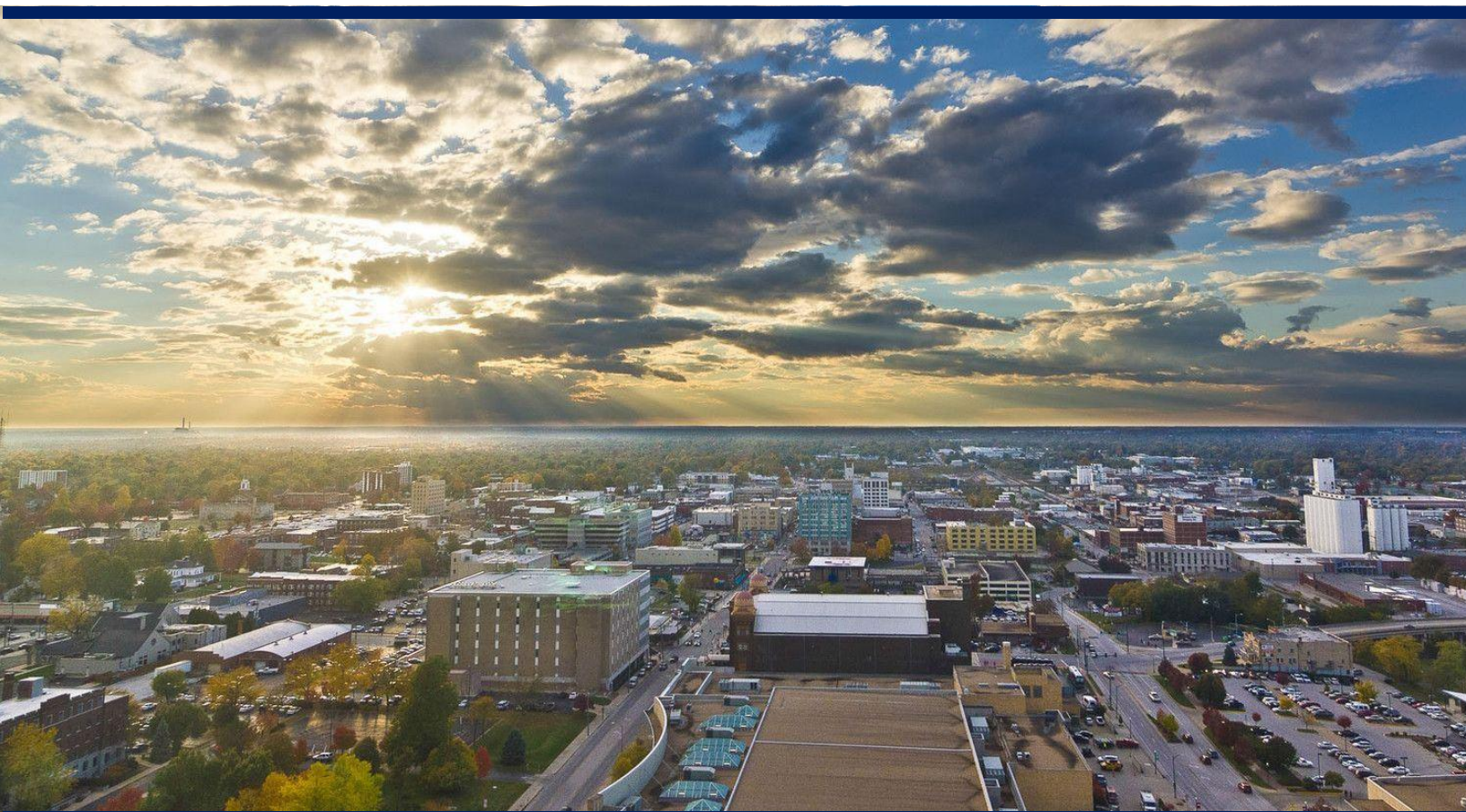


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An Economic Impact Analysis of Hiring Local in Springfield, Missouri



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Executive Summary

A local business preference ordinance has been proposed to support small businesses, prevent high unemployment, and increase municipal tax revenues in Springfield, Missouri. The ordinance would provide an 8 percent bid credit to law-abiding local businesses bidding on the City's public works projects.

- The City plans to invest \$471 million on infrastructure improvements over the next five years.
- Local workers spend 67 percent of their pre-tax income back in the local economy compared to just 30 percent for nonlocal workers.
- Employing local workers on the City's Capital Improvements Program projects would boost the economy by \$785 million and save or create jobs for more than 3,200 residents over the next five years.
- However, employing nonlocal workers on the projects would result in local businesses—such as stores and restaurants—missing out on \$71 million in sales and saving or creating jobs for 400 fewer Springfield residents over the next five years.
- Employing local workers on the City's Capital Improvements Program projects would increase local tax revenues—primarily from sales taxes and property taxes—by \$11.1 million compared with an alternative scenario in which they are completed by nonlocal workers.
- Hiring local contractors would increase investments in local apprenticeship training funds by \$1.4 million over the next five years.

A strong Springfield is built locally by highly trained workers. Awarding public works projects to local businesses who employ Springfield residents would boost economic development, promote training opportunities for young residents, and spur local tax revenues. As a result, the proposed local business preference ordinance would deliver good value for taxpayers.

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Introduction

A local business preference program has been proposed to support small businesses, decrease local unemployment, and increase municipal tax revenues in the City of Springfield, Missouri. The ordinance would amend the Springfield City Code to provide an 8 percent bid credit to local businesses bidding on City-funded public works projects. Local businesses would be classified as those who occupy permanent office space or construction yards within city limits where at least 50 percent of their employees work for at least 60 percent of their annual hours or where at least 50 full-time employees work. Coverage of the ordinance would apply only to public works projects valued over \$75,000, which matches the coverage threshold of Missouri's Prevailing Wage Law. Coverage would also extend to local subcontractors, with an escalating bid credit based on their share of the work to be performed, up to 5 percent. Only law-abiding local contractors who comply with local, state, and federal laws and who are up to date on their taxes, fees, and licenses would qualify for the local business preference credit.

According to data from the U.S. Census Bureau, the City of Springfield is comprised of 85 percent White residents, 4 percent Black and African American residents, and 4 percent Hispanic and Latinx residents ([Census, 2022](#)). Across racial and ethnic identities, the median household income in Springfield (\$36,856 per year) is considerably lower in Springfield than it is for both the State of Missouri (\$55,461 per year) and the United States (\$62,843 per year). In fact, 23 percent of Springfield residents live in poverty, double the poverty rate for Missouri (12 percent) and the United States as a whole (11 percent). Approximately 2,500 Springfield residents are currently employed in the construction sector, or about 3 percent of the City's workforce.

This report, conducted by the Project for Middle Class Renewal (PMCR) at the University of Illinois at Urbana-Champaign and the Midwest Economic Policy Institute (MEPI), assesses the economic impact of awarding public works contracts to local contractors who employ local workers, particularly in instances in which differences in competitive bid submissions are small. Results indicate that, with a high poverty rate, Springfield's proposed local business preference ordinance could allow more City funds to be used to hire local businesses who employ local workers on construction projects, creating job opportunities for communities that need them most and boosting local economic development.

Planned City Projects from 2022 to 2026 Under the Capital Improvements Program

Every year, the City of Springfield's Planning and Development Department releases a Capital Improvements Program (CIP). The CIP serves as the main planning and budgetary document outlining priorities for improving the City's infrastructure. The 2022 CIP, which was released in January 2022, details the 2022 projects that are to receive funding and includes a summary of planned CIP projects over the five-year period from 2023 through 2027. Figure 1 highlights this five-year period.

In total, the City of Springfield plans to spend \$471 million on infrastructure improvements over the next five years (Figure 1). In general, two out of every three dollars will go toward streets, sidewalks, and water projects. The City plans to invest \$152 million on 45 street, traffic management, walkability, and bicycle projects (32 percent) and \$170 million on 70 sanitary sewer, stormwater, and solid waste improvement projects (44 percent). The remaining \$150 million (32 percent) will be spent on other projects, such as airport, municipal building, and fire station improvements ([CIP, 2022](#)).

Figure 1: Summary of Proposed Public Works Projects Funded by the City of Springfield, 2023—2027

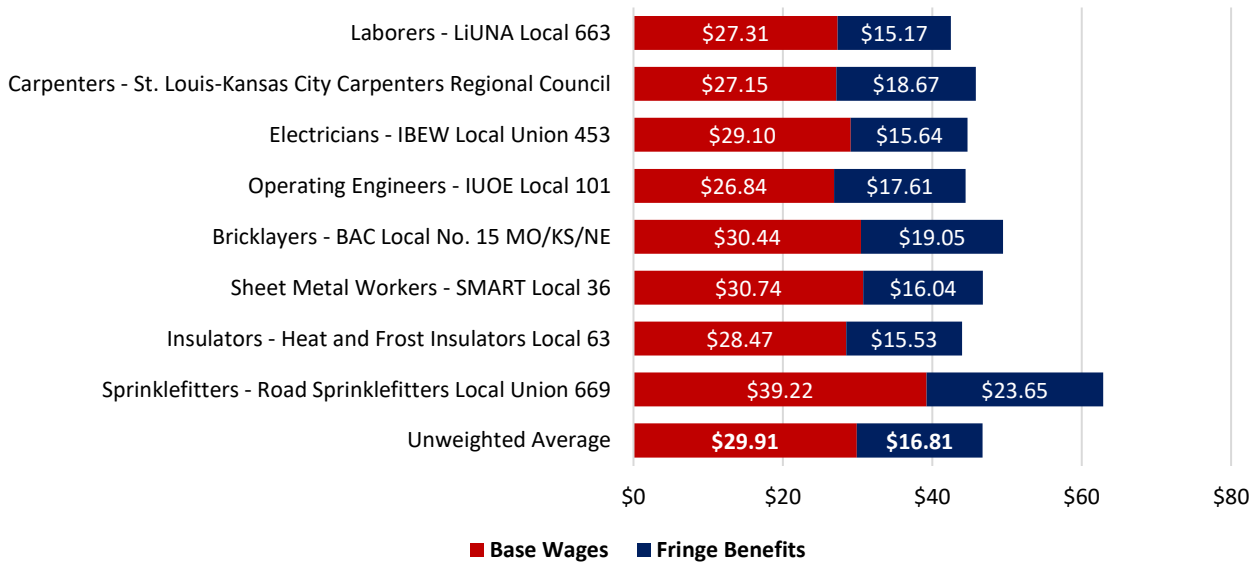
Project Category	Projects	Proposed Expenditures	Share of Value
Street, Traffic Management, Walkability, Bicycle, and Safety Improvements	45	\$151,603,064	32.2%
Sanitary Sewer, Stormwater, and Solid Waste Improvements	70	\$169,600,000	36.0%
All Other Project Categories	42	\$150,082,003	31.8%
Total Capital Improvement Projects	157	\$471,285,067	100.0%

Source: Authors’ analysis of City of Springfield’s 2022 *Capital Improvements Plan (CIP, 2022)*.

Middle-Class Wages and Fringe Benefits Paid on City Projects

All infrastructure projects carried out by the City of Springfield are covered by Missouri’s Prevailing Wage Law, which establishes local minimum wage rates for different types of skilled construction workers on taxpayer-funded public works projects valued over \$75,000 (MO Labor, 2022). The main purpose of a prevailing wage law is to protect local construction standards in the competitive bidding process, ensuring that contractors compete based on core competencies and efficiencies rather than on undermining local middle-class compensation, area work standards, and contributions to training programs. On average, prevailing wage laws have been found to increase the hiring of local contractors on public projects by between 8 percent and 10 percent (Manzo, 2022; Manzo & Duncan, 2018). In Greene County, wages and fringe benefits that have been privately negotiated by employers and trades unions through collective bargaining generally prevail (e.g., MO DLS, 2021).

Figure 2: Prevailing Construction Tradesworker Wage and Fringe Benefits Rates in Springfield, 2022



Source: Authors’ analysis of collective bargaining agreements for the eight selected trades in the Springfield area. In this analysis, the average construction worker on public works projects is assumed to earn \$30 per hour in wages and \$17 per hour in benefits.

Figure 2 provides base wage and fringe benefits rates for eight construction trades in the Springfield area—laborers, carpenters, electricians, operating engineers, bricklayers, sheet metal workers, insulators, and sprinkle fitters. For these occupations involved in public works projects, hourly wages range from \$27 per hour to \$39 per hour and fringe benefits range from \$15 per hour to \$24 per hour. The unweighted average is about \$30 per hour in base wages and \$17 per hour in fringe benefits (Figure 2).

Disposable Income and Consumer Spending by Local and Nonlocal Workers

This analysis assumes that workers performing work on public works projects in the City of Springfield are paid the same wages and fringe benefits rates, regardless of whether they are local workers or nonlocal workers. This is because all blue-collar construction workers are paid locally prevailing wage rates, as long as the project costs at least \$75,000. However, even though local and nonlocal workers are assumed to earn the same income on public works projects, they have very different impacts on consumer spending at restaurants, stores, car dealerships, entertainment venues, and other local businesses.

On average, Midwest households spend 67 percent of their pre-tax income back into the economy (BLS, 2021). This includes spending on food, beverages, housing, apparel, transportation, health care, entertainment, personal care, and other items. Approximately 9 percent of their pre-tax income goes to personal insurance and pensions, including Social Security payroll deductions. Another 13 percent goes towards federal income taxes. In Missouri, state income tax contributions comprise about 4 percent of the average household's income. The remaining 7 percent goes to savings. This analysis assumes that local workers spend this 67 percent of their total pre-tax income in the local economy, while nonlocal workers only spend 30 percent of their total pre-tax income back in the local economy (see Appendix Table A).¹

An Example of Local Business Preference on an Average Street Improvement Project

The City of Springfield plans to spend about \$127 million specifically on 29 street improvement projects over the next five years (CIP, 2021). Accordingly, the average street project is expected to cost about \$4.38 million. As a hypothetical example, assume an out-of-state contractor bids \$4.30 million and a local contractor bids \$4.54 million, or 5.6 percent more, on the same average-sized street project. This bid spread was the median difference for competitive bids on similar state projects in Greene County between 2020 and 2021 (see Appendix Table B). Under a low-bid model, the out-of-state contractor would be awarded the project. However, with an 8 percent local business preference credit, the local contractor's bid would be received by the City of Springfield as if it had been submitted for 8 percent less than the \$4.54 million. The City thus awards the project to the local contractor as if it had been submitted for \$4.18 million, but the contract with the City is still \$4.54 million. In this example, the local business preference credit ensures that local workers are building and repairing the roads in their own community.

Figure 3 demonstrates why it may be in the best interest of the City of Springfield to offer a local business preference credit in this example. The analysis utilizes IMPLAN, an industry-standard economic modeling software that inputs U.S. Census Bureau data, accounts for the interrelationship between households and

¹ Nonlocal workers are thus assumed to spend 45 percent as much in the local economy as local workers. For example, a local worker earning \$60,000 and contributing 67 percent of her pre-tax income to the local economy would spend \$40,000. A nonlocal worker earning \$60,000 and contributing 30 percent of his pre-tax income would spend \$18,000. Mathematically, \$18,000 is 45 percent as much as \$40,000. This 45 percent estimate aligns with similar studies (Knapp, 2021; Nissen & Zhang, 2006).

businesses, and follows dollars as they cycle throughout the economy (IMPLAN, 2022). With a 100 percent local workforce, the typical \$4.4 million street project would pay \$1.2 million in total wages and fringe benefits to blue-collar construction workers. This matches expectations from the 2017 *Economic Census* collected and released by the U.S. Census Bureau, which finds that construction worker labor costs account for about 28 percent of the net value of total construction in Missouri’s heavy and civil engineering construction sector (Census, 2017). At current hourly wage and fringe benefits rates, the street improvement project would employ 13 full-time equivalent construction workers from the local community (“Direct Effect”). The project would produce about \$2.2 million in revenue for local suppliers from business-to-business purchases, creating or savings another 13 jobs (“Indirect Effect”). Finally, as local construction workers spend 67 percent of their incomes back in the local economy, an additional 7 full-time equivalent jobs are created or saved at restaurants, shops, and other local businesses (“Induced Effect”). Ultimately, about \$7.7 million in economic activity would be generated from the initial \$4.54 million spent by the City of Springfield—producing a multiplier of \$1.70 in economic activity per dollar invested.

By contrast, an out-of-state contractor using all nonlocal workers on this average street improvement project would only generate \$7.1 million in local economy activity—a multiplier of \$1.56 per dollar invested, or 8 percent less than hiring locally (Figure 3). This is because nonlocal workers spend less in the local economy. A nonlocal, migratory workforce would spend \$629,000 less at local businesses, creating 4 fewer jobs than an equivalent local workforce. In addition, even though the project would pay the same wages and fringe benefits rates to the nonlocal workers, none of the \$1.2 million in direct labor income would go to local construction workers. Local sales taxes and local property tax collections would be lower, resulting in about \$36,000 less in local tax revenues.

Figure 3: Example Street Improvement Project in Springfield, All Local Workers vs. All Nonlocal Workers

Project Example	Local Employment	Local Labor Income	Local Output	Local Taxes
<u>Local Contractor</u>				
Direct Effect	13	\$1,232,840	\$4,400,000	\$26,969
Indirect Effect	13	\$683,098	\$2,221,568	\$73,417
Induced Effect	7	\$346,730	\$1,105,416	\$27,875
Total Effects	33	\$2,262,668	\$7,726,984	\$128,261
<u>Nonlocal Contractor</u>				
Direct Effect	0	\$0	\$4,400,000	\$12,856
Indirect Effect	13	\$683,098	\$2,221,568	\$73,417
Induced Effect	3	\$149,299	\$475,982	\$6,408
Total Effects	16	\$832,397	\$7,097,550	\$106,794
<u>Difference</u>				
Direct Effect	-13	-\$1,232,840	\$0	-\$14,113
Indirect Effect	0	\$0	\$0	\$0
Induced Effect	-4	-\$197,432	-\$629,434	-\$21,468
Total Effects	-17	-\$1,430,272	-\$629,434	-\$35,581

Source: Authors’ IMPLAN analysis using data from the City of Springfield’s 2022 *Capital Improvements Plan* (IMPLAN, 2022; CIP, 2022). Table CIP-D reports that the City proposes to spend \$127,066,086 on 29 street improvements, or \$4,381,589 per project on average. Local employment is full time equivalent (FTE) and is based on construction workers earning an average of \$30 per hour in wages and \$17 per hour in fringe benefits on City-funded public works projects. All IMPLAN data is for Greene County, Missouri.

The net effect of the local business preference ordinance is substantial in this hypothetical example (Figure 3). Without the ordinance, the City of Springfield would appear as if it were reducing taxpayer costs by \$240,000 by awarding the street improvement project to the out-of-state contractor. However, this “savings” is partially offset by the \$36,000 in local taxes it forgoes from the nonlocal workforce and is dwarfed by the \$629,000 in lost economic activity in the local community as well as the \$1.4 million drop in income that would have otherwise gone to local workers. Put in another way, by paying \$240,000 more, the local business preference programs would ensure that the local economy grows by \$629,000 and that 17 full-time jobs are created for Springfield residents in this example.

An Economic Impact Analysis of City Projects Based on the Local Share of the Workforce

IMPLAN, an industry-standard economic modeling software, can be used to further demonstrate the value of using local businesses who employ local workers. Figure 4 presents estimates on the economic impacts of the City of Springfield’s \$471 million in planned infrastructure investments from 2023 through 2027. The investments would produce \$132 million in wages and fringe benefits for more than 1,300 construction jobs over five years. The projects would add an additional \$192 million in business revenues for local businesses in the supply chain, creating or saving over 1,100 jobs indirectly over five years. Through the increased consumer demand from construction workers, the projects would spur another \$121 million for restaurants, stores, and other local businesses that would employ nearly 800 more workers over the five-year period—assuming a 100 percent local construction workforce. In total, the Capital Improvements Program could boost economic activity in Springfield by up to \$785 million over five years, a multiplier of \$1.67 in economic activity per dollar invested.

Figure 4: Economic Impact of 2023—2027 City Projects, Assuming Projects Built 100 Percent Locally

100% Local Workforce	Total Employment	Total Labor Income	Total Output
Direct Effect	1,350	\$132,055,135	\$471,285,067
Indirect Effect	1,114	\$61,740,565	\$192,365,334
Induced Effect	761	\$37,966,581	\$121,524,377
Total Effects	3,226	\$231,762,281	\$785,174,778
<i>Multiplier Effect</i> →			\$1.67

Source: Authors’ IMPLAN analysis using data from the City of Springfield’s 2022 *Capital Improvements Plan* (IMPLAN, 2022; CIP, 2022). Total employment is full time equivalent (FTE) and is based on construction workers earning an average of \$30 per hour in wages and \$17 per hour in fringe benefits on City-funded public works projects. All IMPLAN data is for Greene County, Missouri.

Economic activity, employment, and local tax revenues would all be affected if the contractors who are awarded these public works projects employ nonlocal workers (Figure 5). Because nonlocal workers take money back home with them upon project completion, Springfield’s public works projects would have significantly smaller “Induced Effects” on the City’s economy if they employ a nonlocal workforce. Compared to projects that are built 100 percent locally, if 25 percent of the total value of CIP projects is completed by nonlocal workers, the City of Springfield would add 100 fewer jobs, \$24 million less in economic activity, and \$2.9 million less in local tax revenues over five years. If 50 percent is completed by nonlocal workers, the City would add 200 fewer jobs, \$39 million less in economic activity, and \$5.7 million less in local tax revenues over five years. At the extreme, if all projects were carried out by nonlocal contractors, the City would add 400 fewer jobs, \$71 million less in economic activity, and \$11.1 million less in local tax revenues over five years. The \$71 million difference in total output between a 100 percent locally sourced workforce (\$785 million) and a 100% nonlocal workforce (\$714 million) would represent a

9 percent loss of economic activity—a fact which could justify the 8 percent local hire credit in the proposed local business preference ordinance.

Figure 5: Induced Economic Effects of 2023—2027 City Projects, by Local Share of the Workforce

Induced Effects (Created or Saved)	Employment	Economic Output	Local Taxes*	Multiplier
100% Local and 0% Nonlocal Workforce	761	\$121,524,377	\$11,746,786	\$1.67
75% Local and 25% Nonlocal Workforce	656	\$97,684,709	\$8,842,937	\$1.62
50% Local and 50% Nonlocal Workforce	551	\$82,038,240	\$6,031,048	\$1.58
25% Local and 75% Nonlocal Workforce	446	\$66,391,771	\$3,311,115	\$1.55
0% Local and 100% Nonlocal Workforce	341	\$50,745,303	\$683,141	\$1.52

Source: Authors' IMPLAN analysis using data from the City of Springfield's 2022 *Capital Improvements Plan* (IMPLAN, 2022; CIP, 2022). *Local taxes also includes lost property tax revenues from the "Direct Effect" of not employing local construction workers. All IMPLAN data is for Greene County, Missouri.

The Impact of Hiring Local on City Projects on Funding for Apprenticeship Training

When cities award projects to local contractors, they not only keep tax dollars in the community and spur local economic development, but they also help ensure that the next generation of local construction workers is trained. The eight construction trades evaluated in this analysis invest between 25 cents and 63 cents per hour worked by skilled tradespeople into local apprenticeship programs. The unweighted average is 50 cents contributed towards registered apprenticeship programs per hour worked by local construction workers in Springfield (Figure 6).

Figure 6: Contributions into Local Apprenticeship Training Funds Per Construction Tradesworker Hour

Local Apprenticeship Funding Per Hour by Trades Union	Collectively Bargained Contribution
Laborers – LiUNA Local 663	\$0.62
Carpenters – St. Louis-Kansas City Carpenters Regional Council	\$0.50
Electricians – IBEW Local Union 453	\$0.60
Operating Engineers – IUOE Local 101	\$0.25
Bricklayers – BAC Local No. 15 MO/KS/NE	\$0.60
Sheet Metal Workers – SMART Local 36	\$0.63
Insulators – Heat and Frost Insulators Local 63	\$0.39
Sprinklefitters – Road Sprinklefitters Local Union 669	\$0.42
Unweighted Average	\$0.50

Source: Authors' analysis of Collective Bargaining Agreements for the eight selected trades.

Figure 7 shows the estimated impact of Springfield's Capital Improvements Program on registered apprenticeship programs in the community, based on the local share of the workforce. Assuming that construction workers earn an average of \$30 per hour in base wages and \$17 per hour in fringe benefits, the \$132 million in total labor income would translate into an estimate of about 2.8 million hours worked by construction workers on the City's public works projects between 2023 and 2027. At \$0.50 in training contributions per hour worked, the City's public works projects would produce \$1.4 million in revenue for local apprenticeship training programs over five years. However, if 25 percent of the workforce is nonlocal, the Capital Improvements Program would only invest \$1.1 million in local apprenticeship programs. If 50 percent of the workforce is nonlocal, funding for local apprenticeship programs would drop to \$0.7

million. The data shows that the local business preference program would support local economic activity, local jobs, and local career development opportunities for Springfield residents (Figure 7).

Figure 7: Investments in Local Training from 2023—2027 City Projects, by Local Share of the Workforce

Local Apprenticeship Investments	Estimated Funding
100% Local and 0% Nonlocal Workforce	\$1,404,842
75% Local and 25% Nonlocal Workforce	\$1,053,631
50% Local and 50% Nonlocal Workforce	\$702,421
25% Local and 75% Nonlocal Workforce	\$351,210
0% Local and 100% Nonlocal Workforce	\$0

Source: Authors analysis based on data from the City of Springfield’s 2022 *Capital Improvements Plan* and collective bargaining agreements for eight selected trades in the Springfield area (CIP, 2022).

Conclusion

A strong Springfield is built locally by highly trained workers. Awarding public works projects to local contractors who employ Springfield residents boosts economic development, promotes training opportunities for young residents, saves or creates jobs in other industries unrelated to construction, and spurs local tax revenues. It also allows local construction workers to stay home and build the roads, bike paths, water systems, and local buildings in their communities—rather than traveling across the state or country to work on other projects away from their families. Ultimately, local taxpayers both pay the cost of public works construction projects and reap their benefits. The proposed local business preference credit would help deliver the best value for taxpayers on public works projects in the City of Springfield.

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Appendix

Table A: Stylized Example of Consumer Spending in the Midwest, Local Workers vs. Nonlocal Workers

Midwestern MSAs: Household Consumer Spending	All Consumer Units		Local Workers		Nonlocal Workers	
	Amount	Share	Amount	Share	Amount	Share
<i>Income Before Taxes</i>	\$78,572	100.0%	\$78,572	100.0%	\$78,572	100.0%
<i>Average Annual Expenditures</i>	\$59,789	76.1%	\$59,789	76.1%	\$59,789	76.1%
Food and Beverages	\$7,840	10.0%	\$7,840	10.0%	\$7,840	10.0%
Housing	\$18,973	24.1%	\$18,973	24.1%	\$0	0.0%
Apparel	\$1,636	2.1%	\$1,636	2.1%	\$1,636	2.1%
Transportation (excl. Vehicle Purchases)	\$5,626	7.2%	\$5,626	7.2%	\$5,626	7.2%
Vehicle Purchases	\$4,720	6.0%	\$4,720	6.0%	\$0	0.0%
Healthcare	\$5,691	7.2%	\$5,691	7.2%	\$0	0.0%
Entertainment	\$3,292	4.2%	\$3,292	4.2%	\$3,292	4.2%
Personal Care	\$695	0.9%	\$695	0.9%	\$695	0.9%
Miscellaneous	\$2,251	2.9%	\$2,251	2.9%	\$2,251	2.9%
Cash Contributions	\$1,985	2.5%	\$1,985	2.5%	\$1,985	2.5%
Insurance and Pensions (incl. FICA)	\$7,080	9.0%	\$0	0.0%	\$0	0.0%
<i>Federal Income Taxes</i>	\$10,273	13.1%	\$10,273	13.1%	\$10,273	13.1%
<i>State Income Taxes</i>	\$3,106	4.0%	\$3,106	4.0%	\$3,106	4.0%
<i>Savings</i>	\$5,404	6.9%	\$5,404	6.9%	\$5,404	6.9%
Local Spending	--	--	\$52,709	67.1%	\$23,325	29.7%

Source: Authors' stylized example of spending on various items for all households, local workers only, and nonlocal workers only based on consumer unit data for midwestern metropolitan statistical areas from 2019-2020 *Consumer Expenditure Surveys* conducted and released by the Bureau of Labor Statistics at the U.S. Department of Labor (BLS, 2021).

Table B: Bid Results and Spread Between the Apparent Low Bid and Second-Lowest Bid on Competitive Missouri Department of Transportation Projects in Greene County from 2020 through 2021

Date	Call Number	Bidders	Apparent Low Bid	Second-Lowest Bid	Bid Spread
12/17/2021	G03	7	\$197,000	\$215,639	9.5%
11/19/2021	G07	4	\$981,059	\$997,075	1.6%
5/21/2021	G07	3	\$7,004,445	\$7,064,149	0.9%
3/19/2021	G04	4	\$1,029,287	\$1,039,722	1.0%
11/20/2020	G10	6	\$13,663,250	\$14,799,477	8.3%
11/20/2020	G06	4	\$7,065,487	\$8,163,725	15.5%
11/20/2020	G09	7	\$1,333,333	\$1,417,953	6.3%
11/20/2020	G11	7	\$965,609	\$1,019,601	5.6%
10/16/2020	G06	3	\$1,046,075	\$1,262,450	20.7%
10/16/2020	G07	3	\$390,561	\$445,692	14.1%
9/18/2020	G04	4	\$1,250,877	\$1,364,619	9.1%
8/21/2020	G01	4	\$3,553,352	\$3,579,500	0.7%
6/19/2020	G04	6	\$501,236	\$529,895	5.7%
5/15/2020	G06	3	\$3,737,025	\$3,876,582	3.7%
4/17/2020	G01	3	\$304,373	\$523,587	72.0%
3/20/2020	G03	3	\$2,514,236	\$2,628,628	4.5%
2/21/2020	G01	3	\$270,500	\$273,800	1.2%
Median Bid Spread →					5.7%

Source: Authors' analysis of the 17 Missouri Department of Transportation highway construction projects located fully or partially in Greene County, Missouri with competition of at least 3 bidders and costing at least \$75,000 between January 1, 2020 and December 31, 2021, published by Bid Express ([BidX, 2022](#)).