



How can Rhode Island use data to efficiently train workers while saving millions of dollars?

Strategic Goal

Federal dollars for job-training programs are often designated for certain types of individuals. The Rhode Island Department of Labor and Training (DLT) wants to increase the number of job-seekers who qualify as “dislocated workers.” This will allow DLT to use federal revenue streams to fund training programs, train more people and save valuable state funds.

Assessment

DLT received a \$5.2 million, two-year National Emergency Grant from the U.S. Department of Labor in to fund training programs for “dislocated workers”; unemployed individuals unlikely to find jobs in their former employment sector. The goal of the programs are to equip them with skills they need to succeed in today’s economy.

Grant Funds at Three-quarter Mark

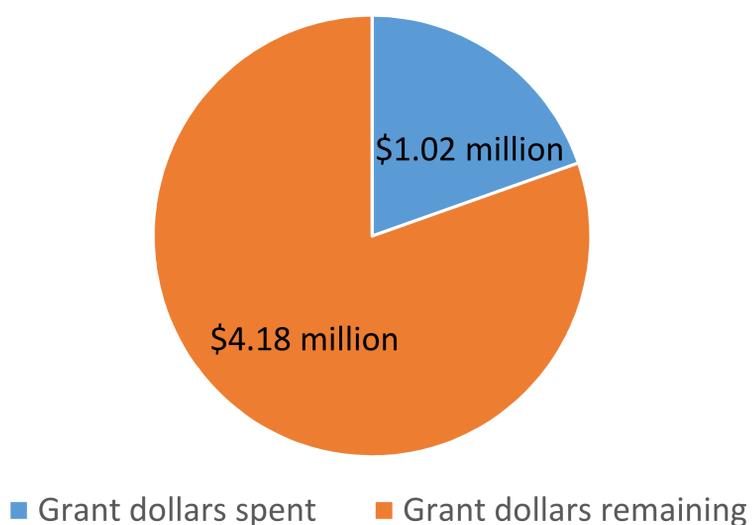


Figure 1: Grant dollars spent on funding training programs for dislocated workers, eighteen months into the two-year grant.

Documenting that a worker is dislocated using conventional methods is difficult, and after 18 months, DLT had only spent a small portion of the grant to train 80 job-seekers. Training for hundreds of participants was instead funded using Job Development Funds, which are raised through state taxes.

Understanding the Challenges

Determining eligibility is difficult to do with the current paper process. Training applicants must provide burdensome paper documentation that they fit one of the eligibility definitions for a dislocated worker. These requirements burden job-seekers and training providers, resulting in few, verified federal-fund-eligible trainees.

A Data-Driven Solution

Why require people to fill out paper forms, when a computer can do the calculation instead? DLT, in partnership with RIPL, developed a data-driven solution to increase the number of individuals who qualify as dislocated workers, and therefore can use federal funds for training.

We instead use machine learning and the Unemployment Insurance (UI) and wage data, to calculate if each training applicant qualifies as dislocated.

The new process, “Data Works,” works like this:

- DLT receives a batch of job training applicants and runs a program that identifies them in the history of UI wage and claim data.
- Applicants with a current UI claim automatically qualify as disqualified workers.
- When the program finds applicants without a current claim, but who had a UI claim in the past 10 years, it:
 - o Calculates if the applicant is currently earning less than predicted if he or she had remained employed in his or her pre-UI claim industry.
 - o If so, and if the industry of prior-employment is a qualifying industry, the applicant is deemed “dislocated” (someone who lost a job in an industry and was likely unable to find gainful employment in that same industry.)

Identification method	Dislocated-eligible
Original method (2016)	8.75%
Data Works (2016)	21.2%
Data Works (2017)	25%

Figure 2: Success rate of identifying eligible dislocated workers by identification method.

Results & Conclusion

Data Works has been effective at increasing the number of job-seekers who qualify as dislocated workers.

In 2016, only 80 of 914 training applicants, or 8.75 percent, were originally identified as dislocated. When Data Works was used to review those applicants, 194, or 21.2%, were deemed eligible. In 2017, 25 percent of new applicants are being identified as dislocated workers with this data-driven method, saving the state money and, at the same time, increasing worker training towards gainful employment.