Recycling Market Development Workgroup



October 16, 2025 10 AM – 12PM

Agenda

- Welcome
- Workgroup Recap and Solid Waste Master Plan
- RMD Action Plan Status Updates
- Presentations
 - Massachusetts Office of Business Development Business Front Door
 - MA Division of Apprentice Standards Registered Apprenticeship Programs
 - BDC Capital administers the Recycling Loan Fund
- Next Steps & Concluding Remarks

Workgroup Recap

2030 Solid Waste Master Plan

Goal

- Foster in-state market development for reusable, recyclable and compostable materials.
- Target materials: Food material, furniture and other bulky materials, glass, textiles. Also increase ability of recycling facilities and systems to sort materials to enable higher value market outlets.

<u>Strategies</u>

- Work with stakeholders to develop a comprehensive market development plan:
- Plan should support activities across multiple levels of the waste management hierarchy, including reuse, recycling, composting, processing, and other diversion options.
- Identify materials that are the best candidates for in-state market development.

Workgroup Recap

- Meetings 1 & 2 January and February 2022
 - Existing MA market development programs, regional and national landscape
- Meetings 3-6 April through December 2022
 - Specific topics including:
 - Business support and economic development strategies / Demand-side strategies
 - Education, outreach, networking and information sharing / Research and development
 - Breakout groups: Packaging, organics, bulky materials and textiles, emerging markets
- Meeting 7 June 2023
 - Introduced draft Recycling Market Development Action Plan
- Meeting 8 September 2024
 - Resources for businesses
- Meeting 9 March 2025
 - RMD Action Plan Update and Waste Reduction Innovation Grant

Solid Waste Master Plan 2025 Review



Solid Waste Master Plan

- Establishes MassDEP's overarching solid waste policy framework
- 2030 Solid Waste Master Plan
 - Finalized in 2021
 - Intended to run through 2030
 - Big picture framework
 - Supported by multiple Action Plans
 - Action Plans updated as needed

Massachusetts

2030 Solid Waste Master Plan:

Working Together Toward Zero Waste
October 2021



2025 Program Review

- MassDEP committed to "prepare a mid-course program & policy assessment by 2025"
- Update action plans, including Recycling Market Development
- Consider optimal use of MassDEP staffing and funding
- Complete by end of calendar year 2025

Progress to Date - Overall

- Goal to reduce disposal by 30 percent (1.7 million tons) by 2030
- From 5.7 to 4.0 million tons
- However total disposal increased 9 percent (500K tons) through 2023
- Driven by economic growth 32% increase in State GDP in Mass.
- Continued post-pandemic waste generation shifts

Recycling Market Development





Massachusetts Department of Environmental Protection
Bureau of Air and Waste

February 2024

- Published first Action Plan in February 2024
- Continued to grow RBDG grants
- Developed guidance for recycling businesses in MA
- Launched Waste Reduction
 Innovations Grant in Spring 2025

Business Support and Economic Development Strategies

Action Item	Status	Timeframe	Notes
Recycling & Reuse Business Development Grants and Recycling Loan Fund	Currently Implementing	Short Term	Ongoing - Limited to capital equipment
Innovation Grant	Launched April 2025	Medium Term	Provide funding for investments such as startups etc.
Connect Recycling Businesses to Webinars/Workshops	Initiated in Year 1 and Continued in Year 2	Short Term	Focused on resources offered by MA and regional agencies
Recycling Business Guidance Document	Completed in Year 1 and Updated in Year 2	Short Term	Includes grants, loans, and permit requirements. Updated May 2025. Plan to continue updating annually.
Connect recycling businesses with financial and TA offered through State and Regional Economic Development Orgs	Initiated in Year 1 and Continued in Year 2	Short Term	Funnel businesses to economic development centers etc.

Business Support and Economic Development Strategies (cont.)

Action Item	Status	Timeframe	Notes
Emphasize program outreach and marketing to minority-owned businesses and businesses near EJ populations etc.	Currently Implementing	Short Term	On-going - Partner with the Supplier Diversity Office and business orgs etc.
Connect recycling businesses to MassHire Career Centers etc.	Initiated in Year 1 and Continued in Year 2	Short Term	Current need for skilled equipment maintenance and drivers
Continue to deliver messages through RecycleSmart MA etc.	Currently Implementing	Short term	Ongoing - Expand growth of partner orgs for high contamination generator sectors
Connect with Reduce & Reuse Action Plan	Currently Implementing	Short term	Ongoing - Currently supported through RBDG reuse grants and Reuse Micro Grants
Continue to monitor recycling market development programs in other states	Currently Implementing	Long Term	Ongoing - Including conferences, webinars, and participation in regional forums like NERC

Build Demand for Recycled Products Strategies

Action Item	Status	Timeframe	Notes
Engage other state agencies on purchasing recycled products	Currently Implementing	Short Term	Ongoing
Use the RecycleSmart MA program as an outreach channel	Future Program Commitment	Medium Term	Increasing purchase of recycled content products will help support recycling businesses
Hold workshops to provide guidance to businesses on opportunities to purchase recycled content products	Future Program Commitment	Medium Term	Develop improved web page and resources for Business Buy Recycled initiatives
Initiate conversations with recycling processors and manufacturers about barriers	Currently Implementing	Medium Term	Ongoing examples: Industry associations, Sustainable Purchasing Leadership Council
Provide funding for pilot projects utilizing recycled materials	Future Program Commitment	Medium Term	Focus on state agencies and municipalities, work with OSD and DCAMM

Build Demand for Recycled Products Strategies (cont.)

Action Item	Status	Timeframe	Notes
Engage the state legislature in potential strategies to build demand	Future Program Commitment	Long Term	Include Joint Committees
Connect with MassDEP's Deconstruction Workgroup to build demand for used building materials	Currently Implementing	Short Term	Ongoing - Support building reuse infrastructure
Continue meetings of the Recycling Market Development Workgroup	Currently Implementing	Short Term	Ongoing
Explore Regional Partnerships	Currently Implementing	Short Term	Ongoing

Research and Development Strategies

Action Item	Status	Timeframe	Notes
Discuss potential partnership with Massachusetts Technology Collaborative	Future Program Commitment	Medium Term	Began discussions - implement initiative in medium term
Utilize Massachusetts' college and university system to kickstart R&D	Initiated Year 1 and Continued in Year 2	Medium Term	Related to Innovation Grant etc. Focus: how to increase efficiency, economic viability
Work with OSD etc. to pilot and test performance of recycled content products	Future Program Commitment	Medium Term	Focus on products new to marketplace

Research and Development Strategies (cont.)

Action Item	Status	Timeframe	Notes
Testing new recycled content products/applications/ technologies	Starting Year 2	Short Term	Could also fund assistance through state higher education system or other contracted service providers
Support business incubator programs through Innovation Grants	Starting Year 2-3	Short/Medium Term	Leverage other funding and investment opportunities, such as foundation funding
Connect/target research and development projects with other MassDEP action plans	Initiated in Year 1	Short Term	Currently Assessing Plan Connections

Waste Reduction Innovation Grant

To support new technology that expands recycling and reuse infrastructure in Massachusetts

- Application closed on July 15, 2025 and received applications are currently in review
- Please refer to the webpage to learn more:
 - https://www.mass.gov/how-to/waste-reduction-innovation-grant

Estimated Grant Timeline				
MassDEP reviews applications received	August – November 2025			
Award finalists announced (pending agreement on grant scope and contract)	By December 2025			
Grant contracts finalized and signed	By March 2026			
Awarded projects begin	By April 2026			







START, GROW, THRIVE IN MASSACHUSETTS

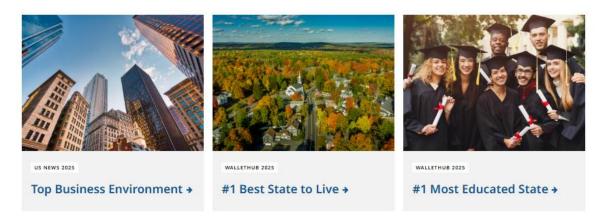




Start, Grow and Thrive in Massachusetts

In Massachusetts, we solve the big problems facing our world. We're home to the brightest minds curing diseases, fighting climate change, applying AI for good, and educating young talent. And we do this while being the best place to live and raise a family, embracing diversity, celebrating personal freedoms, and valuing safety for all.

See what's possible in Massachusetts.



Start & Build Your Business

Business Front Door

Funding & Resources

Explore Top Rankings

Start & Build Your Business

Business Front Door

Funding & Resources

Explore Top Rankings

Start & Build Your Business

Find the tools and information to help your business succeed. Whether you're starting, growing, or scaling your business, we are here to assist you every step of the way.

Can't find what you need? <u>Sign up</u> for the Business Front Door, where we can offer personalized support and point you in the right direction!

TABLE OF CONTENTS

- Start a Business in Massachusetts
- Workforce, Internships & Training
- Business Insurance
- Facilities & Sites
- Utilities & Infrastructure

Funding & Resources

Whether you're starting, growing, or scaling your business, we are here to assist you every step of the way. Learn about the tools and information available through the state to help your business succeed.

Sign up for the Business Front Door to get personalized support.

TABLE OF CONTENTS

- Guidance & General Advising
- Working Capital, Bonds & Loans
- Job Incentives
- Workforce, Internships & Training
- Research & Commercialization
- Exporting Goods
- Equipment
- Finding a Site or Building
- Acquiring, Constructing & Renovating a Facility
- Climate Upgrades



























Start & Build Your Business

Business Front Door

Funding & Resources

Explore Top Rankings

Business Front Door

Massachusetts is here to support you every step of the way as your business grows. Through the Business Front Door, we can connect you to the latest and most relevant resources available for businesses looking to start, grow, or relocate to Massachusetts.

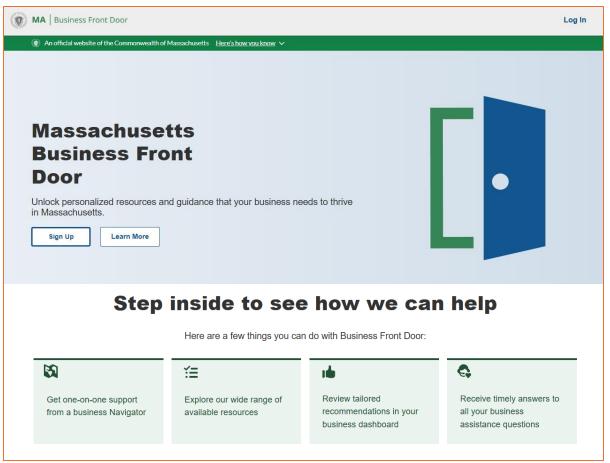


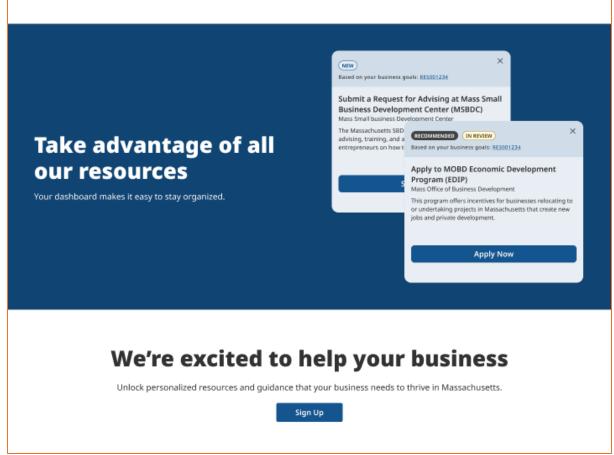
Enter the Business Front Door →



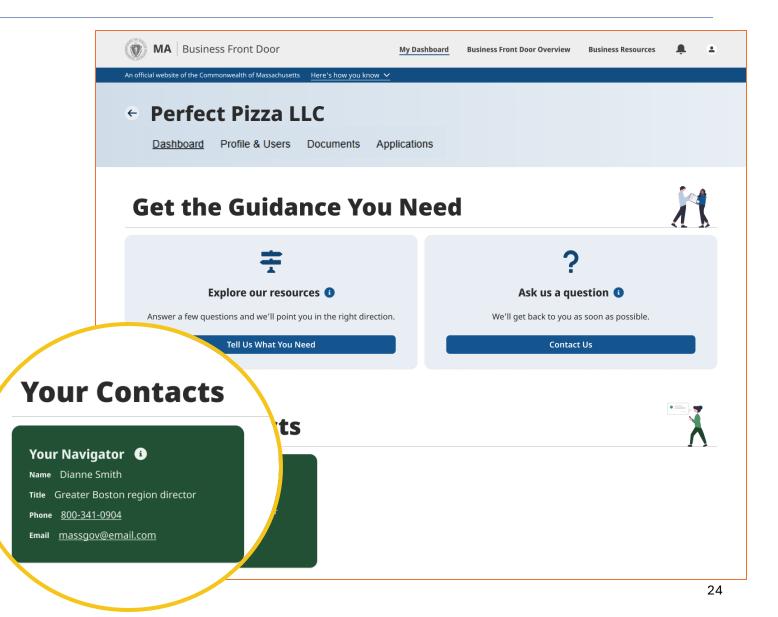
MASSACHUSETTS WELCOMES YOU!

Team MA is excited to connect you with the latest and most relevant resources available for businesses. We are here to support you through every step of your business journey. At the Business Front Door, we can help start, scale or grow your business in Massachusetts.





Businesses in the Business Front Door receive a **personal Team MA**Navigator, a dedicated single point of contact to address business needs.



Get the Guidance You Need



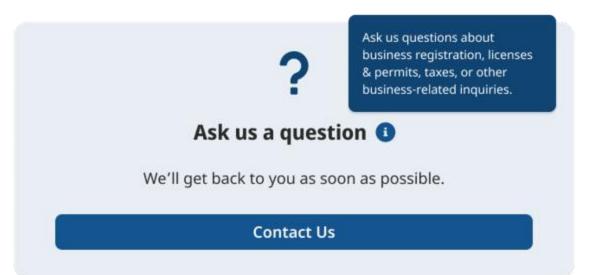


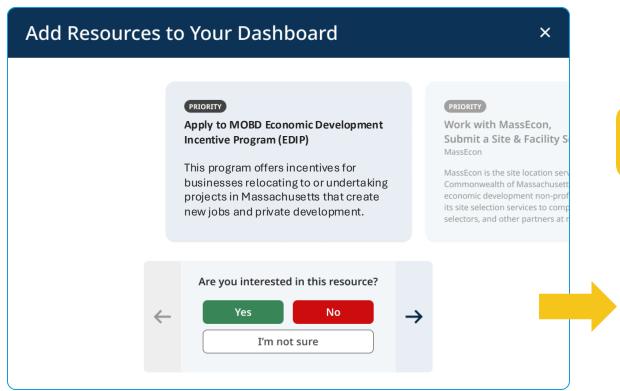
Recommended resources may include financial tools and programs, business advising, and key information.

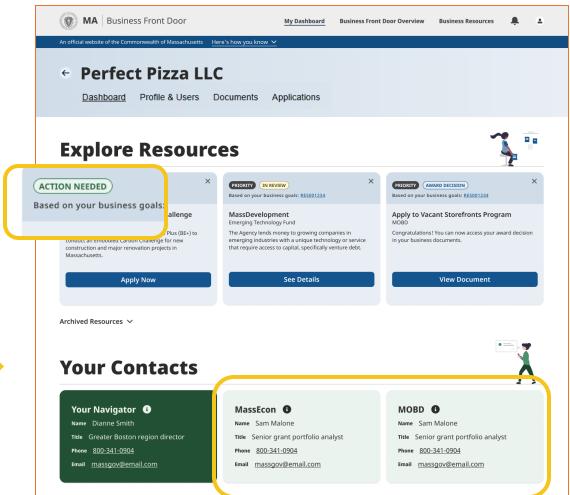
Explore our resources

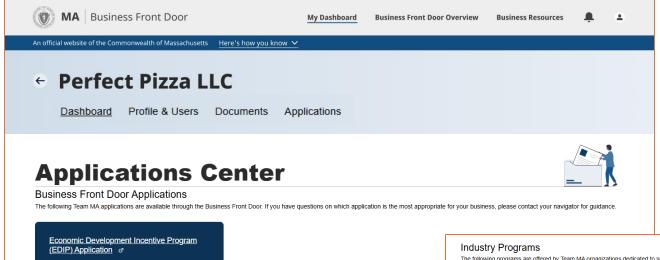
Answer a few questions and we'll point you in the right direction.

Tell Us What You Need

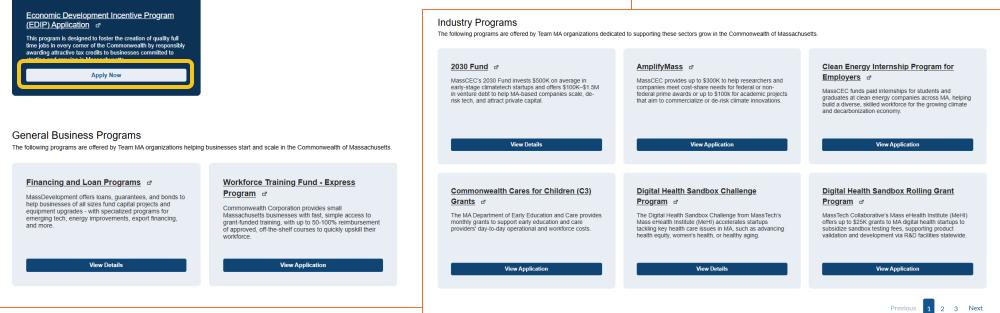








In your **Applications Center**, browse business programs across Team MA agencies and launch applications from the site.





Point of
Contact

A tailored list of business opportunities Pathway to
ask questions
and flag
issues

More easily contact
Team MA

See all available business resources

Streamlined
page about
doing business
in MA







Recycling Market Development Workgroup

Tap into Talent to Build Your Team

Registered Apprenticeship The Value Proposition





Dennis X. Collins

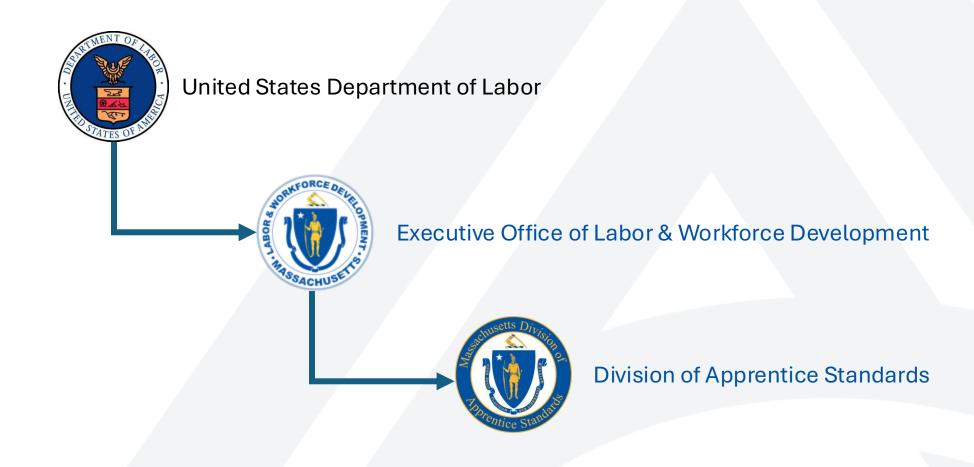
Apprenticeship Lead

Dennis.X.Collins@mass.gov

617-626-6962



Registered Apprenticeship Structure



DAS Registered Apprenticeship Lifecycle

AYeam

One Team

One Mission

Promotion & Registration - Apprenticeship Liaisons

Online Training:

Introduction to

Registered Apprenticeship Sponsorship

Grant Funding — Grants Management

Community of Practice Meetings

Program Administration
Operations

Online Training:

Using the Online Portal

Monitoring & Compliance

Quality Assurance

Online Training:

Sponsor Recordkeeping Requirements

"Invest in an employer who invests in you...
that's what apprenticeship offers."

"BioTech Apprentice's Advice to Jobseekers

Employer Pain Points

& how Registered Apprenticeship addresses them...



Building a diverse and highly skilled workforce pipeline



Improving team productivity and efficiency



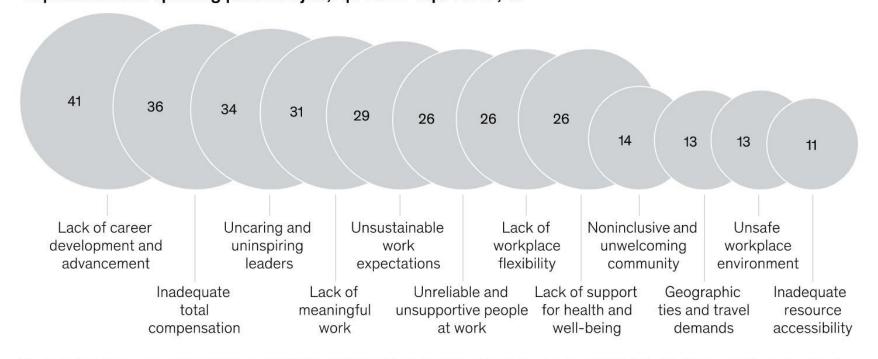
Increasing staff loyalty and reducing turnover costs Retention Rate ~ 90%+



Financial incentives - potential tax credits and training funding opportunities ROI ~ \$1.50

Attract...Train...Retain

Top Reasons for Leaving an Employer



Source: Subset of respondents from McKinsey's 2022 Great Attrition, Great Attraction 2.0 global survey (n = 13,382), including those currently employed and planning to leave (n = 4,939), those currently employed and planning to stay (n = 7,439), and those who quit their previous primary jobs between Apr 2021 and Apr 2022 (n = 1,154)

McKinsey & Company

Who is an apprentice?

An apprentice is **a full-time W-2 employee** who attains skills through mentored on-the-job training and classroom instruction while earning established pay increases for competencies and skills met.



Internship / "apprenticeship" / Registered Apprenticeship

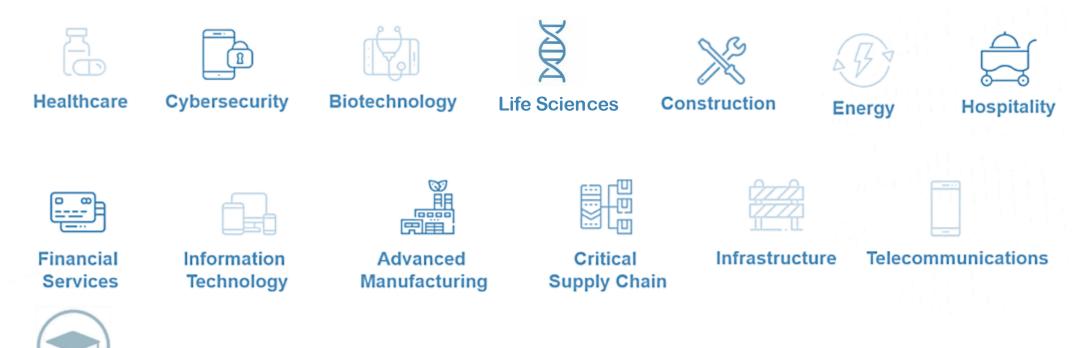
- ✓ Internship short term without formal structure
- ✓ "apprenticeship" typically longer than an internship with some structure
- ✓ Registered Apprenticeship formal, mentored training that leads to a credential



A Wide Range of Industries

Education

More than 1,000 occupations are approved for Registered Apprenticeship Programs by the USDOL



...there's a RAP for that.

Registered Apprenticeship Program

Key Components of Registered Apprenticeship





Employer engagement/involvement



Structured Mentored On-the-Job Training (OJT) **2,000 hour minimum**



Related Technical Instruction (RTI)

150 hours per year



Progressive Wage Increases for Skills Gained

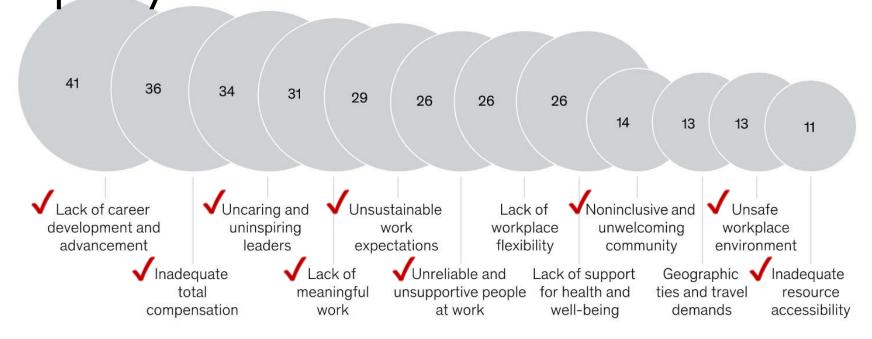


Industry Credential

EARNING WHILE LEARNING

Top Reasons for Leaving an

E previous job, Apr 2021–Apr 2022, %



Source: Subset of respondents from McKinsey's 2022 Great Attrition, Great Attraction 2.0 global survey (n = 13,382), including those currently employed and planning to leave (n = 4,939), those currently employed and planning to stay (n = 7,439), and those who quit their previous primary jobs between Apr 2021 and Apr 2022 (n = 1,154)



USDOL Standards – Work Process (OJT)

Recycling And Reclamation Worker O*NET 53-7062

Recycling and Reclamation Worker

Prepare and sort materials or products for recycling. Identify and remove hazardous substances. Dismantle components of products such as appliances.

ONET Title: Recycling and Reclamation Workers

ONET Code: 53-7062.04

Alternative Occupations Titles:

Bobcat Driver; Box Sorter; Convenience Recycle Center Technician (Convenience Recycle Center Tech);
Deconstruction and Decontamination Waste
Operations Specialist (D and D Waste Operations
Specialist); Non-Ferrous Material Handler; Sort Line
Worker; Sorter; Transfer Station Operator; Recycling
And Reclamation Worker; Recycling And Reclamation
Worker; Recycling And Reclamation Worker

★ Registered Occupation **6**

The occupation title(s) listed below have been vetted by industry and approved by the U.S. Department of Labor for use in a Registered Apprenticeship Program. In some instances, there may be more than one occupational title to select from based on specific employer foci and needs. Each title includes a set of occupational **Work Process Schedules (WPS)** that provide employers with an approved set of work activities and educational coursework to help you get started creating your program.

Open all Close all

+

Recycling And Reclamation Worker

Estimated Program Length: 1 Year (2,000 hours)

USDOL Standards – Work Process (OJT)

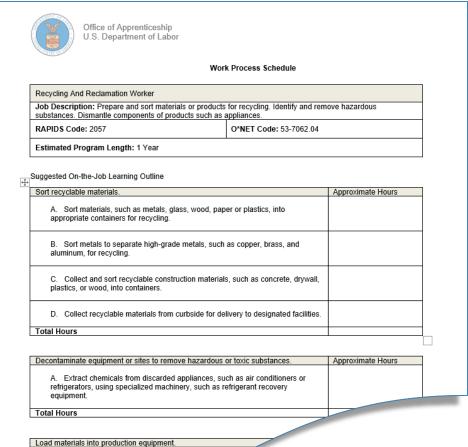
Recycling And Reclamation Worker O*NET 53-7062

Work Activities

Below you will find typical work activities and tasks associated with this occupation. Apprenticeship program sponsors may use these and/or other work activities tailored for their needs when building the On-the-Job Training component of their apprenticeship program.

Open all Close all

- + Sort recyclable materials
- + Decontaminate equipment or sites to remove hazardous or toxic substances
- Load materials into production equipment
- Clean work areas
- Operate recycling equipment
- + Clean materials to prepare them for production
- + Operate forklifts or other loaders
- Record operational or production data
- + Clean production equipment
- + Lubricate production equipment
- + Repair production equipment or tools
- + Operate grinding equipment



A. Deposit recoverable materials into chutes or place

USDOL Standards – Work Process

Recycling Coordinator O*NET 53-1042

Recycling Coordinator

Supervise curbside and drop-off recycling programs for municipal governments or private firms.

ONET Title: Recycling Coordinators

ONET Code: 53-1042.01

Alternative Occupations Titles:

Heavy Equipment Supervisor; Recycle Coordinator; Recycling Coordinator; Recycling Manager; Recycling Program Manager; Recycling Specialist; Route Supervisor; Solid Waste Division Supervisor; Waste Reduction Coordinator; Recycling Coordinator; Recycling Coordinator; Recycling Coordinator



★ Registered Occupation 6

The occupation title(s) listed below have been vetted by industry and approved by the U.S. Department of Labor for use in a Registered Apprenticeship Program. In some instances, there may be more than one occupational title to select from based on specific employer foci and needs. Each title includes a set of occupational Work Process Schedules (WPS) that provide employers with an approved set of work activities and educational coursework to help you get started creating your program.

Open all Close all



Recycling Coordinator

Estimated Program Length: 2 Years (4,000 hours)

USDOL Standards – Work Process (OJT)

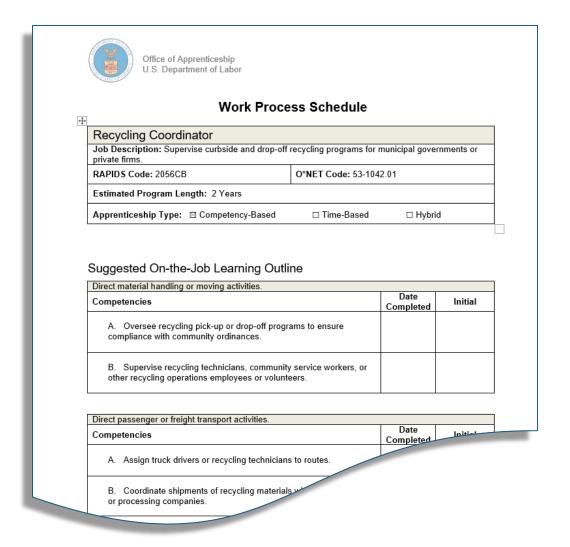
Recycling Coordinator O*NFT 53-1042

Work Activities

Below you will find typical work activities and tasks associated with this occupation. Apprenticeship program sponsors may use these and/or other work activities tailored for their needs when building the On-the-Job Training component of their apprenticeship program.

Open all Close all

- + Direct material handling or moving activities
- + Direct passenger or freight transport activities
- + Record details of deliveries or shipments
- + Plan work operations
- + Inspect facilities to ensure compliance with safety, quality, or service standards
- + Negotiate contracts for transportation, distribution, or logistics services
- + Review customer information
- + Operate packing or other material processing equipment
- Operate vehicles or material-moving equipment
- + Plan implementation or promotion of recycling programs
- + Schedule operational activities
- + Train transportation or material moving personnel
- Develop program goals or plans
- + Investigate crimes committed within organizations
- + Explain regulations, policies, or procedures



Creating a Pathway

Registered Pre-Apprenticeship

Pre-Apprenticeship is a program or set of strategies that is designed to prepare individuals to enter and succeed in a Registered Apprenticeship Program (RAP), ideally leading to a Career Pathway.

- ✓ Classroom instruction with job shadowing OJT.
- ✓ Interview opportunity at the end of the program for the tethered Registered Apprenticeship Program
- ✓ DAS Certificate of Completion
- ✓ Paid or unpaid

Registered Apprenticeship

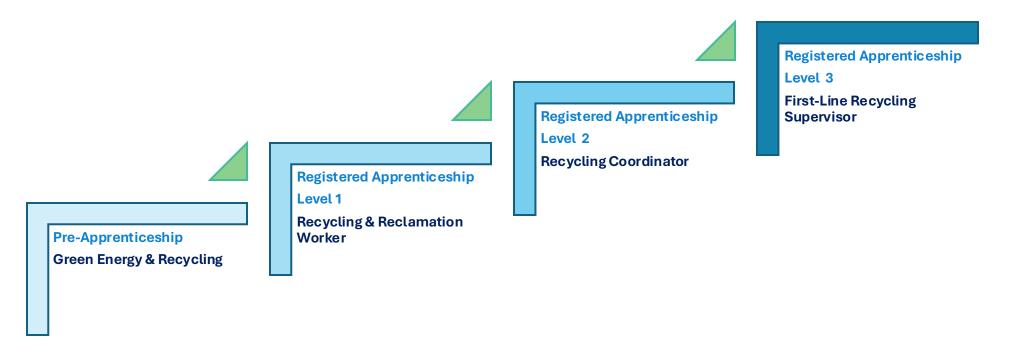
Apprenticeship is an industry-driven, high-quality career pathway where employers can develop and prepare their future workforce, and individuals can build a career.

- √ Full-time Paid W-2 Employee
- ✓ On-the-Job Training (OJT) min of 2,000 hours with a mentor
- √ Related Technical Instruction (RTI) 150 hrs/year
- ✓ Industry Credential



Pathway to Success Example - Recycling





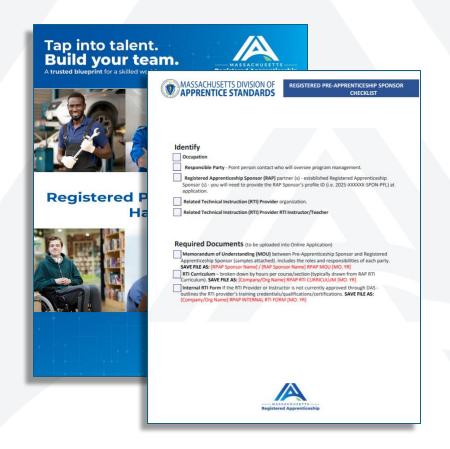


Creating mutually beneficial career pathways specific to the employer's needs as well as the employee's professional goals lead to greater success.

Program Outreach & Development...

The DAS Apprenticeship Liaison Team is prepared to support your outreach and program development efforts every step of the way.









Through our "Massachusetts Registered Apprenticeship" LinkedIn page we promote registered apprenticeships by posting our activities and share information, including highlighting approved Employer Sponsor and Apprentice successes.

If you are on LinkedIn, we ask that you please FOLLOW our page Massachusetts Registered Apprenticeship.



Thank you for your time!



Key Contacts:

Carol Brennan, Director, Recycling Loan Fund

Scott Brunini, Senior Risk Officer

BDC Capital Corporation

500 Edgewater Drive, Suite 555 Wakefield, MA 01880

Phone: 781-928-1100

Fax: 781-928-1101

Let us recycle some money into your business!

- Has growth placed a strain on your working capital?
- Would longer terms on <u>equipment financing</u> help lessen monthly payments and preserve valuable operating cash?
- Are you in need of <u>capital to expand</u>?



- For recycling-related companies or companies engaged in recycling activity
- Term loans from \$50,000 to \$500,000
- Funded by Mass. Dept. Env. Protection



- For any business purpose
- For Mass. companies engaged in keeping waste out of the Mass. landfills
- Favorable interest rates; up to a 10-year term



Reasons to apply for a RLF loan:

Low Cost, Fixed Rate Financing for...
Business Expansion or Acquisition
Equipment Purchases
Working Capital

- More flexible underwriting than conventional financing
- Longer terms
- Favorable interest rates to Banks



How to apply for a RLF loan:

- Call first to discuss your request!
- Provide financial documents
- Estimate the amount of materials to be diverted from landfills
 - Mass. DEP makes eligibility determination
 - BDC Capital makes credit decision
 - BDC Capital closes the loan and remains point of contact through life of the loan



BDC Capital Other Financing Programs:

Asset-Based Working Capital Lines of Credit

Term Loans and Cash Flow Loans

Mezzanine Capital

SBA 504 Loans for Owner-Occupied Real Estate and Equipment

CDFI Loans: (Community Development Financial Institutions Fund) \$5,000 to \$2 million; focus on Gateway Cities, Hispanic, African American and Low-to-Moderate Income Areas



Questions??

Carol Brennan <u>cbrennan@BDCNewEngland.com</u> 413-237-6648

Scott Brunini <u>sbrunini@BDCNewEngland.com</u> 781-928-1100 x127

Additional information on our website:

https://www.bdcnewengland.com/programs/massachusetts-recycling-loan-fund/

