# **INFRASTRUCTURE WORKFORCE FACT SHEET:** MASSACHUSETTS

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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 Massachusetts, 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 Massachusetts Department of Transportation, Department of Energy Resources, Executive Office of Energy and Environmental Affairs, and Department of Public Utilities at the state level, as well as numerous local entities. On the workforce side, leaders include the Massachusetts Executive Office of Labor and Workforce Development and the MassHire State Workforce Board, as well as educational institutions, labor groups, community-based organizations, and others. Major employers include the Massachusetts Bay Transportation Authority, the Massachusetts Port Authority, Berkshire Gas, Liberty Utilities, National Grid, and Eversource, among others.

#### LEVELS OF INFRASTRUCTURE EMPLOYMENT

Massachusetts employs nearly 311,000 infrastructure workers, representing 9.2% of its entire workforce. This total ranks 19th nationally, on par with states such as Arizona, Wisconsin, Missouri, and Minnesota. However, their share of the workforce ranks 49th, on par with neighboring New England states Rhode Island and Connecticut, and speaking to the 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 Massachusetts face a variety of challenges in filling these jobs:

- A shrinking and aging workforce—and population more generally—may limit the pool of talent, especially in western Massachusetts.
- The high costs of child care may limit opportunities for women and other residents to consider these careers. As an example, annual home-based private child care in Massachusetts costs roughly \$5,000 more than the national average.
- Funding and fiscal challenges facing major public employers such as the Massachusetts Bay Transportation Authority (MBTA) may stymie shortand long-term hiring and training efforts. MBTA projects a \$236 million deficit in fiscal year 2024 alone.
- Levels of public awareness of energy careers are lagging—especially positions involved in insulation and weatherization, with 92% of employers reporting hiring difficulty in recent years.
- A lack of flexibility and time to pursue additional training, education, and credentials remains a challenge among many 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:

- The UMass Transportation Center Workforce Development Program provides group and individual training, employment support services, and other resources to prospective workers.
- Numerous career and technical education programs have emerged statewide, including Bunker Hill Community College's Electric Power Utility Technology Program and Roxbury Community College's Center for Smart Building Technology.
- The Massachusetts Department of Transportation established an organization-wide mentorship program in June 2021 and expanded training available at its MassDOT Learning Hub.
- The state legislature passed a law aiming to boost participation of minority and female workers in state contracts involved in infrastructure design, construction, and maintenance.
- Investments in clean energy technologies and improvements—including electric vehicle charging stations, wind energy generation, and energy storage—contribute \$13.7 billion to Massachusetts' gross state product and support a growing number of workers and future career pathways.
- The state's 2022-2024 Three-Year Energy Efficiency Plan enhances support for workforce development initiatives among electric and gas distribution companies, including steps toward greater diversity, equity, and inclusion via community outreach and dedicated budgets for training. The Massachusetts Clean Energy and Climate Plan for 2025 and 2030 emphasizes similar efforts, especially among hardto-reach environmental justice populations.