Additional data, findings, and recommendations are available in the main report, Seizing the U.S. infrastructure opportunity: Investing in current and future workers.

This fact sheet explores major infrastructure workforce needs in Colorado, with an emphasis on the transportation and energy sectors—the two main employers for this workforce. To help leaders better understand the current landscape of actors and actions involved in these issues, the fact sheet briefly summarizes: levels of infrastructure employment; challenges in hiring, training, and retention; and opportunities for innovation that invest in current and future workforce development.

Ultimately, leaders involved in infrastructure construction, operation, and maintenance need to collaborate with those involved in workforce development (and vice versa). On the infrastructure side, these leaders include the Colorado Department of Transportation and the Colorado Energy Office at the state level, as well as numerous local entities. On the workforce side, leaders include the Colorado Department of Labor and Employment and the Colorado Workforce Development Council, as well as educational institutions, labor groups, community-based organizations, and others. Major employers include the Regional Transportation District, Roaring Fork Transportation Authority, Xcel Energy, Black Hills Energy, and Colorado Springs Utilities, among others.

### LEVELS OF INFRASTRUCTURE EMPLOYMENT

Colorado employs nearly 284,000 infrastructure workers, representing 10.9% of its entire workforce. This total ranks 21st nationally, on par with states such as Minnesota and Maryland, but slightly behind neighboring Arizona. This share of the workforce ranks 40th, similar to states such as Oregon, Virginia, and Florida, and speaking to the wide variety of other service industries and activities in the region.

**Total infrastructure employment, 2021**

**Infrastructure share of total employment, 2021**

(Source: Brookings analysis of BLS Occupational Employment Statistics)
Similar to most states, the largest infrastructure occupations include those involved in trade and logistics, such as material movers and truck drivers. Other sizable occupations include those involved in the skilled trades and other infrastructure design and operation activities, such as electricians and civil engineers. As the main report describes, this means that investments in on-the-job training and work-based learning opportunities are crucial to support this workforce.

CHALLENGES IN HIRING, TRAINING, AND RETENTION

Employers and workers in Colorado face a variety of challenges in filling these jobs:

- In its annual Talent Pipeline Report outlining major workforce trends in the state, the Colorado Workforce Development Council points to struggles workers without advanced degrees or training face in accessing “high-demand, better paying” jobs.
- Struggles accessing postsecondary credentials and work-based learning are of particular concern for disadvantaged populations, including people of color, rural residents, workers with disabilities, and workers who only recently immigrated to the U.S.—a key and growing segment of Colorado’s workforce in coming years.
- The construction industry has echoed concerns about hiring enough workers to keep up with demand; one recent survey said that “86% of Colorado specialty and general contractors plan to add headcount this year, but 98% have had trouble filling some or all of their open positions.”
- Transportation employers such as the Regional Transportation District (RTD) also face staffing shortages that are limiting operations. Over the past year, nearly a quarter of RTD’s positions were vacant, and service levels were 70% of pre-pandemic levels.
- Similarly, fast-growing opportunities in clean energy suffer from staffing shortages, while "just transition" issues remain a concern for many current energy workers.

OPPORTUNITIES FOR INNOVATION

Several ongoing or emerging efforts are advancing infrastructure workforce development and offer guidance for other potential actions in years to come:

- A big part of addressing employer demands and helping workers is to support “quality jobs,” which several state agencies are emphasizing in ongoing efforts. The creation of a Job Quality Framework is helping Colorado provide assessment tools and guidance to employers, communities, and others in support of a skills-based talent development network.
- This effort complements other investments aimed at bridging training and placement gaps, such as the Colorado Re-Engaged Initiative, Colorado Opportunity Scholarship Initiative, and Reskilling, Upskilling, and Next-skilling (RUN) grants—all supported by federal stimulus funding.
- Sector strategies and partnerships that aim to coordinate training, education, and employer engagement are also prevalent in statewide actions, including strategies tailored to different regions across Colorado.
- Transportation-focused efforts include the Colorado Department of Transportation’s memorandum on equity, which aims to provide on-the-job supportive services to increase the number of women and people of color in infrastructure careers, as well as a Federal Highway Administration-approved local hiring preference for the $1.2 billion Central 70 project.
- Numerous efforts around boosting clean energy careers are also evident, including Colorado’s Just Transition Action Plan, Energy Smart Colorado training programs, the Mile High Youth Corps, and a workforce-related partnership between the Colorado Energy Office and Solar Energy International.