The Class of 1964 Policy Research Shop

WORKFORCE DEVELOPMENT IN THE UPPER VALLEY

A Survey of Programs and Services

Presented to the Upper Valley Lake Sunapee Regional Planning Commission

PRS Policy Brief 1819-04 June 5, 2019

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This report was written by undergraduate students at Dartmouth College under the direction of professors in the Rockefeller Center. Policy Research Shop (PRS) students produce non-partisan policy analyses and present their findings in a non-advocacy manner. The PRS is fully endowed by the Dartmouth Class of 1964 through a class gift in celebration of its 50th Anniversary given to the Center. This endowment ensures that the Policy Research Shop will continue to produce high-quality, non-partisan policy research for policymakers in New Hampshire and Vermont. The PRS was previously funded by major grants from the U.S. Department of Education, Fund for the Improvement of Post-Secondary Education (FIPSE) and from the Ford Foundation and by initial seed grants from the Surdna Foundation, the Lintilhac Foundation, and the Ford Motor Company Fund. Since its inception in 2005, PRS students have invested more than 65,000 hours to produce more than 190 policy briefs for policymakers in New Hampshire and Vermont.



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EXECUTIVE SUMMARY

Workforce development is a broad term that refers to a myriad of activities by private and public organizations with the goal of strengthening the quality of the workforce. These activities can consist of specific and/or general hands-on trainings, educational classes and instruction, apprenticeships, and much more. Organizations from the school system, to the government, to private institutions host and regulate these programs and services. This report documents the landscape of workforce development programs and services across the Upper Valley of New Hampshire and Vermont on behalf of the Upper Valley Lake Sunapee Regional Planning Commission (UVLSRPC). The body of the report provides synopses of all programs and services that reach the workforce of this region including descriptions of the processes, costs, and other pertinent demographic information. Following this, ideas are identified for expansion of the project to further impact workforce development growth in the region. With this information the UVLSRPC will be able to present a comprehensive overview of workforce development to the citizens of the Upper Valley to help remediate problems of underemployment and workforce shortages.

1. THE UPPER VALLEY AND ITS WORKFORCE

The Upper Valley of Vermont and New Hampshire is a tight community of 69 towns from both sides of the border along the Connecticut River with a population of 178,000. The region is home to leading healthcare, educational, and manufacturing facilities that are among the best in the nation. These include Dartmouth-Hitchcock Medical Center and the White River Junction Veterans Administration Hospital, as well as Dartmouth College. Additionally, the region is home to renowned manufacturing and engineering companies such as Whelen Engineering and Hypertherm, Inc.

As of the 2010 Census, the Lebanon-Hanover NH-VT Micropolitican NECTA region, a subset of the 69 towns, had a population of 78,152 people holding a total of 33,035 primary jobs. Two-thirds of these residents are locally employed. Roughly half of Vermont residents who work in the Upper Valley commute to jobs in New Hampshire; whereas only one in ten of working New Hampshire residents commute to Vermont. Almost half of all resident workers in the Upper Valley work in Hanover or Lebanon, NH. Much of the remaining half travel as far as Manchester, NH, and Montpelier, VT, for work. The average Upper Valley resident earns \$3,333 per month or more, but this varies widely by industry.²

The largest industries in the Upper Valley are healthcare and social assistance, retail trade, and educational services. Employment opportunities vary greatly by town. In Lebanon, healthcare and social assistance make up just under 8,000 jobs, or 44 percent of employment. The educational services sector in Hanover employs almost 6,000 workers, representing 62 percent of employment. The region has a high median age among workers of 43.4 years. Since 2000, NH's youth population has been on the decline, while its above-65 population has steadily risen. The state ranks highest for share of college freshmen

seeking an education out-of-state at almost 35 percent of all NH high school graduates.³ Combined with a low unemployment rate of 2.2 percent, these demographics have created a growing underemployment crisis in the region as there are too few workers in the Upper Valley available to take on jobs in skilled professions.⁴

As a result, the Upper Valley faces a workforce development challenge. Businesses relying on skilled professionals in fields such as manufacturing, machining, plumbing, construction, nursing, and many more are suffering. Further, the stigmatization of some skilled professions among the working class and a low retention rate of recent high school and college graduates in the region make filling the workforce gaps that much more difficult. Though there are many available workforce development education and training programs and services across the region, they are largely scattered, poorly advertised, and sometimes difficult to access. In order to confront this growing crisis, residents of the Upper Valley need greater awareness of the different programs and services that make up the workforce development landscape in front of them.

2. PURPOSE STATEMENT

Until now, there has been no comprehensive, publicly available database or map of Upper Valley public and private workforce development programs and services. As the region continues to face challenges described above, the necessity to ease burdens on employers and jobseekers becomes even more pressing. Additionally, everyone from high school students to workers at or above retirement age could benefit from a public database of workforce development and retraining opportunities available in the area. This report, requested by the Upper Valley Lake Sunapee Regional Planning Commission (UVLSRPC), seeks to provide a comprehensive survey of such programs and services. The goal is to provide a database of accessible information on all opportunities available to potential workers including pertinent details summarized for each program, service, grant, or other workforce development item.

The intended objective of such a database is to help individuals and employers in the region locate the most effective education and training programs and services to help fulfill their workforce development needs. The database will provide a clear, accessible resource for these interested parties to facilitate a simpler research process. Further, existing programs and services will also have the opportunity to learn from one another and better improve the existing landscape.

3. METHODOLOGY

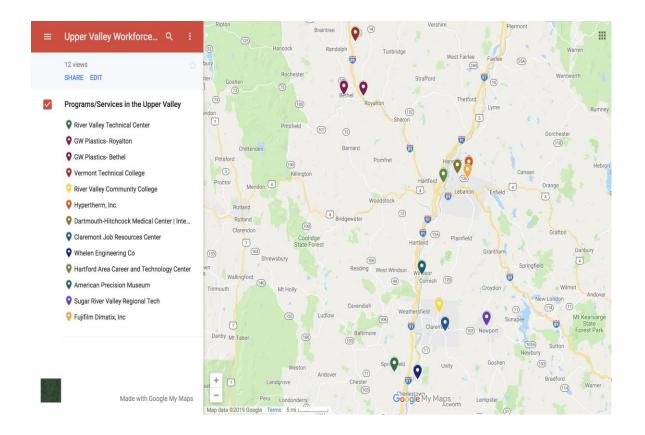
The research done in compiling the following overview began by first using online resources to generate a list of workforce development programs and services across the Upper Valley. From there, direct contacts with program or service leaders were made and interviews were conducted via telephone, in-person, and over email to gather more data

not available online to create a complete database. Once the raw information was gathered, synopses of all of the programs and services were created, consisting of the most pertinent information a potential participant of the program or service would need to know (to the extent that it was provided by program/service leaders). A more detailed description of this methodology, including the research process and interview questions, is located in Appendix A.

4. WORKFORCE DEVELOPMENT PROGRAMS AND SERVICES

The following sections denote all of the individual workforce development programs and services uncovered in the research. Each program or service is noted in italics, and in cases where a provider manages multiple programs or services, that provider is introduced with subsequent indented paragraphs below to specify the programs/services it houses. All programs and services are listed alphabetically within each subsection. The section is organized by physical location in relation to the Upper Valley: north, central, and south. Additionally, there are certain programs and services that extend beyond the Upper Valley, programs and services that do not have physical locations, and programs and services that vary in their location. Those programs and services are noted in their own respective sections. Information on how to find further details or apply for the programs and services are included when applicable in the form of phone numbers, email addresses, and websites. Providers who were unable to be contacted, and/or whose information was gathered solely from online sources without communication to program/service leaders, are noted with an asterisk (*) before their title. Figure 1, found on the next page, is a map depicting the locations of all identified programs in the Upper Valley.

Figure 1: Map of Upper Valley Workforce Development Programs/Services



4.1 Northern Programs and Services

GW Plastics: GW Plastics, a manufacturing company with plants in both Bethel and Royalton, VT, currently offers a variety of workforce development opportunities to external participants and its own employees over a wide range of demographics. For further questions or inquiries about participation, individuals should contact VP of Human Resources, Cathy Tempesta, at cathy.tempesta@gwplastics.com.

Certificate in Manufacturing Leadership Technology Program: The GW Certificate in Manufacturing Leadership Technology Program takes place at the nearby Vermont Technical College (VTC). The program is designated for "high level employees" currently working at GW. Every two to three years, several employees are selected to participate. Over the course of four years, participants are enrolled at VTC where they take one course per semester (classes one to two evenings a week) in each of the necessary disciplines in GW's business: physics, technical math, manufacturing processes, and design communications. Upon successful completion of each course they receive a \$500 bonus, and upon

graduation, a 10 percent increase in pay. GW covers all costs of enrollment for participants.

Molder and Automation Apprentice Training: The Molder and Automation Apprenticeship Training is a program located in both GW's Bethel and Royalton plants. The program is meant for current entry level GW employees interested in moving up in the business. Upon completion of the program, employees earn the status of Process Technician Employee. The program is offered annually and takes 2-3 employees. Over the course of 18 months, selected employees are matched with a mentor and develop an individualized training program to reach the desired outcome. Participants incur no added costs for participating in the program.

Process Engineer Training: The Process Engineer Training Program is offered at GW's Royalton plant to one graduate of VTC's two-year program in manufacturing engineering technology. Over 18 months, participants are trained by the Technology Center Manager in Royalton with full time employment and no added costs. Upon completion of the program, participants earn Process Engineer status.

Tool Division Apprenticeship Program: The Tool Division Apprenticeship Program is located at the company's Plastics Mold Division at GW's Royalton plant. The program hires local high school graduates looking for work at GW and offers full time employment and regular pay increases over the course of two years. Participants incur no added costs for participating in the program.

Scholarship at Vermont Technical College: The Scholarship at Vermont Technical College, taking place at VTC, is offered every Spring to two incoming high school freshmen interested in manufacturing/engineering and working/living in their local community in the future. Over four years, participants are given a scholarship to VTC worth \$8,800 per year. They also participate in a paid summer internship over the summer between their freshman and sophomore years. There are no added costs for participants and upon graduation they are offered entry level engineering positions at GW.

School of Tech: The School of Tech, located at GW's Royalton plant, is a program that works with area high schools to offer a semester long course for students aged 14-17 that teaches them what GW does, from project conception, to material selection, to design, to mold making, through production. Approximately 8-10 students are selected and bussed to the Royalton plant twice a week for a two-hour hands-on course of study. The students also receive a science credit upon graduation. The program is offered every fall and participants incur no added costs. Students are also given detailed information about future careers at GW.⁵

Vermont Technical College (VTC): Through the Office of Continuing Education and Workforce Development (CEWD), VTC offers a wide array of certificate programs that focus on applied learning and career-focused education. Email cewd@vtc.edu for more information.⁶

Agriculture & Food Systems: The Institute for Applied Agriculture and Food Systems at VTC offers trainings ranging in length from one day to three weeks that are taught by expert facilitators in their fields. The Institute also offers Certificate Programs, from vegetable, fruit and berry production, to dairy-herd and natural resource land management, to technical skills such as meat cutting and welding.

Business-Learning & Development: Business-Learning & Development teaches participants how to navigate the larger, more influential "people part" of organizational life. A whole suite of development programs includes Communication Effectiveness, Giving Feedback that Motivates Others, Conflict Management, Customer Service Skills, Coaching Skills, Decision-Making and Delegation Skills, The Art of Listening, etc.

Career & Technical Teacher: The Career & Technical Teacher Education Program is an alternative route to licensure programs for apprentice educators. To qualify, applicants must be either a high school graduate with at least six years of experience in the desired trade or hold an associate degree or higher with four years of experience. Once hired at a regional high school tech center, teachers can enter this three-year program to obtain their Level I Educator License.

Electrical/Plumbing/HVAC: Trainings are available for licensed electricians and plumbers, and for tradespeople who hold specialty licenses. Exam prep trainings are offered for people nearing the completion of the required 8,000 on-the-job training hours and are applying to take the Journeymen's exam; or for Journeymen who are getting close to taking the Master's exam. CEWD also offers online career training programs in HVACR Certified Technician and HVACR Controls/Building Automation Systems.

Green Trainings/Construction: Green Trainings offer flexible schedules and training locations. Programs cover Alternative Fuels, Health and Safety, Renewable Energy, and Weatherization and Home Performance.

Health Care: CEWD offers one-day seminars and short Certificate Programs, both online and in-person. Programs include Nursing High Fidelity Simulation, Nursing Professional Development, Dental Hygiene Professional Development, and Healthcare Management/ Leadership.

Manufacturing: Three manufacturing apprenticeships are designed using the successful programs CEWD offers at companies around the state. These offerings allow students to begin without an employer sponsor and participate in required on-the-job training in-between classes. Classes meet twice a week in the evenings and on some Saturdays. The apprenticeships include Advanced Manufacturing Apprenticeship, Industrial Maintenance Apprenticeship, and GlobalFoundries Technician Program Apprenticeship.

National Center for Construction Education & Research (NCCER): The NCCER-credentialed Project Supervision is designed for employees in construction aspiring to be site supervisors and industry leaders who want to upskill existing foremen, estimators, and project engineers in construction. For a total of 85 contact hours, the program costs \$3,350.

SHRM - Human Resource Training: The SHRM "Essentials of Human Resources" program covers introductory HR topics in a condensed, easy-to-understand format. The SHRM Learning System is intended to cover the SHRM Body of Competence and Knowledge (SHRM BoCK) tested in the SHRM-CP and SHRM-SCP certification exams.

Youth Summer Camps: VTC offers a variety of summer programs for youth in Vermont, including Social Entrepreneurship and Business for Good, Rosie's Girls STEM Leadership Camp, Coder Camp for Girls, Advanced Coder Camp, and AeroCamp. The tuition rate for 2019 is \$479 per credit. Vermont residents are eligible for two free tuition vouchers during their junior or senior years in high school.⁷

4.2 Central Programs and Services

Dartmouth-Hitchcock Workforce Readiness Institute (WRI): The WRI offers a number of programs to train individuals for medical professions. Almost everyone who finishes the program is offered a position at Dartmouth-Hitchcock Medical Center (DHMC). Most of the opportunities for training include an hourly wage and are tuition-free through sponsorship by DHMC. No college experience is required for the certificate programs, and those with only a high school diploma or the equivalent thereof are encouraged to apply. As of 2019, Dartmouth-Hitchcock's Workforce Readiness Institute offered the following trainings and programs: Medical Assistant, Pharmacy Technician, ENT PA Residency, Certified Surgical Technologist, Nurse Assistant, Ophthalmic Assistant, CT PA Residency, and LPN to RN Program. Almost all WRI activity takes place on-site in Lebanon, NH. Notably, a medical assistant program operates out of Keene, NH, as well as in the Manchester-Concord/Nashua region. For these programs, DHMC acknowledges that military veterans often possess the kinds of skills that they prioritize in the application selection process. As such, they encourage veterans to apply. DHMC also operates summer

internship programs for high school and college students, structured to provide professional development skills. There is also a job shadow program, where 8th-graders from Hanover High School have a week of intensive hands-on experience in the medical environment. DHMC is working to create a more structured, long-term job shadowing experience that draws from more schools as well. Finally, WRI also contains Project SEARCH, which seeks out highly-motivated individuals aged 28 or under with physical or cognitive disabilities, working with them to provide professional skills training for a paid position with DHMC or another employer. To learn more about each programs offered through the WRI, visit their program webpage online at http://dhwri.org/#programs/. For inquiries, applicants are directed to send questions to wri@hitchcock.org, or to call their Title-I hotline at (603) 653-0400.8

Fujifilm Dimatix, Inc.: Located in Lebanon, NH, Fujifilm Dimatix, Inc. is a company that focuses on making industrial print jets and other imaging and documenting technology. As a major company in the region with jobs that require specialization and training, it provides workforce development through both external and internal programs.

STEM Internship – High Tech Manufacturing and Engineering: This internship takes sixteen high school students from Lebanon High School in NH and Thetford Academy in VT (eight from each school). Lebanon sends only seniors and Thetford allows Juniors and Seniors. The program partners with Hypertherm, Inc. and consists of a full semester of education that counts for class credit and exposes students to every step of the production process. Each company hosts an 8-week session for each school, five days a week for two hours each day. The students are transported to and from their sending schools by bus each day. The internship exposes students not only to manufacturing and engineering, but also accounting, marketing, and human resources. Specifically, during the Fujifilm portion, students try their hand at product development and learn important lessons about procurement, automation, chemical and physics analytics practices, along with many more manufacturing practices. Additionally, students can earn both math and science credits. There are no costs for students in the program. The program runs from the beginning of the school-year through mid-January. Interested students should speak to their guidance counselors.

VTC Proficiency Based Leadership Series: The Leadership Series program is an internal program offered by Fujifilm to employees looking to move up or who have already moved into leadership positions. The goal of the program is to prepare the employees to be more effective leaders in the company. The students learn about six different leadership proficiencies to better deal with common difficult situations leaders confront on a daily basis. The proficiencies include: communication styles, moving from conflict to collaboration, giving constructive feedback, leadership styles and personal influence, managing and optimizing groups and teams, and managing change. Those who complete this program are sought after for higher

management positions and are given more responsibility, leading to faster career advancement. Classes take place at Fujifilm and are provided by Vermont Technical College teachers. Applicants are selected internally.⁹

Hartford Area Career and Technology Center (*HACTC*): Located in White River Junction, HACTC connects adults, high schoolers, and businesses to training in a variety of fields.

High School Courses: HACTC is the leading provider of career and technical education for high school students in the Upper Valley area. HACTC operates on a half-day schedule, where students also attend classes at their sending school and are bused to the facility. HACTC accepts students from over fifteen high schools and academies in the region, and places them into courses fitting their occupational interests. At the end of their program, students leave with academic credit, certifications, a professional resume, and samples of their completed work. The cost of attendance is billed to the students' sending schools. Courses can range from one semester to a full-year program. The full list of courses offered at the center are: Automotive Technology, Building Trades, Business Administration, Collision Repair and Refinishing, Computer Science Essentials, Computer Science Principles, Cybersecurity, Cosmetology, Culinary Arts, Design/Illustration/Media Arts, Education Sciences, Health Sciences, Industrial Mechanics and Welding, Natural Resources, Introduction to Engineering Design, Principles of Engineering, and Career and Technology Exploration. For more information about HACTC's High School Career and Technology Programs, visit their online catalogue at http://hactc.com/programs/.

Adult Courses: In addition to its youth courses, HACTC also offers four programs for adults: Licensed Nursing Assistant (LNA), Introduction to Welding, Introduction to QuickBooks, and Introduction to Microsoft Excel. Class sizes are small, and financial assistance is available for tuition and registration fees. These courses are offered throughout the year and are typically held in the evening to accommodate full-time workers. Adults looking to register for courses should direct their inquiries to HACTC Adult Education Coordinator Charles Reibel at reibelc@hartfordschools.net, or by phone at (802) 359-4739. Interested parties can also go directly to the Adult Education website at http://hactc.com/adult-ed/.

Customized Business Courses: The HACTC also offers customized business and industry training for its regional corporate partners. Businesses interested in a personal training programs should direct their inquiries to HACTC Adult Education Coordinator Charles Reibel at reibelc@hartfordschools.net, or by phone at (802) 359-4739. 10

*Hypertherm Inc.: Hypertherm, Inc. is a manufacturing company with headquarters in Hanover, NH. It offers multiple programs geared towards teaching manufacturing and engineering skills to high schoolers and unemployed individuals.

Hypertherm Technical Training Institute (HTTI): HTTI finds and trains unemployed and underemployed Americans to become highly qualified Computer Numeric Control (CNC) machine operators. The course takes nine weeks to complete. In tandem with this training, the company runs a paid nine-week course whose curriculum includes math, blueprint reading, and geometric testing. Hypertherm also collaborates with River Valley Community College (RVCC) to provide participants with academic credits that get program graduates halfway to an associate degree. Inquiries for this program can be made by reaching out to the Director of the Advanced Machine Tool Technology Program at River Valley Community College, James Britton, at jbritton@ccsnh.edu. 11

Hypertherm Summer Institute: The Hypertherm Summer Institute is an apprenticeship program that offers high school Juniors and Seniors, ages 16 and over, the opportunity to explore a career in Advanced Manufacturing. Participants learn, through job shadowing and instruction, the operation of cutting-edge CNC machines, automation and robotics, blueprint reading with geometric dimensioning and tolerancing, machine tool math, verification product quality with state-of-the-art inspection equipment, LEAN manufacturing, continuous improvement activities, and fundamentals of turning, milling, inspection, and manufacturing processes. Participants work for eight weeks (with a one-week unpaid summer vacation after 4 weeks) for 40 hours per week and earn \$10.00 an hour. Participants also have the opportunity to earn up to 16 college credits. After completion of the program and graduation from high school, participants have the potential for full-time employment at Hypertherm. Interested individuals can apply at http://application.vthitec.org/HyperthermSI/index.php/. 12

4.3 Southern Programs and Services

American Precision Museum (APM): Located at the historic Robbins & Lawrence Armory in Windsor, VT, this public museum hosts daily programs for kids ages 8-15 in their Learning Lab—demonstrating basic robotics, 3D printing, and other fun STEM activities in a structured and safe environment. The museum can be reached by phone at (802) 674-5781 and more information found at http://www.americanprecision.org/.

Upper Valley Manufacturing Week: This weeklong event offers students in the Upper Valley educational classroom visits from local businesses, job shadowing opportunities, and facility tours. Students are directly introduced to local manufacturing careers as well as encouraged to learn the necessary skills. A large variety of sponsors for the week's event include Chamberlain Machine, Inc.,

Hypertherm, Inc., North Hartland Tool, Whelen Engineering, and many more local companies and organizations.¹³

Junior Apprentice Program: Any day of the week, children ages eight to twelve, accompanied by a parent or guardian, may complete a Junior Apprentice booklet, included in the price of admission. The booklet is filled with fun activities that teach the history of manufacturing and the museum. Completion of all tasks qualifies them for the Young Apprenticeship Club.

Young Apprenticeship Club: Junior Apprentices can come to classes at the museum every other Saturday from June 2nd to October 20th. The Young Apprenticeship Club consists of "a wide variety of guided activities including coding and robotics." Young Apprentices have the opportunity to undertake special projects throughout the season. Completed projects are presented during the Model Engineering Show and Maker Space Event on August 18th. Some Youth Apprenticeship programming has accompanying fees to cover the cost of materials and instructors.

Working Machine Shop: Every year, the APM, with the assistance of RVTC, recruits and trains high-school student interns to demonstrate the museum's historic machine tools to visitors during the summer. This comprehensive internship program has structured learning goals, metrics, and offers school credit. Students come away with a strong knowledge of manufacturing history and techniques, as well as good practice with soft-skills from explaining the museums exhibits and programs to the public. ¹⁵

NH Works: Sponsored by the Office of Workforce Opportunity, Department of Business and Economic Affairs, the NH Works system was created in 1999 from the Workforce Investment Act (now the Workforce Innovation and Opportunities Act, WIOA). Through use of WIOA funds, the NH Works system includes an array of programs overseen by the Department of Employment Security and its employment service known as New Hampshire Employment Security (NHES). The majority of these programs focus less on direct training and more on assistance in locating advanced training as well as assisting the lives of those in need of workforce development services. Some of these programs have varied locations that are listed in later sections. More details can be found at http://nhworks.org/.

Centers. The one that can be most easily accessed by Upper Valley residents is located in Claremont. These centers offer several services (many also obtainable at online at http://nhes.nh.gov/services/job-seekers/career.htm or via the NH Works website at http://nhworks.org/) that individuals seeking workforce development guidance or training will find useful. At the centers and on these links, users have

access to training and job matching databases of registered providers. Additionally, resume writing and other soft skills, as well as guidance in navigating the unemployment system can be obtained. The use of these job centers and online sources are available to anyone over 18 years old at no cost.

WIOA Adult & Dislocated Worker: The WIOA Adult program, which includes dislocated worker services, is geared toward under- and unemployed adults. The program works on an individualized basis, for up to a year, to help adults find specific training programs and/or employment. In some cases, the program will also cover all costs for the individual's training. These services can be accessed in the same Job Resource Centers described above but are handled by a different staff. To qualify for WIOA Adult services, an individual must be over 18 years old, authorized to work in the US, meet income and economic eligibility standards (i.e. TANF), and be a resident of NH. To qualify for Dislocated Worker services specifically, an individual must also be terminated or laid-off, notified of the termination/lay-off, and be unlikely to return to a previous occupation.

Senior Community Service Employment Program (SCSEP): SCSEP is a program that focuses on assisting NH seniors to find job-specific training programs and/or knowledge upgrading services to keep seniors competitive in the changing workforce landscape. SCSEP does so by offering the development of individual employment training assignments with local non-profit or government agencies to provide an opportunity to learn new skills, obtain paid training and worker's compensation coverage, and seek an annual physical exam. Additionally, SCSEP works to place seniors into part-time and full-time jobs. To qualify for these services, an individual must be age 55 or older, a resident of New Hampshire, unemployed, and have a gross family income of no more than 125 percent of the federal poverty guidelines. Further, priority is given to applicants who are veterans or qualified spouses, over 65 years of age, living with a disability, or who have low literacy skills/limited English proficiency, reside in a rural area, are homeless or at risk of homelessness, have low employment prospects, or have failed to find employment after using services through the NH Works system in the past. These services can be accessed in the same Job Resource Centers described above but are handled by a different staff. 16

River Valley Community College (RVCC): RVCC offers both credited and non-credited courses and programs geared towards preparing students to be better engaged in the workforce. As one of the several colleges in the Community College System of New Hampshire (CCSNH), RVCC is also home to the government led WorkReadyNH which, although it falls under NH Works, is listed with RVCC because the College is the physical provider.

Plumbing Licensure Renewal: The Plumbing Licensure Renewal program offers yearly licensure renewals for local plumbers on the third Wednesday of every month from 6-9PM at RVCC in Claremont. The program costs participants \$59.00 and can be registered for online at http://rivervalley.edu/community/plumbing-license-renewal/ or over the phone by calling 603-542-7744.¹⁷

WorkReadyNH: WorkReadyNH was created by the statewide NH Works program to foster greater development of soft skills among the workforce. WorkReadyNH consists of a standardized course that provides soft skills training for individuals including teamwork, communication, graphic literacy, and resume building. At the end of the program, participants have a working resume, enhanced interpersonal skills, and a business or career plan. WorkReadyNH is a tuition-free, 60-hour program, offered several times a year for three weeks from 9:00am to 3:00pm, Monday through Friday, through the Community College System of NH. The program's presence in the Upper Valley is serviced by the RVCC campus. As of 2019, the program has graduated over 4,500 participants across the state, with 99.8 percent of graduates saying it met or exceeded their expectations. All graduates take the ACT Work Keys Exam and receive a National Career Readiness Certificate and a regionally-recognized WorkReadyNH Certificate. The program is not for full-time students, but rather those already employed or looking to go straight to work or enter certificate programs. The minimum age for participation is 18, but the program caters to both new workers and those looking for training later in life. WorkReadyNH also works with incarcerated individuals to help provide the skills they need to enter the workforce. The only requirements for entry for all participants are a demonstration of basic reading and math skills. The program is only for NH residents. Graduates have gone on to work for Dartmouth-Hitchcock Medical Center, Hypertherm, Inc., and other major regional employers. ¹⁸

River Valley Technical Center (RVTC): RVTC offers a variety courses and certifications in different industries to a large range of participants, in both the daytime under-18 and evening adult courses. More information and registration details can be found online at http://rvtc.org/.

Daytime Courses: While the Center is located in Springfield, VT, and most participants are from that region, individuals nearer the southern end of the Upper Valley can still reasonably access the Center. The program has 296 daytime students, usually under 18 years of age. The center has many students in lower economic distinctions as about 37 percent of daytime students qualify for free and reduced lunch. Further, 98 percent of students do not have a high school degree. Students commit to a course that usually lasts for about 700 hours over two years, though, this may vary by intended certification. Regarding costs, if a student does not have a diploma, the school district they live in pays for daytime programing (approx. \$7,000 per year). However, if a student has a diploma, daytime

programing costs \$1,800 per year. The classes and related degrees offered to participants include: Construction, HVAC, Plumbing, Electrician, Welding, Culinary, Horticulture and Natural Resources (Landscaping, Farming, Arbor, and Logging), Engineering, Advance Manufacturing, Hospitality, Criminal Justice, Human Services (Child Care, Education, and Social Services), Audio Video Production (Videographer, Audio Technician, Studio Recording), Health Careers (LNA, EMT, Veterinary Technician, and Other Health Care Related Fields), IT (Computer Programming, Adobe Suite Certification, Hardware Management, Software Development, Network Management), and Business and Financial Services (Accountant, Entrepreneur, and Customer Service).

Evening Courses: Evening LNA and EMT are mostly taken by those over 18 years old. Half of these evening students make under \$25,000 a year (about ten percent make above \$50,000). Courses tend to be geared towards those without a college degree with about ten percent of nighttime students having gone beyond a high school degree or GED. About 20-40 adults are in evening classes at one time. Costs for LNA and EMT courses are \$1,250 and \$1,000 respectively. Additionally, many adults qualify for Vermont Non-Degree Grants. 19

Sugar River Valley Technical Center (SRVC): SRVC is a quickly growing technical center that reaches southern Upper Valley residents. Many of their participants come from the Sunapee District, but SRVC is working to expand more to the Upper Valley. SRVC offers a variety of technical classes across a diverse list of industries including Building, Culinary, Accounting, Machine Tool, and Plumbing/Heating to high school students. The different programs take about two years to complete on average. Further, students with special needs are able to access services until age 21. The students are bussed in from their sending high schools every day for under two hours. The students' sending schools cover virtually all costs. However, certain programs require outside purchases such as particular attire for certain fields. Currently there are over 500 high school students who take classes at the center, however, individual labs maintain class sizes of 16 students. SRVC is also working to expand its offerings to adults as well. Evening classes of 16 students in the Fall and Spring, likely in Machine Tool and Construction/Carpentry (focusing on repair work), are going to be offered soon. Necessary education for these classes will likely be a high school diploma or the equivalent. Further, SRVC is working to create a summer inmate carpentry training program with inmates from Sullivan County. The program will last for six weeks and inmate participants will be selected by Sullivan County. For information on courses and registration go to http://srvrtc.sau6.org/.²⁰

Little League of Manufacturing at Whelen Engineering: The Little League of Manufacturing at Whelen Engineering is a program intended to teach high school students more about the fields of manufacturing and engineering. In the program, participants have

the opportunity to do hands-on work with machines, job shadow, and learn about careers in the industry. The program takes 16 high school students each quarter of the school year and holds classes at Whelen in Charlestown, NH for an hour a day for 45 days. Students ages range from 14 to 19 and they come from the Claremont and Fall Mountain School Districts. The classes count for elective course credit and tuition and transportation are covered entirely by the school district. Many graduates of the program go on to work in the field in other locations, two-year and four-year universities, and some end up working at Whelen. Additionally, programs for middle school students involve field trips, guest speakers, and an in-class curriculum. Finally, a curriculum is woven into the classes of even younger students in the elementary school level. Individuals seeking further information can contact Jacqui Guillette at jeguillette@gmail.com.²¹

4.4 Multiple-Location Programs and Services

NH Department of Education Registered Apprenticeships: Through the NH Department of Education and in conjunction with the US Department of Labor, the state of NH offers Registered Apprenticeship Programs to assist individuals to find proper training and secure licenses and certifications, as well as to help businesses locate potential employees. The following programs are available to a broad range of businesses and individuals.

ApprenticeshipNH: With a recent \$1.2 million State Apprenticeship Expansion grant, the Community College System of NH is able to offer these Registered Apprenticeships. The program, known as ApprenticeshipNH, allows individuals to find apprenticeships and business to register to host them. The program connects job seekers looking to learn new skills with employers looking for qualified workers. The program targets students in the Community College System of NH but also is open to other interested parties. Training takes place on college campuses as well as the offices, headquarters, and factories of various participating employers who hire apprentices. ApprenticeshipNH focuses on the industries of healthcare, manufacturing, hospitality, and IT. Student participants are paid during the apprenticeship and guaranteed a job at the same company upon successful completion of the program. Past employers participating in ApprenticeshipNH include Dartmouth-Hitchcock, Teleflex Medical, and Hypertherm, Inc., with more employers currently developing programs. The minimum age to participate is 16 and the program has seen individuals in their late 50s and early 60s participating. The majority of participants have a high school degree, and some have a postsecondary education (e.g. two-year college) and are often looking for a career switch or a job after a period of unemployment. Most participants come from middle to low income backgrounds. ApprenticeshipNH takes anywhere from 1 to 4 years to complete, depending on the technical nature of the job, what the employer wants, and the USDOL determined requirements for each job. The program is structured to mimic a normal job, often having a 40 hour per week commitment. Typical day-to-day schedules depend on the specific apprenticeship and mostly fall into 3 patterns: working during the day and attending school at night; Monday/Tuesday in school, then working Wednesday-Friday; and frontloading education in the first weeks, then job training. The program serves around 100 people a year (with rolling admissions) across the state, with the Upper Valley region making up about a quarter of these participants. There is no cost for participating in the apprenticeship. Nine out of ten employers also provide tuition assistance. Pay rates vary across industries and positions often start at \$10 per hour with progressive wage increases as participants move through the program, ending with a typical salary for the respective position. Options are also available for those looking for work that will sustain a family. Contact Emily Zeien at ezeien@ccsnh.edu for information and registration details or go to http://apprenticeshipnh.org/.²²

*Electrical, Machining, and Plumbing Apprenticeship Programs: Programs are also offered for these specific trades. Information regarding these programs can be found at http://education.nh.gov/career/career/reg_appren_prog.htm/.²³

New Hampshire Sector Partnerships Initiative (SPI): NH SPI is a collaboration between both NH Works and the private sector. The Initiative works to connect businesses, organizations, and individuals within particular industries to meet and discuss training and retention needs and strategies. From these meetings, businesses work to structure education and training programs as well as find Registered Apprentices. NH SPI also partners with Jobs for the Future to help complete market and industry research, create training programs, and put together industry collaboration events. ²⁴ The industries that fall under this initiative include Hospitality, Construction, Technology, Manufacturing, and Health Care. Programs and events are hosted year-round and throughout the entire state of New Hampshire. Trainings can be hosted on site at the particular businesses and last as long as needed, though many often last between four to ten weeks. Companies that need financial assistance in creating training and education programs are referred to the NH Job Training Fund by NH SPI for assistance. Businesses interested in getting in touch can find contacts specific to their industry at http://nhsectorpartners.org/contact/. ²⁵

NH Works: Other services are offered through NH Works that take place outside of the Job Resource Center in Claremont. Both the Vocational Rehabilitation and the On-the-Job Training Program entail on-site learning. Information on these opportunities are also available on the NH Works website at http://nhworks.org/.

On-the-Job Training Program (OJT): The OJT program is geared towards businesses looking to offer training programs to potential employees. As such, the program takes place at the respective business using the program. Businesses conduct interviews with applicants and hire potential employees based on options provided by OJT, and then OJT connects the business with a Job Placement Specialist to identify their ideal training guidelines and schedule. The size, length

of time, and frequency of this training program are up to the respective business. At the end of the training program, the business can then decide who to officially hire. The services provided by OJT are free to businesses. Further, OJT will reimburse a company for up to 50 percent of its trainee's gross pay over the duration of the training period. The program has no industry limits and varies widely from construction to pharmacy technician. The only limiting demographic factor is that trainees must be above 18 years old.²⁶

Vocational Rehabilitation: Vocational Rehabilitation helps those with prediagnosed disabilities to maximize their potential for employment by finding accessible specific job training as well as employment opportunities. Further, the program offers guided counseling to achieve these goals and vehicle/home modification assistance if necessary. The program can either take place at designated office locations (the nearest to the Upper Valley in Hanover and Lebanon) or at the participant's own home if so required. At the moment, the program focuses on those who are most severely disabled, though there is a waiting list available for those that do not immediately qualify.²⁷

River Valley Community College Customized Business Training Programs: Outside of its course offerings, RVCC offers the opportunity for businesses to use their staff and resources to better train employees. The Business Training Center (BTC) assists companies in meeting their training and educational goals by working in partnership with area businesses to offer customized training programs to advance technological, interpersonal, and/or management skills. The BTC provides experienced instructors with knowledge on how to teach skills in a variety of fields such as supervisory and leadership, professional sales, manufacturing, project management, computer applications, and soft skills. Instructors go to the business to teach. Businesses can learn more by calling 603-542-7744.²⁸

4.5 Online/Non-Physical Programs and Services

Community College of Vermont (CCV): CCV is Vermont's second largest college, serving over 6,000 students each semester. The College offers multiple certificate programs to students.²⁹

Certified Production Technician (CPT): The CPT program leads to an industry-recognized credential that ensures preparedness for front-line production work. Available for both entry-level and supervisory roles, a CPT certification means that an individual has demonstrated mastery of core competencies of manufacturing production as specified by the Manufacturing Skill Standards Council (MSSC). The goal of the CPT certification program is to raise the level of performance of production workers both to assist individuals in finding higher-wage jobs and to help employers improve company productivity and competitiveness. CPT credits

can be applied to a STEM Studies degree. Courses include Principles of Manufacturing, Manufacturing Technology, and Green Production.

Certified Public Bookkeeper (CPB): This program allows students to earn the nationally recognized CPB license while working as a bookkeeper or pursuing an accounting degree. Students complete one semester at CCV (3 accounting classes in 15 weeks), then complete four NACPB certification exams: bookkeeping, accounting, QuickBooks, and payroll. Students then work as full-time bookkeepers for two years, or continue at CCV for an Associate in Accounting to be eligible for the Certified Public Bookkeeper license.

Computer Technology Training: The Community College of Vermont offers several opportunities for employee skills development in software commonly utilized in the workplace. Workshops, short trainings, and courses range from half day to 15 weeks in duration, depending on the needs of the business. The content of workshops can be customized. Typical trainings and courses include QuickBooks, PowerPoint, Word, Excel, Computer Applications, Search Engine Marketing and Optimization, and Intro to Internet Marketing.³⁰

Next Steps NH: In 2013, Next Steps NH was funded by a five-year State Personnel Development Grant focused on providing professional development coaching and training to selected New Hampshire high schools for the purpose of increasing the graduation rate of students with disabilities and students at-risk. While the grant has expired, the Next Steps NH website, http://nextsteps-nh.org/, still houses a lot of useful information, links, and resources on a variety of topics to help students and families transition to higher level education, trainings, and careers. These resources include information about apprenticeships, Job Corps, community college programs, soft skills, and much more. 31

River Valley Community College Online Career Training: The Online Career Training offered by RVCC includes open enrollment courses for anyone looking to prepare for a new career or advance in their current occupation. Popular industries include but are not limited to: Healthcare Professional Training, Business and Accounting, Construction trades, IT, Computer Applications, Hospitality, Language Skills, Health and Fitness, and Legal. Courses typically last about six months and upon completion, participants either receive a certificate or are prepared for their respective certification exams. Costs for this program vary by course. A complete course catalogue can be found on their Online Instruction Center at http://ed2go.com/rivervalley/.³²

*Vermont Training Program (VTP): VTP is a 30-year old workforce development program that partners with employers and career centers to prepare workers in VT for future careers. VTP provides conditional grants for workforce training for new, low-skilled, transitioning, and incumbent workers. Grants from VTP can cover up to half of the training costs for participation fees and trainer salaries. Rather than beginning workforce

development initiatives, grant money is used to supplement existing programs and services by businesses, education centers, or nonprofit and community organizations. VTP is focused on all sectors of the state's economy including fields like Advanced Manufacturing, Financial Services, Food Systems, Forest Products, Health Care, Software Development and IT, Biotechnology, Clean Energy, and Environmental Consulting. The number of Vermonters VTP reaches in a year varies with larger economic trends, but in FY2018 alone the program serviced over 2,000 people. To be eligible for the program, trainees must be full-time permanent employees working in VT. Programs must pay trainees a living wage, defined by the VT Legislative Fiscal Office as an hourly minimum of \$13.06, and offer at least three additional benefits, such as health and dental insurance or paid sick days. Applications for VTP funding are always being accepted and are reviewed on a rolling basis. Application information is available online at http://accd.vermont.gov/economic-development/funding-incentives/vtp/.³³

4.6 Beyond the Upper Valley

*Building Pathways New Hampshire (BPNH): This five-week pre-apprenticeship program in building and construction for women is a collaborative endeavor under the NH Building Trades' USDOL-recognized Registered Apprenticeship programs of the NH AFL-CIO. BPNH assists unemployed and underemployed New Hampshire women to secure a career in construction through entry into a multi-year 'earn as you learn' registered apprenticeship. There is a comprehensive application and assessment process for new applicants, followed by an intensive five weeks of classroom and hands-on training. This training includes construction site visits which introduce the different crafts that fall under the building and construction industry. BPNH offers job readiness support, case management and support services, career coaching, and support for undergoing the program's application process. Classes are held in Manchester, NH, but Upper Valley residents have been in attendance in the past. BPNH is eligible for financial assistance under the WIOA. For more information and to get in touch, visit the BPNH Facebook page at http://facebook.com/buildingpathwaysnh/.³⁴

*New Hampshire Job Corps Center: Located in Manchester, NH, Job Corps is a no-cost education and career technical training program administered by the U.S. Department of Labor. The Job Corps program is authorized by Title I-C of the Workforce Innovation and Opportunity Act of 2014. Dormitories and other living facilities are offered to students, making the Center more accessible to Upper Valley residents. The program offers young adults, ages 16-24, the opportunity to obtain basic high school level education and various trade skills. Students can live at the facility in dormitories with access to numerous amenities from cafeterias to athletic facilities, as well as participate in clubs and sports teams. For trade education, the center offers the Work-Based Learning program to teach students manufacturing technology, electrical technology, facilities maintenance, culinary arts, hotel and lodging, nurse assistance, clinical medical assistance, medical office support, and security services. Students can select a focus in the trade skill(s) they prefer

and improve over the course of their studies. Further, after graduating, the center provides students with a \$1,000 transition allowance, job placement assistance, career counseling, and relocation counseling all with the goal of providing a successful and simple transition to a career. More details and registration information can be found online at http://newhampshire.jobcorps.gov/.³⁵

5. CONCLUSION AND NEXT STEPS

The preceding information offers a comprehensive overview of the available workforce development programs and services that reach the Upper Valley of New Hampshire and Vermont. This overview is intended to provide interested businesses, organizations, and individuals the information they would need to explore options to enhance their workforce readiness and correct issues of underemployment. The resource is intended to be used for such a purpose and published through an easily accessible source, whether it is the UVLSRPC's website or another source such as the Department of Labor or the NH Works database, so that interested parties can use it. Further applications of this research as described below.

This report was focused solely on creating a clear view of the landscape of available workforce development programs and services in the Upper Valley. This information can be used in several ways. First, information about these opportunities can be placed in a more condensed and interactive format. Industry leaders interviewed for this report advocated for doing this through an online interactive database. An individual or business using this database would then be able to conduct a filtered search based on their respective needs regarding location, industry, cost, their age and educational background, etc. and find programs and services that work best for them. Additionally, a map like the one provided in Figure 1 in Section 4 could be posted online and made interactive so that interested parties can select a program/service near them and read about it directly. Figure 1 was created with the service *Google-My Maps* and provides a starting point for such an online map.

The creation and required updating of this database can be done in a few different ways, the best of which can be determined by future research teams. The Dartmouth College Class of 1964 Policy Research Shop, another workforce development-focused organization (perhaps one listed in Appendix C), a local government service like the NH/VT Department of Labor, or the UVLSRPC itself can create and update said database.

Additionally, the data and landscape created here not only allow one to see the available workforce development programs and services, but also makes the gaps in the current landscape more visible. From the data collected, future researchers may identify problems in the current system with regards to excluded regions, demographics, industries, and create strong models for workforce development programs in the region to try to follow based on

the most successful facets of existing programs and services. This research may then assist program/service providers as well as legislators to be able to create new programs and legislation that would further improve workforce development in the region.

APPENDIX A: EXTENDED METHODOLOGY

A.1 Locating Programs and Services

Uncovering available workforce development programs and services began with recommendations of providers and specific programs and services received the UVLSRPC in the initial meeting; and later through research online and further recommendations provided by other industry leaders.

Initially, the scope of this research was only dedicated to those programs and services that were based in or within a reasonable distance from the Upper Valley. However, it became apparent that certain programs and services that were not strictly based in/near the Upper Valley were still able to be of great benefit to its residents either by offering online resources or housing for out-of-town participants. Thus, any workforce development program that was able to connect with participants from the Upper Valley even though it was located outside of the area was included in the report.

Once the many programs and services were located, the final step in discovery was making initial contact with a leader of the program or service. In this stage, many cold calls and emails were sent out to develop that connection. While many programs and services replied, some never got back to researchers with information. In those cases, further research was conducted online to uncover as much information as possible.

A.2 Data Collection

Data collection was undertaken through three means: in-person interviews (either on-site or at Dartmouth College), phone interviews, or email correspondences. In approaching these interviews/correspondences, researchers created a list of thirteen questions to ask along with the general flow of conversation, as shown below:

- 1. What are the different programs/services/initiatives your organization offers?
- 2. How many individuals do these programs work with in a typical year?
- 3. What are the typical demographics of your programs/services' participants in the following categories (percentages or averages, or however you can best present the information)?
 - a. Target Age Range (<18, 18-29, 30-44, 45+)
 - b. Average Household Income (<\$25,000, \$25,000-\$50,000, >\$50,000)
 - c. Geographic Region or Towns Serviced
 - d. Education (No H.S. degree, H.S. degree or Equivalent, AA, BA, Masters+)



- 4. What skills/trades do your programs/services prepare people for?
- 5. What is the cost of participating in your programs/services?
- 6. Do you offer any financial assistance to subsidize either the cost of the programs/services or transportation to/from the program?
- 7. What is the typical length of time that an individual participates in your programs/services?
- 8. What percentage of participants go on to get a job after in their respectively trained field after completing your programs/services? Do individuals typically tend to work for your company afterwards? If so, how often?
- 9. Do you directly partner with any particular schools, federal programs, or other businesses? If so, in what capacity?
- 10. How do you measure your programs/services' success?
- 11. How would you describe the impact of your programs/services in terms of workforce development?
- 12. Do you offer any preferences to any demographics in particular?
- 13. Is there anything else you believe would be effective to note in our final database?

These questions were selected because they offer a majority of information that interested participants would want to know about a program or service in determining whether they would like to or are able to participate. We sent applicable questions from this list to the points of contact for the programs and services detailed in this report.

A.3 Creating and Completing a Template

Not every program or service was able to provide all of the above information because it did not apply to them, they did not collect that particular data point, or because they were not able to legally disclose the details. Further, some individuals did not know the answers to certain questions at the time of the interview or correspondence. As a result, researchers created a generic template based on the information that was most often provided and was deemed most relevant to the final goals of the report. The templates also included certain applicable data points outside of the initial thirteen questions that came out during primary conversations. Once the first questions were answered by all responsive programs and services, the templates were filled out for each. This provided a more equitable way to compare information between programs and services and a clear path to follow up with any program/service where more information was needed. The template provided a space to record information under the following headings:

- 1. Program Provider
- 2. Program Offered
- 3. Location of Program
- 4. Industry of Program
- 5. Certifications/Degree/Services Offered
- 6. Demographics of Participants



- 7. Length of Time of Program
- 8. Size of Program
- 9. Frequency of Program
- 10. Cost of Program by Participant
- 11. Transportation to/from Program Offered
- 12. When the Program is Offered
- 13. Other Details
- 14. Follow-Up Questions

From this point, the information in the templates was turned into the paragraphs about each program or service in Section 4. Each summary included as much information relevant to the goal of the report as was available.

APPENDIX B: RESEARCH ORGANIZATIONS AND LEGISLATION

This section provides a short overview of relevant federal legislation and local research organizations related to workforce development. There are some organizations that were uncovered in the creation of this report that conduct similar research to what we were doing. These organizations work daily with the region's workforce development institutions in different capacities and as a result may be useful to connect with for further research. Additionally, state-run services that focus on data-oriented improvement to workforce development are included here.

Reaching Higher NH: Reaching Higher NH is a policy shop based out of NH that is focused on coordinating and aligning K-12 level programs, higher education offerings, and initiatives by businesses or nonprofits. They are looking for gaps in existing programs and want to development policy recommendations. They generally rely on publicly available datasets, such as that from the Federal Office of Civil Rights or New Hampshire's Department of Education. Their target industries are: manufacturing, hospitality, welding, healthcare, information technology, and engineering. Reaching Higher NH is currently engaged in a research project that seeks to provide a broad overview of education in the state, including a district-level template that indicates education finance and performance data.³⁶

Vermont Talent Pipeline Management (VTPM): The Talent Pipeline Management model was founded by the US Chamber of Commerce Foundation and is currently being implemented nationwide. Vermont is a leader in this effort, as it is the first statewide implementer with public and private partnerships in the industries of advanced manufacturing, healthcare, and construction. VTPM is described as an "employer-led, data-driven model for filling the most critical jobs in the Vermont workforce." The program has been executed in two stages. The first stage focused on hearing from industry and business leaders about what skills are most-needed to continue economic growth and improve Vermont's communities. Next, by partnering with these businesses and analyzing

the state's needs, VTPM sought to improve talent supply chains through tracking measurements of success and providing appropriate rewards and incentives. ³⁸ While VTPM's partner locations are outside of the Upper Valley, the program is seeking to expand business partnerships across the state.

Beyond these other organizations, there are also certain pieces of federal legislation that are relevant to local workforce development and may prove impactful in further research. Listed below are multiple programs that remain important and influential to workforce development and underemployed individuals/families.

National Registered Apprenticeships: The Office of Apprenticeship in the US Department of Labor oversees a nationwide apprenticeship program administered by State Apprenticeship Agencies. Today, the program partners with over "150,000 employers in more than 1,000 occupations," helping them recruit and train a highly-skilled workforce.³⁹ Each apprenticeship program is run by a sponsor, which can be a single business or school or group of businesses or schools. A public database of sponsors is available online, and it includes such large employers as Ford Motor Company, the US military, and UPS. Federal dollars are used to help fund training programs, pay participants, and ensure the safety of national accreditation of new programs. The program boasts positive outcomes for its participants. New apprentices start at an average wage of \$15.00 an hour, with 91 percent retaining employment after completion of training. 40 The Department of Labor also hosts a National Apprenticeship Week (NAW), which is an event that "gives apprenticeship sponsors the opportunity to showcase their programs, facilities, and apprentices in their community."41 Those interested in finding their nearest NAW event can view the online database at http://dol.gov/apprenticeship/naw/. The Office of Apprenticeship hosts an online Apprenticeship Finder Tool, which allows anyone to see their nearest opportunities, located at http://apprenticeship.gov/.

Perkins Career and Technical Education Act: Enacted in 1984 and reauthorized in 1998, 2006 and 2018, the Perkins Act has expanded the role of the federal government in improving the quality of career and technical education. On July 1, 2019, the new Perkins V legislation, passed on a unanimous voice vote in the Senate, goes into effect. Provisions in the bill appropriate federal funds to providing all students career exploration and development activities in middle school and comprehensive guidance and academic counseling in high school. The law also "expands the definition of 'special populations' to include homeless individuals, foster youth, those who have aged out of the foster care system, and youth with a parent who is on active duty in the armed forces," to provide increased funding for supporting these groups. Perkins V does much more than can be summarized here. For more information on what the bill does and resources for implementation at the state and local level, visit http://careertech.org/perkins-virtual-resource-table/.

Temporary Assistance for Needy Families (TANF): Workforce development aspects of the TANF program stem from its work participation rate requirements for recipients of aid. States must have at least 50 percent of all adults receiving assistance and 90 percent of all those two-parent families engaged in any of 12 "work activities" while on the program. Pursuing higher education or accredited job training are both included in the list of acceptable activities. The majority of TANF recipients are already part of the labor market but are typically in low- or minimum-wage jobs in temporary or low-skill positions. Using the TANF Emergency Fund, many states have received federal dollars to "create new subsidized employment programs or expand existing ones." ⁴³ As the act awaits reauthorization under negotiations over expanded provisions for training and development, TANF may weigh heavier on workforce development in the Upper Valley area than it has in the past. ⁴⁴ For a collection of work on state use of TANF education and training resources, visit http://clasp.org/tanf-education-and-training-resources/.

Workforce Innovation and Opportunity Act (WIOA): The WIOA is the country's primary workforce development legislation. The WIOA overhauled federal investment in state workforce development programs, adding an evidence-based evaluation system and increased grants for at-risk youth and other special categories. Every state must submit a four-year strategy for educating and training their workforce to qualify for funding. Some states are testing the results of incorporating the TANF program into new WIOA provisions. Research shows that using federal grants in this way could significantly improve the employment and training experience for people who are low income or have other barriers to employment. Merging one-stop employment centers with TANF welfare-to-work programs is a decision that can be affected at the state and local level. For an overview of what the WIOA changed about federal workforce development spending, visit http://doleta.gov/wioa/overview.cfm/.

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REFERENCES

- ¹ New Hampshire Employment Security. "The Upper Valley On the Map," *State of New Hampshire*, Nov 2012.
- ² New Hampshire Employment Security. "The Upper Valley On the Map," *State of New Hampshire*, Nov 2012.
- ³ Greg Bird, Steve Norton, Katie Sullivan, *What is New Hampshire*, 2018, (NHCPPS, 2017), 42. Retrieved from http://www.nhpolicy.org/report/what-is-new-hampshire-2018
- ⁴ Why SPI Matters | New Hampshire Sector Partnerships Initiative. (n.d.). Retrieved from https://nhsectorpartners.org/about/why-spi-matters/
- ⁵ C. Tempesta, personal communication, 4/4/2019
- ⁶ Vermont Technical College: Continuing Education & Workforce Development Office, Retrieved from https://www.vtc.edu/academics/continuing-education-workforce-development
- ⁷ Vermont Technical College: Continuing Education & Workforce Development Office, Retrieved from https://www.vtc.edu/academics/continuing-education-workforce-development
- ⁸ S. Currier & C. Isabelle, personal communication, 2/28/2019
- ⁹ C. Hamilton, personal communication, 5/13/2019
- ¹⁰ D. Heavisides, personal communication, 3/7/2019
- ¹¹ Developing today's workforce. (n.d.). Retrieved from http://response.hypertherm.com/HTTI
- ¹² Hypertherm Summer Institute Application. (n.d.). Retrieved from

https://application.vthitec.org/HyperthermSI/index.php

¹³ Manufacturing Week. (n.d.). Retrieved from

https://www.americanprecision.org/education/manufacturing-week

- ¹⁴ S. Davison, personal communication, 4/2/2019
- ¹⁵ S. Davison, personal communication, 4/2/2019
- ¹⁶ K. Runion, personal communication, 3/5/2019
- ¹⁷ D. Osborn, personal communication, 4/1/2019
- ¹⁸ M. Mott, personal communication, 3/4/2019
- ¹⁹ D. Williams, personal communication, 2/28/2019
- ²⁰ A. Herzog, personal communication, 4/23/2019
- ²¹ J. Guillette, personal communication, 2/25/2019
- ²² E. Zeien, personal communication, ??????
- ²³ Registered Apprenticeship Program. (n.d.). Retrieved from

https://www.education.nh.gov/career/career/reg appren prog.htm

- ²⁴ Sector Partnership Initiatives (SPI). (n.d.). Retrieved from https://www.nhworks.org/sector-partnership-initiatives-spi/
- ²⁵ P. Przybyszekski, personal communication, 2/22/2019
- ²⁶ NH Works. (n.d.). On-the-Job Training (OJT) [Brochure]. Author.
- ²⁷ K. Runion, personal communication, 3/5/2019
- ²⁸ D. Osborn, personal communication, 4/1/2019
- ²⁹ Community College of Vermont. Retrieved from https://ccv.edu/explore-ccv-programs/credentials-training/



The Nelson A. Rockefeller Center at Dartmouth College

The Center for Public Policy and the Social Sciences

³⁰ Community College of Vermont. Retrieved from https://ccv.edu/explore-ccv-programs/credentials-training/

³⁴ Program Summary. (n.d.). Retrieved from https://www.nscite.org/vosnet/CIS/CRS/crs_programdata.aspx?session=progdetail&wizid=&appid=&school=NH990010&locationID=292&geo=3301000000&returnto=&onetcode=

³⁵ Home | New Hampshire Job Corps Center. (n.d.). Retrieved from https://newhampshire.jobcorps.gov/

- ³⁷ Vermont TPM: Employers Leading the Way to Close the Skills Gap. (n.d.). Retrieved from https://www.vermonttpm.org/
- ³⁸ Vermont Talent Pipeline Management. (n.d.). Retrieved from https://accd.vermont.gov/economic-development/programs/vtpm
- ³⁹ FAQs | Apprenticeship.gov. (n.d.). Retrieved from https://www.apprenticeship.gov/faqs
- ⁴⁰ Apprenticeship Toolkit Frequently Asked Questions. (n.d.). Retrieved from https://www.dol.gov/apprenticeship/toolkit/toolkitfaq.htm
- ⁴¹ National Apprenticeship Week. (n.d.). Retrieved from https://www.dol.gov/apprenticeship/naw/
- ⁴² Strengthening Career & Technical Education for 21st Century Act Signed. (2018, August 02). Retrieved from https://blog.ed.gov/2018/08/strengthening-career-technical-education-21st-century-act-signed-law/
- ⁴³ Lower-Basch, Elizabeth. "Getting Incentives Right: Connecting Low-Income Individuals with Jobs," *Center for Law and Social Policy*, March 2016.
- ⁴⁴ Strawn, Julie. "TANF's Role in Expanding Economic Opportunity," *Center for Law and Social Policy*, Apr 2010.
- ⁴⁵ (n.d.). Retrieved from https://www.doleta.gov/wioa/overview.cfm
- ⁴⁶ Cielinski, Anna. "Coordinating TANF & WIOA High Interest, Slow Progress During Early Days of WIOA," *Center for Law and Social Policy*, May 2017.

³¹ Next Steps NH. (n.d.). Retrieved from https://nextsteps-nh.org/

³² D. Osborn, personal communication, 4/1/2019

³³ Business Grants. (n.d.). Retrieved from https://accd.vermont.gov/economic-development/funding-incentives/vtp/business-grants

³⁶ J. Rodriguez, personal communication, 3/5/2019