

6 | EXPAND WORKFORCE DEVELOPMENT PROGRAMS FOR BUILDING DECARBONIZATION

The City of Boston will work to support and enhance existing training programs and programs to increase the diversity in the building trades through upskilling and incumbent worker training. Many Boston-based high schools and higher education institutions offer certifications and degrees in facilities management and green building technologies, and connect students to careers in Boston. Local programs connect youth, women, and people of color with career opportunities in the building trades. Trade unions also offer programs to train incumbent workers and increase diversity in the trades. Since it is important to balance training programs with job matching, the City will explore ways to expand job fairs and boards for building construction and operation, and to connect contractors with building projects.

Today, more than 62,000 people work in energy efficiency jobs in the Boston metro area.¹⁶ Approximately 80 percent buildings in Boston will need to undergo deep energy retrofits and prepare for the impacts of climate change. To carry out that work, Boston needs to grow the pipeline of Boston's future green builders and hone the skills of our active labor force. This includes:

- **Facilities management.** Building operators, maintenance workers and building automation controls experts all play a vital part in ensuring that buildings run at peak performance.
- **Construction trades.** Every tradesperson involved in building renovations - electricians, carpenters, roofers, plumbers, HVAC technicians,

estimators, pipefitters and more - will need to understand what a deep energy retrofit entails and become familiar with electric building systems, to allow buildings to reduce their emissions.

To support and enhance the work of local and regional institutions, trade unions and non-profit partners, the City will also convene key players to develop a citywide strategy, coordinate the efforts of current workforce development programs, and ensure the building sector is ready to retrofit and operate carbon-neutral buildings.

EXPECTED BENEFITS



Creation of local, well-paying, high-quality jobs



Local economic investment



Enhanced employment security (through new trade skills development)



Increasingly diverse workforce in the building professions



Improved building performance and sharing of best practices as industry knowledge and workforce for net zero carbon buildings advances

¹⁶ E2 (Environmental Entrepreneurs), "Clean Jobs Cities 2018," September 2018.

DESIGNING FOR EQUITY

- › The City of Boston will continue to build a diverse, inclusive workforce of people of color, women, recent immigrants, veterans, and young professionals.
- › Job training programs should be designed to accommodate different skill sets and educational levels and should be financially accessible to all Boston residents.
- › High-quality job opportunities in this field need to be accessible and fairly distributed. Living wages and appropriate benefits should be provided, as well as opportunities for career advancement. Wherever possible, employers should give workers a voice in formulating

policies, enforcing wage and hour rules, and protecting against wage theft.

METRICS FOR SUCCESS

- › Construction work hours on public and large private projects performed by:
 - Boston residents: 51 percent
 - Women: 12 percent
 - People of color: 40 percent
- › 50 percent of individuals who begin training go on to graduate from or complete training
- › 75 percent placement rate into jobs or additional training for individuals who complete training

STEPS

TIMELINE

IMPLEMENTERS AND PARTNERS

1. Regularly convene an internal City working group on workforce development for energy efficiency and green buildings to:
 - Coordinate citywide programming
 - Develop an equitable workforce development strategy that builds on the Regional Infrastructure Jobs Plan, including marketing and outreach
 - Convene stakeholder and community roundtables around specific topics as needed
 - Collaborate with industry partners and stakeholders to advertise and scale training programs
 - Coordinate with local municipalities, regional agencies and Mass Save

Starting
2019

City and stakeholders, including trade unions, construction companies, community colleges, regional partners, universities, non-profit and community-based organizations.

2. Estimate baseline and future construction labor needs to meet carbon neutrality goals
 - Inventory career ladder and training programs for union and open shop workers, including for those without a high school diploma
 - Identify labor and training gaps

2019-2020

City, technical experts

3. Pilot and coordinate training programs and support partner-led programs, including:
 - A training course to develop the capacity of MWDBE contractors to bid on municipal and large-scale projects
 - Building Operator Certification training programs

Starting
2019

City, in partnership with local and regional non-profits and industry associations

STEPS	TIMELINE	IMPLEMENTERS AND PARTNERS
<p>4. Develop facilities management training and job opportunities for municipal building staff</p> <ul style="list-style-type: none"> • Explore adding a facilities management track to City Academy • Increase the number of municipal building operators with Building Operator Certification • Develop training and advancement opportunities for incumbent maintenance staff 	2020-2021	City
<p>5. Expand technical offerings and career pathways in Boston Public Schools</p> <ul style="list-style-type: none"> • Support and enhance existing programs at career and technical education (CTE) high schools • Apply for state grant to offer a new pre-college green building innovation pathway at non-technical schools • Expand access to technical courses (e.g., after-school carpentry program accessible to all students) • Expand summer internship opportunities through the Building Boston's Future program 	Starting in 2020	City, in partnership with local non-profits, training programs and industry associations

EXISTING TOOLS AND EFFORTS

Boston's schools and academic institutions are preparing students and mid-career professionals for careers in the green building sector:

- › Several Boston public schools have career and technical education (CTE) programs that support green buildings. **Madison Park High School** serves approximately 10,000 students, with certification programs for carpentry, electrical, facilities management, plumbing and sheet metal. The **John D. O'Bryant School of Mathematics and Science** offers computer science and engineering pathways. The **Boston Green Academy** has an environmental science and technology program. Boston Public Schools is also developing an **after-school carpentry program** that will be open to students across the district.

- › Many higher education institutions in Boston offer certificates and degrees that prepare their students for careers in facilities management or in the trades. These institutions include Benjamin Franklin Institute of Technology, Bunker Hill Community College, Mass Maritime, Northeastern University, Roxbury Community College, and Wentworth Institute of Technology, among many others.



Mayor Martin J. Walsh joins members of YouthBuild Boston, the Dudley Street Neighborhood Initiative and Madison Park High School students, and lends a hand in installing siding onto one of the City of Boston's Neighborhood Home Initiative homes being built at 31-33 Woodville Street in Dudley Square.

The City of Boston is investing in workforce development:

- › **The Neighborhood Jobs Trust** collects fees from developers of large commercial projects to fund jobs, job training and other related services. The Trust funds programs like the Tuition-Free Community College Plan, Roxbury Community College Center for Smart Building Technology, and Youth Options Unlimited (YOU) Boston, a workforce development organization that works with young people who are court-involved or gang-affiliated, re-entering the community from incarceration, or seeking refuge from poverty or violence.

The City and its partners operate training programs for youth and incumbent professionals to access training:

- › The **Tuition-Free Community College Plan** covers tuition and other expenses for eligible Boston residents who have completed high school. Participating colleges include Bunker Hill Community College, Roxbury Community College, MassBay Community College, and the Benjamin Franklin Institute of Technology. Students can also transfer to tuition-free four-

year colleges through the Boston Bridge from the state's Commonwealth Commitment program.

- › In 2018, the City hosted **Building Operator Certification (BOC) training** to ensure municipal operators can make City-owned buildings perform at the highest level. Building off of that success, A Better City and Local Initiatives Support Corporation (LISC) Boston have hosted additional training sessions in 2019. The City of Boston will partner to carry out at least four more rounds of training before the end of 2020.
- › **Trade unions** also offer training programs to their incumbent workers. Many City- and partner-led programs recruit Boston residents to train and place them in careers in the building industry.
- › The Mayor's Office of Workforce Development's **City Academy** is a training pipeline for Boston residents to access entry-level City positions. There are currently free training tracks for Commercial Driver's License (CDL) and Hoisting and Emergency Medical Training. The CDL and Hoisting training partners with the Public Works Department, Parks and Recreation Department, and Boston Water and Sewer Commission, as well as Suffolk Construction, a private construction industry partner.

- › **YouthBuild Boston** is a job training organization that works to prepare under-served community members in the Boston area for jobs in the building trades. As part of the Office of Workforce Development's Greater Boston American Apprenticeship Initiative, WinnResidential and Wentworth Institute of Technology have partnered with YouthBuild Boston to offer a paid **Facilities Maintenance Technician apprenticeship**. Participants are paid a living wage and receive a certificate upon completion.
- › The **Economic Mobility Lab** tests ideas to economically empower low- and moderate-income Bostonians. Its programs include **Building Boston's Future**, a Boston Center for Youth and Families (BCYF) program to place high school students in workplaces for paid 7-week internships.
- › **Operation Exit** is a re-entry program that provides participants with the career readiness and occupational skills training needed to apply for state-registered Building Trades apprenticeship programs.
- › **Building Pathways** is a Boston-based non-profit organization that operates the Building Trades Pre-Apprenticeship Program, which prepares under-represented, disadvantaged or low-skilled Boston metro area residents to enter a union apprenticeship program.

The programs listed above are just a few of the many programs connecting Boston's youth, people of color, women, and other residents to careers in construction and facilities management. The Mayor's Office of Workforce Development works to connect residents and companies to appropriate programs and opportunities.

WHAT IS THE BOSTON RESIDENT JOBS POLICY?

The Boston Resident Jobs Policy (BRJP) is an ordinance passed in 1983 and updated most recently in 2017. Private development projects over 50,000 square feet and any public development project must meet the following employment standards for the total work hours of journey people and apprentices in each trade:

- › at least 51 percent must go to Boston residents;
- › at least 40 percent must go to people of color; and
- › at least 12 percent must go to women.

The BRJP office and the Boston Planning & Development Agency (BPDA) monitor projects for BRJP compliance. The Boston Employment Commission also reviews projects and makes recommendations to the BRJP office and the BPDA to strengthen compliance.
