

Research Question

We were asked to calculate the economic impact on the city's economy and its residents of meeting the Boston Resident Jobs Policy requirement that 51 percent of work hours in each trade be worked by Boston residents

We sought to measure:

- the direct impact the extra hours and wages that would be earned if the requirements were met
- the indirect impact the additional impact that having those wages accrue to residents would have on economic activity within the city's borders



BRJP Background

- In 1983, the Mayor approved an Ordinance setting employment standards for construction projects in Boston. The standards required a certain share of construction workers to be Boston residents, people of color, and women.
- In 2017, the Ordinance was extended by the Mayor's Executive Order, requiring private development projects over 50,000 square feet and any public development:
 - At least 51 percent of the total work hours of journey people and 51 percent of the total work hours of apprentices in each trade must go to Boston residents
 - at least 40 percent of the total work hours of journey people and 40 percent of the total work hours of apprentices in each trade must go to people of color
 - at least 12 percent of the total work hours of journey people and 12 percent of the total work hours of apprentices in each trade must go to women.
- Our study focuses specifically on the 51 percent Boston resident requirement and the direct and indirect impacts that meeting that requirement would have on the city's economy



Developers and contractors continue to fall short of the required BRJP thresholds

- Only 23 percent tracked hours were worked by Boston residents in calendar year 2022.
- No trade with more than 1,000 hours worked met the 51 percent Boston residents requirement.



Hours Worked and Estimated Wage by Trade in 2022

Trade	Total Hours Worked, 2022	Share Worked by Boston Residents	Estimated Average Hourly Wage
Laborer	2,003,437	26%	\$43.58
Carpenter	1,929,764	23%	\$54.96
Electrician	1,253,502	27%	\$59.23
Iron Worker	628,380	25%	\$52.72
Plumber	451,918	23%	\$64.69
Pipefitter	329,637	23%	\$63.43
Equipment Operator	299,847	10%	\$53.69
Sheetmetal Worker	258,885	24%	\$55.31
Painter	245,476	20%	\$52.20
Sprinkler Fitter	188,463	21%	\$66.20
Bricklayer	184,003	19%	\$60.35
Glazier	180,907	20%	\$50.80
Taper	143,051	16%	\$50.80
Roofer	134,593	21%	\$48.53
Piledriver	101,127	21%	\$49.07
Insulator	87,084	14%	\$53.85
Elevator Const (Mech)	81,627	11%	\$65.62
Mason	76,472	14%	\$60.35

Trade	Total Hours Worked, 2022	Share Worked by Boston Residents	Estimated Average Hourly Wage
Asbestos Worker	70,370	21%	\$38.10
HVAC	57,350	20%	\$55.31
Concrete Worker	54,951	4%	\$34.41
Floor Layer	53,733	17%	\$51.77
Mason Tender	43,616	14%	\$43.83
Cement Mason	40,441	11%	\$50.59
Waterproofer	33,867	24%	\$48.53
Floor Covers	32,997	9%	\$51.77
Elev Const Helper	31,825	32%	\$45.93
Marble Tile Worker	31,470	19%	\$46.25
Oiler	30,577	15%	\$24.34
Technician	27,309	28%	\$47.38
Plasterer	24,173	16%	\$50.59
Cement Laborer	22,038	10%	\$43.58
Wrecker	21,004	27%	\$43.73
Crane Operator	14,197	16%	\$54.28
Tele-Communications	11,579	26%	\$47.38
All Other Trades	54,082	17%	
Total, All Trades	9,233,754	23%	



What if the BRJP Policy had been complied:

Trade	Total Hours Worked, 2022	Share Worked by Boston Residents	Estimated Average Hourly Wage
Laborer	2,003,437	51%	\$43.58
Carpenter	1,929,764	51%	\$54.96
Electrician	1,253,502	51%	\$59.23
Iron Worker	628,380	51%	\$52.72
Plumber	451,918	51%	\$64.69
Pipefitter	329,637	51%	\$63.43
Equipment Operator	299,847	51%	\$53.69
Sheetmetal Worker	258,885	51%	\$55.31
Painter	245,476	51%	\$52.20
Sprinkler Fitter	188,463	51%	\$66.20
Bricklayer	184,003	51%	\$60.35
Glazier	180,907	51%	\$50.80
Taper	143,051	51%	\$50.80
Roofer	134,593	51%	\$48.53
Piledriver	101,127	51%	\$49.07
Insulator	87,084	51%	\$53.85
Elevator Const (Mech)	81,627	51%	\$65.62
Mason	76,472	51%	\$60.35

Trade	Total Hours Worked, 2022	Share Worked by Boston Residents	Estimated Average Hourly Wage
Asbestos Worker	70,370	51%	\$38.10
HVAC	57,350	51%	\$55.31
Concrete Worker	54,951	51%	\$34.41
Floor Layer	53,733	51%	\$51.77
Mason Tender	43,616	51%	\$43.83
Cement Mason	40,441	51%	\$50.59
Waterproofer	33,867	51%	\$48.53
Floor Covers	32,997	51%	\$51.77
Elev Const Helper	31,825	51%	\$45.93
Marble Tile Worker	31,470	51%	\$46.25
Oiler	30,577	51%	\$24.34
Technician	27,309	51%	\$47.38
Plasterer	24,173	51%	\$50.59
Cement Laborer	22,038	51%	\$43.58
Wrecker	21,004	51%	\$43.73
Crane Operator	14,197	51%	\$54.28
Tele-Communications	11,579	51%	\$47.38
All Other Trades	54,082	51%	
Total, All Trades	9,233,754	51%	



If the BRJP Policy had been fully complied with:

- The direct impacts of meeting the requirements:
 - Boston residents would work an additional 2.6 million construction hours.
 - Boston residents would have earned \$138.5 million in wages from those hours at prevailing wage rates.



Calculating the indirect impacts

- Having calculated the direct impacts from BRJP compliance data we moved to analyze the indirect impacts
- For this we used the REMI (Regional Economic Modeling Incorporated) PI+ regional model, which allows us to estimate the relationships between economic variables in Suffolk County, the rest of Greater Boston, and the rest of Massachusetts
- This type of model is ideally designed to answer questions about how reallocating wages from one place to another will impact a broader set of economic variables



Scenarios Descriptions

Scenario 1: Upper Bound	Scenario 2: Lower Bound	Scenario 3: Preferred Estimate
All additional hours worked by underemployed and unemployed Boston residents	All additional hours worked by Boston residents working at Massachusetts minimum wage of \$15/hour.	 According to the 2017-2021 American Community Survey (ACS) data: 15% hours filled by underemployed workers (20% construction workers worked fewer than 40 weeks in a year and 13% worked substantially fewer than 40 hours/week) 15% hours filled by unemployed workers (7.5% unemployment rate) The remaining 70% hours filled by low wage workers

Source: BPDA Research Division estimates generated using Regional Economic Models, Inc. Policy Insight Plus (REMI PI+), Massachusetts Regions



Scenarios

	Scenario 1: Upper Bound	Scenario 2: Lower Bound	Scenario 3: Preferred Estimate
Description	All Hours filled by under/unemployed workers	All hours filled by workers currently employed in low-wage work	30% filled by underemployed; 70% filled by current low-wage workers
Gross City Product (millions of 2022 \$)	102.9	73.8	82.6
Indirect and Induced Jobs	774	555	621
New Resident Income (millions of 2022 \$)	216	155.1	173.4

Source: BPDA Research Division estimates generated using Regional Economic Models, Inc. Policy Insight Plus (REMI PI+), Massachusetts Regions



Economic Impacts of Preferred Estimate (Scenario 3)

- 621 indirect and induced jobs
 - Primarily from the local consumption demand increase because of the extra wage increase
- \$173.4 million wage increase for Boston residents
 - \$111.2 million wage increase from direct jobs added (new hours for construction workers minus any wages they would have been earnings otherwise in those hours)
 - 62.2 million wage increase from indirect and induced jobs added
- \$82.6 million increase in Boston Gross City Product (GCP)

Source: BPDA Research Division estimates generated using Regional Economic Models, Inc. Policy Insight Plus (REMI PI+), Massachusetts Regions



Conclusion

- Because building trades in Boston are highly paid and a large gap exits between the observed hours data and the BRJP targets, the economic impacts of fully meeting targets is large
- The *direct* impact on those gaining the opportunity to work in construction is the largest impact, but the *indirect* impact creating additional spending within the city's borders has the potential to add over 600 jobs and an additional 60 million dollars in wages accruing to Boston residents

