Annual Performance Report

Massachusetts Workforce and Labor Area Review
Program Year 2023

Executive Office of Labor and Workforce Development
Department of Economic Research
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MASSACHUSETTS EXECUTIVE OFFICE OF LABOR & WORKFORCE DEVELOPMENT

MASSACHUSETTS DEPARTMENT OF ECONOMIC RESEARCH

Statewide Workforce Information System Overview:

The Executive Office of Labor and Workforce Development (EOLWD) oversees the Massachusetts Workforce Development system. Workforce information products and services are developed and disseminated primarily by EOLWD's Department of Unemployment Assistance (DUA), the Department of Economic Research (DER), and the MassHire Department of Career Services (MDCS), in coordination with EOLWD.

The workforce information products and services produced with these grant funds are consistent with the Governor's Strategic Plan and Goals, with the vision of the MassHire State Workforce Board (MSWB), and with the grant requirements. Labor market and workforce information resources provide the Commonwealth with information on jobs, wages, labor force, and occupations that support education and economic development efforts, workforce partners' employment and reemployment services, performance management and business planning, and customer needs at the state and local levels.

The products and services are designed to meet customer needs and to offer flexibility for adjustments with changes in the Commonwealth's economic climate and labor force, the strategic plan, new customer product requests, and new tools to disseminate state and local workforce and labor market information.

Workforce Information Grant (WIG) funds support subscriptions to the Conference Board's Help Wanted OnLine (HWOL) Analytics and help fund a subscription to Lightcast's Labor Developer (formerly Labor Insight) for each local MassHire Workforce Board (MWB). These services enable staff to analyze the hard and soft skill requirements for the job openings from companies posting job vacancies available on the Commonwealth's online MassHire JobQuest, as well as provide the ability to customize data and information requests to assist job seekers and unemployment claimants in entry and reentry to the labor force and reemployment. Labor Developer allows users to research each job order to assess skills, certifications, and experience needed for each job opening and for business representatives to provide a complete range of services to the companies posting openings in their areas. Information on hard and soft skills for each occupation provide insight into employer's current job postings and help MassHire Career Centers (MHCCs) in assisting job seekers and assessing their needs for training. Lightcast occupational coding utilizes three methods of occupational coding: O*NET, Standard Occupational

Classification (SOC), and Lightcast's more detailed and contemporary codes. SOC codes can be compared to the labor supply estimates of jobs, job openings, and wages from the Occupational Employment and Wage Statistics (OEWS) program, the short-term and long–term projections, and detailed staffing patterns developed with the Local Employment and Wage Information System (LEWIS) at the state and local levels. DUA uses the six-digit SOC codes for Unemployment Insurance (UI) claimant records and for developing claimant demographic information statewide and by area. The projections, along with available openings, are used to assist those unemployed and those seeking other career pathways or job opportunities through the services provided by the local MSWB.

EOLWD is responsible for the appropriate development and dissemination of workforce information and labor market information, including economic, career, and occupational data, to all the Commonwealth's workforce development partners. Its key focus is identifying and serving the needs of local MassHire Workforce Boards (MHWB), MHCCs and their partnering organizations, as well as educators, job seekers, employers, and students and parents served by local workforce providers.

Labor market and workforce information is available online and through customized information based on request. Direct assistance is provided to all individuals in-person, by phone, by email or through the DER website co-funded by this grant.

Information on in-demand jobs, staffing patterns by industry and occupation, industry and occupational projections and occupational supply, wage information, quarterly workforce indicators and labor force trends, statewide and for each local Workforce Development Area (WDA) is available online for job seekers, UI claimants, and new entrants to the labor force. Data and information products produced with WIG funding provide the Governor, MassHire State Workforce Board, local MassHire Workforce Boards, partner agencies, and other state and local policy makers with information and tools to assist them in planning and meeting the state's strategic workforce, education, and economic development goals.

Workforce Information Database (WID):

The Workforce Information Database (WID 2.8) was populated with the most current labor market and workforce information for all data and information products developed through this grant and the Bureau of Labor Statistics (BLS) Cooperative Agreement, along with formats requested

by customers. WID 2.8 was developed and implemented and went live on February 23, 2021. Grant funding provides for some of the development and maintenance of the website and the WID.

Industry and Occupational Projections:

Short-term industry and occupational projections for 2023 Q2 to 2025 Q2, as well as long-term industry and occupational projections for 2022-2032, statewide and for each WDA were published. Projections were developed using Projection Suite software incorporating the staffing patterns produced using LEWIS software. Files were provided to the Projection Managing Partnership (PMP) in the manner they specified. Short-term projections were published on the DER website, submitted to PMP and ETA Regional Office (RO) on March 7, 2024. Long-term projections were published on the DER website, submitted to PMP and ETA RO on July 8, 2024.

Web pages displaying projections for science, technology, engineering, and math (STEM) occupations in Massachusetts and each local WDA were added providing likely entry level of education, training, mean and median OEWS wages. Other pages allow customers to select occupational projections by most job openings, fast growing occupations, and all occupations. All the data are available at the time of release through the Commonwealth's DER web site at mass.gov/economicresearch. Additionally, some of these web pages are expected to soon have an accompanying Tableau visual to give users another option to customize data downloads and visualize trends in the projection data.

Staffing patterns statewide and for each WDA that provide occupational employment and wage estimates by industry down to the three-digit occupation are produced annually and published on the DER website. They provide information statewide and for each WDA. These high-demand data can only be developed and published with WIG funds and the LEWIS software system. Estimates provide counselors, job seekers, and job developers with more detailed information than the industry (All Industry) OEWS estimates. lmi.dua.eol.mass.gov/lmi/OccupationalEmploymentandWageAllIndustries

Industry and Occupational Projections Website Links:

Employment Information by Industry

- Staffing patterns, found at lmi.dua.eol.mass.gov/LMI/OccupationalEmploymentAndWageByIndustry
- Long-term projections, including at the sub-state level, found at lmi.dua.eol.mass.gov/lmi/LongTermIndustryProjections
- Short-term projections, including at the sub-state level, found at lmi.dua.eol.mass.gov/lmi/ShortTermIndustryProjections

Employment Information by Occupation

- Staffing patterns, found at lmi.dua.eol.mass.gov/lmi/OccupationalEmploymentAndWageSpecificOccupations
- Long-term projections, including at the sub-state level, found at lmi.dua.eol.mass.gov/lmi/LongTermOccupationProjections
- Short-term projections, including at the sub-state level, found at lmi.dua.eol.mass.gov/lmi/ShortTermOccupationalProjections

Annual Economic Analysis and Other Reports:

DER developed and provided workforce information products and services during PY2023 in the following core areas, as defined in the WIG: projections and staffing patterns were compiled for each of the sixteen WDAs; weekly demographic information on those filing initial and continued weeks claimed were published by city and town, customer requested areas, and for each of the 16 WDAs; and all grant-funded products, reports, and workforce information are available on the DER's website mass.gov/economicresearch in a manner accessible to the public and in compliance with Rehabilitation Act Section 508 requirements.

Workforce and Labor Market Information on the Web:

DER's web pages at www.mass.gov/EconomicResearch have received a total 21,975 pageviews from 10,777 active users from January 1, 2023 to December 31, 2023.

The LMI for Jobseekers page, created in collaboration with the MassHire Department of Career Services features information, descriptions, and links to relevant data to help job seekers utilize labor market information as part of their search. The page received 2,628 views from 1/1/2023-12/31/2023.

The Unemployment Rates in Massachusetts page features interactive data dashboards of state-wide and regional unemployment data. These tools allow users to explore labor market information and trends over time and for various regions. The page was published in August of 2023 and received 1,003 views from 8/10/2023-12/31/2023.

The DER Data Visualization page includes a full list of interactive dashboards and visualizations created using Tableau Desktop, including maps. The page received 800 views from 1/1/2023-12/31/2023.

The DER Data Index page on mass.gov serves as a central location for users to view and download data published by DER. Users can access short and long-term employment projections data, data from

BLS programs including CES, OEWS, LAUS, and QCEW, as well as unemployment claims and claimant summary data for various time periods and geographies across Massachusetts. The page received 5,749 views from 1/1/2023-12/31/2023.

DER's LMI Database pages are where users can view and/or download large data files at time of release. As previously noted, the database was recently modernized to improve the delivery and efficiency of LMI to our customers. From January 1, 2023 to December 30, 2023, the LMI Database pages had a total of 3,336,957 hits from 116,021 unique client IPs.

Annual Economic Analysis Report:

The *PY2023 Annual Economic Analysis Report* at mass.gov/lists/department-of-economic-research-reports-releases provides information on the changes in the workforce, labor force and unemployment claimants. The PY 2023 report provides a comprehensive analysis of the Massachusetts economy, highlighting the state's uneven recovery from the COVID-19 pandemic. The report examines key labor market trends, sectoral performance, regional disparities, and identifies high demand occupations, offering insights into the challenges and opportunities facing the Commonwealth.

Equity Dashboards:

In fall of PY2023, DER updated the existing Equity Dashboards with more recent data on Asian American, Black/African American, Hispanic and/or Latino, and Women in the Massachusetts Workforce. The dashboards allow users to view and compare economic data including employment, unemployment, wages, and more across different geographies and time periods.

In addition to updating the data in the existing Equity Dashboards, DER also spent time in PY2023 developing a robust People with Disabilities Equity Dashboard and mass.gov page. The project features an interactive data dashboard along with written analysis and key takeaways along with detailed technical documentation. To develop the data framework, DER met with advocacy organizations and groups for People with Disabilities including Massachusetts Rehabilitation Commission (MassAbility)and the Massachusetts Office on Disability. The resource was published in April of 2024.

Labor Market Information (LMI) Training for Service Delivery:

In December 2023, DER sent a group of staff to the Massachusetts Conference for Women. The Massachusetts Conference for Women provides connection, motivation, networking, inspiration and skill building for thousands of women each year. This annual event has grown to a sold-out crowd of more than 15,000 attendees. The Conference offers incredible opportunities for business networking, professional development and personal growth. DER sent the Director and the Chief Economist to the MA Workforce Development Association Meeting. DER sent the Manager of Customer Engagement and Experience to the NASWA Winter Policy Forum. DER is sending the Chief Economist to the National Association of State Workforce Agencies Summit and Workforce & Labor Market Information Committee meeting. He will participate on a panel on measuring and tracking clean energy employment, as well as attending summit sessions to gain insights and ideas on cutting edge economic research practices employed by other states to apply in our work at DER.

Other Collaborations and Consultation with Workforce Boards:

Local MassHire Workforce Boards, MassHire Career Centers, and partner agencies were provided with information on the web. MassHire Career Centers customers including those receiving Reemployment Services and Eligibility Assessment (RESEA) services are provided with information on LMI accessible through the DER website along with information from O*NET and MDCS. Customized products were developed and provided to support developing new programs and services.

Regional Blueprints:

The Department of Career Services and each local Workforce Skills Cabinet Team develops a Scope of Work based on State data provided by DER. Each planning team received a data package in the form of an Excel spreadsheet from the Executive Office of Labor and Workforce Development's Department of Economic Research with the following elements for all occupations in your region at the 6-digit SOC level:

- 2022 employment
- Change in employment over the past 5 years
- Projected average annual openings
- Total post-secondary completions aligned with the occupation (IPEDS)
- Estimated supply gap
- Demand star rating

Regional Occupation Explorer:

The Massachusetts Department of Economic Research (DER) Regional Occupation Explorer is a data tool designed to provide comprehensive insights into occupations in Massachusetts, specifically at the Workforce Development Area (WDA) and Workforce Skills Cabinet Regions (WSC) levels. The tool has two versions, one at the WDA level and one aggregated to the WSC level. All values in the WDA version are calculated at the Standard Occupational Classification (SOC) and WDA level, while all values in the WSC version are specific to a SOC in a WSC.

The goal of the Regional Occupation Explorer is to help regional workforce development leaders who are developing regional workforce blueprints. The tool provides insights into the potential labor shortages of an occupation, identifies occupations that high paying and in high demand, and indicates which occupations are aligned with the sectors prioritized by MassTalent: advanced manufacturing, health and human services, life sciences, and clean energy.

State Workforce Plan:

DER led the development of the economic analysis portion of the state's WIOA workforce plan, which was officially adopted in PY2023, DER completed its analysis during the early stages of the planning process in July 2023 to provide an in-depth analysis of the current state of the Massachusetts economy to help leaders involved in the planning process make data-informed decisions. DER staff continued to work on updating data necessary for the plan's completion in early 2024 (PY2023).

The Impact on Migration Patterns on the Labor Force Research:

DER worked on a joint research project with the University of Massachusetts Donahue Institute. Understanding migration patterns in Massachusetts is critical for both workforce development and

policy planning. This proposed research aims to identify who is leaving the state, where they are going, and which industries or occupations are most affected. By digging deep into the demographic characteristics and individual drivers behind migration decisions, we can offer actionable insights to policymakers and workforce development professionals.

Key goals of the research include identifying:

- The primary destinations people are moving to when leaving MA and the factors attracting them to other states
- Which occupations and industries are being most affected by out-migration/in-migration
- Which regions have been most affected by out-migration/in-migration;
- Demographic and socioeconomic characteristics of those leaving MA compared to the overall population;
- Motivations and personal experiences behind migration decisions.

DER hopes to publish this data in some form in PY2024.

Assessing competitiveness through cost-of-living adjusted wage analysis:

DER worked on a joint research project with the University of Massachusetts Donahue Institute. The industry makeup, educational attainment of the workforce, and cost of living dynamics leads to Massachusetts having among the highest per capita income in the nation. That said, wages alone do not provide a full picture of a state's competitiveness, residential quality of life, and real earning power.

The research compares Massachusetts wages at the occupation level to other states using cost of living adjusted wages. By accounting for regional differences in expenses like housing, food, transportation, utilities, healthcare and other goods and services, cost of living adjustments allows for an apples-to-apples comparison of real wages. The analysis focused on occupations in critical sectors like healthcare, advanced manufacturing, life sciences, clean energy, and education. These key occupations will be analyzed using wage data from the Bureau of Labor Statistics and cost of living indexes from organizations like the Council for Community and Economic Research and the MIT Family Sustaining Wage Calculator. The differentials between MA's nominal wages and real, cost-adjusted wages will be compared to competitor states.

The goal is to accurately assess how Massachusetts competes for talent when accounting for higher cost of living. The research could identify occupations or regions of the state that may be lagging competitors on a real wage basis. The findings will help inform policies aimed at improving Massachusetts' competitiveness, particularly for attracting talent in high-demand fields.

DER hopes to publish this data in some form in PY2024.

This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the recipient and does not necessarily reflect the official position of the U.S. Department of Labor. The U.S. Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.
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