402
- Northern CEDR: $70,343
- South-Western CEDR: $67,681

Lower than New England ($90,747) and slightly higher than the US ($79,791)

- Central-Southern CEDR: $82,793
- Seacoast CEDR: $75,970
- Northern CEDR: $66,805
- South-Western CEDR: $63,432

Educational Attainment	**Unemployment Rate**	**Labor Force Participation**
39% Bachelor's or higher (2022)	**2.5%** (December 2022)	**66.7%** (December 2022)

Lower than the New England (42%), but higher than the nation (34%)

- Central Southern CEDR: 39%
- Seacoast CEDR: 42%
- Northern CEDR: 36%
- South-Western CEDR: 33%

Lower than New England (3.1%) and the nation (3.3%)

- Central-Southern CEDR: 2.4%
- Seacoast CEDR: 2.5%
- Northern CEDR: 2.6%
- South-Western CEDR: 2.6%

Significantly higher than New England (63.7%) and the nation (62.2%)

- Central-Southern CEDR: 69.2%
- Seacoast CEDR: 70.6%
- Northern CEDR: 56.5%
- South-Western CEDR: 60.7%

[1] Source: US Census Bureau, American Community Survey

Age

The median age in New Hampshire is 43.0, making it the second oldest state in the country (behind Maine, at 44.7). The State follows New England and national trends in population growth by age cohort, but generally at a greater magnitude. Overall, the trend points to an intensification of overlapping workforce, healthcare, and housing crises as Baby Boomers begin to retire and the younger cohorts lag in growth. Between 2017 and 2027:

- The population under the age of 14 is **declining** at -2%, compared to -2% in New England and -3% in the US

- 15–24-year-olds are **declining** more rapidly, at -3% compared to 0% in New England and +4% in the US

- 25-34-years-olds are **growing** more rapidly, at +10% compared to 0% in New England and -4% in the US

- 35-44-year-olds are **growing** more rapidly, at +32% compared to +24% in New England and +16% in the US

- 45–54-year-olds are **declining** more rapidly, at -13% compared to -8% in New England and -1% in the nation. This is the cohort that is declining the fastest in the State.

- 55-69-year-olds are **increasing**, at +9% compared to +7% in New England and +6% in the US

- The 70 years and older cohort is increasing more rapidly, at +39% compared to +29% in New England and +27% in the nation. This is the cohort that is growing the fastest in the State.

Age Distribution

Source: Emsi

State of New Hampshire Workforce Assessment
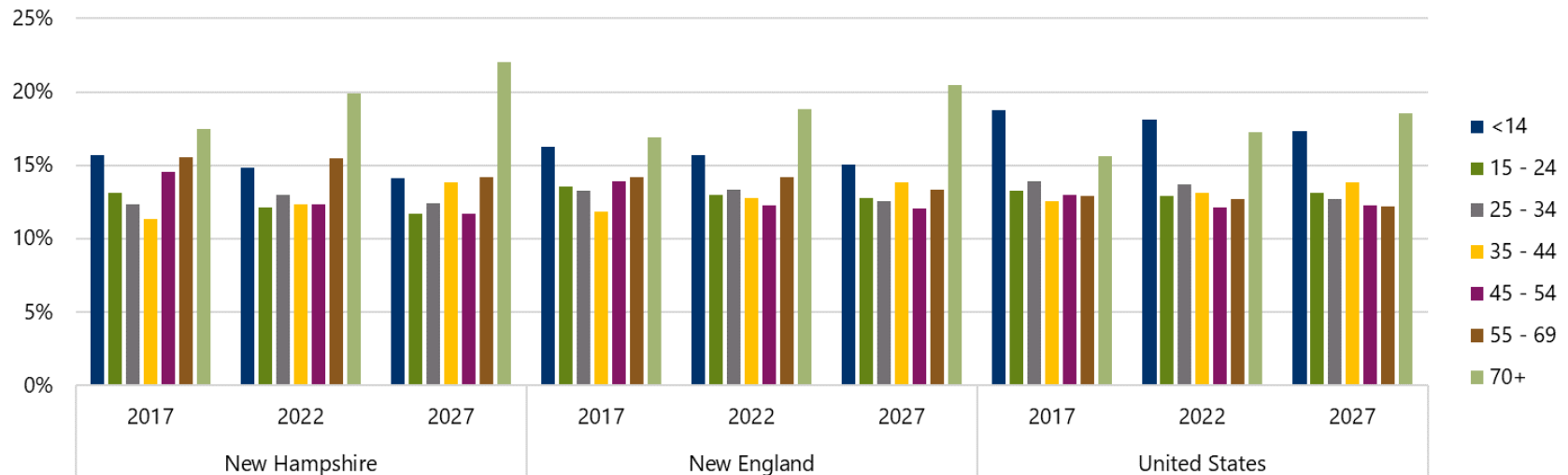
Labor Force

New Hampshire has a total labor force of 769,978 as of February 2023. Of those workers, 2.7% were unemployed.[1] New Hampshire has a labor force participation rate of 66.0% as of February 2023, which is significantly higher than participation at the national level (62.5%), but still not recovered to pre-pandemic levels. However, while the pandemic did have a sharp impact (a -3.45% decrease between March and April 2020, compared to -4.0% at the national level), labor force participation has been steadily declining over the past two decades in keeping with national trends. Overall, the labor force participation rate decreased by -8.7% between January 2000 and February 2023, compared to -7.1% for the US.

- Highest: 72.4% in April 2000 (compared to 67.3% in the US between January and April 2000)
- Lowest: 65.4% in October 2021 (compared to 60.1% in the US in April 2020)
- Average: 69.5% (compared to 64.4% at the national level)

Labor Force Participation Rate

Source: Bureau of Labor Statistics, Seasonally Adjusted

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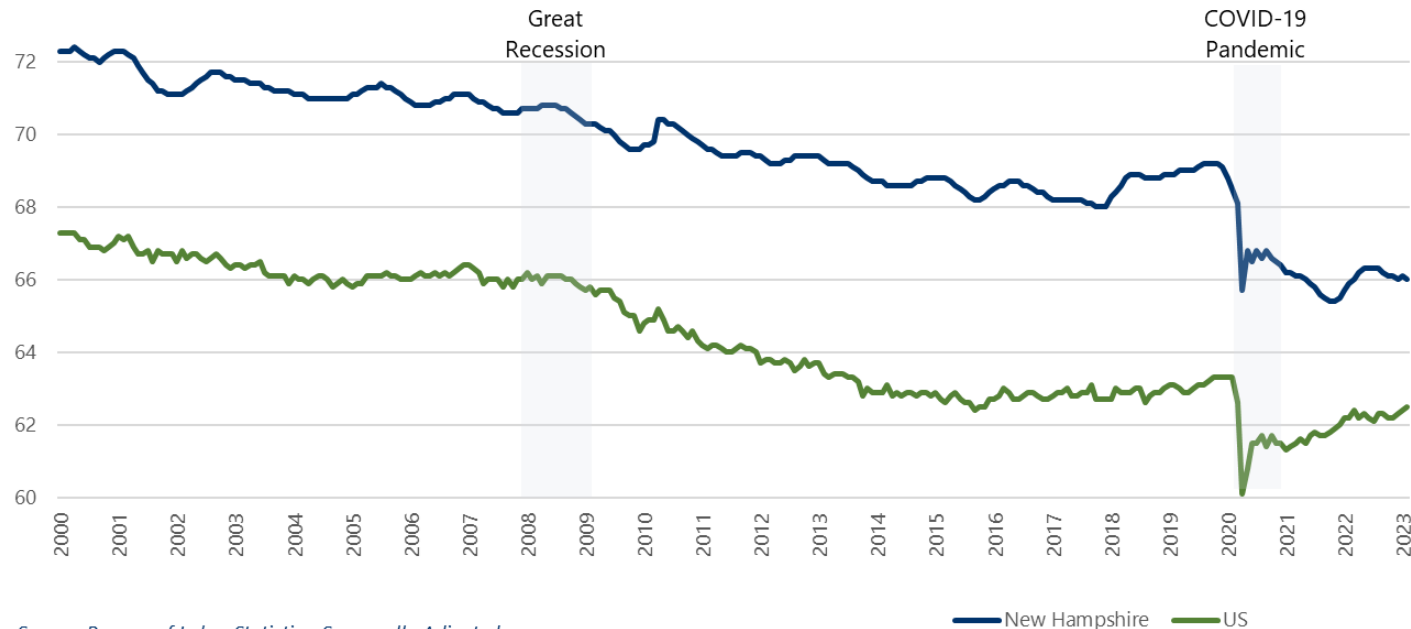
[1] Source: US Bureau of Labor Statistics, Local Area Unemployment Statics.

Jobs

As of 2022, there were 746,212 jobs in New Hampshire, which accounts for approximately 9.1% of the total jobs in New England. This is slightly below pre-pandemic job levels of 747,254 in 2019. Prior to the pandemic, the State's jobs were growing relatively slowly adding an annual average of 0.4% new jobs each year between 2003 and 2019, compared to 0.4% in New England and 0.7% in the nation. However, overall, the State follows job growth trends in New England and the nation and did not fare worse than the other regions of analysis during the pandemic, which resulted in job losses of -5.1% between 2019 and 2020, compared to -6.7% in New England and -5.1% in the nation. In fact, the State's recovery between 2020 and 2021 was slightly faster at 3.4% compared to 3.2% for New England and 2.7% in the nation. However, the State's job growth is expected to slow, with a projected growth rate of 4.5% between 2022 and 2027, while New England is expected to grow at 7.0% and the nation at 6.4%.

Historic and Projected Job Growth
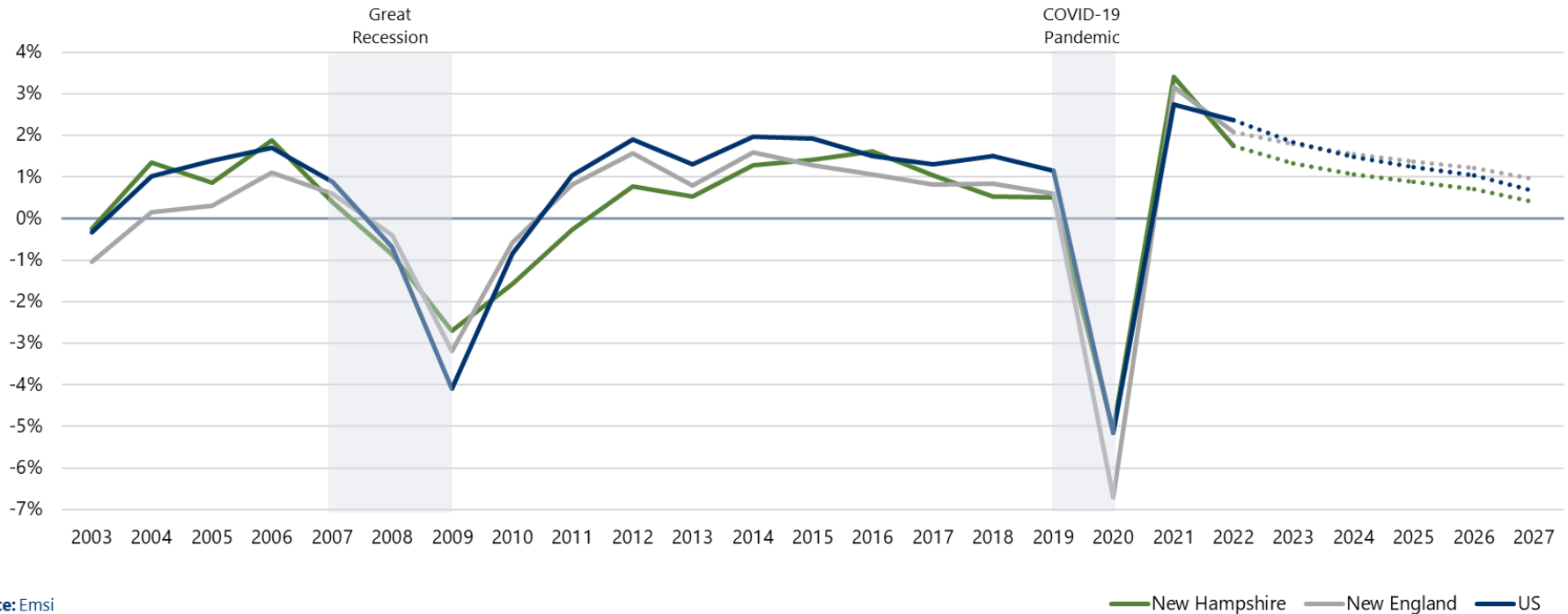
Source: Emsi

Occupational Mix

At the 2-digit SOC code level, the occupational mix of the State of New Hampshire is relatively similar to that of New England and the United States. Within the top 10 occupation groups, the State only deviates by 1 -2 percentage points in terms of share of any given occupation. The State has a:

- Slightly larger share of *Office and Administrative* jobs than New England and the nation

- Slightly larger share of *Sales and Related* jobs than New England and the nation

- Slightly smaller share of *Transportation and Material Moving* jobs than the nation

- Slightly smaller share of *Management* jobs than New England

- Slightly larger share of *Production* jobs than the nation and New England (5% of total, not shown below)

Occupational Mix
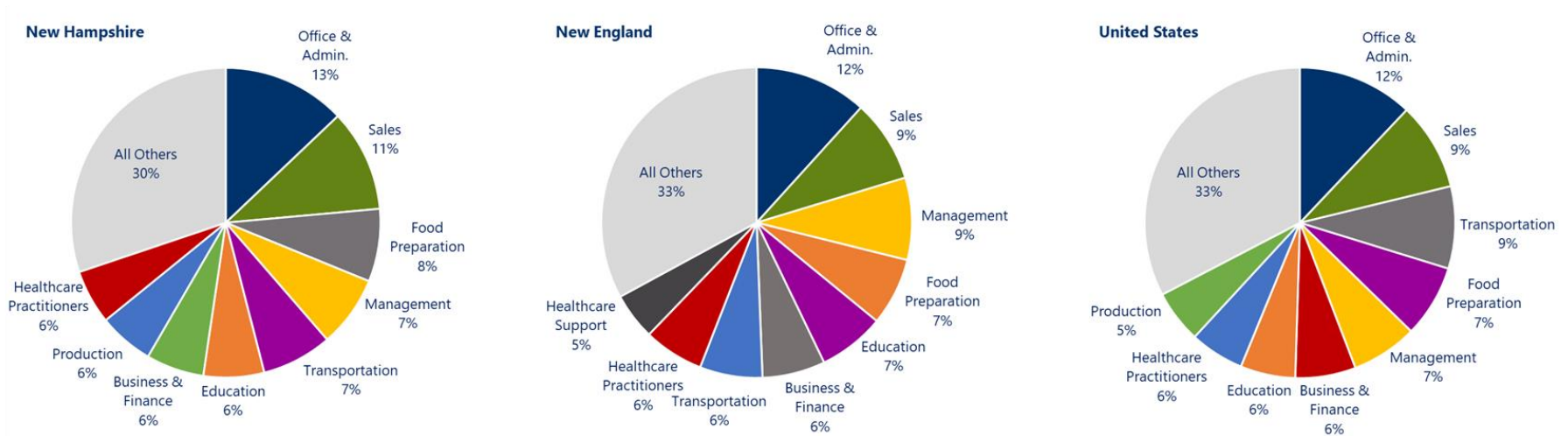
Source: Emsi

Commuting

In 2022, New Hampshire had an average commute time of 25.7 minutes, which aligns with the average commute time of 27.6 minutes across the nation.[2, 3] The State had -45,964 net commuters in 2022, which means it exports workers to nearby communities, particularly the Greater Boston area. While Grafton and Merrimack counties attract in-commuters, the rest of the counties in New Hampshire are net exporters of labor, with Rockingham, Hillsborough, and Stafford losing the most.

Most cross-state commuters are those with monthly earnings above $3,333. Among New Hampshire residents who work in another state, 67% earn over $3,333 per month, about 18% earn between $1,251 and $3,333, and the remaining 14% earn $1,250 per month or less. By comparison, among New Hampshire residents who work in New Hampshire, just over half (54%) earn more than $3,333 per month, 26% earn between $1,251 and $3,333, and the remaining 21% earn $1,250 per month or less. That is, high earners represent a larger share of out-commuting New Hampshire residents than of those who work in-state. This means the State is exporting its top earners.

See Appendix I for a more detailed analysis of commuting trends in the State of New Hampshire.

Net Commuters

Color	Range
	10,131 to 13,426
	3,033 to 4,968
	0 to 3,032
	0 to -3,032
	-3,033 to -4,968
	-4,969 to -10,130
	-10,131 to -13,426
	-13,427 to -16,288
	-16,289

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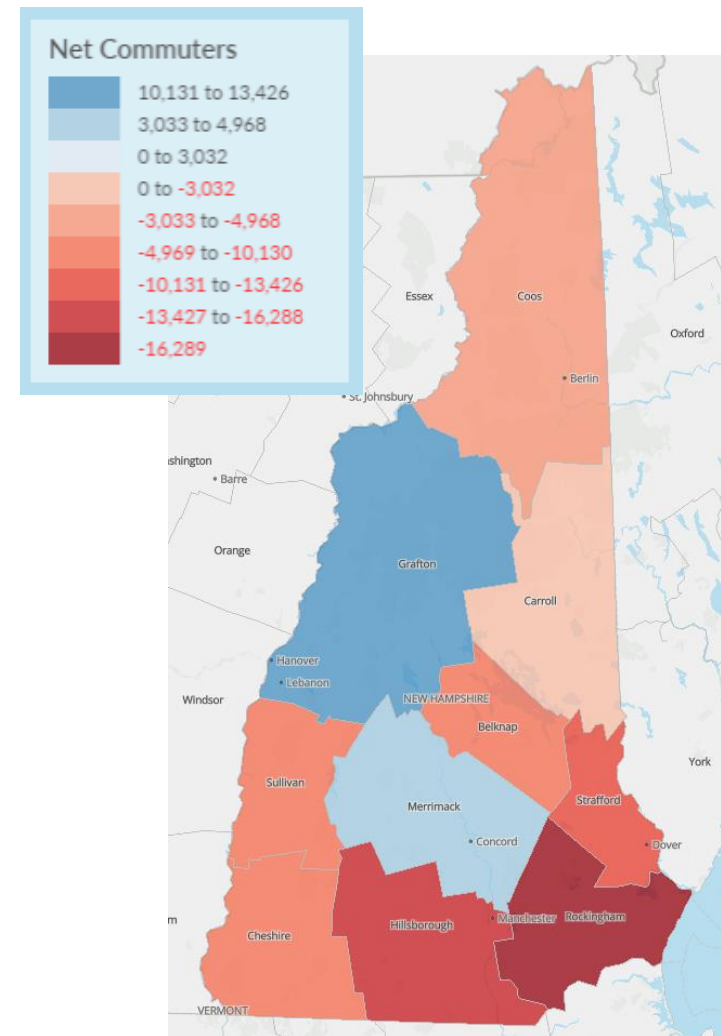
[2] Source: US Census Bureau, American Community Survey
[3] Source: US Census Bureau, Census Bureau Estimates Show Average One-Way Travel Time to Work Rises

Remote Work

Of the 226,036 jobs posted online in New Hampshire in 2022, 29,929 – or 13% – were for remote positions. This number has been going up over time but increased drastically with the pandemic, with remote jobs accounting for 2% of all online job postings in 2019 to 3% in 2020, 5% in 2021, then to 13% in 2022. So far, in the first three months of 2023, 27% of all online job postings were listed as remote positions.

In addition to new remote job postings across the state, existing positions have also transitioned to remote capabilities at various rates across sectors. Remote work due to COVID-19 is estimated at 7% of total employment across the nation. "In June, 7.1 percent of employed persons teleworked because of the coronavirus pandemic, down from 7.4 percent in the prior month. These data refer to employed persons who teleworked or worked at home specifically because of the pandemic." [4]

As of June 2022: [5]

- Workers who are able to do their jobs remotely worked from home 50% of the time
- Employers who are able to provide remote work planned to allow employees to do so for 2.3 days per week post-COVID
- College graduates are two times more likely to work from home than workers with no college
- Occupations that require less personal interaction are more likely to be remote
- Working from home is more common in urban areas
- Older workers are more likely to desire remote work

Remote workers vary significantly based on industry, as not all occupations can be performed remotely. Jobs in the Computer and Mathematical, Healthcare Practitioners and Technicians, Management, Sales, Office and Administrative Support, and Business and Financial Operations are the most likely to offer remote work. The top remote occupations in 2022 at the 5-digit level include:
- *Registered Nurses* (1,535 remote jobs postings accounting for 12% of total remote job postings
- *Software Developers* (1,385; 5%)
- *Retail Salespersons* (741, 2%)
- *Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products* (736; 2%)
- *Computer Occupations, All Others* (652; 2%)

Remote Job Postings by Occupation Group, 2022
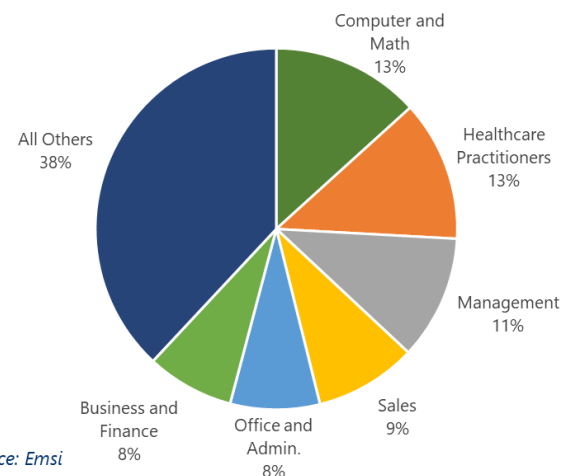
Source: Emsi

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[4] Employment Situation Summary - 2022 Q02 Results (bls.gov)
[5] Barrero, Jose Maria, Nicholas Bloom, and Steven J. Davis, 2021. "Why working from home will stick," National Bureau of Economic Research Working Paper 28731. www.wfhresearch.com Updated July 2022.

BEA   State of New Hampshire Workforce Assessment

Remote work offers both opportunities and challenges to addressing workforce shortages. Remote work allows employers to expand their talent pool to include workers from across the nation, while also allowing for reduced operations costs. However, New Hampshire businesses that require in-person work will face increased competition in attracting local and regional workers, who now have more choice and are no longer limited by geography.

Workforce Pipeline

The State of New Hampshire has:

- Seven Community Colleges with 12 campuses
- Four public four-year colleges
- 12 private nonprofit colleges and universities
- 52 licensed career schools

Just over 30% of New Hampshire higher educational program completions in 2021 were in business-related fields and another 14% were in health-related fields. Based on how educational fields prepare students for professional occupations, 26% of program completers had the minimum qualifications for jobs in the Management occupation group, 18% were qualified for entry-level in the Business and Financial Operations occupation group, and nearly 11% for the Computer and Mathematical occupation group.

- Statewide post-secondary completions grew 43% between 2017 and 2021 to 42,592. Two of the four CEDRs saw increases in completions over the period, with Northern CEDR completions increasing by 5% and Central-Southern CEDR by 67%. Total completions remained the same in the Northern CEDR and shrank by 14% in the South-Western CEDR, although those from Antioch University- New England grew by 56%.

- The top 10 academic major fields in the State in 2021 were: Business Administration and Management (8,116), Psychology (2,856), General Studies (1,825), Health/Health Care Administration/Management (1,707), Registered Nursing (1,629), Computer and Information Sciences (1,559), Accounting (1,416), Corrections and Criminal Justice (1,269), English Language and Literature (855), and Organizational Communication (720). These fields accounted for over half of all 2021 completions. Between 2017 and 2021, the fastest growing majors included Experimental Psychology (5,300%), Community Health Services/Liaison/Counseling (4,000%), and Critical Infrastructure Protection (3,550%).

- Statewide, the following occupations had the largest number of completions in 2021: 21,430 individuals in 2020 with the minimum academic qualifications to be *Managers, All Other* (21,430 completions), *Computer User Support Specialists* (13,158), *General and Operations Managers* (13,061), *Project Management Specialists* (12,809), and *Financial Managers* (12,774).

See Appendix II for a detailed Workforce Pipeline Profile.
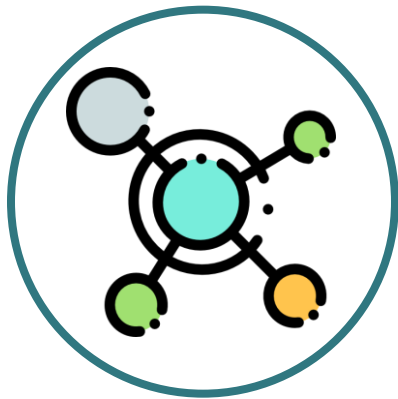
3. CLUSTER ANALYSIS

Cluster Analysis

Purpose: This chapter summarizes the historical trends and current status of New Hampshire's target sectors: Health Care, Manufacturing, Hospitality, and Technology. Each section also includes the top occupations that drive the sector's performance. These top occupations are then further analyzed in the next chapter to identify the State's greatest workforce gaps, which if not met could impede target sector growth.

Healthcare Cluster

Healthcare is the largest cluster in New Hampshire. It has above average earnings, employment growth, and is a major contributor to the state's GRP. Just over 2,800 jobs were lost at the outset of the COVID-19 pandemic; however, employment has since recovered and even exceeds 2016 levels. In addition to top Healthcare Practitioners and Technical occupations – such as physicians and nurses – many top occupations are related to management, training, and human resources, which aligns with trends in other clusters.

- Healthcare is the largest cluster in the state with 98,682 workers (14% of the workforce).
- The Healthcare cluster is experiencing moderate growth of 6% between 2016 and 2026. The pandemic caused a 3% contraction between 2019 and 2021; however, the cluster was growing prior to the pandemic and is expected to continue through 2026. It has already recovered to pre-pandemic employment levels.
- New Hampshire has above average earnings in Healthcare than expected for an area this size ($77,187 compared to $73,280).
- The Healthcare cluster is the second largest contributor to GRP (9%, behind Manufacturing at 13%), but are some of the least productive employees ($88,162 followed by Hospitality at $49,218). As a labor intensive, non-goods producing cluster, this is expected and follows national trends.
- Healthcare has the lowest industry concentration of all the clusters, and it is the only cluster whose concentration is decreasing over time. The cluster's location quotient reduced from 0.98 in 2019 to 0.97 in 2021, and it is expected to decrease to 0.94 by 2026. See Appendix III for a detailed analysis of the Healthcare Cluster.

Top Industries

- Child Day Care Services
- Community Food Services
- Family Planning Centers
- Freestanding Ambulatory Surgical & Emergency Centers
- General Medical & Surgical Hospitals
- Offices of Physicians (except Mental Health Specialists)
- Offices of Physicians, Mental Health Specialists
- Other Residential Care Facilities
- Outpatient Mental Health & Substance Abuse Centers
- Research & Development in Biotechnology (except Nanobiotechnology)

Top Occupations

- All Other Project Management Specialists and Business Operations Specialists
- Human Resources Specialists
- Mental Health and Substance Abuse Social Workers
- Physicians, All Other; and Ophthalmologists, Except Pediatric
- Registered Nurses
- Social and Community Service Managers
- Speech-Language Pathologists
- Training and Development Specialists

Manufacturing Cluster

Manufacturing is crucial to New Hampshire's economy, accounting for a large share of employment, contributing the largest share of the State's GRP, and offering higher than average earnings. However, the State does not have a strong competitive advantage in this sector and is expected to continue losing jobs. Overall, jobs in this sector are becoming more technical in nature.

- The Manufacturing cluster employs 69,844 workers, or 10% of the total workforce.

- The Manufacturing cluster is in decline. It was deeply impacted by the COVID-19 pandemic, losing just over 4,300 jobs between 2019 and 2021. However, unlike other clusters that experienced losses due to the pandemic, the Manufacturing cluster is not projected to grow through 2026. Prior to the pandemic, the cluster was experiencing moderate growth of 5%.

- Average earnings in the Manufacturing cluster are higher than expected for an area this size.

- The Manufacturing cluster is the top contributor to New Hampshire's GRP (13%) and has the second most productive workers ($174,676 following $259,245 for Technology). This is in keeping with national trends, as Manufacturing tends to be a capital-intensive industry.

- Manufacturing has the largest businesses among the clusters.

- The State has a slightly higher concentration relative to the US in Manufacturing, which has remained steady since 2016.

- New Hampshire does not have a competitive advantage in Manufacturing, with 1,161 fewer jobs than expected between 2016 and 2026 due to local factors. This means there are 1065% fewer jobs in this cluster than expected than if national and industry growth trends were the only factors.

- Manufacturing has the highest retirement risk of the State's clusters.

- Nearly half of all jobs within the cluster are in the Production occupation sector (47%). Overall, Production occupations are declining as Manufacturing is becoming more reliant on technology and automation. Computer and Mathematical occupations are growing the fastest within this cluster, while Production is expected to decrease.

- The Manufacturing cluster has the most diversification across occupations. The top 30 occupations account for only 58% of total employment (in the other clusters, the top 30 occupations account for at least 69% of all employment).

See Appendix IV for a detailed analysis of the Manufacturing Cluster.

Top Industries

- Fastener, Button, Needle & Pin Manufacturing
- In-Vitro Diagnostic Substance Manufacturing
- Machine Shops
- Nonferrous Metal Die-Casting Foundries
- Optical Instrument & Lens Manufacturing
- Other Electronic Component Manufacturing
- Rolled Steel Shape Manufacturing
- Search, Detection, Navigation, Guidance, Aeronautical & Nautical System & Instrument Manufacturing
- Small Arms, Ordnance & Ordnance Accessories Manufacturing

Top Occupations

- Architectural and Engineering Managers
- Business Operations Specialists, All Other
- Computer and Information Systems Managers
- Electricians
- Human Resource Specialists
- Industrial Engineers
- Industrial Production Managers
- Logisticians
- Mechanical Engineering Technologists and Techs
- Mechanical Engineers
- Project Management Specialists
- Purchasing Managers
- Rolling Machine Setters, Operators, and Tenders in Metal and Plastic
- Sales Managers
- Software Developers and Software Quality Assurance Analysts and Testers

Hospitality Cluster

The Hospitality industry cluster lags behind the other clusters on most indicators; however, its importance in terms of quality of life, population retention, and workforce attraction cannot be overstated. This cluster was hit particularly hard by the COVID-19 pandemic; however, there are signs of recovery. While most jobs within this cluster are not suitable for target attraction due to low wages, some of the top occupations are related to management, training, and human resources, which aligns with trends in the other clusters.

- The Hospitality industry cluster employs 60,953 workers, or 8% of the total workforce in New Hampshire. It is the third largest cluster in the state.

- With a growth rate of -8% from 2016 to 2026, the Hospitality cluster has experienced the slowest growth rates of all the clusters, primarily due to the COVID-19 pandemic (-12,375 for a growth rate of -12% between 2019 and 2021). However, the cluster was growing prior to the pandemic (4% from 2016 to 2019) and is projected to grow by 6% through 2026, though it is not expected to recover to pre-pandemic levels by then.

- The Hospitality cluster contributes the smallest share of the state's gross regional product (only 3% of total GRP) and has the least productive workers ($49,218 per job). As a labor intensive, non-goods producing cluster, this is to be expected and aligns with national trends.

- The Hospitality cluster has relatively low industry concentration of 1.05; however, it is becoming more concentrated over time. The location quotient was 1.01 in 2016 and is expected to increase by 6% by 2026 to 1.07, growth that is second only to the Technology cluster.

- New Hampshire has a competitive advantage in Hospitality. Although the state's Hospitality employment declined by 8% from 2016 to 2026 (due to the pandemic), it shrank by 26% less than expected than if it had followed national and industry trends.

- The Hospitality cluster has the lowest retirement risk of all the clusters; however, with 17% of the workforce aged 55 and over, that risk is still relatively high.

- The vast majority of jobs in this cluster are in the Food Preparation and Serving occupations (68%). Two of those occupations, Fast Food and Counter Workers (19%) and Waiters and Waitresses (14%), account for a third of cluster employment.

See Appendix V for a detailed analysis of the Hospitality Cluster.

Top Industries

- Full-Service Restaurants
- Limited-Service Restaurants
- Snack and Nonalcoholic Beverage Bars
- Drinking Places
- Cafeterias, Grill Buffets, and Buffets
- Caterers
- Skiing Facilities
- Bed-and-Breakfast Inns
- Recreational and Vacation Camps
- Convention and Trade Show Organizers

Top Occupations

- General and Operations Managers
- Food Service Managers
- Maintenance and Repair Workers, General
- Training and Development Specialists
- Project Management Specialists and Business Operations Specialists, All Other
- Market Research Analysts and Marketing Specialists
- Sales Representatives of Services
- Human Resource Specialists
- Financial Managers
- Personal Service Managers
- Entertainment and Recreation Managers
- Managers, All Other

Construction Cluster

The Construction cluster is experiencing strong growth, even through the pandemic. It accounts for a fairly large share of the State's businesses, and its employees are productive. The State does not have industry concentration or a competitive advantage in this cluster. In keeping with trends among the other clusters, some of the top occupations are in management positions.

- The Construction industry cluster employs 42,040 workers, or 6% of the total workforce in New Hampshire. It is the fourth largest cluster in the state.

- With a growth rate of 10% from 2016 to 2026, the Construction cluster is the second fastest growing cluster in the State (behind Technology at 33%). This cluster did not experience any job losses during the pandemic, though growth has been slowing a bit since 2019. It is projected to grow an additional 2% by 2026.

- This cluster accounts for the largest share of the State's payroll business locations (9%). Construction companies tend to be rather small, with an average of 8 employees.

- The Construction cluster is one of the smaller contributors to the State's gross regional product (only 5% of total GRP), but its employees are relatively productive ($107,041 per job).

- The State of New Hampshire does not have any industry concentration in the Construction cluster (LQ = 1.00), and that has been consistent over time. Since Construction is typically not export-oriented, a neutral industry concentration is to be expected.

- New Hampshire does not have a competitive advantage in Construction. Between 2016 and 2026, this cluster will have 970 fewer jobs than expected if it had followed national and industry trends.

- The Construction cluster has a high retirement risk, with 29% of the workforce aged 55 and over.

- Over 62% of jobs in this cluster are within the Construction and Extraction occupation sector. At the 5-digit level, Construction Laborers (12%) and Carpenters (12%) account for 24% of cluster employment.

See Appendix VI for a detailed analysis of the Construction Cluster.

Top Industries

- All Other Specialty Trade Contractors
- Drywall and Insulation Contractors
- Electrical Contractors and Other Wiring Installation Contractors
- New Multifamily Housing Construction (except For-Sale Builders)
- Oil and Gas Pipeline and Related Structures Construction
- Plumbing, Heating, and Air-Conditioning Contractors
- Residential Remodelers
- Siding Contractors
- Site Preparation Contractors
- Structural Steel and Precast Concrete Contractors

Top Occupations

- Construction Managers
- Earth Drillers and Explosives Workers, Ordnance Handling Experts, and Blasters
- Electrical Power-Line Installers and Repairers
- Electricians
- Floor Layers, Except Carpet, Wood, and Hard Tiles
- General and Operations Managers
- Operating Engineers
- Other Construction Equipment Operators
- Pile Driver Operators
- Project Management Specialists and Business Operations Specialists
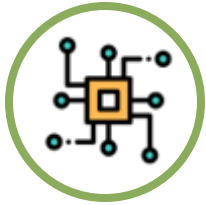
Technology Cluster

Although the Technology industry cluster is relatively small, it is driving job growth in the State. Not only is the cluster rapidly growing, but it also has the highest wages and the most productive workers of any of the clusters and a significant competitive advantage. In addition to the top occupations in the Computer and Mathematical sector, this cluster follows trends across the other cluster in terms of demand for management.

- New Hampshire's Technology cluster employs 22,373 workers, accounting for just 3% of jobs.

- The Technology cluster is the State's fastest-growing cluster, with 33% growth between 2016 and 2026 (more than triple the rate of the next fastest growth cluster, Construction at 10%). Unlike many of the other clusters, Technology job growth remained steady during the height of the COVID-19 pandemic, growing 5% between 2019 and 2021. It is projected to grow an additional 12% by 2026 for a total of 6,167 jobs added over the ten-year time period.

- The Technology cluster has the smallest businesses among the clusters with an average of 6 jobs per location.

- The Technology cluster accounts for 6% of the State's GRP, and it has the most productive workforce. Its workers produce $259,000 of GRP per job compared to the next highest cluster, Manufacturing at $175,000 per job.

- This cluster has the highest paying jobs at $151,810 on average. However, Technology workers in New Hampshire earn less than the national average of $157,121 for an area this size.

- This cluster has the highest industry concentration relative to the nation (LQ = 1.25). Overall, the LQ is projected to increase by 11% to 1.29 from 2016 to 2026.

- New Hampshire has a competitive advantage in Technology, adding 1,907 more jobs than expected from 2016 to 2026 due to local factors. This means 45% of the jobs created cannot be explained by national or industry growth.

- Over 48% of jobs within the cluster fall within the Computer and Mathematical occupation sector, which is projected to increase by 43% from 2016 through 2026. The Technology cluster has the highest concentration of employment in a single occupation, with Software Developers and Software Quality Assurance Analysts and Testers accounting for 21% of the cluster's total employment.

See Appendix VII for a detailed analysis of the Technology Cluster.

Top Industries

- Computer Systems Design Services
- Custom Computer Programming Services
- Other Computer-Related Services
- Software Publishers
- Wired Telecommunications Carriers

Top Occupations

- Computer and Information Systems Analysts
- Computer and Information Systems Managers
- Computer Network Architects
- Computer Occupations, All Other
- Computer Systems Analysts
- Computer User Support Specialists
- Marketing Managers
- Project Management Specialists and Business Operations Specialists
- Sales Managers
- Software Developers & Software Quality Assurance Analysts

4. SUPPLY, DEMAND, AND GAP ANALYSIS FOR TOP OCCUPATIONS

Supply, Demand, and Gap Analysis

Purpose: This section identifies the in-demand occupations where the talent supply is low. The Gap Analysis outlines the occupations expected to see the greatest gaps across the state and by Collaborative Economic Development Regions (CEDR). The analysis cross references the in-demand occupations with the state's target sectors in order to inform state, local, and sector strategies.

Key Takeaways

- **The State's labor force is projected to increase by just over 21,000 over the next ten years.** Projecting national age-based participation rates to 2032 and adjusting for New Hampshire's higher overall participation rate relative to the nation yields an effective total participation rate of 63.3% in the State and a total labor force increase of 21,008.

- **The State is expected to have a gap of nearly 191,000 workers in the Top Occupations over the next ten years.** The 80 Top Occupations are projected to gain a total of 6,095 workers between 2022 and 2032 across the State. This comprises the "Supply" portion of the gap analysis. Meanwhile, there are projected to be just over 196,971 job openings for the 80 Top Occupations. These openings are used to estimate the "Demand" for Top Occupations. Subtracting the openings from the projected increase in the labor force results in a shortfall, or gap, of 190,876 workers.

- **There are 34 of the Top Occupations that are expected to have a workforce gap of over 2,000 over the next ten years.** These are the most In-Demand Occupations in the State and strategies for addressing these gaps are included in Chapter 5. These 34 occupations span 12 occupational clusters. Management occupations accounted for the largest portion of the projected labor force gap, with an estimated shortfall of 26,052 workers over the next 10 years. Other large occupational group gaps include Business and Financial Operations (12% of the gap), and Sales and Related Occupations (11%). Occupations in bold span multiple industry clusters.

- **Most of New Hampshire's labor force growth will occur in the populous Central-Southern CEDR, where the labor force is expected to grow by 13,052.** The labor force in the Seacoast CEDR is expected to grow by 9,183, while the Northern CEDR will increase by only 51 and the South-Western CEDR's labor force is expected to shrink by 1,278.

- **The Central-Southern CEDR is expected to see the most openings for Top Occupations, with almost 77,500 by 2032.** It is followed by the Seacoast CEDR with close to 59,000, the South-Western CEDR with just over 12,000, and the Northern CEDR with a little more than 29,000.

- **The largest workforce gap for the State's Top Occupations is expected to be in the Central-Southern CEDR, with close to 74,000 openings unfilled by labor force growth.** The Seacoast CEDR is expected to see a shortage of over 56,000 unfilled openings, followed by more than 29,000 in the Northern CEDR, and over 12,000 in the South-Western CEDR.

- **The 80 Top Occupations account for a significant portion of the job postings within the State.** On average, there were 4,822 unique job postings per month for the Top Occupations across the State, which accounts for 40% of the 12,067 unique job postings across all occupations.

Supply

To evaluate the future supply of workers in the Top 80 Occupations, Camoin Associates created labor force projections through 2032 based on historical national age-based participation rates, adjusting to account for New Hampshire's overall higher participation rate relative to the nation. This analysis yields an effective total participation rate of 63.3% in the State and a projected total labor force increase of 21,008, aggregated for the years 2022 through 2032 – which was then distributed across occupations based on the State's projected occupational mix in 2032 per Emsi.

The 80 Top Occupations are projected to gain a total of 6,095 workers between 2022 and 2032 across the State.

The table below shows the Top Occupations that are projected to gain at least 100 workers over the next ten years. See Appendix IX: Gap Analysis for additional detail on the methodology used to create these labor force projections.

Top Occupations with the Largest Projected Growth in Labor Force, 2022–2032

SOC	Description	Labor Force Growth
29-1141	Registered Nurses	412
11-1021	General and Operations Managers	396
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	322
53-3032	Heavy and Tractor-Trailer Truck Drivers	233
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	223
43-1011	First-Line Supervisors of Office and Administrative Support Workers	204
41-1011	First-Line Supervisors of Retail Sales Workers	195
13-2011	Accountants and Auditors	181
47-2031	Carpenters	153
13-1198	Project Management Specialists and Business Operations Specialists, All Other	151
49-9071	Maintenance and Repair Workers, General	150
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	135
11-3031	Financial Managers	131
11-9198	Personal Service Managers, All Other; Entmt. and Rec. Managers; and Managers, All Other	131
13-1111	Management Analysts	127
47-2111	Electricians	105
15-1232	Computer User Support Specialists	101
Total		**4,682**

Demand

Openings

Openings is an indicator of projected job demand. Openings are an estimate of the number of new jobs being created and replacements from workers retiring or permanently leaving an occupation (growth + replacements = openings).

There are projected to be just over 196,971 job openings for the 80 Top Occupations in New Hampshire between 2022 and 2032.

The table to the right shows the occupations that are projected to have at least 2,000 openings during that period. Together, these 34 jobs account for 80% of the projected openings in the Top Occupations. The most in-demand occupations include:

- *General and Operations Managers* (12,301 projected openings)

- *Software Developers and Software Quality Assurance Analysts and Testers* (9,706)

- *Heavy and Tractor-Trailer Truck Drivers* (9,468)

- *Registered Nurses* (8,358)

- *Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products* (8,293)

See Appendix IX: Gap Analysis for additional detail on openings by CEDR.

Top Occupations by Projected Openings, 2022–2032

SOC	Description	Openings
11-1021	General and Operations Managers	12,301
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	9,706
53-3032	Heavy and Tractor-Trailer Truck Drivers	9,468
29-1141	Registered Nurses	8,358
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	8,293
41-1011	First-Line Supervisors of Retail Sales Workers	7,716
43-1011	First-Line Supervisors of Office and Administrative Support Workers	7,451
13-2011	Accountants and Auditors	5,921
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	5,690
47-2031	Carpenters	5,274
49-9071	Maintenance and Repair Workers, General	5,234
13-1111	Management Analysts	4,349
13-1198	Project Management Specialists and Business Operations Specialists, All Other	4,249
39-9031	Exercise Trainers and Group Fitness Instructors	4,556
47-2111	Electricians	4,051
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	3,772
11-3031	Financial Managers	3,678
11-9198	Personal Service Managers, All Other; Entmt. and Rec. Managers; and Managers, All Other	3,686
13-1161	Market Research Analysts and Marketing Specialists	3,617
13-1071	Human Resources Specialists	3,348
51-1011	First-Line Supervisors of Production and Operating Workers	3,024
51-9161	Computer Numerically Controlled Tool Operators	2,985
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	2,945
15-1232	Computer User Support Specialists	2,878
11-3021	Computer and Information Systems Managers	2,707
15-1211	Computer Systems Analysts	2,530
25-3021	Self-Enrichment Teachers	2,666
47-2152	Plumbers, Pipefitters, and Steamfitters	2,498
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	2,490
13-1028	Buyers and Purchasing Agents	2,319
11-9111	Medical and Health Services Managers	2,324
49-9041	Industrial Machinery Mechanics	2,276
11-9021	Construction Managers	2,266
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	2,112
Total		**156,737**

Source: Emsi

Job Postings Analytics

Analysis of job postings data provides real-time insight into the Top Occupations, the intensity of demand, and the skills and qualifications that employers are seeking based on job vacancy advertisements aggregated from over 45,000 websites. This data is limited to the jobs advertisements posted on an online platform, but there is likely a great deal of variation in terms of online job advertisements among industries and occupations. This means that while this analysis can provide intelligence into the overall demand for a particular occupation, it is not indicative of the actual total demand for the Top Occupations in the State. See Appendix VII for a detailed analysis of job postings. Key takeaways from the job postings analytics include:

- **The 80 Top Occupations account for a significant portion of the job postings within the State.** On average, there were 4,822 unique job postings per month for the Top Occupations across the State, which accounts for 40% of the 12,067 unique job postings across all occupations.

- **Demand for the Top Occupations varies widely by region.** The Central-Southern CEDR is the leader in unique job postings within the State, accounting for 50% of the average monthly unique job postings for the Top Occupations. The Seacoast CEDR accounted for the second largest proportion of postings (28%), followed by the Northern CEDR (15%), then the South-Western CEDR (6%).

- **Unique job postings per month have increased slightly since the beginning of the COVID-19 Pandemic, but overall, the average number of monthly postings has remained consistent over the past 5 years.** On average, there are 4,777 job postings per month for the Top Occupations across the State. The Top Occupation within the State in terms of total number of unique postings is *Registered Nurses*, which accounted for 19% of the total job postings.

- **As a group, employers are putting average effort toward hiring the Top Occupations; however, posting intensity varied by occupation.** The State's average posting intensity of 2:1 for the Top Occupations, which is similar to the posting intensity for all other occupations in the State. *Rolling Machine Setters, Operators, and Tenders, Metal and Plastic* had the highest posting intensity of the Top Occupations, with 10 additional postings per 1 unique posting. Other occupations with relatively high posting intensities include *Industrial Machinery Mechanics* (6:1), *Electrical Engineers* (5:1), and *Industrial Engineers (5:1).*

- **The industries with the highest number of unique postings include Administrative and Support and Waste Management and Remediation Services (16% of postings),[6] Health Care and Social Assistance (14%), Manufacturing (10%), and Retail (8%).**

- **There were 3 unique postings for every 1 job opening in the Top Occupations over the past 5 years. A disproportionate number of job advertisements every month relative to the number of open positions that are available is an indication that employers may be having trouble meeting their talent needs.** About half of the Top Occupations that had the highest ratios of postings per openings were in the Healthcare Practitioners and Technical Occupations sector, including *General Internal Medicine Physicians* (21.5 postings per opening), *Physical Therapists* (16.7), *Registered Nurses* (15.1), and *Nurse Practitioners* (11.4).

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[6] The Administrative and Support and Waste Management and Remediation Services sector provides routine support activities for the day-to-day operations of other organizations, such as security, collection agencies, janitors, landscaping, trash, etc. Nearly 49% of the job postings for this sector were for Temporary Help Services.

- **There was a gap of $5,913 between the median annual earnings and the median advertised salary for the Top Occupations, which may indicate that employers are not having a hard time filling these positions. However, at the occupation-level, there are many postings that are paying a premium over the median earnings for the occupation, which may be an indication that employers are having a hard time filling these positions.** The occupations with the largest premiums include *Magnetic Resonance Imaging Technicians* (job postings offered $23,240 more per year than the median earnings for this occupation), *Computer Network Support Specialists* ($15,235 more), *Database Administrators and* Architects ($14,819), *Physicians, All Other; and Ophthalmologists, Except Pediatric* ($14,442), and *Heavy and Tractor-Trailer Truck Drivers* ($14,1630.

- Top Occupations that are in-demand based on meeting at least two of the job postings metrics are shown below:

In-Demand Top Occupations based on Job Postings Analytics, 5-digit SOC
Occupations that span multiple clusters shaded in grey

SOC	Occupation	Average Unique Postings	Posting Intensity	Postings per Job Opening	Salary Premium
11-1021	General and Operations Managers	x	x		
11-2022	Sales Managers	x		x	
11-3031	Financial Managers	x	x		
11-9051	Food Service Managers	x	x	x	
11-9111	Medical and Health Services Managers	x		x	
13-1081	Logisticians		x		
15-1231	Computer Network Support Specialists		x		x
15-1232	Computer User Support Specialists	x	x		
15-1241	Computer Network Architects		x	x	
15-1245	Database Administrators and Architects	x		x	x
15-1299	Computer Occupations, All Other	x		x	
29-1021	Dentists, General	x		x	
29-1051	Pharmacists		x	x	
29-1123	Physical Therapists	x		x	
29-1141	Registered Nurses		x	x	x
29-1171	Nurse Practitioners		x	x	
29-1216	General Internal Medicine Physicians		x	x	
29-1228	Physicians, All Other; and Ophthalmologists, Except Pediatric	x	x	x	x
29-2035	Magnetic Resonance Imaging Technologists		x	x	x
29-2061	Licensed Practical and Licensed Vocational Nurses	x	x	x	
41-1011	First-Line Supervisors of Retail Sales Workers	x		x	
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	x	x		
47-2111	Electricians		x		x
47-2152	Plumbers, Pipefitters, and Steamfitters		x		x
53-3032	Heavy and Tractor-Trailer Truck Drivers	x	x		x

Gap Analysis

Statewide Gaps

The State's largest labor force gaps (or unmet demand) are calculated by subtracting the projected labor force growth from the projected openings for the Top Occupations using the following formula: *Openings (Demand) – Labor Force Growth (Supply) = Gap.*

**Assuming a total labor force growth of 6,095 and openings
of 196,971 there will be a projected gap of 190,876 workers
across the 80 Top Occupations between 2022 and 2032.**

The table on the following page shows the Top Occupations with a projected workforce gap of over 2,000 between 2022 and 2032. These 34 Top Occupations – or the In-Demand Occupations - are expected to have almost 156,737 openings over the next decade, of which only 4,682 will be filled by labor force growth. These In-Demand Occupations currently account for 77% of the Top Occupation jobs in New Hampshire and 80% of the projected workforce gap. The occupations with the largest gaps include:

- *General and Operations Managers* are expected to see the largest shortage, with a gap of 11,905 jobs
- *Software Developers and Software Quality Assurance Analysts and Testers* (–9,384)
- *Heavy and Tractor-Trailer Truck Drivers* (–9,235)
- *Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products* (–8,070)
- *Registered Nurses* (–7,946)
- *First-Line Supervisors of Retail Sales Workers* (–7,521)
- *First-Line Supervisors of Office and Administrative Support Workers* (–7,247) are also expected to have large gaps

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Top Occupations with the Largest Projected Employment Gaps, 2022–2032

SOC	Description	2022 Employment	Gap Analysis (2022 - 2032)		
			Labor Force Growth -	Openings =	Projected Gap
11-1021	General and Operations Managers	13,404	396	12,301	(11,905)
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	9,634	322	9,706	(9,384)
53-3032	Heavy and Tractor-Trailer Truck Drivers	8,078	233	9,468	(9,235)
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	7,399	223	8,293	(8,070)
29-1141	Registered Nurses	14,401	412	8,358	(7,946)
41-1011	First-Line Supervisors of Retail Sales Workers	7,576	195	7,716	(7,521)
43-1011	First-Line Supervisors of Office and Administrative Support Workers	7,550	204	7,451	(7,247)
13-2011	Accountants and Auditors	6,239	181	5,921	(5,740)
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	4,496	135	5,690	(5,556)
47-2031	Carpenters	5,638	153	5,274	(5,121)
49-9071	Maintenance and Repair Workers, General	5,208	150	5,234	(5,084)
39-9031	Exercise Trainers and Group Fitness Instructors	1,906	80	4,556	(4,476)
13-1111	Management Analysts	4,249	127	4,349	(4,222)
13-1198	Project Management Specialists and Business Operations Specialists, All Other	5,000	151	4,249	(4,098)
47-2111	Electricians	3,462	105	4,051	(3,946)
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	3,321	82	3,772	(3,689)
11-9198	Personal Service Managers, All Other; Entmt. and Rec. Managers; and Managers, All Other	4,336	131	3,686	(3,555)
11-3031	Financial Managers	4,307	131	3,678	(3,547)
13-1161	Market Research Analysts and Marketing Specialists	2,919	95	3,617	(3,521)
13-1071	Human Resources Specialists	3,114	94	3,348	(3,255)
51-1011	First-Line Supervisors of Production and Operating Workers	3,004	84	3,024	(2,939)
51-9161	Computer Numerically Controlled Tool Operators	2,733	74	2,985	(2,911)
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	2,985	82	2,945	(2,863)
15-1232	Computer User Support Specialists	3,346	101	2,878	(2,777)
11-3021	Computer and Information Systems Managers	3,196	95	2,707	(2,612)
25-3021	Self-Enrichment Teachers	1,853	62	2,666	(2,605)
15-1211	Computer Systems Analysts	3,125	93	2,530	(2,437)
47-2152	Plumbers, Pipefitters, and Steamfitters	2,288	66	2,498	(2,432)
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	2,506	71	2,490	(2,419)
13-1028	Buyers and Purchasing Agents	2,416	64	2,319	(2,255)
11-9111	Medical and Health Services Managers	2,260	75	2,324	(2,250)
49-9041	Industrial Machinery Mechanics	2,131	68	2,276	(2,208)
11-9021	Construction Managers	2,676	81	2,266	(2,184)
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	2,260	65	2,112	(2,047)
Total		**159,015**	**4,682**	**156,737**	**(152,054)**

Source: Emsi and Camoin Associates

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Regional Gaps

The largest projected workforce gaps by CEDR are outlined below. See Appendix IX: Gap Analysis for additional detail on gaps by CEDR.

Central-Southern CEDR

Top Occupations currently provide 86,609 jobs and are expected to have 77,450 openings over the next decade with only 3,801 filled from labor force growth. The largest expected shortages include:

- *General and Operations Managers (–4,563)*
- *Software Developers and Software Quality Assurance Analysts and Testers (–3,631)*
- *Heavy and Tractor-Trailer Truck Drivers (–3,319)*
- *Registered Nurses (–3,105)*
- *First-Line Supervisors of Office and Administrative Support Workers (–2,885)*

South-Western CEDR

Top Occupations currently provide 13,168 jobs and are expected to have 12,098 openings over the next decade while the labor force shrinks by 335. The largest expected shortages include

- *General and Operations Managers (–761)*
- *First-Line Supervisors of Retail Sales Workers (–673)*
- *Heavy and Tractor-Trailer Truck Drivers (–625)*
- *Carpenters (–518)*
- *Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (–494)*

Seacoast CEDR

Top Occupations currently provide 60,729 jobs and are expected to have 58,754 openings over the next decade with only 2,586 filled from labor force growth. The largest expected shortages include:

- *General and Operations Managers (–3,507)*
- *Heavy and Tractor-Trailer Truck Drivers (–3,208)*
- *Software Developers and Software Quality Assurance Analysts and Testers (–2,604)*
- *First-Line Supervisors of Retail Sales Workers (–2,567)*
- *Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (–2,165)*

Northern CEDR

Top Occupations currently provide 32,257 jobs and are expected to have 29,177 openings over the next decade with only 13 filled from labor force growth. The largest expected shortages include:

- *Registered Nurses (–2,412)*
- *General and Operations Managers (–1,675)*
- *Heavy and Tractor-Trailer Truck Drivers (–1,415)*
- *First-Line Supervisors of Retail Sales Workers (–1,415)*
- *First-Line Supervisors of Office and Administrative Support Workers (–1,185)*

Occupational Group and Industry Cluster Gaps

The 34 most In-Demand Occupations are shown below by occupational group and by industry cluster. Each of these occupations are expected to fall short of industry demand by at least 2,000 workers over the next 10 years. Together, these 34 occupations account for 80% of the projected gap for all Top Occupations. Occupations in italics span multiple industry clusters. They will be further evaluated to determine if there are workforce retention, expansion, or attraction strategies that can help employers close the projected labor force gap.

Gaps by Occupational Group

The 34 occupations span 12 occupational clusters. Management occupations accounted for the largest portion of the projected labor force gap, with an estimated shortfall of 26,052 workers over the next 10 years. Other large occupational group gaps include Business and Financial Operations (12% of the gap), and Sales and Related Occupations (11%). Occupations in bold span multiple industry clusters.

Management Occupations (SOC 11):

- *General and Operations Managers*
- *Computer and Information Systems Managers*
- *Financial Managers*
- Construction Managers
- Medical and Health Services Managers
- *Personal Service Managers, All Other; Entertainment and Recreation Managers; and Managers, All Other*

Business and Financial Operations (SOC 13):

- Buyers and Purchasing Agents
- *Human Resources Specialists*
- Management Analysts
- *Market Research Analysts and Marketing Specialists*
- *Project Management Specialists and Business Operations Specialists, All Other*
- *Accountants and Auditors*

Share of the Projected Labor Force Gap by Occupational Sector

Management, 14%
Business, 12%
Education, 1%
Personal Care, 2%
Construction, 2%
Office and Admin, 4%
Healthcare, 4%
Transportation, 5%
Production, 5%
Installation, Maint. and Repair, 6%
Sales, 11%
Computer and Mathematical, 8%
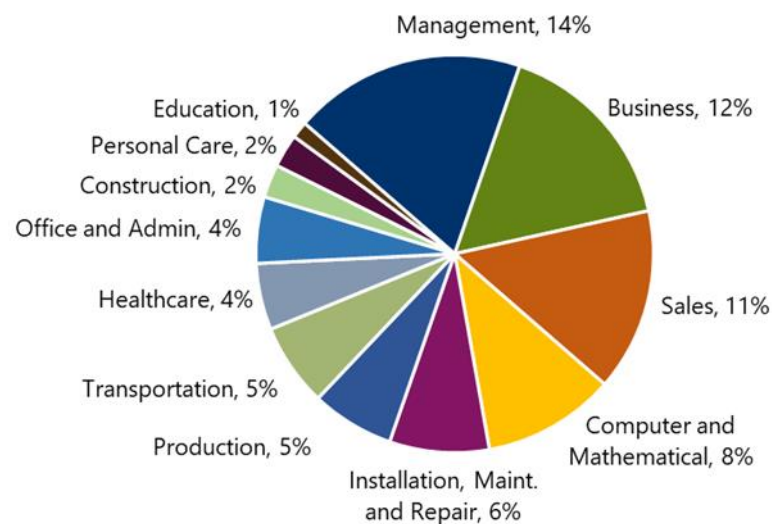
Source: Emsi and Camoin Associates

Computer and Mathematical (SOC 15):

- *Computer Systems Analysts*
- Computer User Support Specialists
- *Software Developers and Software Quality Assurance Analysts and Testers*

Educational Instruction and Library Occupations (SOC 25):

- Self-Enrichment Teachers

Healthcare Practitioners and Technical Occupations (SOC 29):

- Registered Nurses

Personal Care and Service Occupations (SOC 39):

- Exercise Trainers and Group Fitness Instructors

Sales and Related Occupations (SOC 41):

- First-Line Supervisors of Retail Sales Workers
- *Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel*
- *Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products*

Office and Administrative Support Occupations (SOC 43):

- *First-Line Supervisors of Office and Administrative Support Workers*

Construction and Extraction Occupations (SOC 47):

- First-Line Supervisors of Construction Trades and Extraction Workers
- Carpenters
- Electricians
- Plumbers, Pipefitters, and Steamfitters

Installation, Maintenance, and Repair Occupations (SOC 49):

- First-Line Supervisors of Mechanics, Installers, and Repairers
- Heating, Air Conditioning, and Refrigeration Mechanics and Installers
- Industrial Machinery Mechanics
- Maintenance and Repair Workers, General

Production Occupations (SOC 51):

- First-Line Supervisors of Production and Operating Workers
- Inspectors, Testers, Sorters, Samplers, and Weighers
- Computer Numerically Controlled Tool Operators

Transportation and Material Moving Occupations (SOC 53):

- Heavy and Tractor-Trailer Truck Drivers

Gaps by Industry Cluster

The In-Demand Occupations are shown by industry cluster below; italicized occupations span multiple industry clusters. This information can be used to develop sector strategies by stakeholders to fill workforce gaps and to identify cross-sector opportunities for collaboration.

Healthcare Industry Cluster

- Registered Nurses
- Medical and Health Services Managers
- *First-Line Supervisors of Office and Admin. Support*
- *Human Resources Specialists*
- *Project Management Specialists and Business Operations Specialists, All Other*

Manufacturing Industry Cluster

- Industrial Machinery Mechanics
- Inspectors, Testers, Sorters, Samplers, and Weighers
- CNC Tool Operators
- First-Line Supervisors of Production Workers
- *Computer and Information Systems Managers*
- *Computer Systems Analysts*
- *Electricians*
- *Financial Managers*
- *Human Resources Specialists*
- *Market Research Analysts and Marketing Specialists*
- *Project Management Specialists and Business Operations Specialists, All Other*
- *Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products*

- *Software Developers and Software Quality Assurance Analysts and Testers*

Hospitality Industry Cluster

- Exercise Trainers and Group Fitness Instructors
- Self-Enrichment Teachers
- Maintenance and Repair Workers, General
- First-Line Supervisors of Mechanics, Installers, and Repairers
- First-Line Supervisors of Retail Sales Workers
- *Accountants and Auditors*
- *Financial Managers*
- *First-Line Supervisors of Office and Administrative Support Workers*
- *General and Operations Managers*
- *Human Resources Specialists*
- *Market Research Analysts and Marketing Specialists*
- *Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other*
- *Project Management Specialists and Business Operations Specialists, All Other*
- *Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel*

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Construction Industry Cluster

- Heating, Air Conditioning, and Refrigeration Mechanics and Installers
- Heavy and Tractor-Trailer Truck Drivers
- Plumbers, Pipefitters, and Steamfitters
- Carpenters
- Construction Managers
- First-Line Supervisors of Construction Trades and Extraction Workers
- *Accountants and Auditors*
- *Electricians*
- *General and Operations Managers*
- *Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other*
- *Project Management Specialists and Business Operations Specialists, All Other*
- *Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel*
- *Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products*

Technology Industry Cluster

- Computer User Support Specialists
- Management Analysts
- Buyers and Purchasing Agents
- *Computer and Information Systems Managers*
- *Computer Systems Analysts*
- *Financial Managers*
- *General and Operations Managers*
- *Human Resources Specialists*
- *Project Management Specialists and Business Operations Specialists, All Other*
- *Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel*
- *Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products*
- *Software Developers and Software Quality Assurance Analysts and Testers*
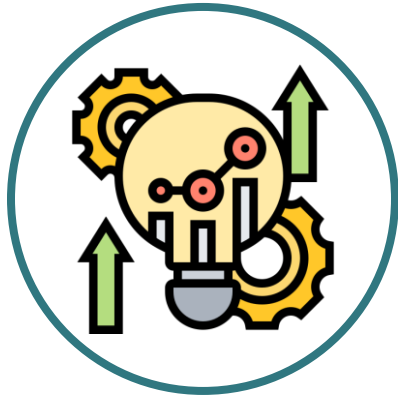
5. STRATEGIES TO BRIDGE WORKFORCE GAPS
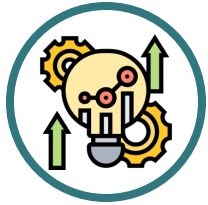
Strategies

Purpose: This section identifies how the State of New Hampshire, and its partners can work across economic development, workforce, and educational networks to address the significant workforce gaps for in-demand occupations.

Key Takeaways

Chapters 1- 4 uncovered the most pressing workforce challenges facing New Hampshire in the coming decade. To overcome systemic challenges and demographic shifts in New Hampshire's economy, the State will need to take a collaborative, multi-disciplinary approach to fill unmet demand in the top occupations. While some of this work is already being done at various levels throughout the state, a comprehensive and coordinated effort among partners will be necessary to enact meaningful gains. This includes efforts in two primary categories of strategies: growing from within the State and attracting from outside the State.

Growing From Within the State

These are strategies that are targeted at the current residents and workforce of New Hampshire, focusing on adapting the skills and guiding career pathways with institutional partners like workforce development leaders and educational institutions.

- **Diversify the workforce –** Expand the pool of existing workers within the State that are not currently participating in each occupation. Efforts to recruit in underrepresented demographics would expand the labor pool for these occupations. Strategies could include expanding demographics for marketing, employer/HR education, incentive programs (such as sign-on bonuses or tax credits for employers who diversify their hiring), and/or education/training institution coordination for student recruitment.

- **Transfer skills –** Skills overlap between occupations in ways that are not always evident based on credentials, work experience, or qualifications. Understanding which occupations would be a good match based on skills (and also provide an opportunity for advancement for employees) will help employers/HR/workforce development think outside the box when they are considering applicants for in-demand positions. Skills transferability is also relevant to individuals transitioning from military positions to the civilian workforce. The Department of Military Affairs and Veterans Services, which provides Transition and Career Resources for Military/Veterans, will be a valuable partner moving forward with the data from this report. Understanding both the skillsets of the individuals as well as the motivations that might drive them to stay within the state could be a critical piece to supporting the state's economy while also supporting veterans. Throughout the northeast, there are other military sites with transitional programs, like Fort Drum in Watertown, which could also be partners in veteran retention and attraction.

- **Increase training pipeline –** For occupations that have existing training programs but are not currently producing enough graduates, the State should work with its training partners to increase capacity and retention. This also overlaps with the workforce diversification strategy, as education partners should be trying to market/appeal to more diverse students. Partners should also be asked to evaluate their career pathways to ensure a good pipeline of workers.

- **Increase state-wide graduate retention –** Currently, only about 71% of graduates remain in New Hampshire after finishing their degree. This is a population that has built a community in and around their schools and ought to be primed to remain in State, given adequate job opportunities.

- **Promote and train existing employees –** Upskilling and promoting the existing workforce supports a business's resiliency and can require fewer resources than a recruitment effort. Resources that incentivize employer investment in the workforce – including on-the-job training programs, credentials, certifications, internships, and apprenticeships – can contribute to building the skillsets of existing employees.

- **Showcasing workforce opportunities for the trades –** Analysis of the top occupations across the State shows that a four-year degree is not necessary to obtain a position that has a career path and quality wages. Continuing to promote messaging across all levels of education with data-driven messages about the potential for alternative pathways will be important to shifting perceptions about the value of training certificates and associates degrees.

- **Educate employers about long-term labor force trends –** New Hampshire's (and New England and the nation, more broadly) demographic shifts have significant implications for who will be filling the next generation of jobs. While much of this data is publicly available, interpreting exactly what this means for employers and the timeline that it will impact their businesses will be critical for proactive planning.

- **Collaborate and prioritize other sectors that increase participation across different careers–** The pandemic has forced economic development stakeholders and leaders to expand their purview of what impacts the ability of the workforce to find and retain quality jobs. Sectors that were once relegated to only social issues have proven to be critical indicators for economic prosperity. As workforce retention and attraction strategies are implemented at the State level, the following topics apply across sectors and will also require ongoing attention from a consortium of partners.
  - Expand childcare to improve parents' ability to participate in the labor force
  - Encourage summer jobs and apprenticeships for youth, particularly those not on a college track
  - Evaluate transportation systems and other barriers to participating in the workforce
  - Consider non-traditional candidates, including those with criminal records and part-time, seasonal, and migrant workers
  - Education/housing/childcare/transportation credits or vouchers for workforce retention

Attracting From Outside the State

Shifting demographics and population decline mean that attraction into the State will be necessary to fill some of the most critical jobs to the State's economy. These strategies will be more applicable to workers with high levels of economic mobility, meaning they can pick up and leave their current location for another position. Attracting from outside the state could also refer to remote recruitment, or filling jobs with individuals who are qualified for the positions but may not live or want to relocate to New Hampshire.

- **Attract and Retain Commuters –** New Hampshire is a net exporter of labor, particularly among its higher-paying jobs (see Appendix I). The State should market in high-inflow markets to convince commuters to either stay in New Hampshire for work or to

commute there instead. Given the low wages relative to high-inflow markets in the Boston area, the State should educate employers about the labor market and consider incentive programs for workers and/or employers to make the financial decision to work in New Hampshire more favorable. Other non-financial benefits should be considered and messaged as well, such as reduced commute time, quality of life, school systems, taxes, etc., where applicable.

- **Attract Workers –** In cases where there are large concentrations of workers in New Hampshire's In-Demand Occupations in other MSAs, the State should target marketing to attract out-of-state workers to relocate. This is most likely to be successful in MSAs that are in close proximity and/or where New Hampshire jobs pay considerably more. Attracting from outside the state could also refer to remote recruitment, or filling jobs with individuals who are qualified for the positions but may not live or want to relocate to New Hampshire. The State should consider moving assistance stipends or work with employers to provide bonuses, training credits, tax incentives etc. to incentivize workers to move. See the following population attraction programs, some of which include incentives for remote workers: ThinkVermont, Make My Move, Life Works Here, Remote Tucson, Movers and Shakas.

Diversify Workforce

Strategies and marketing to appeal to a broader pool of candidates can help companies attract talent. "Job seekers look for an inclusive workplace when looking for their next career move. More than 3 out of 4 job seekers and employees (76%) report that a diverse workforce is an important factor when evaluating companies and job offers." [7] Numerous studies have outlined the benefits of promoting diversity and inclusion in the workplace, including: [8]

- Attracting a broader pool of talent
- Improving employee satisfaction
- Reduction in turnover
- Producing better decisions

- Improving company performance
- Promoting innovation
- Increasing customer insight
- Improving company image

While all these benefits are relevant to businesses in New Hampshire, the focus of this analysis is on increasing the pool of potential applicants for openings in the In-Demand Top Occupations. These occupations have been evaluated based on the level of inclusion within the workforce in terms of race and sex. Occupations that do not reflect the overall demographics of the State's workforce should be targeted at the state, regional, industry, and business levels to encourage workforce diversification. The inclusion ratio compares the share of demographics in each In-Demand Occupation to the share of demographics across all jobs. An inclusion ratio of 1.00 means the demographics of the occupation are perfectly representative of the overall workforce. A ratio above 1.00 means the demographic is overrepresented in the occupation, while a ratio less than 1.00 indicates an occupation in which the demographic is underrepresented in the occupation.

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[7] Recruiting a Diverse Workforce | Glassdoor for Employers
[8] Diversity during COVID-19 still matters | McKinsey; Is there a payoff from top-team diversity? | McKinsey; New Research: Diversity + Inclusion = Better Decision Making At Work (forbes.com); Diversity and Inclusion Is A Business Strategy, Not An HR Program – JOSH BERSIN; Recruiting a Diverse Workforce | Glassdoor for Employers; Why Diversity and Inclusion Matter (Quick Take) | Catalyst

Race

Racial diversity is low in New Hampshire, with 89% of the population identifying as white. This is reflected in its workforce, with 88% of all workers identifying as white. Inclusion ratios for In-Demand Occupations by race are shown below, with the least inclusive occupations shaded in grey, while inclusive ones are in bold.

None of the In-Demand Occupations are inclusive across all races; however, a few are inclusive or have an overrepresentation of non-white races (generally due to high ratios for Asian workers):

New Hampshire Workforce Distribution by Race

White 88.4%
Hispanic or Latino 4.8%
Asian 3.4%
Black or African American 1.8%
Two or More Races 1.5%
Other 0.2%

Source: Emsi

- *Heavy and Tractor-Trailer Truck Drivers*
- *Management Analysts*
- *Computer User Support Specialists*
- *Inspectors, Testers, Sorters, Samplers, and Weighers (the most inclusive of the In-Demand Occupations across the races)*
- *Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other*
- *Computer Systems Analysts*
- *Software Developers and Software Quality Assurance Analysts and Testers*

Efforts to diversify all the In-Demand Occupations will increase the pool of talent employers can draw upon; however, the following occupations are particularly lacking in diversity:

- *First-Line Supervisors of Mechanics, Installers, and Repairers*
- *Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products*
- *General and Operations Managers*
- *First-Line Supervisors of Construction Trades and Extraction Workers*
- *Heating, Air Conditioning, and Refrigeration Mechanics and Installers*
- *Registered Nurses*
- *Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel*

- *Electricians*
- *Financial Managers*
- *Buyers and Purchasing Agents*
- *First-Line Supervisors of Office and Administrative Support Workers*
- *Industrial Machinery Mechanics*
- *Medical and Health Services Managers*
- *Maintenance and Repair Workers, General*
- *Computer Numerically Controlled Tool Operators*
- *Plumbers, Pipefitters, and Steamfitters*

Inclusion Ratios for In-Demand Occupations by Race

SOC	Occupation	White	Hispanic or Latino	Asian	Black or African American	Two or More Races	Other	Total
			Non-White Workers					
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	0.87	0.37	**5.63**	0.39	0.78	0.44	**1.96**
15-1211	Computer Systems Analysts	0.95	0.48	**3.16**	0.73	0.93	0.55	**1.36**
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	0.96	**1.63**	0.72	**1.24**	**1.65**	0.54	**1.29**
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	0.96	**1.26**	**1.59**	**1.24**	0.73	**1.03**	**1.28**
15-1232	Computer User Support Specialists	0.98	0.68	**1.91**	0.92	**1.01**	0.78	**1.12**
13-1111	Management Analysts	0.99	0.67	**1.59**	**1.08**	**1.26**	0.69	**1.08**
53-3032	Heavy and Tractor-Trailer Truck Drivers	0.99	**1.41**	0.32	**1.80**	0.73	**1.00**	**1.06**
47-2031	Carpenters	**1.00**	**1.58**	0.14	0.68	**1.20**	0.86	0.96
25-3021	Self-Enrichment Teachers	**1.01**	0.66	**1.20**	0.83	**1.46**	0.36	0.94
11-3021	Computer and Information Systems Managers	**1.01**	0.38	**2.14**	0.44	0.68	0.52	0.94
13-1198	Project Management Specialists and Business Operations Specialists, All Other	**1.01**	0.63	**1.33**	0.78	**1.16**	0.53	0.92
51-1011	First-Line Supervisors of Production and Operating Workers	**1.01**	**1.04**	0.95	0.84	0.52	**1.01**	0.92
11-9021	Construction Managers	**1.02**	**1.23**	0.22	0.73	**1.48**	0.45	0.88
13-1071	Human Resources Specialists	**1.02**	0.76	0.91	**1.08**	0.95	0.76	0.88
41-1011	First-Line Supervisors of Retail Sales Workers	**1.02**	0.92	0.76	0.84	0.90	**1.15**	0.86
13-2011	Accountants and Auditors	**1.02**	0.43	**1.60**	0.67	0.66	0.47	0.84
13-1161	Market Research Analysts and Marketing Specialists	**1.03**	0.64	**1.15**	0.55	0.87	0.42	0.80
39-9031	Exercise Trainers and Group Fitness Instructors	**1.03**	0.75	0.43	**1.05**	**1.21**	0.73	0.76
47-2152	Plumbers, Pipefitters, and Steamfitters	**1.03**	**1.13**	0.13	0.67	0.82	**1.48**	0.74
51-9161	Computer Numerically Controlled Tool Operators	**1.04**	0.68	0.99	0.54	0.56	0.50	0.73
49-9043	Maintenance and Repair Workers, General	**1.04**	0.84	0.59	0.57	0.67	0.00	0.69
11-9111	Medical and Health Services Managers	**1.04**	0.54	0.75	0.95	0.72	0.73	0.69
49-9041	Industrial Machinery Mechanics	**1.04**	0.86	0.52	0.59	0.55	0.93	0.68
43-1011	First-Line Supervisors of Office and Administrative Support Workers	**1.04**	0.68	0.60	0.75	0.76	0.84	0.68
13-1028	Buyers and Purchasing Agents	**1.05**	0.61	0.75	0.57	0.66	0.68	0.65
11-3031	Financial Managers	**1.05**	0.50	0.95	0.51	0.62	0.49	0.65
47-2111	Electricians	**1.05**	0.88	0.21	0.63	0.83	**1.18**	0.64
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	**1.05**	0.76	0.41	0.78	0.54	0.77	0.64
29-1141	Registered Nurses	**1.05**	0.33	**1.02**	0.67	0.61	0.69	0.62
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	**1.06**	0.77	0.18	0.54	0.68	0.98	0.55
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	**1.06**	0.77	0.11	0.38	0.73	0.83	0.51
11-1021	General and Operations Managers	**1.06**	0.47	0.55	0.39	0.61	0.70	0.50
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	**1.07**	0.52	0.45	0.29	0.44	0.40	0.45
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	**1.07**	0.52	0.24	0.38	0.59	0.88	0.43

Source: Emsi; "Other" includes American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander

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Sex

The sexes are evenly balanced in the State; however, the In-Demand Occupations are skewed towards males. The table below shows the inclusion ratios for the In-Demand Occupations by sex. Occupations shaded in grey have the least balance between the sexes, while inclusive ones are in bold.

The most balanced occupations in terms of sex are *Management Analysts* and *Project Management Specialists and Business Operations Specialist, All Other*.

Out of the 34 In-Demand Occupations, 23 have a ratio below 1.00 for females. The occupations that are heavily staffed by males tend to be more "traditional" jobs in the trades and manufacturing. The following occupations are particularly lacking in female inclusion:

- *Heating, Air Conditioning, and Refrigeration Mechanics and Installers*
- *Plumbers, Pipefitters, and Steamfitters*
- *Carpenters*
- *Electricians*
- *Industrial Machinery Mechanics*
- *First-Line Supervisors of Construction Trades and Extraction Workers*
- *Maintenance and Repair Workers, General*
- *Heavy and Tractor-Trailer Truck Drivers*
- *Construction Managers*
- *First-Line Supervisors of Mechanics, Installers, and Repairers*
- *Computer Numerically Controlled Tool Operators*

- *Software Developers and Software Quality Assurance Analysts and Testers*
- *First-Line Supervisors of Production and Operating Workers*
- *Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products*
- *Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other*
- *Computer User Support Specialists*
- *Computer and Information Systems Managers*
- *General and Operations Managers*
- *Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel*

The following occupations are heavily dominated by females:

- *Registered Nurses*
- *Human Resources Specialists*
- *Medical and Health Services Managers*
- *First-Line Supervisors of Office and Administrative Support Workers*
- *Self-Enrichment Teachers*

To expand the potential labor pool, efforts should be made to make these occupations and job environments more appealing to the opposite sex.

Inclusion Ratios for In-Demand Occupations by Sex

SOC	Occupation	Males	Females
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	**1.96**	0.02
47-2152	Plumbers, Pipefitters, and Steamfitters	**1.96**	0.03
47-2031	Carpenters	**1.96**	0.03
47-2111	Electricians	**1.95**	0.04
49-9041	Industrial Machinery Mechanics	**1.93**	0.06
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	**1.92**	0.07
49-9043	Maintenance and Repair Workers, General	**1.91**	0.08
53-3032	Heavy and Tractor-Trailer Truck Drivers	**1.90**	0.09
11-9021	Construction Managers	**1.88**	0.11
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	**1.87**	0.12
51-9161	Computer Numerically Controlled Tool Operators	**1.80**	0.19
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	**1.58**	0.42
51-1011	First-Line Supervisors of Production and Operating Workers	**1.55**	0.44
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	**1.51**	0.49
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	**1.47**	0.52
15-1232	Computer User Support Specialists	**1.43**	0.57
11-3021	Computer and Information Systems Managers	**1.38**	0.61
11-1021	General and Operations Managers	**1.38**	0.62
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	**1.32**	0.68
15-1211	Computer Systems Analysts	**1.24**	0.76
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	**1.14**	0.86
41-1011	First-Line Supervisors of Retail Sales Workers	**1.10**	0.90
13-1111	Management Analysts	**1.06**	0.94
13-1198	Project Management Specialists and Business Operations Specialists, All Other	0.94	**1.06**
13-1028	Buyers and Purchasing Agents	0.91	**1.09**
11-3031	Financial Managers	0.89	**1.11**
13-1161	Market Research Analysts and Marketing Specialists	0.81	**1.19**
39-9031	Exercise Trainers and Group Fitness Instructors	0.77	**1.23**
13-2011	Accountants and Auditors	0.77	**1.24**
25-3021	Self-Enrichment Teachers	0.65	**1.35**
43-1011	First-Line Supervisors of Office and Administrative Support Workers	0.62	**1.38**
11-9111	Medical and Health Services Managers	0.54	**1.47**
13-1071	Human Resources Specialists	0.52	**1.48**
29-1141	Registered Nurses	0.18	**1.83**

Source: Emsi

Transfer Skills

Skills transferability identifies the occupations that are closely related to other occupations, meaning a worker could easily move between the two occupations based on their skills. The table below shows the occupations that could most easily be drawn upon to meet the needs of the In-Demand Occupations. These transferrable occupations have a compatibility index of 95 or above, meaning the two occupations are very similar in terms of skills, knowledge and abilities based on O*NET data. This data can be used to both help employers find workers with skills outside of their standard occupations for the industry and can also help job seekers and workforce development providers find career opportunities and paths.

Transferable Occupations for In-Demand Occupations

In-Demand Occupation	
SOC	*Transferable Occupations*
11-1021	**General and Operations Managers**
	Funeral Service Managers
	Public Relations and Fundraising Managers
	Purchasing Managers
	Purchasing Agents, Except Wholesale, Retail, and Farm Products
	Storage and Distribution Managers
	Water Resource Specialists
11-3021	**Computer and Information Systems Managers**
	Database Administrators
11-3031	**Financial Managers**
	Compliance Managers
	Financial Examiners
	First-Line Supervisors of Non-Retail Sales Workers
	Loan Counselors
	Personal Financial Advisors
	Sales Agents, Securities and Commodities
11-9111	**Medical and Health Services Managers**
	Compensation, Benefits, and Job Analysis Specialists
13-1028	**Buyers and Purchasing Agents**
	Energy Brokers
	Sales Agents, Financial Services
	Securities and Commodities Traders
13-1111	**Management Analysts**
	Compensation, Benefits, and Job Analysis Specialists
	Market Research Analysts and Marketing Specialists

In-Demand Occupation	
SOC	*Transferable Occupations*
13-1161	**Market Research Analysts and Marketing Specialists**
	Sales Agents, Securities and Commodities
	Survey Researchers
13-2011	**Accountants and Auditors**
	Loan Counselors
	Loan Interviewers and Clerks
	Tax Examiners and Collectors, and Revenue Agents
	Tax Preparers
15-1211	**Computer Systems Analysts**
	Database Architects
	Software Quality Assurance Engineers and Testers
	Web Developers
25-3021	**Self-Enrichment Teachers**
	Home Economics Teachers, Postsecondary
	Interviewers, Except Eligibility and Loan
	Kindergarten Teachers, Except Special Education
	Library Technicians
	Teacher Assistants
29-1141	**Registered Nurses**
	Critical Care Nurses
	Licensed Practical and Licensed Vocational Nurses
	Veterinarians
41-1011	**First-Line Supervisors of Retail Sales Workers**
	Animal Trainers
	Cooks, Fast Food
	Spa Managers

To qualify as a transferable, the occupation had to (1) not be another In-Demand Occupation, (2) have earnings lower than the In-Demand Occupation, and (3) have a skills compatibility index of at least 95

Source: Emsi

Transferable Occupations for In-Demand Occupations, Continued

	In-Demand Occupation
SOC	*Transferable Occupations*

43-1011 First-Line Supervisors of Office and Administrative Support Workers

Animal Trainers
Compensation, Benefits, and Job Analysis Specialists
Loan Interviewers and Clerks
Loan Officers

47-1011 First-Line Supervisors of Construction Trades and Extraction Workers

Janitors and Cleaners, Except Maids and Housekeeping Cleaners

47-2031 Carpenters

Carpet Installers
Drywall and Ceiling Tile Installers
Helpers--Carpenters
Mechanical Door Repairers
Pipelayers
Roofers
Septic Tank Servicers and Sewer Pipe Cleaners
Solar Photovoltaic Installers
Weatherization Installers and Technicians
Welders, Cutters, and Welder Fitters

47-2111 Electricians

Refrigeration Mechanics and Installers
Solar Photovoltaic Installers
Wind Turbine Service Technicians

47-2152 Plumbers, Pipefitters, and Steamfitters

Aircraft Structure, Surfaces, Rigging, and Systems Assemblers
Bus and Truck Mechanics and Diesel Engine Specialists
Carpet Installers
Mechanical Door Repairers
Solar Photovoltaic Installers
Weatherization Installers and Technicians

49-1011 First-Line Supervisors of Mechanics, Installers, and Repairers

Solar Photovoltaic Installers

49-9021 Heating, Air Conditioning, and Refrigeration Mechanics and Installers

Weatherization Installers and Technicians

49-9041 Industrial Machinery Mechanics

Computer-Controlled Machine Tool Operators, Metal and Plastic
Electrical and Electronics Installers and Repairers, Transportation Equipment
Farm Equipment Mechanics and Service Technicians
Geothermal Technicians
Maintenance Workers, Machinery
Millwrights
Mobile Heavy Equipment Mechanics, Except Engines
Motorboat Mechanics and Service Technicians
Rail Car Repairers
Wind Turbine Service Technicians

	In-Demand Occupation
SOC	*Transferable Occupations*

49-9071 Maintenance and Repair Workers, General

Automotive Glass Installers and Repairers
Bicycle Repairers
Control and Valve Installers and Repairers, Except Mechanical Door
Electrical and Electronics Installers and Repairers, Transportation Equipment
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters
Mobile Heavy Equipment Mechanics, Except Engines
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic
Tire Repairers and Changers

51-1011 First-Line Supervisors of Production Workers

Agricultural Inspectors
Janitors and Cleaners, Except Maids and Housekeeping Cleaners

51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers

Electromechanical Equipment Assemblers
Etchers and Engravers
Executive Secretaries and Executive Administrative Assistants
Fabric and Apparel Patternmakers
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic
Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic
Machine Feeders and Offbearers
Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic
Mixing and Blending Machine Setters, Operators, and Tenders
Machinists
Ophthalmic Laboratory Technicians
Paper Goods Machine Setters, Operators, and Tenders
Rolling Machine Setters, Operators, and Tenders, Metal and Plastic
Semiconductor Processors
Textile Cutting Machine Setters, Operators, and Tenders
Timing Device Assemblers and Adjusters
Tool Grinders, Filers, and Sharpeners

51-9161 CNC Tool Operators

Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic

53-3032 Heavy and Tractor-Trailer Truck Drivers

Drywall and Ceiling Tile Installers
Excavating and Loading Machine and Dragline Operators
Light Truck or Delivery Services Drivers
Segmental Pavers
Tank Car, Truck, and Ship Loaders
Taxi Drivers and Chauffeurs

To qualify as a transferable, the occupation had to (1) not be another In-Demand Occupation, (2) have earnings lower than the In-Demand Occupation, and (3) have a skills compatibility index of at least 95

Source: Emsi

Increase Training Pipeline

One avenue for addressing workforce shortages is to increase the in-state supply through educational and training programs. For each of the In-Demand Occupations there is at least one academic program that "directly prepares" students for the occupation. Emsi uses this education-occupation crosswalk to provide annual completions by occupation. Multiplying 2010–2020 average annual occupational completions to get projected 2022–2032 completions and comparing these to projected annual openings for each occupation over the same period gives an idea of potential future workforce surpluses and shortages. Completions were adjusted by a postsecondary graduate retention rate of 71%, based on estimates from the National Center for Education Statistics to account for graduates leaving the state upon completion of their degree.[9]

There are projected training shortfalls in nearly half (16 of 34) of the In-Demand Occupations, with the largest being *Heavy and Tractor-Trailer Truck Drivers*, *Sales Representatives of Services*, and *Carpenters*. Most occupations require less than a bachelor's degree; apprenticeships or a certificate or associate's degree from a community college would be sufficient to qualify individuals for entry-level positions. Some trades may require union membership to pursue an apprenticeship, although many are offered through employers as well. The table to the right shows the In-Demand Occupations with training shortfalls, while the tables on the following pages outline the academic programs that "directly prepare" students for these occupations and the institutions and other options in New Hampshire that offer those programs.

State of New Hampshire In-Demand Occupation Training Pipeline: 2022–2032 Shortfalls

SOC	Occupation	Openings	Completions	Shortfall
53-3032	Heavy and Tractor-Trailer Truck Drivers	9,468	97	(9,371)
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	5,690	223	(5,467)
47-2031	Carpenters	5,274	69	(5,205)
47-2111	Electricians	4,051	245	(3,806)
49-9071	Maintenance and Repair Workers, General	5,234	1,444	(3,789)
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	3,772	297	(3,475)
51-9161	CNC Tool Operators	2,985	431	(2,553)
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	2,945	623	(2,322)
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	2,490	275	(2,215)
13-1028	Buyers and Purchasing Agents	2,319	374	(1,945)
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	9,706	8,590	(1,116)
49-9041	Industrial Machinery Mechanics	2,276	383	(1,893)
47-2152	Plumbers, Pipefitters, and Steamfitters	2,498	719	(1,779)
51-1011	First-Line Supervisors of Production Workers	3,024	1,604	(1,420)

Source: Emsi, Camoin Associates

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[9] NCES conducted a survey asking if respondents were ever employed in the same state as their bachelor's degree-granting institution, within 12 months after degree completion. The portion for the Northeast was 71.0%, versus 76.6% nationally.

In-Demand Occupations Pipeline: Educational Programs and Institutions

SOC	Occupation	Entry-Level Educational Requirements	Educational Program	Institutions
53-3032	Heavy and Tractor-Trailer Truck Drivers	Postsecondary nondegree award	Truck and Bus Driver/Commercial Vehicle Operator and Instructor	White Mountains Community College, CDL school
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	High school diploma or equivalent	Retailing and Retail Operations; Selling Skills and Sales Operations	Plymouth State University, River Valley Community College, Southern New Hampshire University, on-the-job training
47-2031	Carpenters	High school diploma or equivalent	Carpentry/Carpenter	Manchester Community College, apprenticeship
47-2111	Electricians	High school diploma or equivalent	Electrician	Manchester Community College, apprenticeship
49-9071	Maintenance and Repair Workers, General	High school diploma or equivalent	Building/Property Maintenance	Apprenticeship, on-the-job training
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	High school diploma or equivalent	Quality Control Technology/Technician	Nashua Community College, on-the-job training
51-9161	CNC Tool Operators	High school diploma or equivalent	Machine Shop Technology/Assistant; Computer Numerically Controlled (CNC) Machinist Technology/CNC Machinist	Great Bay Community College, Nashua Community College, NHTI–Concord's Community College, River Valley Community College, apprenticeship
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	High school diploma or equivalent	Construction Trades, General; Mason/Masonry; Carpentry/Carpenter; Electrician; Building/Property Maintenance; Concrete Finishing/Concrete Finisher; Building/Home/Construction Inspection/Inspector; Drywall Installation/Drywaller; Glazier; Painting/Painter and Wall Coverer; Roofer; Building/Construction Site Mgmt./Manager; Carpet, Floor, and Tile Worker; Insulator; Building Construction Technology/Technician; Pipefitting/Pipefitter and Sprinkler Fitter; Plumbing Technology/Plumber; Well Drilling/Driller; Blasting/Blaster	Manchester Community College, NHTI–Concord's Community College
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	Postsecondary nondegree award	Heating, Ventilation, Air Conditioning and Refrigeration Engineering Technology/Technician; Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician	InterCoast Career Institute, Manchester Community College, apprenticeship
13-1028	Buyers and Purchasing Agents	Bachelor's degree	Agricultural/Farm Supplies Retailing and Wholesaling; Wine Steward/Sommelier; Apparel and Textile Marketing Mgmt.; Sales, Distribution, and Marketing Operations, General; Merchandising and Buying Operations; General Merchandising, Sales, and Related Marketing Operations, Other; Fashion Merchandising; Apparel and Accessories Marketing Operations; Purchasing, Procurement/Acquisitions and Contracts Mgmt.	University of New Hampshire, Southern New Hampshire University

Source: Emsi, Camoin Associates

BEA   State of New Hampshire Workforce Assessment

In-Demand Occupations Pipeline: Educational Programs and Institutions (continued)

SOC	Occupation	Entry-Level Educational Requirements	Educational Program	Institutions
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	Bachelor's degree	Artificial Intelligence; Information Technology; Informatics; Computer Programming/Programmer, General; Computer Programming, Specific Applications; Computer Programming, Vendor/Product Certification; Computer Game Programming; Computer Programming, Specific Platforms; Information Science/Studies; Computer Science; Modeling, Virtual Environments and Simulation; Cloud Computing; Computer Engineering, General; Computer Software Engineering; Computer Software Technology/Technician; Mathematics and Computer Science; Accounting and Computer Science; Economics and Computer Science; Linguistics and Computer Science; Data Science, General; Computer and Information Sciences, General; Computer Systems Analysis/Analyst; Computer Engineering Technology/Technician; Computer/Computer Systems Technology/Technician	Daniel Webster College, Dartmouth College, Franklin Pierce University, Granite State College, Great Bay Community College, Keene State College, Lakes Region Community College, Lebanon College, Manchester Community College, Nashua Community College, NHTI–Concord's community College, Mount Washington College, New England College, River Valley Community College, Rivier University, Saint Anselm College, Southern New Hampshire University, University of New Hampshire (main campus), White Mountains Community College
49-9041	Industrial Machinery Mechanics	High school diploma or equivalent	Industrial Mechanics and Maintenance Technology/Technician; Energy Systems Installation and Repair Technology/Technician; Hydroelectric Energy System Installation and Repair Technology/Technician; Geothermal Energy System Installation and Repair Technology/ Technician	Lakes Region Community College, White Mountains Community College, apprenticeship
47-2152	Plumbers, Pipefitters, and Steamfitters	High school diploma or equivalent	Pipefitting/Pipefitter and Sprinkler Fitter; Plumbing Technology/Plumber, Plumbing and Related Water Supply Services, Other	Apprenticeship
51-1011	First-Line Supervisors of Production Workers	High school diploma or equivalent	Operations Mgmt. and Supervision	Granite State College, New England College, Southern New Hampshire University

Source: Emsi, Camoin Associates

New Hampshire In-Demand Occupation Apprenticeship Programs

SOC	OccupationTitle	ProgName	County
53-3032	Truck Driver, Heavy (Alternate Title: Motor Transport Operator)	New Hampshire Motor Transport Association	Merrimack
47-2031	Carpenter	Waterline Industries Corporation	Rockingham
47-2111	Crane Electrician (Existing Title: Electrician [Ship & Boat])	Portsmouth Naval Shipyard	Rockingham
49-9071	Industrial Maintenance Repairer	Amphenol Printed Circuits, Inc.	Hillsborough
51-9061	Inspector, Precision	BAE Systems	Hillsborough
51-9161	Numerical Control Machinist Operator	Hypertherm, Inc.	Grafton
49-9021	Heating and Air Conditioning Mechanic and Installer	Palmer & Sicard, Inc.	Rockingham
49-9041	Industrial Machinist System Technician	Lindt & Sprüngli (USA)	Rockingham
47-2152	Marine Pipefitter (Existing Title: Pipe Fitter [Ship & Boat])	Portsmouth Naval Shipyard	Rockingham

Note: Includes programs whose status is "Awaiting Signatures" or "Registered" as of FY2021.

Source: U.S. Department of Labor, Employment and Training Administration

II.   Attract and Retain Commuters

New Hampshire experiences net out-commuting of 32 of its 34 In-Demand Occupations; only *CNC Tool Operators* and *First-Line Supervisors of Retail Sales Workers* commute into the state in greater numbers than commute out. Helping out-commuters find in-state jobs or encouraging more out-of-state workers in In-Demand Occupations to work in New Hampshire would help alleviate shortages.

The table below shows 2021 statewide net commuting for each occupation with at least 200 net out-commuters, the largest county-level outflow, the largest net inflow county in New England, and a comparison of median wages in the New Hampshire county and in the inflow county. The largest net out-commuting counties tend to be Rockingham and Hillsborough, those nearest to Boston. Note that the data do not indicate where out-commuters are commuting to; in some cases, they likely live in one New Hampshire county and work in another. Thus, not all — or necessarily any — out-commuters work in the top destination county indicated. For all In-Demand Occupations with net out-commuting, the top destination for the occupation is either Suffolk County or Middlesex County in Massachusetts. Suffolk is home to Boston, and Middlesex neighbors it to the northwest and borders New Hampshire.

Higher wages and lower taxes and cost of living are likely major motivations for working in Massachusetts and living in New Hampshire. All out-commuting occupations pay higher wages in Massachusetts than in New Hampshire. For most of them, median wages are 15% to almost 70% higher in Massachusetts than in New Hampshire, with an average wage premium of 25%. According to Tax Foundation data, since 2000 Massachusetts has had on average the 15th highest state and local tax burden, while New Hampshire has averaged 37th. Between 2010 and 2020, the cost of living as measured by regional price parities, which compare buying power across states and metro areas, averaged 2.3% lower in New Hampshire than in Massachusetts, with housing 10.7% lower in New Hampshire. In 2020 the differences were 3.5% and 14.6% as New Hampshire became less expensive relative to Massachusetts over the decade.

Workers in occupations with smaller wage premiums might be willing to accept lower pay to avoid commuting across state lines. However, the State will have to find other ways to incentivize out-commuters earning larger wage premiums to work in New Hampshire.

Net Commuting of New Hampshire's In-Demand Occupations, 2021

SOC	Occupation	Statewide Net Commuters	Largest County Outflow	Top Destination	Median Wage in Destination	Median Wage in NH	Wage Difference
11-1021	General and Operations Managers	(1,525)	(504)	Suffolk County, MA	$65.40	$51.19	28%
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	(1,033)	(535)	Suffolk County, MA	$59.72	$50.17	19%
29-1141	Registered Nurses	(846)	(963)	Suffolk County, MA	$48.15	$35.97	34%
13-1198	Project Management Specialists and Business Operations Specialists, All Other	(671)	(324)	Suffolk County, MA	$46.66	$35.98	30%
47-2031	Carpenters	(596)	(208)	Middlesex County, MA	$29.19	$23.62	24%
13-2011	Accountants and Auditors	(580)	(247)	Suffolk County, MA	$43.19	$33.12	30%
47-2111	Electricians	(550)	(251)	Middlesex County, MA	$33.32	$26.84	24%
13-1111	Management Analysts	(546)	(239)	Suffolk County, MA	$54.01	$43.28	25%
11-3031	Financial Managers	(523)	(265)	Suffolk County, MA	$74.87	$60.55	24%
49-9071	Maintenance and Repair Workers, General	(492)	(166)	Suffolk County, MA	$25.53	$21.94	16%
13-1161	Market Research Analysts and Marketing Specialists	(420)	(172)	Suffolk County, MA	$35.92	$30.32	18%
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	(403)	(179)	Middlesex County, MA	$45.12	$31.92	41%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	(383)	(174)	Suffolk County, MA	$35.16	$29.02	21%
47-2152	Plumbers, Pipefitters, and Steamfitters	(372)	(126)	Middlesex County, MA	$37.73	$26.10	45%
13-1071	Human Resources Specialists	(354)	(143)	Suffolk County, MA	$38.00	$30.30	25%
15-1232	Computer User Support Specialists	(289)	(151)	Suffolk County, MA	$32.45	$24.34	33%
11-3021	Computer and Information Systems Managers	(274)	(151)	Suffolk County, MA	$81.41	$66.79	22%
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	(260)	(107)	Suffolk County, MA	$37.38	$27.82	34%
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	(257)	(163)	Middlesex County, MA	$37.35	$31.32	19%
51-1011	First-Line Supervisors of Production and Operating Workers	(238)	(93)	Middlesex County, MA	$35.15	$34.69	1%
11-9111	Medical and Health Services Managers	(233)	(162)	Suffolk County, MA	$63.01	$49.01	29%
11-9021	Construction Managers	(226)	(96)	Suffolk County, MA	$53.97	$37.80	43%

Note: The top destination is the county in the region with the largest net in-migration. It is not necessarily the destination of all New Hampshire out-commuters for that occupation.

Source: Emsi

Attract Workers from Outside New England

Another strategy for closing the gap for In-Demand Occupations is to attract workers from out of state. The table below shows the MSAs where it may be feasible to draw workers from. These MSAs have a high concentration of In-Demand Occupations, with a sizable workforce, and lower median hourly earnings. Workers may be more likely to consider a move from relatively nearby MSAs (e.g. *CNC Tool Operators* in Lebanon, NH-VT and *First-Line Supervisors of Production and Operating Workers* and *Inspectors, Testers, Sorters, Samplers, and Weighers* in St. Mary's, PA) and/or ones that have large differences in earnings (e.g. *Management Analysts* in Tallahassee, FL and Sacramento-Roseville-Folsom, CA).

Top MSAs for In-Demand Occupations

SOC	Occupation	New Hampshire Median Hourly Earnings	New Hampshire Cost of Living Adjustment	Metropolitan Statistical Area Name	2021 Jobs	2021 LQ	Median Hourly Earnings	Cost of Living Adjustment	Difference in Cost of Living Adjusted Earnings
13-1111	Management Analysts	$44.14	$36.63	Tallahassee, FL	5,655	4.8	$23.83	$23.57	$13.06
				Sacramento-Roseville-Folsom, CA	24,275	3.6	$36.88	$27.12	$9.51
25-3021	Self-Enrichment Teachers	$23.63	$19.61	Heber, UT	595	5.7	$19.44	$16.08	$3.53
				Corvallis, OR	313	3.1	$19.77	$16.29	$3.32
39-9031	Exercise Trainers and Group Fitness Instructors	$22.56	$18.72	Sierra Vista-Douglas, AZ	318	3.6	$16.66	$15.96	$2.76
				Edwards, CO	253	3.4	$18.32	$15.32	$3.40
				Glenwood Springs, CO	305	3.2	$18.88	$14.66	$4.06
49-9041	Industrial Machinery Mechanics	$27.28	$22.64	Albertville, AL	447	4.2	$20.51	$22.20	$0.44
51-1011	First-Line Supervisors of Production and Operating Workers	$33.11	$27.48	Dalton, GA	1,177	4.5	$24.58	$26.66	$0.82
				St. Marys, PA	219	4.0	$27.23	$26.03	$1.45
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	$21.55	$17.89	St. Marys, PA	241	4.8	$16.25	$15.54	$2.35
				Carbondale-Marion, IL	891	4.1	$11.49	$11.92	$5.97
				Calhoun, GA	374	4.0	$16.00	$17.30	$0.59
				Fort Payne, AL	355	4.0	$13.59	$15.23	$2.66
				Talladega-Sylacauga, AL	407	3.6	$13.88	$15.27	$2.62
				Scottsboro, AL	208	3.5	$13.76	$15.04	$2.85
				Albertville, AL	514	3.4	$13.54	$14.65	$3.24
				Morristown, TN	674	3.4	$15.20	$16.67	$1.22
51-9161	CNC Tool Operators	$21.43	$17.78	Lebanon, NH-VT	566	5.4	$21.16	$17.43	$0.35
				Ogden-Clearfield, UT	1,121	4.0	$18.17	$17.49	$0.29
				Jackson, MI	205	3.7	$15.76	$17.55	$0.23
53-3032	Heavy and Tractor-Trailer Truck Drivers	$23.15	$19.21	Murray, KY	1,078	4.7	$16.80	$18.26	$0.95
				Harrison, AR	995	4.3	$15.81	$17.53	$1.68
				Portales, NM	317	3.2	$18.69	$18.43	$0.78

Includes MSAs with an LQ above 3.0, more than 200 jobs, and with lower cost of living adjusted median hourly wages than New Hampshire

Source: Emsi

Summary of Strategies

Summary of Strategies For Bridging the Gap for In-Demand Occupations

Occupations shaded in light grey span multiple industry clusters

SOC	Occupation	Workforce Diversification	Skills Transferability	Increase Training Pipeline	Attract or Retain Commuters	Attract Workers
11-1021	General and Operations Managers	Y	Y		Y	
11-3021	Computer and Information Systems Managers	Y	Y		Y	
11-3031	Financial Managers	Y	Y		Y	
11-9021	Construction Managers	Y			Y	
11-9111	Medical and Health Services Managers	Y	Y		Y	
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	Y				
13-1028	Buyers and Purchasing Agents	Y	Y	Y		
13-1071	Human Resources Specialists	Y			Y	
13-1111	Management Analysts		Y		Y	Y
13-1161	Market Research Analysts and Marketing Specialists		Y		Y	
13-1198	Project Management Specialists and Business Operations Specialists, All Other				Y	
13-2011	Accountants and Auditors		Y		Y	
15-1211	Computer Systems Analysts		Y			
15-1232	Computer User Support Specialists	Y			Y	
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	Y		Y	Y	
25-3021	Self-Enrichment Teachers	Y	Y			Y
29-1141	Registered Nurses	Y	Y		Y	
39-9031	Exercise Trainers and Group Fitness Instructors					Y
41-1011	First-Line Supervisors of Retail Sales Workers		Y			
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	Y		Y	Y	
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	Y			Y	
43-1011	First-Line Supervisors of Office and Administrative Support Workers	Y	Y		Y	
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	Y	Y	Y	Y	
47-2031	Carpenters	Y	Y	Y	Y	
47-2111	Electricians	Y	Y	Y	Y	
47-2152	Plumbers, Pipefitters, and Steamfitters	Y	Y	Y	Y	
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	Y	Y			
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	Y	Y	Y		
49-9041	Industrial Machinery Mechanics	Y	Y	Y		Y
49-9071	Maintenance and Repair Workers, General	Y	Y	Y	Y	
51-1011	First-Line Supervisors of Production and Operating Workers	Y	Y	Y	Y	Y
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers		Y	Y		Y
51-9161	CNC Tool Operators	Y	Y	Y		Y
53-3032	Heavy and Tractor-Trailer Truck Drivers	Y	Y	Y		Y

Appendix I: Commuting Profile

Statewide as of 2019 (pre-pandemic), 453,374 individuals both lived and worked in New Hampshire, 114,800 lived in the state but commuted to another state for work, and 78,362 lived in another state but commuted into New Hampshire for work.[10] Of New Hampshire residents who worked out of state in 2019, the lion's share (90,599) worked in Massachusetts, followed by Vermont (9,187), Maine (7,748), New York (2,333), and Connecticut (1,171). Fewer than 1,000 worked in each of Rhode Island, New Jersey, Pennsylvania, Florida, and other states.

Approximately half of New Hampshire's nonresident workforce commuted from Massachusetts (39,633) in 2019, with significant numbers also coming from Maine (17,569), Vermont (15,105), New York (1,697), and Connecticut (1,289). Fewer than 1,000 lived in each of Rhode Island, Pennsylvania, New Jersey, Florida, and other states.

Work State of New Hampshire Residents, 2019

State	Count	Share
New Hampshire	453,374	79.8%
Total Out-Commuters	114,800	20.2%
Massachusetts	90,599	15.9%
Vermont	9,187	1.6%
Maine	7,748	1.4%
New York	2,333	0.4%
Connecticut	1,171	0.2%
Rhode Island	722	0.1%
New Jersey	355	0.1%
Pennsylvania	334	0.1%
Florida	322	0.1%
All Other Locations	2,029	0.4%

Note: Counts only private primary jobs.
Source: US Census Bureau, OnTheMap

Home State of New Hampshire Workers, 2019

State	Count	Share
New Hampshire	453,374	85.3%
Total In-Commuters	78,362	14.7%
Massachusetts	39,633	7.5%
Maine	17,569	3.3%
Vermont	15,105	2.8%
New York	1,697	0.3%
Connecticut	1,289	0.2%
Rhode Island	649	0.1%
Pennsylvania	381	0.1%
New Jersey	315	0.1%
Florida	250	0.0%
All Other Locations	1,474	0.3%

Note: Counts only private primary jobs.
Source: US Census Bureau, OnTheMap

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[10] Source: US Census Bureau's OnTheMap (census.gov)

By 2021, 125,919 individuals lived in New Hampshire but worked in another state, and 82,458 individuals lived in another state but worked in New Hampshire, for net out-commuting of 43,461.[11] This is a decrease from pre-pandemic levels in 2019 when 136,121 New Hampshire residents commuted to other states for work and 87,098 workers commuted into New Hampshire from other states, yielding net out-commuting of 49,023.

Of New Hampshire residents who worked out of state in 2021, 81% worked in Massachusetts, 9% in Vermont, 8% in Maine, 1% in Connecticut, and less than 1% in each of Rhode Island and New York.

Approximately half (52%) of New Hampshire's nonresident workforce commuted from Massachusetts (42,706) in 2021, followed by roughly one-quarter (24%) from Maine (19,438), 21% from Vermont (17,646), and less than 2% each from Connecticut (1,328), Rhode Island (818), and New York (523).

Work State of New Hampshire Out-Commuters, 2021

State	Outbound Commuters	Share
MA	101,594	80.7%
VT	10,871	8.6%
ME	10,475	8.3%
CT	1,321	1.0%
RI	878	0.7%
NY	780	0.6%
Total	**125,919**	

Source: Emsi

Home State of New Hampshire In-Commuters, 2021

State	Inbound Commuters	Share
MA	42,706	51.8%
ME	19,438	23.6%
VT	17,646	21.4%
CT	1,328	1.6%
RI	818	1.0%
NY	523	0.6%
Total	**82,458**	

Source: Emsi

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[11] Source: Emsi

Out-Bound Commuters

Most cross-state commuters are those with monthly earnings above $3,333. Among New Hampshire residents who work in another state, 69% earn over $3,333 per month, about 19% earn between $1,251 and $3,333, and the remaining 12% earn $1,250 per month or less. By comparison, among New Hampshire residents who work in New Hampshire, just over half (52%) earn more than $3,333 per month, 30% earn between $1,251 and $3,333, and the remaining 18% earn $1,250 per month or less. That is, high earners represent a larger share of out-commuting New Hampshire residents than of those who work in-state. This means the State is exporting its top earners.

- Massachusetts is the main destination of all out-commuting income brackets, claiming from 59% of those earning $1,250 per month or less up to 86% of those earning more than $3,333.

- All three earnings brackets share the same next five work states: Vermont, Maine, New York, Connecticut, and Rhode Island, with Vermont and Maine switching places for commuters in the lowest bracket.

New Hampshire Resident Workers by Earnings and State of Employment, 2019

Total Workers			Earning $1,250 per Month or Less		
State	Count	Share	State	Count	Share
Total Private Primary Jobs	**568,174**	**100%**	**Total Private Primary Jobs**	**95,585**	**16.8%**
New Hampshire	453,374	100%	New Hampshire	82,073	18.1%
Total Out-Commuters	114,800	100%	Total Out-Commuters	13,512	11.8%
Massachusetts	90,599	78.9%	Massachusetts	7,938	58.7%
Vermont	9,187	8.0%	Maine	1,862	13.8%
Maine	7,748	6.7%	Vermont	1,762	13.0%
New York	2,333	2.0%	New York	753	5.6%
Connecticut	1,171	1.0%	Connecticut	288	2.1%
Rhode Island	722	0.6%	Rhode Island	257	1.9%
New Jersey	355	0.3%	Pennsylvania	92	0.7%
Pennsylvania	334	0.3%	Florida	72	0.5%
Florida	322	0.3%	Colorado	68	0.5%
All Other Locations	2,029	1.8%	All Other Locations	420	3.1%

Earning $1,251–$3,333 per Month			Earning More Than $3,333 per Month		
State	Count	Share	State	Count	Share
Total Private Primary Jobs	**158,282**	**27.9%**	**Total Private Primary Jobs**	**314,307**	**55.3%**
New Hampshire	136,023	30.0%	New Hampshire	235,278	51.9%
Total Out-Commuters	22,259	19.4%	Total Out-Commuters	79,029	68.8%
Massachusetts	14,706	66.1%	Massachusetts	67,955	86.0%
Vermont	3,213	14.4%	Vermont	4,212	5.3%
Maine	2,571	11.6%	Maine	3,315	4.2%
New York	476	2.1%	New York	1,104	1.4%
Connecticut	260	1.2%	Connecticut	623	0.8%
Rhode Island	177	0.8%	Rhode Island	288	0.4%
Florida	98	0.4%	New Jersey	214	0.3%
New Jersey	95	0.4%	Pennsylvania	154	0.2%
Pennsylvania	88	0.4%	Florida	152	0.2%
All Other Locations	575	2.6%	All Other Locations	1,012	1.3%

Note: State shares are of total out-commuters in each earnings bracket.

Source: US Census Bureau, OnTheMap

In-Bound Commuters

Among workers in New Hampshire who commute in from another state, 52% earn more than $3,333 per month, 28% earn between $1,251 and $3,333, and 20% earn $1,250 per month or less. This is quite close to the earnings distribution of New Hampshire workers who are also residents.

In-commuters in all earnings brackets come from the same top nine states in the same order.

- Massachusetts is the home of 54% of in-commuters in the lowest earnings bracket, 47% of those in the middle bracket, and 51% of the highest-earning in-commuters

- Maine is home to 19% of lower-earnings in-commuters, 24% of those with middle-earnings, and 23% of high-earnings in-commuters

- Vermont is home to 16% of in-commuters earning $1,250 per month or less, 21% of those earning $1,251 to $3,333, and 20% of those earning over $3,333 per month

- The remaining six top home states—New York, Connecticut, Rhode Island, Pennsylvania, New Jersey, and Florida—each represent less than 5% and generally less than 2% of in-commuters in each earnings bracket

Workers in New Hampshire by Earnings and Home State, 2019

Total Workers			Earning $1,250 per Month or Less		
State	Count	Share	State	Count	Share
Total Private Primary Jobs	**531,736**	**100%**	**Total Private Primary Jobs**	**97,720**	**18.4%**
New Hampshire	453,374	100%	New Hampshire	82,073	18.1%
Total In-Commuters	78,362	100%	Total In-Commuters	15,647	20.0%
Massachusetts	39,633	50.6%	Massachusetts	8,474	54.2%
Maine	17,569	22.4%	Maine	2,977	19.0%
Vermont	15,105	19.3%	Vermont	2,500	16.0%
New York	1,697	2.2%	New York	500	3.2%
Connecticut	1,289	1.6%	Connecticut	454	2.9%
Rhode Island	649	0.8%	Rhode Island	227	1.5%
Pennsylvania	381	0.5%	Pennsylvania	92	0.6%
New Jersey	315	0.4%	New Jersey	67	0.4%
Florida	250	0.3%	Florida	52	0.3%
All Other Locations	1,474	1.9%	All Other Locations	304	1.9%

Earning $1,251–$3,333 per Month			Earning More Than $3,333 per Month		
State	Count	Share	State	Count	Share
Total Private Primary Jobs	**158,316**	**29.8%**	**Total Private Primary Jobs**	**275,700**	**51.8%**
New Hampshire	136,023	30.0%	New Hampshire	235,278	51.9%
Total In-Commuters	22,293	28.4%	Total In-Commuters	40,422	51.6%
Massachusetts	10,376	46.5%	Massachusetts	20,783	51.4%
Maine	5,450	24.4%	Maine	9,142	22.6%
Vermont	4,681	21.0%	Vermont	7,924	19.6%
New York	566	2.5%	New York	631	1.6%
Connecticut	286	1.3%	Connecticut	549	1.4%
Rhode Island	168	0.8%	Rhode Island	254	0.6%
Pennsylvania	127	0.6%	Pennsylvania	162	0.4%
New Jersey	94	0.4%	New Jersey	154	0.4%
Florida	90	0.4%	Florida	108	0.3%
All Other Locations	455	2.0%	All Other Locations	715	1.8%

Note: State shares are of total in-commuters in each earnings bracket.

Source: US Census Bureau, OnTheMap

Appendix II: Workforce Pipeline Profile

Key Takeaways

About one-quarter of New Hampshire higher educational program completions in 2020 were in business-related fields and another 10% were in health-related fields. Based on how educational fields prepare students for professional occupations, about 20% of program completers had the minimum qualifications for management occupations, 15% were qualified for entry-level business and financial occupations, and nearly 10% for computer occupations.

- Statewide post-secondary completions grew 84% between 2011 and 2020 to 36,836. Three of the four CEDRs saw increases in completions over the period, ranging from 0.2% in the Northern CEDR to 185% in the Central-Southern CEDR. Total completions shrank by 21% in the South-Western CEDR, although those from Franklin Pierce University grew by almost 11%.

- The top 10 academic major fields in the state in 2020 were: Business Administration and Management (6,366), Psychology (2,246), General Studies (1,699), Registered Nursing (1,657), Health/Health Care Administration/Management (1,461), Accounting (1,304), Computer and Information Sciences (1,223), Corrections and Criminal Justice (997), English Language and Literature (804), and Organizational Communication (639). These fields accounted for half of all 2020 completions. Health/Health Care Administration/Management and Corrections and Criminal Justice are also among the fastest growing majors, with completions increasing by 1024% and 2166% between 2011 and 2020.

- Statewide, New Hampshire's post-secondary educational institutions provided 17,934 individuals in 2020 with the minimum academic qualifications to be Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other, representing a potential 10-year supply of nearly 115,000. Other top occupational completions in the state were General and Operations Managers, Project Management Specialists and Business Operations Specialists, Computer User Support Specialists, and Sales Managers.

Training Programs

The State of New Hampshire has:

- Seven Community Colleges with 12 campuses

- Four public four-year colleges

- 12 private nonprofit colleges and universities

- 52 licensed career schools

The table below shows the 10-year trend in total completions from New Hampshire's post-secondary educational institutions, by CEDR. Statewide, total completions grew 84%, from 20,042 in 2011 to 36,836 in 2020.

- The Southern-Central CEDR has the highest number of institutions and, not surprisingly, the most completions in the State. Growing from 9,199 completions in 2011 to 26,241 in 2020, the region produced 71% of the State's total. Southern New Hampshire University alone provided 58% of the state total. SNHU completions increased more than eightfold between 2011 and 2020.

- At 13% of the state total, the Seacoast CEDR is the second largest source of completions, with 4,712 in 2020. Most of these (4,259) were from the University of New Hampshire's main campus. UNH's completions were 6% higher in 2020 than in 2011, while completions from the smaller Great Bay Community College increased 45% over the same period, from 230 to 334.

- The Northern CEDR produced 10% of the State's 2020 completions, with 3,836. This was almost unchanged from 2011's 3,830 completions. Dartmouth College (2,114 completions in 2020) and Plymouth State University (1,311) are the largest institutions in the region. Both grew modestly between 2011 and 2020, at 7% and 6%, respectively. The six other post-secondary institutions in the Northern CEDR saw modest to significant declines in completions.

- Representing 6% of New Hampshire's total 2020 completions, the South-Western CEDR produced 2,047 in 2020, a 21% decrease from 2011. The largest institutions are Keene State College, with 915 completions, and Franklin Pierce University, with 637. Franklin Pierce is the only institution in the region to see an increase in completions since 2011. The other four saw declines of 10% to 57%, with Keene State shrinking by almost one-third.

Postsecondary Educational Completions by Region and Institution, 2011–2020

Region/Institution	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2011–2020 Change
Northern CEDR											
Dartmouth College	1,976	1,985	2,081	2,153	2,064	2,103	2,074	2,169	2,115	2,114	7.0%
Empire Beauty School-Laconia	59	64	45	55	45	35	43	43	37	53	-10.2%
Lakes Region Community College	210	244	208	178	181	205	167	228	188	129	-38.6%
Lebanon College	35	39	16	26	ND	ND	ND	ND	ND	ND	–
New England School of Hair Design	20	37	12	21	23	17	21	9	14	9	-55.0%
Plymouth State University	1,240	1,484	1,397	1,467	1,427	1,341	1,258	1,250	1,352	1,311	5.7%
Upper Valley Educators Institute	55	39	45	41	24	37	28	30	22	18	-67.3%
White Mountains Community College	235	252	194	226	171	202	219	217	247	202	-14.0%
Total	**3,830**	**4,144**	**3,998**	**4,167**	**3,935**	**3,940**	**3,810**	**3,946**	**3,975**	**3,836**	**0.2%**
South-Western CEDR											
Antioch University-New England	318	294	316	326	251	201	208	249	341	287	-9.7%
Franklin Pierce University	576	676	608	555	505	674	590	621	574	637	10.6%
Keene Beauty Academy	35	38	26	33	26	43	40	22	20	15	-57.1%
Keene State College	1,347	1,405	1,323	1,325	1,263	1,053	1,208	1,156	960	915	-32.1%
River Valley Community College	315	370	276	220	234	206	197	200	194	193	-38.7%
Total	**2,591**	**2,783**	**2,549**	**2,459**	**2,279**	**2,177**	**2,243**	**2,248**	**2,089**	**2,047**	**-21.0%**
Seacoast CEDR											
Chester College of New England	35	ND	ND	ND	ND	ND	ND	ND	ND	ND	–
Empire Beauty School-Portsmouth	61	40	67	42	47	51	38	46	ND	ND	–
Empire Beauty School-Somersworth	56	50	54	62	42	29	60	41	80	86	53.6%
Great Bay Community College	230	245	226	270	290	340	329	356	373	334	45.2%
InterCoast Career Institute-Salem	ND	0	39	56	ND	ND	ND	ND	ND	ND	–
Paul Mitchell the School-Portsmouth	21	24	18	10	26	33	26	19	22	33	57.1%
University of New Hampshire-Main Campus	4,019	4,033	4,289	4,029	4,194	4,124	4,097	4,438	4,540	4,259	6.0%
Total	**4,422**	**4,392**	**4,693**	**4,469**	**4,599**	**4,577**	**4,550**	**4,900**	**5,015**	**4,712**	**6.6%**

Note: ND = no data

Source: Emsi, Integrated Postsecondary Education Data System

BEA   State of New Hampshire Workforce Assessment

Postsecondary Educational Completions by Region and Institution, 2011–2020

Region/Institution	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2011–2020 Change
Central-Southern CEDR											
American Academy of Health and Beauty	51	91	53	50	49	58	46	41	43	20	-60.8%
American School of Nursing and Medical Careers	108	169	135	192	214	130	187	138	116	ND	–
Colby-Sawyer College	208	187	267	246	320	322	318	281	219	195	-6.3%
Continental Academie of Hair Design-Hudson	59	38	49	35	42	39	29	15	33	9	-84.7%
Continental Academie of Hair Design-Manchester	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	–
Daniel Webster College	252	199	143	178	125	137	ND	ND	ND	ND	–
Empire Beauty School-Hooksett	49	62	43	49	63	82	93	82	113	105	114.3%
Granite State College	495	476	510	475	649	629	667	600	545	564	13.9%
Harmony Health Care Institute	ND	ND	ND	ND	ND	ND	18	32	48	50	–
Magdalen College	16	16	ND	20	19	26	23	13	23	18	12.5%
Manchester Community College	301	374	330	416	399	525	407	560	513	461	53.2%
Michaels School of Hair Design and Esthetics-	119	96	88	75	91	94	77	75	58	56	-52.9%
Mount Washington College	1,195	1,012	902	649	429	ND	ND	ND	ND	ND	–
Nashua Community College	302	298	300	298	339	299	313	315	312	318	5.3%
New England College	653	599	511	521	526	521	609	893	681	765	17.2%
New Hampshire Institute for Therapeutic Arts	53	35	25	28	35	31	31	20	24	15	-71.7%
New Hampshire Institute of Art	95	83	114	97	96	117	108	101	ND	ND	–
NHTI-Concord's Community College	697	745	719	745	735	719	763	821	837	766	9.9%
Rivier University	658	633	679	694	747	870	923	696	615	549	-16.6%
Saint Anselm College	449	396	438	420	518	492	539	554	517	585	30.3%
Seacoast Career School-Manchester Campus	380	414	306	256	202	164	108	95	ND	ND	–
Southern New Hampshire University	2,589	2,634	3,035	4,508	7,654	10,198	13,583	17,854	20,399	21,418	727.3%
St Joseph School of Nursing	66	67	46	87	97	74	94	98	57	64	-3.0%
Thomas More College of Liberal Arts	22	10	15	18	23	16	17	30	25	22	0.0%
University of New Hampshire-Franklin Pierce	173	179	139	170	111	101	91	93	81	85	-50.9%
University of New Hampshire at Manchester	194	200	236	221	194	169	166	206	201	176	-9.3%
Total	**9,199**	**9,013**	**9,083**	**10,448**	**13,677**	**15,813**	**19,210**	**23,613**	**25,460**	**26,241**	**185.3%**
State Total	**20,042**	**20,332**	**20,323**	**21,543**	**24,490**	**26,507**	**29,813**	**34,707**	**36,539**	**36,836**	**83.8%**

Note: ND = no data

Source: Emsi, Integrated Postsecondary Education Data System

Statewide, the top 10 academic fields accounted for half of all 2020 completions, while the top 20 accounted for 62%. The top 10 were: Business Administration and Management (6,366), Psychology (2,246), General Studies (1,699), Registered Nursing (1,657), Health/Health Care Administration/ Management (1,461), Accounting (1,304), Computer and Information Sciences (1,223), Corrections and Criminal Justice (997), English Language and Literature (804), and Organizational Communication (639). Among the top 20 fields, Human Resources Management/Personnel Administration, Corrections and Criminal Justice, Creative Writing, and Health/Health Care Administration/Management are the fastest growing, each increasing by more than 1000% from 2011 to 2020.

Top Post-Secondary Completion Fields in New Hampshire, 2020

CIP Code	Description	2020 Completions	Share of Total	2011–2020 Average	2011–2020 Change
52.0201	Business Administration and Management, General	6,366	17.3%	4,268	152%
42.0101	Psychology, General	2,246	6.1%	1,424	173%
24.0102	General Studies	1,699	4.6%	857	767%
51.3801	Registered Nursing/Registered Nurse	1,657	4.5%	1,097	142%
51.0701	Health/Health Care Administration/Management	1,461	4.0%	570	1024%
52.0301	Accounting	1,304	3.5%	845	200%
11.0101	Computer and Information Sciences, General	1,223	3.3%	784	595%
43.0199	Corrections and Criminal Justice, Other	997	2.7%	419	2166%
23.0101	English Language and Literature, General	804	2.2%	699	70%
09.0901	Organizational Communication, General	639	1.7%	274	Insf. Data
24.0199	Liberal Arts and Sciences, General Studies and Humanities, Other	561	1.5%	253	510%
54.0101	History, General	561	1.5%	383	105%
23.1302	Creative Writing	549	1.5%	257	1177%
52.1401	Marketing/Marketing Management, General	502	1.4%	317	105%
52.0205	Operations Management and Supervision	421	1.1%	224	680%
44.0000	Human Services, General	386	1.0%	143	444%
52.1001	Human Resources Management/Personnel Administration, General	386	1.0%	207	12767%
51.2201	Public Health, General	384	1.0%	164	399%
50.0409	Graphic Design	373	1.0%	159	492%
51.0000	Health Services/Allied Health/Health Sciences, General	362	1.0%	146	934%
Total Completions		**36,836**	**100%**	**27,113**	**83.8%**

Source: Emsi, Integrated Postsecondary Education Data System

The following tables show the most popular fields of study and number of 2020 completions in each CEDR. These are the top five in each region.

Northern CEDR

- Business Administration and Management
- Econometrics and Quantitative Economics
- Engineering
- Computer Science
- Management Science

Central-Southern CEDR

- Business Administration and Management
- Psychology
- General Studies
- Registered Nursing
- Health/Health Care Administration/Management

South-Western CEDR

- Business Administration and Management
- Environmental Studies
- Elementary Education and Teaching
- Psychology
- Occupational Safety and Health Technology

Seacoast CEDR

- Business Administration and Management
- Psychology
- Speech Communication and Rhetoric
- Registered Nursing
- Mechanical Engineering

Top Post-Secondary Completion Fields in Central-Southern CEDR, 2020

CIP Code	Description	2020 Completions	Share of Total	2011–2020 Average	2011–2020 Change
52.0201	Business Administration and Management, General	5,148	19.6%	4,268	237.8%
42.0101	Psychology, General	1,885	7.2%	1,424	422.2%
24.0102	General Studies	1,683	6.4%	857	1029.5%
51.3801	Registered Nursing/Registered Nurse	1,365	5.2%	1,097	243.0%
51.0701	Health/Health Care Administration/Management	1,353	5.2%	570	1889.7%
52.0301	Accounting	1,228	4.7%	845	240.2%
11.0101	Computer and Information Sciences, General	1,129	4.3%	784	1052.0%
43.0199	Corrections and Criminal Justice, Other	953	3.6%	419	2065.9%
09.0901	Organizational Communication, General	639	2.4%	699	Insf. Data
23.0101	English Language and Literature, General	599	2.3%	274	499.0%
23.1302	Creative Writing	533	2.0%	253	3035.3%
24.0199	Liberal Arts and Sciences, General Studies and Humanities, Other	526	2.0%	383	1152.4%
52.1401	Marketing/Marketing Management, General	432	1.6%	257	152.6%
54.0101	History, General	432	1.6%	317	632.2%
52.0205	Operations Management and Supervision	421	1.6%	224	679.6%
52.1001	Human Resources Management/Personnel Administration, General	377	1.4%	143	12466.7%
44.0000	Human Services, General	374	1.4%	207	1106.5%
50.0409	Graphic Design	370	1.4%	164	704.3%
03.0104	Environmental Science	284	1.1%	159	9366.7%
51.0000	Health Services/Allied Health/Health Sciences, General	280	1.1%	146	803.2%
Total Completions		**26,241**	**100%**	**16,176**	**185.3%**

Source: Emsi, Integrated Postsecondary Education Data System

Top Post-Secondary Completion Fields in Seacoast CEDR, 2020

CIP Code	Description	2020 Completions	Share of Total	2011–2020 Average	2011–2020 Change
52.0201	Business Administration and Management, General	886	18.8%	684	106.5%
42.0101	Psychology, General	212	4.5%	217	2.9%
09.0101	Speech Communication and Rhetoric	164	3.5%	157	19.7%
51.3801	Registered Nursing/Registered Nurse	159	3.4%	155	-2.5%
14.1901	Mechanical Engineering	136	2.9%	113	43.2%
26.0102	Biomedical Sciences, General	128	2.7%	97	12700.0%
44.0701	Social Work	124	2.6%	104	67.6%
51.2306	Occupational Therapy/Therapist	118	2.5%	115	-1.7%
23.0101	English Language and Literature, General	113	2.4%	140	-43.8%
45.1001	Political Science and Government, General	98	2.1%	101	-14.8%
14.0801	Civil Engineering, General	95	2.0%	98	-4.0%
30.1901	Nutrition Sciences	86	1.8%	78	32.3%
19.0701	Human Development and Family Studies, General	79	1.7%	84	9.7%
12.0401	Cosmetology/Cosmetologist, General	70	1.5%	77	-26.3%
11.0101	Computer and Information Sciences, General	68	1.4%	52	61.9%
31.0301	Parks, Recreation, and Leisure Facilities Management, General	67	1.4%	78	-1.5%
45.0401	Criminology	65	1.4%	75	-18.8%
03.0101	Natural Resources/Conservation, General	62	1.3%	53	12.7%
45.1101	Sociology, General	61	1.3%	78	-53.8%
52.0101	Business/Commerce, General	59	1.3%	112	-57.9%
Total Completions		**4,712**	**100%**	**2,925**	**6.6%**

Source: Emsi, Integrated Postsecondary Education Data System

Top Post-Secondary Completion Fields in Northern CEDR, 2020

CIP Code	Description	2020 Completions	Share of Total	2011–2020 Average	2011–2020 Change
52.0201	Business Administration and Management, General	227	5.9%	391	-36.8%
45.0603	Econometrics and Quantitative Economics	166	4.3%	54	Insf. Data
14.0101	Engineering, General	165	4.3%	145	18.7%
11.0701	Computer Science	139	3.6%	100	167.3%
52.1301	Management Science	139	3.6%	14	Insf. Data
45.1001	Political Science and Government, General	138	3.6%	155	-6.8%
14.1301	Engineering Science	130	3.4%	114	18.2%
51.2201	Public Health, General	97	2.5%	57	98.0%
51.1201	Medicine	88	2.3%	84	29.4%
52.0101	Business/Commerce, General	84	2.2%	83	-29.4%
03.0103	Environmental Studies	83	2.2%	66	107.5%
26.0101	Biology/Biological Sciences, General	79	2.1%	93	-13.2%
13.1202	Elementary Education and Teaching	74	1.9%	89	-37.3%
43.0104	Criminal Justice/Safety Studies	69	1.8%	61	30.2%
27.0101	Mathematics, General	64	1.7%	66	-1.5%
42.2704	Experimental Psychology	63	1.6%	12	Insf. Data
54.0101	History, General	62	1.6%	88	-41.5%
23.0101	English Language and Literature, General	61	1.6%	81	-40.8%
51.3801	Registered Nursing/Registered Nurse	55	1.4%	60	-21.4%
42.0101	Psychology, General	54	1.4%	103	-53.0%
Total Completions		**3,836**	**100%**	**2,351**	**0.2%**

Source: Emsi, Integrated Postsecondary Education Data System

Top Post-Secondary Completion Fields in South-Western CEDR, 2020

CIP Code	Description	2020 Completions	Share of Total	2011–2020 Average	2011–2020 Change
52.0201	Business Administration and Management, General	105	5.1%	145	-51.8%
03.0103	Environmental Studies	99	4.8%	89	19.3%
13.1202	Elementary Education and Teaching	95	4.6%	120	-43.5%
42.0101	Psychology, General	95	4.6%	128	-33.1%
15.0701	Occupational Safety and Health Technology/Technician	88	4.3%	111	1.1%
51.2308	Physical Therapy/Therapist	85	4.2%	69	107.3%
51.3801	Registered Nursing/Registered Nurse	78	3.8%	81	44.4%
51.0000	Health Services/Allied Health/Health Sciences, General	72	3.5%	32	Insf. Data
26.0101	Biology/Biological Sciences, General	64	3.1%	45	42.2%
13.0101	Education, General	49	2.4%	44	44.1%
51.1508	Mental Health Counseling/Counselor	48	2.3%	33	84.6%
09.0101	Speech Communication and Rhetoric	46	2.2%	71	-56.6%
43.0199	Corrections and Criminal Justice, Other	44	2.1%	21	Insf. Data
42.2801	Clinical Psychology	43	2.1%	43	-32.8%
43.0103	Criminal Justice/Law Enforcement Administration	43	2.1%	36	4.9%
51.0001	Health and Wellness, General	41	2.0%	37	412.5%
13.1210	Early Childhood Education and Teaching	33	1.6%	45	-41.1%
23.0101	English Language and Literature, General	31	1.5%	48	-55.1%
45.1101	Sociology, General	31	1.5%	48	-53.0%
50.0602	Cinematography and Film/Video Production	30	1.5%	27	20.0%
Total Completions		**2,047**	**100%**	**2,347**	**-21.0%**

Source: Emsi, Integrated Postsecondary Education Data System

Completions

The CIP codes used to classify academic fields of study can be mapped to occupational SOC codes according to the skillset and entry-level amount of education required by an occupation. From this it is possible to derive occupational completions, representing the number of post-secondary graduates, or completers, who would have the basic qualifications for given occupations. The most recent data for completions is 2020. Multiplying 2010–2020 average annual occupational completions by 10 provides an estimate of the potential supply of new workers for any given occupation. Completions count the number of degrees rather than students, so that a single student who double-majors in economics and political science, for instance, will count as two completions and will be qualified for more than one occupation.

Statewide, New Hampshire's post-secondary educational institutions provided 17,934 individuals in 2020 with the minimum academic qualifications to be Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other, representing a potential 10-year supply of nearly 126,433. Other top occupational completions in the state were General and Operations Managers (potential 10-year supply of 76,023), Project Management Specialists and Business Operations Specialists (75,809), Computer User Support Specialists (72,937), and Sales Managers (72,921).

The following tables show the occupations with the largest pipelines in each CEDR, 2020 completions, and estimated 2022–2032 completions. These are the top five in each region.

Northern CEDR
- Personal Service Managers, All Other; Entertainment and Recreation Managers; and Managers, All Other
- Chief Executives
- General and Operations Managers
- Secondary School Teachers, except Special and Career/Technical Education
- Sales Managers

South-Western CEDR
- Personal Service Managers, All Other; Entertainment and Recreation Managers; and Managers, All Other
- Marketing Managers
- Project Management Specialists and Business Operations Specialists, All Other
- Market Research Analysts and Marketing Specialists
- Sales Managers

Central-Southern CEDR
- Personal Service Managers, All Other; Entertainment and Recreation Managers; and Managers, All Other
- Computer User Support Specialists
- General and Operations Managers
- Human Resources Specialists
- Project Management Specialists and Business Operations Specialists, All Other

Seacoast CEDR
- Personal Service Managers, All Other; Entertainment and Recreation Managers; and Managers, All Other
- General and Operations Managers
- Chief Executives
- Project Management Specialists and Business Operations Specialists, All Other
- Sales Managers

Top Occupational Completions in New Hampshire, 2022–2032

SOC	Description	Completions	Completions	Typical Entry-Level Education
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	17,934	126,433	Bachelor's degree
11-1021	General and Operations Managers	11,020	76,023	Bachelor's degree
13-1198	Project Management Specialists and Business Operations Specialists, All Other	10,684	75,809	Bachelor's degree
15-1232	Computer User Support Specialists	10,677	72,937	Some college, no degree
11-2022	Sales Managers	10,471	72,921	Bachelor's degree
11-1011	Chief Executives	10,516	72,820	Bachelor's degree
11-2021	Marketing Managers	10,349	70,779	Bachelor's degree
13-1071	Human Resources Specialists	10,177	65,416	Bachelor's degree
11-3021	Computer and Information Systems Managers	8,557	60,164	Bachelor's degree
13-1111	Management Analysts	7,932	57,733	Bachelor's degree
13-1161	Market Research Analysts and Marketing Specialists	7,790	57,621	Bachelor's degree
13-2011	Accountants and Auditors	7,870	56,134	Bachelor's degree
11-3121	Human Resources Managers	8,346	54,489	Bachelor's degree
15-1299	Computer Occupations, All Other	4,365	30,491	Bachelor's degree
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	2,996	29,899	Bachelor's degree
21-1021	Child, Family, and School Social Workers	3,183	24,355	Bachelor's degree
25-2022	Middle School Teachers, Except Special and Career/Technical Education	2,407	23,368	Bachelor's degree
25-2021	Elementary School Teachers, Except Special Education	1,973	22,609	Bachelor's degree
13-1041	Compliance Officers	3,303	22,218	Bachelor's degree
27-3031	Public Relations Specialists	3,763	21,968	Bachelor's degree
21-1023	Mental Health and Substance Abuse Social Workers	3,138	21,793	Master's degree
21-1022	Healthcare Social Workers	3,290	21,104	Master's degree
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	3,057	20,708	Bachelor's degree
21-1013	Marriage and Family Therapists	2,901	19,784	Master's degree
19-3031	Clinical, Counseling, and School Psychologists	2,553	19,061	Master's degree
15-2041	Statisticians	3,233	18,950	Master's degree
21-1015	Rehabilitation Counselors	2,649	17,064	Master's degree
21-1012	Educational, Guidance, and Career Counselors and Advisors	2,290	16,163	Master's degree
19-3039	Psychologists, All Other	2,345	15,843	Master's degree
19-3032	Industrial-Organizational Psychologists	2,263	15,555	Master's degree
29-1223	Psychiatrists	2,263	15,555	Doctoral or professional degree
27-3043	Writers and Authors	1,798	15,155	Bachelor's degree
19-2041	Environmental Scientists and Specialists, Including Health	1,541	15,107	Bachelor's degree

Note: Includes only occupations requiring more than a high school education and with at least 1,000 completions in 2020.

Source: Emsi

Top Occupational Completions in New Hampshire, 2022–2032 (continued)

SOC	Description	Completions 2020	Completions 2022–2032	Typical Entry-Level Education
13-2098	Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other	1,920	14,856	Bachelor's degree
25-3097	Tutors and Teachers and Instructors, All Other	2,552	14,715	Some college, no degree
11-3011	Administrative Services and Facilities Managers	2,633	14,655	Bachelor's degree
27-3023	News Analysts, Reporters, and Journalists	1,832	14,610	Bachelor's degree
29-1141	Registered Nurses	2,062	14,529	Bachelor's degree
25-1099	Postsecondary Teachers	2,512	14,505	Doctoral or professional degree
15-1212	Information Security Analysts	1,840	14,121	Bachelor's degree
29-1171	Nurse Practitioners	1,941	14,057	Master's degree
11-2031	Public Relations and Fundraising Managers	2,590	14,033	Bachelor's degree
27-3041	Editors	2,081	13,767	Bachelor's degree
29-1161	Nurse Midwives	1,884	13,726	Master's degree
11-9121	Natural Sciences Managers	1,452	13,265	Bachelor's degree
11-9032	Education Administrators, Kindergarten through Secondary	1,106	12,723	Master's degree
15-1251	Computer Programmers	1,875	12,572	Bachelor's degree
15-1257	Web Developers and Digital Interface Designers	1,960	12,477	Bachelor's degree
15-1211	Computer Systems Analysts	1,758	12,401	Bachelor's degree
15-1244	Network and Computer Systems Administrators	1,756	12,315	Bachelor's degree
15-1245	Database Administrators and Architects	1,740	12,202	Bachelor's degree
15-1241	Computer Network Architects	1,718	12,172	Bachelor's degree
13-2061	Financial Examiners	1,723	12,101	Bachelor's degree
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	1,708	12,099	Bachelor's degree
13-2031	Budget Analysts	1,717	12,097	Bachelor's degree
13-2041	Credit Analysts	1,722	12,085	Bachelor's degree
15-1231	Computer Network Support Specialists	1,710	12,058	Associate's degree
15-1221	Computer and Information Research Scientists	1,716	12,057	Master's degree
43-9111	Statistical Assistants	1,790	11,876	Bachelor's degree
29-1151	Nurse Anesthetists	1,657	11,627	Master's degree
13-1075	Labor Relations Specialists	1,438	11,606	Bachelor's degree
19-1042	Medical Scientists, Except Epidemiologists	1,379	11,205	Doctoral or professional degree
43-3031	Bookkeeping, Accounting, and Auditing Clerks	1,480	10,554	Some college, no degree
13-2081	Tax Examiners and Collectors, and Revenue Agents	1,476	10,503	Bachelor's degree
43-9081	Proofreaders and Copy Markers	1,393	10,207	Bachelor's degree
19-3094	Political Scientists	1,199	10,073	Master's degree
43-9031	Desktop Publishers	1,218	9,685	Associate's degree
13-1011	Agents and Business Managers of Artists, Performers, and Athletes	1,479	9,289	Bachelor's degree
19-3022	Survey Researchers	1,020	8,201	Master's degree
27-1024	Graphic Designers	1,372	7,593	Bachelor's degree
27-1011	Art Directors	1,349	7,331	Bachelor's degree
11-2011	Advertising and Promotions Managers	1,199	7,303	Bachelor's degree
13-1131	Fundraisers	1,156	6,380	Bachelor's degree
21-1091	Health Education Specialists	1,006	5,551	Bachelor's degree

Note: Includes only occupations requiring more than a high school education and with at least 1,000 completions in 2020.

State of New Hampshire Workforce Assessment

Top Occupational Completions in the Central-Southern CEDR, 2022–2032

SOC	Description	Completions 2020	Completions 2022–2026	Typical Entry-Level Education
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	13,907	80,039	Bachelor's degree
15-1232	Computer User Support Specialists	8,942	54,247	Some college, no degree
11-1021	General and Operations Managers	8,840	53,249	Bachelor's degree
13-1071	Human Resources Specialists	8,719	49,169	Bachelor's degree
13-1198	Project Management Specialists and Business Operations Specialists, All Other	8,670	53,617	Bachelor's degree
11-2021	Marketing Managers	8,513	50,718	Bachelor's degree
11-2022	Sales Managers	8,503	50,922	Bachelor's degree
11-1011	Chief Executives	8,370	50,606	Bachelor's degree
11-3021	Computer and Information Systems Managers	7,000	43,853	Bachelor's degree
11-3121	Human Resources Managers	6,972	39,441	Bachelor's degree
13-2011	Accountants and Auditors	6,530	41,284	Bachelor's degree
13-1111	Management Analysts	6,151	38,238	Bachelor's degree
13-1161	Market Research Analysts and Marketing Specialists	6,037	37,042	Bachelor's degree
15-1299	Computer Occupations, All Other	3,385	20,213	Bachelor's degree
27-3031	Public Relations Specialists	2,920	12,568	Bachelor's degree
21-1022	Healthcare Social Workers	2,590	12,938	Master's degree
21-1023	Mental Health and Substance Abuse Social Workers	2,452	13,496	Master's degree
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	2,450	13,329	Bachelor's degree
21-1021	Child, Family, and School Social Workers	2,393	14,438	Bachelor's degree
25-3097	Tutors and Teachers and Instructors, All Other	2,377	12,586	Some college, no degree
25-1099	Postsecondary Teachers	2,364	12,526	Doctoral or professional degree
15-2041	Statisticians	2,314	10,066	Master's degree
21-1013	Marriage and Family Therapists	2,283	11,975	Master's degree
21-1015	Rehabilitation Counselors	2,269	11,760	Master's degree
11-3011	Administrative Services and Facilities Managers	2,245	10,138	Bachelor's degree
13-1041	Compliance Officers	2,234	10,532	Bachelor's degree
11-2031	Public Relations and Fundraising Managers	2,196	9,303	Bachelor's degree
19-3031	Clinical, Counseling, and School Psychologists	2,021	11,893	Master's degree
21-1012	Educational, Guidance, and Career Counselors and Advisors	1,914	10,710	Master's degree
19-3039	Psychologists, All Other	1,902	10,545	Master's degree
19-3032	Industrial-Organizational Psychologists	1,895	10,502	Master's degree
29-1223	Psychiatrists	1,895	10,502	Doctoral or professional degree
27-3041	Editors	1,837	10,083	Bachelor's degree
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	1,730	12,492	Bachelor's degree
29-1141	Registered Nurses	1,715	10,967	Bachelor's degree

Note: Includes only occupations requiring more than a high school education and with at least 1,000 completions in 2020.

Source: Emsi

Top Occupational Completions in the Central-South CEDR, 2022–2032 (continued)

SOC	Description	Completions 2020	Completions 2022–2032	Typical Entry-Level Education
13-2098	Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other	1,703	12,463	Bachelor's degree
15-1257	Web Developers and Digital Interface Designers	1,702	10,254	Bachelor's degree
43-9111	Statistical Assistants	1,611	9,549	Bachelor's degree
13-2061	Financial Examiners	1,601	10,654	Bachelor's degree
13-2031	Budget Analysts	1,600	10,655	Bachelor's degree
13-2041	Credit Analysts	1,600	10,638	Bachelor's degree
29-1171	Nurse Practitioners	1,600	10,572	Master's degree
29-1161	Nurse Midwives	1,592	10,487	Master's degree
15-1251	Computer Programmers	1,561	9,911	Bachelor's degree
25-2022	Middle School Teachers, Except Special and Career/Technical Education	1,517	10,849	Bachelor's degree
15-1212	Information Security Analysts	1,446	10,697	Bachelor's degree
15-1211	Computer Systems Analysts	1,438	9,706	Bachelor's degree
15-1244	Network and Computer Systems Administrators	1,433	9,596	Bachelor's degree
15-1245	Database Administrators and Architects	1,424	9,543	Bachelor's degree
15-1221	Computer and Information Research Scientists	1,404	9,430	Master's degree
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	1,399	9,378	Bachelor's degree
15-1231	Computer Network Support Specialists	1,395	9,407	Associate's degree
15-1241	Computer Network Architects	1,394	9,369	Bachelor's degree
43-3031	Bookkeeping, Accounting, and Auditing Clerks	1,379	9,291	Some college, no degree
13-2081	Tax Examiners and Collectors, and Revenue Agents	1,375	9,258	Bachelor's degree
29-1151	Nurse Anesthetists	1,365	8,388	Master's degree
27-3023	News Analysts, Reporters, and Journalists	1,347	8,076	Bachelor's degree
13-1011	Agents and Business Managers of Artists, Performers, and Athletes	1,333	7,674	Bachelor's degree
27-3043	Writers and Authors	1,263	7,959	Bachelor's degree
27-1024	Graphic Designers	1,249	5,861	Bachelor's degree
27-1011	Art Directors	1,228	5,601	Bachelor's degree
43-9081	Proofreaders and Copy Markers	1,172	6,935	Bachelor's degree
25-2021	Elementary School Teachers, Except Special Education	1,106	10,202	Bachelor's degree
11-2011	Advertising and Promotions Managers	1,090	5,759	Bachelor's degree
13-1131	Fundraisers	1,083	5,417	Bachelor's degree

Note: Includes only occupations requiring more than a high school education and with at least 1,000 completions in 2020.

Source: Emsi

Top Occupational Completions in the Seacoast CEDR, 2022–2032

SOC	Description	Completions 2020	Completions 2022–2032	Typical Entry-Level Education
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	1,865	19,522	Bachelor's degree
11-1021	General and Operations Managers	1,233	11,547	Bachelor's degree
11-1011	Chief Executives	1,199	10,896	Bachelor's degree
13-1198	Project Management Specialists and Business Operations Specialists, All Other	1,175	10,646	Bachelor's degree
11-2022	Sales Managers	1,113	10,367	Bachelor's degree
13-1111	Management Analysts	1,065	9,785	Bachelor's degree
11-2021	Marketing Managers	1,054	9,116	Bachelor's degree
13-1161	Market Research Analysts and Marketing Specialists	1,049	8,984	Bachelor's degree
15-1232	Computer User Support Specialists	1,048	8,982	Some college, no degree
11-3021	Computer and Information Systems Managers	1,014	8,393	Bachelor's degree
13-1071	Human Resources Specialists	972	8,389	Bachelor's degree
11-3121	Human Resources Managers	925	7,825	Bachelor's degree
13-2011	Accountants and Auditors	921	7,789	Bachelor's degree
11-9121	Natural Sciences Managers	500	5,081	Bachelor's degree
21-1021	Child, Family, and School Social Workers	437	4,686	Bachelor's degree
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	435	6,351	Bachelor's degree
21-1013	Marriage and Family Therapists	415	4,465	Master's degree
21-1023	Mental Health and Substance Abuse Social Workers	415	4,490	Master's degree
19-1029	Biological Scientists, All Other	387	3,619	Bachelor's degree
19-2041	Environmental Scientists and Specialists, Including Health	384	4,154	Bachelor's degree
13-1041	Compliance Officers	369	3,919	Bachelor's degree
17-2199	Engineers, All Other	366	3,767	Bachelor's degree
15-2041	Statisticians	348	3,714	Master's degree
21-1022	Healthcare Social Workers	343	3,703	Master's degree
19-1021	Biochemists and Biophysicists	339	3,671	Doctoral or professional degree
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	336	3,572	Bachelor's degree
15-1299	Computer Occupations, All Other	332	3,760	Bachelor's degree
19-1042	Medical Scientists, Except Epidemiologists	327	3,123	Doctoral or professional degree
27-3043	Writers and Authors	315	3,819	Bachelor's degree
25-2022	Middle School Teachers, Except Special and Career/Technical Education	310	4,385	Bachelor's degree
27-3031	Public Relations Specialists	309	3,545	Bachelor's degree
11-1031	Legislators	300	3,265	Bachelor's degree
11-9151	Social and Community Service Managers	277	3,547	Bachelor's degree
27-3023	News Analysts, Reporters, and Journalists	277	3,365	Bachelor's degree
17-2081	Environmental Engineers	275	2,664	Bachelor's degree
25-2021	Elementary School Teachers, Except Special Education	268	3,770	Bachelor's degree

Note: Includes only occupations requiring more than a high school education and with at least 250 completions in 2020.

Source: Emsi

Top Occupational Completions in the Northern CEDR, 2022–2032

SOC	Description	Completions 2020	Completions 2022–2032	Typical Entry-Level Education
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	1,452	17,535	Bachelor's degree
11-1011	Chief Executives	671	7,606	Bachelor's degree
11-1021	General and Operations Managers	671	7,606	Bachelor's degree
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	572	7,697	Bachelor's degree
11-2022	Sales Managers	559	7,801	Bachelor's degree
13-1198	Project Management Specialists and Business Operations Specialists, All Other	525	7,642	Bachelor's degree
11-9121	Natural Sciences Managers	508	5,063	Bachelor's degree
15-1232	Computer User Support Specialists	504	6,885	Some college, no degree
11-2021	Marketing Managers	468	6,890	Bachelor's degree
15-2041	Statisticians	453	4,345	Master's degree
13-1111	Management Analysts	452	6,327	Bachelor's degree
15-1299	Computer Occupations, All Other	451	4,488	Bachelor's degree
25-2022	Middle School Teachers, Except Special and Career/Technical Education	416	5,753	Bachelor's degree
13-1041	Compliance Officers	404	4,402	Bachelor's degree
13-1161	Market Research Analysts and Marketing Specialists	402	7,705	Bachelor's degree
11-3021	Computer and Information Systems Managers	388	5,572	Bachelor's degree
27-3031	Public Relations Specialists	383	4,243	Bachelor's degree
25-2021	Elementary School Teachers, Except Special Education	339	4,978	Bachelor's degree
17-2199	Engineers, All Other	332	3,194	Bachelor's degree
19-2041	Environmental Scientists and Specialists, Including Health	326	5,165	Bachelor's degree
17-2061	Computer Hardware Engineers	304	2,572	Bachelor's degree
13-1071	Human Resources Specialists	303	5,402	Bachelor's degree
11-3121	Human Resources Managers	279	4,958	Bachelor's degree
25-4013	Museum Technicians and Conservators	273	3,207	Bachelor's degree
13-2011	Accountants and Auditors	263	4,729	Bachelor's degree
17-2081	Environmental Engineers	263	2,428	Bachelor's degree
11-3011	Administrative Services and Facilities Managers	238	2,358	Bachelor's degree
19-1042	Medical Scientists, Except Epidemiologists	232	2,556	Doctoral or professional degree
15-1212	Information Security Analysts	230	1,980	Bachelor's degree
19-3094	Political Scientists	224	2,982	Master's degree
19-1021	Biochemists and Biophysicists	217	2,573	Doctoral or professional degree
21-1021	Child, Family, and School Social Workers	209	3,029	Bachelor's degree
25-4012	Curators	209	2,595	Master's degree
11-9032	Education Administrators, Kindergarten through Secondary	208	3,092	Master's degree
11-1031	Legislators	206	2,585	Bachelor's degree
15-2031	Operations Research Analysts	203	859	Bachelor's degree

Note: Includes only occupations requiring more than a high school education and with at least 200 completions in 2020.

Source: Emsi

State of New Hampshire Workforce Assessment

Top Occupational Completions in the South-Western CEDR, 2022–2032

SOC	Description	Completions 2020	Completions 2022–2032	Typical Entry-Level Education
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	710	9,337	Bachelor's degree
11-2021	Marketing Managers	314	4,055	Bachelor's degree
13-1198	Project Management Specialists and Business Operations Specialists, All Other	314	3,904	Bachelor's degree
13-1161	Market Research Analysts and Marketing Specialists	302	3,890	Bachelor's degree
11-2022	Sales Managers	296	3,831	Bachelor's degree
13-1041	Compliance Officers	296	3,365	Bachelor's degree
11-1011	Chief Executives	276	3,712	Bachelor's degree
11-1021	General and Operations Managers	276	3,621	Bachelor's degree
13-1111	Management Analysts	264	3,383	Bachelor's degree
25-2021	Elementary School Teachers, Except Special Education	260	3,659	Bachelor's degree
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	259	3,359	Bachelor's degree
11-9032	Education Administrators, Kindergarten through Secondary	213	2,698	Master's degree
19-5011	Occupational Health and Safety Specialists	202	2,271	Bachelor's degree
15-1299	Computer Occupations, All Other	197	2,030	Bachelor's degree
13-1071	Human Resources Specialists	183	2,456	Bachelor's degree
15-1232	Computer User Support Specialists	183	2,823	Some college, no degree
19-2041	Environmental Scientists and Specialists, Including Health	181	2,463	Bachelor's degree
19-1042	Medical Scientists, Except Epidemiologists	178	1,573	Doctoral or professional degree
19-3031	Clinical, Counseling, and School Psychologists	178	2,533	Master's degree
19-4042	Environmental Science and Protection Technicians, Including Health	178	1,594	Associate's degree
21-1022	Healthcare Social Workers	171	2,180	Master's degree
11-3121	Human Resources Managers	170	2,265	Bachelor's degree
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	168	2,182	Bachelor's degree
21-1023	Mental Health and Substance Abuse Social Workers	168	2,182	Master's degree
25-2022	Middle School Teachers, Except Special and Career/Technical Education	164	2,381	Bachelor's degree
13-2011	Accountants and Auditors	156	2,332	Bachelor's degree
11-3021	Computer and Information Systems Managers	155	2,346	Bachelor's degree
27-3031	Public Relations Specialists	151	1,612	Bachelor's degree
21-1021	Child, Family, and School Social Workers	144	2,202	Bachelor's degree
21-1013	Marriage and Family Therapists	119	1,844	Master's degree
15-2041	Statisticians	118	825	Master's degree
17-2081	Environmental Engineers	114	1,114	Bachelor's degree
23-1011	Lawyers	114	1,077	Doctoral or professional degree
21-1015	Rehabilitation Counselors	111	1,640	Master's degree
25-9045	Teaching Assistants, Except Postsecondary	110	1,411	Some college, no degree
27-3023	News Analysts, Reporters, and Journalists	105	1,726	Bachelor's degree
19-3032	Industrial-Organizational Psychologists	102	1,473	Master's degree
19-3039	Psychologists, All Other	102	1,505	Master's degree
21-1012	Educational, Guidance, and Career Counselors and Advisors	102	1,527	Master's degree
29-1223	Psychiatrists	102	1,473	Doctoral or professional degree

Note: Includes only occupations requiring more than a high school education and with at least 100 completions in 2020.

Source: Emsi

Appendix III: Healthcare Industry Cluster Analysis

Key Takeaways

Healthcare is the largest cluster in New Hampshire. It has above average earnings, employment growth, and is a major contributor to the state's GRP. Just over 2,800 jobs were lost at the outset of the COVID-19 pandemic; however, employment has since recovered and even exceeds 2016 levels. In addition to top Healthcare Practitioners and Technical occupations – such as physicians and nurses – many top occupations are related to management, training, and human resources, which aligns with trends in other clusters.

- Healthcare is the largest cluster in the state with 98,682 workers (14% of the workforce).

- The Healthcare cluster is experiencing moderate growth of 6% between 2016 – 2026. The pandemic caused a 3% contraction between 2019 and 2021; however, the cluster was growing prior to the pandemic and is expected to continue through 2026. It has already recovered to pre-pandemic employment levels.

- New Hampshire has above average earnings in Healthcare than expected for an area this size ($77,187 compared to $73,280).

- The Healthcare cluster is the second largest contributor to GRP (9%, behind Manufacturing at 13%), but are some of the least productive employees ($88,162 followed by Hospitality at $49,218). As a labor intensive, non-goods producing cluster, this is expected and follows national trends.

- Healthcare has the lowest industry concentration of all the clusters, and it is the only cluster whose concentration is decreasing over time. The cluster's location quotient reduced from 0.98 in 2019 to 0.97 in 2021, and it is expected to decrease to 0.94 by 2026. Overall, industry concentration is expected to decrease by 4% from 2016 to 2026.

Top Industries

- Child Day Care Services
- Community Food Services
- Family Planning Centers
- Freestanding Ambulatory Surgical & Emergency Centers
- General Medical & Surgical Hospitals
- Offices of Physicians (except Mental Health Specialists)
- Offices of Physicians, Mental Health Specialists
- Other Residential Care Facilities
- Outpatient Mental Health & Substance Abuse Centers
- Research & Development in Biotechnology (except Nanobiotechnology)

Top Occupations

- All Other Project Management Specialists and Business Operations Specialists
- Human Resources Specialists
- Mental Health and Substance Abuse Social Workers
- Physicians, All Other; and Ophthalmologists, Except Pediatric
- Registered Nurses
- Social and Community Service Managers
- Speech-Language Pathologists
- Training and Development Specialists

Overview

Healthcare is the largest industry cluster in the State, encompassing all industries in the Health Care and Social Assistance sector (NAICS 62) plus *Research and Development in Biotechnology (except Nanotechnology*) and in the *Physical, Engineering, and Life Sciences (except Nanotechnology)* (NAICS 541714 and 541715), *Voluntary Health Organizations* (NAICS 813212), and *State and Local Government Hospitals (*NAICS 902622 and 903622). See Appendix C for a full list of the industries included in this cluster.

Jobs	Growth Rate	Average Earnings
98,682	**6%** (2016–2026)	**$77,187**
14% of the total workforce	*2016–2019: 4% I 2021–2026: 4%*	*$73,280 national avg. for an area this size*

Payroll Business Locations	Total GRP	Location Quotient
4,215	**$8.7 billion**	**0.97**
7% of the State's total businesses	*9% of the State's gross regional product*	*Down 1.9% since 2016*

Competitive Effect	Unemployment	Retirement Risk
-7,381 jobs (2016–2026)	**4,209 unemployed** as of Nov 2021	**High**
57% fewer jobs than expected due to local factors	*Down from a peak of 41,800 in April 2020*	*29% of workers retire soon*

Top Industries (6-digit NAICS)

By Employment	By Location Quotient	By Growth Rate (2016–2021)	By Competitive Effect (Shift-Share)
1. General Medical & Surgical Hospitals (27,612)	1. Outpatient Mental Health & Substance Abuse Centers (2.49)	1. Research & Development in Biotechnology (except Nanobiotechnology) (62%)	1. Offices of Physicians (except Mental Health Specialists) (492)
2. Offices of Physicians (except Mental Health Specialists) (14,815)	2. Family Planning Centers (1.74)	2. Offices of Physicians, Mental Health Specialists (54%)	2. Other Residential Care Facilities (430)
3. Child Day Care Services (6,305)	3. Community Food Services (1.71)	3. Freestanding Ambulatory Surgical & Emergency Centers (52%)	3. Freestanding Ambulatory Surgical & Emergency Centers (395)

Staffing Pattern

There are 98,682 jobs in the Healthcare industry cluster, spread across approximately 396 occupations. See Appendix D for the full staffing pattern. The top 30 occupations in terms of share of employment are shown to the right. Together, these 30 occupations account for 69% of the cluster's total employment. *Registered Nurses* account for 13% of the cluster's jobs, followed by *Home Health and Personal Care Aides* (8%), *Nursing Assistants* (7%), *Medical Secretaries and Administrative Assistants* (3%), and *Medical Assistants* (3%).

Staffing Pattern for Healthcare Cluster: Top 30 Occupations, 5 digit SOC

Occupation	Share of Cluster's 2021 Jobs
Registered Nurses	12.9%
Home Health and Personal Care Aides	7.9%
Nursing Assistants	7.1%
Medical Secretaries and Administrative Assistants	3.2%
Medical Assistants	2.9%
Childcare Workers	2.4%
Receptionists and Information Clerks	2.3%
Preschool Teachers, Except Special Education	2.1%
Office Clerks, General	2.1%
Licensed Practical and Licensed Vocational Nurses	1.9%
Substance Abuse, Behavioral Disorder, and Mental Health Counselors	1.9%
Medical and Health Services Managers	1.8%
Physicians, All Other; and Ophthalmologists, Except Pediatric	1.7%
Dental Hygienists	1.6%
Dental Assistants	1.3%
Social and Human Service Assistants	1.3%
First-Line Supervisors of Office and Administrative Support Workers	1.3%
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	1.3%
Physical Therapists	1.2%
Teaching Assistants, Except Postsecondary	1.2%
Billing and Posting Clerks	1.1%
Nurse Practitioners	1.1%
Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	1.0%
Radiologic Technologists and Technicians	1.0%
Occupational Therapists	0.9%
Interviewers, Except Eligibility and Loan	0.9%
Emergency Medical Technicians and Paramedics	0.9%
Maids and Housekeeping Cleaners	0.8%
Food Servers, Nonrestaurant	0.8%
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	0.8%
Total	**68.7%**

Source: Emsi, 2022.1

Staffing for Healthcare Cluster by 2-Digit Occupation

Healthcare Support, 22.0%
Office & Admin. Support, 14.8%
Healthcare Practitioners & Technical, 34.3%
Community & Social Service, 5.9%
Management, 4.8%
Personal Care & Service, 3.8%
Educational Instruction & Library, 3.7%
Food Prep. & Serving Related, 2.1%
All Other, 8.6%

Source: Emsi, 2022.1

Job Growth Trends by Occupation

Historical and projected job growth trends for the top 8 occupation sectors within the Healthcare cluster are shown below (note the top 3 sectors plotted on the right y-axis). These 8 sectors account for 91% of jobs in the cluster in 2021.

2016–2026

Overall, the top Healthcare occupation sectors are growing moderately over the 10-year period, projected to increase by 5%. These gains are primarily concentrated in the *Management* (26%) and *Community and Social Service* (25%) occupations. *Personal Care and Service* occupations lost jobs over the period, shrinking by 14% from 2016 to 2026, followed by *Food Preparation and Serving Related* (-8%) and *Educational Instruction and Library* (-1%).

2016–2019

Prior to the COVID-19 pandemic, occupational employment within the Healthcare cluster grew at an overall rate of 4%. Jobs in the *Management* (17%), *Community and Social Service* (14%), and *Educational Instruction and Library* (12%) occupations were growing fastest, while *Personal Care and Service* (-8%), *Food Preparation and Serving Related* (-4%), and *Healthcare Support* (-1%) occupations all lost jobs.

2019–2021

During the pandemic, New Hampshire lost about 3% of its Healthcare jobs. Six of the top 8 sectors experienced job losses, with *Educational Instruction and Library* occupations shrinking by 14%, followed by *Food Preparation and Serving Related* (-7%) and *Personal Care and Service* (-6%). *Community and Social Service and Management* occupations were the least affected by the pandemic, increasing by 1% and 0.3%, respectively.

2021–2026

Looking forward, all major sectors are projected to grow from 2021 to 2026. Total cluster employment is expected to increase

Healthcare Cluster Job Growth by 2 Digit Occupation

Legend:
- Community & Social Service
- Personal Care & Service
- Food Prep. & Serving Related
- Healthcare Support (Right Axis)
- Management
- Educational Instruction & Library
- Healthcare Practitioners & Technical (Right Axis)
- Office & Admin. Support (Right Axis)
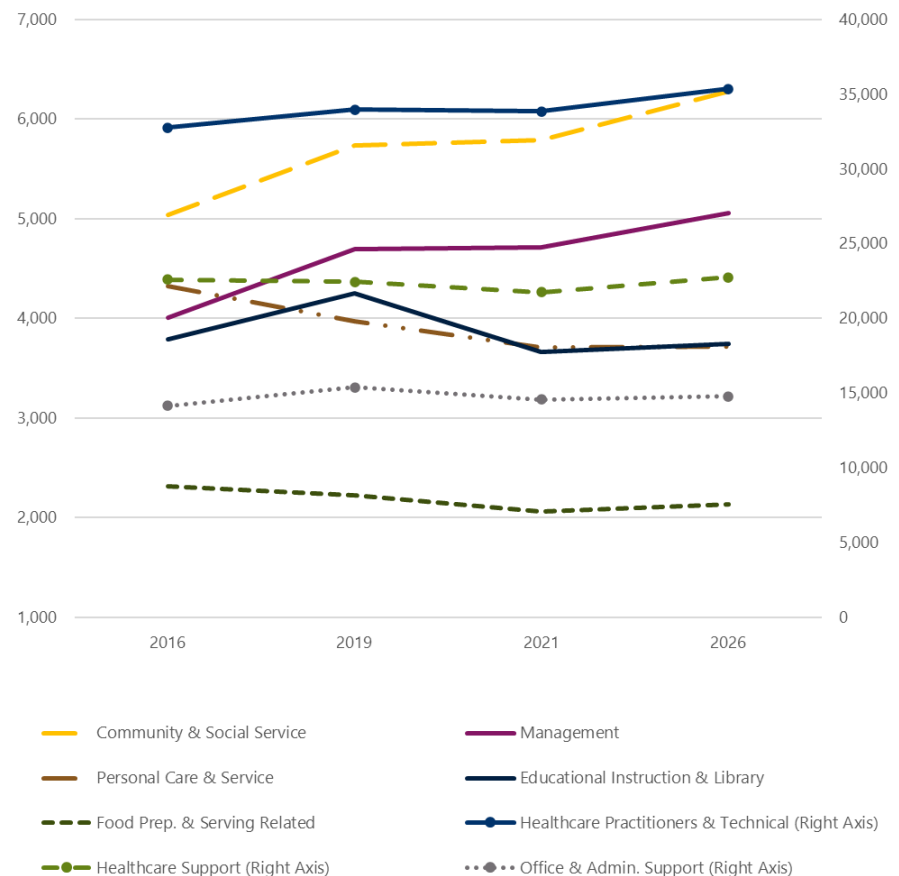
Source: Emsi, 2022.1

by 4%, with *Community and Social Service* (8%), *Management* (7%), and *Healthcare Support* (5%) growing the fastest.

Top Occupations

The occupations below are the 23 top occupations in New Hampshire's Healthcare cluster, as determined by size (represented by bubble size), growth (plotted on the x-axis), and salary (plotted on the y-axis). For this analysis, occupations employing fewer than 200 Healthcare workers, with growth rates below -5.0% between 2016–2019 (pre-COVID data is assumed to be a better indicator of the occupation's overall trajectory), and earnings less than $21.16

Top Occupations in the Healthcare Cluster by 5-digit SOC

Bubble Size = 2021 Employment

Source: Emsi, 2022.1
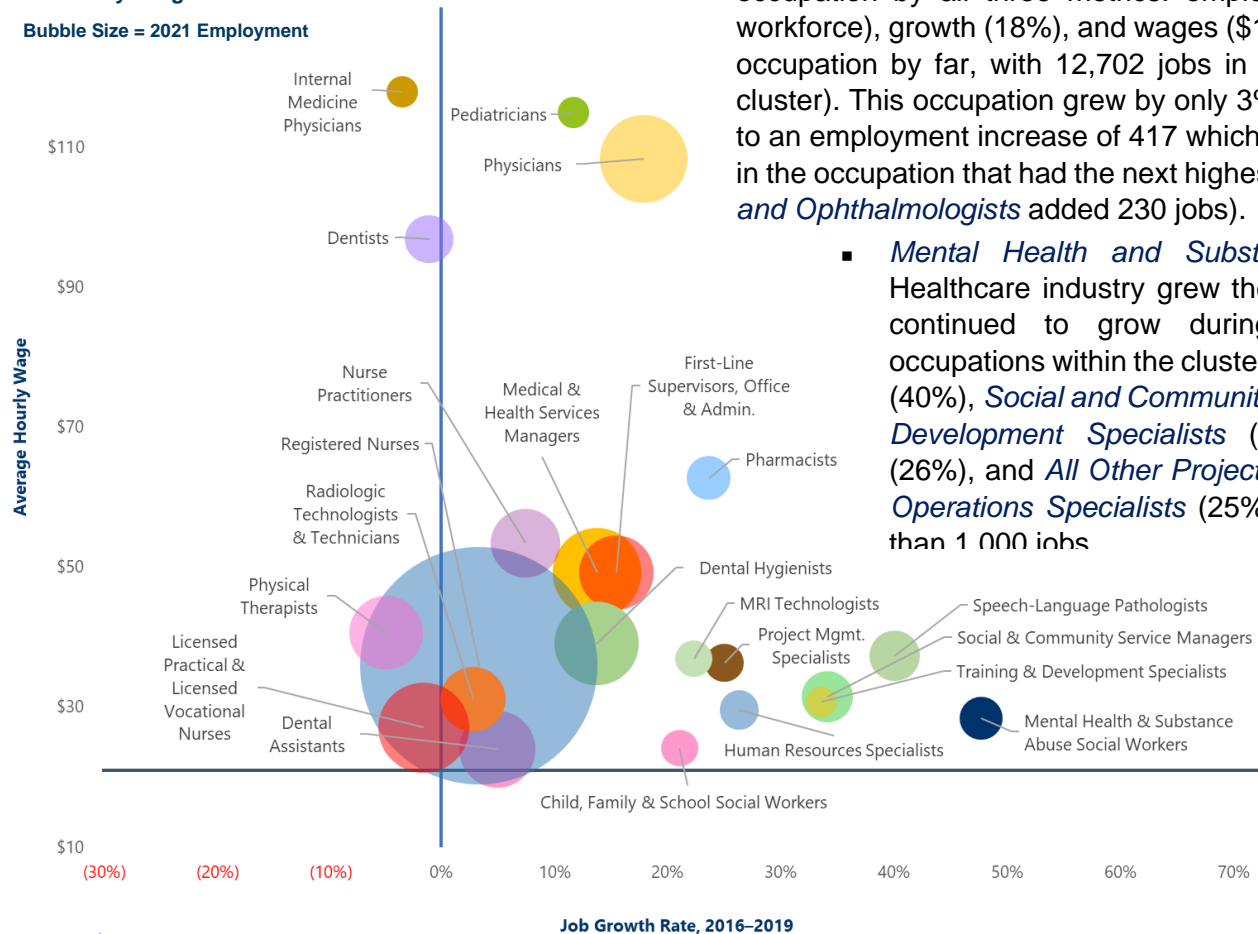
- *Ophthalmologists, Except Pediatric, and All Other Physicians* is a top Healthcare occupation by all three metrics: employment (1,719 or 1.7% of total cluster workforce), growth (18%), and wages ($108.38). *Registered Nurses* is the largest occupation by far, with 12,702 jobs in 2021 (13% of total employment in this cluster). This occupation grew by only 3% pre-pandemic; however, that amounts to an employment increase of 417 which is nearly double the employment added in the occupation that had the next highest increase in jobs (*Physicians, All Other; and Ophthalmologists* added 230 jobs).

- *Mental Health and Substance Abuse Social Workers* in the Healthcare industry grew the fastest from 2016 to 2019 (48%) and continued to grow during the pandemic. Other fast-growth occupations within the cluster include *Speech-Language Pathologists* (40%), *Social and Community Service Managers* (34%), *Training and Development Specialists* (34%), *Human Resources Specialists* (26%), and *All Other Project Management Specialists and Business Operations Specialists* (25%). All of these occupations have fewer than 1,000 jobs.

- *General Internal Medicine Physicians* are the top earners within the cluster ($117.97 per hour), followed by *General Pediatricians* ($115.01), *Ophthalmologists, Except Pediatric, and All Other Physicians* ($108.38), *General Dentists* ($96.91), and *Pharmacists* ($62.75).

(the state's median hourly wage) were omitted.

Attachment 1: Healthcare Industry Cluster Definition

This cluster spans 44 industries and employs 98,682 workers. It includes all industries in the *Healthcare and Social Assistance* sector (62), as well as the *Scientific Research and Development Services* industry group (5417), and selected industries from the *Other Services (except Public Administration)* sector (81), and *Government* (90).

NAICS	Industry	2021 Jobs
621111	Offices of Physicians (except Mental Health Specialists)	14,815
621112	Offices of Physicians, Mental Health Specialists	387
621210	Offices of Dentists	5,110
621310	Offices of Chiropractors	661
621320	Offices of Optometrists	730
621330	Offices of Mental Health Practitioners (except Physicians)	750
621340	Offices of Physical, Occupational and Speech Therapists, and Audiologists	1,801
621391	Offices of Podiatrists	94
621399	Offices of All Other Miscellaneous Health Practitioners	939
621410	Family Planning Centers	236
621420	Outpatient Mental Health and Substance Abuse Centers	3,133
621491	HMO Medical Centers	0
621492	Kidney Dialysis Centers	394
621493	Freestanding Ambulatory Surgical and Emergency Centers	1,179
621498	All Other Outpatient Care Centers	643
621511	Medical Laboratories	302
621512	Diagnostic Imaging Centers	142
621610	Home Health Care Services	4,176
621910	Ambulance Services	876
621991	Blood and Organ Banks	93
621999	All Other Miscellaneous Ambulatory Health Care Services	203
622110	General Medical and Surgical Hospitals	27,612

NAICS	Industry	2021 Jobs
622210	Psychiatric and Substance Abuse Hospitals	458
622310	Specialty (except Psychiatric and Substance Abuse) Hospitals	957
623110	Nursing Care Facilities (Skilled Nursing Facilities)	6,085
623210	Residential Intellectual and Developmental Disability Facilities	1,065
623220	Residential Mental Health and Substance Abuse Facilities	1,025
623311	Continuing Care Retirement Communities	3,089
623312	Assisted Living Facilities for the Elderly	1,489
623990	Other Residential Care Facilities	1,038
624110	Child and Youth Services	790
624120	Services for the Elderly and Persons with Disabilities	5,757
624190	Other Individual and Family Services	2,003
624210	Community Food Services	315
624221	Temporary Shelters	259
624229	Other Community Housing Services	247
624230	Emergency and Other Relief Services	51
624310	Vocational Rehabilitation Services	881
624410	Child Day Care Services	6,305
541714	Research and Development in Biotechnology (except Nanobiotechnology)	613
541715	Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	1,469
813212	Voluntary Health Organizations	73
902622	Hospitals (State Government)	436
903622	Hospitals (Local Government)	0
Total		**98,682**

Source: Emsi, 2022.3

Attachment 2: Healthcare Cluster Staffing Pattern

The top 77 occupations (e.g. all occupations with more than 200 Healthcare employees) represent 87.7% of all employment in the Healthcare Cluster. Altogether, employment spans 355 occupations for a total of 98,682 jobs.

Staffing Patterns for the Healthcare Cluster, 2021

SOC	Occupation	Share of Cluster's Jobs	Jobs in Cluster (2021)	Median Hourly Earnings	Job Growth 2016–2021 Change	Job Growth 2016–2021 Rate	Job Growth 2016–2019 Change	Job Growth 2016–2019 Rate
29-1141	Registered Nurses	12.9%	12,702	$35.97	156	1%	417	3%
31-1128	Home Health and Personal Care Aides	7.9%	7,818	$13.51	(525)	(6%)	(330)	(4%)
31-1131	Nursing Assistants	7.1%	7,056	$16.35	(784)	(10%)	(210)	(3%)
43-6013	Medical Secretaries and Administrative Assistants	3.2%	3,192	$18.97	439	16%	535	19%
31-9092	Medical Assistants	2.9%	2,831	$18.37	403	17%	315	13%
39-9011	Childcare Workers	2.4%	2,382	$10.97	(547)	(19%)	(429)	(15%)
43-4171	Receptionists and Information Clerks	2.3%	2,298	$15.72	(27)	(1%)	126	5%
25-2011	Preschool Teachers, Except Special Education	2.1%	2,100	$14.68	(86)	(4%)	330	15%
43-9061	Office Clerks, General	2.1%	2,060	$19.12	149	8%	203	11%
29-2061	Licensed Practical and Licensed Vocational Nurses	1.9%	1,866	$27.11	(94)	(5%)	(31)	(2%)
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	1.9%	1,858	$20.73	518	39%	368	27%
11-9111	Medical and Health Services Managers	1.8%	1,784	$49.29	217	14%	216	14%
29-1228	Physicians, All Other; and Ophthalmologists, Except Pediatric	1.7%	1,719	$108.38	435	34%	230	18%
29-1292	Dental Hygienists	1.6%	1,598	$39.15	227	17%	188	14%
31-9091	Dental Assistants	1.3%	1,319	$24.04	73	6%	62	5%
21-1093	Social and Human Service Assistants	1.3%	1,280	$16.67	(94)	(7%)	3	0%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	1.3%	1,268	$28.94	125	11%	177	15%
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	1.3%	1,242	$18.80	(144)	(10%)	(32)	(2%)
29-1123	Physical Therapists	1.2%	1,226	$40.67	(94)	(7%)	(65)	(5%)
25-9045	Teaching Assistants, Except Postsecondary	1.2%	1,204	$15.58	41	4%	201	17%
43-3021	Billing and Posting Clerks	1.1%	1,086	$19.58	105	11%	167	17%
29-1171	Nurse Practitioners	1.1%	1,069	$53.48	140	15%	69	7%

Staffing Patterns for the Healthcare Cluster, 2021 (continued)

SOC	Occupation	Share of Cluster's Jobs	Jobs in Cluster (2021)	Median Hourly Earnings	Job Growth 2016–2021		Job Growth 2016–2019	
					Change	Rate	Change	Rate
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	1.0%	990	$20.89	(74)	(7%)	(13)	(1%)
29-2034	Radiologic Technologists and Technicians	1.0%	941	$31.23	(38)	(4%)	27	3%
29-1122	Occupational Therapists	0.9%	870	$38.78	87	11%	79	10%
43-4111	Interviewers, Except Eligibility and Loan	0.9%	867	$19.24	(43)	(5%)	43	5%
29-2041	Emergency Medical Technicians and Paramedics	0.9%	841	$17.54	(38)	(4%)	1	0%
37-2012	Maids and Housekeeping Cleaners	0.8%	799	$13.16	(339)	(30%)	(233)	(20%)
35-3041	Food Servers, Nonrestaurant	0.8%	787	$11.95	109	16%	118	17%
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	0.8%	772	$14.62	(20)	(3%)	49	6%
29-1215	Family Medicine Physicians	0.7%	725	$116.08	(125)	(15%)	(49)	(6%)
11-1021	General and Operations Managers	0.7%	699	$50.64	21	3%	69	10%
31-9097	Phlebotomists	0.7%	682	$18.53	(18)	(3%)	12	2%
35-2012	Cooks, Institution and Cafeteria	0.7%	681	$16.93	(10)	(1%)	(9)	(1%)
29-2018	Clinical Laboratory Technologists and Technicians	0.7%	653	$32.03	(126)	(16%)	(117)	(15%)
43-4051	Customer Service Representatives	0.7%	651	$18.39	173	36%	202	42%
29-1071	Physician Assistants	0.6%	619	$57.23	21	4%	11	2%
11-9151	Social and Community Service Managers	0.6%	592	$31.54	156	36%	149	34%
29-1127	Speech-Language Pathologists	0.6%	566	$37.36	194	52%	149	40%
43-3031	Bookkeeping, Accounting, and Auditing Clerks	0.6%	556	$20.67	(33)	(6%)	20	3%
29-1021	Dentists, General	0.5%	527	$96.91	(19)	(3%)	(6)	(1%)
21-1022	Healthcare Social Workers	0.5%	516	$31.33	34	7%	15	3%
39-9032	Recreation Workers	0.5%	488	$13.60	(33)	(6%)	32	6%
29-2055	Surgical Technologists	0.5%	445	$25.28	(6)	(1%)	5	1%
29-1248	Surgeons, Except Ophthalmologists	0.4%	443	$116.66	(53)	(11%)	(61)	(12%)
49-9071	Maintenance and Repair Workers, General	0.4%	434	$21.42	35	9%	59	15%
29-1051	Pharmacists	0.4%	431	$62.75	84	24%	82	24%
21-1023	Mental Health and Substance Abuse Social Workers	0.4%	417	$28.50	145	53%	130	48%
29-1126	Respiratory Therapists	0.4%	406	$34.04	(7)	(2%)	14	3%
29-2052	Pharmacy Technicians	0.4%	395	$16.75	79	25%	94	30%
11-9031	Education and Childcare Administrators, Preschool and Daycare	0.4%	390	$22.10	13	4%	44	12%
29-2057	Ophthalmic Medical Technicians	0.4%	384	$20.58	187	95%	17	9%

Staffing Patterns for the Healthcare Cluster, 2021 (continued)

SOC	Occupation	Share of Cluster's Jobs	Jobs in Cluster (2021)	Median Hourly Earnings	Job Growth 2016–2021		Job Growth 2016–2019	
					Change	Rate	Change	Rate
29-9098	Health Information Technologists, Medical Registrars, Surgical Assistants,	0.4%	381	$30.36	71	23%	29	9%
39-9041	Residential Advisors	0.4%	369	$14.55	44	13%	3	1%
19-3039	Psychologists, All Other	0.4%	369	$41.51	91	33%	28	10%
13-1071	Human Resources Specialists	0.4%	347	$29.65	73	27%	72	26%
31-2021	Physical Therapist Assistants	0.3%	345	$29.83	(88)	(20%)	(91)	(21%)
13-1198	Project Management Specialists and Business Operations Specialists, All Other	0.3%	335	$36.37	88	36%	62	25%
31-9093	Medical Equipment Preparers	0.3%	320	$18.30	16	5%	27	9%
19-3031	Clinical, Counseling, and School Psychologists	0.3%	311	$36.83	(3)	(1%)	(15)	(5%)
29-2035	Magnetic Resonance Imaging Technologists	0.3%	309	$36.98	48	19%	58	22%
21-1021	Child, Family, and School Social Workers	0.3%	305	$24.22	43	17%	55	21%
29-2031	Cardiovascular Technologists and Technicians	0.3%	304	$33.88	32	12%	49	18%
31-9099	Healthcare Support Workers, All Other	0.3%	297	$16.13	73	33%	52	23%
29-1011	Chiropractors	0.3%	279	$33.18	6	2%	(0)	(0%)
31-1133	Psychiatric Aides	0.3%	268	$18.80	34	15%	24	10%
39-1098	First-Line Supervisors of Personal Service and Entertainment and Recreation Workers, Except Gambling Services	0.3%	264	$21.21	(107)	(29%)	(9)	(2%)
29-1031	Dietitians and Nutritionists	0.3%	263	$30.97	17	7%	18	7%
13-2011	Accountants and Auditors	0.3%	260	$33.25	11	5%	27	11%
29-2032	Diagnostic Medical Sonographers	0.3%	252	$39.64	6	2%	9	4%
21-1015	Rehabilitation Counselors	0.3%	249	$20.46	0	0%	20	8%
29-2081	Opticians, Dispensing	0.2%	230	$19.92	(47)	(17%)	(24)	(9%)
29-1216	General Internal Medicine Physicians	0.2%	226	$117.97	43	23%	(6)	(3%)
29-1221	Pediatricians, General	0.2%	220	$115.01	2	1%	25	12%
33-9032	Security Guards	0.2%	211	$15.79	18	9%	5	2%
53-3058	Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	0.2%	207	$14.52	(45)	(18%)	(18)	(7%)
13-1151	Training and Development Specialists	0.2%	204	$30.79	60	42%	48	34%

Source: Emsi, 2022.1

Appendix IV: Manufacturing Industry Cluster Analysis

Key Takeaways

Manufacturing is crucial to New Hampshire's economy, accounting for a large share of employment, contributing the largest share of the State's GRP, and offering higher than average earnings. However, the State does not have a strong competitive advantage in this sector and is expected to continue losing jobs. Overall, jobs in this sector are becoming more technical in nature.

- The Manufacturing cluster employs 69,844 workers, or 10% of the total workforce.

- The Manufacturing cluster is in decline. It was deeply impacted by the COVID-19 pandemic, losing just over 4,300 jobs between 2019 and 2021. However, unlike other clusters that experienced losses due to the pandemic, the Manufacturing cluster is not projected to grow through 2026. Prior to the pandemic, the cluster was experiencing moderate growth of 5%.

- Average earnings in the Manufacturing cluster are higher than expected for an area this size.

- The Manufacturing cluster is the top contributor to New Hampshire's GRP (13%) and has the second most productive workers ($174,676 following $259,245 for Technology). This is in keeping with national trends, as Manufacturing tends to be a capital-intensive industry.

- Manufacturing has the largest businesses among the clusters.

- The State has a slightly higher concentration relative to the US in Manufacturing, which has remained steady since 2016.

- New Hampshire does not have a competitive advantage in Manufacturing, with 1,161 fewer jobs than expected between 2016 and 2026 due to local factors. This means there are 1065% fewer jobs in this cluster than expected if national and industry growth trends were the only factors.

- Manufacturing has the highest retirement risk of the State's clusters.

- Nearly half of all jobs within the cluster are in the Production occupation sector (47%). Overall, Production occupations are declining as Manufacturing is becoming more reliant on technology and automation. Computer and Mathematical occupations are growing the fastest within this cluster, while Production is expected to decrease.

Top Industries

- Fastener, Button, Needle & Pin Manufacturing
- In-Vitro Diagnostic Substance Manufacturing
- Machine Shops
- Nonferrous Metal Die-Casting Foundries
- Optical Instrument & Lens Manufacturing
- Other Electronic Component Manufacturing
- Rolled Steel Shape Manufacturing
- Search, Detection, Navigation, Guidance, Aeronautical & Nautical System & Instrument Manufacturing
- Small Arms, Ordnance & Ordinance Accessories Manufacturing

Top Occupations

- Architectural and Engineering Managers
- Business Operations Specialists, All Other
- Computer and Information Systems Managers
- Electricians
- Human Resource Specialists
- Industrial Engineers
- Industrial Production Managers
- Logisticians
- Mechanical Engineering Technologists and Techs
- Mechanical Engineers
- Project Management Specialists
- Purchasing Managers
- Rolling Machine Setters, Operators, and Tenders in Metal and Plastic
- Sales Managers
- Software Developers and Software Quality Assurance Analysts and Testers

- The Manufacturing cluster has the most diversification across occupations. The top 30 occupations account for only 58% of total employment (in the other clusters, the top 30 occupations account for at least 69% of all employment).

Overview

Manufacturing is the second largest industry cluster in the State. This cluster includes all industries in the *Manufacturing* sector (NAICS 31-33) plus *Forestry and Logging* (NAICS 113). See Appendix C for a full list of the industries included in this cluster.

Jobs	Growth Rate	Average Earnings
69,844	**-2%** (2016–2026)	**$95,041**
Accounts for 10% of the total workforce	*2016–2019: 5% I 2021–2026: 0%*	*$91,268 national avg. for an area this size*

Payroll Business Locations	Total GRP	Location Quotient
2,090	**$12.2B**	**1.24**
4% of the State's total businesses	*13% of the State's gross regional product*	*Up 0.9% since 2016*

Competitive Effect	Unemployment	Retirement Risk
-1,161 jobs (2016–2026)	**2,245 unemployed** as of Nov 2021	**High**
1065% fewer jobs than expected due to local factors	*Down from a peak of 21,319 in April 2020*	*34% of workers retire soon*

Top Industries (6-digit NAICS)

By Employment

1. Search, Detection, Navigation, Guidance, Aeronautical & Nautical System & Instrument Manufacturing (7,089)

2. Machine Shops (2,756)

3. Optical Instrument & Lens Manufacturing (1,912)

By Location Quotient

1. Fastener, Button, Needle & Pin Manufacturing (26.2)

2. Optical Instrument & Lens Manufacturing (19.8)

3. Small Arms, Ordnance & Ordnance Accessories Manufacturing (18.0)

By Growth Rate (2016–2021)

1. Rolled Steel Shape Manufacturing (315%)

2. Nonferrous Metal Die-Casting Foundries (285%)

3. In-Vitro Diagnostic Substance Manufacturing (241%)

By Competitive Effect (Shift-Share)

1. Search, Detection, Navigation, Guidance, Aeronautical & Nautical System & Instrument Manufacturing (730)

2. Optical Instrument & Lens Manufacturing (409)

3. Other Electronic Component Manufacturing (242)

Staffing Pattern

There are 69,844 jobs in the Manufacturing industry cluster, spread across approximately 196 occupations. See Appendix D for the full staffing pattern. The top 30 occupations in terms of share of employment are shown to the right. Together, these 30 occupations account for 58% of the cluster's total employment. *Production* occupations account for 47% of the cluster's jobs, followed by *Architecture and Engineering* (10%), *Office and Administrative Support* (9%), *Management* (8%), and *Transportation and Material Moving* (6%).

Staffing for Manufacturing Cluster by 2-Digit Occupation

Architecture & Engineering, 9.7%
Office & Admin. Support, 8.5%
Management, 8.0%
Transp. & Material Moving, 6.3%
Business & Finance, 4.5%
Installation, Maintenance & Repair, 4.3%
Computer & Mathematical, 3.8%
Sales, 3.6%
All Others, 4.7%
Production, 46.5%
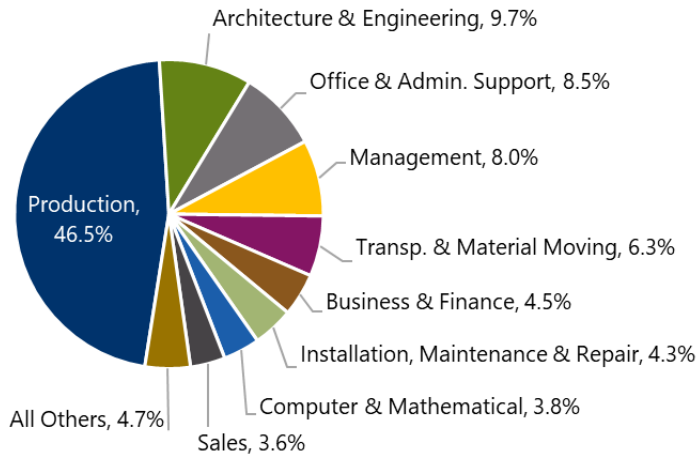
Source: Emsi, 2022.1

Staffing Pattern for Manufacturing Cluster: Top 30 Occupations, 5 digit SOC

Occupation	Share of Cluster's 2021 Jobs
Miscellaneous Assemblers and Fabricators	6.0%
Electrical, Electronic, and Electromechanical Assemblers	4.5%
Computer Numerically Controlled Tool Operators	3.8%
Inspectors, Testers, Sorters, Samplers, and Weighers	3.5%
First-Line Supervisors of Production and Operating Workers	3.2%
Machinists	2.6%
Software Developers and Software Quality Assurance Analysts and Testers	2.2%
Industrial Engineers	2.2%
Mechanical Engineers	2.2%
General and Operations Managers	2.1%
Sales Representatives, Wholesale and Manufacturing	1.9%
Shipping, Receiving, and Inventory Clerks	1.9%
Industrial Machinery Mechanics	1.8%
Packers and Packagers, Hand	1.5%
Office Clerks, General	1.5%
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1.5%
Electrical Engineers	1.4%
Packaging and Filling Machine Operators and Tenders	1.3%
Industrial Production Managers	1.3%
Laborers and Freight, Stock, and Material Movers, Hand	1.1%
Helpers--Production Workers	1.1%
Welders, Cutters, Solderers, and Brazers	1.1%
Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	1.1%
Molding, Coremaking, and Casting Machine Setters, Metal and Plastic	1.1%
Buyers and Purchasing Agents	1.1%
Heavy and Tractor-Trailer Truck Drivers	1.1%
Maintenance and Repair Workers, General	1.1%
Customer Service Representatives	1.0%
Architectural and Engineering Managers	1.0%
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Metal and Plastic	1.0%
Total	58.2%

Source: Emsi, 2022.1

Job Growth Trends by Occupation

Historical and projected job growth trends for the top 9 occupation sectors within the Manufacturing cluster are shown below (note the Production sector plotted on the right y-axis). These 9 sectors account for 95% of jobs in the cluster in 2021.

2016–2026

Overall, the top Manufacturing occupation sectors are declining slightly over the 10-year period, projected to lose a total of 2% of jobs. These losses are primarily concentrated in the *Production* (-8%) and *Office and Administrative Support* (-7%) occupations. *Computer and Mathematical* occupations are growing the fastest, with a 20% growth rate from 2016 to 2026, followed by *Business and Financial Operations* (16%) and *Transportation and Material Moving* (11%).

2016–2019

Prior to the COVID-19 pandemic, all occupation sectors were growing within the Manufacturing cluster for an overall rate of 5%. Jobs in the *Computer and Mathematical* (23%), *Business and Financial Operations* (17%), and *Transportation and Material Moving* (12%) occupations were growing fastest, while *Production* jobs were stagnant at 1%.

2019–2021

During the pandemic, New Hampshire lost about 6% of its Manufacturing jobs in these occupation sectors. All these sectors experienced job losses, but *Production* occupations were hit the hardest (-7%), followed by *Architecture and Engineering* (-6%), and Installation, Maintenance, and Repair (-6%). *Transportation and Material Moving* occupations were the least affected by the pandemic, losing only 1% of jobs.

2021–2026

Looking forward, all sectors are projected to grow except for *Production* (-2%) and *Office and Administrative Support* (-4%). *Installation, Maintenance, and Repair* occupations are expected to grow the fastest, at 4% over the next few years.

Manufacturing Cluster Job Growth by 2 Digit Occupation

Legend:
- Architecture & Engineering
- Management
- Business & Financial
- Computer & Mathematical
- Production (Right Axis)
- Office & Admin. Support
- Transportation & Material Moving
- Installation, Maint. & Repair
- Sales
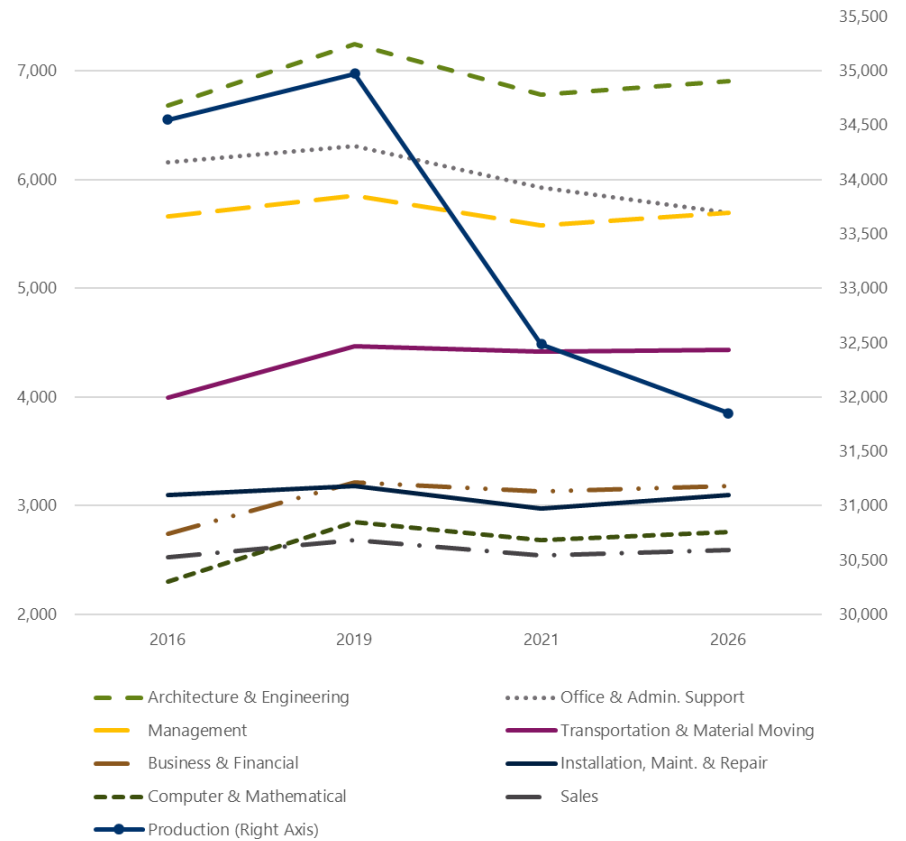
Source: Emsi, 2022.1

Top Occupations

The occupations below are the 25 top occupations in New Hampshire's Manufacturing cluster, as determined by size (represented by bubble size), growth (plotted on the x-axis), and salary (plotted on the y-axis). For this analysis, occupations employing fewer than 200 Manufacturing workers, with growth rates below -5.0% between 2016–2019 (pre-COVID data is assumed to be a better indicator of the occupation's overall trajectory), and earnings less than $21.16 (the state's median hourly wage) were omitted.

- Software Developers and Software Quality Assurance Analysts and Testers is a top Manufacturing occupation by all three metrics: employment (1,546 or 2.2% of total workforce), growth (32%), and wages ($52.70). Mechanical Engineers and Industrial Engineers were also a major source of cluster jobs (1,525 and 1,537 respectively) with high growth rates (23% and

- *Rolling Machine Setters, Operators, and Tenders in Metal and Plastic* in the Manufacturing industry grew rapidly from 2016 to 2019 (215%), and even picked up the pace during the pandemic. Other fast-growth occupations with moderate employment within the cluster include *Project Management Specialists and Business Operations Specialists, All Other* (43%), *Mechanical Engineering Technologists and Technicians* (38%), *Logisticians* (35%), *Electricians* (22%), and *Human Resource Specialists* (20%).

- *Architectural and Engineering Managers* are the top earners within the cluster ($74.39 per hour), followed by *Sales Managers* ($71.13), *Computer and Information Systems Managers* ($68.13), *Industrial Production Managers* ($63.09), and *Purchasing Managers* ($60.80).

Top Occupations in the Manufacturing Cluster by 5-digit SOC

Bubble Size – 2021 Employment

Average Hourly Wage (y-axis)

Job Growth Rate, 2016 - 2019 (x-axis)

Labels visible: Architectural & Engineering Managers; Sales Managers; Computer & Info. Systems Managers; Purchasing Managers; Computer Systems Analysts; Industrial Production Managers; Financial Managers; Electronics Engineers, Except Computer; Electrical Engineers; Sales Reps: Tech & Scientific; First-Line Supervisors of Production Workers; Industrial Machinery Mechanics; CNC Tool Operators; Inspectors, Testers, Sorters, Samplers, and Weighers; Software Developers; Mechanical Engineers; Industrial Engineers; Project Management Specialists; Logisticians; Sales Representatives; Market Research Analysts; Human Resources; Electricians; Mechanical Engineering Technologists; Rolling Machine Setters

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29%) and relatively high wages ($43.68 and $43.31).

Attachment 1: Manufacturing Industry Cluster Definition

This cluster spans 363 industries and employs 69,844 workers. It includes all industries in the *Manufacturing* sector (31-33), as well as the *Forest and Logging* subsector (113).

NAICS	Industry	2021 Jobs
113110	Timber Tract Operations	48
113210	Forest Nurseries and Gathering of Forest Products	<10
113310	Logging	798
311111	Dog and Cat Food Manufacturing	32
311119	Other Animal Food Manufacturing	31
311211	Flour Milling	0
311212	Rice Milling	0
311213	Malt Manufacturing	0
311221	Wet Corn Milling	0
311224	Soybean and Other Oilseed Processing	0
311225	Fats and Oils Refining and Blending	<10
311230	Breakfast Cereal Manufacturing	0
311313	Beet Sugar Manufacturing	0
311314	Cane Sugar Manufacturing	63
311340	Nonchocolate Confectionery Manufacturing	<10
311351	Chocolate and Confectionery Manufacturing from Cacao Beans	648
311352	Confectionery Manufacturing from Purchased Chocolate	118
311411	Frozen Fruit, Juice, and Vegetable Manufacturing	0
311412	Frozen Specialty Food Manufacturing	14
311421	Fruit and Vegetable Canning	30
311422	Specialty Canning	0
311423	Dried and Dehydrated Food Manufacturing	0

NAICS	Industry	2021 Jobs
311511	Fluid Milk Manufacturing	604
311512	Creamery Butter Manufacturing	0
311513	Cheese Manufacturing	14
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	0
311520	Ice Cream and Frozen Dessert Manufacturing	17
311611	Animal (except Poultry) Slaughtering	40
311612	Meat Processed from Carcasses	53
311613	Rendering and Meat Byproduct Processing	0
311615	Poultry Processing	0
311710	Seafood Product Preparation and Packaging	212
311811	Retail Bakeries	158
311812	Commercial Bakeries	178
311813	Frozen Cakes, Pies, and Other Pastries Manufacturing	188
311821	Cookie and Cracker Manufacturing	22
311824	Dry Pasta, Dough, and Flour Mixes Manufacturing from Purchased Flour	142
311830	Tortilla Manufacturing	0
311911	Roasted Nuts and Peanut Butter Manufacturing	0
311919	Other Snack Food Manufacturing	<10
311920	Coffee and Tea Manufacturing	43
311930	Flavoring Syrup and Concentrate Manufacturing	31
311941	Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing	29
311942	Spice and Extract Manufacturing	0

Manufacturing Industry Cluster (continued)

NAICS	Industry	2021 Jobs
311991	Perishable Prepared Food Manufacturing	83
311999	All Other Miscellaneous Food Manufacturing	100
312111	Soft Drink Manufacturing	204
312112	Bottled Water Manufacturing	32
312113	Ice Manufacturing	41
312120	Breweries	878
312130	Wineries	138
312140	Distilleries	51
312230	Tobacco Manufacturing	0
313110	Fiber, Yarn, and Thread Mills	12
313210	Broadwoven Fabric Mills	431
313220	Narrow Fabric Mills and Schiffli Machine Embroidery	62
313230	Nonwoven Fabric Mills	504
313240	Knit Fabric Mills	31
313310	Textile and Fabric Finishing Mills	87
313320	Fabric Coating Mills	438
314110	Carpet and Rug Mills	<10
314120	Curtain and Linen Mills	49
314910	Textile Bag and Canvas Mills	133
314994	Rope, Cordage, Twine, Tire Cord, and Tire Fabric Mills	<10
314999	All Other Miscellaneous Textile Product Mills	139
315110	Hosiery and Sock Mills	0

NAICS	Industry	2021 Jobs
315190	Other Apparel Knitting Mills	0
315210	Cut and Sew Apparel Contractors	41
315220	Men's and Boys' Cut and Sew Apparel Manufacturing	46
315240	Women's, Girls', and Infants' Cut and Sew Apparel Manufacturing	44
315280	Other Cut and Sew Apparel Manufacturing	306
315990	Apparel Accessories and Other Apparel Manufacturing	53
316110	Leather and Hide Tanning and Finishing	0
316210	Footwear Manufacturing	84
316992	Women's Handbag and Purse Manufacturing	<10
316998	All Other Leather Good and Allied Product Manufacturing	95
321113	Sawmills	642
321114	Wood Preservation	0
321211	Hardwood Veneer and Plywood Manufacturing	28
321212	Softwood Veneer and Plywood Manufacturing	15
321213	Engineered Wood Member (except Truss) Manufacturing	0
321214	Truss Manufacturing	45
321219	Reconstituted Wood Product Manufacturing	46
321911	Wood Window and Door Manufacturing	58
321912	Cut Stock, Resawing Lumber, and Planing	0
321918	Other Millwork (including Flooring)	170
321920	Wood Container and Pallet Manufacturing	104
321991	Manufactured Home (Mobile Home) Manufacturing	0

Manufacturing Industry Cluster (continued)

NAICS	Industry	2021 Jobs
321992	Prefabricated Wood Building Manufacturing	338
321999	All Other Miscellaneous Wood Product Manufacturing	203
322110	Pulp Mills	0
322121	Paper (except Newsprint) Mills	351
322122	Newsprint Mills	0
322130	Paperboard Mills	0
322211	Corrugated and Solid Fiber Box Manufacturing	82
322212	Folding Paperboard Box Manufacturing	96
322219	Other Paperboard Container Manufacturing	<10
322220	Paper Bag and Coated and Treated Paper Manufacturing	138
322230	Stationery Product Manufacturing	36
322291	Sanitary Paper Product Manufacturing	0
322299	All Other Converted Paper Product Manufacturing	67
323111	Commercial Printing (except Screen and Books)	1,321
323113	Commercial Screen Printing	519
323117	Books Printing	61
323120	Support Activities for Printing	103
324110	Petroleum Refineries	0
324121	Asphalt Paving Mixture and Block Manufacturing	87
324122	Asphalt Shingle and Coating Materials Manufacturing	93
324191	Petroleum Lubricating Oil and Grease Manufacturing	56
324199	All Other Petroleum and Coal Products Manufacturing	0

NAICS	Industry	2021 Jobs
325110	Petrochemical Manufacturing	0
325120	Industrial Gas Manufacturing	0
325130	Synthetic Dye and Pigment Manufacturing	<10
325180	Other Basic Inorganic Chemical Manufacturing	<10
325193	Ethyl Alcohol Manufacturing	0
325194	Cyclic Crude, Intermediate, and Gum and Wood Chemical Manufacturing	0
325199	All Other Basic Organic Chemical Manufacturing	34
325211	Plastics Material and Resin Manufacturing	88
325212	Synthetic Rubber Manufacturing	<10
325220	Artificial and Synthetic Fibers and Filaments Manufacturing	<10
325311	Nitrogenous Fertilizer Manufacturing	<10
325312	Phosphatic Fertilizer Manufacturing	0
325314	Fertilizer (Mixing Only) Manufacturing	<10
325320	Pesticide and Other Agricultural Chemical Manufacturing	0
325411	Medicinal and Botanical Manufacturing	0
325412	Pharmaceutical Preparation Manufacturing	495
325413	In-Vitro Diagnostic Substance Manufacturing	352
325414	Biological Product (except Diagnostic) Manufacturing	906
325510	Paint and Coating Manufacturing	36
325520	Adhesive Manufacturing	329
325611	Soap and Other Detergent Manufacturing	30
325612	Polish and Other Sanitation Good Manufacturing	<10

Manufacturing Industry Cluster (continued)

NAICS	Industry	2021 Jobs
325613	Surface Active Agent Manufacturing	0
325620	Toilet Preparation Manufacturing	139
325910	Printing Ink Manufacturing	<10
325920	Explosives Manufacturing	0
325991	Custom Compounding of Purchased Resins	<10
325992	Photographic Film, Paper, Plate, and Chemical Manufacturing	47
325998	All Other Miscellaneous Chemical Product and Preparation Manufacturing	70
326111	Plastics Bag and Pouch Manufacturing	83
326112	Plastics Packaging Film and Sheet (including Laminated) Manufacturing	78
326113	Unlaminated Plastics Film and Sheet (except Packaging) Manufacturing	74
326121	Unlaminated Plastics Profile Shape Manufacturing	965
326122	Plastics Pipe and Pipe Fitting Manufacturing	53
326130	Laminated Plastics Plate, Sheet (except Packaging), and Shape Manufacturing	543
326140	Polystyrene Foam Product Manufacturing	<10
326150	Urethane and Other Foam Product (except Polystyrene) Manufacturing	398
326160	Plastics Bottle Manufacturing	83
326191	Plastics Plumbing Fixture Manufacturing	0
326199	All Other Plastics Product Manufacturing	1,855
326211	Tire Manufacturing (except Retreading)	0
326212	Tire Retreading	90
326220	Rubber and Plastics Hoses and Belting Manufacturing	283
326291	Rubber Product Manufacturing for Mechanical Use	467

NAICS	Industry	2021 Jobs
326299	All Other Rubber Product Manufacturing	62
327110	Pottery, Ceramics, and Plumbing Fixture Manufacturing	63
327120	Clay Building Material and Refractories Manufacturing	<10
327211	Flat Glass Manufacturing	0
327212	Other Pressed and Blown Glass and Glassware Manufacturing	183
327213	Glass Container Manufacturing	0
327215	Glass Product Manufacturing Made of Purchased Glass	371
327310	Cement Manufacturing	83
327320	Ready-Mix Concrete Manufacturing	251
327331	Concrete Block and Brick Manufacturing	96
327332	Concrete Pipe Manufacturing	0
327390	Other Concrete Product Manufacturing	299
327410	Lime Manufacturing	0
327420	Gypsum Product Manufacturing	161
327910	Abrasive Product Manufacturing	72
327991	Cut Stone and Stone Product Manufacturing	252
327992	Ground or Treated Mineral and Earth Manufacturing	<10
327993	Mineral Wool Manufacturing	0
327999	All Other Miscellaneous Nonmetallic Mineral Product Manufacturing	124
331110	Iron and Steel Mills and Ferroalloy Manufacturing	<10
331210	Iron and Steel Pipe and Tube Manufacturing from Purchased Steel	22
331221	Rolled Steel Shape Manufacturing	70

Manufacturing Industry Cluster (continued)

NAICS	Industry	2021 Jobs
331222	Steel Wire Drawing	0
331313	Alumina Refining and Primary Aluminum Production	0
331314	Secondary Smelting and Alloying of Aluminum	0
331315	Aluminum Sheet, Plate, and Foil Manufacturing	<10
331318	Other Aluminum Rolling, Drawing, and Extruding	277
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	21
331420	Copper Rolling, Drawing, Extruding, and Alloying	405
331491	Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, and Extruding	0
331492	Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum)	10
331511	Iron Foundries	<10
331512	Steel Investment Foundries	819
331513	Steel Foundries (except Investment)	0
331523	Nonferrous Metal Die-Casting Foundries	94
331524	Aluminum Foundries (except Die-Casting)	416
331529	Other Nonferrous Metal Foundries (except Die-Casting)	<10
332111	Iron and Steel Forging	0
332112	Nonferrous Forging	0
332114	Custom Roll Forming	20
332117	Powder Metallurgy Part Manufacturing	0
332119	Metal Crown, Closure, and Other Metal Stamping (except Automotive)	397
332215	Metal Kitchen Cookware, Utensil, Cutlery, and Flatware (except Precious) Manufacturing	<10
332216	Saw Blade and Handtool Manufacturing	21

NAICS	Industry	2021 Jobs
332311	Prefabricated Metal Building and Component Manufacturing	64
332312	Fabricated Structural Metal Manufacturing	399
332313	Plate Work Manufacturing	114
332321	Metal Window and Door Manufacturing	34
332322	Sheet Metal Work Manufacturing	942
332323	Ornamental and Architectural Metal Work Manufacturing	238
332410	Power Boiler and Heat Exchanger Manufacturing	124
332420	Metal Tank (Heavy Gauge) Manufacturing	36
332431	Metal Can Manufacturing	0
332439	Other Metal Container Manufacturing	<10
332510	Hardware Manufacturing	102
332613	Spring Manufacturing	0
332618	Other Fabricated Wire Product Manufacturing	177
332710	Machine Shops	2756
332721	Precision Turned Product Manufacturing	244
332722	Bolt, Nut, Screw, Rivet, and Washer Manufacturing	287
332811	Metal Heat Treating	81
332812	Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers	152
332813	Electroplating, Plating, Polishing, Anodizing, and Coloring	166
332911	Industrial Valve Manufacturing	239
332912	Fluid Power Valve and Hose Fitting Manufacturing	295
332913	Plumbing Fixture Fitting and Trim Manufacturing	170

Manufacturing Industry Cluster (continued)

NAICS	Industry	2021 Jobs
332919	Other Metal Valve and Pipe Fitting Manufacturing	907
332991	Ball and Roller Bearing Manufacturing	1383
332992	Small Arms Ammunition Manufacturing	11
332993	Ammunition (except Small Arms) Manufacturing	0
332994	Small Arms, Ordnance, and Ordnance Accessories Manufacturing	1883
332996	Fabricated Pipe and Pipe Fitting Manufacturing	206
332999	All Other Miscellaneous Fabricated Metal Product Manufacturing	141
333111	Farm Machinery and Equipment Manufacturing	<10
333112	Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing	0
333120	Construction Machinery Manufacturing	26
333131	Mining Machinery and Equipment Manufacturing	0
333132	Oil and Gas Field Machinery and Equipment Manufacturing	0
333241	Food Product Machinery Manufacturing	158
333242	Semiconductor Machinery Manufacturing	58
333243	Sawmill, Woodworking, and Paper Machinery Manufacturing	195
333244	Printing Machinery and Equipment Manufacturing	448
333249	Other Industrial Machinery Manufacturing	260
333314	Optical Instrument and Lens Manufacturing	1,912
333316	Photographic and Photocopying Equipment Manufacturing	21
333318	Other Commercial and Service Industry Machinery Manufacturing	450
333413	Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing	144
333414	Heating Equipment (except Warm Air Furnaces) Manufacturing	157

NAICS	Industry	2021 Jobs
333415	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	161
333511	Industrial Mold Manufacturing	43
333514	Special Die and Tool, Die Set, Jig, and Fixture Manufacturing	191
333515	Cutting Tool and Machine Tool Accessory Manufacturing	190
333517	Machine Tool Manufacturing	1,135
333519	Rolling Mill and Other Metalworking Machinery Manufacturing	0
333611	Turbine and Turbine Generator Set Units Manufacturing	62
333612	Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing	31
333613	Mechanical Power Transmission Equipment Manufacturing	42
333618	Other Engine Equipment Manufacturing	0
333912	Air and Gas Compressor Manufacturing	62
333914	Measuring, Dispensing, and Other Pumping Equipment Manufacturing	12
333921	Elevator and Moving Stairway Manufacturing	0
333922	Conveyor and Conveying Equipment Manufacturing	<10
333923	Overhead Traveling Crane, Hoist, and Monorail System Manufacturing	0
333924	Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing	0
333991	Power-Driven Handtool Manufacturing	0
333992	Welding and Soldering Equipment Manufacturing	56
333993	Packaging Machinery Manufacturing	40
333994	Industrial Process Furnace and Oven Manufacturing	89
333995	Fluid Power Cylinder and Actuator Manufacturing	20
333996	Fluid Power Pump and Motor Manufacturing	0

Manufacturing Industry Cluster (continued)

NAICS	Industry	2021 Jobs
333997	Scale and Balance Manufacturing	0
333999	All Other Miscellaneous General Purpose Machinery Manufacturing	1070
334111	Electronic Computer Manufacturing	292
334112	Computer Storage Device Manufacturing	98
334118	Computer Terminal and Other Computer Peripheral Equipment Manufacturing	697
334210	Telephone Apparatus Manufacturing	26
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	226
334290	Other Communications Equipment Manufacturing	96
334310	Audio and Video Equipment Manufacturing	122
334412	Bare Printed Circuit Board Manufacturing	376
334413	Semiconductor and Related Device Manufacturing	624
334416	Capacitor, Resistor, Coil, Transformer, and Other Inductor Manufacturing	498
334417	Electronic Connector Manufacturing	410
334418	Printed Circuit Assembly (Electronic Assembly) Manufacturing	1,631
334419	Other Electronic Component Manufacturing	1712
334510	Electromedical and Electrotherapeutic Apparatus Manufacturing	249
334511	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	7089
334512	Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use	209
334513	Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables	359
334514	Totalizing Fluid Meter and Counting Device Manufacturing	<10
334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals	468
334516	Analytical Laboratory Instrument Manufacturing	239

NAICS	Industry	2021 Jobs
334517	Irradiation Apparatus Manufacturing	<10
334519	Other Measuring and Controlling Device Manufacturing	181
334613	Blank Magnetic and Optical Recording Media Manufacturing	<10
334614	Software and Other Prerecorded Compact Disc, Tape, and Record Reproducing	71
335110	Electric Lamp Bulb and Part Manufacturing	434
335121	Residential Electric Lighting Fixture Manufacturing	51
335122	Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing	435
335129	Other Lighting Equipment Manufacturing	123
335210	Small Electrical Appliance Manufacturing	0
335220	Major Household Appliance Manufacturing	<10
335311	Power, Distribution, and Specialty Transformer Manufacturing	62
335312	Motor and Generator Manufacturing	101
335313	Switchgear and Switchboard Apparatus Manufacturing	<10
335314	Relay and Industrial Control Manufacturing	82
335911	Storage Battery Manufacturing	0
335912	Primary Battery Manufacturing	<10
335921	Fiber Optic Cable Manufacturing	782
335929	Other Communication and Energy Wire Manufacturing	768
335931	Current-Carrying Wiring Device Manufacturing	769
335932	Noncurrent-Carrying Wiring Device Manufacturing	0
335991	Carbon and Graphite Product Manufacturing	84
335999	All Other Miscellaneous Electrical Equipment and Component Manufacturing	172

Manufacturing Industry Cluster (continued)

NAICS	Industry	2021 Jobs
336111	Automobile Manufacturing	<10
336112	Light Truck and Utility Vehicle Manufacturing	0
336120	Heavy Duty Truck Manufacturing	0
336211	Motor Vehicle Body Manufacturing	66
336212	Truck Trailer Manufacturing	<10
336213	Motor Home Manufacturing	0
336214	Travel Trailer and Camper Manufacturing	37
336310	Motor Vehicle Gasoline Engine and Engine Parts Manufacturing	452
336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing	211
336330	Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing	<10
336340	Motor Vehicle Brake System Manufacturing	0
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing	30
336360	Motor Vehicle Seating and Interior Trim Manufacturing	0
336370	Motor Vehicle Metal Stamping	47
336390	Other Motor Vehicle Parts Manufacturing	<10
336411	Aircraft Manufacturing	104
336412	Aircraft Engine and Engine Parts Manufacturing	1007
336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing	121
336414	Guided Missile and Space Vehicle Manufacturing	0
336415	Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing	0
336419	Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing	0
336510	Railroad Rolling Stock Manufacturing	0

NAICS	Industry	2021 Jobs
336611	Ship Building and Repairing	40
336612	Boat Building	57
336991	Motorcycle, Bicycle, and Parts Manufacturing	<10
336992	Military Armored Vehicle, Tank, and Tank Component Manufacturing	0
336999	All Other Transportation Equipment Manufacturing	51
337110	Wood Kitchen Cabinet and Countertop Manufacturing	356
337121	Upholstered Household Furniture Manufacturing	<10
337122	Nonupholstered Wood Household Furniture Manufacturing	237
337124	Metal Household Furniture Manufacturing	<10
337125	Household Furniture (except Wood and Metal) Manufacturing	0
337127	Institutional Furniture Manufacturing	55
337211	Wood Office Furniture Manufacturing	0
337212	Custom Architectural Woodwork and Millwork Manufacturing	164
337214	Office Furniture (except Wood) Manufacturing	<10
337215	Showcase, Partition, Shelving, and Locker Manufacturing	77
337910	Mattress Manufacturing	12
337920	Blind and Shade Manufacturing	<10
339112	Surgical and Medical Instrument Manufacturing	1111
339113	Surgical Appliance and Supplies Manufacturing	947
339114	Dental Equipment and Supplies Manufacturing	24
339115	Ophthalmic Goods Manufacturing	30
339116	Dental Laboratories	166

Manufacturing Industry Cluster (continued)

NAICS	Industry	2021 Jobs
339910	Jewelry and Silverware Manufacturing	64
339920	Sporting and Athletic Goods Manufacturing	128
339930	Doll, Toy, and Game Manufacturing	24
339940	Office Supplies (except Paper) Manufacturing	33
339950	Sign Manufacturing	315
339991	Gasket, Packing, and Sealing Device Manufacturing	573

NAICS	Industry	2021 Jobs
339992	Musical Instrument Manufacturing	22
339993	Fastener, Button, Needle, and Pin Manufacturing	616
339994	Broom, Brush, and Mop Manufacturing	140
339995	Burial Casket Manufacturing	0
339999	All Other Miscellaneous Manufacturing	291

Total   **69,844**

Attachment 2: Manufacturing Cluster Staffing Pattern

The top 77 occupations (e.g., all occupations with more than 200 Manufacturing employees) represent 82.1% of all employment in the Manufacturing Cluster. Altogether, employment spans 371 occupations for a total of 69,844 jobs.

Staffing Patterns for the Manufacturing Cluster, 2021

SOC	Occupation	Share of Cluster's Jobs	Jobs in Cluster (2021)	Median Hourly Earnings	Job Growth 2016 - 2021		Job Growth 2016 - 2019	
					Change	Rate	Change	Rate
51-2098	Miscellaneous Assemblers and Fabricators	6.0%	4,159	$16.96	(108)	(3%)	340	8%
51-2028	Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	4.5%	3,132	$18.33	61	2%	210	7%
51-9161	Computer Numerically Controlled Tool Operators	3.8%	2,639	$21.43	(24)	(1%)	268	10%
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	3.5%	2,414	$21.55	(78)	(3%)	195	8%
51-1011	First-Line Supervisors of Production and Operating Workers	3.2%	2,255	$33.11	(69)	(3%)	51	2%
51-4041	Machinists	2.6%	1,823	$23.68	(153)	(8%)	(49)	(2%)
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	2.2%	1,546	$52.70	277	22%	400	32%
17-2112	Industrial Engineers	2.2%	1,537	$43.31	325	27%	358	29%
17-2141	Mechanical Engineers	2.2%	1,525	$43.68	189	14%	304	23%
11-1021	General and Operations Managers	2.1%	1,495	$50.64	(163)	(10%)	(69)	(4%)
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1.9%	1,349	$31.48	113	9%	143	12%
43-5071	Shipping, Receiving, and Inventory Clerks	1.9%	1,348	$17.95	347	35%	293	29%
49-9041	Industrial Machinery Mechanics	1.8%	1,256	$27.28	(22)	(2%)	43	3%
53-7064	Packers and Packagers, Hand	1.5%	1,074	$11.64	421	65%	389	60%
43-9061	Office Clerks, General	1.5%	1,064	$19.12	12	1%	46	4%
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1.5%	1,014	$19.20	370	57%	329	51%
17-2071	Electrical Engineers	1.4%	964	$48.53	(101)	(9%)	(20)	(2%)
51-9111	Packaging and Filling Machine Operators and Tenders	1.3%	917	$15.14	123	15%	77	10%
11-3051	Industrial Production Managers	1.3%	885	$63.09	(42)	(5%)	40	4%
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	1.1%	792	$15.23	5	1%	32	4%
51-9198	Helpers--Production Workers	1.1%	785	$16.16	(389)	(33%)	(298)	(25%)
51-4121	Welders, Cutters, Solderers, and Brazers	1.1%	782	$22.67	81	12%	91	13%

Staffing Patterns for the Manufacturing Cluster, 2021 (continued)

SOC	Occupation	Share of Cluster's Jobs	Jobs in Cluster (2021)	Median Hourly Earnings	Job Growth 2016 - 2021		Job Growth 2016 - 2019	
					Change	Rate	Change	Rate
51-4023	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	1.1%	765	$21.84	619	424%	314	215%
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	1.1%	754	$16.94	(394)	(34%)	(252)	(22%)
13-1028	Buyers and Purchasing Agents	1.1%	754	$32.05	12	2%	60	8%
53-3032	Heavy and Tractor-Trailer Truck Drivers	1.1%	753	$23.15	(14)	(2%)	22	3%
49-9071	Maintenance and Repair Workers, General	1.1%	739	$21.42	(6)	(1%)	30	4%
43-4051	Customer Service Representatives	1.0%	722	$18.39	(26)	(3%)	47	6%
11-9041	Architectural and Engineering Managers	1.0%	719	$74.39	(43)	(6%)	11	1%
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1.0%	668	$18.17	(66)	(9%)	32	4%
51-5112	Printing Press Operators	0.9%	622	$20.49	(95)	(13%)	(7)	(1%)
43-3031	Bookkeeping, Accounting, and Auditing Clerks	0.9%	618	$20.67	(64)	(9%)	(1)	(0%)
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	0.8%	582	$18.64	2	0%	10	2%
51-9199	Production Workers, All Other	0.8%	580	$17.72	(109)	(16%)	(52)	(8%)
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	0.8%	564	$18.80	(143)	(20%)	(49)	(7%)
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	0.8%	556	$37.19	18	3%	(13)	(2%)
43-5061	Production, Planning, and Expediting Clerks	0.8%	543	$25.70	(96)	(15%)	(17)	(3%)
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	0.8%	531	$45.58	(82)	(13%)	20	3%
13-2011	Accountants and Auditors	0.7%	523	$33.25	6	1%	37	7%
17-3026	Industrial Engineering Technologists and Technicians	0.7%	517	$28.17	32	7%	74	15%
53-7065	Stockers and Order Fillers	0.7%	510	$13.64	(98)	(16%)	(41)	(7%)
51-6031	Sewing Machine Operators	0.7%	456	$15.08	(36)	(7%)	(13)	(3%)
17-3023	Electrical and Electronic Engineering Technologists and Technicians	0.6%	452	$29.33	(212)	(32%)	(175)	(26%)
53-7051	Industrial Truck and Tractor Operators	0.6%	447	$20.67	51	13%	27	7%
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	0.6%	423	$15.76	(155)	(27%)	(87)	(15%)
17-3027	Mechanical Engineering Technologists and Technicians	0.6%	422	$27.22	95	29%	125	38%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	0.6%	418	$28.94	(8)	(2%)	25	6%
45-4022	Logging Equipment Operators	0.6%	409	$20.37	(11)	(3%)	21	5%
13-1198	Project Management Specialists and Business Operations Specialists, All Other	0.6%	388	$36.37	160	70%	98	43%

Staffing Patterns for the Manufacturing Cluster, 2021 (continued)

SOC	Occupation	Share of Cluster's Jobs	Jobs in Cluster (2021)	Median Hourly Earnings	Job Growth 2016 - 2021		Job Growth 2016 - 2019	
					Change	Rate	Change	Rate
51-4023	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	1.1%	765	$21.84	619	424%	314	215%
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	1.1%	754	$16.94	(394)	(34%)	(252)	(22%)
13-1028	Buyers and Purchasing Agents	1.1%	754	$32.05	12	2%	60	8%
53-3032	Heavy and Tractor-Trailer Truck Drivers	1.1%	753	$23.15	(14)	(2%)	22	3%
49-9071	Maintenance and Repair Workers, General	1.1%	739	$21.42	(6)	(1%)	30	4%
43-4051	Customer Service Representatives	1.0%	722	$18.39	(26)	(3%)	47	6%
53-7063	Machine Feeders and Offbearers	0.5%	383	$15.45	94	32%	46	16%
11-3031	Financial Managers	0.5%	369	$58.28	10	3%	25	7%
51-4199	Metal Workers and Plastic Workers, All Other	0.5%	350	$17.13	66	23%	74	26%
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	0.5%	324	$20.28	(53)	(14%)	(30)	(8%)
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	0.5%	323	$21.01	13	4%	21	7%
11-3021	Computer and Information Systems Managers	0.5%	315	$68.13	31	11%	32	11%
13-1071	Human Resources Specialists	0.4%	297	$29.65	48	19%	49	20%
13-1081	Logisticians	0.4%	294	$34.75	67	30%	80	35%
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	0.4%	286	$18.12	10	4%	(5)	(2%)
51-4111	Tool and Die Makers	0.4%	273	$28.80	16	6%	16	6%
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	0.4%	272	$14.62	(60)	(18%)	(38)	(12%)
11-2022	Sales Managers	0.4%	258	$71.13	9	4%	13	5%
51-9162	Computer Numerically Controlled Tool Programmers	0.4%	255	$30.94	8	3%	2	1%
51-9081	Dental Laboratory Technicians	0.4%	248	$20.04	35	17%	49	23%
13-1161	Market Research Analysts and Marketing Specialists	0.4%	246	$30.45	15	7%	45	19%
51-7011	Cabinetmakers and Bench Carpenters	0.3%	243	$21.69	(149)	(38%)	(134)	(34%)
51-3092	Food Batchmakers	0.3%	238	$16.88	(61)	(21%)	(42)	(14%)
17-2072	Electronics Engineers, Except Computer	0.3%	237	$53.46	(50)	(17%)	(2)	(1%)
15-1211	Computer Systems Analysts	0.3%	235	$44.12	45	24%	29	15%
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	0.3%	228	$34.61	(21)	(9%)	(9)	(4%)
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	0.3%	226	$17.21	(343)	(60%)	(261)	(46%)
15-1244	Network and Computer Systems Administrators	0.3%	222	$41.54	8	4%	34	16%
27-1024	Graphic Designers	0.3%	219	$22.25	(16)	(7%)	5	2%

Staffing Patterns for the Manufacturing Cluster, 2021 (continued)

SOC	Occupation	Share of Cluster's Jobs	Jobs in Cluster (2021)	Median Hourly Earnings	Job Growth 2016 - 2021		Job Growth 2016 - 2019	
					Change	Rate	Change	Rate
51-6063	Textile Knitting and Weaving Machine Setters, Operators, and Tenders	0.3%	217	$18.27	7	3%	87	42%
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	0.3%	208	$32.23	(108)	(34%)	13	4%
47-2111	Electricians	0.3%	205	$26.30	32	19%	38	22%
11-3061	Purchasing Managers	0.3%	204	$60.80	14	7%	27	14%
51-4193	Plating Machine Setters, Operators, and Tenders, Metal and Plastic	0.3%	204	$18.56	73	57%	79	60%

Source: Emsi, 2022.1

Appendix V: Hospitality Industry Cluster Analysis

Key Takeaways

The Hospitality industry cluster lags behind the other clusters on most indicators; however, its importance in terms of quality of life, population retention, and workforce attraction cannot be overstated. This cluster was hit particularly hard by the COVID-19 pandemic; however, there are signs of recovery. While most jobs within this cluster are not suitable for target attraction due to low wages, some of the top occupations are related to management, training, and human resources, which aligns with trends in the other clusters.

- The Hospitality industry cluster employs 60,953 workers, or 8% of the total workforce in New Hampshire. It is the third largest cluster in the state.

- With a growth rate of -8% from 2016–2026, the Hospitality cluster has experienced the slowest growth rates of all the clusters, primarily due to the COVID-19 pandemic (-12,375 for a growth rate of -12% between 2019 and 2021). However, the cluster was growing prior to the pandemic (4% from 2016–2019) and is projected to grow by 6% through 2026, though it is not expected to recover to pre-pandemic levels by then.

- The Hospitality cluster contributes the smallest share of the state's gross regional product (only 3% of total GRP) and has the least productive workers ($49,218 per job). As a labor-intensive, non-goods producing cluster, this is to be expected and aligns with national trends.

- The Hospitality cluster has relatively low industry concentration of 1.05; however, it is becoming more concentrated over time. The location quotient was 1.01 in 2016 and is expected to increase by 6% by 2026 to 1.07, growth that is second only to the Technology cluster.

- New Hampshire has a competitive advantage in Hospitality. Although the state's Hospitality employment declined by 8% from 2016 to 2026 (due to the pandemic), it shrank by 26% less than expected than if it had followed national and industry trends.

- The Hospitality cluster has the lowest retirement risk of all the clusters; however, with 17% of the workforce aged 55 and over, that risk is still relatively high.

- The vast majority of jobs in this cluster are in the *Food Preparation and Serving* occupations (68%). Two of those occupations, Fast Food and Counter Workers (19%) and *Waiters and Waitresses* (14%), account for a third of cluster employment.

Top Industries

- Full-Service Restaurants
- Limited-Service Restaurants
- Snack and Nonalcoholic Beverage Bars
- Drinking Places
- Cafeterias, Grill Buffets, and Buffets
- Caterers
- Skiing Facilities
- Bed-and-Breakfast Inns
- Recreational and Vacation Camps
- Convention and Trade Show Organizers

Top Occupations

- General and Operations Managers
- Food Service Managers
- Maintenance and Repair Workers, General
- Training and Development Specialists
- Project Management Specialists and Business Operations Specialists, All Other
- Market Research Analysts and Marketing Specialists
- Sales Representatives of Services
- Human Resource Specialists
- Financial Managers
- Personal Service Managers
- Entertainment and Recreation Managers
- Managers, All Other

Overview

Hospitality is the third largest industry cluster in the State. This cluster includes 36 industries across the *Arts, Entertainment, and Recreation* (NAICS 71) and *Accommodation and Food Services* (NAICS 72) sectors plus portions of the *Scenic and Sightseeing Transportation* (NAICS 487) and *Administrative and Support Services* (NAICS 561) subsectors. See Appendix C for a full list of the industries included in this cluster.

Jobs	Growth Rate	Average Earnings
60,953	**-8%** (2016–2026)	$30,509
8% of the total workforce	*2016–2019: 4% I 2021–2026: 6%*	*$31,720 national avg. for an area this size*

Payroll Business Locations	Total GRP	Location Quotient
4,435	**$3.0 billion**	**1.05**
8% of the State's total businesses	*3% of the State's gross regional product*	*Increased 4.0% since 2016*

Competitive Effect	Unemployment	Retirement Risk
2,052 jobs (2016–2026)	**3,415 unemployed** as of Nov 2021	**Moderately High**
26% more jobs than expected due to local factors	*Down from a peak of 26,186 in April 2020*	*17% of workers retire soon*

Top Industries (6-digit NAICS)

By Employment

1. Full-Service Restaurants (23,109)
2. Limited-Service Restaurants (13,285)
3. Snack & Nonalcoholic Beverage Bars (6,216)

By Location Quotient

1. Skiing Facilities (7.3)
2. Bed-and-Breakfast Inns (7.0)
3. Recreational & Vacation Camps (except Campgrounds) (6.0)

By Growth Rate (2016–2021)

1. Drinking Places (Alcoholic Beverages) (98%)
2. Cafeterias, Grill Buffets & Buffets (77%)
3. Convention and Trade Show Organizers (62%)

By Competitive Effect (Shift-Share)

1. Full-Service Restaurants (1,572)
2. Snack & Nonalcoholic Beverage Bars (812)
3. Caterers (283)

Staffing Pattern

There are 60,953 jobs in the Hospitality industry cluster, spread across approximately 140 occupations. See Appendix D for the full staffing pattern. The top 30 occupations in terms of share of employment are shown to the right. Together, these 30 occupations account for 88% of the cluster's total employment. *Food Preparation and Serving Related* occupations account for 68% of the cluster's jobs, followed by *Sales* (5%), *Building and Grounds Cleaning and Maintenance* (5%), *Management* (4%), and *Office and Administrative Support* (4%).

Staffing for Hospitality Cluster by 2-Digit Occupation
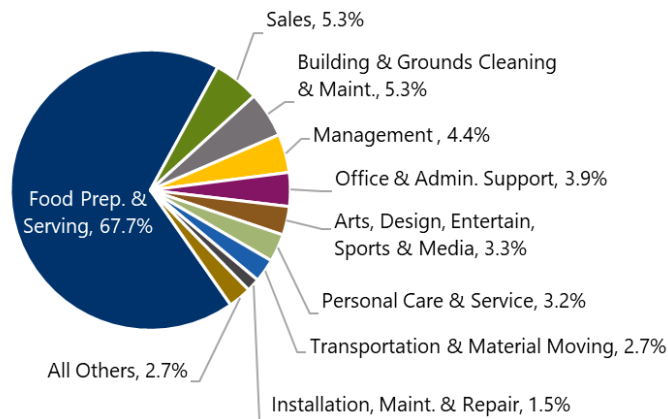
Source: Emsi, 2022.1

Staffing Pattern for Hospitality Cluster: Top 30 Occupations, 5 digit SOC

Occupation	Share of Cluster's 2021 Jobs
Fast Food and Counter Workers	19.4%
Waiters and Waitresses	14.0%
Cooks, Restaurant	7.9%
First-Line Supervisors of Food Preparation and Serving Workers	4.8%
Bartenders	4.0%
Cashiers	3.9%
Cooks, Short Order	3.1%
Dishwashers	3.0%
Food Preparation Workers	2.6%
Maids and Housekeeping Cleaners	2.4%
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	2.3%
Dining Room and Cafeteria Attendants and Bartender Helpers	2.2%
Cooks, Fast Food	2.1%
Driver/Sales Workers	1.9%
Food Service Managers	1.8%
General and Operations Managers	1.5%
Landscaping and Groundskeeping Workers	1.4%
Amusement and Recreation Attendants	1.3%
Hotel, Motel, and Resort Desk Clerks	1.2%
Maintenance and Repair Workers, General	1.1%
Chefs and Head Cooks	1.0%
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	0.9%
Office Clerks, General	0.7%
Retail Salespersons	0.6%
Recreation Workers	0.6%
Lodging Managers	0.6%
Musicians and Singers	0.6%
Writers and Authors	0.5%
Bookkeeping, Accounting, and Auditing Clerks	0.5%
Food Servers, Nonrestaurant	0.5%
Total	88.4%

Source: Emsi, 2022.1

Job Growth Trends by Occupation

Historical and projected job growth trends for the top 9 occupation sectors within Hospitality are shown below (note the *Food Preparation and Serving* sector plotted on the right y-axis). These 9 sectors account for 97% of jobs in the cluster in 2021.

2016–2026

Overall, the top Hospitality occupation sectors are declining over the 10-year period, projected to lose a total of 8% of jobs. These losses are primarily concentrated in *Building and Grounds Cleaning and Maintenance* (-31%) and *Office and Administrative Support* (-22%) occupations. *Transportation and Material Moving* occupations are growing the fastest, with 32% growth from 2016 to 2026, followed by *Management* (6%) and *Sales* (5%).

2016–2019

Prior to the COVID-19 pandemic, all but two occupation sectors were growing within the Hospitality cluster for an overall rate of 4%. Jobs in the *Transportation and Material Moving* (28%), *Installation, Maintenance, and Repair* (22%), and *Sales* (19%) occupations were growing fastest, while *Food Preparation and Serving* jobs were relatively stagnant at 2%. *Building and Grounds Cleaning and Maintenance* and *Arts, Design, Entertainment, Sports, and Media* occupations were declining slightly (-4% and -2%, respectively).

2019–2021

During the pandemic, New Hampshire lost 17% of its Hospitality jobs in these occupation sectors. All sectors experienced job losses, but *Office and Administrative Support* occupations were hit the hardest (-27%), followed by Building and Grounds Cleaning and Maintenance (-24%), and *Personal Care and Service* (-22%). *Arts, Design, Entertainment, Sports, and Media* occupations were the least affected by the pandemic, losing only 5% of jobs.

2021–2026

Going forward, the Hospitality cluster is projected to grow by 6%, but still not recover to pre-recession levels. *Transportation and Material Moving* jobs (12%) and *Food Preparation and Serving* (8%) are

Hospitality Cluster Job Growth by 2 Digit Occupation

Legend:
- — — Sales
- ·········· Building & Grounds Cleaning & Maint.
- — Management
- — · — Office & Admin. Support
- — Arts, Design, Entertain, Sports & Media
- — Personal Care & Service
- — — Trans. & Material Moving
- — Installation, Maint. & Repair
- —●— Food Prep & Serving (Right Axis)
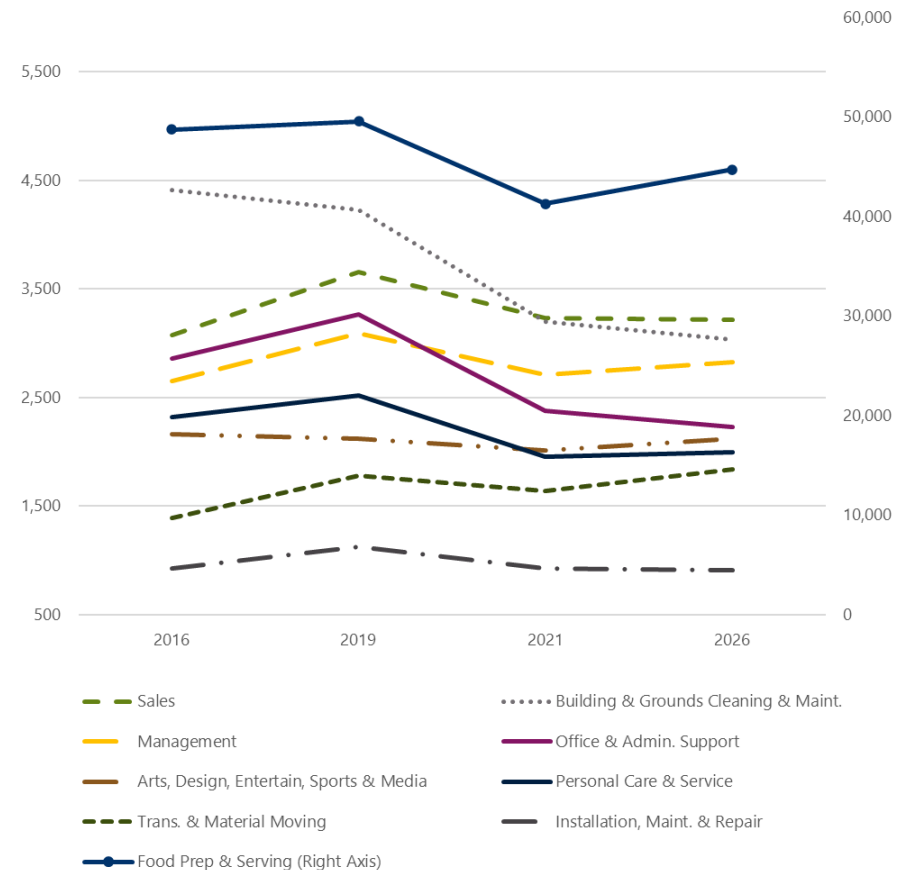
Source: Emsi, 2022.1

expected to grow fastest, while *Office and Administrative Support* and *Building and Grounds Cleaning and Maintenance* are expected to continue their decline (-6% and -5% respectively).

Top Occupations

The occupations below are the 18 top occupations in New Hampshire's Hospitality cluster, as determined by size (represented by bubble size), growth (plotted on the x-axis), and salary (plotted on the y-axis). For this analysis, occupations employing fewer than 50 Hospitality workers, with growth rates below 0.0% between 2016–2019 (pre-COVID data is assumed to be a better indicator of the occupation's overall trajectory), and earnings less than $21.16 (the state's median hourly wage) were omitted.

Top Occupations in the Hospitality Cluster by 5-digit SOC

Bubble Size = 2021 Employment
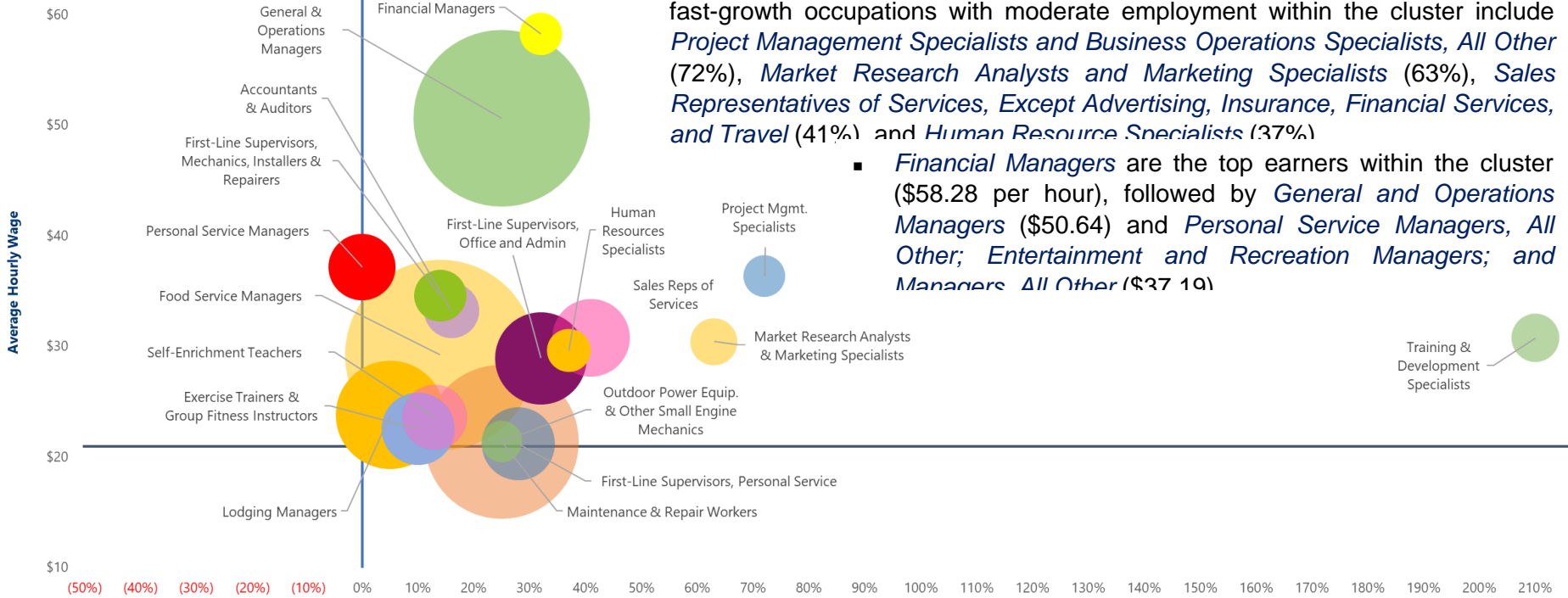
- *General and Operations Managers* is a top Hospitality occupation by all three metrics: employment (916 jobs), growth (25%), and wages ($50.64). *Food Service Managers* and *Maintenance and Repair Workers, General* are also a major source of cluster jobs (1,074 and 699, respectively) with high growth rates (14% and 25%), but relatively low wages ($29.24 and $21.42).

- *Training and Development Specialists* in the Hospitality industry grew rapidly from 2016 to 2019 (210%), and even picked up the pace during the pandemic. Other fast-growth occupations with moderate employment within the cluster include *Project Management Specialists and Business Operations Specialists, All Other* (72%), *Market Research Analysts and Marketing Specialists* (63%), *Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel* (41%), and *Human Resource Specialists* (37%).

- *Financial Managers* are the top earners within the cluster ($58.28 per hour), followed by *General and Operations Managers* ($50.64) and *Personal Service Managers, All Other; Entertainment and Recreation Managers; and Managers, All Other* ($37.19).

Average Hourly Wage

$60
$50
$40
$30
$20
$10

General & Operations Managers
Financial Managers
Accountants & Auditors
First-Line Supervisors, Mechanics, Installers & Repairers
Personal Service Managers
Food Service Managers
First-Line Supervisors, Office and Admin
Human Resources Specialists
Project Mgmt. Specialists
Sales Reps of Services
Self-Enrichment Teachers
Market Research Analysts & Marketing Specialists
Exercise Trainers & Group Fitness Instructors
Outdoor Power Equip. & Other Small Engine Mechanics
Training & Development Specialists
First-Line Supervisors, Personal Service
Lodging Managers
Maintenance & Repair Workers

(50%) (40%) (30%) (20%) (10%) 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 110% 120% 130% 140% 150% 160% 170% 180% 190% 200% 210%

Job Growth Rate, 2016 - 2019

Source: Emsi, 2022.1

Attachment 1: Hospitality Cluster Definition

This cluster spans 36 industries and employs 60,953 workers. It includes all industries in the *Accommodation and Food Services* sector (72) (except for Casino Hotels, which the State does not have or anticipate allowing), as well as most industries in the *Arts, Entertainment, and Recreation* sector (71), plus the *Scenic and Sightseeing Transportation* subsector (487), and selected industries from the *Administrative and Support Services* subsector (561).

NAICS	Industry	2021 Jobs
487110	Scenic and Sightseeing Transportation, Land	164
487210	Scenic and Sightseeing Transportation, Water	89
487990	Scenic and Sightseeing Transportation, Other	<10
561520	Tour Operators	71
561591	Convention and Visitors Bureaus	15
561920	Convention and Trade Show Organizers	92
711110	Theater Companies and Dinner Theaters	288
711130	Musical Groups and Artists	127
711190	Other Performing Arts Companies	25
711211	Sports Teams and Clubs	89
711212	Racetracks	287
711219	Other Spectator Sports	23
711310	Promoters of Performing Arts, Sports, and Similar Events with Facilities	140
711320	Promoters of Performing Arts, Sports, and Similar Events without Facilities	96
711510	Independent Artists, Writers, and Performers	1,252
712110	Museums	379
712120	Historical Sites	101
713110	Amusement and Theme Parks	496

NAICS	Industry	2021 Jobs
713120	Amusement Arcades	176
713910	Golf Courses and Country Clubs	2266
713920	Skiing Facilities	1,216
713930	Marinas	357
713950	Bowling Centers	172
713990	All Other Amusement and Recreation Industries	1,404
721110	Hotels (except Casino Hotels) and Motels	4,996
721191	Bed-and-Breakfast Inns	418
721199	All Other Traveler Accommodation	169
721211	RV (Recreational Vehicle) Parks and Campgrounds	489
721214	Recreational and Vacation Camps (except Campgrounds)	678
722310	Food Service Contractors	1,440
722320	Caterers	636
722410	Drinking Places (Alcoholic Beverages)	69
722511	Full-Service Restaurants	23,109
722513	Limited-Service Restaurants	13,285
722514	Cafeterias, Grill Buffets, and Buffets	115
722515	Snack and Nonalcoholic Beverage Bars	6,216

Total		**60,953**

Source: Emsi, 2022.3

Attachment 2: Hospitality Cluster Staffing Pattern

The top 54 occupations (e.g., all occupations with more than 100 Hospitality employees) represent 95.0% of all employment in the Hospitality Cluster. Altogether, employment spans 290 occupations for a total of 60,953 jobs.

Staffing Patterns for the Hospitality Cluster, 2021

SOC	Occupation	Share of Cluster's Jobs	Jobs in Cluster (2021)	Median Hourly Earnings	Job Growth 2016 - 2021		Job Growth 2016 - 2019	
					Change	Rate	Change	Rate
35-3023	Fast Food and Counter Workers	19.4%	11,824	$11.18	(736)	(6%)	130	1%
35-3031	Waiters and Waitresses	14.0%	8,512	$9.80	(3,728)	(30%)	(776)	(6%)
35-2014	Cooks, Restaurant	7.9%	4,844	$15.85	(808)	(14%)	263	5%
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	4.8%	2,953	$18.47	(7)	0%	335	11%
35-3011	Bartenders	4.0%	2,438	$9.48	(706)	(22%)	200	6%
41-2011	Cashiers	3.9%	2,349	$11.53	142	6%	365	17%
35-2015	Cooks, Short Order	3.1%	1,919	$12.61	(106)	(5%)	148	7%
35-9021	Dishwashers	3.0%	1,833	$11.35	(460)	(20%)	84	4%
35-2021	Food Preparation Workers	2.6%	1,563	$13.12	(68)	(4%)	74	5%
37-2012	Maids and Housekeeping Cleaners	2.4%	1,471	$13.16	(900)	(38%)	(275)	(12%)
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	2.3%	1,423	$11.78	(313)	(18%)	132	8%
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	2.2%	1,321	$9.33	(15)	(1%)	315	24%
35-2011	Cooks, Fast Food	2.1%	1,281	$11.65	(245)	(16%)	(66)	(4%)
53-3031	Driver/Sales Workers	1.9%	1,132	$11.77	307	37%	306	37%
11-9051	Food Service Managers	1.8%	1,074	$29.24	(2)	0%	154	14%
11-1021	General and Operations Managers	1.5%	916	$50.64	106	13%	202	25%
37-3011	Landscaping and Groundskeeping Workers	1.4%	882	$16.39	(161)	(15%)	43	4%
39-3091	Amusement and Recreation Attendants	1.3%	814	$9.91	(155)	(16%)	143	15%
43-4081	Hotel, Motel, and Resort Desk Clerks	1.2%	738	$12.96	(370)	(33%)	66	6%
49-9071	Maintenance and Repair Workers, General	1.1%	699	$21.42	28	4%	165	25%
35-1011	Chefs and Head Cooks	1.0%	629	$26.52	(185)	(23%)	(72)	(9%)
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	0.9%	520	$14.62	(115)	(18%)	14	2%
43-9061	Office Clerks, General	0.7%	451	$19.12	13	3%	117	27%
41-2031	Retail Salespersons	0.6%	364	$13.21	25	7%	102	30%
39-9032	Recreation Workers	0.6%	349	$13.60	(75)	(18%)	48	11%
11-9081	Lodging Managers	0.6%	347	$23.83	(41)	(10%)	18	5%
27-2042	Musicians and Singers	0.6%	342	$29.42	(13)	(4%)	(7)	(2%)

Staffing Patterns for the Hospitality Cluster, 2021 (continued)

SOC	Occupation	Share of Cluster's Jobs	Jobs in Cluster (2021)	Median Hourly Earnings	Job Growth 2016 - 2021		Job Growth 2016 - 2019	
					Change	Rate	Change	Rate
27-3043	Writers and Authors	0.5%	319	$25.23	(11)	(3%)	(32)	(10%)
43-3031	Bookkeeping, Accounting, and Auditing Clerks	0.5%	311	$20.67	(24)	(7%)	45	13%
35-3041	Food Servers, Nonrestaurant	0.5%	301	$11.95	(112)	(27%)	(32)	(8%)
27-1013	Fine Artists, Including Painters, Sculptors, and Illustrators	0.4%	260	$11.74	103	65%	58	37%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	0.4%	248	$28.94	11	5%	76	32%
27-2022	Coaches and Scouts	0.4%	237	$14.65	(18)	(7%)	9	4%
35-2012	Cooks, Institution and Cafeteria	0.4%	231	$16.93	(26)	(10%)	50	20%
51-3011	Bakers	0.4%	230	$15.32	53	30%	21	12%
37-1011	First-Line Supervisors of Housekeeping and Janitorial Workers	0.3%	194	$21.06	(11)	(5%)	34	17%
43-4051	Customer Service Representatives	0.3%	193	$18.39	43	29%	72	48%
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	0.3%	188	$18.80	(50)	(21%)	29	12%
33-9032	Security Guards	0.3%	187	$15.79	(44)	(19%)	6	2%
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	0.3%	177	$30.78	2	1%	71	41%
35-9099	Food Preparation and Serving Related Workers, All Other	0.3%	162	$11.37	29	22%	32	24%
39-9031	Exercise Trainers and Group Fitness Instructors	0.3%	156	$22.56	10	7%	14	10%
39-1098	First-Line Supervisors of Personal Service and Entertainment and Recreation Workers, Except Gambling Services	0.3%	156	$21.21	13	9%	41	28%
39-7018	Tour and Travel Guides	0.2%	144	$12.96	(37)	(21%)	2	1%
27-2099	Miscellaneous Entertainers and Performers, Sports and Related Workers	0.2%	133	$17.35	56	73%	55	71%
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	0.2%	131	$37.19	0	0%	0	0%
41-2021	Counter and Rental Clerks	0.2%	129	$17.51	(6)	(4%)	17	13%
25-3021	Self-Enrichment Teachers	0.2%	124	$23.63	(4)	(3%)	16	13%
53-3033	Light Truck Drivers	0.2%	119	$16.60	(35)	(23%)	17	11%
51-6011	Laundry and Dry-Cleaning Workers	0.2%	118	$12.53	(34)	(22%)	21	14%
37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	0.2%	110	$23.20	(22)	(17%)	(2)	(1%)
13-1121	Meeting, Convention, and Event Planners	0.2%	107	$24.11	(29)	(21%)	1	1%
27-2011	Actors	0.2%	105	$23.81	(20)	(16%)	(6)	(5%)
27-1012	Craft Artists	0.2%	100	$6.99	(7)	(7%)	(12)	(12%)

Source: Emsi, 2022.1

Appendix VI: Construction Industry Cluster Analysis

Key Takeaways

The Construction cluster is experiencing strong growth, even through the pandemic. It accounts for a fairly large share of the State's businesses, and its employees are productive. The State does not have industry concentration or a competitive advantage in this cluster. In keeping with trends among the other clusters, some of the top occupations are in management positions.

- The Construction industry cluster employs 42,040 workers, or 6% of the total workforce in New Hampshire. It is the fourth largest cluster in the state.
- With a growth rate of 10% from 2016–2026, the Construction cluster is the second fastest growing cluster in the State (behind Technology at 33%). This cluster did not experience any job losses during the pandemic, though growth has been slowing a bit since 2019. It is projected to grow an additional 2% by 2026.
- This cluster accounts for the largest share of the State's payroll business locations (9%). Construction companies tend to be rather small, with an average of 8 employees.

Top Industries

- All Other Specialty Trade Contractors
- Drywall and Insulation Contractors
- Electrical Contractors and Other Wiring Installation Contractors
- New Multifamily Housing Construction (except For-Sale Builders)
- Oil and Gas Pipeline and Related Structures Construction
- Plumbing, Heating, and Air-Conditioning Contractors
- Residential Remodelers
- Siding Contractors
- Site Preparation Contractors
- Structural Steel and Precast Concrete Contractors

- The Construction cluster is one of the smaller contributors to the State's gross regional product (only 5% of total GRP), but its employees are relatively productive ($107,041 per job).

- The State of New Hampshire does not have any industry concentration in the Construction cluster (LQ = 1.00), and that has been consistent over time. Since Construction is typically not export-oriented, a neutral industry concentration is to be expected.

- New Hampshire does not have a competitive advantage in Construction. Between 2016 and 2026, this cluster will have 970 fewer jobs than expected if it had followed national and industry trends.

- The Construction cluster has a high retirement risk, with 29% of the workforce aged 55 and over.

- Over 62% of jobs in this cluster are within the *Construction and Extraction* occupation sector. At the 5-digit level, *Construction Laborers* (12%) and *Carpenters* (12%) account for 24% of cluster employment.

Top Occupations

- Construction Managers
- Earth Drillers and Explosives Workers, Ordnance Handling Experts, and Blasters
- Electrical Power-Line Installers and Repairers
- Electricians
- Floor Layers, Except Carpet, Wood, and Hard Tiles
- General and Operations Managers
- Operating Engineers
- Other Construction Equipment Operators
- Pile Driver Operators
- Project Management Specialists and Business Operations Specialists8

Overview

Construction is the fourth largest industry cluster in the State. This cluster includes all industries in the *Construction* sector (NAICS 23). See Appendix C for a full list of the industries included in this cluster.

Jobs	Growth Rate	Average Earnings
42,949	**10%** (2016–2026)	**$71,926**

Top Industries (6-digit NAICS)

By Employment	*By Location Quotient*	*By Growth Rate (2016–2021)*	*By Competitive Effect (Shift-Share)*
1. Plumbing, Heating, and Air-Conditioning Contractors (5,853)	1. Siding Contractors (1.6)	1. Oil and Gas Pipeline and Related Structures Construction (387%)	1. Electrical Contractors and Other Wiring Installation Contractors (211)
2. Electrical Contractors and Other Wiring Installation Contractors (4,768)	2. Drywall and Insulation Contractors (1.5)	2. New Multifamily Housing Construction (except For-Sale Builders) (51%)	2. Plumbing, Heating, and Air-Conditioning Contractors (187)
3. Residential Remodelers (4,067)	3. Site Preparation Contractors (1.5)	3. Structural Steel and Precast Concrete Contractors (31%)	3. All Other Specialty Trade Contractors (165)

Payroll Business Locations	Total GRP	Location Quotient
5,050	**$4.5 billion**	**1.00**
9% of the State's total businesses	*6% of the State's gross regional product*	*Unchanged since 2016*

Competitive Effect	Unemployment	Retirement Risk
-970 jobs (2016–2026)	**550 unemployed** as of Nov. 2021	**High**
20% fewer jobs than expected due to local factors	*Down from a peak of 2,820 in February 2020[12]*	*29% of workers retire soon*

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[12] Construction is a seasonal industry and the unemployment rate in Feb 2020 was lower than the January or February peaks in 2017, 2018, and 2019.

Staffing Pattern

There are 42,040 jobs in the Construction industry cluster, spread across approximately 282 occupations. See Appendix D for the full staffing pattern. The top 30 occupations in terms of share of employment are shown to the right. Together, these 30 occupations account for 83% of the cluster's total employment. *Construction Laborers* and *Carpenters* each account for 12% of the cluster's jobs, followed by *Electricians* (7%), *First-Line Supervisors* (6%), *Construction Managers* (6%), and *Plumbers, Pipefitters, and Steamfitters* (5%).

Staffing Pattern for Construction Cluster: Top 30 Occupations, 5 digit SOC

Occupation	Share of Cluster's 2021 Jobs
Construction Laborers	12.3%
Carpenters	12.3%
Electricians	6.6%
First-Line Supervisors of Construction Trades and Extraction Workers	5.9%
Construction Managers	5.8%
Plumbers, Pipefitters, and Steamfitters	4.7%
Painters, Construction and Maintenance	4.6%
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	4.2%
Office Clerks, General	3.4%
Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	3.2%
Operating Engineers and Other Construction Equipment Operators	2.4%
General and Operations Managers	2.0%
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	1.6%
Heavy and Tractor-Trailer Truck Drivers	1.5%
Bookkeeping, Accounting, and Auditing Clerks	1.3%
Drywall and Ceiling Tile Installers	1.3%
Cost Estimators	1.1%
Roofers	1.0%
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	1.0%
Sheet Metal Workers	0.9%
Brickmasons and Blockmasons	0.9%
Electrical Power-Line Installers and Repairers	0.8%
Cement Masons and Concrete Finishers	0.7%
Project Management Specialists and Business Operations Specialists, All Other	0.7%
Insulation Workers, Floor, Ceiling, and Wall	0.5%
Paving, Surfacing, and Tamping Equipment Operators	0.5%
Plasterers and Stucco Masons	0.5%
First-Line Supervisors of Mechanics, Installers, and Repairers	0.5%
Glaziers	0.5%
Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	0.5%
Total	83.2%

Source: Emsi, 2022.1

Staffing for Construction Cluster by 2-Digit Occupation

Management, 11.8%
Installation, Maintenance, and Repair, 8.4%
Office and Admin. Support, 7.8%
Business and Financial Operations, 2.6%
Construction and Extraction, 62.4%
Transportation and Material Moving, 2.6%
Sales and Related, 1.5%
Production, 1.0%
All Other, 1.9%

Source: Emsi, 2022.1

Job Growth Trends by Occupation

Historical and projected job growth trends for the top 8 occupation sectors within the Construction cluster are shown below (note the Construction and Extraction sector plotted on the right y-axis). These 8 sectors account for 98% of the cluster's jobs in 2021.

2016–2026

All the top Construction occupation sectors are growing over the 10-year period, projected to increase employment by 10%. Four of the top 8 are expected to grow by 30% or more: *Production* (35%), *Sales and Related* (32%), *Management* (31%), and *Business and Financial Operations* (30%). *Construction and Extraction* occupations have the slowest expected growth at 3% from 2016 to 2026, but as the largest occupational group by far, even slow growth represents a significant number of new jobs.

2016–2019

Prior to the COVID-19 pandemic, nearly all Construction occupation sectors were growing, for an overall rate of 5%. *Production* (23%), *Sales and Related* (20%), and *Transportation and Material Moving* (18%) were the fastest-growing major occupational groups. *Installation, Maintenance, and Repair* and *Construction and Extraction* were the slowest, at 5% and 2%, respectively.

2019–2021

Overall, New Hampshire's Construction cluster grew by 3% during the pandemic. Only *Construction and Extraction* occupations shrank, but by just 0.3%, shedding fewer than 100 jobs. The fastest growth was in *Business and Financial Operations* (13%), *Management* (11%), and *Production* jobs (9%). The other major occupation sectors increased by 2% (*Transportation and Material Moving*) to 8% (*Installation, Maintenance, and Repair*).

2021–2026

Looking forward, all occupational sectors are projected to grow except *Office and Administrative Support* (-1%). *Management* occupations are expected to grow the fastest, at 5% over the next few years, followed by *Sales and Related* occupations and

Construction Cluster Job Growth by 2 Digit Occupation

Legend:
- Management
- Office and Admin. Support
- Transportation and Material Moving
- Production
- Installation, Maintenance, and Repair
- Business and Financial Operations
- Sales and Related
- Construction and Extraction (right axis)
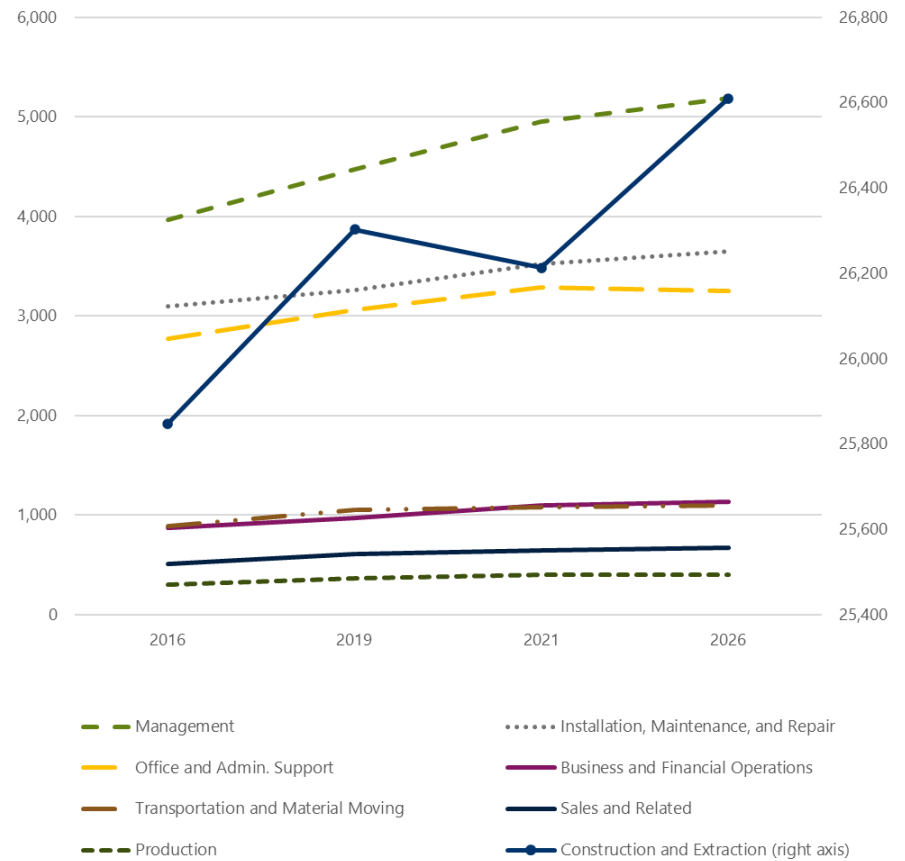
Source: Emsi, 2022.1

Installation, Maintenance, and Repair, both at 4%. *Production* jobs are expected to increase by just 1% by 2026.

Top Occupations

The occupations below are the 21 top occupations in New Hampshire's Construction cluster, as determined by size (represented by bubble size), growth (plotted on the x-axis), and salary (plotted on the y-axis). For this analysis, occupations employing fewer than 100 Construction workers, with 2016–2019 growth rates below -5.0% (pre-COVID data is assumed to be a better indicator of the occupation's overall trajectory), and earnings less than $21.16 (the state's median hourly wage) were omitted.

Average Hourly Wage (y-axis: $15 to $55)

Job Growth Rate, 2016–2019 (x-axis: (100%) to 200%)

Labeled occupations:
- General & Operations Mgrs.
- Electrical Power-Line Installers & Repairers
- Pile Driver Operators
- Construction Mgrs.
- Personal Service Mgrs.
- First-Line Supervisors of Mechanics, Installers & Repairers
- Accountants & Auditors
- Sales Reps. Wholesale & Mfg.
- First-Line Supervisors of Construction Trades & Extraction Workers
- Sales Reps. of Services
- Electricians
- Mobile Heavy Equip. Mechanics
- Heating, A.C. & Refrig. Mechanics & Installers
- Earth Drillers & Explosives Workers, Ordnance Handling Experts & Blasters
- Plumbers, Pipefitters & Steamfitters
- Carpenters
- Operating Engineers
- Floor Layers
- Project Mgmt. Specialists
- Cement Masons & Concrete Finishers
- Heavy & Tractor-Trailer Truck Drivers

State of New Hampshire Workforce Assessment

Top Occupations in the Construction Cluster by 5-digit SOC

Bubble Size = 2021 Employment

- No occupation ranks in the top for all three metrics (size, growth, and salary), but 8 are among the top 10 on two measures. *Electricians* and *Construction Managers* are the largest of these, with 2,777 and 2,430 jobs, respectively, in 2021. *Electrician* jobs grew by 25% from 2016 to 2019 and pay $26.30, in about the middle of the group. *Construction Manager* jobs pay well, with median hourly earnings of $36.10, and grew 16% pre-pandemic.

  - *Project Management Specialists and Business Operations Specialists* are the fasts growing occupation, increasing by 175% from 2016 to 2019. Other fast-growth occupations include *Floor Layers, Except Carpet, Wood, and Hard Tiles* (61%), *Earth Drillers and Explosives Workers, Ordnance Handling Experts, and Blasters* (54%), and *Operating Engineers and Other Construction Equipment Operators* (42%).

  - *General and Operations Managers* are the top earners within the cluster at $50.64 per hour, followed by *Electrical Power-Line Installers and Repairers* ($43.34) and *Pile Driver*

Attachment 1: Construction Cluster Definition

This cluster spans 31 industries and employs 42,040 workers. It includes all industries in the *Construction* sector (23).

NAICS	Industry	2021 Jobs	NAICS	Industry	2021 Jobs
236115	New Single-Family Housing Construction (except For-Sale Builders)	3,113	238150	Glass and Glazing Contractors	195
236116	New Multifamily Housing Construction (except For-Sale Builders)	106	238160	Roofing Contractors	635
236117	New Housing For-Sale Builders	325	238170	Siding Contractors	429
236118	Residential Remodelers	4067	238190	Other Foundation, Structure, and Building Exterior Contractors	176
236210	Industrial Building Construction	406	238210	Electrical Contractors and Other Wiring Installation Contractors	4,768
236220	Commercial and Institutional Building Construction	2072	238220	Plumbing, Heating, and Air-Conditioning Contractors	5,853
237110	Water and Sewer Line and Related Structures Construction	756	238290	Other Building Equipment Contractors	597
237120	Oil and Gas Pipeline and Related Structures Construction	98	238310	Drywall and Insulation Contractors	2,176
237130	Power and Communication Line and Related Structures Construction	783	238320	Painting and Wall Covering Contractors	2,066
237210	Land Subdivision	78	238330	Flooring Contractors	888
237310	Highway, Street, and Bridge Construction	1,540	238340	Tile and Terrazzo Contractors	277
237990	Other Heavy and Civil Engineering Construction	309	238350	Finish Carpentry Contractors	1,372
238110	Poured Concrete Foundation and Structure Contractors	1039	238390	Other Building Finishing Contractors	445
238120	Structural Steel and Precast Concrete Contractors	332	238910	Site Preparation Contractors	3,683
238130	Framing Contractors	609	238990	All Other Specialty Trade Contractors	1,956
238140	Masonry Contractors	892			
Total					**42,040**

Source: Emsi, 2022.3

Attachment 2: Construction Cluster Staffing Pattern

The top 52 occupations (e.g. all occupations with more than 100 Construction employees) represent 90.9% of all employment in the Construction Cluster. Altogether, employment spans 251 occupations for a total of 42,040 jobs.

Staffing Patterns for the Construction Cluster, 2021

| SOC	Occupation	Share of Cluster's Jobs	Jobs in Cluster (2021)	Median Hourly Earnings	Job Growth 2016–2021 Change	Job Growth 2016–2021 Rate	Job Growth 2016–2019 Change	Job Growth 2016–2019 Rate
47-2061	Construction Laborers	12.3%	5,176	$18.62	(284)	(5%)	(196)	(4%)
47-2031	Carpenters	12.3%	5,159	$22.86	(237)	(4%)	(156)	(3%)
47-2111	Electricians	6.6%	2,777	$26.30	613	28%	543	25%
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	5.9%	2,500	$30.52	(79)	(3%)	(68)	(3%)
11-9021	Construction Managers	5.8%	2,430	$36.10	503	26%	313	16%
47-2152	Plumbers, Pipefitters, and Steamfitters	4.7%	1,956	$25.14	205	12%	170	10%
47-2141	Painters, Construction and Maintenance	4.6%	1,925	$18.56	(60)	(3%)	(14)	(1%)
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	4.2%	1,773	$26.70	318	22%	197	14%
43-9061	Office Clerks, General	3.4%	1,430	$19.12	469	49%	294	31%
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	3.2%	1,335	$37.19	252	23%	87	8%
47-2073	Operating Engineers and Other Construction Equipment Operators	2.4%	1,023	$24.03	343	50%	286	42%
11-1021	General and Operations Managers	2.0%	854	$50.64	150	21%	74	10%
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	1.6%	666	$18.80	(72)	(10%)	(54)	(7%)
53-3032	Heavy and Tractor-Trailer Truck Drivers	1.5%	651	$23.15	139	27%	119	23%
43-3031	Bookkeeping, Accounting, and Auditing Clerks	1.3%	556	$20.67	39	7%	10	2%
47-2081	Drywall and Ceiling Tile Installers	1.3%	548	$21.20	(98)	(15%)	(147)	(23%)
13-1051	Cost Estimators	1.1%	462	$31.88	(79)	(15%)	(66)	(12%)
47-2181	Roofers	1.0%	431	$20.09	(54)	(11%)	(9)	(2%)
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	1.0%	413	$30.78	102	33%	71	23%
47-2211	Sheet Metal Workers	0.9%	384	$23.28	16	4%	7	2%
47-2021	Brickmasons and Blockmasons	0.9%	362	$25.20	(80)	(18%)	(79)	(18%)
49-9051	Electrical Power-Line Installers and Repairers	0.8%	321	$43.34	98	44%	44	20%
47-2051	Cement Masons and Concrete Finishers	0.7%	304	$22.18	77	34%	75	33%
13-1198	Project Management Specialists and Business Operations Specialists, All Other	0.7%	285	$36.37	220	338%	114	175%

Staffing Patterns for the Construction Cluster, 2021 (continued)

SOC	Occupation	Share of Cluster's Jobs	Jobs in Cluster (2021)	Median Hourly Earnings	Job Growth 2016–2021		Job Growth 2016–2019	
					Change	Rate	Change	Rate
47-2131	Insulation Workers, Floor, Ceiling, and Wall	0.5%	221	$17.92	(30)	(12%)	23	9%
47-2071	Paving, Surfacing, and Tamping Equipment Operators	0.5%	219	$22.52	42	24%	8	4%
47-2161	Plasterers and Stucco Masons	0.5%	209	$21.09	51	32%	11	7%
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	0.5%	206	$34.61	33	19%	11	7%
47-2121	Glaziers	0.5%	204	$22.74	27	16%	23	13%
47-3015	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	0.5%	201	$16.90	62	44%	56	40%
47-2042	Floor Layers, Except Carpet, Wood, and Hard Tiles	0.5%	189	$21.88	84	80%	64	61%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	0.4%	187	$28.94	32	20%	13	8%
47-2044	Tile and Stone Setters	0.4%	187	$22.59	(93)	(33%)	(72)	(26%)
47-2221	Structural Iron and Steel Workers	0.4%	180	$20.77	(30)	(14%)	(0)	(0%)
49-9098	Helpers--Installation, Maintenance, and Repair Workers	0.4%	176	$15.17	64	56%	47	42%
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	0.4%	173	$25.31	48	38%	41	32%
13-2011	Accountants and Auditors	0.4%	168	$33.25	31	23%	17	13%
47-2171	Reinforcing Iron and Rebar Workers	0.4%	164	$20.35	(19)	(10%)	(15)	(8%)
47-3013	Helpers--Electricians	0.4%	163	$13.45	64	64%	39	39%
47-3012	Helpers--Carpenters	0.4%	153	$13.93	60	64%	46	49%
51-4121	Welders, Cutters, Solderers, and Brazers	0.3%	145	$22.67	24	20%	11	9%
47-5022	Excavating and Loading Machine and Dragline Operators, Surface Mining	0.3%	142	$18.77	(91)	(39%)	(45)	(19%)
47-3011	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	0.3%	141	$19.66	47	51%	31	33%
49-9071	Maintenance and Repair Workers, General	0.3%	137	$21.42	7	5%	(5)	(4%)
17-2051	Civil Engineers	0.3%	131	$40.40	1	1%	(7)	(5%)
47-2072	Pile Driver Operators	0.3%	121	$39.80	5	4%	17	14%
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	0.3%	119	$15.23	10	9%	8	7%
47-5097	Earth Drillers, Except Oil and Gas; and Explosives Workers, Ordnance Handling Experts, and Blasters	0.3%	117	$26.55	45	62%	39	54%
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	0.3%	110	$31.48	2	2%	1	1%
47-2022	Stonemasons	0.3%	110	$23.72	(20)	(15%)	(4)	(3%)
43-4051	Customer Service Representatives	0.3%	106	$18.39	47	80%	40	68%
37-3011	Landscaping and Groundskeeping Workers	0.2%	103	$16.39	(3)	(3%)	(10)	(9%)

Source: Emsi, 2022.1

Appendix VII: Technology Industry Cluster Analysis
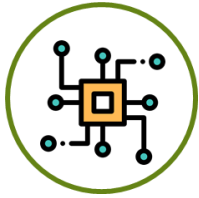
Key Takeaways

Although the Technology industry cluster is relatively small, it is driving job growth in the State. Not only is the cluster rapidly growing, it has the highest wages and the most productive workers of any of the clusters and a significant competitive advantage. In addition to the top occupations in the *Computer and Mathematical* sector, this cluster follows trends across the other cluster in terms of demand for management.

- New Hampshire's Technology cluster employs 22,373 workers, accounting for just 3% of jobs.

- The Technology cluster is the State's fastest-growing cluster, with 33% growth between 2016 and 2026 (more than triple the rate of the next fastest growth cluster, Construction at 10%). Unlike many of the other clusters, Technology job growth remained steady during the height of the COVID-19 pandemic, growing 5% between 2019 and 2021. It is projected to grow an additional 12% by 2026 for a total of 6,167 jobs added over the ten-year time period.

- The Technology cluster has the smallest businesses among the clusters with an average of 6 jobs per location.

- The Technology cluster accounts for 6% of the State's GRP, and it has the most productive workforce. Its workers produce $259,000 of GRP per job compared to the next highest cluster, Manufacturing at $175,000 per job.

- This cluster has the highest paying jobs at $151,810 on average. However, Technology workers in New Hampshire earn less than the national average of $157,121 for an area this size.

- This cluster has the highest industry concentration relative to the nation (LQ = 1.25). Overall, the LQ is projected to increase by 11% to 1.29 from 2016 to 2026.

- New Hampshire has a competitive advantage in Technology, adding 1,907 more jobs than expected from 2016 to 2026 due to local factors. This means 45% of the jobs created cannot be explained by national or industry growth.

- Over 48% of jobs within the cluster fall within the *Computer and Mathematical* occupation sector, which is projected to increase by 43% from 2016 through 2026. The Technology cluster has the highest concentration of employment in a single occupation,

Top Industries

- Computer Systems Design Services
- Custom Computer Programming Services
- Other Computer-Related Services
- Software Publishers
- Wired Telecommunications Carriers

Top Occupations

- Computer and Information Systems Analysts
- Computer and Information Systems Managers
- Computer Network Architects
- Computer Occupations, All Other
- Computer Systems Analysts
- Computer User Support Specialists
- Marketing Managers
- Project Management Specialists and Business Operations Specialists
- Sales Managers
- Software Developers & Software Quality Assurance Analysts

with *Software Developers and Software Quality Assurance Analysts and Testers* accounting for 21% of the cluster's total employment.
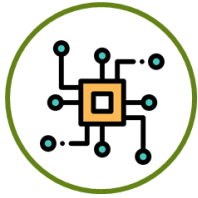
Overview

Technology is the smallest industry cluster in the State. This cluster consists of a selection of *Information* sectors (NAICS 5112 *Software Publishers*, NAICS 517 *Telecommunications*, and NAICS 518 *Data Processing, Hosting, and Related Services*) and *Technical Services* (NAICS 5415 *Computer Systems Design and Related Services*). See Appendix C for a full list of the industries included in this cluster.

Jobs	Growth Rate	Average Earnings
22,373	**33%** (2016–2026)	**$151,818**
3% of the total workforce	*2016–2019: 13% I 2021–2026: 12%*	*$157,121 national avg. for an area this size*

Payroll Business Locations	Total GRP	Location Quotient
3,848	**$5.8 billion**	**1.25**
7% of the State's total businesses	*6% of the State's gross regional product*	*Up 7.3% since 2016*

Competitive Effect	Unemployment	Retirement Risk
1,907 jobs (2016–2026)	**1,330 unemployed** as of Nov 2021	**High**
45% more jobs than expected due to local factors	*Down from a peak of 5,176 in April 2020*	*25% of workers retire soon*

Top Industries (6-digit NAICS)

By Employment

1. Computer Systems Design Services (8,254)
2. Custom Computer Programming Services (4,378)
3. Software Publishers (3,886)

By Location Quotient

1. Software Publishers (1.6)
2. Computer Systems Design Services (1.6)
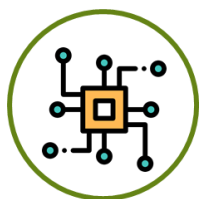3. Wired Telecommunications Carriers (1.5)

By Growth Rate (2016–2021)

1. Computer Systems Design Services (65%)
2. Other Computer-Related Services (65%)
3. Software Publishers (20%)

By Competitive Effect (Shift-Share)

1. Computer Systems Design Services (2,640)
2. Wired Telecommunications Carriers (382)
3. Other Computer-Related Services (180)

Staffing Pattern

There are 22,068 jobs in the Technology industry cluster, spread across approximately 213 occupations. See Appendix D for the full staffing pattern. The top 30 occupations in terms of share of employment are shown to the right. Together, these 30 occupations account for 82% of the cluster's total employment. *Software Developers and Software Quality Assurance Analysts and Testers* account for 21% of the cluster's jobs, followed by *Computer User Support Specialists* (6%), *Computer Systems Analysts* (5%), *Computer and Information Systems Managers* (5%), and *Sales Representatives of Services* (4%).

Staffing Pattern for Technology Cluster: Top 30 Occupations, 5 digit SOC

Occupation	Share of Cluster's 2021 Jobs
Software Developers and Software Quality Assurance Analysts and Testers	20.5%
Computer User Support Specialists	5.8%
Computer Systems Analysts	5.3%
Computer and Information Systems Managers	5.1%
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	4.3%
Network and Computer Systems Administrators	3.4%
Computer Programmers	3.3%
Customer Service Representatives	3.2%
General and Operations Managers	2.7%
Computer Occupations, All Other	2.4%
Project Management Specialists and Business Operations Specialists, All Other	2.3%
Telecommunications Equipment Installers and Repairers, Except Line Installers	2.3%
Web Developers and Digital Interface Designers	1.9%
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	1.8%
Computer Network Support Specialists	1.7%
Management Analysts	1.7%
Market Research Analysts and Marketing Specialists	1.6%
Office Clerks, General	1.4%
Information Security Analysts	1.1%
Computer Network Architects	1.1%
Accountants and Auditors	1.1%
Human Resources Specialists	1.0%
First-Line Supervisors of Office and Administrative Support Workers	1.0%
Sales Managers	0.9%
Marketing Managers	0.9%
Financial Managers	0.9%
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	0.9%
Telecommunications Line Installers and Repairers	0.9%
Bookkeeping, Accounting, and Auditing Clerks	0.8%
Database Administrators and Architects	0.8%
Total	**82.2%**

Source: Emsi, 2022.1

Staffing for Technology Cluster by 2-Digit Occupation
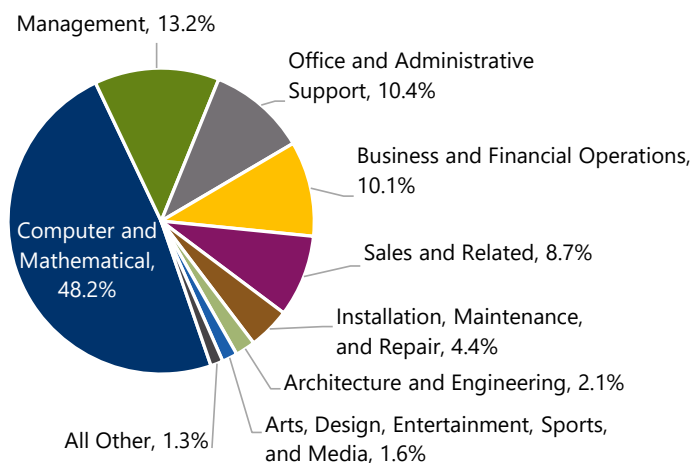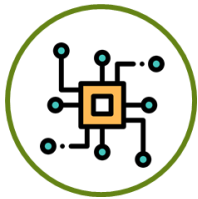
- Management, 13.2%
- Office and Administrative Support, 10.4%
- Business and Financial Operations, 10.1%
- Computer and Mathematical, 48.2%
- Sales and Related, 8.7%
- Installation, Maintenance, and Repair, 4.4%
- Architecture and Engineering, 2.1%
- Arts, Design, Entertainment, Sports, and Media, 1.6%
- All Other, 1.3%

Source: Emsi, 2022.1

Job Growth Trends by Occupation

Historical and projected job growth trends for the top 8 occupation sectors within the Technology cluster are shown below (note the Computer and Mathematical sector plotted on the right y-axis). These 8 sectors account for 99% of jobs in the cluster in 2021.

2016–2026

Overall, the top Technology occupation sectors are growing rapidly over the 10-year period, projected to increase employment by 32%. These gains are primarily concentrated in the *Business and Financial Operations* (66%), *Management* (57%), and *Computer and Mathematical* (43%) occupations. *Installation, Maintenance, and Repair* occupations are shrinking, losing 19% of jobs from 2016 to 2026, while *Office and Administrative Support* occupations are stagnant, shedding less than 1% of jobs.

2016–2019

Prior to the COVID-19 pandemic, occupational growth was mixed across the Technology cluster. Although total cluster employment increased 13%, half of the top 8 occupation sectors shrank. Jobs in the *Business and Financial Operations* (30%), *Management* (29%), and *Computer and Mathematical* (19%) occupations grew fastest, while *Installation, Maintenance, and Repair* (-23%), *Arts, Design, Entertainment, Sports, and Media* (-8%), and *Office and Administrative Support* (-4%) jobs declined.

2019–2021

During the pandemic, New Hampshire's Technology cluster continued to grow, expanding by 5%. Only one of the top 8 occupation sectors experienced job losses, with *Installation, Maintenance, and Repair* contracting by 2%. *Business and Financial Operations* and *Management* occupations were the most resilient, growing by 13% and 10%, respectively.

2021–2026

Looking forward, all sectors are projected to grow over the next few years. The fastest-growing top occupations are expected to be *Computer and Mathematical* (15%), *Architecture and Engineering* (13%), *Business and Financial Operations* (13%), *Arts, Design, Entertainment, Sports, and Media* (11%), and *Management* (11%).

Technology Cluster Job Growth by 2 Digit Occupation
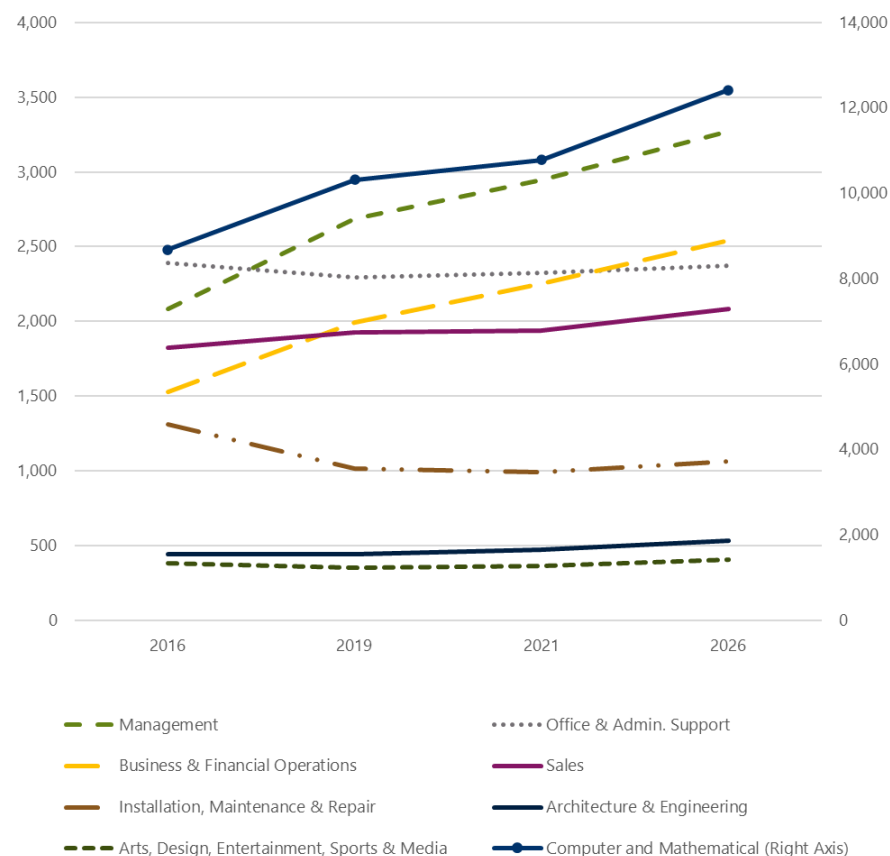
Legend:
- Management
- Business & Financial Operations
- Installation, Maintenance & Repair
- Arts, Design, Entertainment, Sports & Media
- Office & Admin. Support
- Sales
- Architecture & Engineering
- Computer and Mathematical (Right Axis)

Source: Emsi, 2022.1
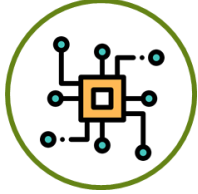
Top Occupations

The occupations below are the 21 top occupations in New Hampshire's Technology cluster, as determined by size (represented by bubble size), growth (plotted on the x-axis), and salary (plotted on the y-axis). For this analysis, occupations employing fewer than 100 Technology workers, with growth rates below 0.0% between 2016–2019 (pre-COVID data is assumed to be a better indicator of the occupation's overall trajectory), and earnings less than $21.16 (the state's median hourly wage) were omitted.

■ *Computer and Information Systems Managers* and *Computer Occupations, All Other* are the top two Technology occupations by all three metrics: employment (1,144 and 531, respectively), growth (48% and 61%), and wages ($68.13 and $47.49). *Software Developers & Software Quality Assurance Analysts* and *Computer User Support Specialists* were also major sources of jobs (4,589 and 1,303, respectively) with relatively high growth rates (19% and 17%) and good wages ($52.70 and $25.15).

■ *Software Developers and Software Quality Assurance Analysts and Testers* is the largest occupation in this cluster with 4,589 employees (21% of total employment, followed by *Computer Systems Analysts* (1,189) and *Computer and Information Systems Analysts* (1,303).

cluster experienced strong growth between 2016 and 2019 and even picked up the pace during the pandemic. *Project Management Specialists and Business Operations Specialists* was the fastest growing occupation (76%), followed by *Computer Occupations, All Other* (60%), and *Computer and Information Systems Managers* (48%).

■ *Sales Managers* are the top earners within the cluster ($71.13 per hour), followed by *Computer and Information Systems Managers* ($68.13), *Computer Network Architects* ($62.04), and *Marketing Managers* ($60.55).

Top Occupations in the Technology Cluster by 5-digit SOC

Bubble Size = 2021 Employment

Source: Emsi, 2022.1
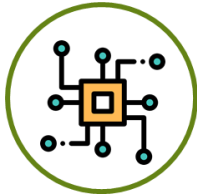
Attachment 1: Technology Cluster Definition

This cluster spans 10 industries and employs 22,373 workers. It includes selected industries from the *Information* sector (51) and the *Professional, Scientific, and Technical Services* sector (54).

NAICS	Industry	2021 Jobs
511210	Software Publishers	3,886
517311	Wired Telecommunications Carriers	3,336
517312	Wireless Telecommunications Carriers (except Satellite)	151
517410	Satellite Telecommunications	<10
517919	All Other Telecommunications	32
518210	Data Processing, Hosting, and Related Services	1,314
541511	Custom Computer Programming Services	4,378
541512	Computer Systems Design Services	8,254
541513	Computer Facilities Management Services	479
541519	Other Computer Related Services	533
Total		**22,373**

Source: Emsi, 2022.3

BEA   State of New Hampshire Workforce Assessment
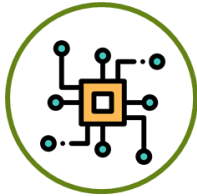
Attachment 2: Technology Cluster Staffing Pattern

The top 44 occupations (e.g. all occupations with more than 75 Technology employees) represent 89% of all employment in the Technology Cluster. Altogether, employment spans 211 occupations for a total of 22,373 jobs.

Staffing Patterns for the Technology Cluster, 2021

SOC	Occupation	Share of Cluster's Jobs	Jobs in Cluster (2021)	Median Hourly Earnings	Job Growth 2016–2021		Job Growth 2016–2019	
					Change	Rate	Change	Rate
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	20.5%	4,589	$52.70	931	25%	702	19%
15-1232	Computer User Support Specialists	5.8%	1,303	$25.15	252	24%	181	17%
15-1211	Computer Systems Analysts	5.3%	1,189	$44.12	260	28%	284	31%
11-3021	Computer and Information Systems Managers	5.1%	1,144	$68.13	446	64%	332	48%
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	4.3%	955	$30.78	231	32%	181	25%
15-1244	Network and Computer Systems Administrators	3.4%	754	$41.54	120	19%	90	14%
15-1251	Computer Programmers	3.3%	746	$37.33	(103)	(12%)	(40)	(5%)
43-4051	Customer Service Representatives	3.2%	724	$18.39	21	3%	23	3%
11-1021	General and Operations Managers	2.7%	603	$50.64	83	16%	59	11%
15-1299	Computer Occupations, All Other	2.4%	531	$47.49	200	60%	203	61%
13-1198	Project Management Specialists and Business Operations Specialists, All Other	2.3%	512	$36.37	286	126%	171	76%
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	2.3%	507	$33.82	(303)	(37%)	(254)	(31%)
15-1257	Web Developers and Digital Interface Designers	1.9%	432	$28.42	47	12%	(14)	(4%)
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	1.8%	410	$45.58	(141)	(26%)	(111)	(20%)
15-1231	Computer Network Support Specialists	1.7%	380	$31.24	151	66%	80	35%
13-1111	Management Analysts	1.7%	379	$44.14	122	47%	96	37%
13-1161	Market Research Analysts and Marketing Specialists	1.6%	358	$30.45	104	41%	68	27%
43-9061	Office Clerks, General	1.4%	318	$19.12	28	10%	25	9%
15-1212	Information Security Analysts	1.1%	248	$49.13	106	75%	64	45%
15-1241	Computer Network Architects	1.1%	247	$62.04	58	31%	34	18%
13-2011	Accountants and Auditors	1.1%	244	$33.25	26	12%	20	9%
13-1071	Human Resources Specialists	1.0%	229	$29.65	77	51%	49	32%

Staffing Patterns for the Technology Cluster, 2021 (continued)

SOC	Occupation	Share of Cluster's Jobs	Jobs in Cluster (2021)	Median Hourly Earnings	Job Growth 2016–2021		Job Growth 2016–2019	
					Change	Rate	Change	Rate
43-1011	First-Line Supervisors of Office and Administrative Support Workers	1.0%	218	$28.94	12	6%	1	1%
11-2022	Sales Managers	0.9%	212	$71.13	85	67%	59	46%
11-2021	Marketing Managers	0.9%	212	$60.55	69	49%	49	34%
11-3031	Financial Managers	0.9%	204	$58.28	69	51%	46	34%
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	0.9%	203	$18.80	(7)	(3%)	(4)	(2%)
49-9052	Telecommunications Line Installers and Repairers	0.9%	191	$26.19	(66)	(26%)	(60)	(23%)
43-3031	Bookkeeping, Accounting, and Auditing Clerks	0.8%	183	$20.67	(3)	(1%)	(1)	(1%)
15-1245	Database Administrators and Architects	0.8%	174	$47.29	52	43%	34	28%
13-1151	Training and Development Specialists	0.8%	173	$30.79	57	49%	36	31%
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	0.7%	164	$37.19	5	3%	(17)	(11%)
41-1012	First-Line Supervisors of Non-Retail Sales Workers	0.7%	155	$39.94	(1)	(1%)	(5)	(3%)
41-9031	Sales Engineers	0.6%	134	$58.55	(12)	(8%)	(2)	(1%)
43-9021	Data Entry Keyers	0.5%	118	$16.58	(93)	(44%)	(86)	(41%)
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	0.5%	105	$31.48	33	45%	31	43%
13-1028	Buyers and Purchasing Agents	0.5%	104	$32.05	36	54%	20	29%
17-2072	Electronics Engineers, Except Computer	0.4%	98	$53.46	(15)	(13%)	(12)	(10%)
11-1011	Chief Executives	0.4%	90	$65.13	18	26%	4	6%
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	0.4%	87	$34.61	4	5%	(1)	(1%)
15-2031	Operations Research Analysts	0.4%	87	$44.65	(1)	(1%)	3	3%
17-2071	Electrical Engineers	0.4%	86	$48.53	(3)	(4%)	(8)	(9%)
43-3021	Billing and Posting Clerks	0.4%	83	$19.58	32	63%	17	33%
49-2011	Computer, Automated Teller, and Office Machine Repairers	0.4%	82	$23.39	6	8%	(6)	(8%)

Source: Emsi, 2022.1

Appendix VIII: Job Postings Analytics for Top Occupations

Key Takeaways

Analysis of job postings data provides real-time insight into the occupations, the intensity of demand, and the skills and qualifications that employers are seeking based on job vacancy advertisements scraped from over 45,000 websites. This data is limited to the jobs advertisements posted on an online platform, but there is likely a great deal of variation in terms of online job advertisements among industries and occupations. This means that while this analysis can provide intelligence into the overall demand for a particular occupation, it is not indicative of the actual total demand for the Top Occupations in the State. Key takeaways form the job postings analytics include:

- **The 80 Top Occupations account for a significant portion of the job postings within the State.** On average, there were 4,822 unique job postings per month for the Top Occupations across the State, which accounts for 40% of the 12,067 unique job postings across all occupations.

- **Demand for the top occupations varies widely by region.** The Central-Southern CEDR is the leader in unique job postings within the State, accounting for 50% of the average monthly unique job postings for the Top Occupations. The Seacoast CEDR accounted for the second largest proportion of postings (28%), followed by the Northern CEDR (15%), then the South-Western CEDR (6%).

- **Unique job postings per month have increased slightly since the beginning of the COVID-19 Pandemic, but overall, the average number of monthly postings has remained consistent over the past 5 years.** On average, there are 4,777 job postings per month for the Top Occupations across the State. The Top Occupation within the State in terms of total number of unique postings is *Registered Nurses*, which accounted for 19% of the total job postings.

- **As a group, employers are putting average effort toward hiring the Top Occupations; however, posting intensity varied by occupation.** The State's average posting intensity of 2:1 for the Top Occupations, which is similar to the posting intensity for all other occupations in the State. *Rolling Machine Setters, Operators, and Tenders, Metal and Plastic* had the highest posting intensity of the Top Occupations, with 10 additional postings per 1 unique posting. Other occupations with relatively high posting intensities include *Industrial Machinery Mechanics* (6:1), *Electrical Engineers* (5:1), and *Industrial Engineers (5:1).*

- **There were 3 unique postings for every 1 job opening in the Top Occupations over the past 5 years. A disproportionate number of job advertisements every month relative to the number of open positions that are available is an indication that employers may be having trouble meeting their talent needs.** About half of the Top Occupations that had the highest ratios of postings per openings were in the Healthcare Practitioners and Technical Occupations sector, including *General Internal Medicine Physicians* (21.5 postings per opening), *Physical Therapists* (16.7), *Registered Nurses* (15.1), and *Nurse Practitioners* (11.4).

- **There was a gap of $5,913 between the median annual earnings and the median advertised salary for the Top Occupations, which may indicate that employers are not having a hard time filling these positions. However, at the**

occupation-level, there are many postings that are paying a premium over the median earnings for the occupation, which may be an indication that employers are having a hard time filling these positions. The occupations with the largest premiums include *Magnetic Resonance Imaging Technicians* (job postings offered $23,240 more per year than the median earnings for this occupation), *Computer Network Support Specialists* ($15,235 more), *Database Administrators and* Architects ($14,819), *Physicians, All Other; and Ophthalmologists, Except Pediatric* ($14,442), and *Heavy and Tractor-Trailer Truck Drivers* ($14,1630.

- **The industries with the highest number of unique postings include Administrative and Support and Waste Management and Remediation Services (16% of postings), Health Care and Social Assistance (14%), Manufacturing (10%), and Retail (8%).**

- Top Occupations that are in-demand based on meeting at least two of the jobs postings metrics are shown below:

In-Demand Top Occupations based on Job Postings Analytics, 5-digit SOC
Occupations that span multiple clusters shaded in grey

SOC	Occupation	Average Unique Postings	Posting Intensity	Postings per Job Opening	Salary Premium
11-1021	General and Operations Managers	x	x		
11-2022	Sales Managers	x		x	
11-3031	Financial Managers	x	x		
11-9051	Food Service Managers	x	x	x	
11-9111	Medical and Health Services Managers	x		x	
13-1081	Logisticians		x		
15-1231	Computer Network Support Specialists		x		x
15-1232	Computer User Support Specialists	x	x		
15-1241	Computer Network Architects		x	x	
15-1245	Database Administrators and Architects	x		x	x
15-1299	Computer Occupations, All Other	x		x	
29-1021	Dentists, General	x		x	
29-1051	Pharmacists		x	x	
29-1123	Physical Therapists	x		x	
29-1141	Registered Nurses		x	x	x
29-1171	Nurse Practitioners		x	x	
29-1216	General Internal Medicine Physicians		x	x	
29-1228	Physicians, All Other; and Ophthalmologists, Except Pediatric	x		x	x
29-2035	Magnetic Resonance Imaging Technologists			x	x
29-2061	Licensed Practical and Licensed Vocational Nurses	x	x	x	
41-1011	First-Line Supervisors of Retail Sales Workers	x		x	
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	x	x		
47-2111	Electricians		x		x
47-2152	Plumbers, Pipefitters, and Steamfitters		x		x
53-3032	Heavy and Tractor-Trailer Truck Drivers	x	x		x

Unique Postings

There were 4,789 unique job postings for the Top Occupations in the month of December 2021 across the State of New Hampshire, which is in line with the monthly average of 4,777 over the past 5 years. The average number of monthly postings has increased slightly since the beginning of the COVID-19 Pandemic, averaging 5,047 per month since April 2020. A drop or spike in posting behavior across industries indicates broad economic trends or talent issues that affect the labor market as a whole.

Unique Job Postings is the number of deduplicated job vacancy advertisements scraped from over 45,000 websites. Deduplication is the process of identifying duplicate job postings and only counting one of the duplicates. The unique posting count is the count of postings after the deduplication process has taken place.

Unique Job Postings by Month for Top Occupations
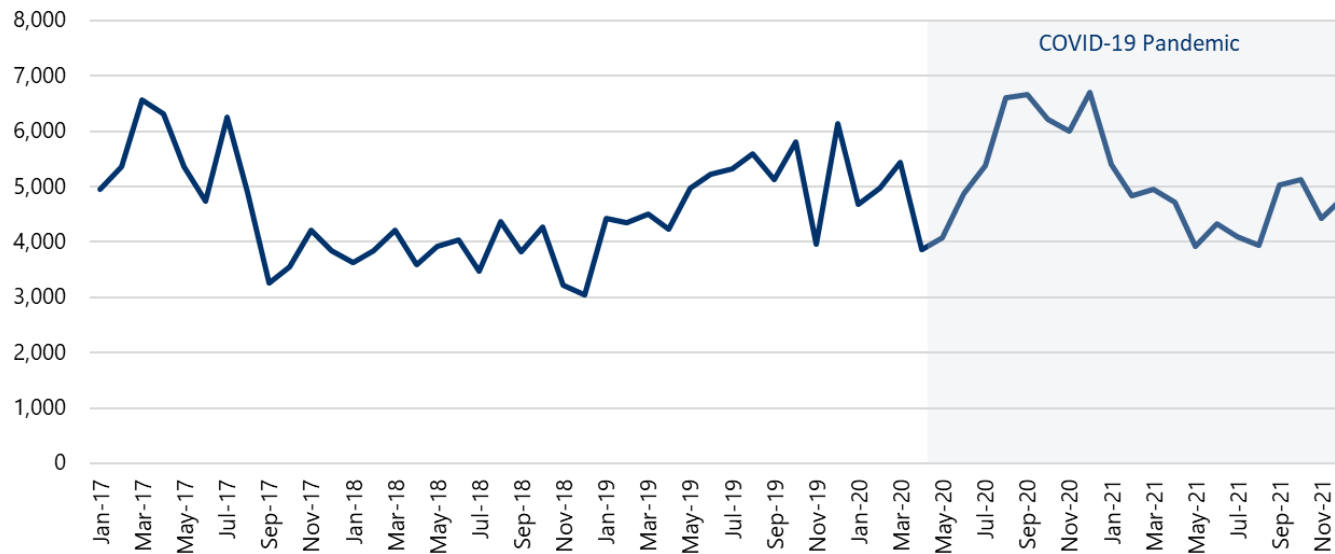
Source: Emsi

The 80 Top Occupations account for a significant portion of the job postings within the State. On average, there were 4,822 unique job postings per month for the Top Occupations across the State, which accounts for 40% of the 12,067 unique job postings across all occupations.

Registered Nurses is the top occupation within the State in terms of total number of unique postings, with an average of 933 postings per month. This occupation accounted for 19% of the job postings on average. Demand for this occupation was driven by the Central-Southern CEDR, which accounts for 39% of the postings for Registered Nurses. Overall, this region produced half of all unique job postings for the Top Occupations. Other than *Registered Nurses*, unique postings are well-dispersed among the other Top Occupations.

Average Monthly Unique Postings per Month for Top Occupations by Region, 2017 - 2021

Central-Southern, 50%

South-Western, 6%

4,822 Unique Postings

Seacoast, 28%

County Not Reported, 1%

Northern, 15%
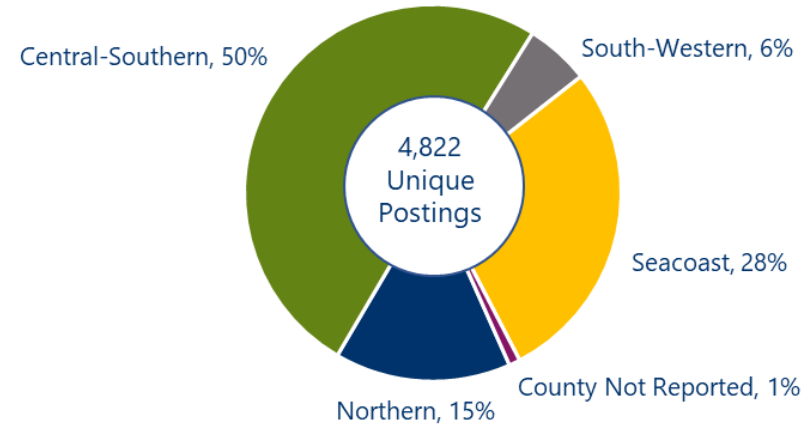
Source: Emsi

Top Occupations by Average Unique Postings per Month, 2017 - 2021

		Average Unique Postings by Region						
SOC	Occupation	Northern	South Western	Central Southern	Seacoast	County Not Reported	New Hampshire Total	Share of Total
29-1141	Registered Nurses	242	53	364	272	2	933	19%
41-1011	First-Line Supervisors of Retail Sales Workers	51	22	139	97	2	311	6%
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	17	11	191	82	4	306	6%
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	22	10	155	72	3	262	5%
53-3032	Heavy and Tractor-Trailer Truck Drivers	30	15	106	77	2	230	5%
11-9111	Medical and Health Services Managers	27	9	74	39	2	150	3%
11-9198	Personal Service Managers, All Other; Entmnt. and Rec. Managers; and Managers, All Other	13	5	85	34	2	140	3%
15-1299	Computer Occupations, All Other	5	3	80	33	2	124	3%
29-2061	Licensed Practical and Licensed Vocational Nurses	24	10	47	27	1	108	2%
49-9071	Maintenance and Repair Workers, General	14	6	50	28	1	97	2%
11-1021	General and Operations Managers	12	4	52	26	1	96	2%
29-1123	Physical Therapists	21	12	34	21	0	88	2%
13-2011	Accountants and Auditors	8	5	50	22	1	86	2%
11-2022	Sales Managers	6	2	53	18	2	82	2%
29-1228	Physicians, All Other; and Ophthalmologists, Except Pediatric	22	4	36	18	0	82	2%
15-1232	Computer User Support Specialists	7	3	44	24	1	79	2%
11-9051	Food Service Managers	12	4	34	24	0	76	2%
13-1071	Human Resources Specialists	6	5	42	21	1	75	2%

Source: Emsi

BEA

Posting Intensity

There were 11,070 total job postings per month for the Top Occupations (average for January 2017 to December 2021). Of those postings, 4,822 were unique, which means that for every 2 job postings, 1 is unique. The State's resulting average posting intensity of 2:1 for the Top Occupations is similar to the posting intensity for all other occupations in the State, which indicates employers are putting average effort toward hiring for these positions. The Top Occupations with higher than average posting intensity (higher than 2:1) are shown on the following page, with darker colors indicating higher posting intensities.

- *Rolling Machine Setters, Operators, and Tenders, Metal and Plastic* had the highest posting intensity of the Top Occupations, with 10 postings per 1 unique posting in the Northern CEDR. The Northern CEDR also had high average intensities among engineering occupations – with a 5:1 posting intensity for *Electrical Engineers* and *Industrial Engineers* and a 4:1 intensity for *Mechanical Engineers* and *Mechanical Engineering Technologists and Technicians* – and *Inspectors, Testers, Sorters, Samplers, and Weighers* (4:1).

- The highest posting intensity in the Seacoast CEDR was for *Computer Network Support Specialists* (4:1).

- *Industrial Machinery Mechanics* had the highest posting intensity in the South-Western CEDR (6:1), and the second highest posting intensity in the State. Other occupations with relatively high demand include *Electrical Engineers* (5:1), *Financial Managers* (4:1), *Purchasing Managers* (4:1), and *Pediatricians, General* (4:1). This region had the most Top Occupations with above average posting intensity (17).

- The Central-Southern CEDR's highest demand was for *Operating Engineers and Other Construction Equipment Operators* (4:1). This region had the least number of Top Occupations with above average posting intensity (11).

- Although *Registered Nurses* accounts for the largest share of unique postings, it does not have a significant posting intensity across the regions, with a slightly above average ratio in the Northern and Seacoast CEDRs (3:1).

Total Job Postings are the count of postings before deduplication. For example, if there are 12 total job postings and 2 unique job postings, this means that the 12 postings contained 10 duplicates and only 2 unique job advertisements.

Posting Intensity is the ratio of total to unique (deduplicated) job postings. A higher-than-average posting intensity can mean that employers are putting more effort than normal into hiring that position.

Top Occupations by Average Posting Intensity, 2017 - 2021

| SOC | Occupation | Average Posting Intensity by Region | | | | New Hampshire Total |
		Northern	South Western	Central Southern	Seacoast	
51-4023	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	10 : 1	2 : 1	3 : 1	0	7 : 1
13-1081	Logisticians	2 : 1	2 : 1	3 : 1	3 : 1	3 : 1
15-1231	Computer Network Support Specialists	2 : 1	3 : 1	3 : 1	4 : 1	3 : 1
15-1241	Computer Network Architects	2 : 1	3 : 1	3 : 1	3 : 1	3 : 1
17-2071	Electrical Engineers	5 : 1	2 : 1	3 : 1	2 : 1	3 : 1
17-2112	Industrial Engineers	5 : 1	5 : 1	2 : 1	2 : 1	3 : 1
17-2141	Mechanical Engineers	4 : 1	3 : 1	2 : 1	3 : 1	3 : 1
29-1141	Registered Nurses	3 : 1	2 : 1	2 : 1	3 : 1	3 : 1
29-2061	Licensed Practical and Licensed Vocational Nurses	2 : 1	3 : 1	3 : 1	3 : 1	3 : 1
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	2 : 1	2 : 1	3 : 1	2 : 1	3 : 1
47-2073	Operating Engineers and Other Construction Equipment Operators	2 : 1	1 : 1	4 : 1	3 : 1	3 : 1
47-2152	Plumbers, Pipefitters, and Steamfitters	2 : 1	2 : 1	3 : 1	3 : 1	3 : 1
49-9041	Industrial Machinery Mechanics	2 : 1	6 : 1	3 : 1	2 : 1	3 : 1
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	4 : 1	3 : 1	2 : 1	2 : 1	3 : 1
11-1021	General and Operations Managers	2 : 1	3 : 1	2 : 1	2 : 1	2 : 1
11-3021	Computer and Information Systems Managers	2 : 1	3 : 1	2 : 1	2 : 1	2 : 1
11-3031	Financial Managers	2 : 1	4 : 1	2 : 1	2 : 1	2 : 1
11-3061	Purchasing Managers	2 : 1	4 : 1	2 : 1	2 : 1	2 : 1
11-9051	Food Service Managers	3 : 1	2 : 1	2 : 1	2 : 1	2 : 1
15-1211	Computer Systems Analysts	3 : 1	3 : 1	2 : 1	2 : 1	2 : 1
15-1232	Computer User Support Specialists	3 : 1	2 : 1	2 : 1	2 : 1	2 : 1
15-1244	Network and Computer Systems Administrators	2 : 1	3 : 1	2 : 1	2 : 1	2 : 1
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	3 : 1	2 : 1	2 : 1	2 : 1	2 : 1
17-3027	Mechanical Engineering Technologists and Technicians	4 : 1	2 : 1	2 : 1	2 : 1	2 : 1
29-1051	Pharmacists	3 : 1	2 : 1	2 : 1	2 : 1	2 : 1
29-1171	Nurse Practitioners	2 : 1	3 : 1	2 : 1	2 : 1	2 : 1
29-1216	General Internal Medicine Physicians	2 : 1	2 : 1	2 : 1	3 : 1	2 : 1
29-1221	Pediatricians, General	2 : 1	4 : 1	1 : 1	2 : 1	2 : 1
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	3 : 1	2 : 1	2 : 1	2 : 1	2 : 1
47-2051	Cement Masons and Concrete Finishers	3 : 1	1 : 1	1 : 1	1 : 1	2 : 1
47-2111	Electricians	2 : 1	2 : 1	2 : 1	3 : 1	2 : 1
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	2 : 1	2 : 1	2 : 1	3 : 1	2 : 1
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	2 : 1	3 : 1	1 : 1	2 : 1	2 : 1
51-1011	First-Line Supervisors of Production and Operating Workers	2 : 1	3 : 1	2 : 1	2 : 1	2 : 1
51-9161	Computer Numerically Controlled Tool Operators	2 : 1	2 : 1	3 : 1	2 : 1	2 : 1
53-3032	Heavy and Tractor-Trailer Truck Drivers	2 : 1	2 : 1	2 : 1	3 : 1	2 : 1
Total Across All Top Occupations		**2 : 1**	**2 : 1**	**2 : 1**	**2 : 1**	**2 : 1**

Source: Emsi

Postings per Opening

There were 3 unique postings for every 1 job opening in the Top Occupations over the past 5 years. A disproportionate number of job advertisements every month relative to the number of open positions that are available is an indication that employers may be having trouble meeting their talent needs. The Top Occupations included on the following page are ones that had over 100 job postings per year over the past five years with over a 5 postings per opening.

Openings are the projected number of new jobs created plus replacement jobs resulting from workers retiring or otherwise permanently leaving an occupation.

About half of the Top Occupations that had the highest ratios of postings per openings were in the **Healthcare Practitioners and Technical Occupations** sector.

- *General Internal Medicine Physicians* had the most unique postings per job openings during this time period, with 21.5 postings per opening. Demand was driven by the Central Southern (28.0 postings per opening) and Northern (23.5) CEDRs.

- *Physical Therapists* were in high demand, particularly in the South-Western CEDR, where there were 55.2 posting for every job opening (the highest proportion of postings per opening among the 80 Top Occupations).

- *Registered Nurses* had consistently high demand across the CEDRs.

- Demand for *Nurse Practitioners* was driven by the South-Western CEDR, with 21.3 postings per opening.

Top Occupations by Unique Postings per Job Opening, 2017 - 2021

| SOC | Description | New Hampshire Total | | | Postings per Job Opening by Region | | | |
		Unique Postings ÷	Openings =	Postings per Job Opening	Northern	South Western	Central Southern	Seacoast
29-1216	General Internal Medicine Physicians	1,943	90	**21.5**	23.5	.	28.0	12.0
29-1123	Physical Therapists	5,285	317	**16.7**	18.5	55.2	17.7	13.8
29-1141	Registered Nurses	55,974	3,711	**15.1**	14.2	17.3	14.3	18.4
29-1171	Nurse Practitioners	4,154	363	**11.4**	11.7	21.3	11.8	9.7
15-1299	Computer Occupations, All Other	7,432	734	**10.1**	4.3	7.3	15.5	10.0
11-9111	Medical and Health Services Managers	9,020	907	**9.9**	8.2	12.6	11.0	10.1
15-1245	Database Administrators and Architects	3,031	310	**9.8**	3.5	12.4	14.6	10.2
29-1127	Speech-Language Pathologists	4,099	440	**9.3**	10.6	18.1	10.2	6.7
29-2061	Licensed Practical and Licensed Vocational Nurses	6,503	769	**8.5**	9.8	11.3	8.0	8.3
29-1228	Physicians, All Other; and Ophthalmologists, Except Pediatric	4,892	616	**7.9**	8.2	8.9	8.9	6.4
15-1241	Computer Network Architects	1,341	212	**6.3**	4.4	.	7.3	11.9
29-2035	Magnetic Resonance Imaging Technologists	715	116	**6.1**	2.4	.	5.4	11.3
17-2072	Electronics Engineers, Except Computer	970	169	**5.7**	2.9	.	7.4	3.4
11-2022	Sales Managers	4,928	873	**5.6**	3.8	2.7	9.5	4.6
11-9051	Food Service Managers	4,530	804	**5.6**	4.2	5.4	7.2	5.1
11-2021	Marketing Managers	3,648	681	**5.4**	2.9	3.4	8.3	5.4
41-1011	First-Line Supervisors of Retail Sales Workers	18,673	3,675	**5.1**	4.5	4.4	6.0	4.6
29-1051	Pharmacists	1,818	361	**5.0**	7.0	6.1	4.7	4.6
29-1021	Dentists, General	633	127	**5.0**	4.7	.	6.5	3.3

Source: Emsi

Advertised Salary vs. Median Earnings

The median advertised salary across the 80 Top Occupations was $64,960; however, the median annual earnings for this occupation within the State was $70,873, resulting in a gap of $5,913. This indicates that employers may not be having a hard time filling these positions as a whole group. However, at the occupation-level, there are many postings that are paying a premium over the median earnings for the occupation, which may be an indication that employers are having a hard time filling these positions. However, the advertised salary data is based on 36,924 advertised salary observations, which is only 13% of the 290,632 postings that occurred for the Top Occupations over the past 5 years. This means the advertised salary can provide an indication of employer's demand for a given occupation but is not necessarily representative of the salaries being offered across all job postings.

- *Magnetic Resonance Imaging Technicians* had the largest gap between the average earnings and the advertised salary, with job postings offering $23,240 more per year than the median earnings for this occupation. This may indicate that employers are paying a premium to attract qualified candidates. By this metric, each of the CEDRs had high demand for this occupation.

- While all of the occupations listed below are in-demand at the State-level, that demand varies widely by region. For example, postings for *Computer Network Support Specialists* at the State-level offered $15,235 above the median annual earnings; however, the regions vary widely with a premium of $35,284 in the Seacoast CEDR but $43,280 below the median in the Northern CEDR.

- Occupations in demand across all regions include *Magnetic Resonance Imaging Technicians*, *Heavy and Tractor-Trailer Truck Drivers*, *Electricians*, and *Registered Nurses*.

Top Occupations by Salary Premium Offered in Job Postings, 2017 - 2021

| SOC | Occupation | New Hampshire Total | | | Premium / (Discount) by Region | | | |
		Advertised Salary -	Average Earnings =	Premium / (Discount)	Northern	South Western	Central Southern	Seacoast
29-2035	Magnetic Resonance Imaging Technologists	$100,096	$76,856	**$23,240**	$13,623	$14,580	$27,823	$27,460
15-1231	Computer Network Support Specialists	$80,256	$65,021	**$15,235**	($14,930)	($6,733)	$10,029	$35,284
15-1245	Database Administrators and Architects	$113,536	$98,717	**$14,819**	($43,280)	($16,395)	$17,319	$19,628
29-1228	Physicians, All Other; and Ophthalmologists, Except Pediatric	$240,512	$226,070	**$14,442**	$28,025	($120,817)	($5,438)	($3,935)
53-3032	Heavy and Tractor-Trailer Truck Drivers	$62,336	$48,173	**$14,163**	$16,508	$16,654	$13,723	$13,171
47-2042	Floor Layers, Except Carpet, Wood, and Hard Tiles	$59,264	$45,510	**$13,754**	.	.	$41,813	($9,893)
47-2111	Electricians	$66,816	$55,266	**$11,550**	$18,492	$7,349	$5,774	$16,323
47-2152	Plumbers, Pipefitters, and Steamfitters	$63,360	$52,728	**$10,632**	$6,554	($10,993)	$8,905	$18,273
15-1212	Information Security Analysts	$112,384	$102,190	**$10,194**	($10,398)	$21,132	$10,049	$20,853
29-1141	Registered Nurses	$84,224	$74,838	**$9,386**	$3,440	$10,684	$12,282	$12,733

Source: Emsi

Top Employers Posting

The industries with the highest number of unique postings include **Administrative and Support and Waste Management and Remediation Services** (16% of postings), **Health Care and Social Assistance** (14%), **Manufacturing** (10%), and **Retail** (8%).

Over the past 5 years, 933 New Hampshire companies have posted jobs on an online platform, resulting in an average of 62 unique job postings per employer per year. The employers shown to the right had more than 100 hires per year for the past 5 years with above average posting intensity. These are the employers that are doing the most online hiring but having the hardest time filling their positions.

- Overall, unique postings were well-dispersed among the employers, with no one company accounting for more than a 3% share of postings.

- BAE Systems had 8,545 job postings for Top Occupations over the past 5 years. It accounted for 3% of all postings.

- The Dartmouth-Hitchcock Medical Center had the second highest number of postings in the State, with 7,097 between 2017 and 2021.

- Comcast had the highest average posting intensity in the State, at 15 total postings per 1 unique job posting.

- Other employers with relatively high posting intensities include Aureus Group (6:1), C&A Industries (6:1), CompHealth (5:1), CyberCoders (5:1), and Walmart (5:1).

Top Companies by Unique Postings for Top Occupations, 2017 - 2021

Company	Unique Postings	Share of Postings	Avgerage Intensity
BAE Systems	8,545	3%	3 : 1
Dartmouth-Hitchcock Medical Center	7,097	2%	3 : 1
Robert Half	4,432	2%	3 : 1
Genesis Healthcare	3,961	1%	3 : 1
Randstad	2,870	1%	3 : 1
HCA Healthcare	2,640	1%	4 : 1
Liberty Mutual	1,939	1%	3 : 1
CyberCoders	1,596	1%	5 : 1
Fidelity Investments	1,488	1%	3 : 1
The Home Depot	1,227	0%	3 : 1
Elliot Health System	1,202	0%	3 : 1
CVS Health	1,065	0%	3 : 1
Portsmouth Regional Hospital	973	0%	3 : 1
Dartmouth College	941	0%	4 : 1
CompHealth	923	0%	5 : 1
K.A. Recruiting	922	0%	3 : 1
Dollar Tree	805	0%	3 : 1
Acca	805	0%	3 : 1
Comcast	766	0%	15 : 1
Sig Sauer	765	0%	3 : 1
Walmart	762	0%	5 : 1
Walgreens Boots Alliance	733	0%	3 : 1
Parkland Medical Center	700	0%	3 : 1
Lonza	664	0%	3 : 1
Aureus Group	615	0%	6 : 1
Kforce	595	0%	3 : 1
United States Department of Veterans Affairs	582	0%	3 : 1
C&A Industries	578	0%	6 : 1
Cross Country Healthcare	530	0%	3 : 1
UPS	517	0%	3 : 1
Best Buy	512	0%	3 : 1
Interim HealthCare	510	0%	3 : 1

Source: Emsi
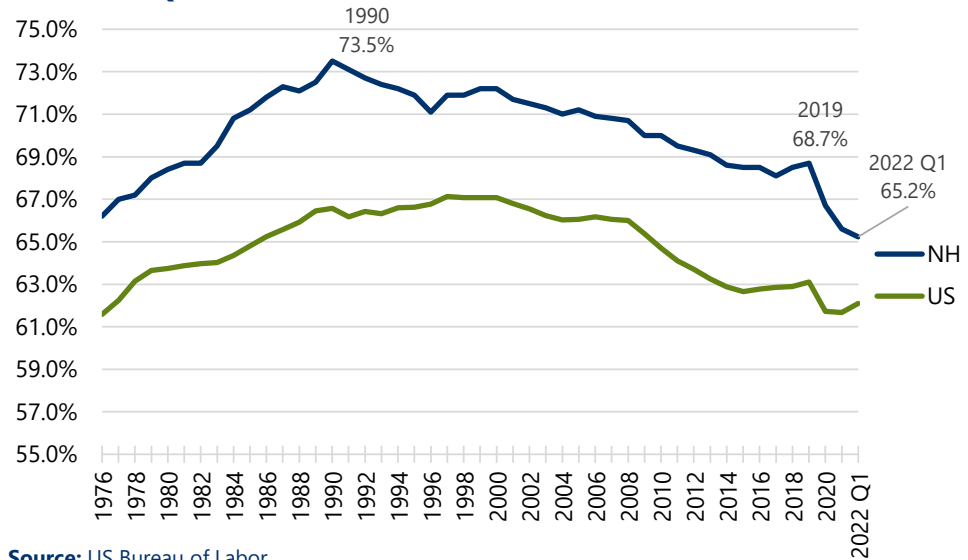
Appendix IX: Gap Analysis

Labor Force Projections

Camoin Associates analyzed New Hampshire and US labor force data to estimate the projected change in the State's labor force from 2022 to 2032. Emsi provides population projections by age group, so we looked at national labor force participation rates for the same five-year age groups (age-based participation rates are not available at the state level). Emsi forecasts a 3% increase in the population aged 16 and older, with declines of less than 1% to as much as 27% across the younger age groups from 15 through 34 years old and the older age groups from 50 through 69 years old.

Overall labor force participation has been declining since 1990 in New Hampshire and since 2000 in the US, with a relatively stable period from 1989 to 2008. National participation rates for all five-year age groups from 16–19 to 45–49 also exhibit distinct downward trends since 1990. However, participation rates for ages 50–54 and 55–59 have generally fluctuated around their 20- or 30-year averages, while participation rates for all five-year groups age 60 and older have increased since 1990.

Labor Force Participation Rate, New Hampshire vs. US, 1976–2022 Q1

Source: US Bureau of Labor

Camoin projected each age group's long-term trends out to 2032, then scaled them up by the percentage difference between New Hampshire's total labor force participation rate and the US's. Applying these adjusted age-based labor force participation rates to New Hampshire's population by age in 2022 and 2032 yields an effective total participation rate of 63.3% and a labor force increase of 21,008. This age-based approach has the advantage of capturing changes in both the age structure of the state's population and labor force participation by age. This leaves a workforce gap of 77,114 in 2032.

Projected Openings (Demand)

Statewide Openings

There are projected to be almost 197,000 job openings for the Top Occupations in New Hampshire between 2022 and 2032. The table to the right shows those with at least 2,000 openings. The most in-demand occupations include:

- *General and Operations Managers*, with 12,301 projected openings

- *Software Developers and Software Quality Assurance Analysts and Testers* (9,706 openings)

- *Heavy and Tractor-Trailer Truck Drivers* (9,468)

- *Registered Nurses* (8,358)

- *Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products* (8,293)

Top Occupations by Projected Openings, 2022–2032

SOC	Description	2022–2032 Openings
11-1021	General and Operations Managers	12,301
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	9,706
53-3032	Heavy and Tractor-Trailer Truck Drivers	9,468
29-1141	Registered Nurses	8,358
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	8,293
41-1011	First-Line Supervisors of Retail Sales Workers	7,716
43-1011	First-Line Supervisors of Office and Administrative Support Workers	7,451
13-2011	Accountants and Auditors	5,921
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	5,690
47-2031	Carpenters	5,274
49-9071	Maintenance and Repair Workers, General	5,234
13-1111	Management Analysts	4,349
13-1198	Project Management Specialists and Business Operations Specialists, All Other	4,249
39-9031	Exercise Trainers and Group Fitness Instructors	4,556
47-2111	Electricians	4,051
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	3,772
11-3031	Financial Managers	3,678
11-9198	Personal Service Managers, All Other; Entmt. and Rec. Managers; and Managers, All Other	3,686
13-1161	Market Research Analysts and Marketing Specialists	3,617
13-1071	Human Resources Specialists	3,348
51-1011	First-Line Supervisors of Production and Operating Workers	3,024
51-9161	Computer Numerically Controlled Tool Operators	2,985
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	2,945
15-1232	Computer User Support Specialists	2,878
11-3021	Computer and Information Systems Managers	2,707
15-1211	Computer Systems Analysts	2,530
25-3021	Self-Enrichment Teachers	2,666
47-2152	Plumbers, Pipefitters, and Steamfitters	2,498
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	2,490
13-1028	Buyers and Purchasing Agents	2,319
11-9111	Medical and Health Services Managers	2,324
49-9041	Industrial Machinery Mechanics	2,276
11-9021	Construction Managers	2,266
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	2,112
Total		**196,971**

Source: Emsi

Openings by Region

Top Occupations by Projected Openings, 2022–2032, Northern CEDR

SOC	Description	2022–2032 Openings
29-1141	Registered Nurses	2,413
11-1021	General and Operations Managers	1,676
53-3032	Heavy and Tractor-Trailer Truck Drivers	1,416
41-1011	First-Line Supervisors of Retail Sales Workers	1,415
43-1011	First-Line Supervisors of Office and Administrative Support Workers	1,186
49-9071	Maintenance and Repair Workers, General	1,099
47-2031	Carpenters	1,058
11-9198	Personal Service Managers, All Other; Entmt. and Rec. Managers; and Managers, All Other	725
13-2011	Accountants and Auditors	720
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	706
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	700
47-2111	Electricians	683
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	602
39-9031	Exercise Trainers and Group Fitness Instructors	562
13-1198	Project Management Specialists and Business Operations Specialists, All Other	556
11-9111	Medical and Health Services Managers	533
13-1111	Management Analysts	507
51-9161	Computer Numerically Controlled Tool Operators	505
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	503
25-3021	Self-Enrichment Teachers	492
11-9021	Construction Managers	475
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	417
11-3031	Financial Managers	411
13-1071	Human Resources Specialists	402
51-1011	First-Line Supervisors of Production and Operating Workers	400
13-1161	Market Research Analysts and Marketing Specialists	395
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	381
47-2152	Plumbers, Pipefitters, and Steamfitters	378
11-9051	Food Service Managers	356
29-2061	Licensed Practical and Licensed Vocational Nurses	343
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	342
47-2073	Operating Engineers and Other Construction Equipment Operators	323
29-1171	Nurse Practitioners	308
Total		**29,177**

Source: Emsi

BEA — State of New Hampshire Workforce Assessment

Top Occupations by Projected Openings, 2022–2032, Central-Southern CEDR

SOC	Description	2022–2032 Openings
11-1021	General and Operations Managers	4,809
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	3,836
53-3032	Heavy and Tractor-Trailer Truck Drivers	3,451
29-1141	Registered Nurses	3,370
43-1011	First-Line Supervisors of Office and Administrative Support Workers	3,012
41-1011	First-Line Supervisors of Retail Sales Workers	2,871
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	2,519
13-2011	Accountants and Auditors	2,412
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	2,138
39-9031	Exercise Trainers and Group Fitness Instructors	1,987
49-9071	Maintenance and Repair Workers, General	1,953
47-2031	Carpenters	1,944
13-1198	Project Management Specialists and Business Operations Specialists, All Other	1,769
13-1111	Management Analysts	1,767
47-2111	Electricians	1,760
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	1,610
11-3031	Financial Managers	1,527
13-1161	Market Research Analysts and Marketing Specialists	1,414
11-9198	Personal Service Managers, All Other; Entmt. and Rec. Managers; and Managers, All Other	1,408
13-1071	Human Resources Specialists	1,270
51-1011	First-Line Supervisors of Production and Operating Workers	1,185
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	1,154
47-2152	Plumbers, Pipefitters, and Steamfitters	1,074
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	1,063
51-9161	Computer Numerically Controlled Tool Operators	1,042
11-3021	Computer and Information Systems Managers	1,028
15-1232	Computer User Support Specialists	1,024
25-3021	Self-Enrichment Teachers	1,004
13-1028	Buyers and Purchasing Agents	999
11-9111	Medical and Health Services Managers	990
15-1211	Computer Systems Analysts	930
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	893
49-9041	Industrial Machinery Mechanics	857
11-9021	Construction Managers	841
31-9091	Dental Assistants	804
29-2061	Licensed Practical and Licensed Vocational Nurses	794
Total		**77,450**

Source: Emsi

Top Occupations by Projected Openings, 2022–2032, South-Western CEDR

SOC	Description	2022–2032 Openings
11-1021	General and Operations Managers	739
41-1011	First-Line Supervisors of Retail Sales Workers	658
53-3032	Heavy and Tractor-Trailer Truck Drivers	611
47-2031	Carpenters	505
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	482
43-1011	First-Line Supervisors of Office and Administrative Support Workers	452
51-9161	Computer Numerically Controlled Tool Operators	450
29-1141	Registered Nurses	389
49-9071	Maintenance and Repair Workers, General	375
13-2011	Accountants and Auditors	341
51-1011	First-Line Supervisors of Production and Operating Workers	315
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	308
11-9198	Personal Service Managers, All Other; Entmt. and Rec. Managers; and Managers, All Other	293
47-2111	Electricians	248
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	241
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	234
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	220
49-9041	Industrial Machinery Mechanics	208
13-1198	Project Management Specialists and Business Operations Specialists, All Other	205
39-9031	Exercise Trainers and Group Fitness Instructors	191
11-9021	Construction Managers	188
11-3031	Financial Managers	183
13-1071	Human Resources Specialists	181
13-1111	Management Analysts	178
13-1161	Market Research Analysts and Marketing Specialists	172
25-3021	Self-Enrichment Teachers	171
17-2141	Mechanical Engineers	170
13-1028	Buyers and Purchasing Agents	167
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	151
47-2152	Plumbers, Pipefitters, and Steamfitters	138
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	133
31-9091	Dental Assistants	133
29-2061	Licensed Practical and Licensed Vocational Nurses	126
11-9111	Medical and Health Services Managers	122
17-2112	Industrial Engineers	114
47-2073	Operating Engineers and Other Construction Equipment Operators	105
15-1232	Computer User Support Specialists	100
11-2022	Sales Managers	100
Total		**12,078**

Source: Emsi

Top Occupations by Projected Openings, 2022–2032, Seacoast CEDR

SOC	Description	2022–2032 Openings
11-1021	General and Operations Managers	3,678
53-3032	Heavy and Tractor-Trailer Truck Drivers	3,326
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	2,736
41-1011	First-Line Supervisors of Retail Sales Workers	2,664
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	2,255
43-1011	First-Line Supervisors of Office and Administrative Support Workers	2,159
29-1141	Registered Nurses	2,008
39-9031	Exercise Trainers and Group Fitness Instructors	1,781
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	1,775
13-2011	Accountants and Auditors	1,749
49-9071	Maintenance and Repair Workers, General	1,565
47-2031	Carpenters	1,563
13-1111	Management Analysts	1,264
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	1,241
13-1198	Project Management Specialists and Business Operations Specialists, All Other	1,135
11-9198	Personal Service Managers, All Other; Entmt. and Rec. Managers; and Managers, All Other	1,131
47-2111	Electricians	1,118
11-3031	Financial Managers	1,043
51-1011	First-Line Supervisors of Production and Operating Workers	1,041
13-1161	Market Research Analysts and Marketing Specialists	997
51-9161	Computer Numerically Controlled Tool Operators	946
25-3021	Self-Enrichment Teachers	920
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	915
13-1071	Human Resources Specialists	872
47-2152	Plumbers, Pipefitters, and Steamfitters	842
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	833
15-1232	Computer User Support Specialists	821
49-9041	Industrial Machinery Mechanics	782
11-3021	Computer and Information Systems Managers	766
15-1211	Computer Systems Analysts	745
11-9021	Construction Managers	679
31-9091	Dental Assistants	625
13-1028	Buyers and Purchasing Agents	618
11-9051	Food Service Managers	617
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	604
11-9111	Medical and Health Services Managers	601
47-2073	Operating Engineers and Other Construction Equipment Operators	541
Total		**58,754**

Source: Emsi

Gaps By Region

Top Occupations with the Largest Projected Employment Gaps in the Northern CEDR, 2022–2032

SOC	Description	2022 Employment	2022–2032 Openings	2022–2032 Labor Force	Projected Gap
29-1141	Registered Nurses	3,902	2,413	1.63	(2,412)
11-1021	General and Operations Managers	1,916	1,676	0.78	(1,675)
53-3032	Heavy and Tractor-Trailer Truck Drivers	1,248	1,416	0.49	(1,415)
41-1011	First-Line Supervisors of Retail Sales Workers	1,389	1,415	0.51	(1,415)
43-1011	First-Line Supervisors of Office and Administrative Support Workers	1,237	1,186	0.47	(1,185)
49-9071	Maintenance and Repair Workers, General	1,101	1,099	0.45	(1,098)
47-2031	Carpenters	1,155	1,058	0.44	(1,057)
11-9198	Personal Service Managers, All Other; Entmt. and Rec. Managers; and Managers, All Other	855	725	0.37	(724)
13-2011	Accountants and Auditors	796	720	0.32	(719)
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	781	706	0.35	(706)
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	672	700	0.28	(700)
47-2111	Electricians	579	683	0.25	(683)
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	493	602	0.20	(602)
39-9031	Exercise Trainers and Group Fitness Instructors	292	562	0.14	(562)
13-1198	Project Management Specialists and Business Operations Specialists, All Other	703	556	0.29	(555)
11-9111	Medical and Health Services Managers	512	533	0.24	(533)
13-1111	Management Analysts	534	507	0.22	(507)
51-9161	Computer Numerically Controlled Tool Operators	472	505	0.18	(505)
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	533	503	0.20	(503)
25-3021	Self-Enrichment Teachers	336	492	0.16	(492)
11-9021	Construction Managers	572	475	0.24	(475)
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	371	417	0.13	(417)
11-3031	Financial Managers	518	411	0.22	(411)
13-1071	Human Resources Specialists	409	402	0.17	(402)
51-1011	First-Line Supervisors of Production and Operating Workers	396	400	0.16	(400)
13-1161	Market Research Analysts and Marketing Specialists	344	395	0.15	(395)
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	379	381	0.15	(380)
47-2152	Plumbers, Pipefitters, and Steamfitters	340	378	0.14	(378)
11-9051	Food Service Managers	265	356	0.12	(356)
29-2061	Licensed Practical and Licensed Vocational Nurses	412	343	0.17	(342)
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	365	342	0.15	(342)
47-2073	Operating Engineers and Other Construction Equipment Operators	293	323	0.12	(323)
29-1171	Nurse Practitioners	310	308	0.17	(308)
13-1028	Buyers and Purchasing Agents	317	294	0.12	(293)
15-1232	Computer User Support Specialists	378	279	0.15	(279)
31-9091	Dental Assistants	219	279	0.09	(279)
49-9041	Industrial Machinery Mechanics	245	258	0.11	(258)
Total		**32,257**	**29,177**	**13**	**(29,164)**

Source: Emsi and Camoin Associates

BLA   State of New Hampshire Workforce Assessment

Top Occupations with the Largest Projected Employment Gaps in the Central-Southern CEDR, 2022–2032

SOC	Description	2022 Employment	2022–2032 Openings	2022–2032 Labor Force	Projected Gap
11-1021	General and Operations Managers	5,593	4,809	245	(4,563)
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	4,288	3,836	206	(3,631)
53-3032	Heavy and Tractor-Trailer Truck Drivers	3,027	3,451	132	(3,319)
29-1141	Registered Nurses	6,244	3,370	266	(3,105)
43-1011	First-Line Supervisors of Office and Administrative Support Workers	3,157	3,012	128	(2,885)
41-1011	First-Line Supervisors of Retail Sales Workers	2,869	2,871	111	(2,759)
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	2,644	2,519	108	(2,410)
13-2011	Accountants and Auditors	2,758	2,412	117	(2,295)
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	1,841	2,138	80	(2,058)
39-9031	Exercise Trainers and Group Fitness Instructors	826	1,987	54	(1,933)
49-9071	Maintenance and Repair Workers, General	2,042	1,953	88	(1,865)
47-2031	Carpenters	2,129	1,944	88	(1,856)
47-2111	Electricians	1,461	1,760	70	(1,690)
13-1111	Management Analysts	1,841	1,767	82	(1,685)
13-1198	Project Management Specialists and Business Operations Specialists, All Other	2,243	1,769	100	(1,668)
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	1,453	1,610	54	(1,556)
11-3031	Financial Managers	1,953	1,527	88	(1,440)
13-1161	Market Research Analysts and Marketing Specialists	1,228	1,414	59	(1,355)
11-9198	Personal Service Managers, All Other; Entmt. and Rec. Managers; and Managers, All Other	1,706	1,408	78	(1,330)
13-1071	Human Resources Specialists	1,300	1,270	57	(1,214)
51-1011	First-Line Supervisors of Production and Operating Workers	1,231	1,185	51	(1,134)
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	1,186	1,154	50	(1,104)
47-2152	Plumbers, Pipefitters, and Steamfitters	1,002	1,074	44	(1,030)
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	1,089	1,063	47	(1,016)
51-9161	Computer Numerically Controlled Tool Operators	1,001	1,042	40	(1,003)
11-3021	Computer and Information Systems Managers	1,360	1,028	59	(969)
25-3021	Self-Enrichment Teachers	740	1,004	36	(968)
15-1232	Computer User Support Specialists	1,350	1,024	59	(965)
13-1028	Buyers and Purchasing Agents	1,086	999	43	(956)
11-9111	Medical and Health Services Managers	1,012	990	50	(940)
15-1211	Computer Systems Analysts	1,299	930	56	(875)
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	976	893	43	(851)
49-9041	Industrial Machinery Mechanics	859	857	40	(817)
11-9021	Construction Managers	1,011	841	47	(794)
31-9091	Dental Assistants	622	804	29	(775)
29-2061	Licensed Practical and Licensed Vocational Nurses	1,008	794	44	(750)
Total		**86,609**	**77,450**	**3,801**	**(73,649)**

Source: Emsi and Camoin Associates

Top Occupations with the Largest Projected Employment Gaps in the South-Western CEDR, 2022–2032

SOC	Description	2022 Employment	2022–2032 Openings	2022–2032 Labor Force	Projected Gap
11-1021	General and Operations Managers	862	739	(22)	(761)
41-1011	First-Line Supervisors of Retail Sales Workers	633	658	(15)	(673)
53-3032	Heavy and Tractor-Trailer Truck Drivers	538	611	(14)	(625)
47-2031	Carpenters	533	505	(13)	(518)
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	472	482	(12)	(494)
43-1011	First-Line Supervisors of Office and Administrative Support Workers	480	452	(11)	(464)
51-9161	Computer Numerically Controlled Tool Operators	435	450	(10)	(460)
29-1141	Registered Nurses	705	389	(18)	(407)
49-9071	Maintenance and Repair Workers, General	379	375	(10)	(385)
13-2011	Accountants and Auditors	382	341	(10)	(351)
51-1011	First-Line Supervisors of Production and Operating Workers	324	315	(8)	(323)
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	279	308	(6)	(314)
11-9198	Personal Service Managers, All Other; Entmt. and Rec. Managers; and Managers, All Other	355	293	(10)	(303)
47-2111	Electricians	229	248	(6)	(254)
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	199	241	(5)	(247)
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	249	234	(6)	(240)
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	261	220	(7)	(228)
49-9041	Industrial Machinery Mechanics	204	208	(6)	(213)
13-1198	Project Management Specialists and Business Operations Specialists, All Other	265	205	(7)	(212)
39-9031	Exercise Trainers and Group Fitness Instructors	86	191	(3)	(194)
11-9021	Construction Managers	231	188	(6)	(194)
11-3031	Financial Managers	252	183	(6)	(190)
13-1071	Human Resources Specialists	184	181	(5)	(186)
13-1111	Management Analysts	196	178	(5)	(183)
17-2141	Mechanical Engineers	241	170	(7)	(177)
13-1161	Market Research Analysts and Marketing Specialists	152	172	(4)	(176)
25-3021	Self-Enrichment Teachers	132	171	(4)	(174)
13-1028	Buyers and Purchasing Agents	181	167	(4)	(172)
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	161	151	(4)	(155)
47-2152	Plumbers, Pipefitters, and Steamfitters	137	138	(3)	(142)
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	143	133	(3)	(137)
31-9091	Dental Assistants	96	133	(3)	(136)
29-2061	Licensed Practical and Licensed Vocational Nurses	141	126	(4)	(130)
11-9111	Medical and Health Services Managers	119	122	(4)	(125)
17-2112	Industrial Engineers	158	114	(4)	(118)
47-2073	Operating Engineers and Other Construction Equipment Operators	102	105	(2)	(108)
15-1232	Computer User Support Specialists	135	100	(3)	(104)
11-2022	Sales Managers	115	100	(3)	(103)
Total		**13,168**	**12,098**	**(335)**	**(12,433)**

Source: Emsi and Camoin Associates

Top Occupations with the Largest Projected Employment Gaps in the Seacoast CEDR, 2022–2032

SOC	Description	2022 Employment	2022–2032 Openings	2022–2032 Labor Force	Projected Gap
11-1021	General and Operations Managers	4,015	3,678	171	(3,507)
53-3032	Heavy and Tractor-Trailer Truck Drivers	2,849	3,326	119	(3,208)
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	2,787	2,736	132	(2,604)
41-1011	First-Line Supervisors of Retail Sales Workers	2,622	2,664	97	(2,567)
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	2,119	2,255	90	(2,165)
43-1011	First-Line Supervisors of Office and Administrative Support Workers	2,238	2,159	86	(2,073)
29-1141	Registered Nurses	3,388	2,008	142	(1,865)
39-9031	Exercise Trainers and Group Fitness Instructors	687	1,781	45	(1,736)
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	1,435	1,775	61	(1,714)
13-2011	Accountants and Auditors	1,817	1,749	77	(1,672)
49-9071	Maintenance and Repair Workers, General	1,537	1,565	64	(1,501)
47-2031	Carpenters	1,668	1,563	65	(1,498)
13-1111	Management Analysts	1,252	1,264	53	(1,210)
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	1,090	1,241	39	(1,201)
13-1198	Project Management Specialists and Business Operations Specialists, All Other	1,349	1,135	58	(1,077)
47-2111	Electricians	1,010	1,118	42	(1,076)
11-9198	Personal Service Managers, All Other; Entmt. and Rec. Managers; and Managers, All Other	1,321	1,131	58	(1,073)
51-1011	First-Line Supervisors of Production and Operating Workers	1,002	1,041	42	(999)
11-3031	Financial Managers	1,215	1,043	54	(989)
13-1161	Market Research Analysts and Marketing Specialists	829	997	38	(959)
51-9161	Computer Numerically Controlled Tool Operators	799	946	34	(912)
25-3021	Self-Enrichment Teachers	608	920	30	(890)
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	908	915	37	(879)
13-1071	Human Resources Specialists	856	872	36	(837)
47-2152	Plumbers, Pipefitters, and Steamfitters	756	842	32	(810)
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	827	833	34	(798)
15-1232	Computer User Support Specialists	984	821	42	(778)
49-9041	Industrial Machinery Mechanics	719	782	33	(748)
11-3021	Computer and Information Systems Managers	930	766	39	(726)
15-1211	Computer Systems Analysts	940	745	40	(705)
11-9021	Construction Managers	792	679	35	(644)
31-9091	Dental Assistants	463	625	21	(604)
11-9051	Food Service Managers	422	617	21	(596)
13-1028	Buyers and Purchasing Agents	660	618	25	(593)
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	673	604	27	(577)
11-9111	Medical and Health Services Managers	568	601	27	(574)
47-2073	Operating Engineers and Other Construction Equipment Operators	495	541	20	(520)
Total		**60,729**	**58,754**	**2,586**	**(56,168)**

Source: Emsi and Camoin Associates

Appendix X: Data Sources and Terminology

Economic Modeling Specialists International (EMSI)

To analyze the industrial makeup of a study area, industry data organized by the North American Industrial Classification System (NAICS) is assessed. Camoin Associates subscribes to Economic Modeling Specialists Intl. (EMSI), a proprietary data provider that aggregates economic data from approximately 90 sources. EMSI industry data, in our experience, is more complete than most or perhaps all local data sources (for more information on EMSI, please see www.economicmodeling.com). This is because local data sources typically miss significant employment counts by industry because data on sole proprietorships and contractual employment (i.e. 1099 contractor positions) is not included and because certain employment counts are suppressed from BLS/BEA figures for confidentiality reasons when too few establishments exist within a single NAICS code.

WHY EMSI?

Comprehensive focus on long term impacts, while other tools focus on short term impacts only.

Uses data from a number of sources; unsupresses data to allow for for analytics on smaller regions.

Other tools allow you to make additional assumptions (such as where jobs or sales are coming from), but this only valuable if you know all of the details about a project.

Emsi uses detailed data and methodology documentation for those interested, but has a user friendly interface and results output.

OnTheMap, U.S. Census

OnTheMap is a tool developed through the U.S. Census Longitudinal Employer-Household Dynamics (LEHD) program that helps to visualize Local Employment Dynamics (LED) data about where workers are employed and where they live. There are also visual mapping capabilities for data on age, earnings, industry distributions, race, ethnicity, educational attainment, and sex. The OnTheMap tool can be found here, along with links to documentation: onthemap.ces.census.gov

American Community Survey (ACS), U.S. Census

The American Community Survey (ACS) is an ongoing statistical survey by the U.S. Census Bureau that gathers demographic and socioeconomic information on age, sex, race, family and relationships, income and benefits, health insurance, education, veteran status, disabilities, commute patterns, and other topics. The survey is mandatory to fill out, but the survey is only sent to a small sample of the population on a rotating basis. The survey is crucial to major planning decisions, like vital services and infrastructure investments, made by municipalities and cities. The questions on the ACS are different than those asked on the decennial census and provide ongoing demographic updates of the nation down to the block group level. For more information on the ACS, visit www.census.gov/programs-surveys/acs

Local Area Unemployment Statistics (LAUS), U.S. Bureau of Labor Statistics (BLS)

The Local Area Unemployment Statistics (LAUS) program estimates total employment and unemployment for approximately 7,500 geographic areas on a monthly basis, from the national level down to the city and town level. LAUS data is developed through U.S. Bureau of Labor Statistics (BLS) by combining data from the Current Population Survey (CPS), Current Employment Statistics (CES) survey, and state unemployment (UI) systems. More information on LAUS can be found here: www.bls.gov/lau/lauov.htm

Annual Replacement Rate

The percent of the occupation estimated to be retiring or otherwise permanently leaving an occupation

Cohort

A specific age group (which may also include gender or race/ethnicity) in demographic data, e.g., "male African Americans born between 1980 and 1984." Over time, this cohort will move through various standard Census age categories such as "25 to 29 year olds" and "30 to 34 year olds."

Compatibility Index

This number is intended to score the compatibility of two occupations in terms of the knowledge, skills, and abilities they require: a score of 100 means complete compatibility, while a score of 0 means no compatibility. The compatibility index is a synthetic number generated by a proprietary algorithm that uses O*NET's data on the required Levels and Importance of competencies.

Competitive Effect

Competitive effect indicates how much of the job change within a given region is the result of some unique competitive advantage of the region. This is because the competitive effect, by definition, measures the job change that occurs within a regional industry that cannot be explained by broader trends (i.e. the National Growth Effect and the Industrial Mix Effect). To measure competitive effect, we subtract Expected Change from the actual regional job change in the industry of interest. *Actual Change – Expected Change = Competitive Effect*. It's important to note that this effect can be positive even if regional employment is declining. This would indicate that regional employment is declining *less* than national employment. See this article for more.

Completions

The number of degrees or certificates conferred for a specific course of study in a given year. Includes all award levels. May be greater than the actual number of students who graduated, as Emsi includes both primary and secondary majors. Both primary and secondary majors are included because a graduate with a dual major in mathematics and electrical engineering should be considered part of the potential supply for occupations that map to both majors. The reference period for a completion year is July 1 of the prior year through June 30 of the current year. For example, the 2017 Completions metric is a count of completions from 7/1/2016–6/30/2017.

Cost of Living (CoL)

The cost of living is an indication of the amount of money needed to live in a given region, including the price of food, taxes, housing, etc., and is linked to the wage level in that region.

Cost-of-Living-Adjusted Earnings

Emsi's industry or occupation earnings, adjusted by the C2ER Cost of Living Index. The Cost of Living index is 100-based, with an index above 100 indicating that the cost of living is higher than average in the region of study. Likewise, an index below 100 indicates that the cost of living is lower than average in the region of study. To create COL-adjusted earnings, we divide earnings by the index, then multiply the result by 100. For more information about how Cost of Living is calculated, click here.

Educational Attainment (SOC)

SOC Educational Attainment is a breakdown of the education levels attained by the occupation's workforce. The Educational Attainment breakout is only provided for the nation as a whole. Source: The Bureau of Labor Statistics' (BLS) Educational Attainment for workers 25 years and older by detailed occupation

Establishments (Payrolled Business Location)

Also referred to as a "Payrolled Business Location", an establishment is a single physical location of some type of economic activity (a business), used for reporting purposes in government data sources. A single company may have multiple establishments. Source: QCEW.

Gross Regional Product (GRP)

Gross Regional Product (GRP) is simply GDP for the region of study. More commonly, GRP is GDP for any region smaller than the United States, such as a state or metro. GRP measures the final market value of all goods and services produced in the region of study. GRP is the sum of total industry earnings, taxes on production & imports, and profits, less subsidies (GRP = earnings + TPI + profits – subsidies). Source: Emsi data based primarily on data from the Bureau of Economic Analysis (BEA) and the Quarterly Census of Employment and Wages (QCEW) from the Bureau of Labor Statistics (BLS).

Hires

The number of hires for the selected timeframe. When compared with Unique Postings, Hires shows how much actual hiring activity there is relative to the amount of posting activity. A hire is reported by the Quarterly Workforce Indicators when an individual's Social Security Number appears on a company's payroll and was not there the quarter before. The QWI program produces a comprehensive tabulation of employment and wage information for workers covered by State unemployment insurance (UI) laws, similar to the QCEW program. For more information from the Census Bureau on how hires data is collected, see this publication. For more information on how Emsi calculates hires for occupations, see the methodology article.

Location Quotient (LQ)

Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region "unique." For example, if the leather products manufacturing industry accounts for 10% of jobs in your area but 1% of jobs nationally, then the area's leather-producing industry has an LQ of 10. So, in your area, leather manufacturing accounts for a larger than average "share" of total jobs—the share is ten times larger than normal. For a long-form explanation of Location Quotient, see Emsi's blog post on the subject. Source: Emsi's proprietary employment data.

Median Household Income (MHI)

Median household income (MHI) refers to the distribution of household income into two equal groups, one having incomes above the median, and other having incomes below the median. A household is defined as persons classified as members of a married-couple family, other family type, or as an unrelated individual. Their monthly family income, therefore, represents the sum of all cash income received by the individual and/or other family members. It may represent income from employment, assets (such as CD's, rental property, savings accounts), and other sources (such as Social Security, Aid to Families with Dependent Children, pensions, State unemployment compensation, and so on). Emsi's Median Household Income comes from the five-year ACS data and includes data for individual ZIP codes, Census Tracts, counties, MSAs, States, and the nation. Emsi does not provide MHI when aggregating regions, since one cannot create a new median by averaging the medians of those individual regions. ACS five-year data has a two-year lag between when the data is collected and when it is released (i.e. a late 2017 Emsi data run would include 2011-2015 ACS data). Source: The Census's Median Household Income

Net Commuters

The minimum number of workers who commute in or out of the region to satisfy the regional numbers of jobs held. A positive number describes commuters entering a region, while a negative number describes commuters leaving a region. Source: Emsi calculates this number by subtracting the Resident Workers from Jobs performed in the selected region.

Openings

A combination of both new jobs and replacement jobs constitutes total openings. The annual openings figure is derived by dividing total openings by the number of years in the user's selected timeframe. For example, an occupation showing 130 openings between 2016 and 2026 would result in an annual openings figure of 13. For more information on how Openings is calculated, see this article.

Posting Intensity

Posting Intensity is the ratio of total to unique (deduplicated) job postings. A higher-than-average posting intensity can mean that employers are putting more effort than normal into hiring that position. Posting intensity is available by occupation, by job title, by company, and by region.

Replacement Jobs

Estimate of opening resulting from workers retiring or otherwise permanently leaving an occupation

Resident Workers

Individuals that live in the region and hold the occupation but may work outside of the region.

Separations

A separation is indicated when a job is present in one quarter but is not present in the following quarter. A separation is reported by the Quarterly Workforce Indicators when an individual's Social Security Number that appeared on a company's payroll in the previous quarter is no longer present. Separations data is published at the industry level and modeled to occupation via staffing patterns. The QWI program produces a comprehensive tabulation of employment and wage information for workers covered by State unemployment insurance (UI) laws, similar to the QCEW program. For more information, see this publication.

Staffing Pattern

Staffing patterns show the occupational makeup of an industry in percentages. For example, a (simplified) staffing pattern for the industry "Hospitals" might show that 10% of jobs in the hospitals industry are occupied by surgeons, 15% by general practitioners, 20% by nurses, 5% by information technology support staff, 5% by janitors, 1% by chief executives, and so on. See also Inverse Staffing Pattern. Source: Primarily the national OES staffing pattern, combined with projections from the National Industry-Occupation Employment Matrix and Emsi's proprietary employment data.

Unique Job Postings

Unique Job Postings is the number of deduplicated job vacancy advertisements scraped from over 45,000 websites. Deduplication is the process of identifying duplicate job postings and only counting one of the duplicates. The unique posting count is the count of postings after the deduplication process has taken place. The total posting count is the count of postings before deduplication. For example, if a user runs a report that returns 12 total job postings and 2 unique job postings, this means that the 12 postings contained 10 duplicates and only 2 unique job advertisements.

About Camoin Associates

Camoin Associates has provided economic development consulting services to municipalities, economic development agencies, and private enterprises since 1999. Through the services offered, Camoin Associates has had the opportunity to serve EDOs and local and state governments from Maine to California; corporations and organizations that include Lowes Home Improvement, FedEx, Amazon, Volvo (Nova Bus) and the New York Islanders; as well as private developers proposing projects in excess of $6 billion. We have completed over 1,500 projects in 45 states plus the Virgin Islands. Our reputation for detailed, place-specific, and accurate analysis has garnered attention from national media outlets including *Marketplace* (NPR), *Forbes* magazine, *The New York Times* and *The Wall Street Journal*. Additionally, our marketing strategies have helped our clients gain both national and local media coverage for their projects in order to build public support and leverage additional funding. To learn more about our experience and projects in all of our service lines, please visit our website at www.camoinassociates.com. You can also find us on Twitter @camoinassociate and on Facebook.

The Project Team

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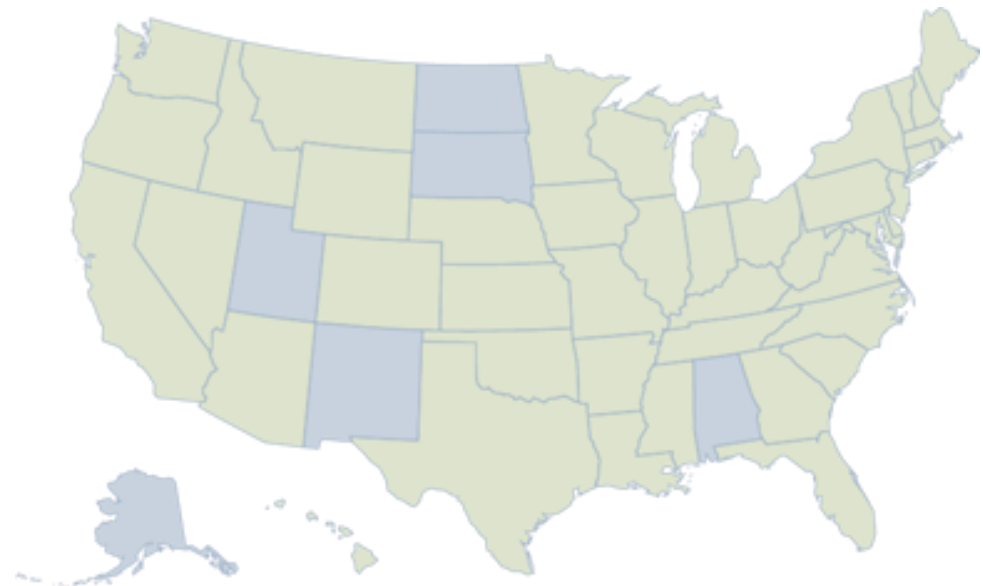*Senior Vice President, Project Principal*

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