

New Hampshire Education-to-Workforce GIS Project

ED# 2019-R1-I-0001



High-Leverage Problem

New Hampshire is anticipating a shrinking labor force. The population of people 65 and older has increased by more than 40% from 2010 to 2020 and the state's unemployment rate has returned to pre-pandemic levels. The New Hampshire Employment Security Economic & Labor Market Information Bureau predicts that the greatest challenge facing New Hampshire is the inability to expand the labor force. Career and technical education (CTE) programs offer New Hampshire students opportunities to build the knowledge needed for high-wage, high-demand (HWHD) occupations aligned with their interests.

CTE is delivered through 283 regional CTE centers, and New Hampshire Department of Education (NHED) leaders do not currently have a process for understanding if existing CTE programs are aligned with HWHD occupations. To support students in exploring in-state, HWHD occupations, NHED requested support in analyzing current labor market information to understand alignment with CTE programs, explore secondary-to-postsecondary pathway alignment, and explore equitable access to HWHD occupations.



R1CC Approach

In Year 3, the Region 1 Comprehensive Center (R1CC) developed a geographic information system (GIS) map to (a) help New Hampshire parents and families identify career pathways aligned to high-wage, high-demand careers, and (b) support the NHED in understanding the alignment between CTE programming and high-wage, high-demand occupations. To maximize the use of this tool, all interest holders (students, guardians, NHED, and secondary and postsecondary CTE program directors) need support in understanding how to use the GIS map. In Year 4, R1CC developed resources to explore key map content, validate employer needs, and discuss opportunities for program alignment. This work included:

- Developing a resource and training workplan in collaboration with NHED.
- Creating accessible, easy-to-use resources for primary map users.
- Planning and facilitating two sessions on navigating and using the GIS map and gathering feedback on the resources.
- Developing a map sustainability plan and creating the GIS Maintenance and Utilization memo.

● — ⊙ — ⊙ → Key Milestones

- Developed and delivered training materials for key interest holders such as CTE leaders and business and industry.
- Modified the map and resources based on use in the field and updated the data in the tool.
- Developed a sustainability plan for the GIS map.
- Worked with NHED to build internal capacity to maintain the GIS map.

“They often would solicit what I thought was the best evidence-based resources to use, so there was some good collaboration there.”

“As a team, they were really flexible and able to not only shift gears based on needs but also really dedicated to understanding context. And because of that, rather than being very black and white, very inflexible, they were able to see the gray areas, which were ambiguities, and successfully navigate some of those complexities.”

? → Outputs

- Updated GIS map.
- GIS resource workplan.
- GIS Maintenance and Utilization memo.
- GIS map facilitation materials.
- GIS sustainability plan.
- Two stakeholder sessions on using the GIS map and gathering feedback.

Outcomes

- NHED and CTE program directors increased their human capacity to navigate and use the GIS map for data-based decision making.
- NHED increased their human capacity to understand the needs of employers related to CTE programming.